

# T500e IRIS Telemetry Kit



This kit includes the necessary parts to install IRIS telemetry technology on a standard T500e model. It's intended for affiliate distributors install only.

## INSTALLATION INSTRUCTIONS:

**Installation Time:** 2 Hours

### Kit Installation Requirements:

Tennant ServiceLink computer or a computer with Wi-Fi connection to access the Tennant Service Application Software, and USB cable (supplied with kit).

*Computer System Requirements: Windows® 7 OS, Microsoft .NET Framework 4.5 or later, USB Port.*

**NOTICE** - The IRIS Telemetry Kit **MUST** be activated to complete installation. After kit is installed **CALL** Technical Support to activate as described on page 5.

**Special Tools Required:** None

### PREPARE MACHINE FOR KIT INSTALL:

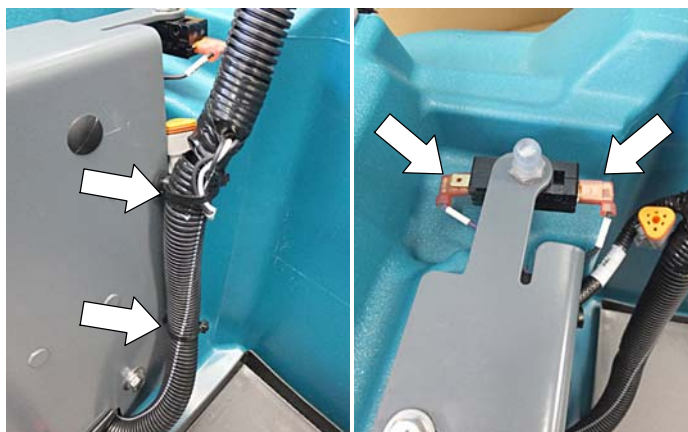
1. Drain the solution and recovery tanks.
2. Park the machine on a level surface and remove key.
3. Remove batteries from machine (Figure 1).

**FOR SAFETY: When handling batteries, wear protective gloves and eye protection. Avoid contact with battery acid.**



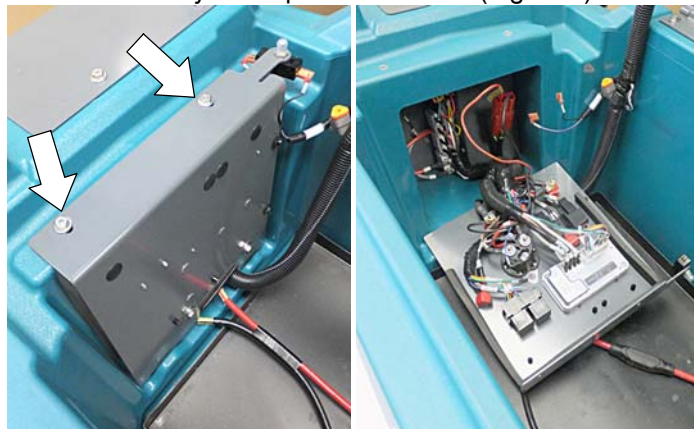
**Fig. 1**

4. Cut the two cable-ties that secure the main wire harness to the metal electrical panel. Then disconnect the two wires from the safety switch as shown (Figure 2).



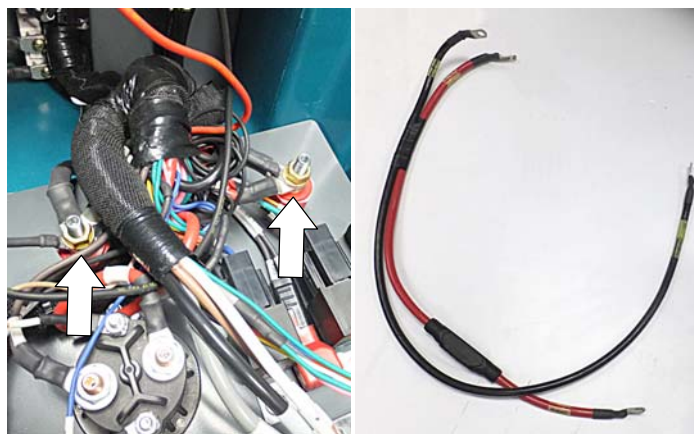
**Fig. 2**

5. Remove the top two screws from the electrical panel and carefully lower panel as shown (Figure 3).



**Fig. 3**

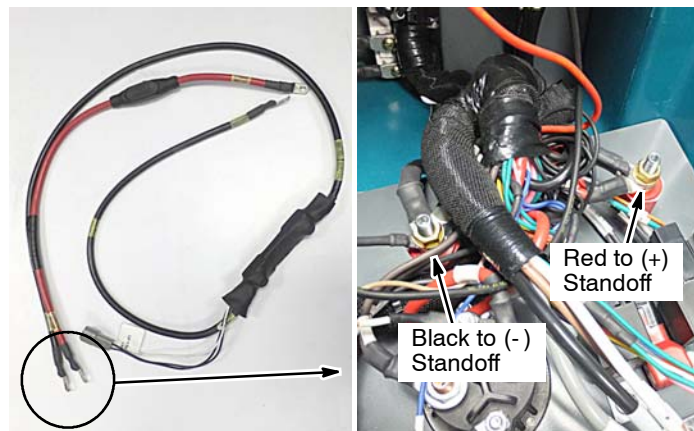
6. Disconnect and remove the existing battery cable assembly from the electrical panel (Figure 4).



**Fig. 4**

### INSTALL TELEMETRY KIT:

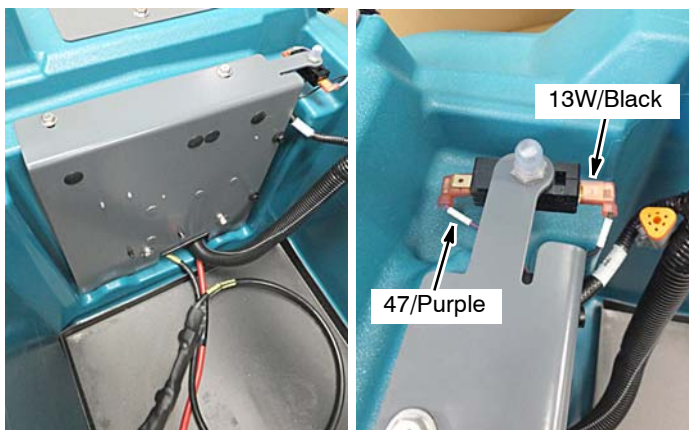
1. Connect the pre-assembled telemetry battery cable harness to the electrical panel as shown (Figure 5). **NOTE: The European battery cable harness is equipped with clamp connectors (not shown).**



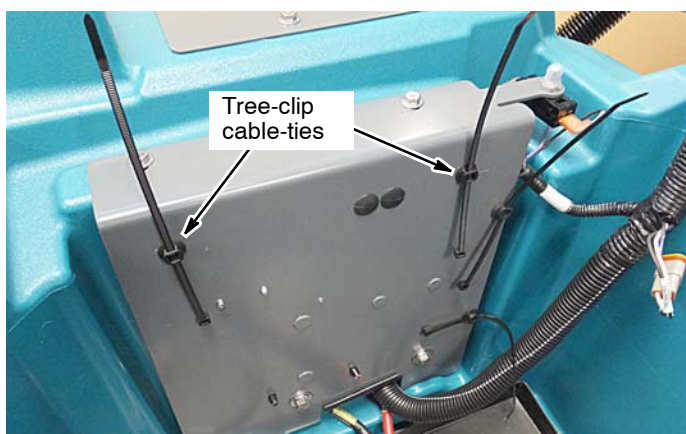
**Fig. 5**



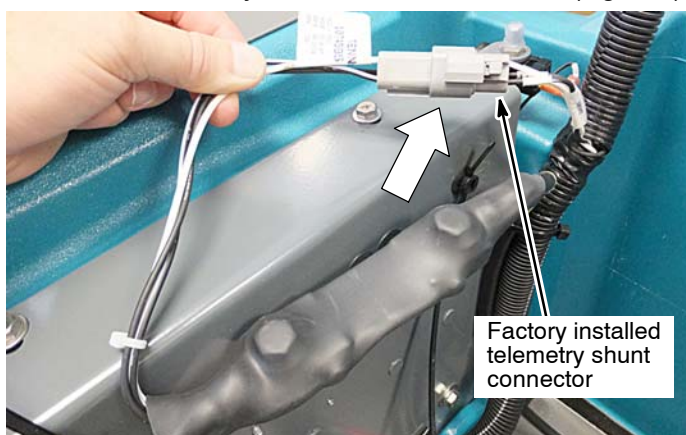
2. Reinstall the electrical panel and reconnect the two wires to the safety switch as shown (Figure 6).

**Fig. 6**

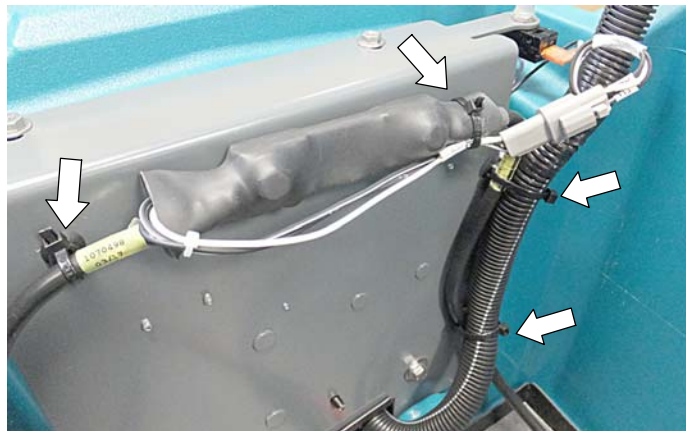
3. Install two tree-clip cable-ties [1210807] to the electrical panel as shown (Figure 7).

**Fig. 7**

4. Connect the telemetry harness assembly to the factory installed telemetry shunt connector as shown (Figure 8).

**Fig. 8**

5. Secure the telemetry harness assembly to the electrical panel with cable-ties as shown (Figure 9). Then re-connect the machine harness and battery cable to the electrical panel with cable-ties [130773].

**Fig. 9**

6. Remove the additional bar-code label located on the backside of the IRIS module and save. The 20 digit number printed on the label will be needed to activate the IRIS system (Figure 10).

**Fig. 10**

7. Using four screws [08712] and four flat washers [140000] attach the mounting plate [1225123] to the IRIS module as shown (Figure 11).

**Fig. 11**



8. Connect the telemetry harness [1075352] and the telemetry antenna [315724] to the IRIS module as shown (Figure 12).



Fig. 12

9. Locate the factory installed telemetry connector as shown (Figure 13). Carefully cut the cable-tie that is securing the connector to the machine harness.

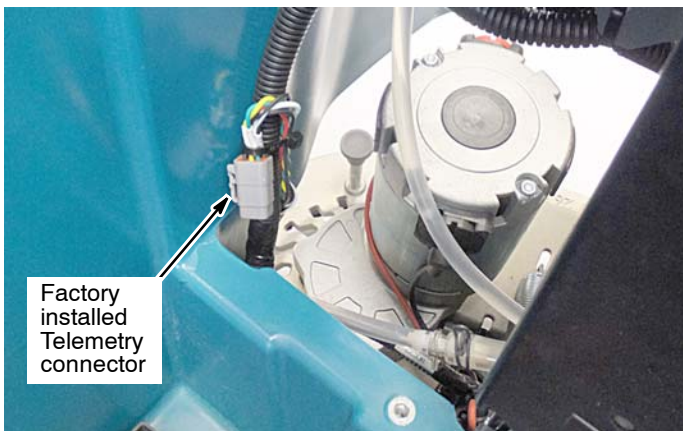


Fig. 13

10. Connect the telemetry harness to the factory installed telemetry connect as shown (Figure 14). Secure the telemetry harness and the antenna wire to the machine harness with cable-tie as shown.

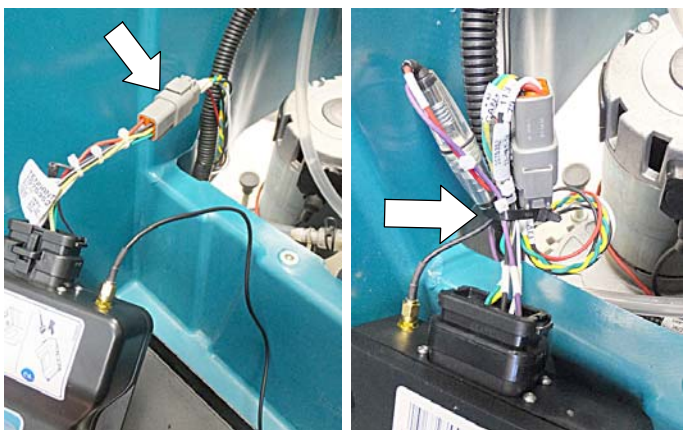


Fig. 14

11. Using two sems screws [1034731], mount the IRIS module to the machine bracket as shown (Figure 15).

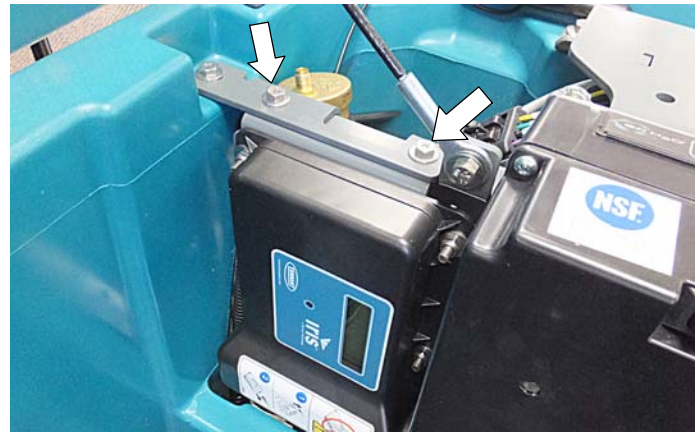


Fig. 15

12. Adhere the telemetry antenna to the machine as shown (Figure 16). Secure the antenna wire with a tree-clip cable-tie [1210807] as shown.

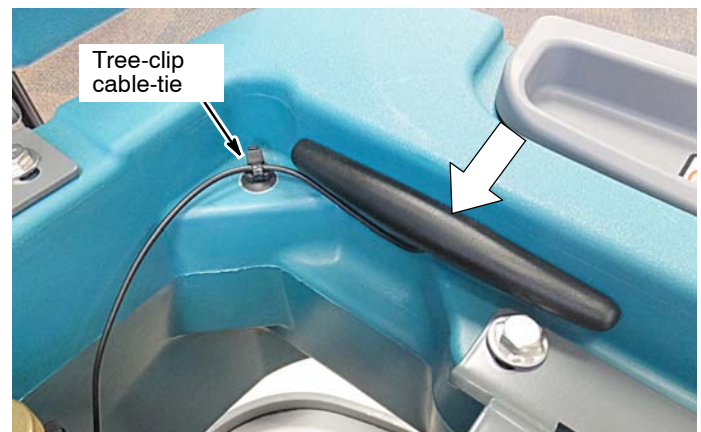


Fig. 16

13. Re-install the batteries.  
14. Apply the FCC label [1069580] to machine as shown (Figure 17).

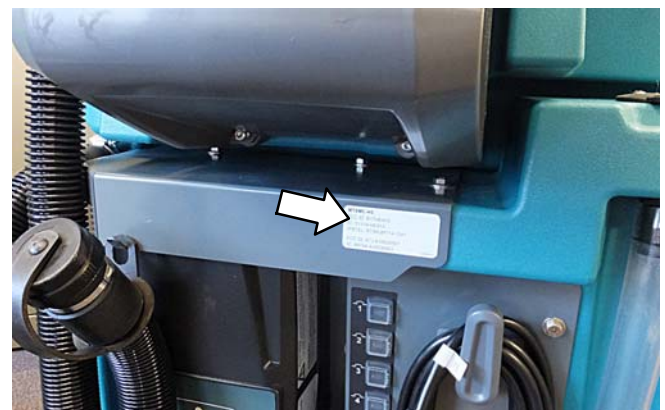


Fig. 17

15. Reconfigure the machine's control board to recognize the installed telemetry kit (See REPROGRAM THE MACHINE'S CONTROL BOARD).  
16. Activate the IRIS telemetry system (See ACTIVATE THE IRIS TELEMETRY SYSTEM).

**NOTE: The IRIS telemetry system must be activated to complete this installation. The system will not function until it is activated.**

## REPROGRAM THE MACHINE'S CONTROL BOARD:

The Tennant Service Application Software is required to reconfigure the machine's control board to recognize the IRIS Telemetry installed kit.

See **TENNANT SERVICE APPLICATION SOFTWARE** on page 6 to access or download software.

1. Start the Service Software Application program **"Service Diagnostics..."**(Figure 18).



Icon on Desktop

Fig. 18

2. After start up, the following screen will appear (Figure 19).

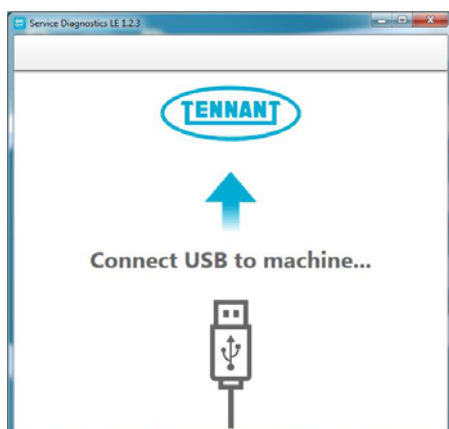


Fig. 19

3. Connect the USB cable [1071235] to computer and to the USB port on machine as shown. Turn the key switch to the on position (Figure 20).

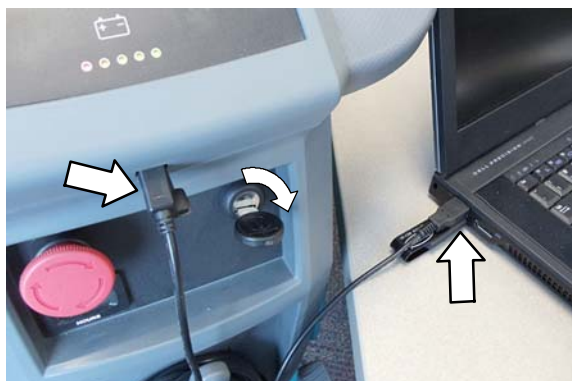


Fig. 20

4. The application software will then connect to the machine (Figure 21). If the application remains on the "Connecting to Machine..." screen for an extended period, cycle key or close and restart the application software. If it still fails to connect, restart the computer.



Fig. 21

5. Once connected, the home screen will appear (Figure 22). If firmware updates are required, the "Firmware" button will be highlighted in yellow as shown. Press the button to update the machine's firmware. Cycle key when completed.

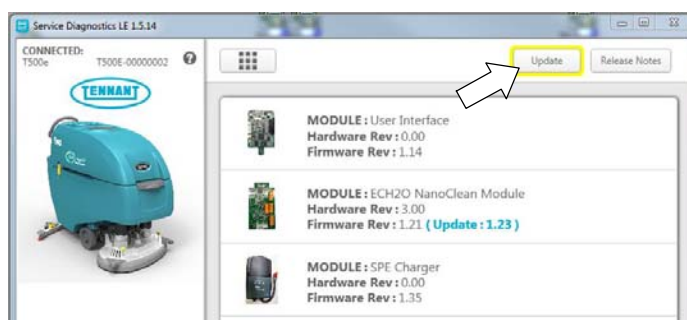
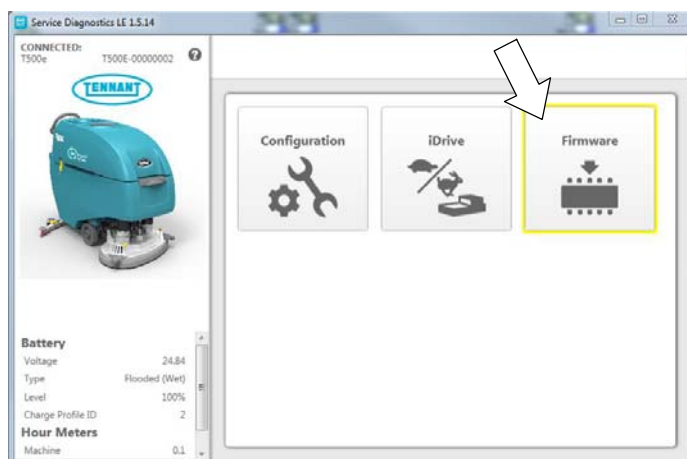


Fig. 22

After the firmware is updated, press the home button to return to the home screen (Figure ).

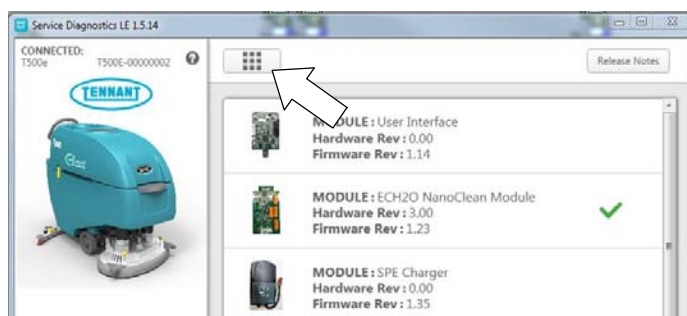


Fig. 23



6. From the Home screen, press the Configuration button (Figure 24).

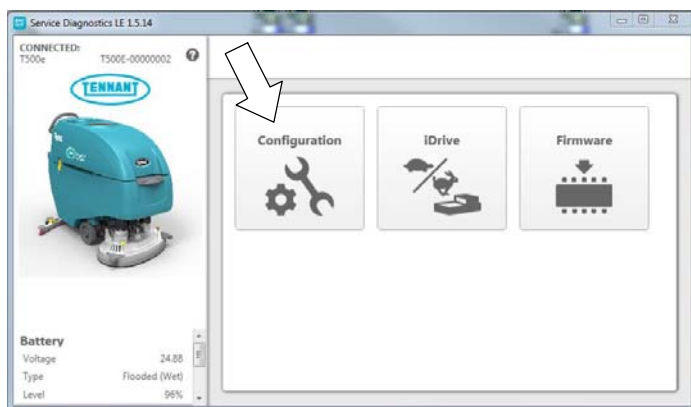


Fig. 24

7. From the machine configuration page, select “Yes” from the **IRIS** drop-down menu to configure the machine with telemetry technology (Figure 25). Then press the down arrow button to program the machine. A green check will appear next to the down arrow button when programmed.

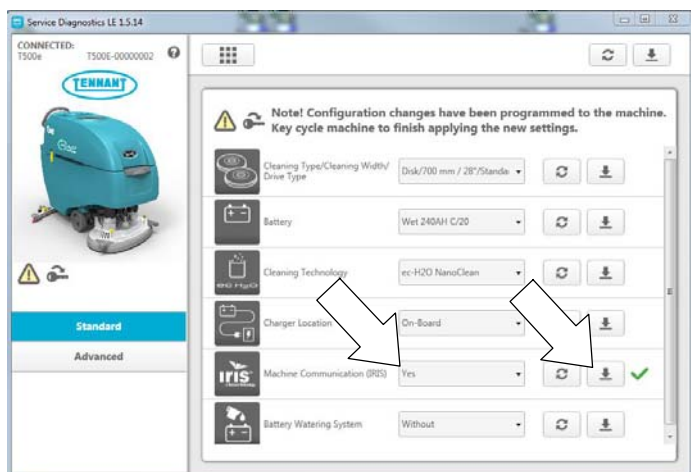


Fig. 25

8. Cycle the key to apply the new machine configuration. Disconnect the USB cable.
9. Activate the IRIS telemetry system (See **ACTIVATE THE IRIS TELEMETRY SYSTEM**).

## ACTIVATE THE IRIS TELEMETRY SYSTEM

**NOTE: The IRIS telemetry system must be activated to complete this installation. The system will not function until it is activated.**

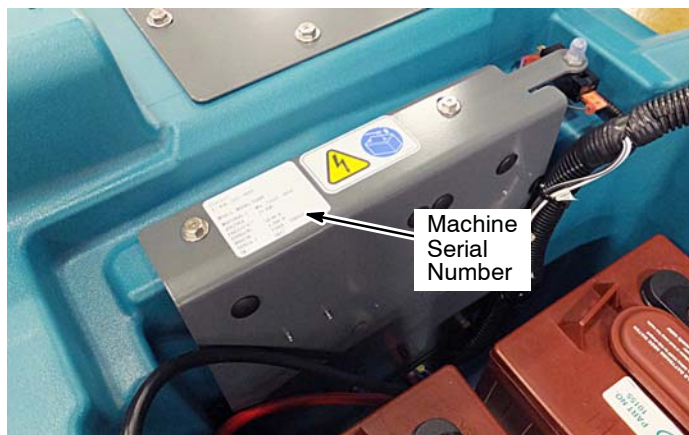
For assistance to activate the IRIS telemetry system, call your customer service location:

Before calling, be sure to have the machine serial number and the 20 digit bar-code number available for activation (Figure 26).

**USA Customer Service Location:** Call Technical Support between hours 7:00 am and 5 pm CST, Monday through Friday.

**Australia Customer Service Location:** Call CCC between hours 8:00 am and 5 pm AEST, Monday through Friday. Ask to be routed to the IRIS expert for assistance.

**Canada, Europe, Middle East, Africa Customer Service Location:** Call local IRIS expert between hours 8:00 am and 5 pm, Monday through Friday.



20 digit Bar-Code Number



Fig. 26

## TENNANT SERVICE APPLICATION SOFTWARE:

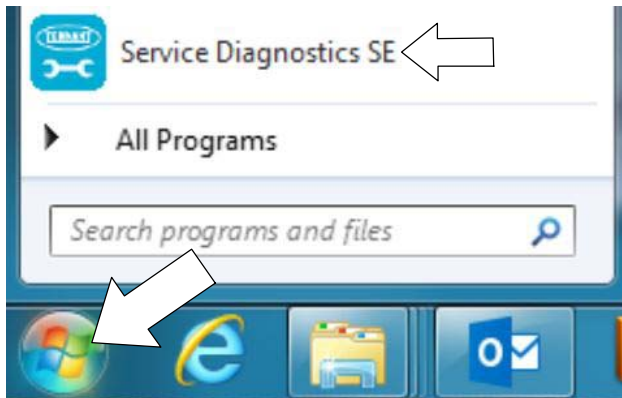
The service application software can be accessed or downloaded as described below.

**For Tennant service personnel equipped with ServiceLink computers,** the software is pre-installed on your computer as shown below. The software application is titled “**Service Diagnostics**” (Figure 27).

Icon on Desktop



From Start menu



From Start menu > All Programs > Tennant Company > Tennant Service Diagnostics

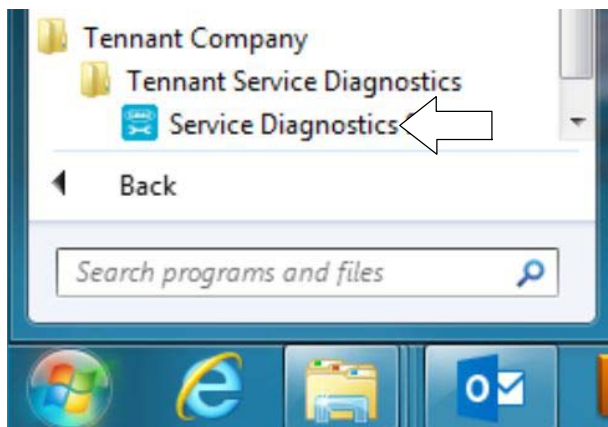


Fig. 27

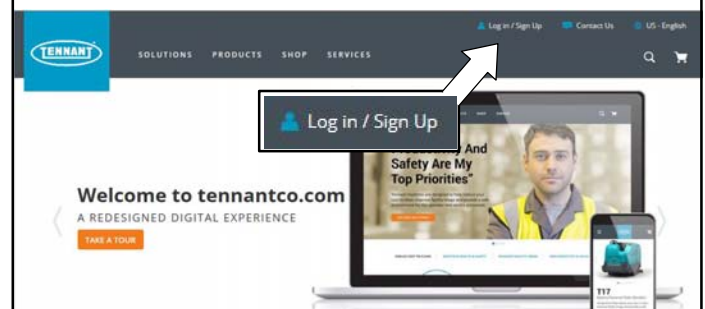
**For other Service Groups,** the Service Application Software can be downloaded from the Tennant Public website as described below.

**NOTE:** If the Service Application Software is currently installed on your computer, confirm or re-install the software to ensure latest software version is installed.

To access the Service Application Software, go to [www.tennantco.com](http://www.tennantco.com). Depending on your geographic location, the website may have a “Log in/Sign Up” button at the upper right or a “My Tennant Customer Sign In” tab at the upper right of the Tennant website as shown below (Figure 28).

Proceed with the software download instructions as described on the following pages.

### Website with “Log in/Sign Up” button (Access to “My Account”)



OR

### Website with “My Tennant Customer Sign In” tab (Access to My Tennant)

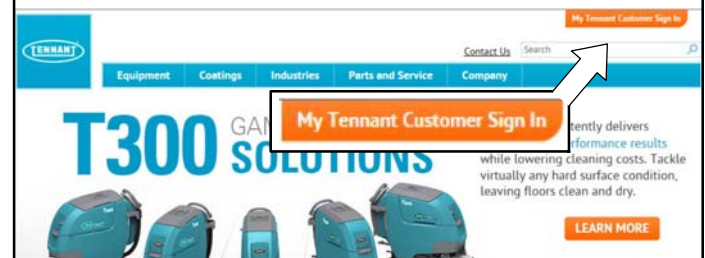


Fig. 28

## Website with “Log in/Sign Up” button: (Access to “My Account”):

1. Log in or Sign Up to create an account (Figure 29).

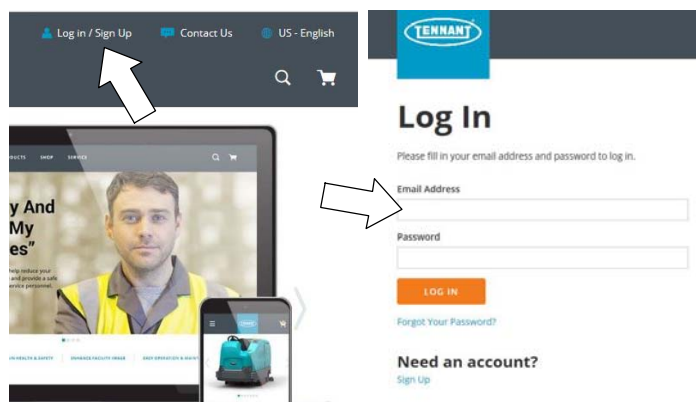


Fig. 29

2. Once logged in to the “My Account” website, click on the “INTERNAL RESOURCES” link as shown below (Figure 30).

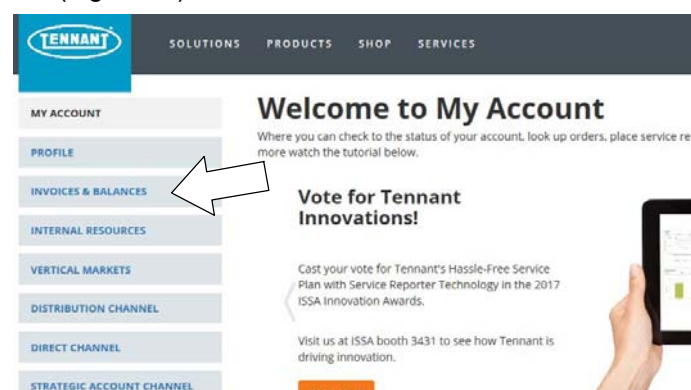


Fig. 30

3. Click on the “SERVICE APPLICATION SOFTWARE” link as shown below (Figure 31).

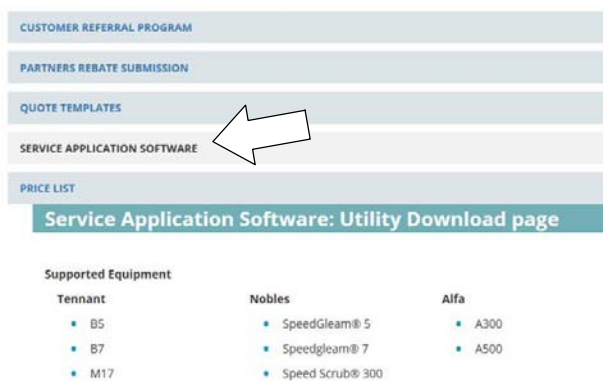


Fig. 31

4. Within the Service Application Software page, click on the link titled “Service Diagnostics LE version 1.5.12” or later (Figure 32).

## Documents



Fig. 32

5. To download the service software continue to click as instructed then click the Save button (Figure 33).

## Service Diagnostics LE Version 1.5.14

To access Service Diagnostics LE Version 1.5.14, [CLICK HERE](#)

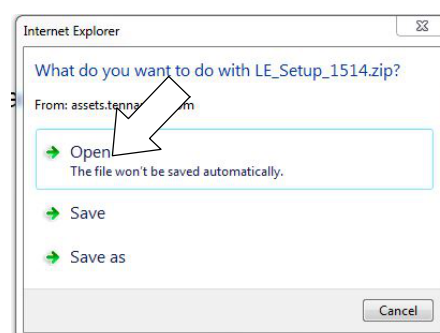


Fig. 33

6. Open the “Downloads” folder and locate the “LE\_Setup\_xxxx” zip file. Open the zip file and double click on the “LE\_Setup\_xxx” file to install the application software on your computer (Figure 38). Follow instructions on screen to install.



Fig. 34

7. After the service application software is installed on your computer, refer to figure 27 to access the program.



## Website with “My Tennant Customer Sign in” tab:

1. Log in to the “My Tennant” website or register as a new user (Figure 35).

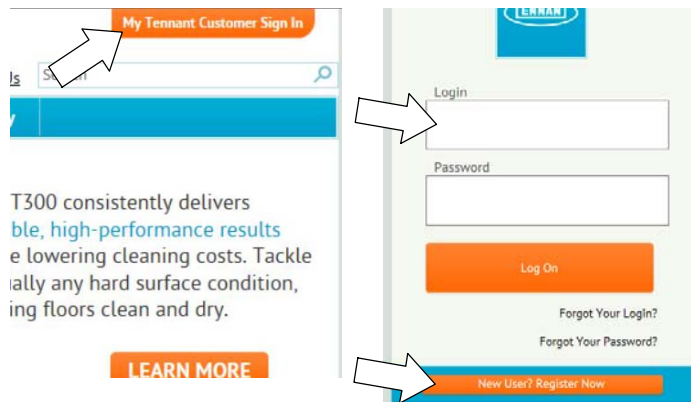


Fig. 35

2. Once logged on to the “My Tennant” website, click on the “Service Application Software” link under the “Product Support & Solution” section as shown below (Figure 36).



Fig. 36

3. Within the Service Application Software page, click on the link titled “Service Diagnostics LE version 1.5.12” or later to download the application installer then click the Save button (Figure 37).

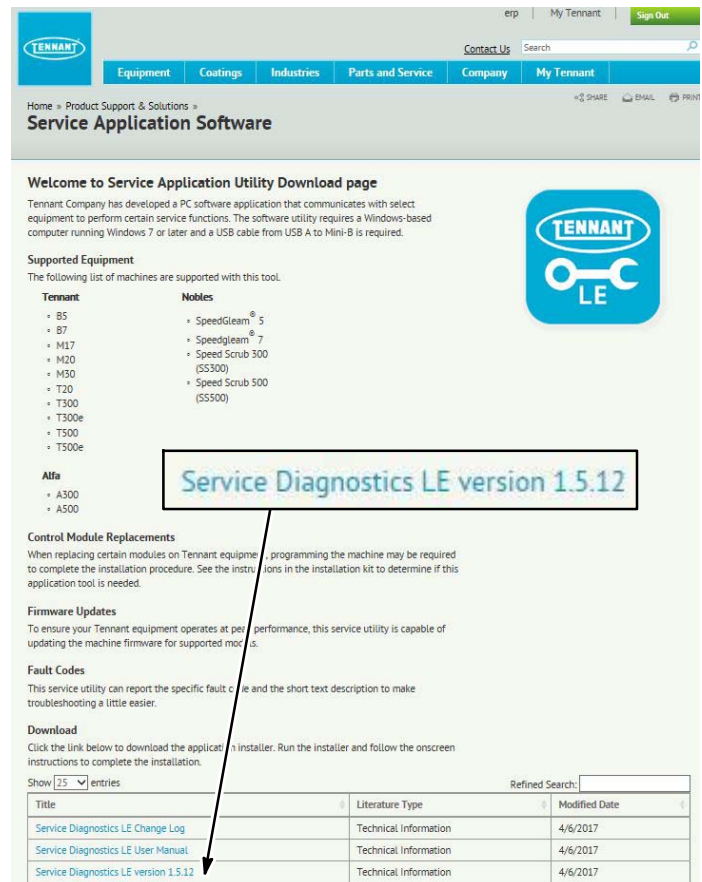


Fig. 37

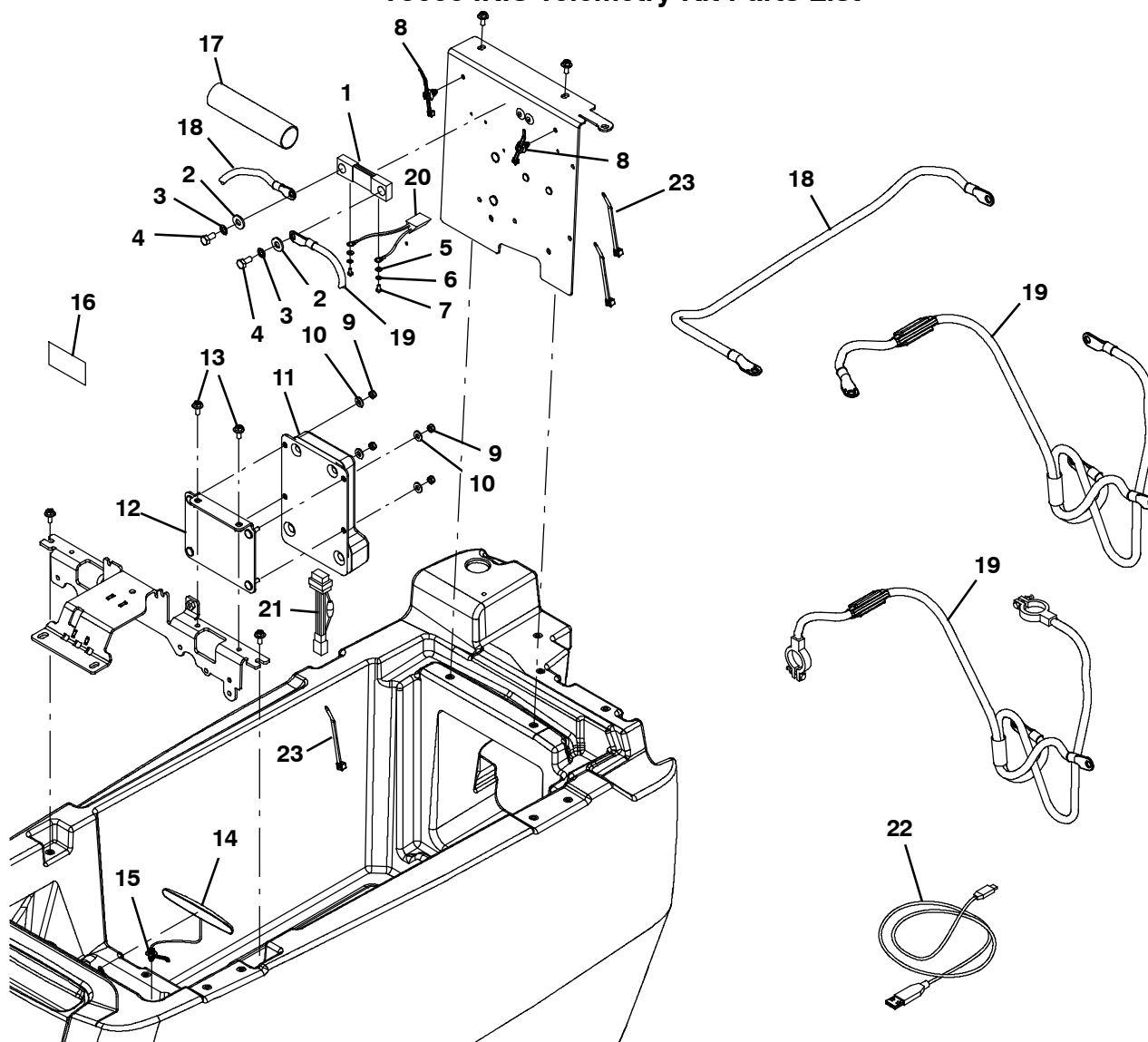
4. Open the “Downloads” folder and locate the “LE\_Setup\_xxxx” zip file. Open the zip file and double click on the “LE\_Setup\_xxx” file to install the application software on your computer (Figure 38). Follow instructions on screen to install.



Fig. 38

5. After the application software is installed on your computer, refer to figure 27 to access the program.



**T500e IRIS Telemetry Kit Parts List**

Ref.	Part No.	Description	Qty.
1	1217304	Shunt [Empco, 250amp/50mv, Metric]	1
2	01685	Washer, Flat, 0.38b 0.88d .08, Ss	2
3	43952	Washer, Lock, Int, 0.31, Ss	2
4	15675	Screw, Hex, M8 X 1.25 X 16, Ss	2
5	41578	Washer, Flat, 06, Ss	2
6	02938	Washer, Lock, Int, 08, Ss	2
7	391403	Screw, Pan, Phl, M4 X 0.70 X 8, Ss	2
8	1210807	Wire, Tie [W/.25" Fir Tree Clip]	2
9	08712	Nut, Hex, Lock, M6 X 1.00, NI, Ss	4
10	32483	Washer, Flat, 0.25, Sae	4
11	9010085	Control Box Assy Kit, Replmt, Telem [USA KIT 9018007]	1
11	9010086	Control Box Assy Kit, Replmt, Telem [EMEA/CA/AUS KITS 9016362/9015487]	1
12	1225123	Bracket Wldt, Control Box	1
13	1034731	Screw, Hex, M6 X 1.00 X 16, Sems, Ss	2
14	315724	Antenna, Telem, 18.0 In [Gprs]	1
15	1210807	Wire, Tie [W/.25" Fir Tree Clip]	3
16	1069580	Label, Mach, Telem [Usa, Intl]	1
17	1217818	Sleeve, Heatshrink, 1.50id, 07.0l	1
18	1070498	Cable, 4ga, Blk [Telemetry]	1
19	1074942	Cable, Assy [USA/CA/AUS KITS 9018007/9015487]	1
19	1074943	Cable, Assy [EMEA KIT 9016362]	1
20	1074595	Harness, Ele, Telem, Shunt	1
21	1075352	Harness, Ele [Telemetry, T500e]	1
22	1071235	Cable, USB	1
23	130773	Tie-Cable, Nyl	3