



## Diagnostic Service Codes

Diagnostic Service Codes are used to inform machine operators of potential fault conditions that have occurred on the machine. Codes occur when machine controllers detect conditions that fall outside a range of acceptable values.

Always read and understand your Operation & Maintenance manual before operating or working on the machine.

For a more detailed description and troubleshooting detail subscribe to Machine IQ Health and Security, available through Bobcat Owner Portal.

[Learn more about Bobcat Owner Portal here.](#)

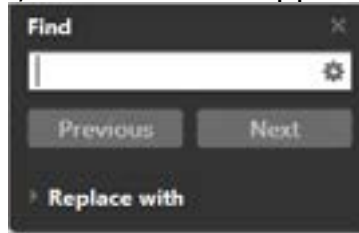
### **This Contains Fault Codes For:**

M-Series Loaders (S450-S850 & T450-T870)  
R-Series Loaders (S60s-S70s & T60s-T70s)  
M-Series Excavators (E26-E85)  
E145 & E165 Excavator  
Small Articulated Loader  
Attachments

Bobcat Engine V1 (DELPHI ECU)  
Bobcat Engine V2 (BOSCH ECU)  
Bobcat Engine D34 (DCU)  
Toolcat  
Telehandler  
Compact Wheel Loader

### **Instructions For Windows Computer:**

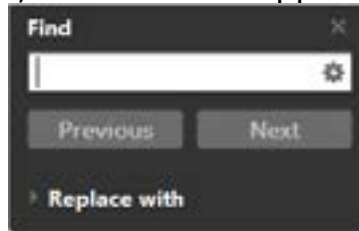
Press both the "Ctrl" and "F" key on your keyboard.  
In the top right, a box should appear labeled "Find."



Type your service code into the white box then press the "Enter" key on your keyboard.  
It should jump to the correct section of the document  
and the service code should be highlighted.  
If there are duplicates of the code, validate which product the code is appearing on.

### **Instructions For Mac Computer:**

Press both the "Cmd" and "F" key on your keyboard.  
In the top right, a box should appear labeled "Find."



Type your service code into the white box then press the "Enter" key on your keyboard.  
It should jump to the correct section of the document  
and the service code should be highlighted.  
If there are duplicates of the code, validate which product the code is appearing on.

| Code    | Product              | Description                                               |
|---------|----------------------|-----------------------------------------------------------|
| 3251-03 | ECU Bobcat Engine V1 | EGR Temperature Sensor - Fault                            |
| 3251-04 | ECU Bobcat Engine V1 | EGR Temperature Sensor - Fault                            |
| 3252-00 | ECU Bobcat Engine V1 | Exhaust Temperature - High                                |
| 3509-03 | ECU Bobcat Engine V1 | Sensor Supply Voltage Fault                               |
| 3509-04 | ECU Bobcat Engine V1 | Sensor Supply Voltage Fault                               |
| A0321   | Telehandler          | Battery Voltage OOR High                                  |
| A0322   | Telehandler          | Battery Voltage OOR Low                                   |
| A0618   | Attachments          | Wheel Speed Out of Range                                  |
| A0702   | Telehandler          | Left interlocking sensor Short to Battery                 |
| A0703   | Telehandler          | Left interlocking sensor Short to Ground or Open circuit  |
| A0802   | Telehandler          | Right interlocking sensor Short to Battery                |
| A0803   | Telehandler          | Right interlocking sensor Short to Ground or Open circuit |
| A0921   | Telehandler          | Overload Signal 1 Out Of Range High                       |
| A0922   | Telehandler          | Overload Signal 1 Out Of Range Low                        |
| A1021   | Telehandler          | Overload Signal 2 Out Of Range High                       |
| A1022   | Telehandler          | Overload Signal 2 Out Of Range Low                        |
| A1144   | Telehandler          | Overload signals disagrees                                |
| A1198   | Telehandler          | Overload calibration performed                            |
| A1199   | Telehandler          | Overload calibration required                             |
| A1221   | Telehandler          | Tilt inclinometer innput Out of range High                |
| A1222   | Telehandler          | Tilt inclinometer innput Out of range Low                 |
| A1298   | Telehandler          | Tilt inclinometer calibration performed                   |
| A1299   | Telehandler          | Tilt inclinometer calibration required                    |
| A3623   | Telehandler          | Programming or constant data invalid                      |
| A3623   | Attachments          | ACD Not Programmed                                        |
| A4621   | Attachments          | 5 Volt Sensor Supply Out of Range High                    |
| A4621   | M-Series Loader      | 5V Sensor Supply Out of Range High                        |
| A4622   | M-Series Loader      | 5V Sensor Supply Out of Range Low                         |
| A4622   | Attachments          | 5 Volt Sensor Supply Out of Range Low                     |
| A4721   | Attachments          | 8 Volt Sensor Supply Out of Range High                    |
| A4721   | M-Series Loader      | 8V Sensor Supply Out of Range High                        |
| A4722   | M-Series Loader      | 8V Sensor Supply Out of Range Low                         |
| A4722   | Attachments          | 8 Volt Sensor Supply Out of Range Low                     |
| A7701   | M-Series Loader      | Key Switch Active                                         |
| A7701   | Attachments          | Cab Key Switch Active                                     |
| A7901   | Attachments          | E-Stop Active                                             |
| A8002   | Attachments          | Output A Error On                                         |
| A8003   | Attachments          | Output A Error Off                                        |
| A8005   | Attachments          | Output A Short to Battery                                 |
| A8006   | Attachments          | Output A Short to Ground                                  |
| A8007   | Attachments          | Output A Open Circuit                                     |
| A8032   | Attachments          | Output A Overcurrent                                      |
| A8102   | Attachments          | Output B Error On                                         |
| A8103   | Attachments          | Output B Error Off                                        |
| A8105   | Attachments          | Output B Short to Battery                                 |
| A8106   | Attachments          | Output B Short to Ground                                  |
| A8107   | Attachments          | Output B Open Circuit                                     |
| A8132   | Attachments          | Output B Overcurrent                                      |
| A8202   | Attachments          | Output C Error On                                         |
| A8203   | Attachments          | Output C Error Off                                        |
| A8205   | Attachments          | Output C Short to Battery                                 |

| Code     | Product              | Description                                                    |
|----------|----------------------|----------------------------------------------------------------|
| A8206    | Attachments          | Output C Short to Ground                                       |
| A8207    | Attachments          | Output C Open Circuit                                          |
| A8232    | Attachments          | Output C Overcurrent                                           |
| A8302    | Attachments          | Output D Error On                                              |
| A8303    | Attachments          | Output D Error Off                                             |
| A8305    | Attachments          | Output D Short to Battery                                      |
| A8306    | Attachments          | Output D Short to Ground                                       |
| A8307    | Attachments          | Output D Open Circuit                                          |
| A8332    | Attachments          | Output D Overcurrent                                           |
| A8402    | Attachments          | Output E Error On                                              |
| A8403    | Attachments          | Output E Error Off                                             |
| A8405    | Attachments          | Output E Short to Battery                                      |
| A8406    | Attachments          | Output E Short to Ground                                       |
| A8407    | Attachments          | Output E Open Circuit                                          |
| A8432    | Attachments          | Output E Overcurrent                                           |
| A8502    | Attachments          | Output F Error On                                              |
| A8503    | Attachments          | Output F Error Off                                             |
| A8505    | Attachments          | Output F Short to Battery                                      |
| A8506    | Attachments          | Output F Short to Ground                                       |
| A8507    | Attachments          | Output F Open Circuit                                          |
| A8532    | Attachments          | Output F Overcurrent                                           |
| A8602    | Attachments          | Output G Error On                                              |
| A8603    | Attachments          | Output G Error Off                                             |
| A8605    | Attachments          | Output G Short to Battery                                      |
| A8606    | Attachments          | Output G Short to Ground                                       |
| A8607    | Attachments          | Output G Open Circuit                                          |
| A8702    | Attachments          | Output H Error On                                              |
| A8703    | Attachments          | Output H Error Off                                             |
| A8705    | Attachments          | Output H Short to Battery                                      |
| A8706    | Attachments          | Output H Short to Ground                                       |
| A8707    | Attachments          | Output H Open Circuit                                          |
| A8802    | Attachments          | Reverse Solenoid Error On                                      |
| A8803    | Attachments          | Reverse Solenoid Error Off                                     |
| B1001-96 | Compact Wheel Loader | Key Switch Failure                                             |
| B1001-96 | Toolcat              | Key Switch - Component Internal Failure                        |
| B1005-00 | M-Series Loader      | Key Switch Multiple                                            |
| B1005-00 | Compact Wheel Loader | Key Switch Multiple                                            |
| B102A-16 | Toolcat              | Cab Controller Sensor Supply - Circuit Voltage Below Threshold |
| B102A-16 | M-Series Loader      | Cab Controller Sensor Supply Voltage Out of Range Low          |
| B102A-17 | M-Series Loader      | Cab Controller Sensor Supply Voltage Out of Range High         |
| B102A-17 | Toolcat              | Cab Controller Sensor Supply - Circuit Voltage Above Threshold |
| B1030-11 | M-Series Loader      | Front Work Light (Left Side) Short to Ground                   |
| B1030-12 | M-Series Loader      | Front Work Light (Left Side) Short to Battery                  |
| B1030-13 | M-Series Loader      | Front Work Light (Left Side) Not Connected                     |
| B1031-11 | M-Series Loader      | Front Work Light (Right Side) Short to Ground                  |
| B1031-12 | M-Series Loader      | Front Work Light (Right Side) Short to Battery                 |
| B1031-13 | M-Series Loader      | Front Work Light (Right Side) Not Connected                    |
| B1034-11 | Toolcat              | Rear Work Lights - Circuit Short to Ground                     |
| B1034-11 | Compact Wheel Loader | Rear Work Light Short to Battery                               |
| B1034-12 | M-Series Loader      | Rear Work Lights Error On                                      |
| B1034-12 | Toolcat              | Rear Work Lights - Circuit Short to Battery                    |
| B1034-12 | Compact Wheel Loader | Rear Work Light Short to Ground                                |

| Code     | Product                  | Description                                             |
|----------|--------------------------|---------------------------------------------------------|
| B1034-13 | Toolcat                  | Rear Work Lights - Circuit Open                         |
| B1034-13 | Compact Wheel Loader     | Rear Work Light Not Connected                           |
| B1034-14 | M-Series Loader          | Rear Work Lights Error Off                              |
| B1035-12 | M-Series Loader          | Rear Marker Light Short to Battery                      |
| B1035-14 | M-Series Loader          | Rear Marker Light Short to Ground or Open Circuit       |
| B1036-11 | Toolcat                  | Rear Marker Lights - Circuit Short to Ground            |
| B1036-12 | Toolcat                  | Rear Marker Lights - Circuit Short to Battery           |
| B1036-12 | M-Series Loader          | Rear Tail Lights Error On                               |
| B1036-13 | Toolcat                  | Rear Marker Lights - Circuit Open                       |
| B1036-14 | M-Series Loader          | Rear Tail Lights Error Off                              |
| B1037-11 | Toolcat                  | Stop Lights - Circuit Short to Ground                   |
| B1037-11 | Compact Wheel Loader     | Stop Light Short to Ground                              |
| B1037-12 | M-Series Loader          | Stop Lamp Short to Battery                              |
| B1037-12 | Toolcat                  | Stop Lights - Circuit Short to Battery                  |
| B1037-13 | Toolcat                  | Stop Lights - Circuit Open                              |
| B1037-14 | M-Series Loader          | Stop Lamp Short to Ground or Open Circuit               |
| B1037-15 | Compact Wheel Loader     | Stop Light Error On                                     |
| B1038-12 | M-Series Loader          | Registration Plate Lamp Short to Battery                |
| B1038-14 | M-Series Loader          | Registration Plate Lamp Short to Ground or Open Circuit |
| B1039-11 | M-Series Loader          | Side Lights Short to Ground                             |
| B1039-12 | M-Series Loader          | Side Lights Short to Battery                            |
| B1039-13 | M-Series Loader          | Side Lights Not Connected                               |
| B103B-12 | Small Articulated Loader | Light Circuit Short to Battery                          |
| B103B-14 | Small Articulated Loader | Light Circuit Short to Ground                           |
| B103D-11 | Compact Wheel Loader     | Beacon Short to Ground                                  |
| B103D-12 | Compact Wheel Loader     | Beacon Short to Battery                                 |
| B103D-12 | Toolcat                  | Beacon Light - Circuit Short to Battery                 |
| B103D-13 | Compact Wheel Loader     | Beacon Not Connected                                    |
| B103D-14 | Toolcat                  | Beacon Light - Circuit Short to Ground or Open          |
| B1040-11 | Compact Wheel Loader     | Buzzer Error Off                                        |
| B1040-12 | Compact Wheel Loader     | Buzzer Error On                                         |
| B1040-12 | Toolcat                  | Buzzer - Circuit Short to Battery                       |
| B1040-14 | Toolcat                  | Buzzer - Circuit Short to Ground or Open                |
| B1040-14 | M-Series Loader          | Buzzer Error Off                                        |
| B1041-12 | Toolcat                  | Backup Alarm - Circuit Short to Battery                 |
| B1041-12 | Compact Wheel Loader     | Backup Alarm Error Off                                  |
| B1041-12 | M-Series Loader          | Backup Alarm Error On                                   |
| B1041-14 | M-Series Loader          | Backup Alarm Error Off                                  |
| B1041-14 | Compact Wheel Loader     | Backup Alarm Error On                                   |
| B1041-14 | Toolcat                  | Backup Alarm - Circuit Short to Ground or Open          |
| B1042-12 | Toolcat                  | Horn Output - Circuit Short to Battery                  |
| B1042-12 | M-Series Loader          | Horn Relay Short to Battery                             |
| B1042-14 | Toolcat                  | Horn Output - Circuit Short to Ground or Open           |
| B1042-14 | M-Series Loader          | Horn Relay Short to Ground or Open Circuit              |
| B104A-11 | Compact Wheel Loader     | Seat Heater Short to Ground                             |
| B104A-12 | Compact Wheel Loader     | Seat Heater Short to Battery                            |
| B104A-13 | Compact Wheel Loader     | Seat Heater Open Circuit                                |
| B1050-12 | M-Series Loader          | HVAC Output Short to Battery                            |
| B1050-12 | Toolcat                  | HVAC Output - Circuit Short to Battery                  |
| B1050-14 | M-Series Loader          | HVAC Output Short to Ground or Open Circuit             |
| B1050-14 | Toolcat                  | HVAC Output - Circuit Short to Ground or Open           |
| B1051-93 | M-Series Loader          | HVAC Inside Sensor In Error                             |

| Code     | Product                  | Description                                                     |
|----------|--------------------------|-----------------------------------------------------------------|
| B1052-93 | M-Series Loader          | HVAC Device Sensor In Error                                     |
| B1053-93 | M-Series Loader          | HVAC Coil Sensor In Error                                       |
| B1054-11 | M-Series Loader          | HVAC Clutch Output Error Off                                    |
| B1054-12 | M-Series Loader          | HVAC Clutch Output Error On                                     |
| B1054-13 | M-Series Loader          | HVAC Clutch Output Open Circuit                                 |
| B1054-19 | M-Series Loader          | HVAC Clutch Output Overcurrent                                  |
| B1055-93 | M-Series Loader          | HVAC Water Valve In Error                                       |
| B105A-12 | Toolcat                  | Front Window Defroster Output - Circuit Short to Battery        |
| B105A-14 | Toolcat                  | Front Window Defroster Output - Circuit Short to Ground or Open |
| B1060-93 | M-Series Loader          | Lift Pedal In Error                                             |
| B1060-F0 | M-Series Loader          | Lift Pedal Not in Neutral                                       |
| B1061-16 | M-Series Loader          | Lift Pedal Sensor A Out of Range Low                            |
| B1061-17 | M-Series Loader          | Lift Pedal Sensor A Out of Range High                           |
| B1062-16 | M-Series Loader          | Lift Pedal Position Sensor "B" Out of Range Low                 |
| B1062-17 | M-Series Loader          | Lift Pedal Position Sensor "B" Out of Range High                |
| B1063-00 | M-Series Loader          | Lift Pedal Sensor In Error                                      |
| B1064-F0 | Compact Wheel Loader     | Lift Input Not in Neutral                                       |
| B1064-F0 | M-Series Loader          | Lift Joystick Not in Neutral                                    |
| B1065-F0 | M-Series Loader          | Lift Input Not in Neutral                                       |
| B1070-09 | M-Series Loader          | Tilt Pedal Failure                                              |
| B1070-93 | M-Series Loader          | Tilt Pedal In Error                                             |
| B1070-F0 | M-Series Loader          | Tilt Pedal Not in Neutral                                       |
| B1071-16 | M-Series Loader          | Tilt Pedal Sensor A Out of Range Low                            |
| B1071-17 | M-Series Loader          | Tilt Pedal Sensor A Out of Range High                           |
| B1072-16 | M-Series Loader          | Tilt Pedal Position Sensor "B" Out of Range High                |
| B1072-17 | M-Series Loader          | Tilt Pedal Position Sensor "B" Out of Range Low                 |
| B1073-00 | M-Series Loader          | Tilt Pedal Sensor In Error                                      |
| B1074-F0 | Compact Wheel Loader     | Tilt Input Not in Neutral                                       |
| B1074-F0 | M-Series Loader          | Tilt Joystick Not in Neutral                                    |
| B1075-F0 | M-Series Loader          | Tilt Input Not in Neutral                                       |
| B1080-09 | Toolcat                  | Operator Presence - Component Failure                           |
| B1080-09 | Compact Wheel Loader     | Operator Presence Component Failure                             |
| B1080-09 | M-Series Loader          | Seat Bar Failure                                                |
| B1080-16 | Compact Wheel Loader     | Operator Presence Circuit Voltage Below Threshold               |
| B1080-16 | Toolcat                  | Operator Presence - Circuit Voltage Below Threshold             |
| B1080-16 | Small Articulated Loader | Armrest Out of Range Low                                        |
| B1080-16 | M-Series Loader          | Seat Bar Out of Range Low                                       |
| B1080-17 | M-Series Loader          | Seat Bar Out of Range High                                      |
| B1080-17 | Small Articulated Loader | Armrest Out of Range High                                       |
| B1080-17 | Compact Wheel Loader     | Operator Presence Circuit Voltage Above Threshold               |
| B1080-17 | Toolcat                  | Operator Presence - Circuit Voltage Above Threshold             |
| B1080-54 | Small Articulated Loader | Armrest No Signal                                               |
| B1080-66 | Small Articulated Loader | Armrest Intermittent Signal                                     |
| B1090-00 | M-Series Loader          | Door Open                                                       |
| B1091-16 | M-Series Loader          | Door Sensor Out of Range Low                                    |
| B1095-13 | M-Series Loader          | Window Sensor Open Circuit                                      |
| B1095-16 | M-Series Loader          | Window Sensor Out of Range Low                                  |
| B1095-17 | M-Series Loader          | Window Sensor Out of Range High                                 |
| B1095-95 | M-Series Loader          | Window Sensor Failure                                           |
| B10A0-12 | M-Series Loader          | Wiper Output Short to Battery                                   |
| B10A0-12 | Toolcat                  | Wiper Output - Circuit Short to Battery                         |
| B10A0-14 | M-Series Loader          | Wiper Output Short to Ground or Open Circuit                    |

| Code     | Product                  | Description                                              |
|----------|--------------------------|----------------------------------------------------------|
| B10A0-14 | Toolcat                  | Wiper Output - Circuit Short to Ground or Open           |
| B10A1-12 | Toolcat                  | Washer Fluid Output - Circuit Short to Battery           |
| B10A1-12 | M-Series Loader          | Washer Fluid Output Short to Battery                     |
| B10A1-14 | Toolcat                  | Washer Fluid Output - Circuit Short to Ground or Open    |
| B10A1-14 | M-Series Loader          | Washer Fluid Output Short to Ground or Open Circuit      |
| B10A2-11 | Compact Wheel Loader     | Front Wiper Short to Ground                              |
| B10A2-12 | Compact Wheel Loader     | Front Wiper Short to Battery                             |
| B10A2-13 | Compact Wheel Loader     | Front Wiper Not connected                                |
| B10A3-11 | Compact Wheel Loader     | Front Wiper High Speed Short to Ground                   |
| B10A3-12 | Compact Wheel Loader     | Front Wiper High Speed Short to Battery                  |
| B10A3-13 | Compact Wheel Loader     | Front Wiper High Speed Not connected                     |
| B10A5-11 | Compact Wheel Loader     | Rear Wiper Short to Ground                               |
| B10A5-12 | Compact Wheel Loader     | Rear Wiper Short to Battery                              |
| B10A5-13 | Compact Wheel Loader     | Rear Wiper Not Connected                                 |
| B10A7-11 | Compact Wheel Loader     | Front Washer Short to Ground                             |
| B10A7-12 | Compact Wheel Loader     | Front Washer Short to Battery                            |
| B10A7-13 | Compact Wheel Loader     | Front Washer Not Connected                               |
| B10A8-11 | Compact Wheel Loader     | Rear Washer Short to Ground                              |
| B10A8-12 | Compact Wheel Loader     | Rear Washer Short to Battery                             |
| B10A8-13 | Compact Wheel Loader     | Rear Washer Not Connected                                |
| B10B0-00 | M-Series Loader          | Drive ISO/H Pattern Switch Flipped While Operating       |
| B10B1-F0 | M-Series Loader          | Drive Input Not in Neutral                               |
| B10B3-F0 | M-Series Loader          | Drive X Input Not In Neutral                             |
| B10B6-F0 | M-Series Loader          | Drive Y Input Not In Neutral                             |
| B10B9-F0 | M-Series Loader          | Drive Left Input Not In Neutral                          |
| B10BC-F0 | M-Series Loader          | Drive Right Input Not In Neutral                         |
| B10C0-00 | Compact Wheel Loader     | Camera Not Connected                                     |
| B10C1-00 | Toolcat                  | Camera Software Error                                    |
| B10D0-11 | Toolcat                  | Display Switched Power Output - Circuit Short to Ground  |
| B10D0-12 | Toolcat                  | Display Switched Power Output - Circuit Short to Battery |
| B10D0-12 | M-Series Loader          | Display Switched Power Relay Error On                    |
| B10D0-13 | Toolcat                  | Display Switched Power Output - Circuit Open             |
| B10D0-14 | M-Series Loader          | Display Switched Power Relay Error Off                   |
| B10F0-11 | Compact Wheel Loader     | Rear Defog Short to Ground                               |
| B10F0-12 | Compact Wheel Loader     | Rear Defog Short to Battery                              |
| B10F0-13 | Compact Wheel Loader     | Rear Defog Circuit Open                                  |
| B1100-9E | Compact Wheel Loader     | Power Exchange Lock Switch Stuck On                      |
| B1100-9E | M-Series Loader          | Bobtach Engage Button Stuck On                           |
| B1101-9E | Compact Wheel Loader     | Power Exchange Unlock Switch Stuck on                    |
| B1101-9E | M-Series Loader          | Bobtach Disengage Button Stuck On                        |
| B1110-F0 | M-Series Loader          | Left Primary Not in Neutral                              |
| B1110-F0 | Toolcat                  | Left Primary - Not in Neutral                            |
| B1111-F0 | M-Series Loader          | Left Secondary Not in Neutral                            |
| B1111-F0 | Toolcat                  | Left Secondary - Not in Neutral                          |
| B1120-16 | Small Articulated Loader | Right Primary Out of Range Low                           |
| B1120-17 | Small Articulated Loader | Right Primary Out of Range High                          |
| B1120-F0 | Compact Wheel Loader     | Joystick Right Roller Not in Neutral                     |
| B1120-F0 | Toolcat                  | Right Primary - Not in Neutral                           |
| B1120-F0 | M-Series Loader          | Right Primary Not in Neutral                             |
| B1121-16 | Small Articulated Loader | Right Secondary Out of Range Low                         |
| B1121-17 | Small Articulated Loader | Right Secondary Out of Range High                        |
| B1121-F0 | Toolcat                  | Right Secondary - Not in Neutral                         |

| Code     | Product              | Description                                                     |
|----------|----------------------|-----------------------------------------------------------------|
| B1121-F0 | M-Series Loader      | Right Secondary Not in Neutral                                  |
| B1122-F0 | M-Series Loader      | Detent Not in Neutral                                           |
| B1122-F0 | Toolcat              | Detent - Not in Neutral                                         |
| B1130-F0 | Toolcat              | Joystick Primary - Not in Neutral                               |
| B1131-F0 | Toolcat              | Joystick Secondary - Not in Neutral                             |
| B1150-F0 | Compact Wheel Loader | FNR Lever not in Neutral                                        |
| B1151-00 | Compact Wheel Loader | FNR Switch Multiple                                             |
| B1155-31 | Toolcat              | FPR Switch - No Signal                                          |
| B1156-00 | Toolcat              | FPR Switch Multiple                                             |
| B116F-11 | M-Series Loader      | Front Left Road Light Short to Ground                           |
| B116F-12 | M-Series Loader      | Front Left Road Light Short to Battery                          |
| B116F-13 | M-Series Loader      | Front Left Road Light Open Circuit                              |
| B1170-11 | Toolcat              | Head Light High Left - Circuit Short to Ground                  |
| B1170-12 | Toolcat              | Head Light High Left - Circuit Short to Battery                 |
| B1170-13 | Toolcat              | Head Light High Left - Circuit Open                             |
| B1172-11 | Toolcat              | Front Turn Signal Left - Circuit Short to Ground                |
| B1172-12 | Toolcat              | Front Turn Signal Left - Circuit Short to Battery               |
| B1172-13 | Toolcat              | Front Turn Signal Left - Circuit Open                           |
| B1175-11 | Toolcat              | Rear Turn Signal Left - Circuit Short to Ground                 |
| B1175-12 | Toolcat              | Rear Turn Signal Left - Circuit Short to Battery                |
| B1175-13 | Toolcat              | Rear Turn Signal Left - Circuit Open                            |
| B1177-12 | M-Series Loader      | Left Turn Signal Short to Battery                               |
| B1177-14 | M-Series Loader      | Left Turn Signal Short to Ground or Open Circuit                |
| B117F-11 | M-Series Loader      | Front Right Road Light Short to Ground                          |
| B117F-12 | M-Series Loader      | Front Right Road Light Short to Battery                         |
| B117F-13 | M-Series Loader      | Front Right Road Light Open Circuit                             |
| B1180-11 | Toolcat              | Head Light High Right - Circuit Short to Ground                 |
| B1180-12 | Toolcat              | Head Light High Right - Circuit Short to Battery                |
| B1180-13 | Toolcat              | Head Light High Right - Circuit Open                            |
| B1182-11 | Toolcat              | Front Turn Signal Right - Circuit Short to Ground               |
| B1182-12 | Toolcat              | Front Turn Signal Right - Circuit Short to Battery              |
| B1182-13 | Toolcat              | Front Turn Signal Right - Circuit Open                          |
| B1185-11 | Toolcat              | Rear Turn Signal Right - Circuit Short to Ground                |
| B1185-12 | Toolcat              | Rear Turn Signal Right - Circuit Short to Battery               |
| B1185-13 | Toolcat              | Rear Turn Signal Right - Circuit Open                           |
| B1187-12 | M-Series Loader      | Right Turn Signal Short to Battery                              |
| B1187-14 | M-Series Loader      | Right Turn Signal Short to Ground or Open Circuit               |
| B1190-11 | Compact Wheel Loader | Front Work Light Short to Battery                               |
| B1190-11 | Toolcat              | Front Work Lights - Circuit Short to Ground                     |
| B1190-12 | Compact Wheel Loader | Front Work Light Short to Ground                                |
| B1190-12 | Toolcat              | Front Work Lights - Circuit Short to Battery                    |
| B1190-13 | Compact Wheel Loader | Front Work Light Not Connected                                  |
| B1190-13 | Toolcat              | Front Work Lights - Circuit Open                                |
| B1191-12 | Toolcat              | Front Work Light 2 - Circuit Short to Battery                   |
| B1191-14 | Toolcat              | Front Work Light 2 - Circuit Short to Ground or Open            |
| B1192-12 | Toolcat              | Front Work Light 3 - Circuit Short to Battery                   |
| B1192-14 | Toolcat              | Front Work Light 3 - Circuit Short to Ground or Open            |
| B11B0-54 | Toolcat              | Travel Pedal Sensor - Missing Calibration                       |
| B11B0-93 | Toolcat              | Travel Pedal Sensor - In Error                                  |
| B11B1-16 | Toolcat              | Travel Pedal Sensor Primary - Circuit Voltage Below Threshold   |
| B11B1-17 | Toolcat              | Travel Pedal Sensor Primary - Circuit Voltage Above Threshold   |
| B11B2-16 | Toolcat              | Travel Pedal Sensor Secondary - Circuit Voltage Below Threshold |

| Code     | Product              | Description                                                     |
|----------|----------------------|-----------------------------------------------------------------|
| B11B2-17 | Toolcat              | Travel Pedal Sensor Secondary - Circuit Voltage Above Threshold |
| B11B5-54 | Compact Wheel Loader | Inching pedal sensor missing calibration                        |
| B11B5-54 | Toolcat              | Brake Pedal Sensor - Missing Calibration                        |
| B11B5-93 | Toolcat              | Brake Pedal Sensor - In Error                                   |
| B11B6-16 | Toolcat              | Brake Pedal Sensor Primary - Circuit Voltage Below Threshold    |
| B11B6-17 | Toolcat              | Brake Pedal Sensor Primary - Circuit Voltage Above Threshold    |
| B11B7-16 | Toolcat              | Brake Pedal Sensor Secondary - Circuit Voltage Below Threshold  |
| B11B7-17 | Toolcat              | Brake Pedal Sensor Secondary - Circuit Voltage Above Threshold  |
| C0314    | Telehandler          | LLMC Undervoltage                                               |
| C0315    | Telehandler          | LLMC Overvoltage                                                |
| C1001-16 | Toolcat              | Hub Controller Sensor Supply - Circuit Voltage Below Threshold  |
| C1001-16 | Compact Wheel Loader | Sensor Supply Out of Range Low                                  |
| C1001-17 | Toolcat              | Hub Controller Sensor Supply - Circuit Voltage Above Threshold  |
| C1001-17 | Compact Wheel Loader | Sensor Supply Out of Range High                                 |
| C1002-16 | M-Series Loader      | Sensor Supply Out of Range Low                                  |
| C1002-17 | M-Series Loader      | Sensor Supply Out of Range High                                 |
| C1003-16 | Compact Wheel Loader | Sensor Supply Out of Range Low                                  |
| C1003-17 | Compact Wheel Loader | Sensor Supply Out of Range High                                 |
| C1004-16 | Compact Wheel Loader | Drive Controller Sensor Supply Out of Range Low                 |
| C1004-17 | Compact Wheel Loader | Drive Controller Sensor Supply Out of Range High                |
| C1005-16 | Toolcat              | Pump Controller Sensor Supply - Circuit Voltage Below Threshold |
| C1005-17 | Toolcat              | Pump Controller Sensor Supply - Circuit Voltage Above Threshold |
| C1006-16 | Toolcat              | Rear Controller Sensor Supply - Circuit Voltage Below Threshold |
| C1006-17 | Toolcat              | Rear Controller Sensor Supply - Circuit Voltage Above Threshold |
| C100A-11 | M-Series Loader      | ECU Power Short to Ground                                       |
| C100A-11 | Toolcat              | ECU Power - Circuit Short to Ground                             |
| C100A-12 | Toolcat              | ECU Power - Circuit Short to Battery                            |
| C100A-12 | M-Series Loader      | ECU Power Short to Battery                                      |
| C100A-13 | M-Series Loader      | ECU Power Open Circuit                                          |
| C100A-13 | Toolcat              | ECU Power - Circuit Open                                        |
| C1015-16 | M-Series Loader      | Lift Spool Position Sensor Out of Range Low                     |
| C1015-17 | M-Series Loader      | Lift Spool Position Sensor Out of Range High                    |
| C1015-56 | M-Series Loader      | Lift Spool Position Sensor Inverted Movement                    |
| C1015-93 | M-Series Loader      | Lift Spool Position Sensor Unresponsive                         |
| C1015-F0 | M-Series Loader      | Lift Spool Position Sensor Not in Neutral                       |
| C1016-16 | M-Series Loader      | Tilt Spool Position Sensor Out of Range Low                     |
| C1016-17 | M-Series Loader      | Tilt Spool Position Sensor Out of Range High                    |
| C1016-93 | M-Series Loader      | Tilt Spool Position Sensor Unresponsive                         |
| C1016-F0 | M-Series Loader      | Tilt Spool Position Sensor Not in Neutral                       |
| C101A-16 | Compact Wheel Loader | Lift Base Pressure Out of Range Low                             |
| C101A-17 | Compact Wheel Loader | Lift Base Pressure Out of Range High                            |
| C101D-16 | M-Series Loader      | Tilt Rod Pressure Sensor Out of Range Low                       |
| C101D-17 | M-Series Loader      | Tilt Rod Pressure Sensor Out of Range High                      |
| C1020-11 | Compact Wheel Loader | Front Base Solenoid Short to Ground                             |
| C1020-11 | Toolcat              | Front Aux Base Solenoid - Circuit Short to Ground               |
| C1020-12 | Compact Wheel Loader | Front Base Solenoid Short to Battery                            |
| C1020-12 | Toolcat              | Front Aux Base Solenoid - Circuit Short to Battery              |
| C1020-13 | Compact Wheel Loader | Front Base Solenoid Open Circuit                                |
| C1020-13 | Toolcat              | Front Aux Base Solenoid - Circuit Open                          |
| C1020-19 | Compact Wheel Loader | Front Base Solenoid Overcurrent                                 |
| C1020-19 | Toolcat              | Front Aux Base Solenoid - Circuit Current Above Threshold       |
| C1021-11 | Toolcat              | Front Aux Rod Solenoid - Circuit Short to Ground                |

| Code     | Product                  | Description                                              |
|----------|--------------------------|----------------------------------------------------------|
| C1021-11 | Compact Wheel Loader     | Front Rod Solenoid Short to Ground                       |
| C1021-12 | Toolcat                  | Front Aux Rod Solenoid - Circuit Short to Battery        |
| C1021-12 | Compact Wheel Loader     | Front Rod Solenoid Short to Battery                      |
| C1021-13 | Compact Wheel Loader     | Front Rod Solenoid Open Circuit                          |
| C1021-13 | Toolcat                  | Front Aux Rod Solenoid - Circuit Open                    |
| C1021-19 | Compact Wheel Loader     | Front Rod Solenoid Overcurrent                           |
| C1021-19 | Toolcat                  | Front Aux Rod Solenoid - Circuit Current Above Threshold |
| C1024-11 | Toolcat                  | Diverter Solenoid - Circuit Short to Ground              |
| C1024-12 | Toolcat                  | Diverter Solenoid - Circuit Short to Battery             |
| C1024-13 | Toolcat                  | Diverter Solenoid - Circuit Open                         |
| C1026-11 | Toolcat                  | Remote Hydraulics Output - Circuit Short to Ground       |
| C1026-12 | Toolcat                  | Remote Hydraulics Output - Circuit Short to Battery      |
| C1026-13 | Toolcat                  | Remote Hydraulics Output - Circuit Open                  |
| C1029-11 | M-Series Loader          | Hydraulic Lock Solenoid Short to Ground                  |
| C1029-12 | M-Series Loader          | Hydraulic Lock Solenoid Short to Battery                 |
| C1029-13 | M-Series Loader          | Hydraulic Lock Solenoid Open Circuit                     |
| C102A-11 | Compact Wheel Loader     | Hydraulic Fan Short to Ground                            |
| C102A-11 | Toolcat                  | Hydraulic Fan Solenoid - Circuit Short to Ground         |
| C102A-12 | Toolcat                  | Hydraulic Fan Solenoid - Circuit Short to Battery        |
| C102A-12 | Compact Wheel Loader     | Hydraulic Fan Short to Battery                           |
| C102A-13 | Compact Wheel Loader     | Hydraulic Cooling Fan Electrical Problem                 |
| C102A-13 | Toolcat                  | Hydraulic Fan Solenoid - Circuit Open                    |
| C102A-19 | Toolcat                  | Hydraulic Fan Solenoid - Circuit Current Above Threshold |
| C102A-19 | Compact Wheel Loader     | Hydraulic Fan Overcurrent                                |
| C102B-11 | M-Series Loader          | Reverse Fan Short to Ground                              |
| C102B-12 | M-Series Loader          | Reverse Fan Short to Battery                             |
| C102B-13 | M-Series Loader          | Reverse Fan Open Circuit                                 |
| C102E-12 | Small Articulated Loader | Fan Circuit Short to Battery                             |
| C102E-14 | Small Articulated Loader | Fan Open Circuit                                         |
| C1030-00 | M-Series Loader          | Two Speed Shift Not Allowed                              |
| C1032-11 | M-Series Loader          | Brake Pull Output Short to Ground                        |
| C1032-12 | M-Series Loader          | Brake Pull Output Short to Battery                       |
| C1032-13 | M-Series Loader          | Brake Pull Output Open Circuit                           |
| C1033-11 | M-Series Loader          | Left Brake Hold Output Short to Ground                   |
| C1033-12 | M-Series Loader          | Left Brake Hold Output Short to Battery                  |
| C1033-13 | M-Series Loader          | Left Brake Hold Output Open Circuit                      |
| C1034-11 | M-Series Loader          | Right Brake Hold Output Short to Ground                  |
| C1034-12 | M-Series Loader          | Right Brake Hold Output Short to Battery                 |
| C1034-13 | M-Series Loader          | Right Brake Hold Output Open Circuit                     |
| C1035-16 | M-Series Loader          | Left Brake Pull Relay Error Off                          |
| C1035-17 | M-Series Loader          | Left Brake Pull Relay Error On                           |
| C1036-16 | M-Series Loader          | Right Brake Pull Relay Error Off                         |
| C1036-17 | M-Series Loader          | Right Brake Pull Relay Error On                          |
| C1039-11 | Toolcat                  | High Flow Solenoid - Circuit Short to Ground             |
| C1039-11 | Compact Wheel Loader     | High Flow Solenoid Short to Ground                       |
| C1039-12 | Toolcat                  | High Flow Solenoid - Circuit Short to Battery            |
| C1039-12 | Compact Wheel Loader     | High Flow Solenoid Short to Battery                      |
| C1039-13 | Compact Wheel Loader     | High Flow Solenoid Open Circuit                          |
| C1039-13 | Toolcat                  | High Flow Solenoid - Circuit Open                        |
| C1039-19 | M-Series Loader          | High Flow Solenoid Overcurrent                           |
| C103A-11 | M-Series Loader          | Ride Control 1 Short to Ground                           |
| C103A-12 | M-Series Loader          | Ride Control 1 Short to Battery                          |

| Code     | Product              | Description                                           |
|----------|----------------------|-------------------------------------------------------|
| C103A-13 | M-Series Loader      | Ride Control 1 Open Circuit                           |
| C103B-11 | M-Series Loader      | Ride Control 2 Short to Ground                        |
| C103B-12 | M-Series Loader      | Ride Control 2 Short to Battery                       |
| C103B-13 | M-Series Loader      | Ride Control 2 Open Circuit                           |
| C103C-11 | M-Series Loader      | Bobtach Engage Short to Ground                        |
| C103C-11 | Toolcat              | Bobtach Engage Solenoid - Circuit Short to Ground     |
| C103C-12 | M-Series Loader      | Bobtach Engage Short to Battery                       |
| C103C-12 | Toolcat              | Bobtach Engage Solenoid - Circuit Short to Battery    |
| C103C-13 | Toolcat              | Bobtach Engage Solenoid - Circuit Open                |
| C103C-13 | M-Series Loader      | Bobtach Engage Open Circuit                           |
| C103D-11 | Toolcat              | Bobtach Disengage Solenoid - Circuit Short to Ground  |
| C103D-11 | M-Series Loader      | Bobtach Disengage Short to Ground                     |
| C103D-12 | Toolcat              | Bobtach Disengage Solenoid - Circuit Short to Battery |
| C103D-12 | M-Series Loader      | Bobtach Disengage Short to Battery                    |
| C103D-13 | M-Series Loader      | Bobtach Disengage Open Circuit                        |
| C103D-13 | Toolcat              | Bobtach Disengage Solenoid - Circuit Open             |
| C1040-11 | M-Series Loader      | Lift Actuator Short to Ground                         |
| C1040-12 | M-Series Loader      | Lift Actuator Short to Battery                        |
| C1040-13 | M-Series Loader      | Lift Actuator Open Circuit                            |
| C1040-19 | M-Series Loader      | Lift Actuator Overcurrent                             |
| C1040-77 | M-Series Loader      | Lift Actuator Reduced Performance                     |
| C1041-00 | M-Series Loader      | Lift Spool Position Sensor Inverted Movement          |
| C1042-00 | M-Series Loader      | Lift Actuator Uncommanded Motion                      |
| C1043-11 | Compact Wheel Loader | Lift Cylinder Base Short to Ground                    |
| C1043-12 | Compact Wheel Loader | Lift Cylinder Base Short to Battery                   |
| C1043-13 | Compact Wheel Loader | Lift Cylinder Base Open Circuit                       |
| C1043-19 | Compact Wheel Loader | Lift Cylinder Base Overcurrent                        |
| C1044-11 | Compact Wheel Loader | Lift Cylinder Rod Short to Ground                     |
| C1044-12 | Compact Wheel Loader | Lift Cylinder Rod Short to Battery                    |
| C1044-13 | Compact Wheel Loader | Lift Cylinder Rod Open Circuit                        |
| C1044-19 | Compact Wheel Loader | Lift Cylinder Rod Overcurrent                         |
| C1045-11 | M-Series Loader      | Tilt Actuator Short to Ground                         |
| C1045-12 | M-Series Loader      | Tilt Actuator Short to Battery                        |
| C1045-13 | M-Series Loader      | Tilt Actuator Open Circuit                            |
| C1045-19 | M-Series Loader      | Tilt Actuator Overcurrent                             |
| C1045-77 | M-Series Loader      | Tilt Actuator Reduced Performance                     |
| C1046-00 | M-Series Loader      | Tilt Spool Position Sensor Inverted Movement          |
| C1047-00 | M-Series Loader      | Tilt Actuator Uncommanded Motion                      |
| C1048-11 | Compact Wheel Loader | Tilt Cylinder Rod Short to Ground                     |
| C1048-12 | Compact Wheel Loader | Tilt Cylinder Rod Short to Battery                    |
| C1048-13 | Compact Wheel Loader | Tilt Cylinder Rod Open Circuit                        |
| C1048-19 | Compact Wheel Loader | Tilt Cylinder Rod Overcurrent                         |
| C1049-11 | Compact Wheel Loader | Tilt Cylinder Base Short to Ground                    |
| C1049-12 | Compact Wheel Loader | Tilt Cylinder Base Short to Battery                   |
| C1049-13 | Compact Wheel Loader | Tilt Cylinder Base Open Circuit                       |
| C1049-19 | Compact Wheel Loader | Tilt Cylinder Base Overcurrent                        |
| C104A-00 | M-Series Loader      | Lift Float Failed to achieve float                    |
| C104B-00 | M-Series Loader      | Lift Float Conditions not favorable                   |
| C104C-00 | M-Series Loader      | Lift Float Failed to maintain float                   |
| C1050-11 | Compact Wheel Loader | Switched Power Relay Short to Ground                  |
| C1050-12 | Toolcat              | Switched Power Output - Circuit Short to Battery      |
| C1050-12 | Compact Wheel Loader | Switched Power Relay Short to Battery                 |

| Code     | Product                  | Description                                                    |
|----------|--------------------------|----------------------------------------------------------------|
| C1050-13 | Compact Wheel Loader     | Switched Power Relay Open Circuit                              |
| C1050-14 | Toolcat                  | Switched Power Output - Circuit Short to Ground or Open        |
| C1050-15 | Small Articulated Loader | Switched Power Relay Short to Battery or Open Circuit          |
| C1051-11 | M-Series Loader          | Two Speed Solenoid Short to Ground                             |
| C1051-11 | Toolcat                  | Two Speed Solenoid - Circuit Short to Ground                   |
| C1051-12 | M-Series Loader          | Two Speed Solenoid Short to Battery                            |
| C1051-12 | Toolcat                  | Two Speed Solenoid - Circuit Short to Battery                  |
| C1051-13 | Toolcat                  | Two Speed Solenoid - Circuit Open                              |
| C1051-13 | M-Series Loader          | Two Speed Solenoid Open Circuit                                |
| C1051-19 | M-Series Loader          | Two Speed Solenoid Overcurrent                                 |
| C1060-11 | Compact Wheel Loader     | Brake Short to Ground                                          |
| C1060-11 | Small Articulated Loader | Brake Solenoid Short to Ground                                 |
| C1060-12 | Small Articulated Loader | Brake Solenoid Short to Battery                                |
| C1060-12 | Compact Wheel Loader     | Brake Short to Battery                                         |
| C1060-13 | Small Articulated Loader | Brake Solenoid Open Circuit                                    |
| C1060-13 | Compact Wheel Loader     | Brake Open Circuit                                             |
| C1060-19 | Compact Wheel Loader     | Brake Solenoid Overcurrent                                     |
| C1061-11 | Toolcat                  | Brake 1 Solenoid - Circuit Short to Ground                     |
| C1061-12 | Toolcat                  | Brake 1 Solenoid - Circuit Short to Battery                    |
| C1061-13 | Toolcat                  | Brake 1 Solenoid - Circuit Open                                |
| C1061-19 | Toolcat                  | Brake 1 Solenoid - Circuit Current Above Threshold             |
| C1062-11 | Toolcat                  | Brake 2 Solenoid - Circuit Short to Ground                     |
| C1062-12 | Toolcat                  | Brake 2 Solenoid - Circuit Short to Battery                    |
| C1062-13 | Toolcat                  | Brake 2 Solenoid - Circuit Open                                |
| C1062-19 | Toolcat                  | Brake 2 Solenoid - Circuit Current Above Threshold             |
| C1070-11 | M-Series Loader          | Rear Auxiliary Base Solenoid Short to Ground                   |
| C1070-12 | M-Series Loader          | Rear Auxiliary Base Solenoid Short to Battery                  |
| C1070-13 | M-Series Loader          | Rear Auxiliary Base Solenoid Open Circuit                      |
| C1071-11 | M-Series Loader          | Rear Auxiliary Base Lock Solenoid Short to Ground              |
| C1071-12 | M-Series Loader          | Rear Auxiliary Base Lock Solenoid Short to Battery             |
| C1071-13 | M-Series Loader          | Rear Auxiliary Base Lock Open Circuit                          |
| C1075-11 | M-Series Loader          | Rear Auxiliary Rod Solenoid Short to Ground                    |
| C1075-12 | M-Series Loader          | Rear Auxiliary Rod Solenoid Short to Battery                   |
| C1075-13 | M-Series Loader          | Rear Auxiliary Rod Solenoid Open Circuit                       |
| C1076-11 | M-Series Loader          | Rear Auxiliary Rod Lock Solenoid Short to Ground               |
| C1076-12 | M-Series Loader          | Rear Auxiliary Rod Lock Solenoid Short to Battery              |
| C1076-13 | M-Series Loader          | Rear Auxiliary Rod Solenoid Open Circuit                       |
| C1080-F8 | M-Series Loader          | Hydraulic Charge Pressure Extremely Low                        |
| C1080-F9 | M-Series Loader          | Low Hydraulic Pump Pressure                                    |
| C1080-FA | M-Series Loader          | Hydraulic Charge Pressure High                                 |
| C1080-FB | M-Series Loader          | Hydraulic Charge Pressure Extremely High                       |
| C1080-FD | Small Articulated Loader | Hydraulic Charge Pressure Shutdown                             |
| C1090-00 | Toolcat                  | Hydraulic Main Filter Plugged                                  |
| C1090-00 | Compact Wheel Loader     | Hydraulic Filter Plugged                                       |
| C1091-16 | Toolcat                  | Hydraulic Main Filter Switch - Circuit Voltage Below Threshold |
| C1091-17 | Toolcat                  | Hydraulic Main Filter Switch - Circuit Voltage Above Threshold |
| C1091-95 | Toolcat                  | Hydraulic Main Filter Pressure Switch - Incorrect Assembly     |
| C1091-95 | Compact Wheel Loader     | Hydraulic Main Filter Switch Not Connected                     |
| C1093-00 | M-Series Loader          | Hydraulic Case Drain Filter Switch Plugged                     |
| C1097-16 | M-Series Loader          | Hydraulic Charge Pressure Sensor Out of Range Low              |
| C1097-17 | M-Series Loader          | Hydraulic Charge Pressure Sensor Out of Range High             |
| C1099-FA | Toolcat                  | Hydraulic Oil Temperature - High                               |

| Code     | Product                  | Description                                                          |
|----------|--------------------------|----------------------------------------------------------------------|
| C1099-FA | Compact Wheel Loader     | Hydraulic Oil Temperature Too High                                   |
| C1099-FB | Compact Wheel Loader     | Hydraulic Oil Temperature Extremely High                             |
| C1099-FB | Toolcat                  | Hydraulic Oil Temperature - Extremely High                           |
| C1099-FC | Compact Wheel Loader     | Hydraulic Oil Temperature Performance Reduction                      |
| C1099-FD | Small Articulated Loader | Hydraulic Oil Temperature Shutdown                                   |
| C109A-16 | Toolcat                  | Hydraulic Oil Temperature Sensor - Circuit Voltage Below Threshold   |
| C109A-16 | Compact Wheel Loader     | Hydraulic Oil Temperature Out of Range Low                           |
| C109A-17 | Compact Wheel Loader     | Hydraulic Oil Temperature Out of Range High                          |
| C109A-17 | Toolcat                  | Hydraulic Oil Temperature Sensor - Circuit Voltage Above Threshold   |
| C10A0-16 | M-Series Loader          | Drive Motor Case Drain Hydraulic Oil Temperature Out of Range Low    |
| C10A0-17 | M-Series Loader          | Drive Motor Case Drain Hydraulic Oil Temperature Out of Range High   |
| C10A1-FA | M-Series Loader          | Drive Motor Case Drain Hydraulic Oil Temperature High                |
| C10A1-FB | M-Series Loader          | Drive Motor Case Drain Hydraulic Oil Temperature Extremely High      |
| C10A1-FC | M-Series Loader          | Drive Motor Case Drain Hydraulic Oil Temperature Reduced Performance |
| C10A5-16 | M-Series Loader          | Pump Case Drain Hydraulic Oil Temperature Out of Range Low           |
| C10A5-17 | M-Series Loader          | Pump Case Drain Hydraulic Oil Temperature Out of Range High          |
| C10A6-FA | M-Series Loader          | Pump Case Drain Hydraulic Oil Temperature High                       |
| C10A6-FB | M-Series Loader          | Pump Case Drain Hydraulic Oil Temperature Extremely High             |
| C10A6-FC | M-Series Loader          | Pump Case Drain Hydraulic Oil Temperature High                       |
| C10B0-00 | M-Series Loader          | Workgroup Disabled Due To Window Fault                               |
| C10C0-77 | M-Series Loader          | Right Swash Plate Commanded Position Not Reachable                   |
| C10C0-F0 | M-Series Loader          | Right Swash Plate Not in Neutral                                     |
| C10C1-16 | M-Series Loader          | Right Swash Plate Sensor Out of Range Low                            |
| C10C1-17 | M-Series Loader          | Right Swash Plate Sensor Out of Range High                           |
| C10C5-77 | M-Series Loader          | Left Swash Plate Commanded Position Not Reachable                    |
| C10C5-F0 | M-Series Loader          | Left Swash Plate Not in Neutral                                      |
| C10C6-16 | M-Series Loader          | Left Swash Plate Sensor Out of Range Low                             |
| C10C6-17 | M-Series Loader          | Left Swash Plate Sensor Out of Range High                            |
| C10CA-77 | Toolcat                  | Swash Plate - Commanded Position Not Reachable                       |
| C10CA-F0 | Toolcat                  | Swash Plate - Not in Neutral                                         |
| C10CB-16 | Toolcat                  | Swash Plate Sensor - Circuit Voltage Below Threshold                 |
| C10CB-17 | Toolcat                  | Swash Plate Sensor - Circuit Voltage Above Threshold                 |
| C10D0-54 | M-Series Loader          | Drive Pump Not Calibrated                                            |
| C10D0-54 | Toolcat                  | Drive Pump - Missing Calibration                                     |
| C10D1-11 | Toolcat                  | Drive Pump Forward - Circuit Short to Ground                         |
| C10D1-11 | Compact Wheel Loader     | Drive Pump Forward Short to Ground                                   |
| C10D1-12 | Toolcat                  | Drive Pump Forward - Circuit Short to Battery                        |
| C10D1-12 | Compact Wheel Loader     | Drive Pump Forward Short to Battery                                  |
| C10D1-13 | Compact Wheel Loader     | Drive Pump Forward Open Circuit                                      |
| C10D1-13 | Toolcat                  | Drive Pump Forward - Circuit Open                                    |
| C10D1-19 | Compact Wheel Loader     | Drive Pump Forward Overcurrent                                       |
| C10D1-19 | Toolcat                  | Drive Pump Forward - Circuit Current Above Threshold                 |
| C10D2-11 | Compact Wheel Loader     | Drive Pump reverse Short to Ground                                   |
| C10D2-11 | Toolcat                  | Drive Pump Reverse - Circuit Short to Ground                         |
| C10D2-12 | Toolcat                  | Drive Pump Reverse - Circuit Short to Battery                        |
| C10D2-12 | Compact Wheel Loader     | Drive Pump reverse Short to Battery                                  |
| C10D2-13 | Compact Wheel Loader     | Drive Pump reverse Open Circuit                                      |
| C10D2-13 | Toolcat                  | Drive Pump Reverse - Circuit Open                                    |
| C10D2-19 | Compact Wheel Loader     | Drive Pump reverse Overcurrent                                       |
| C10D2-19 | Toolcat                  | Drive Pump Reverse - Circuit Current Above Threshold                 |
| C10E0-16 | Small Articulated Loader | Controller 8V Sensor Supply Voltage Low                              |
| C10E0-17 | Small Articulated Loader | Controller 8V Sensor Supply Voltage High                             |

| Code     | Product                  | Description                                     |
|----------|--------------------------|-------------------------------------------------|
| C10E5-16 | Small Articulated Loader | Controller 5V Sensor Supply Voltage Low         |
| C10E5-17 | Small Articulated Loader | Controller 5V Sensor Supply Voltage High        |
| C10F0-11 | Small Articulated Loader | Lift/Tilt Short to Ground                       |
| C10F0-12 | Small Articulated Loader | Lift/Tilt Short to Battery                      |
| C10F0-13 | Small Articulated Loader | Lift/Tilt Open Circuit                          |
| C10F1-16 | Small Articulated Loader | Lift/Tilt Out of Range Low                      |
| C10F1-17 | Small Articulated Loader | Lift/Tilt Out of Range High                     |
| C10FA-11 | Small Articulated Loader | Lift Arm Extension Short to Ground              |
| C10FA-12 | Small Articulated Loader | Lift Arm Extension Short to Battery             |
| C10FA-13 | Small Articulated Loader | Lift Arm Extension Open Circuit                 |
| C10FA-19 | Small Articulated Loader | Lift Arm Extension Overcurrent                  |
| C10FB-11 | Small Articulated Loader | Lift Arm Rod Solenoid Short to Ground           |
| C10FB-12 | Small Articulated Loader | Lift Arm Rod Solenoid Short to Battery          |
| C10FB-13 | Small Articulated Loader | Lift Arm Rod Solenoid Open Circuit              |
| C10FB-19 | Small Articulated Loader | Lift Arm Rod Solenoid Overcurrent               |
| C10FC-11 | Small Articulated Loader | Lift Arm Base Solenoid Short to Ground          |
| C10FC-12 | Small Articulated Loader | Lift Arm Base Solenoid Short to Battery         |
| C10FC-13 | Small Articulated Loader | Lift Arm Solenoid Open Circuit                  |
| C10FC-19 | Small Articulated Loader | Lift Arm Solenoid Overcurrent                   |
| C1100-11 | Small Articulated Loader | Travel Circuit Short to Ground                  |
| C1100-12 | Small Articulated Loader | Travel Circuit Short to Battery                 |
| C1100-13 | Small Articulated Loader | Travel Circuit Open                             |
| C1101-16 | Small Articulated Loader | Travel Circuit Out of Range Low                 |
| C1101-17 | Small Articulated Loader | Travel Circuit Out of Range High                |
| C1110-11 | Compact Wheel Loader     | Ride Control Circuit Short to Ground            |
| C1110-15 | Compact Wheel Loader     | Ride Control Circuit Error On                   |
| C1111-16 | Compact Wheel Loader     | Ride Control Feedback Circuit Out of Range Low  |
| C1111-17 | Compact Wheel Loader     | Ride Control Feedback Circuit Out of Range High |
| C1130-11 | Compact Wheel Loader     | Hydraulic Motor reverse Short to Ground         |
| C1130-12 | Compact Wheel Loader     | Hydraulic Motor reverse Short to Battery        |
| C1130-13 | Compact Wheel Loader     | Hydraulic Motor reverse Open Circuit            |
| C1130-19 | Compact Wheel Loader     | Hydraulic Motor Overcurrent                     |
| C1150-13 | M-Series Loader          | Right Drive Motor Direction Open Circuit        |
| C1150-16 | M-Series Loader          | Right Drive Motor Direction Out of Range Low    |
| C1150-17 | M-Series Loader          | Right Drive Motor Direction Out of Range High   |
| C1155-13 | M-Series Loader          | Left Drive Motor Direction Open Circuit         |
| C1155-16 | M-Series Loader          | Left Drive Motor Direction Out of Range Low     |
| C1155-17 | M-Series Loader          | Left Drive Motor Direction Out of Range High    |
| C1182-A2 | Small Articulated Loader | Alternator Voltage High                         |
| C1182-A2 | Compact Wheel Loader     | Alternator Voltage Low                          |
| C1182-A2 | Toolcat                  | Alternator Voltage System Voltage Low           |
| C1182-A3 | Toolcat                  | Alternator Voltage System Voltage High          |
| C1182-A3 | Small Articulated Loader | Alternator Voltage Low                          |
| C1182-A3 | M-Series Loader          | Alternator Voltage High                         |
| C1183-A3 | Compact Wheel Loader     | Alternator Voltage High                         |
| C1190-00 | M-Series Loader          | System Voltage Out of Range Low                 |
| C1192-00 | Compact Wheel Loader     | System Voltage Extremely Low                    |
| C1192-00 | Toolcat                  | Battery Voltage Extremely Low                   |
| C1193-00 | Toolcat                  | Battery Voltage Low                             |
| C1193-00 | Compact Wheel Loader     | System Voltage Too Low                          |
| C1195-00 | M-Series Loader          | System Voltage Extremely Low                    |
| C1195-00 | Toolcat                  | Battery Voltage High                            |

| Code     | Product                  | Description                                             |
|----------|--------------------------|---------------------------------------------------------|
| C1195-00 | Compact Wheel Loader     | System Voltage High                                     |
| C1196-00 | Compact Wheel Loader     | System Voltage Extremely High                           |
| C1196-00 | Toolcat                  | Battery Voltage Extremely High                          |
| C119A-F8 | Small Articulated Loader | System Voltage Extremely Low                            |
| C119A-F9 | Small Articulated Loader | System Voltage Too Low                                  |
| C119A-FA | Small Articulated Loader | System Voltage Extremely Low                            |
| C119A-FB | Small Articulated Loader | System Voltage Extremely High                           |
| C11A0-11 | Toolcat                  | Servo Enable Solenoid - Circuit Short to Ground         |
| C11A0-12 | Toolcat                  | Servo Enable Solenoid - Circuit Short to Battery        |
| C11A0-13 | Toolcat                  | Servo Enable Solenoid - Circuit Open                    |
| C11C0-11 | M-Series Loader          | Left Forward Drive Solenoid Error Off                   |
| C11C0-12 | M-Series Loader          | Left Forward Drive Solenoid Error On                    |
| C11C2-11 | M-Series Loader          | Left Reverse Drive Solenoid Error Off                   |
| C11C2-12 | M-Series Loader          | Left Reverse Drive Solenoid Error On                    |
| C11C4-11 | M-Series Loader          | Right Forward Drive Solenoid Error Off                  |
| C11C4-12 | M-Series Loader          | Right Forward Drive Solenoid Error On                   |
| C11C6-11 | M-Series Loader          | Right Reverse Drive Solenoid Error Off                  |
| C11C6-12 | M-Series Loader          | Right Reverse Drive Solenoid Error On                   |
| C11F0-94 | Toolcat                  | Diverter Switch - Unexpected Operation                  |
| C1200-11 | Compact Wheel Loader     | Power Exchange Unlock Short to Ground                   |
| C1200-12 | Compact Wheel Loader     | Power Exchange Unlock Short to Battery                  |
| C1200-13 | Compact Wheel Loader     | Power Exchange Unlock Open Circuit                      |
| C1205-11 | Compact Wheel Loader     | Power Exchange Lock Short to Ground                     |
| C1205-12 | Compact Wheel Loader     | Power Exchange Lock Short to Battery                    |
| C1205-13 | Compact Wheel Loader     | Power Exchange Lock Open Circuit                        |
| C1220-11 | Compact Wheel Loader     | Diff-Lock Short to Ground                               |
| C1220-12 | Compact Wheel Loader     | Diff-Lock Short to Battery                              |
| C1220-13 | Compact Wheel Loader     | Diff-Lock Open Circuit                                  |
| C1220-19 | Compact Wheel Loader     | Diff-Lock Overcurrent                                   |
| C1221-17 | Compact Wheel Loader     | Diff-Lock Sensor Out of Range High                      |
| C1250-F9 | Compact Wheel Loader     | Park Brake Pressure Low                                 |
| C1250-FA | Compact Wheel Loader     | Park Brake Pressure High                                |
| C1251-16 | Compact Wheel Loader     | Park Brake Pressure Sensor Circuit Out of Range Low     |
| C1251-17 | Compact Wheel Loader     | Park Brake Pressure Sensor Circuit Out of Range High    |
| C1260-F9 | Compact Wheel Loader     | Service Brake Pressure Low                              |
| C1260-FA | Compact Wheel Loader     | Service Brake Pressure High                             |
| C1260-FB | Compact Wheel Loader     | Service Brake Pressure Extremely High                   |
| C1261-16 | Compact Wheel Loader     | Service Brake Pressure Sensor Circuit Out of Range Low  |
| C1261-17 | Compact Wheel Loader     | Service Brake Pressure Sensor Circuit Out of Range High |
| C1270-F9 | Compact Wheel Loader     | Steering Pressure Low                                   |
| C1271-16 | Compact Wheel Loader     | Steering Pressure Sensor Circuit Out of Range Low       |
| C1271-17 | Compact Wheel Loader     | Steering Pressure Sensor Circuit Out of Range High      |
| C1280-F9 | Compact Wheel Loader     | Reserve Brake Pressure Low                              |
| C1280-FA | Compact Wheel Loader     | Reserve Brake Pressure High                             |
| C1280-FB | Compact Wheel Loader     | Reserve Brake Pressure Extremely Low                    |
| C1281-16 | Compact Wheel Loader     | Reserve Brake Pressure Sensor Circuit Out of Range Low  |
| C1281-17 | Compact Wheel Loader     | Reserve Brake Pressure Sensor Circuit Out of Range High |
| C1290-17 | Toolcat                  | PTO Speed Sensor - Circuit Voltage Above Threshold      |
| C1291-FA | Toolcat                  | PTO Speed - High                                        |
| C1291-FB | Toolcat                  | PTO Speed - Extremely High                              |
| C1292-FD | Toolcat                  | PTO - In Shutdown                                       |
| C1293-92 | Toolcat                  | PTO Switch - Performance or Incorrect Operation         |

| Code     | Product              | Description                                                     |
|----------|----------------------|-----------------------------------------------------------------|
| C1295-13 | Toolcat              | Traction Control Speed Sensor - Circuit Open                    |
| C1295-16 | Toolcat              | Traction Control Speed Sensor - Circuit Voltage Below Threshold |
| C1295-17 | Toolcat              | Traction Control Speed Sensor - Circuit Voltage Above Threshold |
| C129A-13 | Toolcat              | Main Speed Sensor - Circuit Open                                |
| C129A-16 | Toolcat              | Main Speed Sensor - Circuit Voltage Below Threshold             |
| C129A-17 | Toolcat              | Main Speed Sensor - Circuit Voltage Above Threshold             |
| C12B0-11 | Toolcat              | Lift Spool Lock - Circuit Short to Ground                       |
| C12B0-12 | Toolcat              | Lift Spool Lock - Circuit Short to Battery                      |
| C12B0-13 | Toolcat              | Lift Spool Lock - Circuit Open                                  |
| C12B5-11 | Toolcat              | Tilt Spool Lock - Circuit Short to Ground                       |
| C12B5-12 | Toolcat              | Tilt Spool Lock - Circuit Short to Battery                      |
| C12B5-13 | Toolcat              | Tilt Spool Lock - Circuit Open                                  |
| C12BA-11 | Toolcat              | Box Spool Lock - Circuit Short to Ground                        |
| C12BA-12 | Toolcat              | Box Spool Lock - Circuit Short to Battery                       |
| C12BA-13 | Toolcat              | Box Spool Lock - Circuit Open                                   |
| C12F0-FB | Compact Wheel Loader | Hydromotor Speed Extremely High                                 |
| C12F1-31 | Compact Wheel Loader | Hydromotor Speed Sensor Not Connected                           |
| C1300-16 | Compact Wheel Loader | Inching Sensor Circuit Out of Range Low                         |
| C1300-17 | Compact Wheel Loader | Inching Sensor Circuit Out of Range High                        |
| C1401-11 | Toolcat              | AWS Solenoid 1 - Circuit Short to Ground                        |
| C1401-12 | Toolcat              | AWS Solenoid 1 - Circuit Short to Battery                       |
| C1401-13 | Toolcat              | AWS Solenoid 1 - Circuit Open                                   |
| C1402-11 | Toolcat              | AWS Solenoid 2 - Circuit Short to Ground                        |
| C1402-12 | Toolcat              | AWS Solenoid 2 - Circuit Short to Battery                       |
| C1402-13 | Toolcat              | AWS Solenoid 2 - Circuit Open                                   |
| C1403-11 | Toolcat              | AWS Solenoid 3 - Circuit Short to Ground                        |
| C1403-12 | Toolcat              | AWS Solenoid 3 - Circuit Short to Battery                       |
| C1403-13 | Toolcat              | AWS Solenoid 3 - Circuit Open                                   |
| C3014    | Telehandler          | LLMC Sensor Offset                                              |
| C3015    | Telehandler          | LLMC Sensor Out of Range                                        |
| C3016    | Telehandler          | LLMC Sensor Default                                             |
| C3017    | Telehandler          | LLMC Sensor ID Error                                            |
| C3018    | Telehandler          | LLMC Sensor Rx Out of Delay                                     |
| C3113    | Telehandler          | LLMC Calibration Values Out of Range                            |
| C3121    | Telehandler          | LLMC Calibration Values Inverted                                |
| C3122    | Telehandler          | LLMC Calibration Values Too Close                               |
| C3123    | Telehandler          | LLMC Calibration Timeout                                        |
| C3801    | Telehandler          | LLMC EEPROM Failure                                             |
| C3803    | Telehandler          | LLMC External Watchdog Default                                  |
| C3804    | Telehandler          | LLMC Wrong RAM Test                                             |
| C3805    | Telehandler          | LLMC Wrong Program Checksum                                     |
| CP706    | M-Series Loader      | TestCP706                                                       |
| D0217    | Telehandler          | Hydraulic filter plugged                                        |
| D0321    | Telehandler          | Battery Voltage OOR High                                        |
| D0322    | Telehandler          | Battery Voltage OOR Low                                         |
| D0421    | Telehandler          | Inching Pedal OOR High                                          |
| D0422    | Telehandler          | Inching Pedal OOR Low                                           |
| D0428    | Telehandler          | Inching Pedal In error                                          |
| D0605    | Telehandler          | Vehicle speed Short To Battery                                  |
| D0606    | Telehandler          | Vehicle speed Short To Ground                                   |
| D0607    | Telehandler          | Vehicle speed Open circuit                                      |
| D0611    | Telehandler          | Vehicle speed extremely high                                    |

| Code  | Product     | Description                                           |
|-------|-------------|-------------------------------------------------------|
| D0613 | Telehandler | Vehicle speed No Signal                               |
| D0721 | Telehandler | Hydraulic Oil Temperature OOR High                    |
| D0722 | Telehandler | Hydraulic Oil Temperature OOR Low                     |
| D0821 | Telehandler | Frame leveling Pressure Sensor Out Of Range High      |
| D0822 | Telehandler | frame leveling Pressure Sensor Out Of Range Low       |
| D0909 | Telehandler | Park Brake Pressure Low                               |
| D0910 | Telehandler | Park Brake Pressure High                              |
| D0911 | Telehandler | Park Brake Pressure Extremely High                    |
| D0921 | Telehandler | Park Brake Pressure Out of Range High                 |
| D0922 | Telehandler | Park Brake Pressure Out of Range Low                  |
| D1002 | Telehandler | Passive Brake Output Short To Battery or Open circuit |
| D1003 | Telehandler | Passive Brake Valve Short To Ground                   |
| D1005 | Telehandler | Passive Brake Output Short To Battery                 |
| D1006 | Telehandler | Passive Brake Output Short To Ground                  |
| D1007 | Telehandler | Passive Brake Output Open Circuit                     |
| D1032 | Telehandler | Passive Brake Output Overcurrent                      |
| D1128 | Telehandler | Park Brake Dashboard Switch In Error                  |
| D1145 | Telehandler | Park Brake Dashboard Switch Disagree                  |
| D1202 | Telehandler | EMEA Trailer Brake output Error On (Short To Battery) |
| D1203 | Telehandler | EMEA Trailer Brake output Error Off (Short To Gound)  |
| D1207 | Telehandler | EMEA Trailer Brake output Open circuit                |
| D1233 | Telehandler | EMEA Trailer Brake output Controller Internal failure |
| D1302 | Telehandler | EMEA Trailer Brake Relay Error On                     |
| D1303 | Telehandler | EMEA Trailer Brake Relay Error Off                    |
| D1402 | Telehandler | Brake Light Output Error On                           |
| D1402 | Telehandler | Trailer Brake Command Line Output Error On            |
| D1403 | Telehandler | Trailer Brake Command Line Output Error Off           |
| D1403 | Telehandler | Brake Light Output Error Off                          |
| D1407 | Telehandler | Trailer Brake Command Line Output Open Circuit        |
| D1407 | Telehandler | Brake Light Output Open Circuit                       |
| D1433 | Telehandler | Trailer Brake Command Line Output Internal failure    |
| D1433 | Telehandler | Brake Light Output Internal failure                   |
| D1502 | Telehandler | Trailer Brake Command Line Relay Error On             |
| D1502 | Telehandler | Brake Light Relay Error On                            |
| D1503 | Telehandler | Trailer Brake Command Line Relay Error Off            |
| D1503 | Telehandler | Brake Light Relay Error Off                           |
| D1605 | Telehandler | Drive Pump Forward Coil Short To Battery              |
| D1606 | Telehandler | Drive Pump Forward Coil Short To Ground               |
| D1607 | Telehandler | Drive Pump Forward Coil Open circuit                  |
| D1632 | Telehandler | Drive Pump Forward Coil Overcurrent                   |
| D1705 | Telehandler | Drive Pump Reverse Coil Short To Battery              |
| D1706 | Telehandler | Drive Pump Reverse Coil Short To Ground               |
| D1707 | Telehandler | Drive Pump Reverse Coil Open circuit                  |
| D1732 | Telehandler | Drive Pump Reverse Coil Overcurrent                   |
| D1802 | Telehandler | Stabilisers / Aux diverter output valve error ON      |
| D1803 | Telehandler | Stabilisers / Aux diverter output valve error OFF     |
| D1807 | Telehandler | Stabilisers / Aux diverter output open circuit        |
| D1825 | Telehandler | Stabilisers / Aux diverter output Unresponsive        |
| D1902 | Telehandler | Stabilisers / Aux diverter relay feedback error ON    |
| D1903 | Telehandler | Stabilisers / Aux diverter relay feedback error OFF   |
| D2002 | Telehandler | Low speed output (hydraulic motor) Error On           |
| D2003 | Telehandler | Low speed output (hydraulic motor) Error Off          |

| Code  | Product         | Description                                                    |
|-------|-----------------|----------------------------------------------------------------|
| D2007 | Telehandler     | Low speed output (hydraulic motor) Open circuit                |
| D2033 | Telehandler     | Low speed output (hydraulic motor) Controller Internal failure |
| D2102 | Telehandler     | Low speed Relay Error On                                       |
| D2103 | Telehandler     | Low speed Relay Error Off                                      |
| D2202 | Telehandler     | Defeat valve output (hydraulic motor) Error On                 |
| D2203 | Telehandler     | Defeat valve output (hydraulic motor) Error Off                |
| D2207 | Telehandler     | Defeat valve output (hydraulic motor) Open circuit             |
| D2233 | Telehandler     | Defeat valve output Controller Internal failure                |
| D2302 | Telehandler     | Defeat valve relay Error On                                    |
| D2303 | Telehandler     | Defeat valve relay Error Off                                   |
| D2502 | Telehandler     | Left stabilizer on the floor Error ON                          |
| D2503 | Telehandler     | Left stabilizer on the floor Error OFF                         |
| D2609 | Telehandler     | Hydraulic Steering Pressure Low                                |
| D2621 | Telehandler     | Hydraulic Steering Pressure Out of Range High                  |
| D2702 | Telehandler     | Right stabilizer on the floor Error ON                         |
| D2703 | Telehandler     | Right stabilizer on the floor Error OFF                        |
| D2821 | Telehandler     | Left stabilizer Pressure Sensor Out Of Range High              |
| D2822 | Telehandler     | Left stabilizer Pressure Sensor Out Of Range Low               |
| D2921 | Telehandler     | Right stabilizer Pressure Sensor Out Of Range High             |
| D2922 | Telehandler     | Right stabilizer Pressure Sensor Out Of Range Low              |
| D3005 | Telehandler     | Stabilizers Right Output Short To Battery                      |
| D3006 | Telehandler     | Stabilizers Right Output Short To Ground                       |
| D3007 | Telehandler     | Stabilizers Right Output Open circuit                          |
| D3024 | Telehandler     | Stabilizers Right Output Not In Neutral                        |
| D3105 | Telehandler     | Stabilizers Left Output Short To Battery                       |
| D3106 | Telehandler     | Stabilizers Left Output Short To Ground                        |
| D3107 | Telehandler     | Stabilizers Left Output Open circuit                           |
| D3124 | Telehandler     | Stabilizers Left Output Not In Neutral                         |
| D3204 | Telehandler     | Workgroup controller No Communication                          |
| D3304 | Telehandler     | Gateway controller No Communication                            |
| D3404 | Telehandler     | Display controller No Communication                            |
| D3604 | Telehandler     | Engine controller No Communication                             |
| D3723 | Telehandler     | Programming or constant data invalid                           |
| D3728 | Telehandler     | Drive Controller failure                                       |
| D3796 | Telehandler     | Interrupted power                                              |
| D3797 | Telehandler     | Drive Controller programmed                                    |
| D3905 | M-Series Loader | Left Joystick X-Axis Not in Neutral                            |
| D3907 | M-Series Loader | Left Joystick Y-Axis Not in Neutral                            |
| D4004 | Telehandler     | Joystick No communication                                      |
| D4007 | M-Series Loader | Right Joystick Y-Axis Not in Neutral                           |
| D4011 | Telehandler     | Joystick Right roller Out Of Neutral (Auxiliary)               |
| D4028 | Telehandler     | Joystick Grip Fault                                            |
| D4113 | Telehandler     | FNR lever no Signal                                            |
| D4128 | Telehandler     | FNR multiple inputs active                                     |
| D4402 | Telehandler     | Power Quicktach output Error On                                |
| D4403 | Telehandler     | Power Quicktach output Error Off                               |
| D4407 | Telehandler     | Power Quicktach Output Open circuit                            |
| D4502 | Telehandler     | Power Quicktach Relay feedback Error On                        |
| D4503 | Telehandler     | Power Quicktach Relay feedback Error Off                       |
| D4528 | Telehandler     | Power Quicktach Switch in error                                |
| D4621 | Telehandler     | Voltage Sensor 5V OOR High                                     |
| D4622 | Telehandler     | Voltage Sensor 5V OOR Low                                      |

| Code  | Product     | Description                                                |
|-------|-------------|------------------------------------------------------------|
| D4705 | Telehandler | Frame leveling Output Short To Battery                     |
| D4706 | Telehandler | Frame leveling Output Short To Ground                      |
| D4707 | Telehandler | Frame leveling Output Open circuit                         |
| D4724 | Telehandler | Frame leveling Output Not In Neutral                       |
| D4802 | Telehandler | Park Brake Reserve Pressure Valve Output Error On          |
| D4803 | Telehandler | Park Brake Reserve Pressure Valve Output Error Off         |
| D4807 | Telehandler | Park Brake Reserve Pressure Valve Output Open Circuit      |
| D4902 | Telehandler | Park Brake Reserve Pressure Valve Relay Feedback Error On  |
| D4903 | Telehandler | Park Brake Reserve Pressure Valve Relay Feedback Error Off |
| D5005 | Telehandler | Rear Aux./Hook UP Valve Short to Battery                   |
| D5006 | Telehandler | Rear Aux./Hook UP Valve Short to Ground                    |
| D5007 | Telehandler | Rear Aux./Hook UP Valve Open Circuit                       |
| D5105 | Telehandler | Rear Aux./Hook DOWN Valve Short to Battery                 |
| D5106 | Telehandler | Rear Aux./Hook DOWN Valve Short to Ground                  |
| D5107 | Telehandler | Rear Aux./Hook DOWN Valve Open Circuit                     |
| D5205 | Telehandler | Rear Aux./Hook ACTIVATION Valve Short to Battery           |
| D5206 | Telehandler | Rear Aux./Hook ACTIVATION Valve Short to Ground            |
| D5207 | Telehandler | Rear Aux./Hook ACTIVATION Valve Open Circuit               |
| D5232 | Telehandler | Rear Aux./Hook ACTIVATION Valve Overcurrent                |
| D5328 | Telehandler | Rear Aux./Hook Dashbord Switch In Error                    |
| D5421 | Telehandler | Auxiliary spool sensor Out Of Range high                   |
| D5422 | Telehandler | Auxiliary spool sensor Out Of Range low                    |
| D5424 | Telehandler | Auxiliary spool sensor not in neutral                      |
| D5425 | Telehandler | Auxiliary spool sensor unresponsive                        |
| D5521 | Telehandler | SwashPlate Sensor1 OORH                                    |
| D5522 | Telehandler | SwashPlate Sensor1 OORL                                    |
| D5621 | Telehandler | Swash Plate Sensor2 OORH                                   |
| D5622 | Telehandler | Swash Plate Sensor2 OORL                                   |
| D5715 | Telehandler | Swash Plate shutdown                                       |
| D5744 | Telehandler | Swash Plate dual fault                                     |
| D5745 | Telehandler | Swash Plate disagree                                       |
| D5746 | Telehandler | Swash plate unresponsive                                   |
| D5786 | Telehandler | Swash plate Safe Stop failure                              |
| D5815 | Telehandler | Safe Start Shutdown                                        |
| D5824 | Telehandler | Safe Start Swash Out Of Neutral                            |
| D5835 | Telehandler | Safe Start Dump valve stuck on                             |
| D5911 | Telehandler | Overspeed fault                                            |
| D5915 | Telehandler | Overspeed shutdown                                         |
| D5928 | Telehandler | Overspeed failure                                          |
| D5986 | Telehandler | Overspeed failure                                          |
| D6021 | Telehandler | Servo Pressure Out of Range High                           |
| D6022 | Telehandler | Servo Pressure Out of Range Low                            |
| D6202 | Telehandler | Creep Light Error On                                       |
| D6203 | Telehandler | Creep Light Error Off                                      |
| D6302 | Telehandler | Creep Switch Error On                                      |
| D6505 | Telehandler | Gear 1 (Gearbox) Short To Battery                          |
| D6506 | Telehandler | Gear 1 (Gearbox) Short To Ground                           |
| D6507 | Telehandler | Gear 1 (Gearbox) Open Circuit                              |
| D6605 | Telehandler | Gear 2 (Gearbox) Short To Battery                          |
| D6606 | Telehandler | Gear 2 (Gearbox) Short To Ground                           |
| D6607 | Telehandler | Gear 2 (Gearbox) Open Circuit                              |
| D6702 | Telehandler | Gearshift sensor Error On                                  |

| Code  | Product         | Description                                             |
|-------|-----------------|---------------------------------------------------------|
| D6760 | Telehandler     | Gearshift sensor - Shift didn't start / no shift        |
| D6761 | Telehandler     | Gearshift sensor - Shift too long / locked              |
| D6824 | Telehandler     | Frame leveling switch Not in Neutral                    |
| D6902 | Telehandler     | Gear switch 1/2 Error On (dashboard)                    |
| D7002 | Telehandler     | High/Low speed switch Error on (left lever)             |
| D7102 | Telehandler     | Backup alarm Output Error On                            |
| D7103 | Telehandler     | Backup alarm Output Error Off                           |
| D7107 | Telehandler     | Backup alarm Output Open Circuit                        |
| D7133 | Telehandler     | Backup alarm Output Internal Failure                    |
| D7202 | Telehandler     | Backup alarm Relay Feedback Error On                    |
| D7203 | Telehandler     | Backup alarm Relay Feedback Error Off                   |
| D7209 | Telehandler     | Service Brake Pressure Low                              |
| D7210 | Telehandler     | Service Brake Pressure High                             |
| D7214 | Telehandler     | Service Brake Pressure Extremely Low                    |
| D7221 | Telehandler     | Service Brake Pressure Out of Range High                |
| D7222 | Telehandler     | Service Brake Pressure Out of Range Low                 |
| D7309 | Telehandler     | Service Brake Reserve Pressure Low                      |
| D7310 | Telehandler     | Service Brake Reserve Pressure High                     |
| D7321 | Telehandler     | Service Brake Reserve Pressure Out of Range High        |
| D7322 | Telehandler     | Service Brake Reserve Pressure Out of Range Low         |
| D7501 | M-Series Loader | Drive/Drive+ CAN Joystick Information Error             |
| D7502 | M-Series Loader | Drive Controller Needs Programming                      |
| D7504 | M-Series Loader | Drive No Communication from Drive Controller            |
| D7505 | M-Series Loader | Drive Left Joystick X-Axis Not in Neutral               |
| D7506 | M-Series Loader | Drive+ Steering valve cartridge stuck                   |
| D7507 | M-Series Loader | Drive Left Joystick Y-Axis Not in Neutral               |
| D7508 | M-Series Loader | Drive Right Joystick Y-Axis Not in Neutral              |
| D7509 | M-Series Loader | Drive ISO/H Pattern Switch Short to Ground or Battery   |
| D7509 | Telehandler     | Park Brake Reserve Pressure Low                         |
| D7510 | M-Series Loader | Drive Improper Joysticks installed                      |
| D7511 | M-Series Loader | Drive Left speed sensor not connected.                  |
| D7512 | M-Series Loader | Drive Right speed sensor not connected                  |
| D7513 | M-Series Loader | Drive+ Right Front Wheel Angle Sensor Stuck             |
| D7514 | M-Series Loader | Drive+ Left Front Wheel Angle Sensor Stuck              |
| D7515 | M-Series Loader | Drive+ Right Rear Wheel Angle Sensor Stuck              |
| D7516 | M-Series Loader | Drive+ Left Rear Wheel Angle Sensor Stuck               |
| D7517 | M-Series Loader | Drive Left Swash Plate Not in Neutral                   |
| D7518 | M-Series Loader | Drive Right Swash Plate Not in Neutral                  |
| D7519 | M-Series Loader | Drive Left Joystick X-Axis Out of Range High            |
| D7521 | M-Series Loader | Drive Left Joystick Y-Axis Out of Range High            |
| D7522 | M-Series Loader | Drive Right Joystick Y-Axis Out of Range High           |
| D7523 | M-Series Loader | Drive+ Right Front Wheel Angle Sensor Out of Range High |
| D7524 | M-Series Loader | Drive+ Left Front Wheel Angle Sensor Out of Range High  |
| D7525 | M-Series Loader | Drive+ Right Rear Wheel Angle Sensor Out of Range High  |
| D7526 | M-Series Loader | Drive+ Left Rear Wheel Angle Sensor Out of Range High   |
| D7527 | M-Series Loader | Drive Left Swash Plate Out of Position                  |
| D7528 | M-Series Loader | Drive Right Swash Plate Out of Position                 |
| D7529 | M-Series Loader | Drive Left Joystick X-Axis Out of Range Low             |
| D7531 | M-Series Loader | Drive Left Joystick Y-Axis Out of Range Low             |
| D7532 | M-Series Loader | Drive Right Joystick Y-Axis Out of Range Low            |
| D7533 | M-Series Loader | Drive+ Right Front Wheel Angle Sensor Out of Range Low  |
| D7534 | M-Series Loader | Drive+ Left Front Wheel Angle Sensor Out of Range Low   |

| Code  | Product         | Description                                                  |
|-------|-----------------|--------------------------------------------------------------|
| D7535 | M-Series Loader | Drive+ Right Rear Wheel Angle Sensor Out of Range Low        |
| D7536 | M-Series Loader | Drive+ Left Rear Wheel Angle Sensor Out of Range Low         |
| D7537 | M-Series Loader | Drive 5 Volt Sensor Supply 1 Out of Range Low                |
| D7538 | M-Series Loader | Drive+ Sensor Supply 2 Out of Range Low                      |
| D7539 | M-Series Loader | Drive Left Swash Plate Sensor Out of Range High              |
| D7540 | M-Series Loader | Drive Left Swash Plate Sensor Out of Range Low               |
| D7541 | M-Series Loader | Drive Right Swash Plate Sensor Out of Range High             |
| D7542 | M-Series Loader | Drive Right Swash Plate Sensor Out of Range Low              |
| D7543 | M-Series Loader | Drive Left Forward Drive Solenoid Error On                   |
| D7544 | M-Series Loader | Drive Left Reverse Drive Solenoid Error On                   |
| D7545 | M-Series Loader | Drive Right Forward Drive Solenoid Error On                  |
| D7546 | M-Series Loader | Drive Right Reverse Drive Solenoid Error On                  |
| D7547 | M-Series Loader | Drive+ Right Front Steer Extend Short to Battery             |
| D7548 | M-Series Loader | Drive+ Left Front Steer Extend Short to Battery              |
| D7549 | M-Series Loader | Drive+ Right Rear Steer Extend Short To Battery              |
| D7550 | M-Series Loader | Drive+ Left Rear Steer Extend Short to Battery               |
| D7551 | M-Series Loader | Drive+ Steer Pressure Short To Battery                       |
| D7552 | M-Series Loader | Drive Backup Alarm Error On                                  |
| D7553 | M-Series Loader | Drive Left Forward Drive Solenoid Error Off                  |
| D7554 | M-Series Loader | Drive Left Reverse Drive Solenoid Error Off                  |
| D7555 | M-Series Loader | Drive Right Forward Drive Solenoid Error Off                 |
| D7556 | M-Series Loader | Drive Right Reverse Drive Solenoid Error Off                 |
| D7557 | M-Series Loader | Drive+ Right Front Steer Extend Short to Ground              |
| D7558 | M-Series Loader | Drive+ Right Front Steer Retract Short to Ground             |
| D7559 | M-Series Loader | Drive+ Left Front Steer Extend Short to Ground               |
| D7560 | M-Series Loader | Drive+ Left Front Steer Retract Short to Ground              |
| D7561 | M-Series Loader | Drive+ Right Rear Steer Extend Short to Ground               |
| D7562 | M-Series Loader | Drive+ Right Rear Steer Retract Short to Ground              |
| D7563 | M-Series Loader | Drive+ Left Rear Steer Extend Short to Ground                |
| D7564 | M-Series Loader | Drive+ Left Rear Steer Retract Short to Ground               |
| D7565 | M-Series Loader | Drive+ Stree Pressure Short to Ground                        |
| D7566 | M-Series Loader | Drive Backup Alarm Error Off                                 |
| D7567 | M-Series Loader | Drive No Communication from Bobcat Controller                |
| D7568 | M-Series Loader | Drive+ Angle Sensors Not Calibrated                          |
| D7569 | M-Series Loader | Drive Battery Voltage Out of Range High                      |
| D7570 | M-Series Loader | Drive Interrupted Power (also occurs after software updates) |
| D7571 | M-Series Loader | Drive Battery Voltage Out of Range Low                       |
| D7572 | M-Series Loader | Drive Drive Pump Not Calibrated                              |
| D7573 | M-Series Loader | Drive ISO/H Pattern Switch Flipped While Operating           |
| D7574 | M-Series Loader | Drive Right Wheel Speed Uncommanded Motion                   |
| D7575 | M-Series Loader | Drive Left Wheel Speed Uncommanded Motion                    |
| D7576 | M-Series Loader | Drive No Communication from ACS Controller                   |
| D7577 | M-Series Loader | Drive Left Speed Sensor Out of Range High                    |
| D7578 | M-Series Loader | Drive Right Speed Sensor Out of Range High                   |
| D7579 | M-Series Loader | Drive Left Speed Sensor Out of Range Low                     |
| D7580 | M-Series Loader | Drive Right Speed Sensor Out of Range Low                    |
| D7581 | M-Series Loader | Drive+ Right Front Steer Retract Short to Battery            |
| D7582 | M-Series Loader | Drive+ Left Front Steer Retract Short to Battery             |
| D7583 | M-Series Loader | Drive+ right Rear Steer Retract Short to Battery             |
| D7584 | M-Series Loader | Drive+ Left Rear Steer Retract Short to Battery              |
| D7585 | M-Series Loader | Drive 5 Volt Sensor Supply 1 Out of Range High               |
| D7586 | M-Series Loader | Drive+ Sensor Supply 2 Out of Range High                     |

| Code  | Product         | Description                                    |
|-------|-----------------|------------------------------------------------|
| D7587 | M-Series Loader | Drive Software Update Required                 |
| D7588 | M-Series Loader | Drive/Drive+ Switched Power Stuck On           |
| D7589 | M-Series Loader | Drive Switched Power Error Off                 |
| D7590 | M-Series Loader | Drive Drive calibration performed              |
| D7591 | M-Series Loader | Drive Left Swashplate Sensor Reversed          |
| D7592 | M-Series Loader | Drive Right Swashplate Sensor Reversed         |
| D7593 | M-Series Loader | Drive Unresponsive Right Speed Sensor          |
| D7594 | M-Series Loader | Drive Unresponsive Left Speed Sensor           |
| D7595 | M-Series Loader | Drive Left Speed Sensor Reverse Direction      |
| D7596 | M-Series Loader | Drive Right Speed Sensor Reverse Direction     |
| D7597 | M-Series Loader | Drive Controller Programmed                    |
| D7598 | M-Series Loader | Drive Controller in Calibration Mode           |
| D7599 | M-Series Loader | Drive Controller in Angle Calibration Mode     |
| D7605 | Telehandler     | Aux Female Output Short To Battery             |
| D7606 | Telehandler     | Aux Female Output Short To Ground              |
| D7607 | Telehandler     | Aux Female Output Open Circuit                 |
| D7632 | Telehandler     | Aux Female Output Overcurrent                  |
| D7705 | Telehandler     | Aux Male Output Short To Battery               |
| D7706 | Telehandler     | Aux Male Output Short To Ground                |
| D7707 | Telehandler     | Aux Male Output Open Circuit                   |
| D7732 | Telehandler     | Aux Male Output Overcurrent                    |
| D7802 | Telehandler     | DEF Tank Elec fan relay Error ON               |
| D7803 | Telehandler     | SCR Elec fan relay error OFF                   |
| D7902 | Telehandler     | ACD Switches Error On                          |
| D8002 | Telehandler     | Dump valve Short To Battery                    |
| D8003 | Telehandler     | Dump valve Short To Ground                     |
| D8007 | Telehandler     | Dump valve Open circuit                        |
| D8032 | Telehandler     | Dump valve Overcurrent                         |
| D8110 | Telehandler     | LS Pump Pressure High                          |
| D8121 | Telehandler     | LS Pump Pressure Out of Range High             |
| D8122 | Telehandler     | LS Pump Pressure Out of Range Low              |
| D8202 | Telehandler     | Boom Suspension Valve Error On                 |
| D8203 | Telehandler     | Boom Suspension Valve Error Off                |
| D8207 | Telehandler     | Boom Suspension Open Circuit                   |
| D8232 | Telehandler     | Boom Suspension Overcurrent                    |
| D8302 | Telehandler     | Stabilizers ON/OFF output valve Error On       |
| D8303 | Telehandler     | Stabilizers ON/OFF output valve Error Off      |
| D8307 | Telehandler     | Stabilizers ON/OFF output Open circuit         |
| D8402 | Telehandler     | Stabilizers ON/OFF Relay feedback Error On     |
| D8403 | Telehandler     | Stabilizers ON/OFF Relay feedback Error Off    |
| D8505 | Telehandler     | Stabilizers Left Up Output Short To Battery    |
| D8506 | Telehandler     | Stabilizers Left Up Output Short To Ground     |
| D8507 | Telehandler     | Stabilizers Left Up Output Open circuit        |
| D8605 | Telehandler     | Stabilizers Left Down Output Short To Battery  |
| D8606 | Telehandler     | Stabilizers Left Down Output Short To Ground   |
| D8607 | Telehandler     | Stabilizers Left Down Output Open circuit      |
| D8705 | Telehandler     | Stabilizers Right Up Output Short To Battery   |
| D8706 | Telehandler     | Stabilizers Right Up Output Short To Ground    |
| D8707 | Telehandler     | Stabilizers Right Up Output Open circuit       |
| D8805 | Telehandler     | Stabilizers Right Down Output Short To Battery |
| D8806 | Telehandler     | Stabilizers Right Down Output Short To Ground  |
| D8807 | Telehandler     | Stabilizers Right Down Output Open circuit     |

| Code  | Product            | Description                                                                 |
|-------|--------------------|-----------------------------------------------------------------------------|
| D8902 | Telehandler        | Stabilizers Active Switch Error On                                          |
| D9098 | Telehandler        | Drive Controller Calibration Performed                                      |
| D9099 | Telehandler        | Drive Calibration Required                                                  |
| D9199 | Telehandler        | Swash Plate Neutral range calibration required (drive pump) - See procedure |
| D9299 | Telehandler        | Swash Plate maximal range calibration required (drive pump) - See procedure |
| D9302 | Telehandler        | Trailer Brake Supplementary Line Output Error On                            |
| D9303 | Telehandler        | Trailer Brake Supplementary Line Output Error Off                           |
| D9307 | Telehandler        | Trailer Brake Supplementary Line Output Open Circuit                        |
| D9333 | Telehandler        | Trailer Brake Supplementary Line Output Internal failure                    |
| D9402 | Telehandler        | Trailer Brake Supplementary Line Relay Error On                             |
| D9403 | Telehandler        | Trailer Brake Supplementary Line Relay Error Off                            |
| D9509 | Telehandler        | Trailer Brake Reserve Pressure Low                                          |
| D9605 | Telehandler        | Redundancy Park Brake Output Short To Battery                               |
| D9606 | Telehandler        | Redundancy Park Brake Output Short To Ground                                |
| D9607 | Telehandler        | Redundancy Park Brake Output Open Circuit                                   |
| D9999 | Telehandler        | Bad constant Data Table                                                     |
| H0104 | M-Series Excavator | Boom Angle Sensor No Communication                                          |
| H0204 | M-Series Excavator | Arm Angle Sensor No Communication                                           |
| H0304 | M-Series Excavator | Bucket Angle Sensor No Communication                                        |
| H0321 | Telehandler        | Battery Voltage OOR High                                                    |
| H0322 | Telehandler        | Battery Voltage OOR Low                                                     |
| H0405 | M-Series Excavator | Angle Sensor Supply Short To Battery                                        |
| H0406 | M-Series Excavator | Angle Sensor Supply Short To Ground                                         |
| H0407 | M-Series Excavator | Angle Sensor Supply Open Circuit                                            |
| H0705 | M-Series Excavator | Aux 4 Base Short to Battery                                                 |
| H0706 | M-Series Excavator | Aux 4 Base Short to Ground                                                  |
| H0707 | M-Series Excavator | Aux 4 Base Open Circuit                                                     |
| H0732 | M-Series Excavator | Aux 4 Base Overcurrent                                                      |
| H0805 | M-Series Excavator | Aux 4 Rod Short to Battery                                                  |
| H0806 | M-Series Excavator | Aux 4 Rod Short to Ground                                                   |
| H0807 | M-Series Excavator | Aux 4 Rod Open Circuit                                                      |
| H0832 | M-Series Excavator | Aux 4 Rod Overcurrent                                                       |
| H0905 | M-Series Excavator | Direct To Tank Short to Battery                                             |
| H0906 | M-Series Excavator | Direct to Tank Short to Ground                                              |
| H0907 | M-Series Excavator | Direct to Tank Open Circuit                                                 |
| H0932 | M-Series Excavator | Direct to Tank Overcurrent                                                  |
| H1005 | Telehandler        | Rear diverter 1 output Short To Battery                                     |
| H1006 | Telehandler        | Rear diverter 1 output Short To Ground                                      |
| H1007 | Telehandler        | Rear diverter 1 output Open Circuit                                         |
| H1102 | Telehandler        | Rear diverter 2 output Error On                                             |
| H1103 | Telehandler        | Rear diverter 2 output Error Off                                            |
| H1107 | Telehandler        | Rear diverter 2 output Open Circuit                                         |
| H1202 | Telehandler        | Rear diverter 2 output Relay Feedback Error On                              |
| H1203 | Telehandler        | Rear diverter 2 output Relay Feedback Error Off                             |
| H1221 | M-Series Loader    | Right Primary Out of Range High                                             |
| H1222 | M-Series Loader    | Right Primary Out of Range Low                                              |
| H1224 | M-Series Loader    | Right Primary Not in Neutral                                                |
| H1302 | Telehandler        | Front / Rear diverter sensor Error On                                       |
| H1303 | Telehandler        | Front / Rear diverter sensor Error Off                                      |
| H1324 | M-Series Loader    | Left Primary Not in Neutral                                                 |
| H1421 | M-Series Loader    | Lift Base Pressure Out of Range High                                        |
| H1422 | M-Series Loader    | Lift Base Pressure Out of Range Low                                         |

| Code  | Product            | Description                                      |
|-------|--------------------|--------------------------------------------------|
| H1502 | M-Series Loader    | Ride Control Relay Error On                      |
| H1503 | M-Series Loader    | Ride Control Relay Error Off                     |
| H1602 | M-Series Loader    | Ride Control Output Error On                     |
| H1603 | M-Series Loader    | Ride Control Output Error Off                    |
| H1607 | M-Series Loader    | Ride Control Output Open Circuit                 |
| H1628 | M-Series Loader    | Ride Control Output Failure                      |
| H2005 | Telehandler        | Rear Aux./Hook UP Valve Short to Battery         |
| H2006 | Telehandler        | Rear Aux./Hook UP Valve Short to Ground          |
| H2007 | Telehandler        | Rear Aux./Hook UP Valve Open Circuit             |
| H2105 | Telehandler        | Rear Aux./Hook DOWN Valve Short to Battery       |
| H2105 | M-Series Loader    | Reverse Fan Solenoid Short To Battery            |
| H2106 | Telehandler        | Rear Aux./Hook DOWN Valve Short to Ground        |
| H2106 | M-Series Loader    | Reverse Fan Solenoid Short to Ground             |
| H2107 | Telehandler        | Rear Aux./Hook DOWN Valve Open Circuit           |
| H2107 | M-Series Loader    | Reverse Fan Solenoid Open Circuit                |
| H2132 | M-Series Loader    | Reverse Fan Solenoid Overcurrent                 |
| H2205 | Telehandler        | Rear Aux./Hook ACTIVATION Valve Short to Battery |
| H2206 | Telehandler        | Rear Aux./Hook ACTIVATION Valve Short to Ground  |
| H2207 | Telehandler        | Rear Aux./Hook ACTIVATION Valve Open Circuit     |
| H2232 | Telehandler        | Rear Aux./Hook ACTIVATION Valve Overcurrent      |
| H2305 | M-Series Loader    | Rear Base Solenoid Short to Battery              |
| H2306 | M-Series Loader    | Rear Base Solenoid Short to Ground               |
| H2307 | M-Series Loader    | Rear Base Solenoid Open Circuit                  |
| H2328 | Telehandler        | Rear Aux./Hook Dashbord Switch In Error          |
| H2332 | M-Series Loader    | Rear Base Solenoid Overcurrent                   |
| H2405 | M-Series Loader    | Rear Rod Solenoid Short to Battery               |
| H2406 | M-Series Loader    | Rear Rod Solenoid Short to Ground                |
| H2407 | M-Series Loader    | Rear Rod Solenoid Open Circuit                   |
| H2432 | M-Series Loader    | Rear Rod Solenoid Overcurrent                    |
| H2505 | M-Series Loader    | Diverter Solenoid #2 Short to Battery            |
| H2506 | M-Series Loader    | Diverter Solenoid #2 Short to Ground             |
| H2521 | M-Series Excavator | Angle Blade Control Switch Out Of Range High     |
| H2522 | M-Series Excavator | Angle Blade Control Switch Out Of Range Low      |
| H2524 | M-Series Excavator | Angle Blade Control Switch Out Of Neutral        |
| H2605 | M-Series Excavator | Angle Blade Base Solenoid Short To Battery       |
| H2605 | M-Series Loader    | Front Base Solenoid Short to Battery             |
| H2606 | M-Series Loader    | Front Base Solenoid Short to Ground              |
| H2606 | M-Series Excavator | Angle Blade Base Solenoid Short To Ground        |
| H2607 | M-Series Excavator | Angle Blade Base Solenoid Open Circuit           |
| H2607 | M-Series Loader    | Front Base Solenoid Open Circuit                 |
| H2632 | M-Series Loader    | Front Base Solenoid Overcurrent                  |
| H2632 | M-Series Excavator | Angle Blade Base Solenoid Overcurrent            |
| H2705 | M-Series Loader    | Front Rod Solenoid Short to Battery              |
| H2705 | M-Series Excavator | Angle Blade Rod Solenoid Short To Battery        |
| H2706 | M-Series Excavator | Angle Blade Rod Solenoid Short To Ground         |
| H2706 | M-Series Loader    | Front Rod Solenoid Short to Ground               |
| H2707 | M-Series Excavator | Angle Blade Rod Solenoid Open Circuit            |
| H2707 | M-Series Loader    | Front Rod Solenoid Open Circuit                  |
| H2732 | M-Series Loader    | Front Rod Solenoid Overcurrent                   |
| H2732 | M-Series Excavator | Angle Blade Rod Solenoid Overcurrent             |
| H2805 | M-Series Loader    | Diverter Solenoid Short to Battery               |
| H2805 | M-Series Excavator | Diverter Output Short To Battery                 |

| Code  | Product            | Description                               |
|-------|--------------------|-------------------------------------------|
| H2806 | M-Series Excavator | Diverter Output Short To Ground           |
| H2806 | M-Series Loader    | Diverter Solenoid Short to Ground         |
| H2807 | M-Series Excavator | Diverter Output Open Circuit              |
| H2832 | M-Series Excavator | Diverter Output Overcurrent               |
| H2848 | M-Series Excavator | Diverter Multiple Input                   |
| H2905 | M-Series Loader    | High Flow Solenoid Short to Battery       |
| H2906 | M-Series Loader    | High Flow Solenoid Short to Ground        |
| H2907 | M-Series Loader    | High Flow Solenoid Open Circuit           |
| H2932 | M-Series Loader    | High Flow Solenoid Overcurrent            |
| H3028 | M-Series Loader    | Controller Memory Failure                 |
| H3128 | M-Series Loader    | Interrupted Power Failure                 |
| H3204 | Telehandler        | Workgroup controller No communication     |
| H3304 | Telehandler        | Gateway controller No communication       |
| H3404 | Telehandler        | Display controller No communication       |
| H3523 | Telehandler        | Programming or constant data invalid      |
| H3528 | Telehandler        | Controller failure                        |
| H3596 | Telehandler        | Interrupted power                         |
| H3597 | Telehandler        | Controller programmed                     |
| H3604 | Telehandler        | Engine controller No communication        |
| H3648 | M-Series Loader    | ACD Multiple                              |
| H3702 | M-Series Loader    | Power Bobtach Up Solenoid Error On        |
| H3704 | Telehandler        | Drive controller No communication         |
| H3904 | M-Series Excavator | Left Joystick In Error                    |
| H3912 | M-Series Excavator | Left Joystick Thumb Switch Not In Neutral |
| H3913 | M-Series Loader    | Left Joystick Grip No Communication       |
| H3916 | M-Series Excavator | Left Joystick No Communication            |
| H3916 | M-Series Loader    | Left Joystick Not Connected               |
| H3928 | M-Series Loader    | Left Joystick Failure                     |
| H3928 | M-Series Excavator | Left Joystick Internal Failure            |
| H3948 | M-Series Loader    | Left Joystick Multiple                    |
| H4004 | Telehandler        | Joystick No communication                 |
| H4013 | M-Series Loader    | Right Joystick Grip No Communication      |
| H4016 | M-Series Loader    | Right Joystick Not Connected              |
| H4028 | M-Series Loader    | Right Joystick Failure                    |
| H4048 | M-Series Loader    | Right Joystick Multiple                   |
| H4423 | M-Series Excavator | Secondary Not Programmed                  |
| H4423 | M-Series Loader    | Auxiliary Not Programmed                  |
| H4497 | M-Series Excavator | Secondary Controller Programmed           |
| H4621 | M-Series Excavator | 5 Volt Sensor Supply Out Of Range High    |
| H4621 | Telehandler        | Vsensor 5V supply OOR High                |
| H4622 | M-Series Excavator | 5 Volt Sensor Supply Out Of Range Low     |
| H4622 | Telehandler        | Vsensor 5V supply OOR Low                 |
| H4721 | M-Series Excavator | 8 Volt Sensor Supply Out Of Range High    |
| H4721 | M-Series Loader    | Sensor Supply 1 Out of Range High         |
| H4722 | M-Series Excavator | 8 Volt Sensor Supply Out Of Range Low     |
| H4722 | M-Series Loader    | Sensor Supply 1 Out of Range Low          |
| H4821 | M-Series Loader    | 5V Sensor Supply Out of Range High        |
| H4822 | M-Series Loader    | 5V Sensor Supply Out of Range Low         |
| H5705 | M-Series Excavator | Angle Blade Aux 4 Base Short to Battery   |
| H5706 | M-Series Excavator | Angle Blade Aux 4 Base Short to Ground    |
| H5707 | M-Series Excavator | Angle Blade Aux 4 Base Open Circuit       |
| H5732 | M-Series Excavator | Angle Blade Aux 4 Base Overcurrent        |

| Code  | Product            | Description                                         |
|-------|--------------------|-----------------------------------------------------|
| H5805 | M-Series Excavator | Angle Blade Aux 4 Rod Short to Battery              |
| H5806 | M-Series Excavator | Angle Blade Aux 4 Rod Short to Ground               |
| H5807 | M-Series Excavator | Angle Blade Aux 4 Rod Open Circuit                  |
| H5832 | M-Series Excavator | Angle Blade Aux 4 Rod Overcurrent                   |
| H7002 | Telehandler        | Boom Drain Output Error ON                          |
| H7003 | Telehandler        | Boom Drain Output Error OFF                         |
| H7007 | Telehandler        | Boom Drain Output Error Open Circuit                |
| H7033 | Telehandler        | Boom Drain Output Internal Failure                  |
| H7102 | Telehandler        | Boom Drain Relay Feedback Output Error ON           |
| H7103 | Telehandler        | Boom Drain Relay Feedback Output Error OFF          |
| H7205 | Telehandler        | Boom Suspension Output Short To Battery             |
| H7206 | Telehandler        | Boom Suspension Output Short To Ground              |
| H7207 | Telehandler        | Boom Suspension Open Circuit                        |
| H7232 | Telehandler        | Boom Suspension Overcurrent                         |
| H7233 | Telehandler        | Boom Suspension Output Internal Failure             |
| H7404 | M-Series Loader    | Main Controller No Communication                    |
| H7428 | Telehandler        | Boom Suspension Error                               |
| H7528 | Telehandler        | Boom Suspension switch On                           |
| H7602 | Telehandler        | Boom Suspension Icon Error ON                       |
| H7603 | Telehandler        | Boom Suspension Icon Error OFF                      |
| H7604 | M-Series Loader    | Left Hand Panel No Communication                    |
| H7604 | M-Series Excavator | Display No Communication                            |
| H7705 | Telehandler        | Boom Float Output Short To Battery                  |
| H7706 | Telehandler        | Boom Float Output Short To Ground                   |
| H7707 | Telehandler        | Boom Float Open Circuit                             |
| H7732 | Telehandler        | Boom Float Overcurrent                              |
| H7902 | M-Series Excavator | Door Unlock Error On                                |
| H7903 | M-Series Excavator | Door Unlock Error Off                               |
| H8002 | M-Series Loader    | ACD Output A Error On                               |
| H8002 | M-Series Excavator | Door Lock Error On                                  |
| H8003 | M-Series Excavator | Door Lock Error Off                                 |
| H8003 | M-Series Loader    | ACD Output A Error Off                              |
| H8102 | M-Series Loader    | ACD Output B Error On                               |
| H8103 | M-Series Loader    | ACD Output B Error Off                              |
| H8110 | Telehandler        | LS Pump Inlet Pressure High                         |
| H8121 | Telehandler        | LS Pump Inlet Pressure Out Of Range High            |
| H8122 | Telehandler        | LS Pump Inlet Pressure Out Of Range Low             |
| H8202 | M-Series Loader    | ACD Output C Error On                               |
| H8203 | M-Series Loader    | ACD Output C Error Off                              |
| H8209 | Telehandler        | LS Pump Outlet Pressure Low                         |
| H8221 | Telehandler        | LS Pump Outlet Pressure Out Of Range High           |
| H8222 | Telehandler        | LS Pump Outlet Pressure Out Of Range Low            |
| H8302 | M-Series Loader    | ACD Output D Error On                               |
| H8303 | M-Series Loader    | ACD Output D Error Off                              |
| H8305 | Telehandler        | LS Pump Displacement Control Valve Short To Battery |
| H8306 | Telehandler        | LS Pump Displacement Control Valve Short To Ground  |
| H8307 | Telehandler        | LS Pump Displacement Control Open Circuit           |
| H8332 | Telehandler        | LS Pump Displacement Control Overcurrent            |
| H8402 | M-Series Loader    | ACD Output E Error On                               |
| H8403 | M-Series Loader    | ACD Output E Error Off                              |
| H8502 | M-Series Loader    | ACD Output F Error On                               |
| H8503 | M-Series Loader    | ACD Output F Error Off                              |

| Code  | Product         | Description                                  |
|-------|-----------------|----------------------------------------------|
| H8602 | M-Series Loader | ACD Output G Error On                        |
| H8603 | M-Series Loader | ACD Output G Error Off                       |
| H8702 | M-Series Loader | ACD Output H Error On                        |
| H8703 | M-Series Loader | ACD Output H Error Off                       |
| H9110 | M-Series Loader | Fuel Pressure at Filter Inlet Too High       |
| H9111 | M-Series Loader | Fuel Pressure at Filter Inlet Extremely High |
| H9121 | M-Series Loader | Fuel Pressure Out of Range High              |
| H9122 | M-Series Loader | Fuel Pressure Out of Range Low               |
| H9144 | M-Series Loader | Fuel Filter Derate Level 1                   |
| H9145 | M-Series Loader | Fuel Filter Derate Level 2                   |
| H9202 | M-Series Loader | Fuel Lift Pump Output Error On               |
| H9203 | M-Series Loader | Fuel Lift Pump Output Error Off              |
| H9287 | M-Series Loader | Fuel Lift Pump Protection Time-Out           |
| H9309 | M-Series Loader | Fuel Pressure Low                            |
| H9314 | M-Series Loader | Fuel Pressure Extremely Low                  |
| H9321 | M-Series Loader | Fuel Pressure Out of Range High              |
| H9322 | M-Series Loader | Fuel Pressure Out of Range Low               |
| H9344 | M-Series Loader | Fuel Pressure Derate Level 1                 |
| H9999 | Telehandler     | Auxiliary controller Bad Table               |
| I0314 | Telehandler     | LLMI Undervoltage                            |
| I0315 | Telehandler     | LLMI Overvoltage                             |
| I3014 | Telehandler     | LLMI Sensor Offset                           |
| I3015 | Telehandler     | LLMI Sensor Out of Range                     |
| I3016 | Telehandler     | LLMI Sensor Default                          |
| I3017 | Telehandler     | LLMI Sensor ID Error                         |
| I3018 | Telehandler     | LLMI Sensor Rx Out of Delay                  |
| I3113 | Telehandler     | LLMI Calibration Values Out of Range         |
| I3121 | Telehandler     | LLMI Calibration Values Inverted             |
| I3122 | Telehandler     | LLMI Calibration Values Too Close            |
| I3123 | Telehandler     | LLMI Calibration Timeout                     |
| I3901 | Telehandler     | LLMI EEPROM Failure                          |
| I3903 | Telehandler     | LLMI External Watchdog Default               |
| I3904 | Telehandler     | LLMI Wrong RAM Test                          |
| I3905 | Telehandler     | LLMI Wrong Program Checksum                  |
| I3909 | Telehandler     | LLMI Test Button Error                       |
| K1005 | Telehandler     | Position Lights Output Short To Battery      |
| K1006 | Telehandler     | Position Lights Output Short To Ground       |
| K1007 | Telehandler     | Position Lights Output Open Circuit          |
| K1102 | Telehandler     | Position Lights Status Error ON              |
| K1103 | Telehandler     | Position Lights Status Error OFF             |
| K1205 | Telehandler     | Low Beam Output Short To Battery             |
| K1206 | Telehandler     | Low Beam Output Short To Ground              |
| K1207 | Telehandler     | Low Beam Output Open Circuit                 |
| K1305 | Telehandler     | High Beam Output Short To Battery            |
| K1306 | Telehandler     | High Beam Output Short To Ground             |
| K1307 | Telehandler     | High Beam Output Open Circuit                |
| K1402 | Telehandler     | Fog Light Output Error ON                    |
| K1403 | Telehandler     | Fog Light Output Error OFF                   |
| K1505 | Telehandler     | Left Turn Signal Output Short To Battery     |
| K1506 | Telehandler     | Left Turn Signal Output Short To Ground      |
| K1507 | Telehandler     | Left Turn Signal Output Open Circuit         |
| K1602 | Telehandler     | Left Turn Signal Status Error ON             |

| Code    | Product            | Description                                |
|---------|--------------------|--------------------------------------------|
| K1603   | Telehandler        | Left Turn Signal Status Error OFF          |
| K1705   | Telehandler        | Right Turn Signal Output Short To Battery  |
| K1706   | Telehandler        | Right Turn Signal Output Short To Ground   |
| K1707   | Telehandler        | Right Turn Signal Output Open Circuit      |
| K1802   | Telehandler        | Right Turn Signal Status Error ON          |
| K1803   | Telehandler        | Right Turn Signal Status Error OFF         |
| K2002   | Telehandler        | Front Wiper Output Error ON                |
| K2003   | Telehandler        | Front Wiper Output Error OFF               |
| K2102   | Telehandler        | Front Wiper (High Speed) Output Error ON   |
| K2103   | Telehandler        | Front Wiper (High Speed) Output Error OFF  |
| K2202   | Telehandler        | Front/Roof Washer Output Error ON          |
| K2203   | Telehandler        | Front/Roof Washer Output Error OFF         |
| K2305   | Telehandler        | Roof Wiper Output Short To Battery         |
| K2306   | Telehandler        | Roof Wiper Output Short To Ground          |
| K2307   | Telehandler        | Roof Wiper Output Open Circuit             |
| K2405   | Telehandler        | Rear Wiper Output Short To Battery         |
| K2406   | Telehandler        | Rear Wiper Output Short To Ground          |
| K2407   | Telehandler        | Rear Wiper Output Open Circuit             |
| K2502   | Telehandler        | Rear Washer Output Error ON                |
| K2503   | Telehandler        | Rear Washer Output Error OFF               |
| K2605   | Telehandler        | Lateral Wiper Output Short To Battery      |
| K2606   | Telehandler        | Lateral Wiper Output Short To Ground       |
| K2607   | Telehandler        | Rear Wiper Output Open Circuit             |
| K2702   | Telehandler        | Lateral Washer Output Error ON             |
| K2703   | Telehandler        | Lateral Washer Output Error OFF            |
| K4204   | Telehandler        | Left Steering Lever No Communication       |
| K4304   | Telehandler        | Right Steering Lever No Communication      |
| K4404   | Telehandler        | Steering Lever No Communication            |
| L0102   | M-Series Excavator | Lights Button Error On                     |
| L0102   | M-Series Loader    | Standard Panel Button 1 Error On           |
| L0202   | M-Series Excavator | High Flow Enable Button Error On           |
| L0202   | M-Series Loader    | Standard Panel Button 2 Error On           |
| L0302   | M-Series Loader    | Standard Panel Button 3 Error On           |
| L0302   | M-Series Excavator | Auxiliary Enable Button Error On           |
| L0402   | M-Series Loader    | Standard Panel Button 4 Error On           |
| L0402   | M-Series Excavator | Information Button Error On                |
| L7404   | M-Series Loader    | Main Controller No Communication           |
| L7404   | M-Series Excavator | Information Button Error On                |
| L7672   | M-Series Excavator | Information Button Error On                |
| L7672   | M-Series Loader    | Standard Panel Programming Error           |
| LOWVLTG | M-Series Loader    | Low Battery Voltage                        |
| M0116   | Telehandler        | Air Filter Switch Not Connected            |
| M0116   | M-Series Loader    | Air Filter Not Connected                   |
| M0117   | M-Series Loader    | Air Filter Plugged                         |
| M0144   | Telehandler        | Air Filter De-rate Level 1                 |
| M0144   | M-Series Loader    | Air Filter Derate Level 1                  |
| M0145   | M-Series Loader    | Air Filter Derate Level 2                  |
| M0145   | Telehandler        | Air Filter De-rate Level 2                 |
| M0216   | M-Series Excavator | Hydraulic/hydrostatic Filter Not Connected |
| M0216   | M-Series Loader    | Hydraulic/Hydrostatic Filter Not Connected |
| M0217   | M-Series Loader    | Hydraulic/Hydrostatic Filter Plugged       |
| M0217   | M-Series Excavator | Hydraulic/hydrostatic Filter Plugged       |

| Code  | Product            | Description                                 |
|-------|--------------------|---------------------------------------------|
| M0309 | Telehandler        | Battery voltage Low                         |
| M0309 | M-Series Loader    | System Voltage Too Low                      |
| M0310 | M-Series Loader    | System Voltage Too High                     |
| M0310 | Telehandler        | Battery voltage High                        |
| M0311 | Telehandler        | Battery voltage Extremely High              |
| M0311 | M-Series Loader    | System Voltage Extremely High               |
| M0314 | M-Series Loader    | System Voltage Extremely Low                |
| M0314 | Telehandler        | Battery voltage Extremely Low               |
| M0322 | M-Series Excavator | System Voltage Out Of Range Low             |
| M0322 | M-Series Loader    | System Voltage Out of Range Low             |
| M0322 | Telehandler        | Battery voltage Out Of Range Low            |
| M0409 | M-Series Loader    | Engine Oil Pressure Too Low                 |
| M0414 | M-Series Loader    | Engine Oil Pressure Extremely Low           |
| M0415 | M-Series Excavator | Engine Oil Pressure In Shutdown             |
| M0415 | M-Series Loader    | Engine Oil Pressure Shutdown                |
| M0421 | M-Series Loader    | Engine Oil Pressure Out of Range High       |
| M0422 | M-Series Loader    | Engine Oil Pressure Out of Range Low        |
| M0509 | M-Series Loader    | Hydraulic Charge Pressure Low               |
| M0510 | M-Series Loader    | Hydraulic Charge Pressure High              |
| M0511 | M-Series Loader    | Hydraulic Charge Pressure Extremely High    |
| M0514 | M-Series Loader    | Hydraulic Charge Pressure Extremely Low     |
| M0515 | M-Series Loader    | Hydraulic Charge Pressure Shutdown          |
| M0521 | M-Series Loader    | Hydraulic Charge Pressure Out of Range High |
| M0522 | M-Series Loader    | Hydraulic Charge Pressure Out of Range Low  |
| M0610 | Telehandler        | Engine speed High                           |
| M0610 | M-Series Loader    | Engine Speed Too High                       |
| M0611 | M-Series Loader    | Engine Speed Extremely High                 |
| M0613 | M-Series Loader    | Engine Speed No Signal                      |
| M0615 | M-Series Loader    | Engine Speed Shutdown                       |
| M0615 | M-Series Excavator | Engine Speed In Shutdown                    |
| M0618 | M-Series Excavator | Engine Speed Out Of Range                   |
| M0618 | M-Series Loader    | Engine Speed Out of Range                   |
| M0634 | M-Series Loader    | Engine Speed Invalid Data                   |
| M0710 | M-Series Excavator | Hydraulic Oil Temp Too High                 |
| M0710 | M-Series Loader    | Hydraulic Oil Temperature Too High          |
| M0710 | Telehandler        | Hydraulic Oil Temperature High              |
| M0711 | M-Series Excavator | Hydraulic Oil Temp Extremely High           |
| M0711 | M-Series Loader    | Hydraulic Oil Temperature Extremely High    |
| M0715 | M-Series Excavator | Hydraulic Oil Temp In Shutdown              |
| M0715 | M-Series Loader    | Hydraulic Oil Temperature Shutdown          |
| M0721 | M-Series Excavator | Hydraulic Oil Temp Out Of Range High        |
| M0721 | M-Series Loader    | Hydraulic Oil Temperature Out of Range High |
| M0722 | M-Series Loader    | Hydraulic Oil Temperature Out of Range Low  |
| M0722 | M-Series Excavator | Hydraulic Oil Temp Out Of Range Low         |
| M0810 | M-Series Excavator | Engine Coolant Temp Too High                |
| M0810 | M-Series Loader    | Engine Coolant Temperature Too High         |
| M0810 | Telehandler        | Engine Coolant Temperature High             |
| M0811 | M-Series Loader    | Engine Coolant Temperature Extremely High   |
| M0811 | M-Series Excavator | Engine Coolant Temp Extremely High          |
| M0815 | M-Series Excavator | Engine Coolant Temp In Shutdown             |
| M0815 | M-Series Loader    | Engine Coolant Temperature Shutdown         |
| M0821 | Telehandler        | Engine Coolant Temperature OOR High         |

| Code  | Product            | Description                                  |
|-------|--------------------|----------------------------------------------|
| M0821 | M-Series Excavator | Engine Coolant Temp Out Of Range High        |
| M0821 | M-Series Loader    | Engine Coolant Temperature Out of Range High |
| M0822 | Telehandler        | Engine Coolant Temperature OOR Low           |
| M0822 | M-Series Loader    | Engine Coolant Temperature Out of Range Low  |
| M0822 | M-Series Excavator | Engine Coolant Temp Out Of Range Low         |
| M0826 | M-Series Excavator | Engine Coolant Temp Out Of Range Low         |
| M0826 | M-Series Loader    | Engine Coolant Temperature Pre Shutdown      |
| M0909 | M-Series Loader    | Fuel Level Too Low                           |
| M0909 | Telehandler        | Fuel Level Low                               |
| M0921 | M-Series Loader    | Fuel Level Out of Range High                 |
| M0921 | M-Series Excavator | Fuel Level Out Of Range High                 |
| M0921 | Telehandler        | Fuel Level OOR High                          |
| M0922 | M-Series Loader    | Fuel Level Out of Range Low                  |
| M0922 | M-Series Excavator | Fuel Level Out Of Range Low                  |
| M0922 | Telehandler        | Fuel Level OOR Low                           |
| M1009 | Telehandler        | Fuel Filter Pressure Low                     |
| M1014 | Telehandler        | Fuel Filter Pressure Extremely Low           |
| M1016 | M-Series Loader    | Hydraulic Charge Filter Not Connected        |
| M1017 | M-Series Loader    | Hydraulic Charge Filter Plugged              |
| M1021 | Telehandler        | Fuel Filter Pressure OOR High                |
| M1022 | Telehandler        | Fuel Filter Pressure OOR Low                 |
| M1117 | Telehandler        | Fuel Filter Plugged                          |
| M1119 | Telehandler        | Fuel Filter Extremely Plugged                |
| M1121 | M-Series Excavator | Console Sensor Out Of Range High             |
| M1121 | M-Series Loader    | Seat Bar Sensor Out of Range High            |
| M1122 | M-Series Loader    | Seat Bar Sensor Out of range Low             |
| M1122 | M-Series Excavator | Console Sensor Out Of Range Low              |
| M1128 | M-Series Excavator | Console Sensor Failure                       |
| M1128 | M-Series Loader    | Seat Bar Sensor Failure                      |
| M1144 | Telehandler        | Fuel Filter De-rate Level 1                  |
| M1145 | Telehandler        | Fuel Filter De-rate Level 2                  |
| M1210 | M-Series Loader    | Air Inlet Temperature High                   |
| M1211 | M-Series Loader    | Air Inlet Temperature Extremely High         |
| M1302 | Telehandler        | Fuel Pump Output Error ON                    |
| M1303 | Telehandler        | Fuel Pump Output Error OFF                   |
| M1305 | M-Series Loader    | Fuel Hold Solenoid Short to Battery          |
| M1305 | M-Series Excavator | Fuel Hold Solenoid Short To Battery          |
| M1306 | M-Series Loader    | Fuel Hold Solenoid Short to Ground           |
| M1306 | M-Series Excavator | Fuel Hold Solenoid Short To Ground           |
| M1307 | M-Series Loader    | Fuel Hold Solenoid Open Circuit              |
| M1402 | M-Series Loader    | Fuel Pull Output Error On                    |
| M1402 | M-Series Excavator | Fuel Pull Solenoid Error On                  |
| M1402 | Telehandler        | Fuel Solenoid Output Error ON                |
| M1403 | M-Series Excavator | Fuel Pull Solenoid Error Off                 |
| M1403 | Telehandler        | Fuel Solenoid Output Error OFF               |
| M1403 | M-Series Loader    | Fuel Pull Output Error Off                   |
| M1407 | M-Series Excavator | Fuel Pull Solenoid Open Circuit              |
| M1407 | M-Series Loader    | Fuel Pull Output Open Circuit                |
| M1428 | M-Series Loader    | Fuel Pull Output Controller Failure          |
| M1428 | M-Series Excavator | Fuel Pull Solenoid Failure                   |
| M1428 | Telehandler        | Fuel Solenoid Output Internal failure        |
| M1502 | M-Series Loader    | Traction Lock Pull Output Error On           |

| Code  | Product            | Description                                    |
|-------|--------------------|------------------------------------------------|
| M1502 | Telehandler        | Fuel Solenoid Relay Error ON                   |
| M1503 | Telehandler        | Fuel Solenoid Relay Error OFF                  |
| M1503 | M-Series Loader    | Traction Lock Pull Output Error Off            |
| M1507 | M-Series Loader    | Traction Lock Pull Output Open Circuit         |
| M1528 | M-Series Loader    | Traction Lock Pull Output Controller Failure   |
| M1602 | Telehandler        | Front Alignment Lamp Output Error ON           |
| M1603 | Telehandler        | Front Alignment Lamp Output Error OFF          |
| M1605 | M-Series Excavator | Hydraulic Bypass Short to Battery              |
| M1605 | M-Series Loader    | Traction Lock Hold Solenoid Short to Battery   |
| M1606 | M-Series Loader    | Traction Lock Hold Solenoid Short to Ground    |
| M1606 | M-Series Excavator | Hydraulic Bypass Short to Ground               |
| M1607 | M-Series Loader    | Traction Lock Hold Solenoid Open Circuit       |
| M1607 | M-Series Excavator | Hydraulic Bypass Open Circuit                  |
| M1632 | M-Series Excavator | Hydraulic Bypass Overcurrent                   |
| M1702 | Telehandler        | Rear Alignment Lamp Output Error ON            |
| M1703 | Telehandler        | Rear Alignment Lamp Output Error OFF           |
| M1705 | M-Series Loader    | Hydraulic Lock Valve Solenoid Short to Battery |
| M1705 | M-Series Excavator | Hydraulic Lock Valve Short To Battery          |
| M1706 | M-Series Excavator | Hydraulic Lock Valve Short To Ground           |
| M1706 | M-Series Loader    | Hydraulic Lock Valve Solenoid Short to Ground  |
| M1707 | M-Series Loader    | Hydraulic Lock Valve Solenoid Open Circuit     |
| M1707 | M-Series Excavator | Hydraulic Lock Valve Open Circuit              |
| M1732 | M-Series Loader    | Hydraulic Lock Valve Solenoid Overcurrent      |
| M1732 | M-Series Excavator | Hydraulic Lock Valve Overcurrent               |
| M1802 | M-Series Excavator | Power Beyond Valve Output Error On             |
| M1803 | M-Series Excavator | Power Beyond Valve Output Error Off            |
| M1805 | M-Series Loader    | Spool Lock 1 Short to Battery                  |
| M1806 | M-Series Loader    | Spool Lock 1 Short to Ground                   |
| M1807 | M-Series Loader    | Spool Lock 1 Open Circuit                      |
| M1821 | Telehandler        | Frame Leveling pot Out of range high           |
| M1822 | Telehandler        | Frame Leveling pot Out of range low            |
| M1832 | M-Series Loader    | Spool Lock 1 Overcurrent                       |
| M1902 | M-Series Excavator | Power Beyond Valve Relay Error On              |
| M1903 | M-Series Excavator | Power Beyond Valve Relay Error Off             |
| M1910 | M-Series Loader    | Engine Ambient Temperature High                |
| M1911 | M-Series Loader    | Engine Ambient Temperature Extremely High      |
| M1921 | M-Series Loader    | Engine Ambient Temperature Out of Range High   |
| M1922 | M-Series Loader    | Engine Ambient Temperature Out of Range Low    |
| M2005 | M-Series Loader    | Two Speed Primary Short to Battery             |
| M2005 | M-Series Excavator | Two Speed Primary Solenoid Short To Battery    |
| M2006 | M-Series Excavator | Two Speed Primary Solenoid Short To Ground     |
| M2006 | M-Series Loader    | Two Speed Primary Short to Ground              |
| M2007 | M-Series Excavator | Two Speed Primary Solenoid Open Circuit        |
| M2007 | M-Series Loader    | Two Speed Primary Open Circuit                 |
| M2032 | M-Series Loader    | Two Speed Primary Overcurrent                  |
| M2102 | Telehandler        | Glow Plug Output Error ON                      |
| M2102 | M-Series Loader    | Glow Plug Output Error On                      |
| M2103 | M-Series Loader    | Glow Plug Output Error Off                     |
| M2103 | Telehandler        | Glow Plug Output Error OFF                     |
| M2107 | M-Series Loader    | Glow Plug Output Open Circuit                  |
| M2128 | M-Series Loader    | Glow Plug Output Failure                       |
| M2202 | Telehandler        | Starter Output Error ON                        |

| Code  | Product            | Description                                               |
|-------|--------------------|-----------------------------------------------------------|
| M2202 | M-Series Loader    | Starter Output Error On                                   |
| M2203 | M-Series Loader    | Starter Output Error Off                                  |
| M2203 | Telehandler        | Starter Output Error OFF                                  |
| M2207 | Telehandler        | Starter Output Open circuit                               |
| M2207 | M-Series Loader    | Starter Output Open Circuit                               |
| M2228 | M-Series Loader    | Starter Output Failure                                    |
| M2302 | M-Series Loader    | Starter Relay Error On                                    |
| M2302 | Telehandler        | Starter Relay Error ON                                    |
| M2303 | M-Series Loader    | Starter Relay Error Off                                   |
| M2303 | Telehandler        | Starter Relay Error OFF                                   |
| M2402 | M-Series Loader    | Fuel Pull Relay Error On                                  |
| M2403 | M-Series Loader    | Fuel Pull Relay Error Off                                 |
| M2405 | Telehandler        | Crab valve Output Short To Battery                        |
| M2406 | Telehandler        | Crab valve Output Short To Ground                         |
| M2407 | Telehandler        | Crab valve Output Open Circuit                            |
| M2502 | M-Series Loader    | Traction Pull Relay Error On                              |
| M2503 | M-Series Loader    | Traction Pull Relay Error Off                             |
| M2505 | Telehandler        | 4 Wheels valve Short To Battery                           |
| M2506 | Telehandler        | 4 Wheels valve Short To Ground                            |
| M2507 | Telehandler        | 4 Wheels valve Open circuit                               |
| M2521 | M-Series Excavator | Load Sense Sensor Out Of Range High                       |
| M2522 | M-Series Excavator | Load Sense Sensor Out Of Range Low                        |
| M2602 | M-Series Loader    | Glow Plug Relay Error On                                  |
| M2603 | M-Series Loader    | Glow Plug Relay Error Off                                 |
| M2648 | Telehandler        | Steer Mode Switch Multiple inputs active                  |
| M2702 | Telehandler        | Fan Inverter Output Error On                              |
| M2703 | Telehandler        | Fan Inverter Output Error OFF                             |
| M2707 | Telehandler        | Fan Inverter Output Open Circuit                          |
| M2721 | M-Series Excavator | Throttle Primary Sensor Out Of Range High                 |
| M2721 | M-Series Loader    | Throttle Primary Sensor Out of Range High                 |
| M2722 | M-Series Excavator | Throttle Primary Sensor Out Of Range Low                  |
| M2722 | M-Series Loader    | Throttle Primary Sensor Out of Range Low                  |
| M2805 | M-Series Excavator | Diverter Output Short To Battery                          |
| M2805 | Telehandler        | Fan PWM Output Short To Battery                           |
| M2806 | M-Series Excavator | Diverter Output Short To Ground                           |
| M2806 | Telehandler        | Fan PWM Output Short To Ground                            |
| M2807 | Telehandler        | Fan PWM Output Open Circuit                               |
| M2807 | M-Series Excavator | Diverter Output Open Circuit                              |
| M2821 | M-Series Loader    | Throttle Secondary Sensor Out of Range High               |
| M2822 | M-Series Loader    | Throttle Secondary Sensor Out of Range Low                |
| M2832 | Telehandler        | Fan PWM Output Overcurrent                                |
| M2899 | M-Series Loader    | Throttle Secondary Sensor Calibration Required            |
| M2910 | M-Series Loader    | Exhaust Gas Temperature High                              |
| M2910 | Telehandler        | Engine Exhaust gas Temperature High                       |
| M3128 | M-Series Loader    | Interrupted Power Failure                                 |
| M3204 | Telehandler        | Workgroup Controller no communication                     |
| M3204 | M-Series Loader    | Workgroup Controller No Communication                     |
| M3204 | M-Series Excavator | Throttle Controller No Communication To Bobcat Controller |
| M3223 | M-Series Excavator | Throttle Controller Not Calibrated                        |
| M3228 | M-Series Excavator | Throttle Controller Failure                               |
| M3299 | M-Series Excavator | Throttle Controller Calibration In Process                |
| M3304 | M-Series Loader    | Deluxe Panel (M-Series) No Communication                  |

| Code  | Product            | Description                                                             |
|-------|--------------------|-------------------------------------------------------------------------|
| M3304 | M-Series Excavator | Deluxe Panel No Communication                                           |
| M3372 | M-Series Excavator | Display Software Incompatible                                           |
| M3373 | M-Series Excavator | Display Software Outdated                                               |
| M3404 | Telehandler        | Display controller no communication                                     |
| M3404 | M-Series Loader    | Deluxe Panel No Communication                                           |
| M3504 | Telehandler        | DCU Controller no communication                                         |
| M3505 | M-Series Loader    | Hydraulic Fan Short to Battery                                          |
| M3506 | M-Series Loader    | Hydraulic Fan Short to Ground                                           |
| M3507 | M-Series Loader    | Hydraulic Fan Open Circuit                                              |
| M3532 | M-Series Loader    | Hydraulic Fan Overcurrent                                               |
| M3604 | Telehandler        | Engine Controller no communication                                      |
| M3702 | M-Series Excavator | HYD Exchange Output Error On                                            |
| M3703 | M-Series Excavator | HYD Exchange Output Error Off                                           |
| M3704 | Telehandler        | Drive Controller no communication                                       |
| M3705 | M-Series Loader    | Two Speed Secondary Short to Battery                                    |
| M3706 | M-Series Loader    | Two Speed Secondary Short to Ground                                     |
| M3707 | M-Series Loader    | Two Speed Secondary Open Circuit                                        |
| M3732 | M-Series Loader    | Two Speed Secondary Overcurrent                                         |
| M3805 | M-Series Loader    | Auxiliary Hydraulic Lock Short to Battery                               |
| M3806 | M-Series Loader    | Auxiliary Hydraulic Lock Short to Ground                                |
| M3807 | M-Series Loader    | Auxiliary Hydraulic Lock Open Circuit                                   |
| M3832 | M-Series Loader    | Auxiliary Hydraulic Lock Overcurrent                                    |
| M3904 | M-Series Excavator | Jog Shuttle No Communication                                            |
| M3905 | Telehandler        | Cab Buzzer Short To Battery                                             |
| M4028 | Telehandler        | Wrong mapping of ECU controller detected : Engine HP mismatch           |
| M4028 | M-Series Loader    | Wrong ECU Detected                                                      |
| M4109 | Telehandler        | Alternator voltage low                                                  |
| M4109 | M-Series Loader    | Alternator Low                                                          |
| M4109 | M-Series Excavator | Alternator Voltage Too Low                                              |
| M4110 | M-Series Loader    | Alternator High                                                         |
| M4110 | M-Series Excavator | Alternator Voltage High                                                 |
| M4110 | Telehandler        | Alternator voltage high                                                 |
| M4204 | M-Series Excavator | Keyless Entry No Communication                                          |
| M4228 | Telehandler        | Wrong mapping of DCU controller mapping detected : Horse Power mismatch |
| M4228 | M-Series Loader    | Wrong DCU Detected                                                      |
| M4304 | Telehandler        | Keypad KSS no communication                                             |
| M4304 | M-Series Loader    | Keyless Start Panel No Communication                                    |
| M4404 | M-Series Loader    | Auxiliary No Communication                                              |
| M4404 | M-Series Excavator | Secondary No Communication                                              |
| M4405 | Telehandler        | Brake Fail Electric Lamp Short To Battery                               |
| M4472 | M-Series Excavator | Secondary Controller Software Incompatible                              |
| M4473 | M-Series Excavator | Secondary Controller Software Outdated                                  |
| M4505 | Telehandler        | Brake Fail Pressure Lamp Short To Battery                               |
| M4510 | M-Series Loader    | Water In Fuel Too High                                                  |
| M4511 | M-Series Loader    | Water In Fuel Extremely High                                            |
| M4521 | M-Series Loader    | Water In Fuel Sensor Out of Range High                                  |
| M4522 | M-Series Loader    | Water In Fuel Sensor Out of Range Low                                   |
| M4530 | M-Series Loader    | Water In Fuel Sensor Fault                                              |
| M4621 | M-Series Excavator | 5 Volt Sensor Supply Out Of Range High                                  |
| M4621 | M-Series Loader    | 5V Sensor Supply Out of Range High                                      |
| M4622 | M-Series Loader    | 5V Sensor Supply Out of Range Low                                       |
| M4622 | M-Series Excavator | 5 Volt Sensor Supply Out Of Range Low                                   |

| Code  | Product            | Description                                                           |
|-------|--------------------|-----------------------------------------------------------------------|
| M4721 | M-Series Excavator | 8 Volt Sensor Supply Out Of Range High                                |
| M4721 | M-Series Loader    | 8V Sensor Supply Out of Range High                                    |
| M4721 | Telehandler        | Sensor Supply OORH                                                    |
| M4722 | Telehandler        | Sensor Supply OORL                                                    |
| M4722 | M-Series Excavator | 8 Volt Sensor Supply Out Of Range Low                                 |
| M4722 | M-Series Loader    | 8V Sensor Supply Out of Range Low                                     |
| M4802 | M-Series Loader    | Front Light Relay Error On                                            |
| M4803 | M-Series Loader    | Front Light Relay Error Off                                           |
| M4805 | Telehandler        | Worklights output Error On                                            |
| M4806 | Telehandler        | Worklights output Error Off                                           |
| M4902 | Telehandler        | Blue lights Output Short To Battery or Open Circuit                   |
| M4902 | M-Series Loader    | Rear Light Relay Error On                                             |
| M4903 | M-Series Loader    | Rear Light Relay Error Off                                            |
| M4903 | Telehandler        | Blue lights Output Short To Ground                                    |
| M5002 | M-Series Loader    | Front Light Output Error On                                           |
| M5003 | M-Series Loader    | Front Light Output Error Off                                          |
| M5005 | Telehandler        | Front Worklights Output Short to Battery                              |
| M5006 | Telehandler        | Front Worklights Output Short to Ground                               |
| M5007 | Telehandler        | Front Worklights Output Open Circuit                                  |
| M5007 | M-Series Loader    | Front Light Output Open Circuit                                       |
| M5028 | M-Series Loader    | Front Light Output Failure                                            |
| M5102 | Telehandler        | Rear Worklights Short To Battery or Open Circuit                      |
| M5102 | M-Series Loader    | Rear Light Output Error On                                            |
| M5103 | M-Series Loader    | Rear Light Output Error Off                                           |
| M5103 | Telehandler        | Rear Worklights Output Short To Ground                                |
| M5107 | M-Series Loader    | Rear Light Output Open Circuit                                        |
| M5128 | M-Series Loader    | Rear Light Output Failure                                             |
| M5202 | M-Series Loader    | Press to Operate Switch Error On                                      |
| M5205 | M-Series Excavator | Offset Base Solenoid Short To Battery                                 |
| M5205 | Telehandler        | Electronic Battery Disconnect Output Open circuit or Short To Battery |
| M5206 | M-Series Excavator | Offset Base Solenoid Short To Ground                                  |
| M5206 | Telehandler        | Electronic Battery Disconnect Output Short To Ground                  |
| M5207 | Telehandler        | Electronic Battery Disconnect Output Open circuit                     |
| M5207 | M-Series Excavator | Offset Base Solenoid Open Circuit                                     |
| M5221 | M-Series Loader    | Press to Operate Switch Out of Range High                             |
| M5222 | M-Series Loader    | Press to Operate Switch Out of Range Low                              |
| M5232 | M-Series Excavator | Offset Base Solenoid Overcurrent                                      |
| M5302 | Telehandler        | Electronic Battery Disconnect stuck                                   |
| M5303 | Telehandler        | Electronic Battery Disconnect open error (unstuck)                    |
| M5305 | M-Series Loader    | Press to Operate Light Short to Battery                               |
| M5305 | M-Series Excavator | Offset Rod Solenoid Error On                                          |
| M5306 | M-Series Excavator | Offset Rod Solenoid Short To Ground                                   |
| M5306 | M-Series Loader    | Press to Operate Light Short to Ground                                |
| M5307 | M-Series Excavator | Offset Rod Solenoid Open Circuit                                      |
| M5332 | M-Series Excavator | Offset Rod Solenoid Overcurrent                                       |
| M5405 | M-Series Loader    | Spool Lock 2 Short to Battery                                         |
| M5406 | M-Series Loader    | Spool Lock 2 Short to Ground                                          |
| M5407 | M-Series Loader    | Spool Lock 2 Open Circuit                                             |
| M5421 | M-Series Excavator | Offset Control Switch Out Of Range High                               |
| M5422 | M-Series Excavator | Offset Control Switch Out Of Range Low                                |
| M5424 | M-Series Excavator | Offset Control Switch Out Of Neutral                                  |
| M5432 | M-Series Loader    | Spool Lock 2 Overcurrent                                              |

| Code  | Product            | Description                                |
|-------|--------------------|--------------------------------------------|
| M5505 | M-Series Excavator | Auxiliary Base Solenoid Short To Battery   |
| M5506 | M-Series Excavator | Auxiliary Base Solenoid Short To Ground    |
| M5507 | M-Series Excavator | Auxiliary Base Solenoid Open Circuit       |
| M5532 | M-Series Excavator | Auxiliary Base Solenoid Overcurrent        |
| M5605 | M-Series Excavator | Auxiliary Rod Solenoid Short To Battery    |
| M5606 | M-Series Excavator | Auxiliary Rod Solenoid Short To Ground     |
| M5607 | M-Series Excavator | Auxiliary Rod Solenoid Open Circuit        |
| M5632 | M-Series Excavator | Auxiliary Rod Solenoid Overcurrent         |
| M5721 | M-Series Excavator | Auxiliary Control Switch Out Of Range High |
| M5722 | M-Series Excavator | Auxiliary Control Switch Out Of Range Low  |
| M5724 | M-Series Excavator | Auxiliary Control Switch Out Of Neutral    |
| M5810 | M-Series Loader    | Fuel Temperature High                      |
| M5811 | M-Series Loader    | Fuel Temperature Extremely High            |
| M5811 | M-Series Excavator | Fuel Temperature Extremely High            |
| M5815 | M-Series Loader    | Fuel Temperature Shutdown                  |
| M5815 | M-Series Excavator | Fuel Temperature In Shutdown               |
| M5815 | Telehandler        | Fuel Temperature in shutdown               |
| M5826 | M-Series Excavator | Fuel Temperature In Shutdown               |
| M5826 | M-Series Loader    | Fuel Temperature Pre Shutdown              |
| M5902 | M-Series Loader    | DPF Regeneration Switch Error On           |
| M6002 | M-Series Loader    | DPF Inhibit Regen Switch Error On          |
| M6004 | Telehandler        | Cab Controller No Communication            |
| M6021 | M-Series Excavator | Left Control Switch Out of Range High      |
| M6022 | M-Series Excavator | Left Control Switch Out of Range Low       |
| M6024 | M-Series Excavator | Left Control Switch Out of Neutral         |
| M6102 | M-Series Loader    | Remote Parked Regeneration Switch Error On |
| M6105 | Telehandler        | Safety Valve Short To Battery              |
| M6106 | Telehandler        | Safety Valve Short To Ground               |
| M6107 | Telehandler        | Safety Valve Open Circuit                  |
| M6121 | M-Series Excavator | Right Control Switch Out of Range High     |
| M6122 | M-Series Excavator | Right Control Switch Out of Range Low      |
| M6124 | M-Series Excavator | Right Control Switch Out of Neutral        |
| M6132 | Telehandler        | Safety Valve Overcurrent                   |
| M6202 | M-Series Loader    | Tailgate Fan 1 Error On                    |
| M6203 | M-Series Loader    | Tailgate Fan 1 Error Off                   |
| M6204 | M-Series Excavator | Load Moment Sensor In Error                |
| M6221 | M-Series Excavator | Overload Warning Sensor Out of Range High  |
| M6222 | M-Series Excavator | Overload Warning Sensor Out of Range Low   |
| M6228 | M-Series Loader    | Tailgate Fan 1 Failure                     |
| M6302 | M-Series Loader    | Tailgate Fan 2 Error On                    |
| M6303 | M-Series Loader    | Tailgate Fan 2 Error Off                   |
| M6328 | M-Series Loader    | Tailgate Fan 2 Failure                     |
| M6402 | M-Series Loader    | Switched Power Relay Error On              |
| M6403 | M-Series Loader    | Switched Power Relay Error Off             |
| M6505 | M-Series Loader    | ECU Power Short to Battery                 |
| M6505 | M-Series Excavator | ECU Power Short To Battery                 |
| M6506 | M-Series Loader    | ECU Power Short to Ground                  |
| M6506 | M-Series Excavator | ECU Power Short To Ground                  |
| M6507 | M-Series Loader    | ECU Power Open Circuit                     |
| M6604 | M-Series Loader    | ECU No Communication                       |
| M6702 | M-Series Loader    | HVAC Output Error On                       |
| M6703 | M-Series Loader    | HVAC Output Error Off                      |

| Code  | Product            | Description                                       |
|-------|--------------------|---------------------------------------------------|
| M6707 | M-Series Loader    | HVAC Output Open Circuit                          |
| M6728 | M-Series Loader    | HVAC Output Failure                               |
| M6802 | M-Series Loader    | HVAC Relay Error On                               |
| M6803 | M-Series Loader    | HVAC Relay Error Off                              |
| M6904 | M-Series Loader    | DCU No Communication                              |
| M6905 | M-Series Excavator | Dump Valve Short to Battery                       |
| M6906 | M-Series Excavator | Dump Valve Short to Ground                        |
| M6907 | M-Series Excavator | Dump Valve Open Circuit                           |
| M6932 | M-Series Excavator | Dump Valve Overcurrent                            |
| M7002 | M-Series Loader    | Switched Power Output Error On                    |
| M7003 | M-Series Loader    | Switched Power Output Error Off                   |
| M7007 | M-Series Loader    | Switched Power Output Open Circuit                |
| M7028 | M-Series Loader    | Switched Power Output Failure                     |
| M7102 | M-Series Loader    | Electric Fan Output Error On                      |
| M7103 | M-Series Loader    | Electric Fan Output Error Off                     |
| M7107 | M-Series Loader    | Electric Fan Output Open Circuit                  |
| M7202 | M-Series Loader    | Electric Fan Relay Error On                       |
| M7203 | M-Series Loader    | Electric Fan Relay Error Off                      |
| M7304 | M-Series Loader    | Remote Control No Communication                   |
| M7316 | M-Series Loader    | Remote Control Not Connected                      |
| M7423 | M-Series Loader    | Main Controller Not Programmed                    |
| M7472 | M-Series Excavator | Main Controller Software Incompatible             |
| M7473 | M-Series Excavator | Main Controller Software Outdated                 |
| M7497 | M-Series Loader    | Main Controller Software Updated                  |
| M7497 | M-Series Excavator | Main Controller Controller Programmed             |
| M7504 | M-Series Loader    | Drive No Communication                            |
| M7604 | M-Series Excavator | Standard Display Panel No Communication           |
| M7604 | M-Series Loader    | Left Display Panel No Communication               |
| M7748 | M-Series Loader    | Key Switch Multiple                               |
| M7748 | Telehandler        | Multiple key on active (service tool & keyswitch) |
| M7839 | M-Series Loader    | Hourmeter Changed                                 |
| M7902 | M-Series Loader    | Forestry Door Closed                              |
| M7974 | M-Series Loader    | Door Open                                         |
| M8004 | M-Series Excavator | Cooling Fan Controller No Communication           |
| M8005 | M-Series Excavator | Cooling Fan Short To Battery                      |
| M8006 | M-Series Excavator | Cooling Fan Short To Ground                       |
| M8021 | Telehandler        | Throttle pedal analog signal Out Of Range High    |
| M8021 | M-Series Excavator | Cooling Fan Out Of Range High                     |
| M8022 | Telehandler        | Throttle pedal analog signal Out Of Range Low     |
| M8022 | M-Series Excavator | Cooling Fan Out Of Range Low                      |
| M8025 | M-Series Excavator | Cooling Fan Unresponsive                          |
| M8027 | M-Series Excavator | Cooling Fan CAN Error                             |
| M8028 | Telehandler        | Throttle pedal in error. (redundancy error)       |
| M8028 | M-Series Excavator | Cooling Fan Failure                               |
| M8029 | M-Series Excavator | Cooling Fan Wiring Fault                          |
| M8030 | M-Series Excavator | Cooling Fan Controller Fault                      |
| M8128 | Telehandler        | Wrong DEF Sensor detected                         |
| M8228 | M-Series Loader    | AdBlue/DEF Sensor Mismatch                        |
| M8228 | Telehandler        | Inhibit DESOX/REGEN switch in failure             |
| M8302 | M-Series Excavator | Wait to Start Lamp Error On                       |
| M8303 | M-Series Excavator | Wait to Start Lamp Error Off                      |
| M8328 | Telehandler        | Force DESOX/REGEN Switch in failure               |

| Code  | Product              | Description                                                                |
|-------|----------------------|----------------------------------------------------------------------------|
| M8402 | M-Series Loader      | DESOX Service Requested                                                    |
| M8450 | Telehandler          | DESOX/REGEN requested but inhibited                                        |
| M8450 | M-Series Loader      | DeSox Required but Inhibited                                               |
| M8541 | M-Series Loader      | DPF Automatic Regeneration Active                                          |
| M8542 | M-Series Loader      | DPF Automatic Regeneration Active                                          |
| M8543 | M-Series Loader      | DPF Regeneration Required                                                  |
| M8551 | M-Series Loader      | DPF Regeneration Needed - Inhibit Active                                   |
| M8552 | M-Series Loader      | DPF Regeneration Needed - Inhibit Active                                   |
| M8553 | M-Series Loader      | DPF Remote Parked Regeneration Required - Remote Regeneration Kit Required |
| M8554 | M-Series Loader      | DPF Service Regeneration Required - Contact Bobcat Dealer                  |
| M8555 | M-Series Loader      | DPF Service Required                                                       |
| M8560 | M-Series Loader      | DPF Service Regeneration Active                                            |
| M8561 | M-Series Loader      | DPF Service Regeneration Active                                            |
| M8562 | M-Series Loader      | DPF Service Regeneration Active                                            |
| M8563 | M-Series Loader      | DPF Service Regeneration Active                                            |
| M8564 | M-Series Loader      | DPF Service Regeneration Active                                            |
| M8602 | Telehandler          | Receiver input Error On                                                    |
| M8615 | M-Series Loader      | Engine Speed Derate Shutdown                                               |
| M8615 | M-Series Excavator   | Engine Speed Derate In Shutdown                                            |
| M8625 | M-Series Loader      | Engine Speed Derate Unresponsive                                           |
| M8703 | Telehandler          | Attachment run input Error off                                             |
| M8715 | M-Series Loader      | Torque Derate Shutdown                                                     |
| M8725 | M-Series Loader      | Torque Derate Unresponsive                                                 |
| M8804 | M-Series Loader      | Telematics Not Connected                                                   |
| M8848 | Telehandler          | Selection mode switch Multiple                                             |
| M8928 | Telehandler          | ECO Mode switch In error                                                   |
| M9111 | M-Series Excavator   | Fuel Filter Extremely Plugged                                              |
| M9117 | M-Series Excavator   | Fuel Filter Plugged                                                        |
| M9144 | M-Series Excavator   | Fuel Filter Derate Level 1                                                 |
| M9145 | M-Series Excavator   | Fuel Filter Derate Level 2                                                 |
| M9202 | M-Series Excavator   | Fuel Lift Pump Error On                                                    |
| M9203 | M-Series Excavator   | Fuel Lift Pump Error Off                                                   |
| M9287 | M-Series Excavator   | Fuel Pump Failure Time Exceeded                                            |
| M9309 | M-Series Excavator   | Fuel Pressure Low                                                          |
| M9314 | M-Series Excavator   | Fuel Pressure Extremely Low                                                |
| M9321 | M-Series Excavator   | Fuel Pressure Out Of Range High                                            |
| M9322 | M-Series Excavator   | Fuel Pressure Out Of Range Low                                             |
| M9344 | M-Series Excavator   | Fuel Pressure Derate Level 1                                               |
| M9604 | Telehandler          | Single Keypad No Communication                                             |
| M9701 | M-Series Loader      | Turbo Prime Sequence Active                                                |
| M9704 | Telehandler          | Primary Keypad No Communication                                            |
| M9804 | Telehandler          | Secondary Keypad No Communication                                          |
| M9999 | Telehandler          | Bad Constant Data table                                                    |
| P0002 | ECU Bobcat Engine V2 | Fuel Rail Pressure Fault                                                   |
| P0002 | ECU Bobcat Engine V1 | Rail Pressure Control Fault                                                |
| P0003 | ECU Bobcat Engine V1 | Rail Pressure Control Fault                                                |
| P0003 | ECU Bobcat Engine V2 | Fuel Rail Pressure Fault                                                   |
| P0004 | ECU Bobcat Engine V1 | Rail Pressure Control Fault                                                |
| P0004 | ECU Bobcat Engine V2 | Fuel Rail Pressure Fault                                                   |
| P0006 | ECU Bobcat Engine V1 | Rail Pressure Control Fault                                                |
| P0007 | ECU Bobcat Engine V1 | Rail Pressure Control Fault                                                |
| P000F | ECU Bobcat Engine V2 | Fuel Rail Pressure High - Over Relief                                      |

| Code  | Product              | Description                                                |
|-------|----------------------|------------------------------------------------------------|
| P0016 | ECU Bobcat Engine V1 | Cam or Crank Sensor - Fault                                |
| P0070 | ECU Bobcat Engine V1 | Intake Air Temperature Sensor Fault                        |
| P0072 | ECU Bobcat Engine V1 | MAF Sensor - Fault                                         |
| P0072 | ECU Bobcat Engine V1 | Intake Air Temperature - Fault                             |
| P0072 | ECU Bobcat Engine V2 | Engine Compartment Temperature Sensor Out of Range Low     |
| P0073 | ECU Bobcat Engine V2 | Engine Compartment Temperature Sensor Out of Range High    |
| P0073 | ECU Bobcat Engine V1 | MAF Sensor - Fault                                         |
| P0073 | ECU Bobcat Engine V1 | Intake Air Temperature - Fault                             |
| P0074 | ECU Bobcat Engine V1 | Intake Air Temperature Sensor Fault                        |
| P007C | ECU Bobcat Engine V2 | Inlet Air Temperature Sensor Out of Range Low              |
| P007D | ECU Bobcat Engine V2 | Inlet Air Temperature Sensor Out of Range High             |
| P0087 | ECU Bobcat Engine V1 | Rail Pressure Fault                                        |
| P0087 | ECU Bobcat Engine V2 | Fuel Rail Pressure Fault                                   |
| P0087 | ECU Bobcat Engine V1 | Rail Pressure - Fault                                      |
| P0088 | ECU Bobcat Engine V1 | Rail Pressure Control Fault                                |
| P0088 | ECU Bobcat Engine V1 | Rail Pressure - Fault                                      |
| P0089 | ECU Bobcat Engine V1 | Rail Pressure Control Fault                                |
| P009B | ECU Bobcat Engine V2 | Common Rail Pressure Relief Valve Open Count Exceeds Limit |
| P009C | ECU Bobcat Engine V2 | Common Rail Pressure Relief Valve Opened                   |
| P009D | ECU Bobcat Engine V2 | Common Rail Pressure Relief Valve Opened                   |
| P009F | ECU Bobcat Engine V2 | High Rail Pressure                                         |
| P00AC | ECU Bobcat Engine V2 | Intake Manifold Temperature Sensor Out of Range Low        |
| P00AD | ECU Bobcat Engine V2 | Intake Manifold Temperature Sensor Out of Range High       |
| P00BC | ECU Bobcat Engine V2 | Low Manifold Absolute Pressure (Low boost)                 |
| P00BC | ECU Bobcat Engine V1 | Intake Air Volume - Fault                                  |
| P00BD | ECU Bobcat Engine V1 | Intake Air Volume - Fault                                  |
| P00BE | ECU Bobcat Engine V2 | Air Flow Fault (MAF / MAP agreement)                       |
| P0100 | ECU Bobcat Engine V2 | Mass Air Flow Sensor Short to Battery or Open Circuit      |
| P0100 | ECU Bobcat Engine V1 | MAF Sensor - Fault                                         |
| P0101 | ECU Bobcat Engine V1 | Intake Air Volume - Fault                                  |
| P0101 | ECU Bobcat Engine V2 | Mass Air Flow Sensor Electrical Fault                      |
| P0102 | ECU Bobcat Engine V2 | Mass Air Flow Sensor Out of Range Low                      |
| P0102 | ECU Bobcat Engine V1 | MAF Sensor - Fault                                         |
| P0103 | ECU Bobcat Engine V1 | MAF Sensor - Fault                                         |
| P0103 | ECU Bobcat Engine V2 | Mass Air Flow Sensor Out of Range High                     |
| P0105 | ECU Bobcat Engine V1 | Manifold Pressure Sensor Fault                             |
| P0107 | ECU Bobcat Engine V2 | Manifold Absolute Pressure Sensor Out of Range Low         |
| P0107 | ECU Bobcat Engine V1 | Manifold Pressure Sensor Fault                             |
| P0108 | ECU Bobcat Engine V2 | Manifold Absolute Pressure Sensor Out of Range High        |
| P0108 | ECU Bobcat Engine V1 | Manifold Pressure Sensor Fault                             |
| P0110 | ECU Bobcat Engine V1 | Intake Manifold Temperature Sensor Fault                   |
| P0111 | ECU Bobcat Engine V1 | Intake Manifold Temperature Fault                          |
| P0111 | ECU Bobcat Engine V1 | Intake Air Temperature - High                              |
| P0112 | ECU Bobcat Engine V1 | Intake Air Temperature - Fault                             |
| P0112 | ECU Bobcat Engine V1 | Intake Manifold Temperature Sensor Fault                   |
| P0113 | ECU Bobcat Engine V1 | Intake Manifold Temperature Sensor Fault                   |
| P0113 | ECU Bobcat Engine V1 | Intake Air Temperature - Fault                             |
| P0114 | ECU Bobcat Engine V1 | Intake Manifold Temperature Sensor Fault                   |
| P0116 | ECU Bobcat Engine V1 | Engine Coolant Temperature Fault                           |
| P0117 | ECU Bobcat Engine V2 | Coolant Temperature Sensor Out of Range Low                |
| P0117 | ECU Bobcat Engine V1 | Water Temp Sensor Fault                                    |
| P0118 | ECU Bobcat Engine V2 | Coolant Temperature Sensor Out of Range High               |

| Code     | Product              | Description                                               |
|----------|----------------------|-----------------------------------------------------------|
| P0118    | ECU Bobcat Engine V1 | Water Temp Sensor Fault                                   |
| P011E    | ECU Bobcat Engine V2 | Coolant Temperature Low Fault                             |
| P0121    | ECU Bobcat Engine V2 | Engine Speed Control Signal Fault                         |
| P0122    | ECU Bobcat Engine V2 | Engine Speed Control Signal Fault                         |
| P0123    | ECU Bobcat Engine V2 | Engine Speed Control Signal Fault                         |
| P0124    | ECU Bobcat Engine V2 | Engine Speed Control Signal Fault                         |
| P0180    | ECU Bobcat Engine V1 | Fuel Temp Sensor Fault                                    |
| P0181    | ECU Bobcat Engine V1 | Fuel Temperature Fault                                    |
| P0181    | ECU Bobcat Engine V1 | Fuel Temperature - High                                   |
| P0182    | ECU Bobcat Engine V1 | Fuel Temp Sensor Fault                                    |
| P0182    | ECU Bobcat Engine V2 | Fuel Temperature Sensor Out of Range Low                  |
| P0183    | ECU Bobcat Engine V1 | Fuel Temp Sensor Fault                                    |
| P0183    | ECU Bobcat Engine V2 | Fuel Temperature Sensor Out of Range High                 |
| P018C    | ECU Bobcat Engine V2 | Low Fuel Filter Pressure                                  |
| P018D    | ECU Bobcat Engine V2 | High Fuel Filter Pressure                                 |
| P018F    | ECU Bobcat Engine V2 | Common Rail Pressure Relief Valve Open Time Exceeds Limit |
| P0190    | ECU Bobcat Engine V1 | Rail Pressure Sensor Fault                                |
| P0191    | ECU Bobcat Engine V1 | Rail Pressure Fault                                       |
| P0192    | ECU Bobcat Engine V1 | Rail Pressure Sensor Fault                                |
| P0192    | ECU Bobcat Engine V2 | Rail Pressure Sensor Out of Range Low                     |
| P0193    | ECU Bobcat Engine V2 | Rail Pressure Sensor Out of Range High                    |
| P0193    | ECU Bobcat Engine V1 | Rail Pressure Sensor Fault                                |
| P0195    | ECU Bobcat Engine V1 | Engine Oil Temperature Sensor Fault                       |
| P0196    | ECU Bobcat Engine V1 | Engine Oil Temperature Fault                              |
| P0196    | ECU Bobcat Engine V2 | Oil Level/Temp Sensor Fault                               |
| P01C2    | ECU Bobcat Engine V2 | Fuel Filter Pressure Sensor Out of Range Low              |
| P01C4    | ECU Bobcat Engine V2 | Low Fuel Filter Pressure Warning                          |
| P01C5    | ECU Bobcat Engine V2 | Low Fuel Filter Pressure - Derate                         |
| P01C6    | ECU Bobcat Engine V2 | Fuel Filter Pressure Sensor Out of Range High             |
| P0200    | ECU Bobcat Engine V1 | Injector Fault                                            |
| P0201    | ECU Bobcat Engine V1 | Injector #1 Fault                                         |
| P0201    | ECU Bobcat Engine V2 | Injector #1 Open Circuit                                  |
| P0202    | ECU Bobcat Engine V2 | Injector #2 Open Circuit                                  |
| P0202    | ECU Bobcat Engine V1 | Injector #3 Fault                                         |
| P0202    | ECU Bobcat Engine V1 | Injector #2 Fault                                         |
| P0203    | ECU Bobcat Engine V1 | Injector #4 Fault                                         |
| P0203    | ECU Bobcat Engine V1 | Injector #3 Fault                                         |
| P0203    | ECU Bobcat Engine V2 | Injector #3 Open Circuit                                  |
| P0204    | ECU Bobcat Engine V1 | Injector #4 Fault                                         |
| P0204    | ECU Bobcat Engine V1 | Injector #2 Fault                                         |
| P0204    | ECU Bobcat Engine V2 | Injector #4 Open Circuit                                  |
| P0215    | ECU Bobcat Engine V2 | Engine Shutoff Request Signal Detected                    |
| P0217    | ECU Bobcat Engine V1 | Engine Temp Extremely High                                |
| P0218    | ECU Bobcat Engine V2 | CAN Communication Fault - Transmission Oil Temperature    |
| P0219    | ECU Bobcat Engine V2 | Engine Overspeed Detected                                 |
| P0219    | ECU Bobcat Engine V1 | Engine Speed Extremely High                               |
| P0221    | ECU Bobcat Engine V2 | Engine Speed Control Signal Fault                         |
| P0222    | ECU Bobcat Engine V2 | Engine Speed Control Signal Fault                         |
| P0223    | ECU Bobcat Engine V2 | Engine Speed Control Signal Fault                         |
| P0224    | ECU Bobcat Engine V2 | Engine Speed Control Signal Fault                         |
| P0225-16 | Compact Wheel Loader | Throttle Pedal Sensor Out of Range Low                    |
| P0225-17 | Compact Wheel Loader | Throttle Pedal Sensor Out of Range High                   |

| Code     | Product              | Description                                         |
|----------|----------------------|-----------------------------------------------------|
| P0225-54 | M-Series Loader      | Throttle Pedal Position Sensor Calibration Required |
| P0226-16 | Compact Wheel Loader | Throttle Pedal Sensor Secondary Out of Range Low    |
| P0226-17 | Compact Wheel Loader | Throttle Pedal Sensor Secondary Out of Range High   |
| P0227-93 | Compact Wheel Loader | Throttle Pedal Failure                              |
| P0237    | ECU Bobcat Engine V1 | Engine Oil Pressure Sensor Fault                    |
| P0237    | ECU Bobcat Engine V1 | Intake Air Pressure Sensor Fault                    |
| P0238    | ECU Bobcat Engine V1 | Intake Air Pressure Sensor Fault                    |
| P0238    | ECU Bobcat Engine V1 | Engine Oil Pressure Sensor Fault                    |
| P0241    | ECU Bobcat Engine V1 | Boost Control Fault                                 |
| P0242    | ECU Bobcat Engine V1 | Boost Control Fault                                 |
| P0251    | ECU Bobcat Engine V1 | Rail Pressure Control Fault                         |
| P0252    | ECU Bobcat Engine V1 | Rail Pressure Control Fault                         |
| P0252    | ECU Bobcat Engine V2 | Low Fuel Rail Pressure                              |
| P0253    | ECU Bobcat Engine V1 | Rail Pressure Control Fault                         |
| P0254    | ECU Bobcat Engine V2 | Fuel Rail Pressure Control Fault                    |
| P0254    | ECU Bobcat Engine V1 | Rail Pressure Control Fault                         |
| P0258    | ECU Bobcat Engine V1 | Rail Pressure Control Fault                         |
| P0259    | ECU Bobcat Engine V1 | Rail Pressure Control Fault                         |
| P025A    | ECU Bobcat Engine V1 | Inlet Metering Valve Fault                          |
| P025A    | ECU Bobcat Engine V2 | Fuel Metering Unit Open Circuit                     |
| P025B    | ECU Bobcat Engine V1 | Inlet Metering Valve Fault                          |
| P025B    | ECU Bobcat Engine V2 | Fuel Metering Unit Fault                            |
| P025C    | ECU Bobcat Engine V1 | Inlet Metering Valve Fault                          |
| P025C    | ECU Bobcat Engine V2 | Fuel Metering Unit Short to Ground                  |
| P025D    | ECU Bobcat Engine V2 | Fuel Metering Unit Short to Battery                 |
| P025D    | ECU Bobcat Engine V1 | Inlet Metering Valve Fault                          |
| P0261    | ECU Bobcat Engine V1 | Injector #1 Fault                                   |
| P0262    | ECU Bobcat Engine V1 | Injector #1 Fault                                   |
| P0264    | ECU Bobcat Engine V1 | Injector #2 Fault                                   |
| P0265    | ECU Bobcat Engine V1 | Injector #2 Fault                                   |
| P0267    | ECU Bobcat Engine V1 | Injector #3 Fault                                   |
| P0268    | ECU Bobcat Engine V1 | Injector #3 Fault                                   |
| P0270    | ECU Bobcat Engine V1 | Injector #4 Fault                                   |
| P0271    | ECU Bobcat Engine V1 | Injector #4 Fault                                   |
| P028A    | ECU Bobcat Engine V2 | Fan PWM Open Circuit                                |
| P028D    | ECU Bobcat Engine V2 | Fan PWM Short to Ground                             |
| P028E    | ECU Bobcat Engine V2 | Fan PWM Short to Battery                            |
| P029A    | ECU Bobcat Engine V1 | Injector #1 Fault                                   |
| P029B    | ECU Bobcat Engine V1 | Injector #1 Fault                                   |
| P029E    | ECU Bobcat Engine V1 | Injector #2 Fault                                   |
| P029F    | ECU Bobcat Engine V1 | Injector #2 Fault                                   |
| P02A2    | ECU Bobcat Engine V1 | Injector #3 Fault                                   |
| P02A3    | ECU Bobcat Engine V1 | Injector #3 Fault                                   |
| P02A6    | ECU Bobcat Engine V1 | Injector #4 Fault                                   |
| P02A7    | ECU Bobcat Engine V1 | Injector #4 Fault                                   |
| P02E0    | ECU Bobcat Engine V2 | Air Control Valve H-Bridge Drive Open Circuit       |
| P02E2    | ECU Bobcat Engine V2 | Air Control Valve H-Bridge Drive Short to Ground    |
| P02E3    | ECU Bobcat Engine V2 | Air Control Valve H-Bridge Drive Short to Battery   |
| P02E4    | ECU Bobcat Engine V2 | Air Control Valve Position Fault                    |
| P02E5    | ECU Bobcat Engine V2 | Air Control Valve Position Fault                    |
| P02E7    | ECU Bobcat Engine V2 | Air Control Valve Close Position Fault              |
| P02E8    | ECU Bobcat Engine V2 | Air Control Valve Sensor Out of Range Low           |

| Code  | Product              | Description                                |
|-------|----------------------|--------------------------------------------|
| P02E9 | ECU Bobcat Engine V2 | Air Control Valve Sensor Out of Range High |
| P02EA | ECU Bobcat Engine V2 | Air Control Valve Close Position Fault     |
| P02EB | ECU Bobcat Engine V2 | Air Control Valve Close Position Fault     |
| P02EE | ECU Bobcat Engine V2 | Injector #1 Short Circuit                  |
| P02EE | ECU Bobcat Engine V1 | Injector #1 Fault                          |
| P02EF | ECU Bobcat Engine V2 | Injector #2 Short Circuit                  |
| P02EF | ECU Bobcat Engine V1 | Injector #2 Fault                          |
| P02F0 | ECU Bobcat Engine V1 | Injector #3 Fault                          |
| P02F0 | ECU Bobcat Engine V2 | Injector #3 Short Circuit                  |
| P02F1 | ECU Bobcat Engine V2 | Injector #4 Short Circuit                  |
| P02F1 | ECU Bobcat Engine V1 | Injector #4 Fault                          |
| P0325 | ECU Bobcat Engine V1 | Accelerometer Fault                        |
| P0330 | ECU Bobcat Engine V1 | Accelerometer Fault                        |
| P0335 | ECU Bobcat Engine V1 | Crank position sensor fault                |
| P0336 | ECU Bobcat Engine V1 | Crank position sensor fault                |
| P0339 | ECU Bobcat Engine V1 | Crank position sensor fault                |
| P0340 | ECU Bobcat Engine V1 | Camshaft position sensor fault             |
| P0340 | ECU Bobcat Engine V1 | CAM Signal Fault                           |
| P0340 | ECU Bobcat Engine V2 | Cam Sensor Signal Fault                    |
| P0341 | ECU Bobcat Engine V1 | CAM Signal Fault                           |
| P0341 | ECU Bobcat Engine V1 | Camshaft position sensor fault             |
| P0342 | ECU Bobcat Engine V2 | Cam Sensor Signal Fault                    |
| P0342 | ECU Bobcat Engine V1 | CAM Signal Fault                           |
| P0344 | ECU Bobcat Engine V1 | CAM Signal Fault                           |
| P0344 | ECU Bobcat Engine V2 | Cam Sensor Signal Fault                    |
| P0371 | ECU Bobcat Engine V1 | Crank position sensor fault                |
| P0372 | ECU Bobcat Engine V2 | Crank Sensor Signal Fault                  |
| P0372 | ECU Bobcat Engine V1 | Crank position sensor fault                |
| P0374 | ECU Bobcat Engine V2 | Crank Sensor Signal Fault                  |
| P0374 | ECU Bobcat Engine V1 | Crank position sensor fault                |
| P037E | ECU Bobcat Engine V1 | Glow Plug Signal - Fault                   |
| P037F | ECU Bobcat Engine V1 | Glow Plug Signal - Fault                   |
| P0380 | ECU Bobcat Engine V1 | Glow Plug Relay Fault                      |
| P0380 | ECU Bobcat Engine V2 | Glow Plug Relay Open Circuit               |
| P0380 | ECU Bobcat Engine V1 | Intake heater fault                        |
| P0381 | ECU Bobcat Engine V2 | Glow Plug Lamp Open Circuit                |
| P0383 | ECU Bobcat Engine V2 | Glow Plug Relay Short to Ground            |
| P0383 | ECU Bobcat Engine V1 | Glow Plug Relay Fault                      |
| P0384 | ECU Bobcat Engine V1 | Glow Plug Relay Fault                      |
| P0384 | ECU Bobcat Engine V2 | Glow Plug Relay Short to Battery           |
| P0400 | ECU Bobcat Engine V1 | EGR Fault                                  |
| P0400 | ECU Bobcat Engine V1 | EGR Blocked Fault                          |
| P0401 | ECU Bobcat Engine V1 | EGR Control Fault                          |
| P0402 | ECU Bobcat Engine V1 | EGR Control Fault                          |
| P0403 | ECU Bobcat Engine V1 | EGR Actuator - Fault                       |
| P0404 | ECU Bobcat Engine V1 | EGR Fault                                  |
| P0404 | ECU Bobcat Engine V1 | EGR Position Fault                         |
| P0404 | ECU Bobcat Engine V1 | EGR Actuator - Fault                       |
| P0405 | ECU Bobcat Engine V1 | EGR Fault                                  |
| P0406 | ECU Bobcat Engine V2 | EGR Position Sensor Out of Range High      |
| P0406 | ECU Bobcat Engine V1 | EGR Fault                                  |
| P0406 | ECU Bobcat Engine V1 | EGR Actuator Position Fault                |

| Code     | Product               | Description                                            |
|----------|-----------------------|--------------------------------------------------------|
| P0407    | ECU Bobcat Engine V1  | EGR Actuator Position Fault                            |
| P0407    | ECU Bobcat Engine V2  | EGR Position Sensor Out of Range Low                   |
| P0408    | ECU Bobcat Engine V2  | EGR Flow Rate Error                                    |
| P0409    | ECU Bobcat Engine V1  | EGR Position Sensor - Fault                            |
| P0409    | ECU Bobcat Engine V1  | EGR Actuator Position Fault                            |
| P0421    | ECU Bobcat Engine V1  | DOC Exothermal Efficiency Fault                        |
| P0421    | ECU Bobcat Engine V2  | DOC Efficiency Fault (During Regen)                    |
| P0426    | ECU Bobcat Engine D34 | SCR Pre-Treatment Temperature Sensor Tampering         |
| P0427    | ECU Bobcat Engine D34 | SCR Pre-Treatment Temperature Sensor Out of Range Low  |
| P0428    | ECU Bobcat Engine D34 | SCR Pre-Treatment Temperature Sensor Out of Range High |
| P042E    | ECU Bobcat Engine V2  | EGR Control Position Fault                             |
| P042F    | ECU Bobcat Engine V2  | EGR Control Position Fault                             |
| P0460-16 | Toolcat               | Fuel Level Sensor - Circuit Voltage Below Threshold    |
| P0460-16 | Compact Wheel Loader  | Fuel Level Sensor Out of Range Low                     |
| P0460-17 | Toolcat               | Fuel Level Sensor - Circuit Voltage Above Threshold    |
| P0460-17 | Compact Wheel Loader  | Fuel Level Sensor Problem                              |
| P046D    | ECU Bobcat Engine V1  | EGR Actuator Position Fault                            |
| P049B    | ECU Bobcat Engine V2  | EGR Flow Rate Error                                    |
| P0512    | ECU Bobcat Engine V2  | Engine Start Switch Stuck On                           |
| P0522    | ECU Bobcat Engine V2  | Engine Oil Pressure Sensor Out of Range Low            |
| P0523    | ECU Bobcat Engine V2  | Engine Oil Pressure Sensor Out of Range High           |
| P0524    | ECU Bobcat Engine V1  | Engine Oil Pressure Low                                |
| P0527    | ECU Bobcat Engine V2  | Fan Speed Timeout Fault                                |
| P0528    | ECU Bobcat Engine V2  | Cooling Fan Overspeed                                  |
| P0529    | ECU Bobcat Engine V2  | Cooling Fan Underspeed                                 |
| P0543    | ECU Bobcat Engine V1  | Exhaust Gas Temperature Sensor - Fault                 |
| P0544    | ECU Bobcat Engine V2  | Turbine Inlet Temperature Fault                        |
| P0544    | ECU Bobcat Engine V1  | Exhaust Gas Temperature Sensor - Fault                 |
| P0545    | ECU Bobcat Engine V1  | Turbo Temperature Sensor Fault                         |
| P0545    | ECU Bobcat Engine V2  | Turbine Inlet Temperature Sensor Out of Range Low      |
| P0546    | ECU Bobcat Engine V1  | Turbo Temperature Sensor Fault                         |
| P0546    | ECU Bobcat Engine V2  | Turbine Inlet Temperature Sensor Out of Range High     |
| P0546    | ECU Bobcat Engine V1  | Exhaust Gas Temperature Sensor - Fault                 |
| P0547    | ECU Bobcat Engine V1  | Exhaust Gas Temperature Sensor - Fault                 |
| P055B    | ECU Bobcat Engine V2  | Oil Pressure Warning Lamp Open Circuit                 |
| P055C    | ECU Bobcat Engine V2  | Oil Pressure Warning Lamp Short to Ground              |
| P055D    | ECU Bobcat Engine V2  | Oil Pressure Warning Lamp Short to Battery             |
| P0562    | ECU Bobcat Engine V2  | ECU Battery Voltage Extremely Low                      |
| P0562    | ECU Bobcat Engine V1  | Battery Voltage Low                                    |
| P0563    | ECU Bobcat Engine V2  | ECU Battery Voltage Extremely High                     |
| P0563    | ECU Bobcat Engine V1  | Battery Voltage High                                   |
| P056D    | ECU Bobcat Engine V2  | DEF Supply Module Communication Fault                  |
| P0591    | ECU Bobcat Engine V2  | PTO Lamp Open Circuit                                  |
| P0592    | ECU Bobcat Engine V2  | PTO Lamp Short to Ground                               |
| P0593    | ECU Bobcat Engine V2  | PTO Lamp Short to Battery                              |
| P05ED    | ECU Bobcat Engine V2  | DEF Heater Line Short to Battery                       |
| P0602    | ECU Bobcat Engine V1  | ECU Fault                                              |
| P0602    | ECU Bobcat Engine V1  | Injector Data Fault                                    |
| P0603    | ECU Bobcat Engine V1  | ECU Fault                                              |
| P0604    | ECU Bobcat Engine V1  | ECU Fault                                              |
| P0605    | ECU Bobcat Engine V1  | ECU Fault                                              |
| P0606    | ECU Bobcat Engine V1  | ECU Fault                                              |

| Code     | Product               | Description                                        |
|----------|-----------------------|----------------------------------------------------|
| P060B    | ECU Bobcat Engine V2  | ECU Calculation Error                              |
| P060B    | ECU Bobcat Engine V1  | ECU Fault                                          |
| P060C    | ECU Bobcat Engine V2  | ECU Communication Fault                            |
| P0611    | ECU Bobcat Engine V1  | Injector Fault                                     |
| P0615    | ECU Bobcat Engine V2  | Starter Relay Open Circuit                         |
| P0616    | ECU Bobcat Engine V2  | Starter Relay Short to Ground                      |
| P0617    | ECU Bobcat Engine V2  | Starter Relay Short to Battery                     |
| P061B    | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                      |
| P0628    | ECU Bobcat Engine V1  | High Pressure Pump Fault                           |
| P0629    | ECU Bobcat Engine V1  | High Pressure Pump Fault                           |
| P062D    | ECU Bobcat Engine V1  | Injector #1 and #4 Fault                           |
| P062D    | ECU Bobcat Engine V2  | Injector Bank Short Circuit 1                      |
| P062E    | ECU Bobcat Engine V2  | Injector Bank Short Circuit 2                      |
| P062E    | ECU Bobcat Engine V1  | Injector #2 and #3 Fault                           |
| P062F    | ECU Bobcat Engine V2  | ECU Data Read Fault                                |
| P062F    | ECU Bobcat Engine V1  | ECU Fault                                          |
| P0630    | ECU Bobcat Engine V2  | ECU Data Write Fault                               |
| P0641    | ECU Bobcat Engine V1  | 5V Sensor Supply #1 Fault                          |
| P0641    | ECU Bobcat Engine V2  | ECU 5V Sensor Supply Voltage Out of Range High     |
| P0642    | ECU Bobcat Engine V2  | ECU 5V Sensor Supply Voltage Out of Range Low      |
| P0651    | ECU Bobcat Engine V1  | 5V Sensor Supply #2 Fault                          |
| P0652    | ECU Bobcat Engine V1  | Sensor Supply Voltage Fault                        |
| P0653    | ECU Bobcat Engine V1  | Sensor Supply Voltage Fault                        |
| P0657    | ECU Bobcat Engine V2  | ECU Sensor Supply 1 Short to Ground                |
| P0658    | ECU Bobcat Engine V2  | ECU Sensor Supply 1 Voltage Low                    |
| P0658    | ECU Bobcat Engine D34 | DCU Fault                                          |
| P0659    | ECU Bobcat Engine V2  | ECU Sensor 1 Voltage High                          |
| P0659    | ECU Bobcat Engine D34 | DCU Fault                                          |
| P0669    | ECU Bobcat Engine V2  | High ECU Temperature                               |
| P0685    | ECU Bobcat Engine V2  | ECU Main Relay Fault                               |
| P0687    | ECU Bobcat Engine V1  | ECU Main Relay Fault                               |
| P068A    | ECU Bobcat Engine V2  | ECU Main Relay Fault                               |
| P068A    | ECU Bobcat Engine D34 | DCU Fault                                          |
| P0697    | ECU Bobcat Engine V1  | 5V Aux Sensor Supply #2 Fault                      |
| P06AD    | ECU Bobcat Engine V2  | ECU Temperature Sensor Short to Ground             |
| P06AE    | ECU Bobcat Engine V2  | ECU Temperature Sensor Short to Battery            |
| P06F0    | ECU Bobcat Engine V2  | DEF Supply Module Fault                            |
| P06F1    | ECU Bobcat Engine V2  | DEF Supply Module Fault                            |
| POC17    | ECU Bobcat Engine V1  | EGR Position Learning - Fault                      |
| POC17    | ECU Bobcat Engine V2  | EGR Closed Position Fault                          |
| POC18    | ECU Bobcat Engine V1  | EGR Position Learning - Fault                      |
| POC18    | ECU Bobcat Engine V2  | EGR Closed Position Fault                          |
| POC19    | ECU Bobcat Engine V2  | EGR Closed Position Fault                          |
| P100A-11 | Toolcat               | Start Output - Circuit Short to Ground             |
| P100A-11 | M-Series Loader       | Starter Output Short to Ground                     |
| P100A-12 | M-Series Loader       | Starter Output Short to Battery                    |
| P100A-12 | Toolcat               | Starter Output - Circuit Short to Battery          |
| P100A-13 | Toolcat               | Starter Output - Circuit Open                      |
| P100A-13 | M-Series Loader       | Starter Output Open Circuit                        |
| P100B-16 | M-Series Loader       | Starter Output Error Off                           |
| P100B-16 | Toolcat               | Starter Feedback - Circuit Voltage Below Threshold |
| P100B-17 | Toolcat               | Starter Feedback - Circuit Voltage Above Threshold |

| Code     | Product                  | Description                                                               |
|----------|--------------------------|---------------------------------------------------------------------------|
| P100B-17 | M-Series Loader          | Starter Output Error On                                                   |
| P1013    | ECU Bobcat Engine V2     | Engine Speed Fault                                                        |
| P101A    | ECU Bobcat Engine V2     | ECU Internal Fault                                                        |
| P1020-11 | Small Articulated Loader | Glow Plug Output Short to Ground                                          |
| P1020-12 | Small Articulated Loader | Glow Plug Output Short to Battery                                         |
| P1020-13 | Small Articulated Loader | Glow Plug Output Open Circuit                                             |
| P1021-16 | Small Articulated Loader | Glow Plug Output Error Off                                                |
| P1021-17 | Small Articulated Loader | Glow Plug Output Error On                                                 |
| P1033    | ECU Bobcat Engine V2     | High DPF Inlet Temperature                                                |
| P1044    | ECU Bobcat Engine V2     | DEF Tank Temperature Sensor Error Low                                     |
| P1045    | ECU Bobcat Engine V2     | DEF Tank Temperature Sensor Error High                                    |
| P1060-16 | M-Series Loader          | Air Filter Out of Range Low                                               |
| P1060-17 | M-Series Loader          | Air Filter Out of Range High                                              |
| P1061-97 | Toolcat                  | Air Filter Pressure - Component or System Operation Obstructed or Blocked |
| P1061-97 | Compact Wheel Loader     | Air Filter Plugged                                                        |
| P1062-00 | Toolcat                  | Air Filter Pressure Derate Level 1                                        |
| P1062-00 | M-Series Loader          | Air Filter Plugged                                                        |
| P1063-00 | M-Series Loader          | Air Filter Plugged                                                        |
| P1063-00 | Toolcat                  | Air Filter Pressure Derate Level 2                                        |
| P1065-31 | Toolcat                  | Air Filter Switch - No Signal                                             |
| P1065-31 | Compact Wheel Loader     | Air Filter Switch Not Connected                                           |
| P106C    | ECU Bobcat Engine V2     | Low DEF Quality                                                           |
| P106D    | ECU Bobcat Engine V2     | High DEF Quality                                                          |
| P1073    | ECU Bobcat Engine V2     | High Engine Compartment Temperature                                       |
| P107D    | ECU Bobcat Engine V2     | High Inlet Air Temperature                                                |
| P108A    | ECU Bobcat Engine V2     | DEF Supply Pump Motor Speed Fault                                         |
| P108B    | ECU Bobcat Engine V2     | DEF Supply Pump Motor Speed Fault                                         |
| P108C    | ECU Bobcat Engine V2     | DEF Supply Pump Motor Fault                                               |
| P10AD    | ECU Bobcat Engine V2     | High Intake Manifold Temperature                                          |
| P10E0-F8 | Small Articulated Loader | Engine Oil Pressure Extremely Low                                         |
| P10E0-FD | Small Articulated Loader | Engine Oil Pressure Shutdown                                              |
| P10F0-29 | Small Articulated Loader | Engine Speed Invalid Data                                                 |
| P10F0-31 | Small Articulated Loader | Engine Speed No Signal                                                    |
| P10F0-FA | Small Articulated Loader | Engine Speed Too High                                                     |
| P10F0-FB | Small Articulated Loader | Engine Speed Extremely High                                               |
| P10F0-FD | Small Articulated Loader | Engine Speed Shutdown                                                     |
| P1100-FA | Compact Wheel Loader     | Engine Coolant Temperature High                                           |
| P1100-FA | Toolcat                  | Engine Coolant Temperature - High                                         |
| P1100-FB | Compact Wheel Loader     | Engine Coolant Temperature Extremely High                                 |
| P1100-FB | Toolcat                  | Engine Coolant Temperature - Extremely High                               |
| P1100-FC | Compact Wheel Loader     | Engine Coolant Temperature Shutdown                                       |
| P1100-FD | Small Articulated Loader | Engine Coolant Temperature Shutdown                                       |
| P1101-16 | Small Articulated Loader | Engine Coolant Temperature Out of Range Low                               |
| P1101-17 | Small Articulated Loader | Engine Coolant Temperature Out of Range High                              |
| P1110-FA | Compact Wheel Loader     | Fuel Temperature High                                                     |
| P1110-FB | Compact Wheel Loader     | Fuel Temperature Extremely High                                           |
| P1110-FC | Compact Wheel Loader     | Fuel Temperature Limiting Performance                                     |
| P1115-FA | Compact Wheel Loader     | Air Intake Temperature Too High                                           |
| P1115-FB | Compact Wheel Loader     | Air Intake Temperature Extremely High                                     |
| P1115-FC | Compact Wheel Loader     | Air Intake Temperature Limiting Performance                               |
| P1118    | ECU Bobcat Engine V2     | High Engine Coolant Temp                                                  |
| P1120-00 | Compact Wheel Loader     | Fuel Filter Plugged                                                       |

| Code     | Product                  | Description                                                         |
|----------|--------------------------|---------------------------------------------------------------------|
| P1121-00 | Toolcat                  | Fuel Filter Plugged Derate Level 1                                  |
| P1121-00 | Compact Wheel Loader     | Fuel Filter Derate Level 1                                          |
| P1122-00 | Compact Wheel Loader     | Fuel Filter Derate Level 2                                          |
| P1122-00 | Toolcat                  | Fuel Filter Plugged Derate Level 2                                  |
| P1125-00 | Compact Wheel Loader     | Fuel Filter Extremely Plugged                                       |
| P1130-F8 | Toolcat                  | Fuel Filter Inlet Pressure Sensor - Extremely Low                   |
| P1130-F8 | Compact Wheel Loader     | Fuel Filter Inlet Pressure Extremely Low                            |
| P1130-F9 | Compact Wheel Loader     | Fuel Filter Inlet Pressure Low                                      |
| P1130-F9 | Toolcat                  | Fuel Filter Inlet Pressure Sensor - Low                             |
| P1131-13 | M-Series Loader          | Fuel Filter Inlet Pressure Sensor Open Circuit                      |
| P1131-16 | Toolcat                  | Fuel Filter Inlet Pressure Sensor - Circuit Voltage Below Threshold |
| P1131-16 | Compact Wheel Loader     | Fuel Pressure Out of Range Low                                      |
| P1131-17 | Toolcat                  | Fuel Filter Inlet Pressure Sensor - Circuit Voltage Above Threshold |
| P1131-17 | Compact Wheel Loader     | Fuel Pressure Out of Range High                                     |
| P1134-11 | Compact Wheel Loader     | Fuel Lift Pump Short to Ground                                      |
| P1134-12 | Toolcat                  | Fuel Lift Pump - Circuit Short to Battery                           |
| P1134-12 | M-Series Loader          | Fuel Lift Pump Short to Battery                                     |
| P1134-13 | M-Series Loader          | Fuel Lift Pump Open Circuit                                         |
| P1134-14 | Toolcat                  | Fuel Lift Pump - Circuit Short to Ground or Open                    |
| P1134-15 | Compact Wheel Loader     | Fuel Lift Pump Short Error On                                       |
| P1134-63 | Compact Wheel Loader     | Fuel Lift Pump Protection Time-Out                                  |
| P1134-63 | Toolcat                  | Fuel Lift Pump - Circuit / Component Protection Time-Out            |
| P113B-7B | Toolcat                  | Fuel Level - Low Fluid Level                                        |
| P113B-7B | Compact Wheel Loader     | Fuel Level Low                                                      |
| P1140-11 | Small Articulated Loader | Fuel Pull Output Error Off                                          |
| P1140-12 | Small Articulated Loader | Fuel Pull Output Error On                                           |
| P1140-13 | Small Articulated Loader | Fuel Pull Output Open Circuit                                       |
| P1141-16 | Small Articulated Loader | Fuel Pull Output Error Off                                          |
| P1141-17 | Small Articulated Loader | Fuel Pull Output Error On                                           |
| P1145-11 | Small Articulated Loader | Fuel Hold Solenoid Short to Ground                                  |
| P1145-12 | Small Articulated Loader | Fuel Hold Solenoid Short to Battery                                 |
| P1145-13 | Small Articulated Loader | Fuel Hold Solenoid Open Circuit                                     |
| P115A    | ECU Bobcat Engine D34    | DEF Temperature Sensor Failure                                      |
| P115C    | ECU Bobcat Engine D34    | DEF Temperature Sensor Short to Ground                              |
| P115D    | ECU Bobcat Engine D34    | DEF Temperature Sensor Open Circuit                                 |
| P1183    | ECU Bobcat Engine V2     | High Fuel Temperature                                               |
| P1219    | ECU Bobcat Engine V1     | ECU Safety Monitoring - Fault                                       |
| P1220    | ECU Bobcat Engine D34    | DEF Temperature Fault                                               |
| P1221    | ECU Bobcat Engine D34    | DEF Temperature Fault                                               |
| P1223    | ECU Bobcat Engine D34    | DEF Temperature Too High                                            |
| P1224    | ECU Bobcat Engine D34    | DEF Temperature Too Low                                             |
| P1227    | ECU Bobcat Engine V2     | Low DEF Tank Temperature Fault                                      |
| P1227    | ECU Bobcat Engine D34    | DEF Temperature Sensor Fault                                        |
| P1228    | ECU Bobcat Engine V1     | ECU Safety Monitoring - Fault                                       |
| P1229    | ECU Bobcat Engine D34    | DEF Temperature Signal Fault                                        |
| P1230    | ECU Bobcat Engine V2     | DEF Tank Level Signal Error                                         |
| P1230    | ECU Bobcat Engine D34    | DEF Level Signal Fault                                              |
| P1231    | ECU Bobcat Engine D34    | DEF Level Sensor Fault                                              |
| P123A    | ECU Bobcat Engine D34    | DEF Fill Level Fault                                                |
| P123B    | ECU Bobcat Engine D34    | DEF Fill Level Fault                                                |
| P123C    | ECU Bobcat Engine D34    | DEF Level Extremely Low                                             |
| P123D    | ECU Bobcat Engine D34    | DEF Level Empty                                                     |

| Code  | Product               | Description                                            |
|-------|-----------------------|--------------------------------------------------------|
| P1274 | ECU Bobcat Engine V1  | Fuel Pump Fault                                        |
| P1275 | ECU Bobcat Engine V1  | Fuel Pump Fault                                        |
| P12E5 | ECU Bobcat Engine V2  | EGR Fault - Level 1 Inducement                         |
| P12E6 | ECU Bobcat Engine V2  | EGR Fault - Level 2 Inducement                         |
| P12E7 | ECU Bobcat Engine V2  | EGR Fault - Level 3 Inducement                         |
| P12E8 | ECU Bobcat Engine V2  | EGR Fault - Warning                                    |
| P12E9 | ECU Bobcat Engine V2  | SCR Dosing Interrupted - Level 1 Inducement            |
| P12EA | ECU Bobcat Engine V2  | SCR Dosing Interrupted - Level 2 Inducement            |
| P12EB | ECU Bobcat Engine V2  | SCR Dosing Interrupted - Level 3 Inducement            |
| P12EC | ECU Bobcat Engine V2  | SCR Dosing Interrupted - Warning                       |
| P12F2 | ECU Bobcat Engine V2  | DEF Quality - Level 1 Inducement                       |
| P12F3 | ECU Bobcat Engine V2  | DEF Quality - Level 2 Inducement                       |
| P12F4 | ECU Bobcat Engine V2  | DEF Quality - Level 3 Inducement                       |
| P12F5 | ECU Bobcat Engine V2  | DEF Quality - Warning                                  |
| P12F6 | ECU Bobcat Engine V2  | SCR Tampering - Level 1 Inducement                     |
| P12F7 | ECU Bobcat Engine V2  | SCR Tampering - Level 2 Inducement                     |
| P12F8 | ECU Bobcat Engine V2  | SCR Tampering - Level 3 Inducement                     |
| P12F9 | ECU Bobcat Engine V2  | SCR Tampering - Warning                                |
| P1303 | ECU Bobcat Engine V2  | SCR Fault Repeat Offense - Level 1 Inducement          |
| P1304 | ECU Bobcat Engine V2  | SCR Fault Repeat Offense - Level 2 Inducement          |
| P1305 | ECU Bobcat Engine V2  | SCR Fault Repeat Offense - Level 3 Inducement          |
| P1332 | ECU Bobcat Engine D34 | Dosing Valve Tip Temperature Fault                     |
| P1337 | ECU Bobcat Engine D34 | Dosing Valve Tip Temperature Fault                     |
| P1350 | ECU Bobcat Engine D34 | DOC Pre-Treatment Temperature Too High                 |
| P1351 | ECU Bobcat Engine D34 | DOC Pre-Treatment Temperature Too Low                  |
| P1353 | ECU Bobcat Engine D34 | DOC Pre-Treatment Temperature Sensor Out of Range High |
| P1354 | ECU Bobcat Engine D34 | DOC Pre-Treatment Temperature Sensor Out of Range Low  |
| P1360 | ECU Bobcat Engine D34 | SCR Pre-Treatment Temperature Too High                 |
| P1361 | ECU Bobcat Engine D34 | SCR Pre-Treatment Temperature Too Low                  |
| P1443 | ECU Bobcat Engine D34 | DEF Pump Pressure Max                                  |
| P1444 | ECU Bobcat Engine D34 | DEF Pump Pressure Min                                  |
| P1450 | ECU Bobcat Engine V2  | High DEF Pump Pressure                                 |
| P1450 | ECU Bobcat Engine D34 | Metering Control Overpressure                          |
| P1451 | ECU Bobcat Engine D34 | Metering Control Underpressure                         |
| P1451 | ECU Bobcat Engine V2  | Low DEF Pump Pressure                                  |
| P1452 | ECU Bobcat Engine D34 | Monitoring of Overpressure                             |
| P1452 | ECU Bobcat Engine V2  | High DEF Pump Pressure                                 |
| P1453 | ECU Bobcat Engine V2  | DEF Pump Pressure Stabilization Fault                  |
| P1453 | ECU Bobcat Engine D34 | Pressure Stabilization Fault                           |
| P1454 | ECU Bobcat Engine V2  | Low DPF Differential Pressure                          |
| P1455 | ECU Bobcat Engine D34 | Monitoring of Pressure Build-up                        |
| P1457 | ECU Bobcat Engine V2  | Low DEF Pump Pressure                                  |
| P1459 | ECU Bobcat Engine V2  | DEF Pressure Reduction Fault                           |
| P1460 | ECU Bobcat Engine V2  | DEF Afterrun Error                                     |
| P1461 | ECU Bobcat Engine V2  | DEF Reverting Valve Pressure Fault                     |
| P1511 | ECU Bobcat Engine D34 | DEF Quality Sensor Fault                               |
| P1522 | ECU Bobcat Engine V2  | Low Engine Oil Pressure                                |
| P1531 | ECU Bobcat Engine D34 | DEF Quality Sensor Fault                               |
| P1546 | ECU Bobcat Engine V2  | High Turbine Inlet Temperature                         |
| P1560 | ECU Bobcat Engine D34 | DEF Quality Too High                                   |
| P1561 | ECU Bobcat Engine D34 | DEF Quality Too Low                                    |
| P1561 | ECU Bobcat Engine D34 | Battery Voltage Fault                                  |

| Code  | Product               | Description                        |
|-------|-----------------------|------------------------------------|
| P1562 | ECU Bobcat Engine V2  | ECU Battery Voltage Low            |
| P1562 | ECU Bobcat Engine D34 | Battery Voltage Low                |
| P1563 | ECU Bobcat Engine V2  | ECU Battery Voltage High           |
| P1563 | ECU Bobcat Engine D34 | Battery Voltage High               |
| P1564 | ECU Bobcat Engine V2  | ECU Battery Voltage Extremely High |
| P1565 | ECU Bobcat Engine V2  | ECU Battery Voltage Extremely Low  |
| P1601 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1602 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1602 | ECU Bobcat Engine D34 | DCU Sensor Supply Error            |
| P1604 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1606 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1607 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P160B | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P160B | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P160C | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P160C | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P160D | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P160E | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P160F | ECU Bobcat Engine D34 | DCU Fault                          |
| P160F | ECU Bobcat Engine V2  | ECU Memory Fault                   |
| P1610 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1611 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1611 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1612 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1612 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1613 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1614 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1615 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1616 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1617 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1618 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1619 | ECU Bobcat Engine V2  | ECU Internal Fault                 |
| P1620 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1621 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1622 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1623 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1624 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1625 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1626 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1627 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P162B | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1630 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1630 | ECU Bobcat Engine D34 | DCU Fault                          |
| P1631 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1631 | ECU Bobcat Engine D34 | DCU Fault                          |
| P1632 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1633 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1634 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1635 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1636 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1637 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |
| P1638 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault      |

| Code  | Product               | Description                                           |
|-------|-----------------------|-------------------------------------------------------|
| P1657 | ECU Bobcat Engine V2  | ECU Sensor Supply 1 Voltage Fault                     |
| P1660 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P1661 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P1662 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P1663 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P1669 | ECU Bobcat Engine V2  | ECU Sensor Supply 2 Voltage Fault                     |
| P1684 | ECU Bobcat Engine V2  | ECU Sensor Supply 3 Voltage Fault                     |
| P1690 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P1691 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P1692 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P16C0 | ECU Bobcat Engine D34 | DCU Fault                                             |
| P16C1 | ECU Bobcat Engine D34 | DCU Fault                                             |
| P16C2 | ECU Bobcat Engine D34 | DCU Fault                                             |
| P16C3 | ECU Bobcat Engine D34 | DCU Fault                                             |
| P16C4 | ECU Bobcat Engine D34 | DCU Fault                                             |
| P16C5 | ECU Bobcat Engine D34 | DCU Fault                                             |
| P16D2 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P16D6 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P16D8 | ECU Bobcat Engine V1  | ECU Safety Monitoring - Fault                         |
| P1710 | ECU Bobcat Engine D34 | Environment Temperature Too High                      |
| P1711 | ECU Bobcat Engine D34 | Environment Temperature Too Low                       |
| P1712 | ECU Bobcat Engine D34 | Environment Temperature Sensor Fault                  |
| P1713 | ECU Bobcat Engine D34 | Environment Temperature Sensor Fault                  |
| P1880 | ECU Bobcat Engine D34 | Outlet Line Heater Fault                              |
| P1882 | ECU Bobcat Engine D34 | Outlet Line Heater Fault                              |
| P1884 | ECU Bobcat Engine D34 | Outlet Line Heater Over-temperature                   |
| P1885 | ECU Bobcat Engine D34 | Outlet Line Heater Open Circuit                       |
| P1892 | ECU Bobcat Engine D34 | Backflow Line Heater Fault                            |
| P1893 | ECU Bobcat Engine V2  | DEF Backflow Line Pressure Fault                      |
| P1893 | ECU Bobcat Engine D34 | Backflow fault                                        |
| P1894 | ECU Bobcat Engine D34 | Backflow Line Heater Over-Temperature                 |
| P1895 | ECU Bobcat Engine D34 | Backflow Line Heater Open Circuit                     |
| P18A2 | ECU Bobcat Engine D34 | Inlet Line Heater Fault                               |
| P18A3 | ECU Bobcat Engine D34 | Inlet Line Heater Short to Battery                    |
| P18A4 | ECU Bobcat Engine D34 | Inlet Line Heater Over-Temperature                    |
| P18A5 | ECU Bobcat Engine D34 | Inlet Line Heater Open Circuit                        |
| P18B0 | ECU Bobcat Engine D34 | DEF Line Heater Short to Battery                      |
| P18B2 | ECU Bobcat Engine D34 | DEF Heater Relay Over-Temperature                     |
| P18B5 | ECU Bobcat Engine D34 | DEF Heater Relay Open Circuit                         |
| P1904 | ECU Bobcat Engine V2  | Glow Plug Lamp Short to Ground                        |
| P1906 | ECU Bobcat Engine V2  | DPF Regeneration Switch Inhibit Lamp Open Circuit     |
| P1907 | ECU Bobcat Engine V2  | DPF Regeneration Switch Inhibit Lamp Short to Ground  |
| P1908 | ECU Bobcat Engine V2  | DPF Regeneration Switch Inhibit Lamp Short to Battery |
| P190B | ECU Bobcat Engine V2  | High Fuel Rail Pressure                               |
| P190C | ECU Bobcat Engine V2  | Low Fuel Rail Pressure                                |
| P192E | ECU Bobcat Engine V2  | Check Engine Lamp Open Circuit                        |
| P192F | ECU Bobcat Engine V2  | Check Engine Lamp Short to Ground                     |
| P1931 | ECU Bobcat Engine V2  | Check Engine Lamp Short to Battery                    |
| P1934 | ECU Bobcat Engine V2  | Pressure Relief Valve Fault                           |
| P1990 | ECU Bobcat Engine V1  | ECU - Fault                                           |
| P1A32 | ECU Bobcat Engine D34 | Nox Sensor Self Diagnostics                           |
| P1A37 | ECU Bobcat Engine D34 | Nox Sensor Self Diagnostics                           |

| Code  | Product               | Description                                       |
|-------|-----------------------|---------------------------------------------------|
| P1A39 | ECU Bobcat Engine D34 | Nox Sensor Self Diagnostics                       |
| P1A42 | ECU Bobcat Engine D34 | Nox Sensor Self Diagnostics                       |
| P1A47 | ECU Bobcat Engine D34 | Nox Sensor Self Diagnostics                       |
| P1A49 | ECU Bobcat Engine D34 | Nox Sensor Self Diagnostics                       |
| P201F | ECU Bobcat Engine D34 | DEF Pump Motor Speed Fault                        |
| P202A | ECU Bobcat Engine D34 | DEF Tank Coolant Valve Open Circuit               |
| P202B | ECU Bobcat Engine D34 | DEF Tank Coolant Valve Short to Ground            |
| P202C | ECU Bobcat Engine D34 | DEF Tank Coolant Valve Short to Battery           |
| P202D | ECU Bobcat Engine V2  | DEF Leakage Fault                                 |
| P202E | ECU Bobcat Engine D34 | Dosing Valve Temperature Too High                 |
| P202E | ECU Bobcat Engine V2  | DEF Dosing Valve Error                            |
| P2032 | ECU Bobcat Engine V2  | DPF Inlet Temperature Sensor Out of Range Low     |
| P2033 | ECU Bobcat Engine V2  | DPF Inlet Temperature Sensor Out of Range High    |
| P2034 | ECU Bobcat Engine V2  | DPF Inlet Temperature Fault                       |
| P203A | ECU Bobcat Engine V2  | DEF Level Sensor Open Circuit                     |
| P203C | ECU Bobcat Engine D34 | DEF Level Sensor Fault                            |
| P203D | ECU Bobcat Engine D34 | DEF Level Sensor Fault                            |
| P203F | ECU Bobcat Engine V2  | DEF Tank Empty                                    |
| P2041 | ECU Bobcat Engine V2  | DEF Level Sensor Short Circuit                    |
| P2043 | ECU Bobcat Engine V2  | DEF Temperature Sensor Open Circuit               |
| P2046 | ECU Bobcat Engine V2  | DEF Temperature Sensor Short Circuit              |
| P2047 | ECU Bobcat Engine D34 | Dosing Valve Short to Battery                     |
| P2047 | ECU Bobcat Engine V2  | DEF Dosing Valve Short to Battery                 |
| P2048 | ECU Bobcat Engine V2  | DEF Dosing Valve Short to Ground                  |
| P2048 | ECU Bobcat Engine D34 | Dosing Valve Short to Ground                      |
| P2049 | ECU Bobcat Engine D34 | Dosing Valve Short to Battery                     |
| P2049 | ECU Bobcat Engine V2  | DEF Dosing Valve Open Circuit                     |
| P204A | ECU Bobcat Engine V2  | DEF Pressure Fault                                |
| P204A | ECU Bobcat Engine D34 | General Pressure Check Fault                      |
| P204C | ECU Bobcat Engine V2  | DEF Supply Pump Pressure Sensor Out of Range Low  |
| P204D | ECU Bobcat Engine V2  | DEF Supply Pump Pressure Sensor Out of Range High |
| P204E | ECU Bobcat Engine D34 | Backflow Pump Fault                               |
| P2050 | ECU Bobcat Engine V2  | DEF Dosing Valve Short to Battery                 |
| P2051 | ECU Bobcat Engine V2  | DEF Dosing Valve Short to Ground                  |
| P205E | ECU Bobcat Engine V2  | High DEF Tank Temperature                         |
| P205E | ECU Bobcat Engine D34 | DEF Overheating                                   |
| P206C | ECU Bobcat Engine D34 | DEF Quality Sensor Fault                          |
| P206D | ECU Bobcat Engine D34 | DEF Quality Sensor Fault                          |
| P2080 | ECU Bobcat Engine V1  | Turbo Temperature Fault                           |
| P2081 | ECU Bobcat Engine V1  | Turbo Temperature Sensor Fault                    |
| P208A | ECU Bobcat Engine V2  | DEF Supply Pump Motor Open Circuit                |
| P208A | ECU Bobcat Engine D34 | DEF Pump Motor Open Circuit                       |
| P208B | ECU Bobcat Engine V2  | DEF Supply Pump Motor Signal Error                |
| P208B | ECU Bobcat Engine D34 | DEF Pump Motor Overtemperature                    |
| P208C | ECU Bobcat Engine V2  | DEF Supply Pump Motor Short to Ground             |
| P208C | ECU Bobcat Engine D34 | DEF Pump Motor Short to Ground                    |
| P208D | ECU Bobcat Engine V2  | DEF Supply Pump Motor Short to Battery            |
| P208D | ECU Bobcat Engine D34 | DEF Pump Motor Short to Battery                   |
| P208E | ECU Bobcat Engine D34 | Dosing Valve Blocked                              |
| P208E | ECU Bobcat Engine V2  | DEF Dosing Valve Blocked                          |
| P209F | ECU Bobcat Engine D34 | DEF Tank Coolant Valve Temperature Too High       |
| P20A0 | ECU Bobcat Engine V2  | DEF Reverting Valve Open Circuit                  |

| Code  | Product               | Description                                              |
|-------|-----------------------|----------------------------------------------------------|
| P20A1 | ECU Bobcat Engine V2  | High DEF Reverting Valve Temperature                     |
| P20A2 | ECU Bobcat Engine V2  | DEF Reverting Valve Short to Ground                      |
| P20A3 | ECU Bobcat Engine V2  | DEF Reverting Valve Short to Battery                     |
| P20A5 | ECU Bobcat Engine V2  | DEF Reverting Valve Pressure Fault                       |
| P20AC | ECU Bobcat Engine V2  | DEF Supply Module Heater Fault                           |
| P20AD | ECU Bobcat Engine V2  | DEF Supply Module Heater Fault                           |
| P20B0 | ECU Bobcat Engine V2  | DEF Supply Module Temperature Fault                      |
| P20B1 | ECU Bobcat Engine V2  | DEF Tank Heater Valve Open Circuit                       |
| P20B3 | ECU Bobcat Engine V2  | DEF Tank Heater Valve Short to Ground                    |
| P20B4 | ECU Bobcat Engine V2  | DEF Tank Heating/Coolant Valve Short to Battery          |
| P20B9 | ECU Bobcat Engine V2  | DEF Supply Module Heater Relay Open Circuit              |
| P20B9 | ECU Bobcat Engine D34 | Supply Module Heater Open Circuit                        |
| P20BA | ECU Bobcat Engine D34 | Supply Module Heater Overtemperature                     |
| P20BA | ECU Bobcat Engine V2  | DEF Supply Module Heater Fault                           |
| P20BB | ECU Bobcat Engine V2  | DEF Supply Module Heater Relay Short to Ground           |
| P20BC | ECU Bobcat Engine D34 | Supply Module Heater Short to Battery                    |
| P20BC | ECU Bobcat Engine V2  | DEF Supply Module Heater Relay Short to Battery          |
| P20BD | ECU Bobcat Engine V2  | DEF Pressure Line Heater Relay Open Circuit              |
| P20BD | ECU Bobcat Engine D34 | DEF Outlet Line Heater Short to Ground or Open Circuit   |
| P20BE | ECU Bobcat Engine V2  | DEF Pressure Line Heater Fault                           |
| P20BF | ECU Bobcat Engine V2  | DEF Pressure Line Heater Relay Short to Ground           |
| P20BF | ECU Bobcat Engine D34 | Outlet Line Heater Short to Ground                       |
| P20C0 | ECU Bobcat Engine D34 | Outlet Line Heater Short to Battery                      |
| P20C0 | ECU Bobcat Engine V2  | DEF Pressure Line Heater Relay Short to Battery          |
| P20C1 | ECU Bobcat Engine V2  | DEF Backflow Line Heater Relay Open Circuit              |
| P20C1 | ECU Bobcat Engine D34 | DEF Backflow Line Heater Short to Ground or Open Circuit |
| P20C2 | ECU Bobcat Engine V2  | DEF Backflow Line Heater Fault                           |
| P20C3 | ECU Bobcat Engine V2  | DEF Backflow Line Heater Relay Short to Ground           |
| P20C3 | ECU Bobcat Engine D34 | Backflow Line Heater Short to Ground                     |
| P20C4 | ECU Bobcat Engine V2  | DEF Backflow Line Heater Relay Short to Battery          |
| P20C4 | ECU Bobcat Engine D34 | Backflow Line Heater Short to Battery                    |
| P20C5 | ECU Bobcat Engine V2  | DEF Suction Line Heater Relay Open Circuit               |
| P20C5 | ECU Bobcat Engine D34 | DEF Inlet Line Heater Short to Ground or Open Circuit    |
| P20C6 | ECU Bobcat Engine V2  | DEF Suction Line Heater Fault                            |
| P20C7 | ECU Bobcat Engine V2  | DEF Suction Line Heater Relay Short to Ground            |
| P20C7 | ECU Bobcat Engine D34 | Inlet Line Heater Short to Ground                        |
| P20C8 | ECU Bobcat Engine V2  | DEF Suction Line Heater Relay Short to Battery           |
| P20E8 | ECU Bobcat Engine D34 | DEF Pump Pressure Too Low                                |
| P20EE | ECU Bobcat Engine V2  | SCR Efficiency Low                                       |
| P20EE | ECU Bobcat Engine D34 | SCR Efficiency Fault                                     |
| P20FA | ECU Bobcat Engine D34 | DEF Backflow Pump Open Circuit                           |
| P20FB | ECU Bobcat Engine D34 | DEF Backflow Pump Overtemperature                        |
| P20FC | ECU Bobcat Engine D34 | DEF Backflow Pump Short to Ground                        |
| P20FD | ECU Bobcat Engine D34 | DEF Backflow Pump Short to Battery                       |
| P20FF | ECU Bobcat Engine V2  | DEF Supply Module Communication Timeout                  |
| P2108 | ECU Bobcat Engine V1  | Intake Throttle - Fault                                  |
| P2131 | ECU Bobcat Engine V1  | Throttle Position Sensor Fault                           |
| P2135 | ECU Bobcat Engine V2  | Engine Speed Control Signal Fault                        |
| P2136 | ECU Bobcat Engine V2  | Engine Speed Control Signal Fault                        |
| P213E | ECU Bobcat Engine V2  | ECU Internal Shutdown                                    |
| P2143 | ECU Bobcat Engine V2  | EGR H-Bridge Driver Open Circuit                         |
| P2143 | ECU Bobcat Engine V1  | EGR Motor - Fault                                        |

| Code  | Product               | Description                               |
|-------|-----------------------|-------------------------------------------|
| P2144 | ECU Bobcat Engine V2  | EGR H-Bridge Driver Short to Ground       |
| P2144 | ECU Bobcat Engine V1  | EGR Motor - Fault                         |
| P2145 | ECU Bobcat Engine V1  | EGR Motor - Fault                         |
| P2145 | ECU Bobcat Engine V2  | EGR H-Bridge Driver Short to Battery      |
| P2146 | ECU Bobcat Engine V1  | Injector #1 and #4 Fault                  |
| P2147 | ECU Bobcat Engine V1  | Injector #1 and #4 Fault                  |
| P2148 | ECU Bobcat Engine V1  | Injector #1 and #4 Fault                  |
| P2149 | ECU Bobcat Engine V1  | Injector #2 and #3 Fault                  |
| P214F | ECU Bobcat Engine V2  | DEF Supply Module Heater Open Circuit     |
| P2150 | ECU Bobcat Engine V1  | Injector #2 and #3 Fault                  |
| P2151 | ECU Bobcat Engine V1  | Injector #2 and #3 Fault                  |
| P215E | ECU Bobcat Engine V2  | DEF Suction Line Heater SC/STG Fault      |
| P215F | ECU Bobcat Engine V2  | DEF Suction Line Heater Open Circuit      |
| P21C2 | ECU Bobcat Engine V2  | DEF Main Heater Relay Open Circuit        |
| P21C3 | ECU Bobcat Engine D34 | DEF Heater Relay Short to Ground          |
| P21C3 | ECU Bobcat Engine V2  | DEF Main Heater Relay Short to Ground     |
| P21C4 | ECU Bobcat Engine D34 | DEF Heater Relay Short to Battery         |
| P21C4 | ECU Bobcat Engine V2  | DEF Main Heater Relay Short to Battery    |
| P21C7 | ECU Bobcat Engine V2  | SCR System Main Relay Fault               |
| P21C8 | ECU Bobcat Engine V2  | SCR System Main Relay Short to Ground     |
| P21C9 | ECU Bobcat Engine V2  | SCR System Main Relay Short to Battery    |
| P21DD | ECU Bobcat Engine V2  | DEF Supply Module Heater Short to Ground  |
| P2202 | ECU Bobcat Engine V2  | Upstream NOx Sensor Short Circuit         |
| P2202 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Short Circuit    |
| P2203 | ECU Bobcat Engine V2  | Upstream NOx Sensor Open Circuit          |
| P2203 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Open Circuit     |
| P2215 | ECU Bobcat Engine V2  | Downstream NOx Sensor Short Circuit       |
| P2215 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Short Circuit   |
| P2216 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Open Circuit    |
| P2216 | ECU Bobcat Engine V2  | Downstream NOx Sensor Open Circuit        |
| P221C | ECU Bobcat Engine V2  | DEF Pressure Line Heater Electrical Fault |
| P221D | ECU Bobcat Engine V2  | DEF Pressure Line Heater Open Circuit     |
| P221E | ECU Bobcat Engine V2  | DEF Backflow Line Heater Electrical Fault |
| P221F | ECU Bobcat Engine V2  | DEF Backflow Line Heater Open Circuit     |
| P2226 | ECU Bobcat Engine V1  | Barometric Pressure Fault                 |
| P2228 | ECU Bobcat Engine V2  | Atmospheric Pressure Low Fault            |
| P2228 | ECU Bobcat Engine V1  | Barometric Pressure Fault                 |
| P2229 | ECU Bobcat Engine V1  | Barometric Pressure Fault                 |
| P2229 | ECU Bobcat Engine V2  | Atmospheric Pressure High Fault           |
| P225D | ECU Bobcat Engine V2  | Low Upstream NOx Concentration            |
| P2264 | ECU Bobcat Engine V1  | Water in Fuel Sensor Fault                |
| P2265 | ECU Bobcat Engine V2  | Water in Fuel Detected - Derate           |
| P2266 | ECU Bobcat Engine V2  | Water in Fuel Sensor Out of Range Low     |
| P2266 | ECU Bobcat Engine V1  | Water in Fuel Sensor Fault                |
| P2267 | ECU Bobcat Engine V1  | Water in Fuel Sensor Fault                |
| P2267 | ECU Bobcat Engine V2  | Water in Fuel Sensor Out of Range High    |
| P2269 | ECU Bobcat Engine V2  | Water in Fuel Detected                    |
| P2381 | ECU Bobcat Engine D34 | Nox Pre-Treatment Fault                   |
| P2381 | ECU Bobcat Engine V2  | Glow Plug Lamp Short to Battery           |
| P2382 | ECU Bobcat Engine D34 | Nox Post-Treatment Fault                  |
| P2383 | ECU Bobcat Engine D34 | Nox Pre-Treatment Fault                   |
| P2383 | ECU Bobcat Engine V2  | Upstream NOx Sensor Installation Fault    |

| Code  | Product               | Description                                        |
|-------|-----------------------|----------------------------------------------------|
| P2384 | ECU Bobcat Engine V2  | Downstream NOx Sensor Installation Fault           |
| P2384 | ECU Bobcat Engine D34 | Nox Post-Treatment Fault                           |
| P2385 | ECU Bobcat Engine D34 | Nox Pre-Treatment Fault                            |
| P2386 | ECU Bobcat Engine D34 | Nox Post-Treatment Fault                           |
| P2387 | ECU Bobcat Engine D34 | Nox Pre-Treatment Fault                            |
| P2388 | ECU Bobcat Engine D34 | Nox Pre-Treatment Fault                            |
| P2391 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P2392 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P2393 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P2394 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P2395 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P2396 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P2397 | ECU Bobcat Engine V2  | Upstream NOx Concentration Low                     |
| P2397 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P2398 | ECU Bobcat Engine V2  | Downstream NOx Concentration Low                   |
| P2398 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P23A1 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P23A2 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P23A3 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P23A4 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P23A5 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P23A6 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P23A7 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P23A8 | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P23A9 | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                     |
| P23AA | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                    |
| P23B0 | ECU Bobcat Engine D34 | DEF Hose Leak                                      |
| P23B1 | ECU Bobcat Engine D34 | Evaluate Filter Clog                               |
| P23B2 | ECU Bobcat Engine D34 | Supply Module Heater Fault                         |
| P23B2 | ECU Bobcat Engine V2  | DEF Supply Module Heater Fault                     |
| P23B3 | ECU Bobcat Engine V2  | DEF Supply Module Heater Temperature Fault         |
| P23B3 | ECU Bobcat Engine D34 | Supply Module Heater Temperature Fault             |
| P23B4 | ECU Bobcat Engine D34 | Supply Module Heater Temperature Fault             |
| P23B4 | ECU Bobcat Engine V2  | DEF Supply Module Heater Temperature Fault         |
| P23B5 | ECU Bobcat Engine D34 | Supply Module Temperature Fault                    |
| P23B5 | ECU Bobcat Engine V2  | DEF Supply Module Temperature Fault                |
| P23B6 | ECU Bobcat Engine D34 | Supply Module Temperature Fault                    |
| P23B6 | ECU Bobcat Engine V2  | DEF Supply Module Temperature Fault                |
| P23BA | ECU Bobcat Engine D34 | DEF Pump Pressure Too Low                          |
| P23BB | ECU Bobcat Engine D34 | DEF Pump Pressure Too High                         |
| P2413 | ECU Bobcat Engine V1  | EGR Actuator - Fault                               |
| P2414 | ECU Bobcat Engine V1  | EGR Motor - Fault                                  |
| P2415 | ECU Bobcat Engine V1  | EGR Temperature Sensor - Fault                     |
| P2428 | ECU Bobcat Engine V1  | Exhaust Over Temperature Fault                     |
| P242B | ECU Bobcat Engine V1  | SCR Inlet Temperature Sensor Fault                 |
| P242C | ECU Bobcat Engine V1  | EGR Temperature Sensor - Fault                     |
| P242D | ECU Bobcat Engine V1  | EGR Temperature Sensor - Fault                     |
| P242F | ECU Bobcat Engine V2  | High DPF Ash Content - Ash Cleaning Needed         |
| P2454 | ECU Bobcat Engine V2  | DPF Differential Pressure Sensor Out of Range Low  |
| P2455 | ECU Bobcat Engine V2  | DPF Differential Pressure Sensor Out of Range High |
| P2463 | ECU Bobcat Engine V2  | High DPF Soot Mass - Regen Required                |
| P2463 | ECU Bobcat Engine V1  | SCR Fault                                          |

| Code  | Product               | Description                                          |
|-------|-----------------------|------------------------------------------------------|
| P246B | ECU Bobcat Engine V2  | DPF Regeneration Failure                             |
| P246C | ECU Bobcat Engine V2  | High DPF Differential Pressure - DPF Plugged         |
| P24A3 | ECU Bobcat Engine V2  | Very High DPF Soot Mass - Service Regen Required     |
| P24F4 | ECU Bobcat Engine D34 | SCR Pre-Treatment Temperature Fault                  |
| P24F5 | ECU Bobcat Engine D34 | SCR Pre-Treatment Temperature Fault                  |
| P24F6 | ECU Bobcat Engine D34 | SCR Pre-Treatment Temperature Fault                  |
| P2505 | ECU Bobcat Engine V2  | High ECU Temperature                                 |
| P2506 | ECU Bobcat Engine V2  | ECU Software Reset                                   |
| P2507 | ECU Bobcat Engine V2  | ECU Internal Fault                                   |
| P2508 | ECU Bobcat Engine V2  | ECU Internal Fault                                   |
| P2509 | ECU Bobcat Engine V2  | ECU Internal Fault                                   |
| P250A | ECU Bobcat Engine V2  | Oil Level/Temp Sensor Open Circuit                   |
| P250C | ECU Bobcat Engine V2  | Oil Level/Temp Sensor Short to Ground                |
| P250D | ECU Bobcat Engine V2  | Oil Level/Temp Sensor Short to Battery               |
| P250F | ECU Bobcat Engine V2  | Check Engine Oil Level                               |
| P2510 | ECU Bobcat Engine D34 | DCU Fault                                            |
| P2511 | ECU Bobcat Engine V2  | ECU Internal Fault                                   |
| P2530 | ECU Bobcat Engine D34 | DCU Activation Signal Fault                          |
| P2546 | ECU Bobcat Engine V2  | Multi-Torque Switch Out of Range Low                 |
| P2547 | ECU Bobcat Engine V2  | Multi-Torque Switch Out of Range High                |
| P25BA | ECU Bobcat Engine V2  | DPF Regeneration Inhibit and Enable Switch Fault     |
| P25BB | ECU Bobcat Engine V2  | DPF Regeneration Enable Switch Short to Battery      |
| P25BC | ECU Bobcat Engine V2  | DPF Regeneration Inhibit Switch Short to Battery     |
| P25E0 | ECU Bobcat Engine D34 | Supply Module Heater Fault                           |
| P25E1 | ECU Bobcat Engine D34 | Supply Module Heater Fault                           |
| P25E2 | ECU Bobcat Engine D34 | Supply Module Temperature Duty Low                   |
| P25E3 | ECU Bobcat Engine D34 | Supply Module Temperature Duty High                  |
| P260E | ECU Bobcat Engine V2  | DPF Regeneration Enable Switch Lamp Open Circuit     |
| P260F | ECU Bobcat Engine V2  | DPF Regeneration Enable Switch Lamp Short to Ground  |
| P2611 | ECU Bobcat Engine V2  | DPF Regeneration Enable Switch Lamp Short to Battery |
| P2621 | ECU Bobcat Engine V1  | Intake Throttle Lift Sensor - Fault                  |
| P2622 | ECU Bobcat Engine V1  | Intake Throttle Lift Sensor - Fault                  |
| P2632 | ECU Bobcat Engine V2  | Fuel Feed Pump Open Circuit                          |
| P2633 | ECU Bobcat Engine V2  | Fuel Feed Pump Short to Ground                       |
| P2634 | ECU Bobcat Engine V2  | Fuel Feed Pump Short to Battery                      |
| P2635 | ECU Bobcat Engine V2  | Fuel Feed Pump Fault                                 |
| P263D | ECU Bobcat Engine V2  | DEF Pressure Line Heating Fault                      |
| P2669 | ECU Bobcat Engine V2  | ECU Sensor Supply 2 Short to Ground                  |
| P2670 | ECU Bobcat Engine V2  | ECU Sensor Supply 2 Out of Range Low                 |
| P2670 | ECU Bobcat Engine D34 | DCU Fault                                            |
| P2671 | ECU Bobcat Engine D34 | DCU Fault                                            |
| P2671 | ECU Bobcat Engine V2  | ECU Sensor Supply 2 Out of Range High                |
| P2684 | ECU Bobcat Engine V2  | ECU Sensor Supply 3 Short to Ground                  |
| P2685 | ECU Bobcat Engine D34 | DCU Fault                                            |
| P2685 | ECU Bobcat Engine V2  | ECU Sensor Supply 3 Out of Range Low                 |
| P2686 | ECU Bobcat Engine V2  | ECU Sensor 3 Out of Range High                       |
| P2686 | ECU Bobcat Engine D34 | DCU Fault                                            |
| P268C | ECU Bobcat Engine V2  | Injector #1 IQA Code Missing                         |
| P268D | ECU Bobcat Engine V2  | Injector #2 IQA Code Missing                         |
| P268E | ECU Bobcat Engine V2  | Injector #3 IQA Code Missing                         |
| P268F | ECU Bobcat Engine V2  | Injector #4 IQA Code Missing                         |
| P26E8 | ECU Bobcat Engine D34 | DCU Fault                                            |

| Code  | Product               | Description                                    |
|-------|-----------------------|------------------------------------------------|
| P26E9 | ECU Bobcat Engine D34 | DCU Fault                                      |
| P273F | ECU Bobcat Engine V2  | High Transmission Oil Temperature (CAN)        |
| P274F | ECU Bobcat Engine V2  | High Transmission Oil Temperature (H/W Switch) |
| P2A8C | ECU Bobcat Engine D34 | DEF Pump Motor Speed Fault                     |
| P2A8D | ECU Bobcat Engine D34 | DEF Pump Motor Speed Fault                     |
| P2B8C | ECU Bobcat Engine D34 | DEF Pump Motor Fault                           |
| P2B8D | ECU Bobcat Engine D34 | DEF Pump Motor Fault                           |
| P2BB1 | ECU Bobcat Engine V1  | SCR Inducement - Blocked EGR                   |
| P2BB2 | ECU Bobcat Engine V1  | SCR Inducement - Dosing Interrupted            |
| P2BB4 | ECU Bobcat Engine V1  | SCR Inducement - DEF Quality                   |
| P2BB5 | ECU Bobcat Engine V1  | SCR Inducement - Tampering                     |
| P2BB6 | ECU Bobcat Engine V1  | SCR Inducement - Repeat Offense                |
| P2BC1 | ECU Bobcat Engine V1  | DEF Level - Low                                |
| P2BC2 | ECU Bobcat Engine V1  | DEF Level - Very Low                           |
| P2BC3 | ECU Bobcat Engine V1  | DEF Level - Extremely Low                      |
| P2BC4 | ECU Bobcat Engine V1  | Unknown SCR fault                              |
| P2BC4 | ECU Bobcat Engine V1  | DEF Level - Empty                              |
| P2BD0 | ECU Bobcat Engine V1  | DCU CAN Communication Fault                    |
| P2C11 | ECU Bobcat Engine V2  | DEF Dosing Valve Fault                         |
| P3002 | ECU Bobcat Engine V1  | Exhaust Temperature - Extremely High           |
| P3003 | ECU Bobcat Engine V1  | Exhaust Temperature - Extremely High           |
| P3004 | ECU Bobcat Engine V1  | Exhaust Temperature - Extremely High           |
| P3006 | ECU Bobcat Engine V1  | Particulate Matter - Warning                   |
| P3007 | ECU Bobcat Engine V1  | Particulate Matter - High                      |
| P3008 | ECU Bobcat Engine V1  | Particulate Matter - Extremely High            |
| P3011 | ECU Bobcat Engine V1  | Boost Pressure - Fault                         |
| P3012 | ECU Bobcat Engine V1  | Low Water Temperature in Parked Regeneration   |
| P3013 | ECU Bobcat Engine V1  | Parked Regeneration - Time Out                 |
| P3018 | ECU Bobcat Engine V1  | Exhaust Temperature Sensor - Fault             |
| P3019 | ECU Bobcat Engine V1  | Pump Calibration - Error                       |
| P3023 | ECU Bobcat Engine V1  | Exhaust Gas Temperature Sensor - Fault         |
| P3024 | ECU Bobcat Engine V1  | DPF Fault                                      |
| P3025 | ECU Bobcat Engine V1  | Water Temp Sensor Fault                        |
| P304C | ECU Bobcat Engine V2  | Low DEF Supply Pump Pressure                   |
| P304D | ECU Bobcat Engine V2  | High DEF Supply Pump Pressure                  |
| P3052 | ECU Bobcat Engine V2  | DPF Differential Pressure Sensor Fault         |
| P30B1 | ECU Bobcat Engine V2  | High DEF Tank Heating/Coolant Valve Fault      |
| P30B9 | ECU Bobcat Engine V2  | High DEF Supply Module Heater Relay Fault      |
| P30BD | ECU Bobcat Engine V2  | High DEF Pressure Line Heater Relay Fault      |
| P30C1 | ECU Bobcat Engine V2  | High DEF Backflow Line Heater Relay Fault      |
| P30C5 | ECU Bobcat Engine V2  | High DEF Suction Line Heater Relay Fault       |
| P31C5 | ECU Bobcat Engine V2  | High DEF Main Heater Relay Fault               |
| P32EE | ECU Bobcat Engine V2  | Injector #1 Short Circuit                      |
| P32EF | ECU Bobcat Engine V2  | Injector #2 Short Circuit                      |
| P32F0 | ECU Bobcat Engine V2  | Injector #3 Short Circuit                      |
| P32F1 | ECU Bobcat Engine V2  | Injector #4 Short Circuit                      |
| P350D | ECU Bobcat Engine V2  | Oil Level/Temp Sensor Communication Fault      |
| P350E | ECU Bobcat Engine V2  | Oil Level/Temp Sensor Fault                    |
| P350F | ECU Bobcat Engine V2  | Low Engine Oil Level                           |
| P360E | ECU Bobcat Engine V2  | DPF Regeneration Active Lamp Open Circuit      |
| P360F | ECU Bobcat Engine V2  | DPF Regeneration Active Lamp Short to Ground   |
| P3611 | ECU Bobcat Engine V2  | DPF Regeneration Active Lamp Short to Battery  |

| Code     | Product               | Description                                                  |
|----------|-----------------------|--------------------------------------------------------------|
| R3327    | M-Series Excavator    | Display CAN Error                                            |
| R3327    | M-Series Loader       | IQ Touch CAN Error                                           |
| R3334    | M-Series Loader       | IQ Touch CAN RX Error                                        |
| R3334    | M-Series Excavator    | Display CAN Error                                            |
| R3335    | M-Series Excavator    | Display CAN Error                                            |
| R3335    | M-Series Loader       | IQ Touch CAN TX Error                                        |
| R3904    | M-Series Excavator    | Jog Shuttle No Communication                                 |
| R4304    | M-Series Excavator    | Keyless Start Panel No Communication                         |
| R7404    | M-Series Excavator    | Main Controller No Communication                             |
| R7423    | M-Series Excavator    | Display Not Programmed                                       |
| R7492    | M-Series Excavator    | Main Controller Authentication Failed                        |
| R9604    | M-Series Excavator    | Radio No Communication                                       |
| U0028    | ECU Bobcat Engine V2  | ECU CAN Communication Fault                                  |
| U0029    | ECU Bobcat Engine V2  | ECU CAN Communication Fault                                  |
| U0075    | ECU Bobcat Engine V1  | ECU Communication Error                                      |
| U0076    | ECU Bobcat Engine V1  | EGR Fault                                                    |
| U0077    | ECU Bobcat Engine V1  | ECU COMMUNICATION FAULT                                      |
| U0081    | ECU Bobcat Engine V1  | ECU Communication Error                                      |
| U0082    | ECU Bobcat Engine V1  | ECU Communication - Fault                                    |
| U0083    | ECU Bobcat Engine V1  | ECU Communication - Fault                                    |
| U0084    | ECU Bobcat Engine V1  | ECU COMMUNICATION FAULT                                      |
| U0085    | ECU Bobcat Engine V1  | ECU Communication - Fault                                    |
| U0086    | ECU Bobcat Engine V1  | ECU Communication - Fault                                    |
| U0087    | ECU Bobcat Engine V1  | ECU COMMUNICATION FAULT                                      |
| U0089    | ECU Bobcat Engine V1  | ECU COMMUNICATION FAULT                                      |
| U0100    | ECU Bobcat Engine V1  | ECU Communication Fault                                      |
| U010E    | ECU Bobcat Engine D34 | DCU Communication Fault                                      |
| U010F    | ECU Bobcat Engine V2  | ECU CAN Communication Fault                                  |
| U013C    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Engine Speed                   |
| U0140    | ECU Bobcat Engine V1  | Throttle Position Sensor Fault                               |
| U01B7    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Regeneration Switch            |
| U01B8    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Multiple Torque Switch         |
| U01B9    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Engine Shut Down               |
| U029D    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Upstream NOx Sensor            |
| U029E    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Downstream NOx Sensor          |
| U02A2    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - DEF Tank                       |
| U030D    | ECU Bobcat Engine V2  | Upstream NOx Sensor Heating Fault                            |
| U030E    | ECU Bobcat Engine V2  | Downstream NOx Sensor Heating Fault                          |
| U0401    | ECU Bobcat Engine D34 | DCU Communication Fault                                      |
| U040F    | ECU Bobcat Engine D34 | DEF Pump Motor Fault                                         |
| U043D    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Engine Speed Control           |
| U0606    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Engine Speed Control           |
| U0607    | ECU Bobcat Engine V2  | ECU CAN Communication Fault                                  |
| U0608    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Engine Speed Control           |
| U0619    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - DEF Sensor                     |
| U0632    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Cooling Fan Control            |
| U1001    | ECU Bobcat Engine V2  | CAN Communication Fault - Hydraulic Oil Temperature          |
| U1003    | ECU Bobcat Engine V2  | ECU Received Engine Shutdown Request from Machine Controller |
| U100A-08 | M-Series Loader       | Machine Control Message Failure                              |
| U1010-08 | Compact Wheel Loader  | PTOL Keypad No Communication                                 |
| U1011-08 | M-Series Loader       | Options Keypad No Communication                              |
| U1012-08 | Compact Wheel Loader  | Cab Keypad No Communication                                  |

| Code     | Product               | Description                                         |
|----------|-----------------------|-----------------------------------------------------|
| U1013-08 | Compact Wheel Loader  | Accessory (ACD) Keypad No Communication             |
| U1015-62 | Toolcat               | Throttle Encoder - Signal Compare Failure           |
| U1015-62 | M-Series Loader       | Throttle Encoder Signal Failure                     |
| U101A-08 | Toolcat               | Keypad Throttle - Bus Signal / Message Failure      |
| U101B-08 | Toolcat               | Keypad Lights - Bus Signal / Message Failure        |
| U101C-08 | Toolcat               | Keypad Performance - Bus Signal / Message Failure   |
| U1024    | ECU Bobcat Engine D34 | Nox Pre-Treatment CAN communication Fault           |
| U1025    | ECU Bobcat Engine D34 | Nox Pre-Treatment CAN communication Fault           |
| U1026    | ECU Bobcat Engine D34 | Nox Pre-Treatment CAN communication Fault           |
| U1027    | ECU Bobcat Engine D34 | Nox Pre-Treatment CAN communication Fault           |
| U1028    | ECU Bobcat Engine D34 | Nox Pre-Treatment CAN communication Fault           |
| U1028    | ECU Bobcat Engine V2  | DEF Quality Sensor Open Circuit                     |
| U1029    | ECU Bobcat Engine D34 | Nox Pre-Treatment CAN communication Fault           |
| U102A    | ECU Bobcat Engine D34 | Nox Pre-Treatment CAN communication Fault           |
| U102B    | ECU Bobcat Engine D34 | Nox Post-Treatment CAN communication Fault          |
| U102C    | ECU Bobcat Engine D34 | Nox Post-Treatment CAN communication Fault          |
| U102D    | ECU Bobcat Engine D34 | Nox Post-Treatment CAN communication Fault          |
| U102E    | ECU Bobcat Engine D34 | Nox Post-Treatment CAN communication Fault          |
| U102F    | ECU Bobcat Engine D34 | Nox Post-Treatment CAN communication Fault          |
| U1030    | ECU Bobcat Engine D34 | Nox Post-Treatment CAN communication Fault          |
| U1030    | ECU Bobcat Engine V2  | DEF Quality Sensor Short Circuit                    |
| U1031    | ECU Bobcat Engine V2  | ECU CAN Communication Fault                         |
| U1031    | ECU Bobcat Engine D34 | Nox Post-Treatment CAN communication Fault          |
| U1032    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - PTO                   |
| U1033    | ECU Bobcat Engine V2  | ECU CAN Communication Fault - Starter Relay         |
| U1040-00 | Compact Wheel Loader  | Hour Meter Changed                                  |
| U1040-00 | Toolcat               | Hour Meter Updated                                  |
| U1050-00 | Compact Wheel Loader  | Power Failure                                       |
| U1050-00 | Toolcat               | Hub Controller Interrupted Power Failure            |
| U1051-00 | M-Series Loader       | Cab Controller Interrupted Power Failure            |
| U1052-00 | M-Series Loader       | Power Failure                                       |
| U1053-00 | Compact Wheel Loader  | Drive Controller Interrupted Power                  |
| U1054-00 | Compact Wheel Loader  | Interrupted Power Failure                           |
| U1055-00 | M-Series Loader       | Aux Controller Interrupted Power Failure            |
| U1056-00 | M-Series Loader       | Rear Auxiliary Controller Interrupted Power Failure |
| U105A-00 | Toolcat               | Pump Controller Interrupted Power Failure           |
| U105B-00 | Toolcat               | Rear Cab Controller Interrupted Power Failure       |
| U1060-46 | M-Series Loader       | Workgroup Calibration Failed                        |
| U1060-87 | M-Series Loader       | Workgroup Calibration Required                      |
| U1061-00 | M-Series Loader       | Workgroup Calibration Passed                        |
| U1065-00 | M-Series Loader       | Drive Calibration Passed                            |
| U1070-00 | Compact Wheel Loader  | Hub Controller Software Updated                     |
| U1071-00 | M-Series Loader       | Cab Controller Software Updated                     |
| U1073-00 | Compact Wheel Loader  | Drive Controller Programmed                         |
| U1074-00 | Compact Wheel Loader  | Workgroup Controller Software Updated               |
| U1075-00 | M-Series Loader       | Lights Controller Interrupted Power Failure         |
| U107A-00 | Toolcat               | Pump Controller Software Updated                    |
| U107B-00 | Toolcat               | Rear Controller Software Updated                    |
| U1080-00 | M-Series Loader       | Drive Controller In Calibration Mode                |
| U1084-00 | M-Series Loader       | Workgroup In Calibration Mode                       |
| U1090-51 | Toolcat               | Hub Controller - Not Programmed                     |
| U1090-51 | Compact Wheel Loader  | Hub Controller Not Programmed                       |

| Code     | Product                  | Description                                                 |
|----------|--------------------------|-------------------------------------------------------------|
| U1090-57 | Compact Wheel Loader     | Hub Controller Software Version Error                       |
| U1090-57 | Toolcat                  | Hub Controller - Invalid / Incompatible Software Component  |
| U1091-08 | Toolcat                  | Display - Bus Signal / Message Failure                      |
| U1091-08 | Compact Wheel Loader     | Display No Communication                                    |
| U1091-51 | Toolcat                  | Display - Not Programmed                                    |
| U1091-51 | Compact Wheel Loader     | Display Not Programmed                                      |
| U1091-FD | Compact Wheel Loader     | Display Shutdown                                            |
| U1091-FD | Toolcat                  | Display - In Shutdown                                       |
| U1092-08 | M-Series Loader          | Cab Controller No Communication                             |
| U1092-08 | Toolcat                  | Cab Controller - Bus Signal / Message Failure               |
| U1092-51 | M-Series Loader          | Cab Controller Not Programmed                               |
| U1092-51 | Toolcat                  | Cab Controller - Not Programmed                             |
| U1092-57 | M-Series Loader          | Cab Controller Software Version Error                       |
| U1092-57 | Toolcat                  | Cab Controller - Invalid / Incompatible Software Component  |
| U1092-A2 | M-Series Loader          | Cab Controller System Voltage Low                           |
| U1092-A2 | Toolcat                  | Cab Controller - System Voltage Low                         |
| U1092-A3 | M-Series Loader          | Cab Controller System Voltage High                          |
| U1092-A3 | Toolcat                  | Cab Controller - System Voltage High                        |
| U1093-08 | M-Series Loader          | Mid Controller No Communication                             |
| U1093-51 | M-Series Loader          | Mid Controller Not Calibrated                               |
| U1093-57 | M-Series Loader          | Mid Controller Software Version Error                       |
| U1093-A2 | M-Series Loader          | Battery Voltage Low                                         |
| U1093-A3 | M-Series Loader          | Battery Voltage High                                        |
| U1094-08 | Compact Wheel Loader     | Drive Controller No Communication                           |
| U1094-51 | Compact Wheel Loader     | Drive Controller Not Programmed                             |
| U1094-57 | Compact Wheel Loader     | Drive Controller Software Update Required                   |
| U1094-A2 | Compact Wheel Loader     | Drive Controller Voltage Out of Range Low                   |
| U1094-A3 | Compact Wheel Loader     | Drive Controller Voltage Out of Range High                  |
| U1095-08 | Compact Wheel Loader     | Workgroup Controller No Communication                       |
| U1095-51 | Compact Wheel Loader     | Workgroup Controller Not Programmed                         |
| U1095-57 | Compact Wheel Loader     | Workgroup Controller Software Version Error                 |
| U1095-A2 | Compact Wheel Loader     | Workgroup Controller System Voltage Low                     |
| U1095-A3 | Compact Wheel Loader     | Workgroup Controller System Voltage High                    |
| U1096-08 | Toolcat                  | ECU - Bus Signal / Message Failure                          |
| U1096-08 | Compact Wheel Loader     | ECU No Communication                                        |
| U1096-56 | Toolcat                  | ECU - Invalid / Incompatible Configuration                  |
| U1096-56 | Compact Wheel Loader     | ECU Failure                                                 |
| U1097-08 | M-Series Loader          | Aux Controller Bus Signal / Message Failure                 |
| U1097-51 | M-Series Loader          | Aux Controller Not Programmed                               |
| U1097-A2 | M-Series Loader          | Aux Controller System Voltage Low                           |
| U1097-A3 | M-Series Loader          | Aux Controller System Voltage High                          |
| U1098-08 | M-Series Loader          | Rear Auxiliary Controller Communication Error               |
| U1098-51 | M-Series Loader          | Rear Auxiliary Controller Not Programmed                    |
| U1098-57 | M-Series Loader          | Rear Auxiliary Controller Software Version Error            |
| U1098-A2 | M-Series Loader          | Rear Auxiliary Controller System Voltage Low                |
| U1098-A3 | M-Series Loader          | Rear Auxiliary Controller System Voltage High               |
| U1099-51 | Small Articulated Loader | Main Controller Not Programmed                              |
| U109A-08 | Toolcat                  | Pump Controller - Bus Signal / Message Failure              |
| U109A-51 | Toolcat                  | Pump Controller - Not Programmed                            |
| U109A-57 | Toolcat                  | Pump Controller - Invalid / Incompatible Software Component |
| U109A-A2 | Toolcat                  | Pump Controller - System Voltage Low                        |
| U109A-A3 | Toolcat                  | Pump Controller - System Voltage High                       |

| Code     | Product                  | Description                                                              |
|----------|--------------------------|--------------------------------------------------------------------------|
| U109B-08 | Toolcat                  | Rear Controller - Bus Signal / Message Failure                           |
| U109B-51 | Toolcat                  | Rear Controller - Not Programmed                                         |
| U109B-57 | Toolcat                  | Rear Controller - Invalid / Incompatible Software Component              |
| U109B-A2 | Toolcat                  | Rear Controller - System Voltage Low                                     |
| U109B-A3 | Toolcat                  | Rear Controller - System Voltage High                                    |
| U109C-08 | M-Series Loader          | Lights Controller Communication Error                                    |
| U109C-51 | M-Series Loader          | Lights Controller Not Programmed                                         |
| U109C-57 | M-Series Loader          | Lights Controller Software Incompatible                                  |
| U109C-A2 | M-Series Loader          | Lights Controller Voltage Low                                            |
| U109C-A3 | M-Series Loader          | Lights Controller Voltage High                                           |
| U10A0-08 | M-Series Loader          | Drive Motor Case Drain Hydraulic Oil Temperature Sensor No Communication |
| U10A5-08 | M-Series Loader          | Pump Case Drain Hydraulic Oil Temperature Sensor No Communication        |
| U10B0-08 | M-Series Loader          | Left Joystick Base Message Failure                                       |
| U10B0-49 | M-Series Loader          | Left Joystick Base Failure                                               |
| U10B1-08 | M-Series Loader          | Left Joystick Grip Message Failure                                       |
| U10B1-49 | M-Series Loader          | Left Joystick Grip Failure                                               |
| U10B2-49 | M-Series Loader          | Left Joystick Failure                                                    |
| U10B3-00 | M-Series Loader          | Left Joystick Multiple                                                   |
| U10C0-08 | Compact Wheel Loader     | Right Joystick Base Message Failure                                      |
| U10C0-49 | M-Series Loader          | Right Joystick Base Failure                                              |
| U10C1-08 | M-Series Loader          | Right Joystick Grip Message Failure                                      |
| U10C1-49 | M-Series Loader          | Right Joystick Grip Failure                                              |
| U10C2-49 | M-Series Loader          | Right Joystick Failure                                                   |
| U10C3-00 | M-Series Loader          | Right Joystick Multiple                                                  |
| U10D0-08 | M-Series Loader          | Remote Control No Communication                                          |
| U10D0-08 | Toolcat                  | Remote Control - No Operation                                            |
| U10D0-57 | Toolcat                  | Remote Control - Invalid / Incompatible Software Component               |
| U10D0-93 | M-Series Loader          | Remote Control Loss Communication                                        |
| U10D0-93 | Toolcat                  | Remote Control - No Operation                                            |
| U10D0-95 | Small Articulated Loader | Remote Control Fault                                                     |
| U1110-08 | M-Series Loader          | Bob-Tach Angle Sensor No Communication                                   |
| U1111-08 | M-Series Loader          | Bucket Angle Sensor No Communication                                     |
| U1112-08 | M-Series Loader          | Lift Arm Angle No Communication                                          |
| U1113-08 | M-Series Loader          | Frame Angle Sensor No Communication                                      |
| U111A    | ECU Bobcat Engine D34    | CAN Communications Fault                                                 |
| U1164    | ECU Bobcat Engine D34    | CAN Communications Fault                                                 |
| U116D    | ECU Bobcat Engine D34    | CAN Communications Fault                                                 |
| U1180-00 | Toolcat                  | Display Controller not receiving CAN from CAN Bus                        |
| U1180-00 | Compact Wheel Loader     | Display Controller Communication Error                                   |
| U1181-00 | Toolcat                  | Display Controller cannot transmit CAN to CAN Bus                        |
| U1181-00 | Compact Wheel Loader     | Display Controller Communication Error                                   |
| U1182-00 | Compact Wheel Loader     | Display Controller Communication Error                                   |
| U1182-00 | Toolcat                  | Display CAN Error                                                        |
| U1183-00 | Compact Wheel Loader     | Main Controller No Communication                                         |
| U1183-00 | Toolcat                  | Display Controller no communication to Main Controller                   |
| U1184-00 | Compact Wheel Loader     | Jog Shuttle No Communication                                             |
| U1184-00 | Toolcat                  | Display Controller no communication to Jog Shuttle                       |
| U1185-00 | M-Series Loader          | Radio No Communication                                                   |
| U1216    | ECU Bobcat Engine D34    | NOx Pre-treatment Sensor Fault                                           |
| U1219    | ECU Bobcat Engine D34    | NOx Pre-treatment Sensor Fault                                           |
| U121A    | ECU Bobcat Engine D34    | CAN Communications Fault                                                 |

| Code      | Product               | Description                                               |
|-----------|-----------------------|-----------------------------------------------------------|
| U1223     | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                            |
| U1224     | ECU Bobcat Engine D34 | NOx Pre-treatment Sensor Fault                            |
| U1225     | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                           |
| U1226     | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                           |
| U1227     | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                           |
| U1229     | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                           |
| U1233     | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                           |
| U1235     | ECU Bobcat Engine D34 | NOx Post-treatment Sensor Fault                           |
| U1444     | ECU Bobcat Engine D34 | CAN Communications Fault                                  |
| U1661     | ECU Bobcat Engine D34 | CAN Communications Fault                                  |
| U1923     | ECU Bobcat Engine D34 | CAN Communications Fault                                  |
| VAL001-03 | E145 & E165 Excavator | ALTERNATOR POTENTIAL, Voltage above normal                |
| VAL001-04 | E145 & E165 Excavator | ALTERNATOR POTENTIAL, Voltage below normal                |
| VAL002-05 | E145 & E165 Excavator | ACCEL. PEDAL SWITCH, Current below normal                 |
| VAL002-06 | E145 & E165 Excavator | ACCEL. PEDAL SWITCH, Current above normal                 |
| VCO001-11 | E145 & E165 Excavator | GAUGE PANEL ERROR                                         |
| VCO002-11 | E145 & E165 Excavator | E-ECU ERROR                                               |
| VPV001-05 | E145 & E165 Excavator | PUMP P/V (A), Current below normal                        |
| VPV001-06 | E145 & E165 Excavator | PUMP P/V (A), Current above normal                        |
| VPV002-05 | E145 & E165 Excavator | PUMP P/V (B), Current below normal                        |
| VPV002-06 | E145 & E165 Excavator | PUMP P/V (B), Current above normal                        |
| VPV003-05 | E145 & E165 Excavator | FLOW CONTROL P/V (G), Current below normal                |
| VPV003-06 | E145 & E165 Excavator | FLOW CONTROL P/V (G), Current above normal                |
| VPV004-05 | E145 & E165 Excavator | FAN CONTROL P/V (J), Current below normal                 |
| VPV004-06 | E145 & E165 Excavator | FAN CONTROL P/V (J), Current above normal                 |
| VPV005-05 | E145 & E165 Excavator | PRESS. CONTROL 1 P/V (H), Current below normal            |
| VPV005-06 | E145 & E165 Excavator | PRESS. CONTROL 1 P/V (H), Current above normal            |
| VPV006-05 | E145 & E165 Excavator | PRESS. CONTROL 2 P/V (I), Current below normal            |
| VPV006-06 | E145 & E165 Excavator | PRESS. CONTROL 2 P/V (I), Current above normal            |
| VPV007-05 | E145 & E165 Excavator | FLOW CONTROL P/V (C) 2-WAY RH-OPEN, Current below normal  |
| VPV007-06 | E145 & E165 Excavator | FLOW CONTROL P/V (C) 2-WAY RH-OPEN, Current above normal  |
| VPV008-05 | E145 & E165 Excavator | FLOW CONTROL P/V (D) 2-WAY RH-CLOSE, Current below normal |
| VPV008-06 | E145 & E165 Excavator | FLOW CONTROL P/V (D) 2-WAY RH-CLOSE, Current above normal |
| VPV009-05 | E145 & E165 Excavator | FLOW CONTROL P/V (E) ROTATING CW, Current below normal    |
| VPV009-06 | E145 & E165 Excavator | FLOW CONTROL P/V (E) ROTATING CW, Current above normal    |
| VPV010-05 | E145 & E165 Excavator | FLOW CONTROL P/V (F) ROTATING CCW, Current below normal   |
| VPV010-06 | E145 & E165 Excavator | FLOW CONTROL P/V (F) ROTATING CCW, Current above normal   |
| VPV011-05 | E145 & E165 Excavator | TRAVEL, Current below normal                              |
| VPV011-06 | E145 & E165 Excavator | TRAVEL, Current above normal                              |
| VPV012-05 | E145 & E165 Excavator | TRAVEL STRAIGHT P/V (L), Current below normal             |
| VPV012-06 | E145 & E165 Excavator | TRAVEL STRAIGHT P/V (L), Current above normal             |
| VRLOWVLTG | M-Series Loader       | Very Low Battery Voltage                                  |
| VRY001-05 | E145 & E165 Excavator | GLOW PLUG RELAY, Current below normal                     |
| VRY001-06 | E145 & E165 Excavator | GLOW PLUG RELAY, Current above normal                     |
| VRY002-05 | E145 & E165 Excavator | BACK BUZZER RELAY, Current below normal                   |
| VRY002-06 | E145 & E165 Excavator | BACK BUZZER RELAY, Current above normal                   |
| VRY003-05 | E145 & E165 Excavator | BACKUP LAMP RELAY, Current below normal                   |
| VRY003-06 | E145 & E165 Excavator | BACKUP LAMP RELAY, Current above normal                   |
| VRY004-05 | E145 & E165 Excavator | INCHING RELAY, Current below normal                       |
| VRY004-06 | E145 & E165 Excavator | INCHING RELAY, Current above normal                       |
| VRY005-05 | E145 & E165 Excavator | LOW SPEED RELAY, Current below normal                     |
| VRY005-06 | E145 & E165 Excavator | LOW SPEED RELAY, Current above normal                     |

| Code      | Product               | Description                                       |
|-----------|-----------------------|---------------------------------------------------|
| VRY006-05 | E145 & E165 Excavator | HIGH SPEED RELAY, Current below normal            |
| VRY006-06 | E145 & E165 Excavator | HIGH SPEED RELAY, Current above normal            |
| VRY007-05 | E145 & E165 Excavator | STARTER RELAY, Current below normal               |
| VRY007-06 | E145 & E165 Excavator | STARTER RELAY, Current above normal               |
| VRY008-05 | E145 & E165 Excavator | GLOW PLUG II RELAY, Current below normal          |
| VRY008-06 | E145 & E165 Excavator | GLOW PLUG II RELAY, Current above normal          |
| VS5001-03 | E145 & E165 Excavator | THUMB WHEEL (RH), Voltage above normal            |
| VS5001-04 | E145 & E165 Excavator | THUMB WHEEL (RH), Voltage below normal            |
| VS5002-03 | E145 & E165 Excavator | THUMB WHEEL (LH), Voltage above normal            |
| VS5002-04 | E145 & E165 Excavator | THUMB WHEEL (LH), Voltage below normal            |
| VS5003-03 | E145 & E165 Excavator | ACCEL PEDAL SENSOR, Voltage above normal          |
| VS5003-04 | E145 & E165 Excavator | ACCEL PEDAL SENSOR, Voltage below normal          |
| VS5004-03 | E145 & E165 Excavator | PARKING BRAKE PRESS. SENSOR, Voltage above normal |
| VS5004-04 | E145 & E165 Excavator | PARKING BRAKE PRESS. SENSOR, Voltage below normal |
| VS5005-03 | E145 & E165 Excavator | DIAL, Voltage above normal                        |
| VS5005-04 | E145 & E165 Excavator | DIAL, Voltage below normal                        |
| VSE001-00 | E145 & E165 Excavator | OIL TEMP. SENSOR, Signal above normal range       |
| VSE001-03 | E145 & E165 Excavator | OIL TEMP. SENSOR, Voltage above normal            |
| VSE001-04 | E145 & E165 Excavator | OIL TEMP. SENSOR, Voltage below normal            |
| VSE002-03 | E145 & E165 Excavator | FUEL SENSOR, Voltage above normal                 |
| VSE002-04 | E145 & E165 Excavator | FUEL SENSOR, Voltage below normal                 |
| VSE003-03 | E145 & E165 Excavator | VEHICLE SPEED SENSOR, Voltage above normal        |
| VSE003-04 | E145 & E165 Excavator | VEHICLE SPEED SENSOR, Voltage below normal        |
| VSE004-01 | E145 & E165 Excavator | WIF SENSOR, Signal below normal range             |
| VSE004-03 | E145 & E165 Excavator | WIF SENSOR, Voltage above normal                  |
| VSE004-04 | E145 & E165 Excavator | WIF SENSOR, Voltage below normal                  |
| VSE005-03 | E145 & E165 Excavator | SPARE SPEED, Voltage above normal                 |
| VSE005-04 | E145 & E165 Excavator | SPARE SPEED, Voltage below normal                 |
| VSE006-03 | E145 & E165 Excavator | SPARE, Voltage above normal                       |
| VSE006-04 | E145 & E165 Excavator | SPARE, Voltage below normal                       |
| VSE007-03 | E145 & E165 Excavator | ANGLE SENSOR (A), Voltage above normal            |
| VSE007-04 | E145 & E165 Excavator | ANGLE SENSOR (A), Voltage below normal            |
| VSE008-03 | E145 & E165 Excavator | ANGLE SENSOR (B), Voltage above normal            |
| VSE008-04 | E145 & E165 Excavator | ANGLE SENSOR (B), Voltage below normal            |
| VSP001-02 | E145 & E165 Excavator | FRONT PUMP PRESS. SENSOR, Incorrect signal        |
| VSP001-03 | E145 & E165 Excavator | FRONT PUMP PRESS. SENSOR, Voltage above normal    |
| VSP001-04 | E145 & E165 Excavator | FRONT PUMP PRESS. SENSOR, Voltage below normal    |
| VSP002-02 | E145 & E165 Excavator | REAR PUMP PRESS. SENSOR, Incorrect signal         |
| VSP002-03 | E145 & E165 Excavator | REAR PUMP PRESS. SENSOR, Voltage above normal     |
| VSP002-04 | E145 & E165 Excavator | REAR PUMP PRESS. SENSOR, Voltage below normal     |
| VSP003-02 | E145 & E165 Excavator | OWD PRESS. SENSOR, Incorrect signal               |
| VSP003-03 | E145 & E165 Excavator | OWD PRESS. SENSOR, Voltage above normal           |
| VSP003-04 | E145 & E165 Excavator | OWD PRESS. SENSOR, Voltage below normal           |
| VSP004-03 | E145 & E165 Excavator | Px(FRONT) PRESS. SENSOR, Voltage above normal     |
| VSP004-04 | E145 & E165 Excavator | Px(FRONT) PRESS. SENSOR, Voltage below normal     |
| VSP005-03 | E145 & E165 Excavator | Pressure Sensor Issue                             |
| VSP005-04 | E145 & E165 Excavator | Py(TRAVEL) PRESS. SENSOR, Voltage below normal    |
| VSP006-03 | E145 & E165 Excavator | BOOM UP PRESS. SENSOR, Voltage above normal       |
| VSP006-04 | E145 & E165 Excavator | BOOM UP PRESS. SENSOR, Voltage below normal       |
| VSP007-03 | E145 & E165 Excavator | BUCKET CROWD PRESS. SENSOR, Voltage above normal  |
| VSP007-04 | E145 & E165 Excavator | BUCKET CROWD PRESS. SENSOR, Voltage below normal  |
| VSP008-03 | E145 & E165 Excavator | BOOM DOWN PRESS. SENSOR, Voltage above normal     |

| Code      | Product               | Description                                         |
|-----------|-----------------------|-----------------------------------------------------|
| VSP008-04 | E145 & E165 Excavator | BOOM DOWN PRESS. SENSOR, Voltage below normal       |
| VSP009-03 | E145 & E165 Excavator | BUCKET DUMP PRESS. SENSOR, Voltage above normal     |
| VSP009-04 | E145 & E165 Excavator | BUCKET DUMP PRESS. SENSOR, Voltage below normal     |
| VSP010-03 | E145 & E165 Excavator | ARM IN PRESS. SENSOR, Voltage above normal          |
| VSP010-04 | E145 & E165 Excavator | ARM IN PRESS. SENSOR, Voltage below normal          |
| VSP011-03 | E145 & E165 Excavator | ARM OUT PRESS. SENSOR, Voltage above normal         |
| VSP011-04 | E145 & E165 Excavator | ARM OUT PRESS. SENSOR, Voltage below normal         |
| VSP012-03 | E145 & E165 Excavator | TRAVEL PRESS. SENSOR(LH), Voltage above normal      |
| VSP012-04 | E145 & E165 Excavator | TRAVEL PRESS. SENSOR(LH), Voltage below normal      |
| VSP013-03 | E145 & E165 Excavator | TRAVEL PRESS. SENSOR(RH), Voltage above normal      |
| VSP013-04 | E145 & E165 Excavator | TRAVEL PRESS. SENSOR(RH), Voltage below normal      |
| VSP014-03 | E145 & E165 Excavator | SWING PRESS. SENSOR, Voltage above normal           |
| VSP014-04 | E145 & E165 Excavator | SWING PRESS. SENSOR, Voltage below normal           |
| VSP015-03 | E145 & E165 Excavator | ATT(OPTION) PRESS. SENSOR, Voltage above normal     |
| VSP015-04 | E145 & E165 Excavator | ATT(OPTION) PRESS. SENSOR, Voltage below normal     |
| VSP016-03 | E145 & E165 Excavator | ATTACHMENT 2 PRESS. SENSOR, Voltage above normal    |
| VSP016-04 | E145 & E165 Excavator | ATTACHMENT 2 PRESS. SENSOR, Voltage below normal    |
| VSP017-03 | E145 & E165 Excavator | OPTION PEDAL 1 PRESS. SENSOR, Voltage above normal  |
| VSP017-04 | E145 & E165 Excavator | OPTION PEDAL 1 PRESS. SENSOR, Voltage below normal  |
| VSP018-03 | E145 & E165 Excavator | OPTION PEDAL 2 PRESS. SENSOR, Voltage above normal  |
| VSP018-04 | E145 & E165 Excavator | OPTION PEDAL 2 PRESS. SENSOR, Voltage below normal  |
| VSV001-05 | E145 & E165 Excavator | BREAKER OPERATING S/V, Current below normal         |
| VSV001-06 | E145 & E165 Excavator | BREAKER OPERATING S/V, Current above normal         |
| VSV002-05 | E145 & E165 Excavator | RELIEF PRESS. UP S/V (B), Current below normal      |
| VSV002-06 | E145 & E165 Excavator | RELIEF PRESS. UP S/V (B), Current above normal      |
| VSV003-05 | E145 & E165 Excavator | HIGH SPEED S/V (C), Current below normal            |
| VSV003-06 | E145 & E165 Excavator | HIGH SPEED S/V (C), Current above normal            |
| VSV004-05 | E145 & E165 Excavator | REVERSE FAN S/V (D), Current below normal           |
| VSV004-06 | E145 & E165 Excavator | REVERSE FAN S/V (D), Current above normal           |
| VSV005-05 | E145 & E165 Excavator | TRAVEL II PUMP CONFLUENCE S/V, Current below normal |
| VSV005-06 | E145 & E165 Excavator | TRAVEL II PUMP CONFLUENCE S/V, Current above normal |
| VSV006-05 | E145 & E165 Excavator | SWING BRAKE RELEASE S/V (K), Current below normal   |
| VSV006-06 | E145 & E165 Excavator | SWING BRAKE RELEASE S/V (K), Current above normal   |
| VSV007-05 | E145 & E165 Excavator | OPTION SAFETY S/V, Current below normal             |
| VSV007-06 | E145 & E165 Excavator | OPTION SAFETY S/V, Current above normal             |
| VSV008-05 | E145 & E165 Excavator | CRUISE S/V (F), Current below normal                |
| VSV008-06 | E145 & E165 Excavator | CRUISE S/V (F), Current above normal                |
| VSV009-05 | E145 & E165 Excavator | FORWARD S/V (G), Current below normal               |
| VSV009-06 | E145 & E165 Excavator | FORWARD S/V (G), Current above normal               |
| VSV010-05 | E145 & E165 Excavator | REVERSE S/V (H), Current below normal               |
| VSV010-06 | E145 & E165 Excavator | REVERSE S/V (H), Current above normal               |
| VSV011-05 | E145 & E165 Excavator | 2 Pump SELECT S/V (I), Current below normal         |
| VSV011-06 | E145 & E165 Excavator | 2 Pump SELECT S/V (I), Current above normal         |
| VSV012-05 | E145 & E165 Excavator | BYPASS CUT OFF S/V (J), Current below normal        |
| VSV012-06 | E145 & E165 Excavator | BYPASS CUT OFF S/V (J), Current above normal        |
| W0176     | M-Series Loader       | Input Selection Flipped While Operating             |
| W0321     | M-Series Loader       | Battery Voltage Out of Range High                   |
| W0321     | Telehandler           | Battery Voltage OOR High                            |
| W0322     | Telehandler           | Battery Voltage OOR Low                             |
| W0322     | M-Series Loader       | Battery Voltage Out of Range Low                    |
| W0521     | M-Series Loader       | Lift Spool Position Sensor Out of Range High        |
| W0522     | M-Series Loader       | Lift Spool Position Sensor Out of Range Low         |

| Code  | Product         | Description                                                   |
|-------|-----------------|---------------------------------------------------------------|
| W0524 | M-Series Loader | Lift Spool Position Sensor Not in Neutral                     |
| W0525 | M-Series Loader | Lift Spool Position Sensor Unresponsive                       |
| W0595 | M-Series Loader | Lift Spool Position Sensor Inverted Movement                  |
| W0621 | M-Series Loader | Tilt Spool Position Sensor Out of Range High                  |
| W0622 | M-Series Loader | Tilt Spool Position Sensor Out of Range Low                   |
| W0624 | M-Series Loader | Tilt Spool Position Sensor Not in Neutral                     |
| W0625 | M-Series Loader | Tilt Spool Position Sensor Unresponsive                       |
| W0695 | M-Series Loader | Tilt Spool Position Sensor Inverted Movement                  |
| W0721 | Telehandler     | Hydraulic Oil Temperature OOR High                            |
| W0722 | Telehandler     | Hydraulic Oil Temperature OOR Low                             |
| W1005 | M-Series Loader | Lift Base Solenoid Short to Battery                           |
| W1005 | Telehandler     | PVG32 Lift Up/Down valve Short to Battery                     |
| W1006 | Telehandler     | PVG32 Lift Up/Down Valve Short to Ground                      |
| W1006 | M-Series Loader | Lift Base Solenoid Short to Ground                            |
| W1007 | Telehandler     | PVG32 Lift Up/Down Valve Open circuit                         |
| W1007 | M-Series Loader | Lift Base Solenoid Open Circuit                               |
| W1028 | Telehandler     | PVG32 Lift Up/Down Valve in error. From mainvalve diagnostic  |
| W1032 | M-Series Loader | Lift Base Solenoid Overcurrent                                |
| W1105 | Telehandler     | PVG32 Tilt Valve Short to Battery                             |
| W1105 | M-Series Loader | Lift Rod Solenoid Short to Battery                            |
| W1106 | M-Series Loader | Lift Rod Solenoid Short to Ground                             |
| W1106 | Telehandler     | PVG32 Tilt Valve Short to Ground                              |
| W1107 | M-Series Loader | Lift Rod Solenoid Open Circuit                                |
| W1107 | Telehandler     | PVG32 Tilt Valve Open circuit                                 |
| W1128 | Telehandler     | PVG32 Tilt Valve in error, From mainvalve diagnostic          |
| W1132 | M-Series Loader | Lift Rod Solenoid Overcurrent                                 |
| W1205 | M-Series Loader | Tilt Base Solenoid Short to Battery                           |
| W1205 | Telehandler     | PVG32 Extend/Retract Valve Short to Battery                   |
| W1206 | M-Series Loader | Tilt Base Solenoid Short to Ground                            |
| W1206 | Telehandler     | PVG32 Extend/Retract Valve Short to Ground                    |
| W1207 | M-Series Loader | Tilt Base Solenoid Open Circuit                               |
| W1207 | Telehandler     | PVG32 Extend/Retract Valve Open circuit                       |
| W1228 | Telehandler     | PVG32 Extend/Retract Valve in error From mainvalve diagnostic |
| W1232 | M-Series Loader | Tilt Base Solenoid Overcurrent                                |
| W1305 | M-Series Loader | Tilt Rod Solenoid Short to Battery                            |
| W1305 | Telehandler     | PVG32 Auxiliary Valve Short to Battery                        |
| W1306 | Telehandler     | PVG32 Auxiliary valve Short to Ground                         |
| W1306 | M-Series Loader | Tilt Rod Solenoid Short to Ground                             |
| W1307 | M-Series Loader | Tilt Rod Solenoid Open Circuit                                |
| W1307 | Telehandler     | PVG32 Auxiliary valve Open circuit                            |
| W1328 | Telehandler     | PVG32 Auxiliary Valve in error, From mainvalve diagnostic     |
| W1332 | M-Series Loader | Tilt Rod Solenoid Overcurrent                                 |
| W1405 | Telehandler     | PVG32 Frame Leveling Valve Short to Battery                   |
| W1406 | Telehandler     | PVG32 Frame Leveling Valve Short to Ground                    |
| W1407 | Telehandler     | PVG32 Frame Leveling Valve Open circuit                       |
| W1428 | Telehandler     | PVG32 Frame Leveling Valve in error From mainvalve diagnostic |
| W1505 | M-Series Loader | Pedal Lock Short to Battery                                   |
| W1506 | M-Series Loader | Pedal Lock Short to Ground                                    |
| W1507 | M-Series Loader | Pedal Lock Open Circuit                                       |
| W1605 | M-Series Loader | Handle Lock Short to Battery                                  |
| W1606 | M-Series Loader | Handle Lock Short to Ground                                   |
| W1607 | M-Series Loader | Handle Lock Open Circuit                                      |

| Code  | Product         | Description                                 |
|-------|-----------------|---------------------------------------------|
| W1824 | Telehandler     | Frame Leveling potentiometer Out of neutral |
| W2021 | M-Series Loader | Lift Handle Sensor Out of Range High        |
| W2022 | M-Series Loader | Lift Handle Sensor Out of Range Low         |
| W2121 | M-Series Loader | Lift Pedal Sensor Out of Range High         |
| W2122 | M-Series Loader | Lift Pedal Sensor Out of Range Low          |
| W2205 | Telehandler     | Lift Up Output Short To Battery             |
| W2206 | Telehandler     | Lift Up Output Short To Ground              |
| W2207 | Telehandler     | Lift Up Output Open Circuit                 |
| W2221 | M-Series Loader | Tilt Handle Sensor Out of Range High        |
| W2222 | M-Series Loader | Tilt Handle Sensor Out of Range Low         |
| W2232 | Telehandler     | Lift Up Output Overcurrent                  |
| W2299 | Telehandler     | Lift Up Solenoid Calibration Required       |
| W2299 | Telehandler     | Lift Up Coil Calibration required           |
| W2305 | Telehandler     | Lift Down Output Short To Battery           |
| W2306 | Telehandler     | Lift Down Output Short To Ground            |
| W2307 | Telehandler     | Lift Down Output Open Circuit               |
| W2321 | M-Series Loader | Tilt Pedal Sensor Out of Range High         |
| W2322 | M-Series Loader | Tilt Pedal Sensor Out of Range Low          |
| W2332 | Telehandler     | Lift Down Output Overcurrent                |
| W2399 | Telehandler     | Lift Down Coil Calibration required         |
| W2399 | Telehandler     | Lift Down Solenoid Calibration Required     |
| W2405 | Telehandler     | Tilt Out Output Short To Battery            |
| W2406 | Telehandler     | Tilt Out Output Short To Ground             |
| W2407 | Telehandler     | Tilt Out Output Open Circuit                |
| W2432 | Telehandler     | Tilt Out Output Overcurrent                 |
| W2505 | Telehandler     | Tilt Back Output Short To Battery           |
| W2506 | Telehandler     | Tilt Back Output Short To Ground            |
| W2507 | Telehandler     | Tilt Back Output Open Circuit               |
| W2532 | Telehandler     | Tilt Back Output Overcurrent                |
| W2605 | Telehandler     | Extend Output Short To Battery              |
| W2606 | Telehandler     | Extend Output Short To Ground               |
| W2607 | Telehandler     | Extend Output Open Circuit                  |
| W2632 | Telehandler     | Extend Output Overcurrent                   |
| W2705 | Telehandler     | Retract Output Short To Battery             |
| W2706 | Telehandler     | Retract Output Short To Ground              |
| W2707 | Telehandler     | Retract Output Open Circuit                 |
| W2732 | Telehandler     | Retract Output Overcurrent                  |
| W2824 | M-Series Loader | Lift Input Not in Neutral                   |
| W2924 | M-Series Loader | Tilt Input Not in Neutral                   |
| W3128 | M-Series Loader | Interrupted Power Failure                   |
| W3223 | M-Series Loader | ACS Calibration required                    |
| W3223 | Telehandler     | Programming or constant data invalid        |
| W3224 | M-Series Loader | ACS Calibration Performed                   |
| W3225 | M-Series Loader | ACS (AHC) Calibration Failed                |
| W3228 | Telehandler     | Controller failure                          |
| W3231 | M-Series Loader | ACS/AHC Tilt actuator fault                 |
| W3232 | M-Series Loader | AHC Tilt actuator wiring fault              |
| W3233 | M-Series Loader | AHC Tilt handle wiring fault                |
| W3234 | M-Series Loader | ACS/AHC Tilt actuator not in neutral        |
| W3235 | M-Series Loader | ACS/AHC Tilt handle not in neutral          |
| W3236 | M-Series Loader | ACS/AHC Lift actuator fault                 |
| W3237 | M-Series Loader | AHC Lift actuator wiring fault              |

| Code  | Product         | Description                            |
|-------|-----------------|----------------------------------------|
| W3238 | M-Series Loader | AHC Lift handle wiring fault           |
| W3239 | M-Series Loader | ACS/AHC Lift actuator not in neutral   |
| W3240 | M-Series Loader | ACS/AHC Lift handle not in neutral     |
| W3241 | M-Series Loader | AHC No communication                   |
| W3249 | M-Series Loader | ACS Lift actuator short to ground      |
| W3250 | M-Series Loader | ACS Tilt actuator short to ground      |
| W3251 | M-Series Loader | ACS Lift actuator short to battery     |
| W3252 | M-Series Loader | ACS Tilt actuator short to battery     |
| W3253 | M-Series Loader | ACS Lift handle/pedal short to ground  |
| W3254 | M-Series Loader | ACS Tilt handle/pedal short to ground  |
| W3255 | M-Series Loader | ACS Lift handle/pedal short to battery |
| W3256 | M-Series Loader | ACS Tilt handle/pedal short to battery |
| W3257 | M-Series Loader | ACS Lift actuator reduced performance  |
| W3258 | M-Series Loader | ACS Tilt actuator reduced performance  |
| W3259 | M-Series Loader | ACS Lift actuator wrong direction      |
| W3260 | M-Series Loader | ACS Tilt actuator wrong direction      |
| W3261 | M-Series Loader | ACS Handle lock short to ground        |
| W3262 | M-Series Loader | ACS Handle lock short to battery       |
| W3263 | M-Series Loader | ACS Pedal lock short to ground         |
| W3264 | M-Series Loader | ACS Pedal lock short to battery        |
| W3265 | M-Series Loader | ACS Sensor supply voltage out of range |
| W3266 | M-Series Loader | ACS Battery voltage out of range       |
| W3267 | M-Series Loader | ACS Switch flipped while operating     |
| W3268 | M-Series Loader | ACS Lift handle information error      |
| W3270 | M-Series Loader | ACS Right hand drive short to ground   |
| W3271 | M-Series Loader | ACS Right hand drive short to battery  |
| W3274 | M-Series Loader | ACS Left Joystick X-Axis Out of Range  |
| W3275 | M-Series Loader | ACS Interrupted unswitched power       |
| W3276 | M-Series Loader | ACS CAN Joystick Information Error     |
| W3277 | M-Series Loader | ACS Remote Control Information Error   |
| W3295 | M-Series Loader | Workgroup Calibration Passed           |
| W3296 | Telehandler     | Interrupted power                      |
| W3296 | M-Series Loader | Workgroup Calibration Failed           |
| W3297 | M-Series Loader | ACS (AHC) Controller Programmed        |
| W3297 | Telehandler     | Controller programmed                  |
| W3298 | M-Series Loader | Workgroup In Calibration Mode          |
| W3299 | M-Series Loader | Workgroup Calibration Required         |
| W3304 | M-Series Loader | Main Controller No Communication       |
| W3304 | Telehandler     | Gateway controller No communication    |
| W3404 | Telehandler     | Display controller No communication    |
| W3604 | Telehandler     | Engine controller No communication     |
| W3704 | Telehandler     | Drive controller No communication      |
| W3804 | Telehandler     | LLMC No communication                  |
| W3818 | Telehandler     | LLMC Out of Range                      |
| W3844 | Telehandler     | LLMC Not matching                      |
| W3845 | Telehandler     | LLMC Not matching level 2              |
| W3904 | Telehandler     | LLMI No communication                  |
| W3904 | M-Series Loader | Left Joystick No Communication         |
| W3905 | M-Series Loader | Left Joystick X-Axis Not in Neutral    |
| W3918 | Telehandler     | LLMI Out of Range                      |
| W4004 | Telehandler     | Joystick No communication              |
| W4004 | M-Series Loader | Right Joystick No Communication        |

| Code  | Product         | Description                                                                                       |
|-------|-----------------|---------------------------------------------------------------------------------------------------|
| W4005 | M-Series Loader | Right Joystick X-Axis Not in Neutral                                                              |
| W4005 | Telehandler     | Joystick X Axis Out Of Neutral (Tilt)                                                             |
| W4007 | Telehandler     | Joystick Y Axis Out Of Neutral (Lift)                                                             |
| W4007 | M-Series Loader | Right Joystick Y-Axis Not in Neutral                                                              |
| W4010 | Telehandler     | Joystick Left roller Out Of Neutral (Extend Retract)                                              |
| W4028 | Telehandler     | Joystick Grip Fault                                                                               |
| W4204 | Telehandler     | Receiver No Communication                                                                         |
| W4205 | Telehandler     | Remote Left Joystick X Axis OON                                                                   |
| W4206 | Telehandler     | Remote Right Joystick X Axis OON                                                                  |
| W4207 | Telehandler     | Remote Left Joystick Y Axis OON                                                                   |
| W4208 | Telehandler     | Remote Right Joystick Y Axis OON                                                                  |
| W4215 | Telehandler     | Remote Left Joystick X axis in error                                                              |
| W4216 | Telehandler     | Remote Right Joystick X axis in error                                                             |
| W4217 | Telehandler     | Remote Left Joystick Y axis in error                                                              |
| W4218 | Telehandler     | Remote Right Joystick Y axis in error                                                             |
| W4320 | Telehandler     | Manbasket mode : Remote control not connected to Manbasket harness (from Receiver CAN Bus signal) |
| W4321 | Telehandler     | Manbasket mode : Remote control not connected to Manbasket harness (from GACD controller status)  |
| W4325 | Telehandler     | Manbasket mode : Manbasket detection in error                                                     |
| W4326 | Telehandler     | Manbasket mode : Manbasket not detected on carriage                                               |
| W4327 | Telehandler     | Manbasket mode : Manbasket not detected on carriage with GACD on or Remote control active         |
| W4330 | Telehandler     | Manbasket mode : Manbasket Retract switch in error                                                |
| W4331 | Telehandler     | Manbasket mode : No boom extension when expected (boom retract switch ON)                         |
| W4335 | Telehandler     | Manbasket mode : Stabilizers in error                                                             |
| W4336 | Telehandler     | Manbasket mode : Stabilizers not on the ground                                                    |
| W4340 | Telehandler     | Manbasket mode : Boom angle in error                                                              |
| W4341 | Telehandler     | Manbasket mode : Boom lift movement when not expected                                             |
| W4342 | Telehandler     | Manbasket mode : No Boom lift movement when expected                                              |
| W4343 | Telehandler     | Manbasket mode : Boom angle limit exceeded                                                        |
| W4345 | Telehandler     | Manbasket mode : LLM in error                                                                     |
| W4346 | Telehandler     | Manbasket mode : LLM in reduced zone                                                              |
| W4347 | Telehandler     | Manbasket mode : Longitudinal stability : Max allowed value reached.                              |
| W4350 | Telehandler     | Manbasket mode : Frame Leveling in error                                                          |
| W4351 | Telehandler     | Manbasket mode : Frame Leveling angle exceeded (out of the range [-2°;+2°])                       |
| W4355 | Telehandler     | Manbasket mode : Interlocking pin in error                                                        |
| W4356 | Telehandler     | Manbasket mode : Interlocking pin unlocked                                                        |
| W4360 | Telehandler     | Manbasket mode : Manbasket Overload in error                                                      |
| W4361 | Telehandler     | Manbasket mode : Manbasket Overload                                                               |
| W4362 | Telehandler     | Manbasket mode : Manbasket Overload in error Level 2                                              |
| W4365 | Telehandler     | Manbasket mode : Tilt angle in error                                                              |
| W4366 | Telehandler     | Manbasket mode : Tilt angle limit exceeded (out of the range [-4° ; +4° ])                        |
| W4370 | Telehandler     | Manbasket mode : FNR in error                                                                     |
| W4371 | Telehandler     | Manbasket mode : Park brake in error                                                              |
| W4372 | Telehandler     | Manbasket mode : Swash plate position in error                                                    |
| W4404 | Telehandler     | Manbasket mode : GACD controller no communication on CAN Bus                                      |
| W4621 | Telehandler     | Vsensor 5V supply OOR High                                                                        |
| W4622 | Telehandler     | Vsensor 5V supply OOR Low                                                                         |
| W4721 | M-Series Loader | Sensor Supply Out of Range High                                                                   |
| W4722 | M-Series Loader | Sensor Supply Out of Range Low                                                                    |

| Code  | Product         | Description                                               |
|-------|-----------------|-----------------------------------------------------------|
| W4902 | Telehandler     | Blue lights Output Short To Battery or Open Circuit       |
| W4903 | Telehandler     | Blue lights Output Short To Ground                        |
| W5004 | M-Series Loader | Lift Float Failed to maintain float                       |
| W5005 | Telehandler     | Rear diverter 1 output Short To Battery                   |
| W5006 | Telehandler     | Rear diverter 1 output Short To Ground                    |
| W5007 | Telehandler     | Rear diverter 1 output Open Circuit                       |
| W5102 | Telehandler     | Rear diverter 2 output Error On                           |
| W5103 | Telehandler     | Rear diverter 2 output Error Off                          |
| W5107 | Telehandler     | Rear diverter 2 output Open Circuit                       |
| W5202 | Telehandler     | Rear diverter 2 output Relay Feedback Error On            |
| W5203 | Telehandler     | Rear diverter 2 output Relay Feedback Error Off           |
| W5302 | Telehandler     | Front / Rear diverter sensor Error On                     |
| W5303 | Telehandler     | Front / Rear diverter sensor Error Off                    |
| W5402 | Telehandler     | Boom Worklights Output Short To Battery or Open Circuit   |
| W5403 | Telehandler     | Boom Worklights Output Short To Ground                    |
| W5502 | Telehandler     | Mirror Worklights Output Short To Battery or Open Circuit |
| W5503 | Telehandler     | Mirror Worklights Output Short To Ground                  |
| W5602 | Telehandler     | Mirror Defrost Output Short To Battery or Open Circuit    |
| W5603 | Telehandler     | Mirror Defrost Output Short To Ground                     |
| W6021 | Telehandler     | Inclinometer sensor input Out of Range High               |
| W6022 | Telehandler     | Inclinometer sensor input Out of Range Low                |
| W6098 | Telehandler     | Calibration performed                                     |
| W6099 | Telehandler     | Inclinometer Calibration required                         |
| W6102 | Telehandler     | Inclinometer lamp error on                                |
| W6103 | Telehandler     | Inclinometer lamp error off                               |
| W6521 | Telehandler     | Boom Angle 1 OOR High                                     |
| W6522 | Telehandler     | Boom Angle 1 OOR Low                                      |
| W6621 | Telehandler     | Boom Angle 2 OOR High                                     |
| W6622 | Telehandler     | Boom Angle 2 OOR Low                                      |
| W6744 | Telehandler     | Boom Angle in error                                       |
| W6798 | Telehandler     | Boom Angle Calibration Performed                          |
| W6799 | Telehandler     | Boom Angle Calibration Required                           |
| W6802 | Telehandler     | Boom retract Switch Short to Battery                      |
| W6803 | Telehandler     | Boom retract Switch Short to Ground or open circuit       |
| W6902 | Telehandler     | Boom retract Switch 2 Short to Battery                    |
| W6903 | Telehandler     | Boom retract Switch 2 Short to Ground or open circuit     |
| W6928 | Telehandler     | Boom retract Switch 2 In Error                            |
| W7002 | Telehandler     | Boom Drain Output Error ON                                |
| W7003 | Telehandler     | Boom Drain Output Error OFF                               |
| W7007 | Telehandler     | Boom Drain Output Error Open Circuit                      |
| W7033 | Telehandler     | Boom Drain Output Internal Failure                        |
| W7102 | Telehandler     | Boom Drain Relay Feedback Output Error ON                 |
| W7103 | Telehandler     | Boom Drain Relay Feedback Output Error OFF                |
| W7304 | M-Series Loader | Remote Control No Communication                           |
| W7428 | Telehandler     | Boom Suspension Error                                     |
| W7504 | M-Series Loader | Drive Controller No Communication                         |
| W7528 | Telehandler     | Boom Suspension/Float switch On                           |
| W7602 | Telehandler     | Boom Suspension Icon Error ON                             |
| W7603 | Telehandler     | Boom Suspension Icon Error OFF                            |
| W7705 | Telehandler     | Boom Float Output Short To Battery                        |
| W7706 | Telehandler     | Boom Float Output Short To Ground                         |
| W7707 | Telehandler     | Boom Float Output Open circuit                            |

| Code  | Product     | Description                                                  |
|-------|-------------|--------------------------------------------------------------|
| W8002 | Telehandler | Power Quicktach output Error On                              |
| W8003 | Telehandler | Power Quicktach output Error Off                             |
| W8005 | Telehandler | Power Quicktach Output Short To Battery                      |
| W8006 | Telehandler | Power Quicktach Output Short To Ground                       |
| W8007 | Telehandler | Power Quicktach Output Open circuit                          |
| W8128 | Telehandler | Power Quicktach Switch in error                              |
| W8202 | Telehandler | Power Quicktach Relay feedback Error On                      |
| W8203 | Telehandler | Power Quicktach Relay feedback Error Off                     |
| W8302 | Telehandler | Electromagnet Output Error On                                |
| W8303 | Telehandler | Electromagnet Output Error Off                               |
| W8307 | Telehandler | Electromagnet Output Open circuit                            |
| W8402 | Telehandler | Electromagnet Relay feedback Error On                        |
| W8403 | Telehandler | Electromagnet Relay feedback Error Off                       |
| W8502 | Telehandler | Manplatform detection switch Short To Battery                |
| W8503 | Telehandler | Manplatform detection switch Short To Ground or Open circuit |
| W8611 | Telehandler | Winch Overloaded                                             |
| W8628 | Telehandler | Winch Inputs In Error                                        |
| W8702 | Telehandler | Power Quicktach Boom Output Error On                         |
| W8703 | Telehandler | Power Quicktach Boom Output Error Off                        |
| W8707 | Telehandler | Power Quicktach Boom Output Open circuit                     |
| W8802 | Telehandler | Power Quicktach Boom Relay feedback Error On                 |
| W8803 | Telehandler | Power Quicktach Boom Relay feedback Error Off                |
| W8902 | Telehandler | Power Lift Output Error ON                                   |
| W8903 | Telehandler | Power Lift Output Error OFF                                  |
| W8907 | Telehandler | Power Lift Output Error Open Circuit                         |
| W9002 | Telehandler | Power Lift Relay Error ON                                    |
| W9003 | Telehandler | Power Lift Relay Error OFF                                   |
| W9999 | Telehandler | Workgroup controller Bad Table                               |