# **Important Instructions**

**Subject:** Wireless Network Control

Ratings: 12VDC

Equipment Radio Type IEEE 802.15.4 Radio

Frequency Band 2.4GHz ISM Band

Frequency of Operation 2405 – 2475 MHz



#### **WARNING**

This kit is to be installed in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. In Canada, this conversion/installation shall be carried out in accordance with the requirements of the provincial authorities having jurisdiction and in accordance with the requirements of the CAN/CGA-B149.1 and CAN/CGA-B149.2 installation code. Failure to follow instructions could result in serious injury, death or property damage. The qualified agency performing this work assumes all responsibility for this kit installation.

W013R4



## **WARNING**

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the machine before servicing.
- Close gas shut-off valve to the machine before servicing.
- Close steam gate valve to the machine before servicing.
- Never start the machine with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the machine is properly grounded.

W017

Kit consists of:				
1	203532	Wireless Network Control		
1	F8674006	Wireless Network Harness		
2	D503661	Screws		
2	55881	Wire Ties		
1	XXXXXX	Conversion Label		
1	F8673901	Network Option Diagram		
1	XXXXXX	Wireless Control Label		
1	8-18-253EN	Kit Instructions		

#### Special Tools required for this kit:

Magnetic 5/16 in. Socket

IMPORTANT: This kit must be installed by a qualified service person.

NOTE: Refer to appropriate service manual to aid in the installation of this kit.

IMPORTANT: When reference is made to directions (right or left) in this instructions, it is from operator's position facing front of machine.

FCC COMPLIANCE STATEMENT



#### CAUTION

Changes or modifications not expressly approved could void your authority to use this equipment .

This device complies with Part 15 of the FCC Rules. Operation to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interfer-



ence received, including interference that may cause undesired operation.

#### INDUSTRY CANADA STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**NOTE:** When installing this component, all requirements of the mentioned standard must be fulfilled. Also, 203532 is a built-in component and suitable enclosure should be provided in end system.

# **Rear Control Single Washer or Dryer**

- IMPORTANT Disconnect electrical power to machine.
   Control will not recognize network board until power is cycled to machine.
- 2. Remove two control panel attaching screws and lay assembly forward on protective padding.

NOTE: There are four tabs located on backside of control panel frame. Only the two tabs closest to the control must be bent upward. Refer to  $Figure\ 1$  and  $Figure\ 2$ .

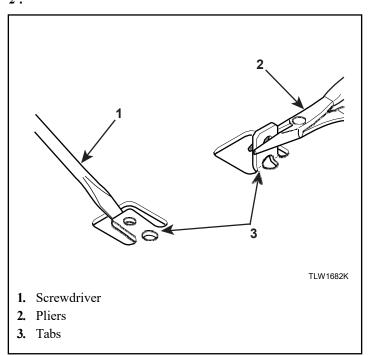


Figure 1

# IMPORTANT: Be careful not to damage control panel overlay when prying up tabs.

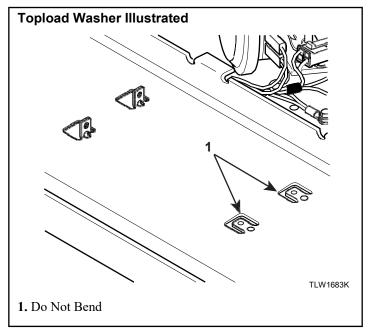


Figure 2

- 4. Adjust the compliance jumpers on the 203532 Wireless Network Control. Refer to *Compliance Jumper (H1)* section at the end of these instructions.
- Remove double sided tape backing from 203532 Wireless Network Control.
- 6. Position 203532 Wireless Network Control so that the mounting tabs on the Network Board go in front of the tabs on the control panel and the assembly mounts to the right of the mounting tabs, as shown in *Figure 3*. (The control should be to the right of the mounting tabs.) Then attach using the (2) D503661 Screws. Refer to *Figure 3*.

3.	Use a flat blade screwdriver and slightly bend each tab up only far enough to allow getting the jaws of a pliers under each tab and bend to 90 degrees. Make sure each tab is bent up square and straight.	
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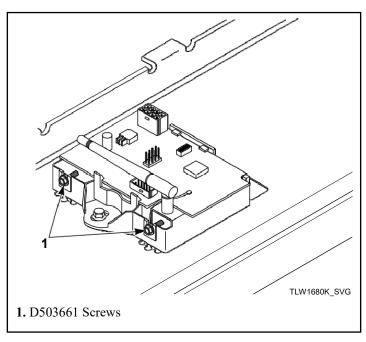


Figure 3

- 7. Install F8674006 Wireless Network Harness between network board "H3" and the electronic control "H1". Refer to *Figure* 4.
- 8. Secure the F8674006 Wireless Network Harness using the (2) 55881 Wire Ties as shown in *Figure 4*.
- 9. Place F8673901 Network Option Diagram in control cabinet with existing diagrams.
- 10. Place XXXXXX Wireless Control Label in the control hood be-hind the control panel.
- 11. Fill out and place XXXXXX Conversion Label in control hood behind control panel.
- 12. Reconnect electrical power to the machine.

NOTE: The machine control MUST have been powered down prior to connecting the wireless control in order for the control to recognize the board and to allow communication with it.

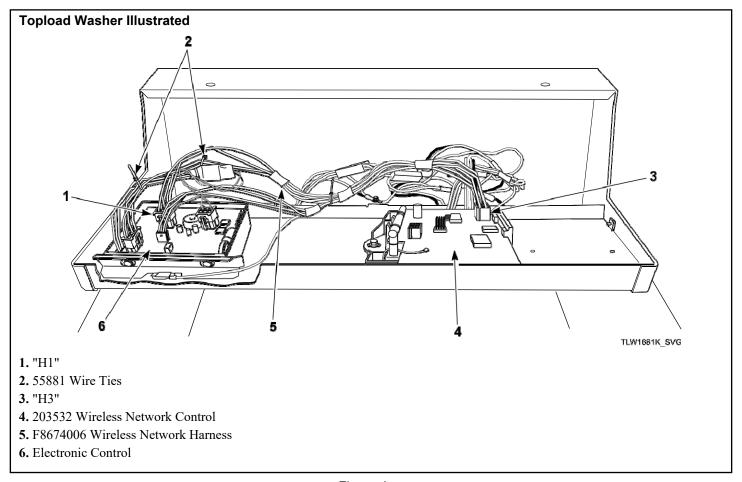


Figure 4

#### **Front Control**

- IMPORTANT Disconnect electrical power to machine.
   Control will not recognize network board until power is cycled to machine.
- 2. Open access panel to gain access to the control area. Refer to Service Manual.
- 3. Adjust the compliance jumpers on the 203532 Wireless Network Control. Refer to *Compliance Jumper (H1)* section at the end of these instructions.
- 4. Install the F8674006 Wireless Network Harness between the network board "H3" refer to *Figure 6*, and the electronic control "H1". Refer to *Figure 7*.
- 5. Remove double sided tape backing from 203532 Wireless Network Control.
- 6. Place the tab on 203532 Wireless Network Control into slot in front bulkhead and secure opposite end with one D503661 Screw. Refer to *Figure 5*.

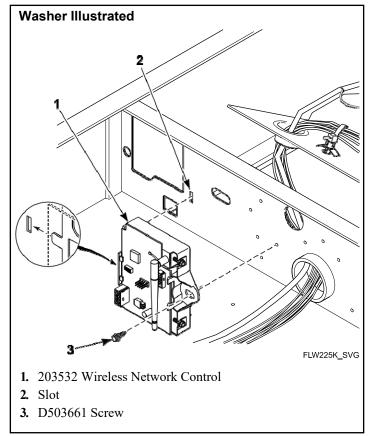
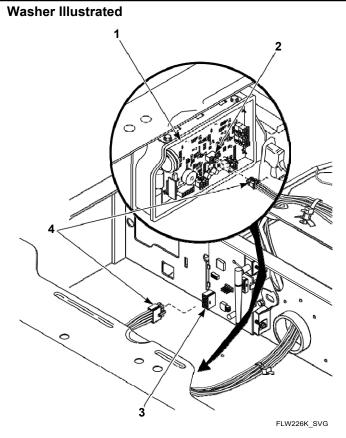


Figure 5



- 1. Electronic Control
- **2.** "H1"
- **3.** "H3"
- 4. F8674006 Wireless Network Harness

Figure 6

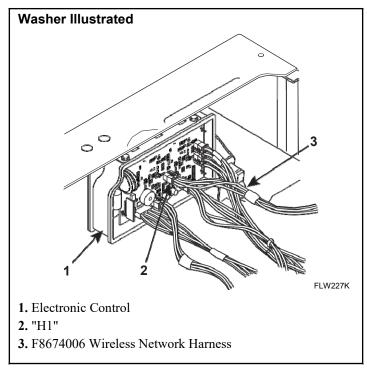


Figure 7

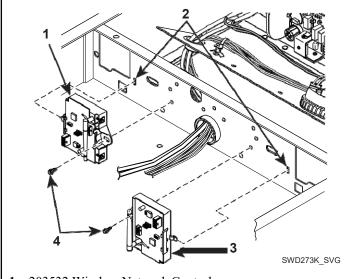
- 7. Place F8673901 Network Option Diagram in control cabinet with existing diagrams.
- 8. Place XXXXXX Wireless Control Label in control cabinet be-hind control panel.
- 9. Fill out and place XXXXXX Conversion Label in control cabinet located behind control panel.
- 10. Close access panel.
- 11. Reconnect electrical power to the machine.

NOTE: The machine control MUST have been powered down prior to connecting the wireless control assembly in order for the control to recognize the board and to allow communication with it.

#### **Front Control**

- IMPORTANT Disconnect electrical power to machine.
   Control will not recognize network board until power is cycled to machine.
- 2. Open access panel to gain access to the control area. Refer to Service Manual.
- 3. Adjust the compliance jumpers on the 203532 Wireless Network Control. Refer to *Compliance Jumper (H1)* section at the end of these instructions.
- 4. Remove double sided tape backing from 203532 Wireless Network Control.
- 5. Place tab on 203532 Wireless Network Control into slot in front bulkhead and secure opposite end with one

D503661 Screw. Refer to Figure  $\delta$  . Repeat for installing second network board.

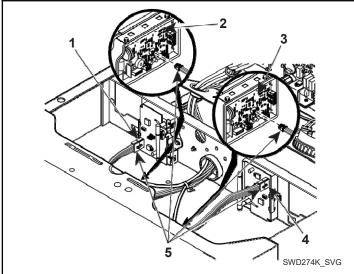


- 1. 203532 Wireless Network Control
- 2. Slot
- 3. D503661 Screws

Figure 8

6. Install F8674006 Wireless Network Harness between network board "H3", refer to *Figure 9*, and electronic control "H1".

Refer to *Figure 10*.



- 1. "H3"
- 2. Electronic Control
- **3.** "H3"
- 4. F8674006 Wireless Network Harness

Figure 9

- 7. Add one 55881 Wire Tie to backside of electronic control as shown in *Figure 10*.
- 8. Place F8673901 Wiring Diagram in control cabinet with existing diagrams.
- 9. Place XXXXXX Wireless Control Label in the control cabinet.
- 10. Fill out and place XXXXXX Conversion Label in control cabinet located behind control panel.

11. Reconnect electrical power to the machine.

NOTE: The machine control MUST have been powered down prior to connecting the wireless control assembly in order for the control to recognize the board and to allow communication with it.

NOTE: Refer to network installation manual for machine connections to network.

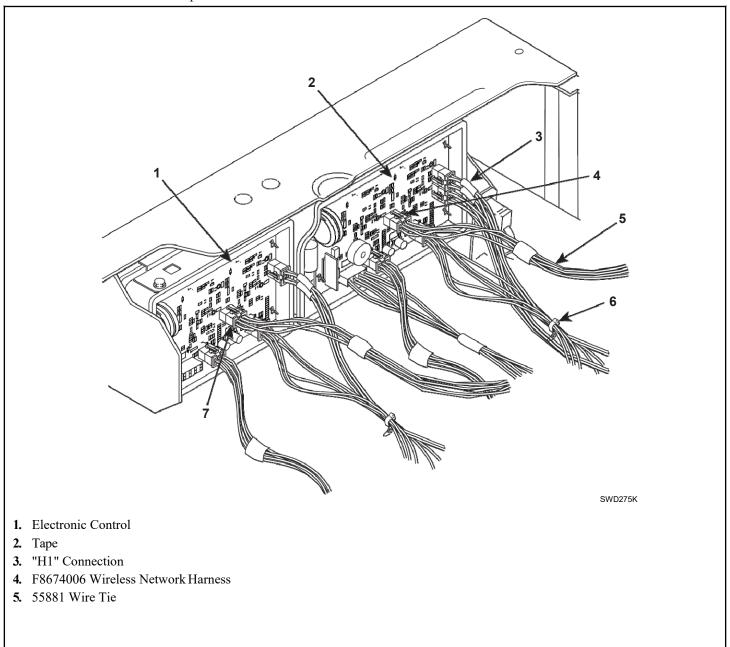


Figure 10

7

# **Compliance Jumper (H1)**

The compliance jumper is used to enforce limits set by local agencies on WiFi channel usage and output power. This jumper

must be placed on the pins described in this section that correspond to the location where the Wireless Network Control will be operated. If the jumper is set incorrectly, the Wireless Network Control will be out of compliance with local agencies. If the jumper is not set at all, the Wireless Network Control will operate

at a reduced power-level, which will reduce the performance of the Wireless Network Control.

NOTE: It is the responsibility of the installer to make sure that the Compliance Jumper is set to meet local standards. Incorrect settings will cause the board to be out of compliance and may lead to reduced range and loss of WiFi channels.

Figure 11

#### Federal Communications Commission (FCC) Interference Statement

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

For additional hosts other than the specific host originally granted with a limited module, a Class II permissive change is required on the module grant to register the additional host as a specific host also approved with the module. The host must meet the necessary requirements to satisfy the module limiting conditions: shield and power supply regulation.

The module is limited to OEM installation ONLY. The OEM integrator is responsible for ensuring the end user has no manual instructions to remove or install module.

# Regulatory Module Integration Instructions

This module has been granted modular approval for mobile applications. OEM integrators for host products may use the module in their final products without additional FCC / IC (Industry Canada) certification if they meet the following conditions. Otherwise, additional FCC / IC approvals must be obtained.

- The host product with the module installed must be evaluated for simultaneous transmission requirements.
- The users manual for the host product must clearly indicate the operating requirements and conditions that must be observed to ensure compliance with current FCC / IC RF exposure guidelines.
- To comply with FCC / IC regulations limiting both maximum RF output power and human exposure to RF radiation, the maximum antenna gain including cable loss in a mobile-only exposure condition must not exceed as below:

Antenna Type	Frequency Band (MHz)	Max Antenna Gain (dBi)
Dipole Antenna	2405 ~ 2475	2

• A label must be affixed to the outside of the host product with the following statements:

This device contains FCC ID: 2ANOT-203532

This equipment contains equipment certified under IC: 23166-203532

The final host / module combination may also need to be evaluated against the FCC Part 15B criteria for unintentional radiators in order to be properly authorized for operation as a Part 15 digital device.

If the final host / module combination is intended for use as a portable device (see classifications below) the host manufacturer is responsible for separate approvals for the SAR requirements from FCC Part 2.1093 and RSS-102.

# **Device Classifications**

Since host devices vary widely with design features and configurations module integrators shall follow the guidelines below regarding device classification and simultaneous transmission, and seek guidance from their preferred regulatory test lab to determine how regulatory guidelines will impact the device compliance. Proactive management of the regulatory process will minimize unexpected schedule delays and costs due to unplanned testing activities.

The module integrator must determine the minimum distance required between their host device and the user's body. The FCC provides device classification definitions to assist in making the correct determination. Note that these classifications are guidelines only; strict adherence to a device classification may not satisfy the regulatory requirement as near-body device design details may vary widely. Your preferred test lab will be able to assist in determining the appropriate device category for your host product and if a KDB or PBA must be submitted to the FCC.

Note, the module you are using has been granted modular approval for mobile applications. Portable applications may require further RF exposure (SAR) evaluations. It is also likely that the host / module combination will need to undergo testing for FCC Part 15 regardless of the device classification. Your preferred test lab will be able to assist in determining the exact tests which are required on the host / module combination.

# **FCC Definitions**

**Portable:** (§2.1093) — A portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is / are within 20 centimeters of the body of the user.

**Mobile:** (§2.1091) (b) — A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. Per §2.1091d(d)(4) In some cases (for example, modular or desktop transmitters), the potential conditions of use of a device may not allow easy classification of that device as either Mobile or Portable. In these cases, applicants are responsible for determining minimum distances for compliance for the intended use and installation of the device based on evaluation of either specific absorption rate (SAR), field strength, or power density, whichever is most appropriate.

## Simultaneous Transmission Evaluation

This module has **not** been evaluated or approved for simultaneous transmission as it is impossible to determine the exact multi-transmission scenario that a host manufacturer may choose. Any simultaneous transmission condition established through module integration into a host product **must** be evaluated per the requirements in KDB447498D01(8) and KDB616217D01,D03 (for laptop, notebook, netbook, and tablet applications).

These requirements include, but are not limited to:

- Transmitters and modules certified for mobile or portable exposure conditions can be incorporated in mobile host devices without further testing or certification when:
- The closest separation among all simultaneous transmitting antennas is ≥20 cm,

Or

- Antenna separation distance and MPE compliance requirements for ALL simultaneous transmitting antennas have been specified in the application filing of at least one of the certified transmitters within the host device. In addition, when transmitters certified for portable use are incorporated in a mobile host device, the antenna(s) must be >5 cm from all other simultaneous transmitting antennas.
- All antennas in the final product must be at least 20 cm from users and nearby persons.