

Tools Needed for Installation

Separately Purchased Parts

Parts List

Specifications and Regulatory

See Product Label

IntelliCheck3 Multi-Level

Temperature Range

Operating: -40 to +140 Degrees F (-40 to +60 Degrees C)

Storage: -50 to +185 Degrees F (-45 to +85 Degrees C)

Power Requirement:

Nominal Voltage: 12 to 24 VDC (-0.5, +8 VDC)

Consumption: 9.6 Watts maximum at 24 VDC
4.8 Watts maximum at 12 VDC

Outside Dimensions: 9.26" Wide X 6.81" High X 2.54" Deep

Weight: 6.5 lb (2.9 kg)

Interfaces

Inputs:

- TB4 Sensor Inputs: EN 13922 compliant
- TB3 Auxiliary: I.S. input switch closure less than 100 ohms

Outputs:

- TB7: 2.0A at 32 VDC maximum Non-intrinsically safe relay
- TB6 Rack interface: EN 13922 compliant I.S. interface for 2/5- wire sensors
- TB6: Intrinsially safe relay output. 200mA at 32 VDC maximum or 500mA at 16 VDC maximum

Scully Signal Company
Wilmington, MA 01887, USA
www.scully.com

For more information and 24 hour technical assistance, call Scully Signal Company at 1-800-272-8559 or email sales@scully.com

scully

IntelliCheck[®]3

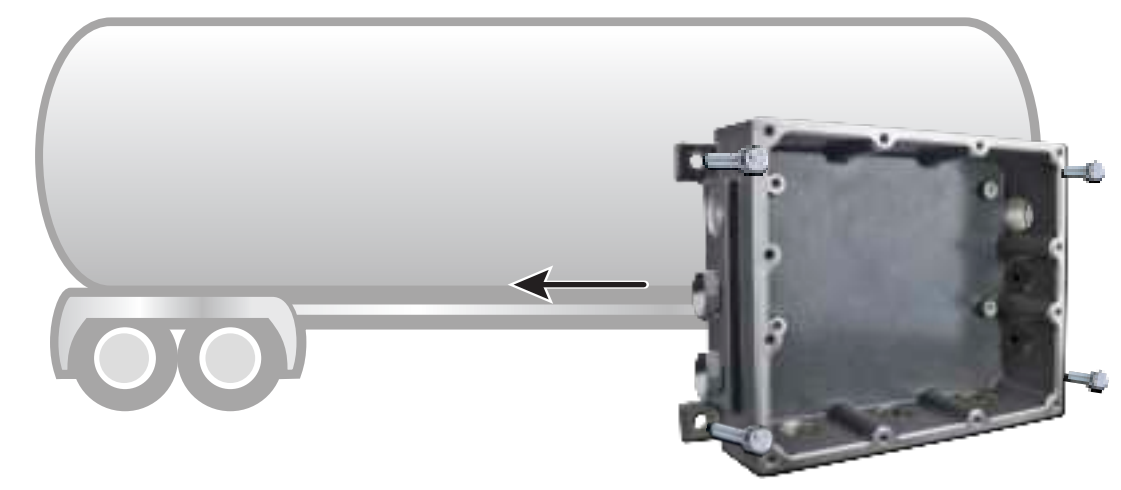
Quick Start Guide for Multi-Level

Featuring Dynamic Self-Checking[®]
www.scully.com

Mechanical Installation

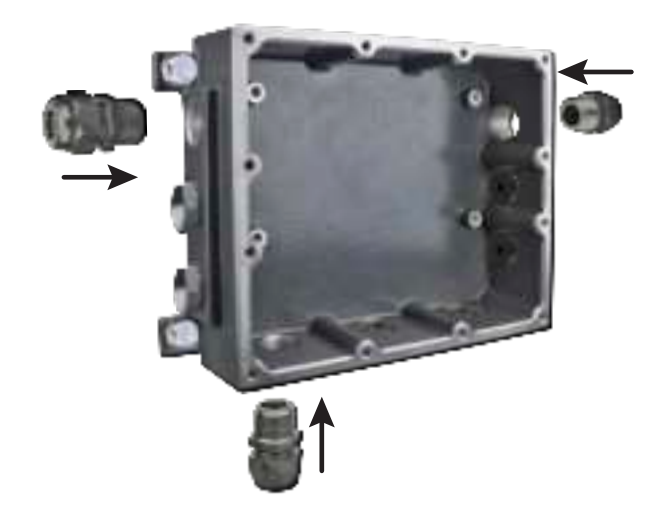
⚠ No drilling or welding to tank's frame should take place without first consulting tank manufacturer. Before beginning installation, tank compartments must be completely drained of liquid and be vapor-free.

1. Remove Electronics Module from Housing, and Mount Housing to Truck

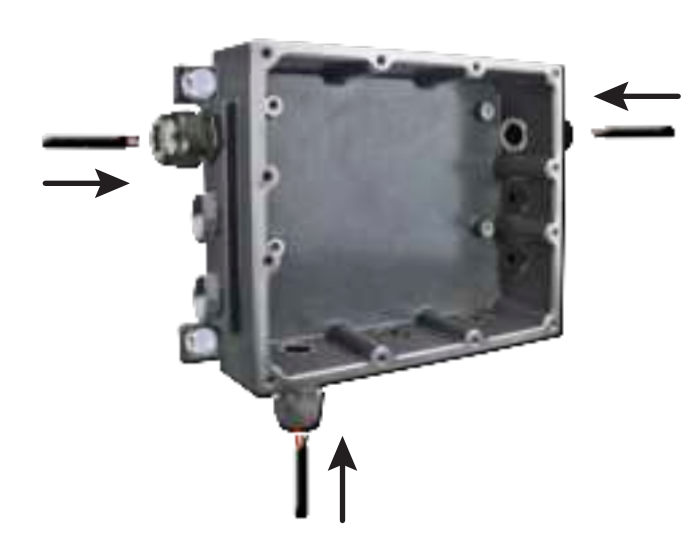


2. Install Cable Glands

(Use Anti Sieze on all threaded fittings including plugs)

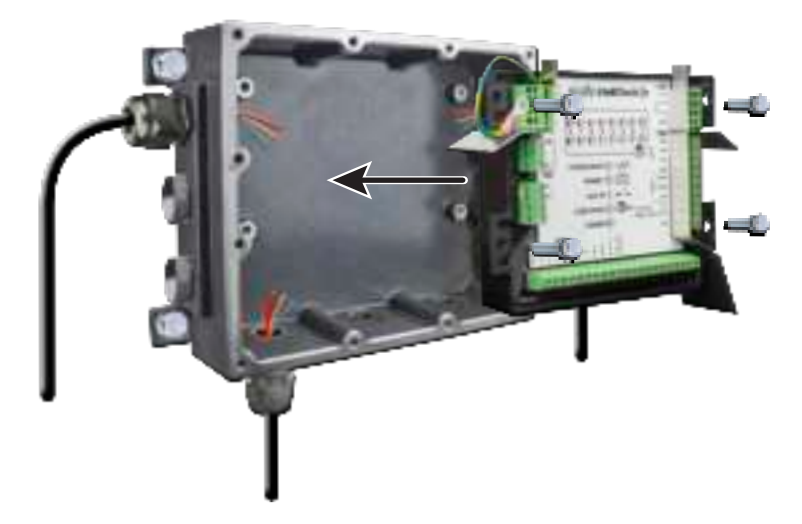


3. Install Power, Sensor and Socket Wire

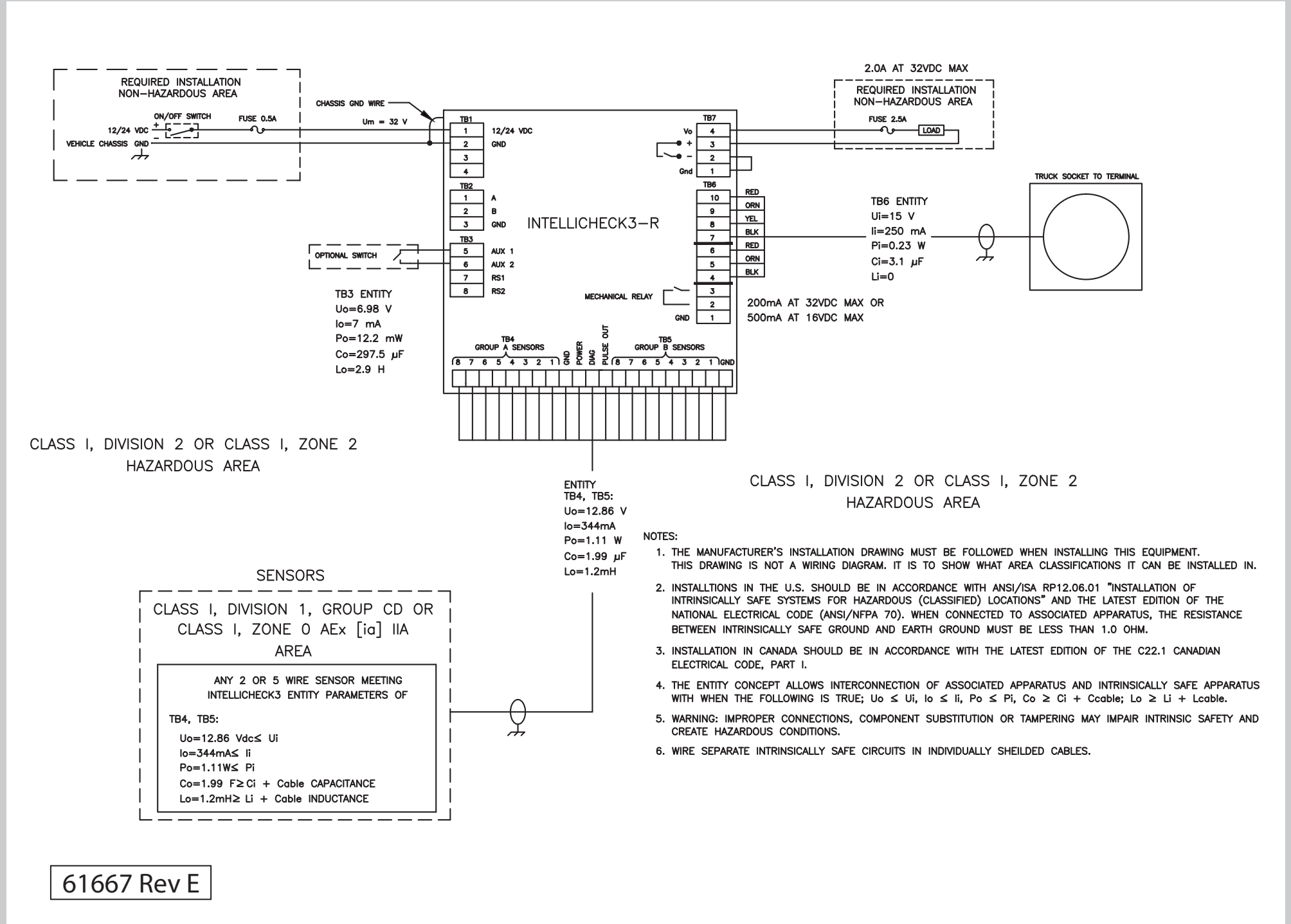


4. Install Electronics Module

(Seal conduit against water, a major source of failures)

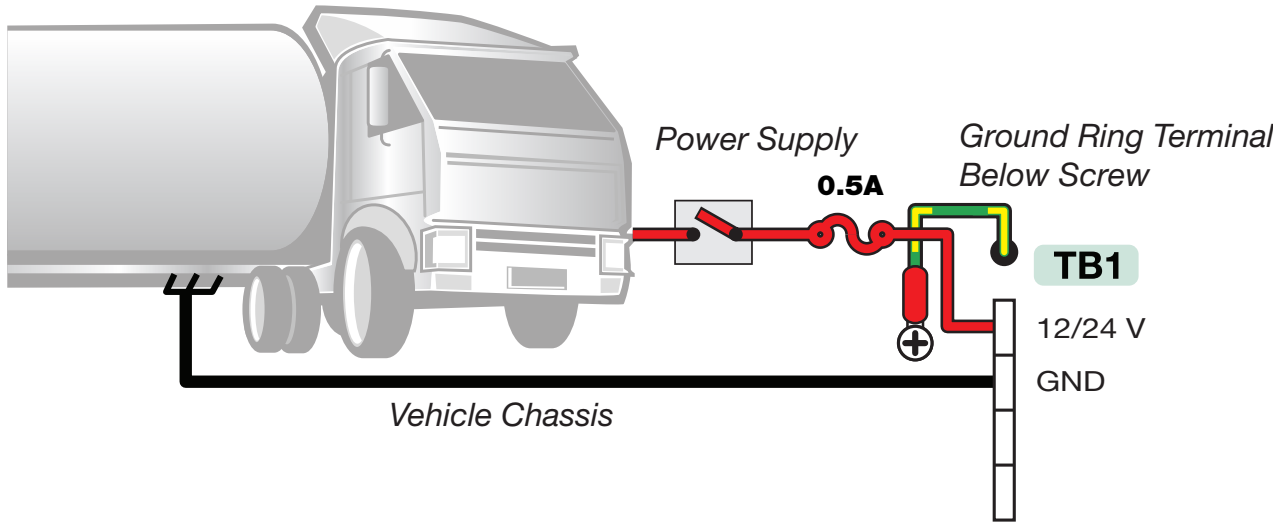
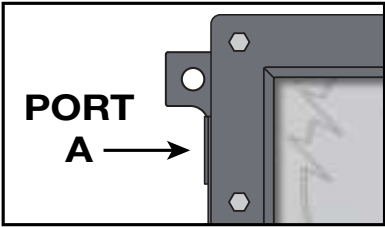


Control Drawing

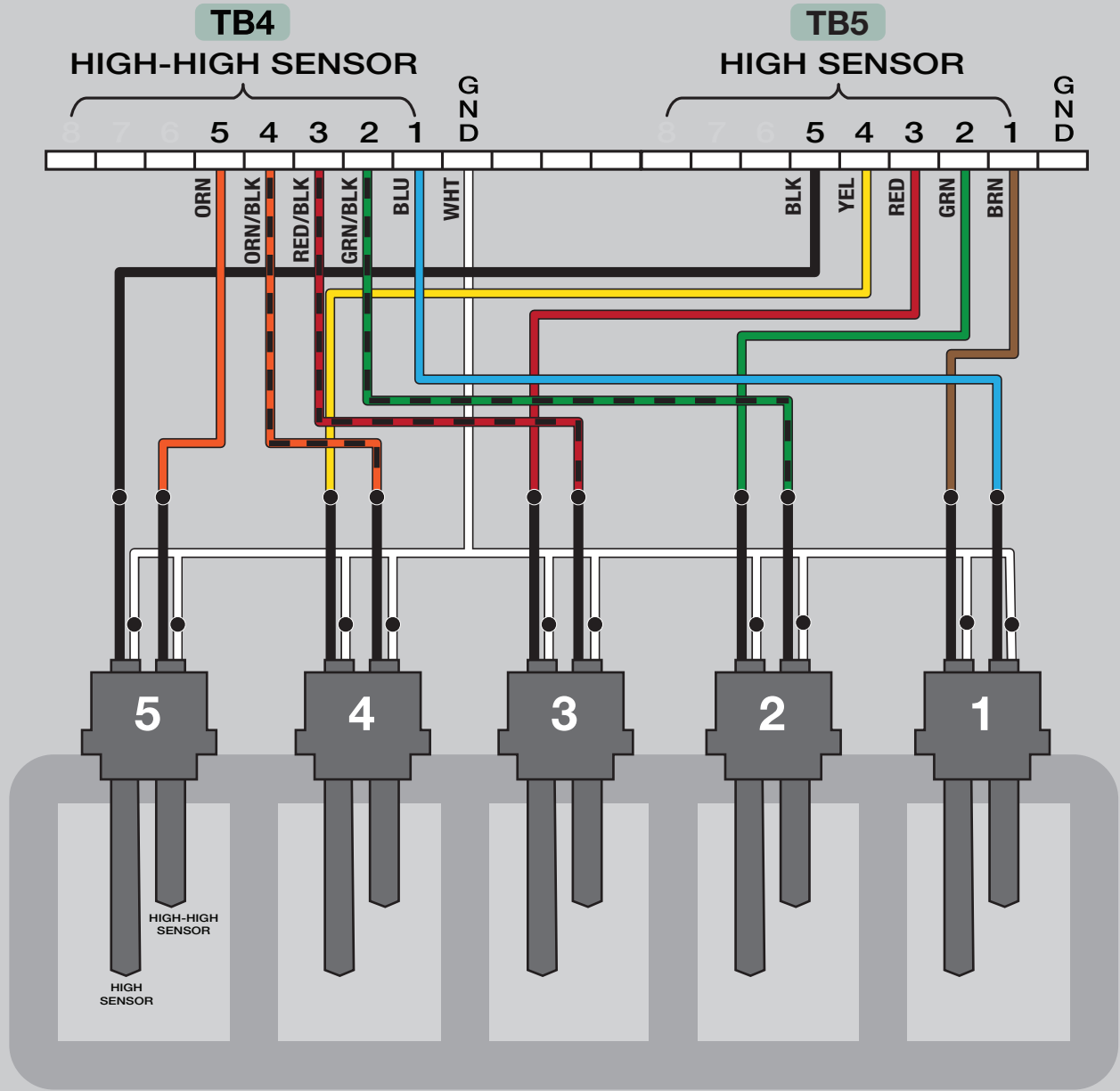
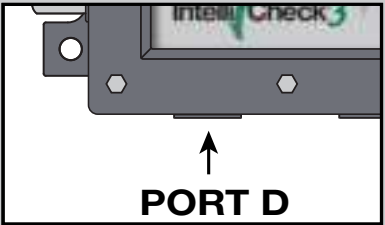


Electronic Installation

1. Wire in Power



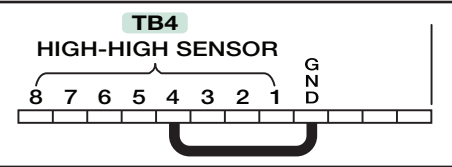
3. Wire Sensors



2. Program Module (Example of 4 Compartment OVP programming)

- a. Attach jumpers as shown.
- b. Apply power to the IntelliCheck®3. The indicator lights representing both overfill and retained configured sensors (1,2 and 3) will be flashing synchronously, alternating between red and green, with the indicator light representing the highest configured sensor (4) flashing at twice the rate of the other configured sensors. All remaining sensor indicator lights (5 thru 8) will be off. The Dynacheck, Aux In, and Power indicator lights will be steady green. Permit and Load Rack lights will be red.
- c. Leave the unit powered up for approximately 10 seconds. Then remove power from the IntelliCheck®3 and remove the programming jumper.

2-Wire Optic Sensors in Parallel



Jumper 1: GND to TB4 Highest Compartment Number

Jumper 2: None

Before applying DC battery power to unit, ensure that polarity of the voltage supplied to TB1 is correct.



Operations for 2-Wire Multi-Level Sensor Lights

Example of 4 compartment system, all sensors good

Example of 6 compartment system, wet HIGH SENSOR on compartment 6

LED Status	Indication	Permission
○○○○○○○○○○○○	No Sensor Present	-
●●●●●●●●●●	Dry Sensor	Permit
●●●●●●●●●●	Wet Sensor	No Permit
●○○●○○●○○●	DYNACHECK® (Constant Blink Rate)	-
●○○●○○●○○●	Sensor Circuit Faulty (Equal to DYNACHECK Blink Rate)	No Permit
●○○○○○●○○○○	Sensor Return Line Open (Slower than DYNACHECK Blink Rate)	No Permit
●●○○○○●●○○	Sensor Return Line Shorted to Ground (Faster than DYNACHECK Blink Rate)	No Permit

(time →)

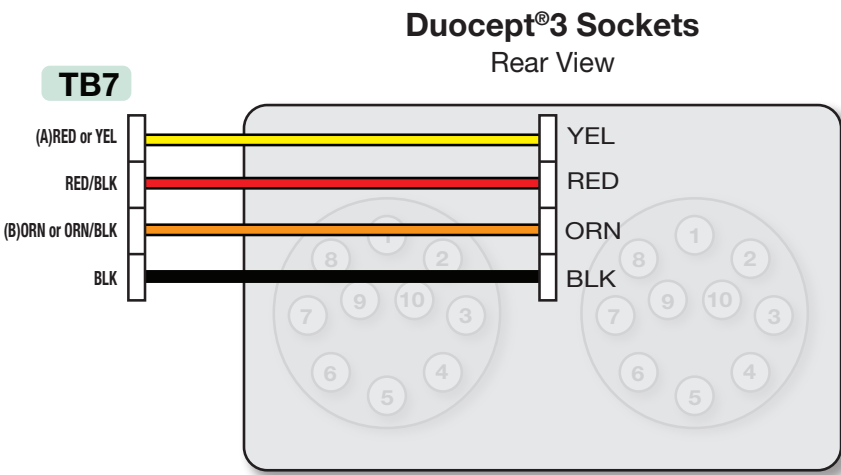
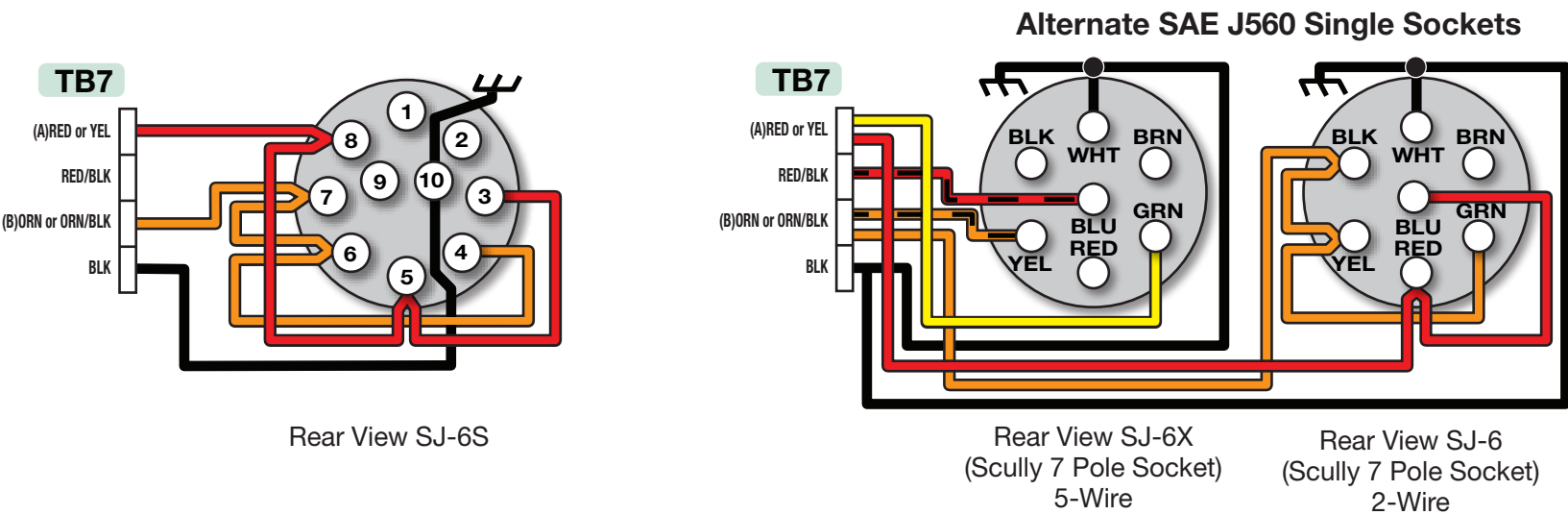
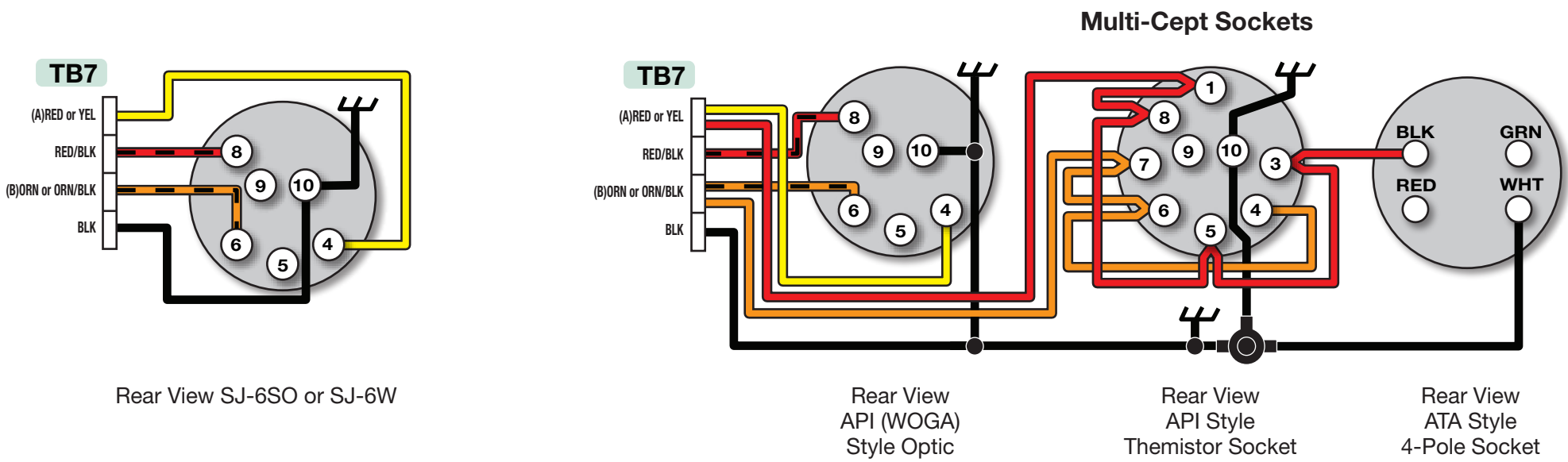
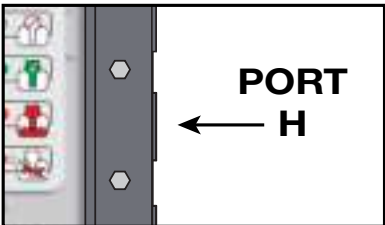
High	High-High	Bypass	API Socket	Mapped IS¹	Other IS²	Non-IS
Dry	Dry	N/A	Enabled	Enabled	Enabled	Enabled
Wet	Dry	Off	Disabled	Enabled	Enabled	Disabled
Wet	Dry	On	Enabled	Enabled	Enabled	Enabled
Wet	Wet	Off	Disabled	Disabled	Enabled	Disabled
Wet	Wet	On	Disabled	Disabled	Enabled	Disabled

■ Disabled or open switch
■ Enabled or closed switch

¹ - The output that corresponds to the wet compartment
² - The other IS outputs that do not correspond to the wet compartment

- If a High sensor becomes wet while filling, the API output on TB7 and non-I.S. switch on TB1 will be disabled but the mapped I.S. switch on TB6 will remain enabled. Pressing the bypass switch will reenale the API output and non-I.S. switch in this case.
- If the IntelliCheck3 Multi-level is powered on with a wet high sensor, all outputs will be disabled. Pressing the bypass switch will reenale all outputs in this case.
- If a High-High sensor becomes wet while filling, the API output on TB7, the non-I.S. switch on TB1, and the mapped I.S. switch will be disable. All other I.S. switches on TB6 with dry High-High sensors on their corresponding compartments will remain enabled. Pressing the bypass switch will not enable any outputs in this case.
- If the IntelliCheck3 Multi-level is powered on with a wet High-High sensor, all outputs will be disabled. Pressing the bypass switch will not enable any outputs in this case.

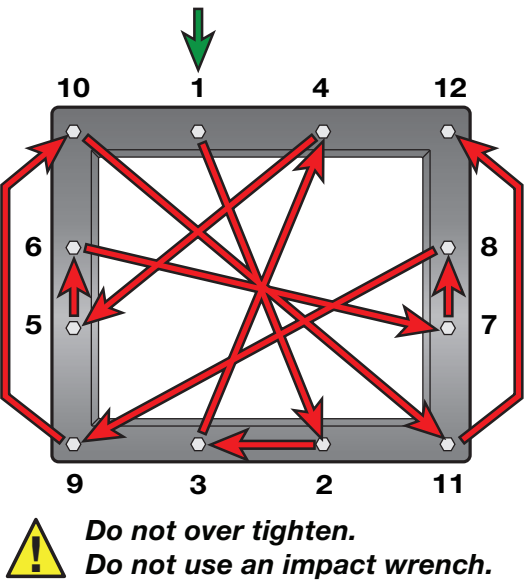
4. Wire Sockets



Close Unit Using Torque Sequence

Place the gasket, window and cover onto the housing and tighten in numeric sequence as shown. After the cover is secure, power can be supplied to the unit for diagnostic evaluation.

Place the gasket, window and cover on to the enclosure housing and lightly tighten all twelve stainless steel hex bolts. Repeat by firmly and evenly tightening to approximately 1.6 N-m (14 inch lbs) per bolt.



Do not over tighten. Do not use an impact wrench.

Operations Status Lights

DYNACHECK®

PERMIT

AUX IN

LOAD RACK

POWER

Permit

Closed

Connected

Power OK

Non-Permit

Open

Not Connected

Power Out of Specification