



T500 Circuit Board Kit



This kit includes the necessary parts to replace a defective circuit board.

INSTALLATION INSTRUCTIONS:

Installation Time: 1 Hour

Special Tools Required: None

NOTICE: To ensure the machine operates at peak performance after installing new circuit board, ensure machine is equipped with latest **FIRMWARE VERSION** (See page 2 for details).

1. Drain the solution and recovery tanks.
2. Park the machine on a level surface and remove key.
3. Disconnect battery cables from battery pack (Figure 1).

⚠ WARNING: Always disconnect battery cables from machine before working on electrical components.



Fig. 1

4. Remove the top two screws from the heat-sink panel and carefully lower panel as shown (Figure 2). Place a piece of cardboard over the battery terminals to prevent contact with metal heat-sink panel.

FOR SAFETY: When servicing machine, keep all metal objects off batteries.

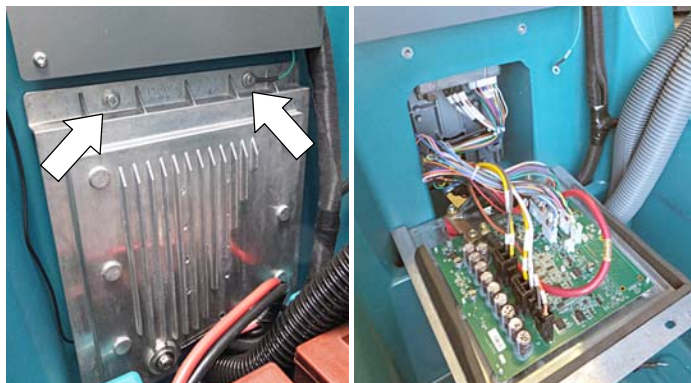


Fig. 2

5. Disconnect wire connectors, bus-bar and red cable from circuit board and remove circuit board from the heat-sink panel (Figure 3). The circuit board is mounted to heat-sink panel with eight torque head screws and six standoffs. Squeeze the standoff flange to release circuit board from panel.

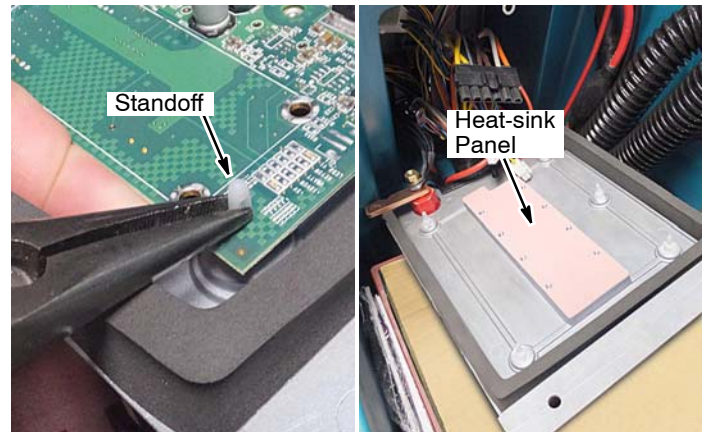
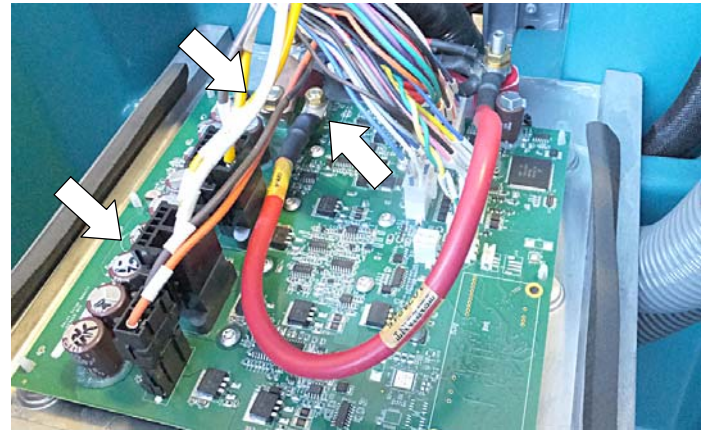


Fig. 3

6. When handling the new circuit board, use the supplied static ground strap as instructed (Figure 4).



Fig. 4

7. Install new circuit board and reconnect the wire connectors and red cable (Figure 5).

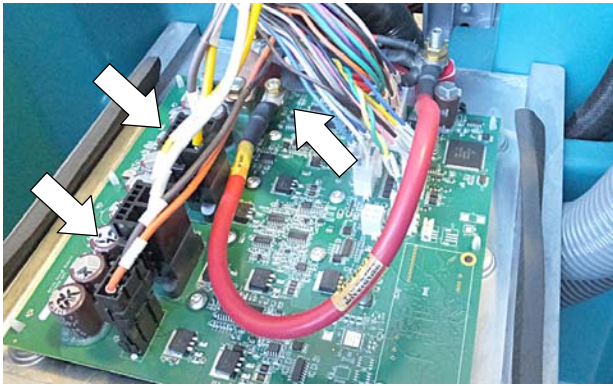


Fig. 5

8. Reconnect the bus-bar and red cable to new circuit board as shown (Figure 6).

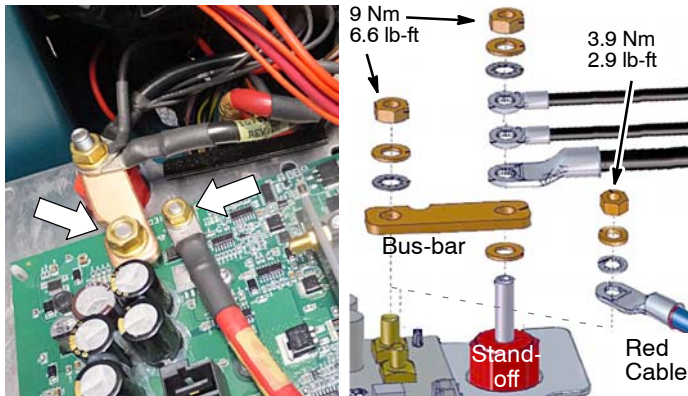


Fig. 6

9. Re-install the heat-sink panel to machine. Make sure to reconnect the ground wire to panel (Figure 7).

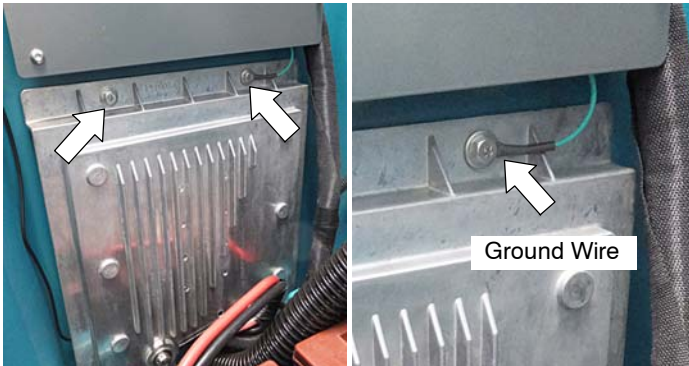


Fig. 7

10. Reconnect battery cables to battery pack (Figure 8).



Fig. 8

11. Update the machine's firmware to latest version.

FIRMWARE VERSION UPDATE INSTRUCTIONS:

The Tennant Service Application Software is required to update the machine's FIRMWARE VERSION. See **SERVICE APPLICATION SOFTWARE** on page 3 to access software .

1. Start the Service Software Application program "Service Diagnostics..."(Figure 9).



Icon on Desktop

Fig. 9

2. After start up, the following screen will appear (Figure 10).

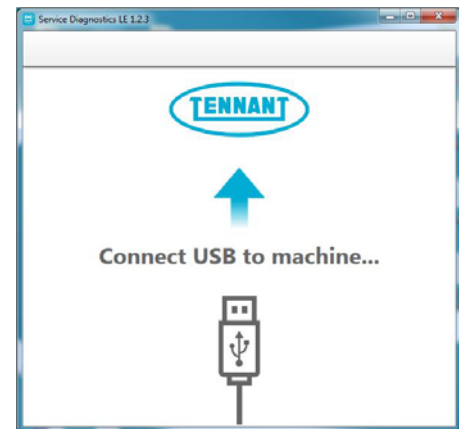


Fig. 10

3. Connect the USB cable to computer and to the USB port on machine as shown. Turn the key switch to the on position (Figure 11).

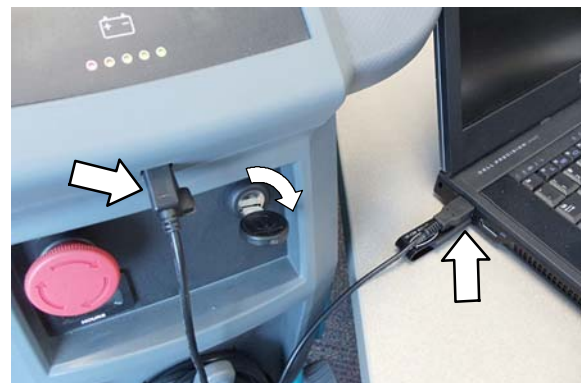


Fig. 11

4. The application software will then connect to the machine (Figure 12). 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. 12

5. Once connected, the home screen will appear (Figure 13). If firmware updates are required, the “Firmware” button will be highlighted in yellow as shown. Press the button to update the machine’s firmware.

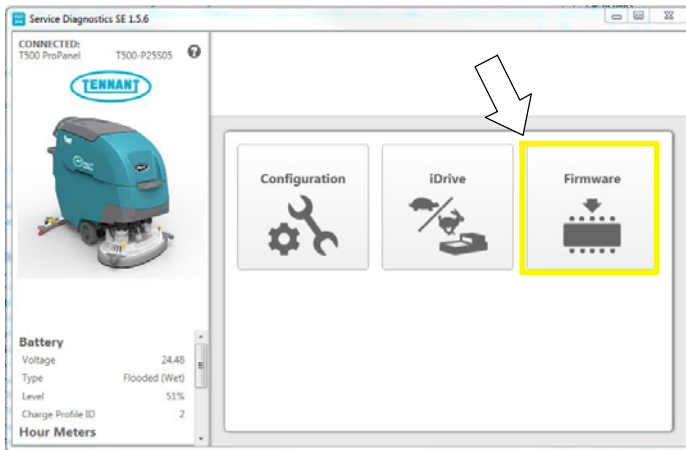


Fig. 13

Continue with the firmware update by pressing the yellow “Update” button as shown (Figure 14).

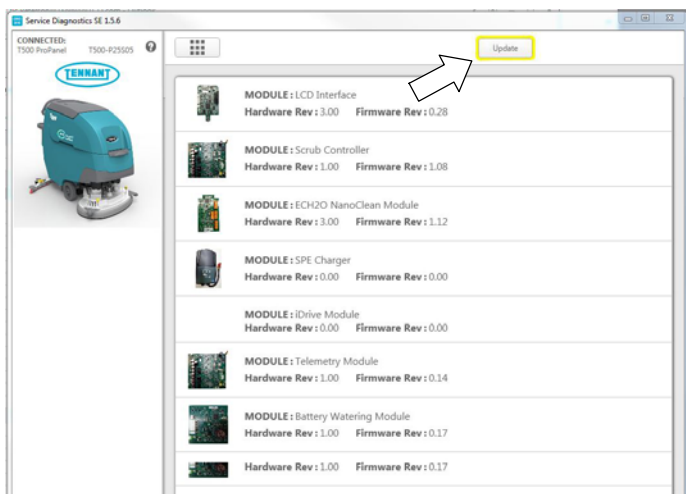


Fig. 14

6. Cycle the key to apply the new firmware updates. Disconnect the USB cable.

SERVICE APPLICATION SOFTWARE:

The Service Application Software is required to update machine’s firmware version.

Service Application Software 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.

For Tennant service personnel equipped with

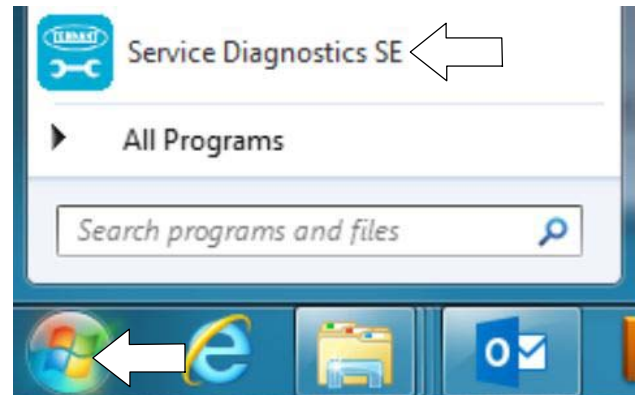
ServiceLink computers, the latest Service Application Software is pre-installed on your computer as shown below.

The service application software is titled “**Service Diagnostics SE**”. (Figure 15).

Icon on Desktop



From Start menu



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

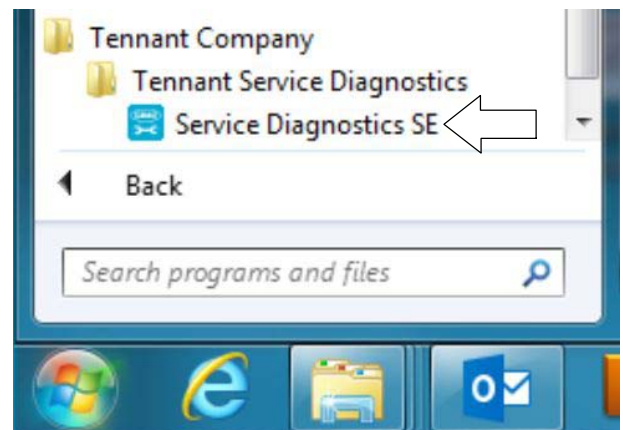


Fig. 15

For other Service Groups, the Service Application Software can be downloaded from the “My Tennant™” 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.

1. Go to www.tennantco.com and click on the “**My Tennant Customer Sign In**” tab in the upper left corner (Figure 16).



Fig. 16

2. Log on to the “My Tennant™” website or register as a new user (Figure 17).



Fig. 17

3. 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 18).

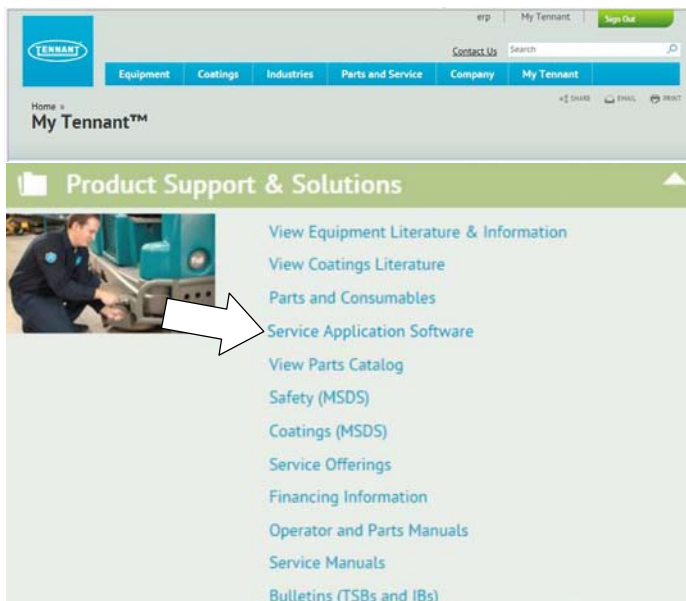


Fig. 18

5. Within the Service Application Software page, click on the link titled “**Service Diagnostics LE version....**” to download the application installer then click the Save button (Figure 19).

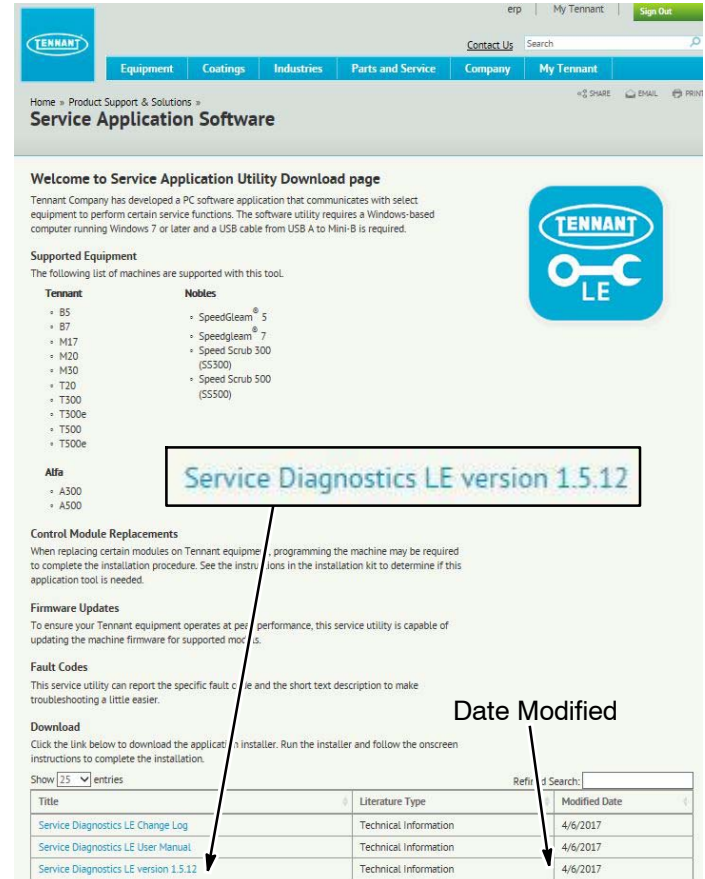


Fig. 19

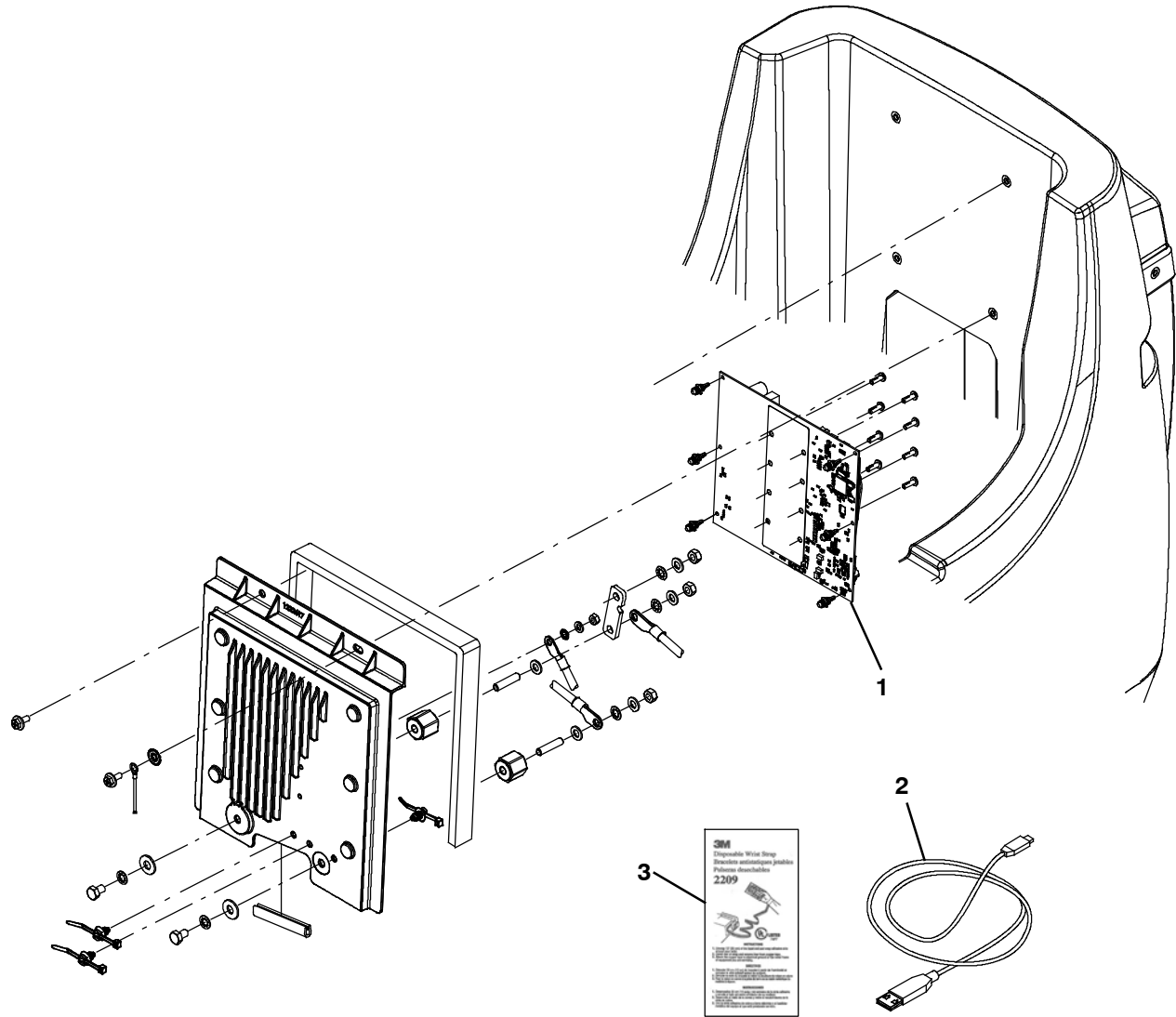
6. Open the “Downloads” folder and locate the “LE_Setup_xxxx” zip file. Open the zip file and double click on the “LE_Setup_xxx” file to install the application software on your computer (Figure 20). Follow instructions on screen to install.



Fig. 20

7. After the application software is installed on your computer, refer to figure 15 to access the program.

T500 Circuit Board Kit Parts List



Ref.	Part No.	Description	Qty.
1	1218915	Circuit board, Assy [T500, CNT, PREMIUM]	1
2	1071235	Cable, USB	1
3	27964	Strap, Ground, Static	1