



Control Panel Replacement Kit

Models: T350, Speed Scrub 350



This kit includes the necessary part to replace a defective control board.

Kit installation is required by TennantTrue service or an authorized Tennant/Nobles service provider.

NOTICE: This kit installation procedure requires access to the Tennant Service Application Software to program the new control board. Refer to page 3 for details.

Authorized Tennant service providers:

If the Tennant Service Application Software is currently installed on your computer, ensure latest software version is installed for new firmware updates.

INSTALLATION INSTRUCTIONS:

Installation Time: 1 Hour

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.

Tools Required: Philips Screwdriver

FOR SAFETY: Before servicing machine, stop on level surface and turn off machine.

INSTALL NEW CONTROL BOARD KIT:

1. Disconnect battery cables from machine.

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

2. Remove the old control panel from operator shroud. Carefully disconnect the wire connectors from the electrical components. Remove the existing switches and hour meter from old panel for reuse (Figure 1).

Take note of wire connections before disconnecting.

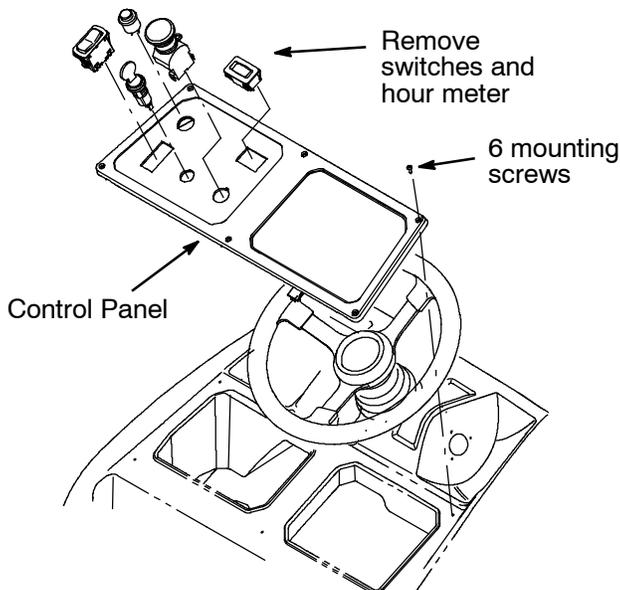


Fig. 1

3. Install the new pre-assembled control panel and reinstall the switches and hour meter.

NOTE: When handling the control panel, it is recommended to use a static wrist strap to protect control board from damage.

4. Reconnect battery cables.
5. Program the new control board as described below.

PROGRAM THE NEW CONTROL BOARD:

The Tennant Service Application Software is required to program the new control board. See **TENNANT SERVICE APPLICATION SOFTWARE** on page 3 to access software .

If you encounter any problems during the programming process please contact the Technical Service Department for support.

1. Start the Service Software Application program “**Service Diagnostics...**” (Figure 2). Refer to Figure 12 for further details to access Software.



Icon on Desktop

Fig. 2

2. After software start up, the following screen will appear (Figure 3).

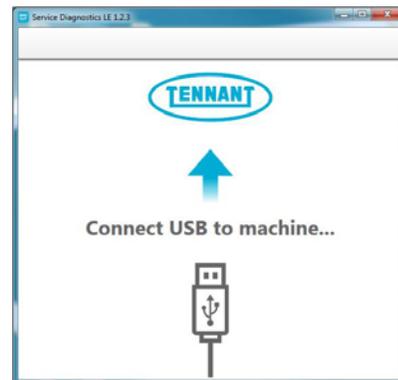


Fig. 3

3. Connect the supplied USB cable to the machine's USB port, located near battery charger, and to the computer (Figure 5).

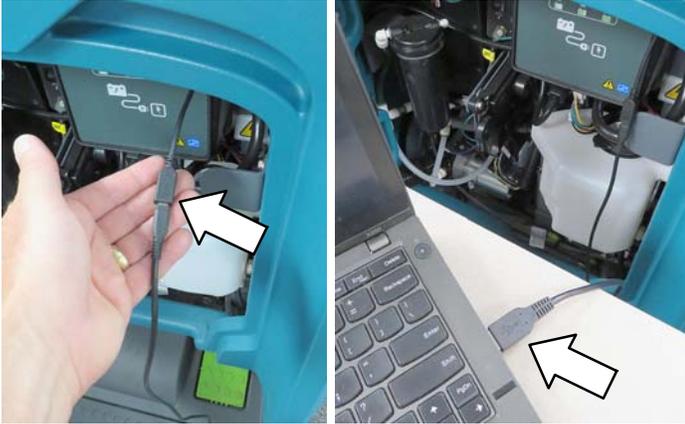


Fig. 4

5. Turn the key switch to the on position. The application software will then connect to the machine (Figure 5). If the application remains on the "Connecting to Machine" screen for an extended period, cycle the key or reconnect the USB cord. If it still fails to connect, restart software or computer.

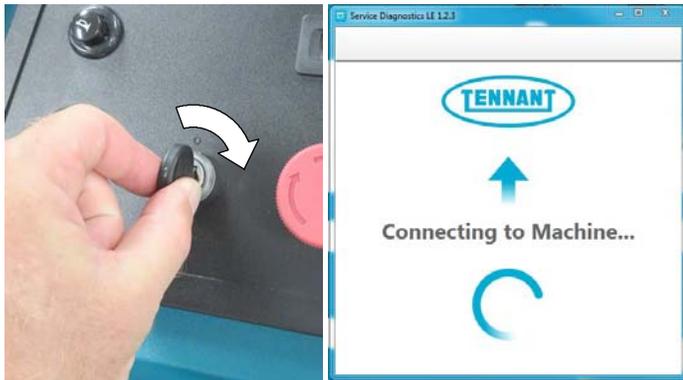


Fig. 5

6. The software will automatically detect that a new control board has been installed by displaying the following screen (Figure 6). Enter the serial number from the machine's serial number label. Then select the appropriate model from the drop-down menu. Press the arrow button to advance to next screen.

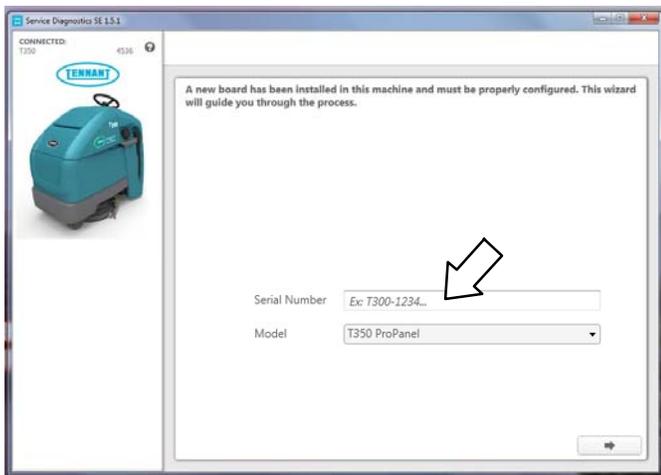


Fig. 6

7. Carefully configure the machine by selecting the installed options (Figure 7). This may require visually inspecting the machine for installed options. After selections are made, press the arrow button to start the programming process for the new control board.

NOTE: If the machine is configured incorrectly, the machine may throw a fault code during machine start up.

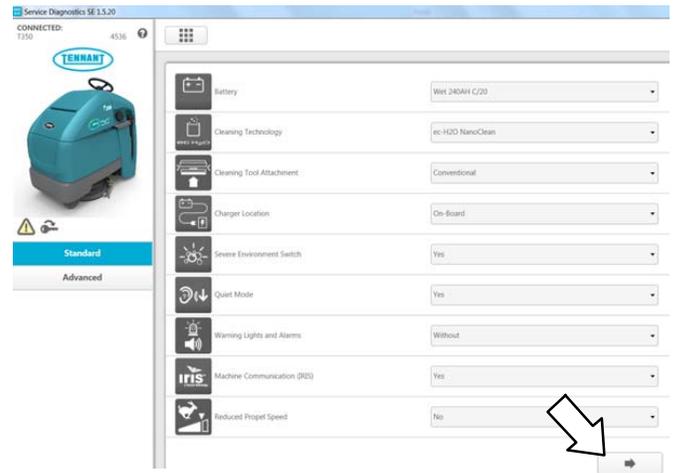


Fig. 7

8. During the programming process the following screen will appear (Figure 8). The programming process may prompt for key cycles. Turn off key, wait a few seconds and turn key back on to continue.

NOTE: This programming process will also automatically update any machine firmware as needed.

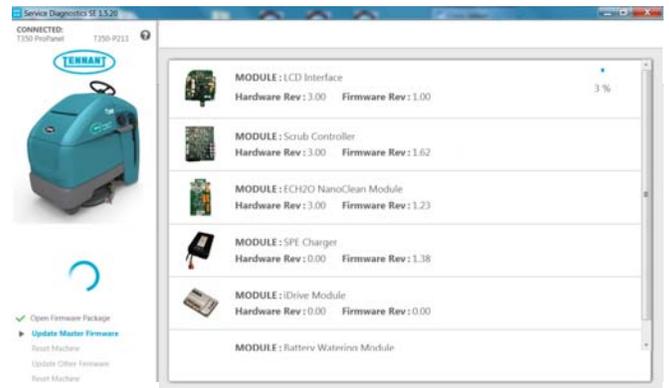


Fig. 8

9. The following screen will appear when the programming process has completed (Figure 9). Press the arrow button to return to the Home Screen. Disconnect the USB cable from the machine and turn key off. The machine is now ready for operation.



Fig. 9

10. Test machine to ensure all installed options are functioning and no fault codes appear. If a fault code appears proceed to next step.
11. First, check for any loose wire connectors at new control board.

Reconnect the application software to the machine and check the machine configuration selections for any incorrect installed options. When the software is reconnected to machine, the following Home page will now appear (Figure 10). Select the Configuration button.

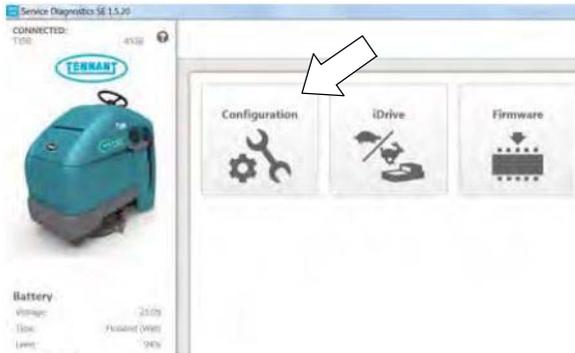


Fig. 10

12. Check and correct the installed options (Figure 11). Then press the down arrow button to reprogram the machine. A green check will appear next to the down arrow button when programmed.

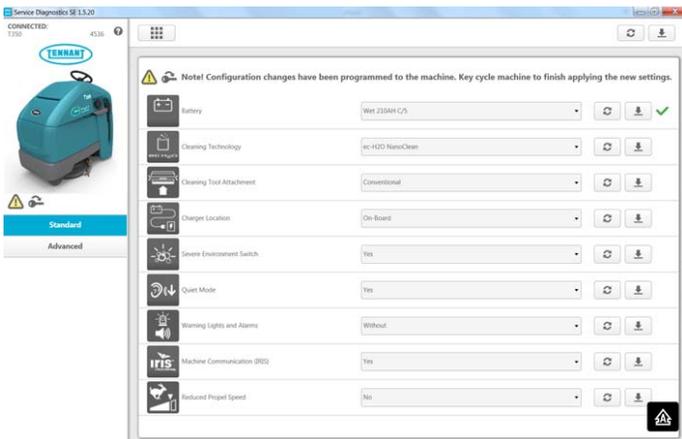


Fig. 11

13. Cycle key to apply the corrected configuration setting. Disconnect USB cable.
14. Retest machine to ensure all installed options are functioning.

TENNANT SERVICE APPLICATION SOFTWARE:

The Tennant Service Application Software is required to program the new control board. The software can be accessed or downloaded as described below.

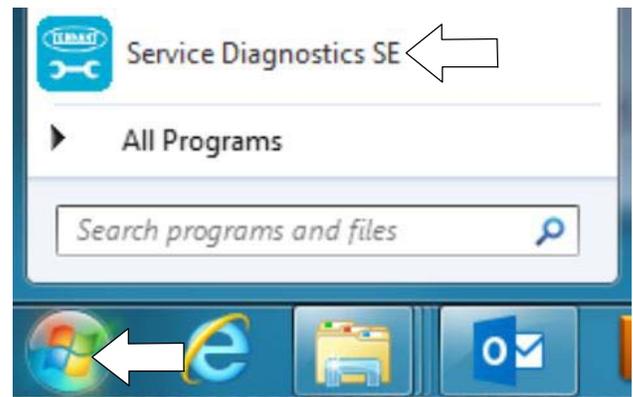
TennantTrue Service with ServiceLink computers:

The software is pre-installed on your computer as shown below. The software application is titled “Service Diagnostics” (Figure 12).

Icon on Desktop



From Start menu



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

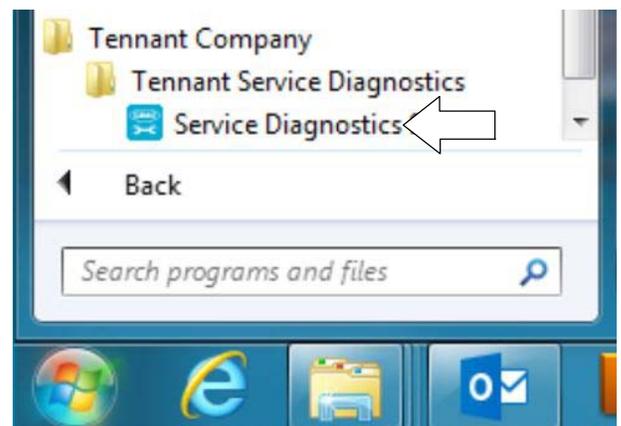


Fig. 12

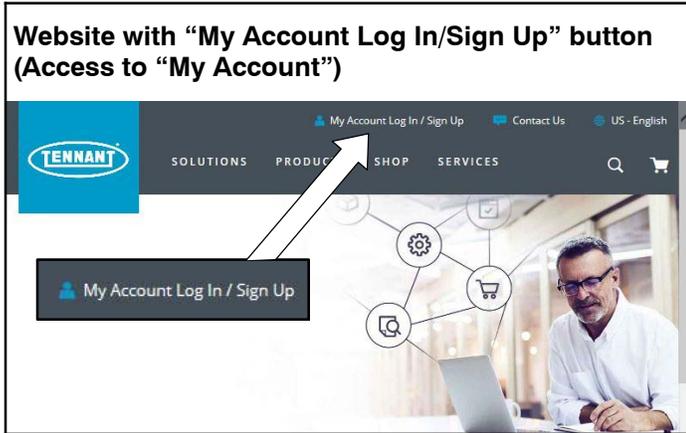
Authorized Tennant Service Providers:

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**. Depending on your geographical location, the website may have a **“My Account 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 13).

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



OR



Fig. 13

Website with “My Account Log In/Sign Up” button:

1. Press “My Account Log In/Sign Up” to open or create an account (Figure 14).

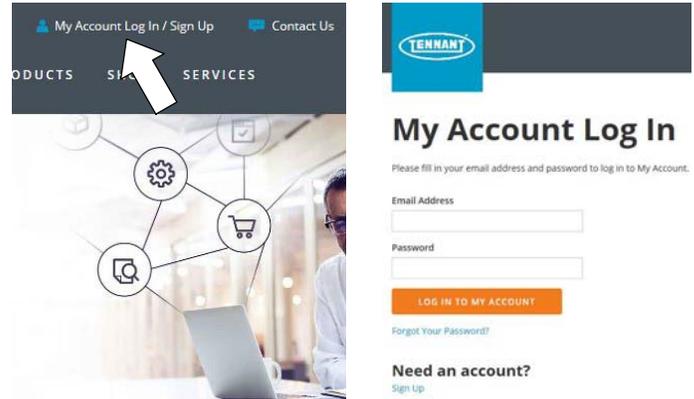


Fig. 14

2. Once logged in to the “My Account” website, click on the **“INTERNAL RESOURCES”** link as shown below (Figure 15).

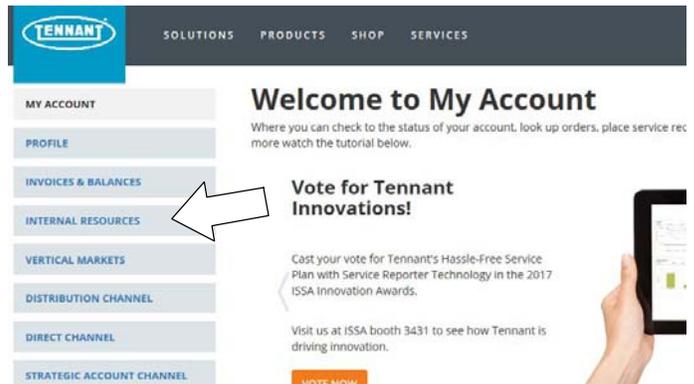
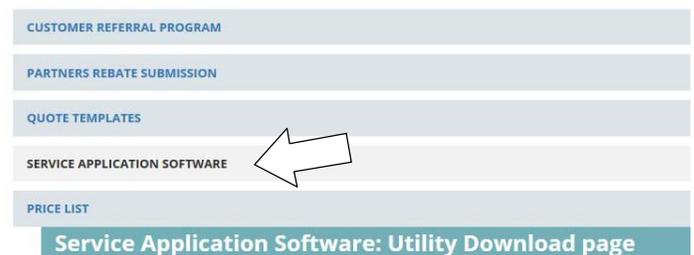


Fig. 15

3. Click on the **“SERVICE APPLICATION SOFTWARE”** link as shown below (Figure 16).



Supported Equipment

Tennant	Nobles	Alfa
<ul style="list-style-type: none"> • B5 • B7 • M17 	<ul style="list-style-type: none"> • SpeedGleam® 5 • Speedgleam® 7 • Speed Scrub® 300 	<ul style="list-style-type: none"> • A300 • A500

Fig. 16

4. Within the Service Application Software page, click on the link titled “**Service Diagnostics LE version x.x.xx**” (Figure 17).



Fig. 17

5. To download the service software continue to click as instructed then click the Save button (Figure 18).

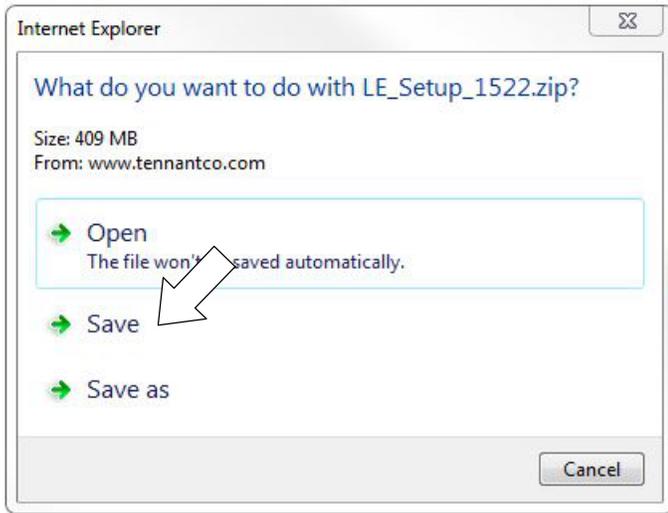


Fig. 18

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 19). Follow instructions on screen to install.



Fig. 19

7. After the service application software is installed on your computer, refer to figure 12 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 20).

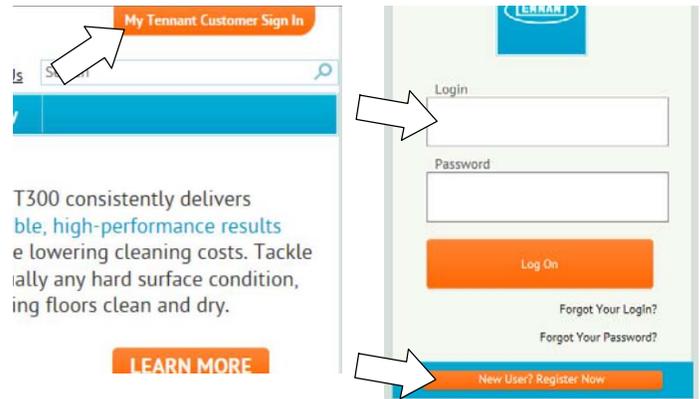


Fig. 20

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 21).

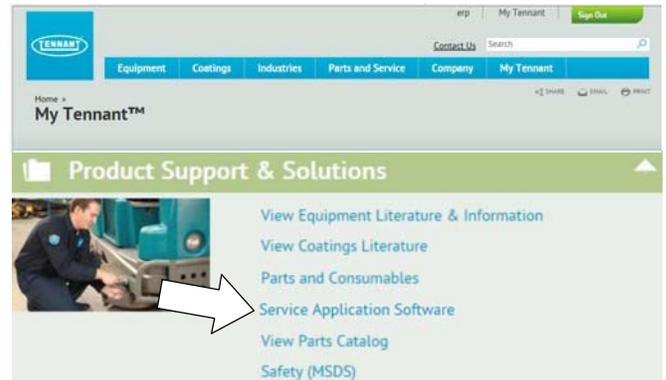


Fig. 21

3. Within the Service Application Software page, click on the link titled **“Service Diagnostics LE version x.x.xx”** to download the application installer then click the Save button (Figure 22).

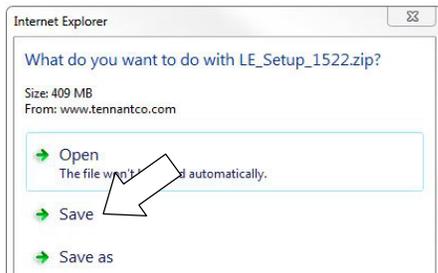
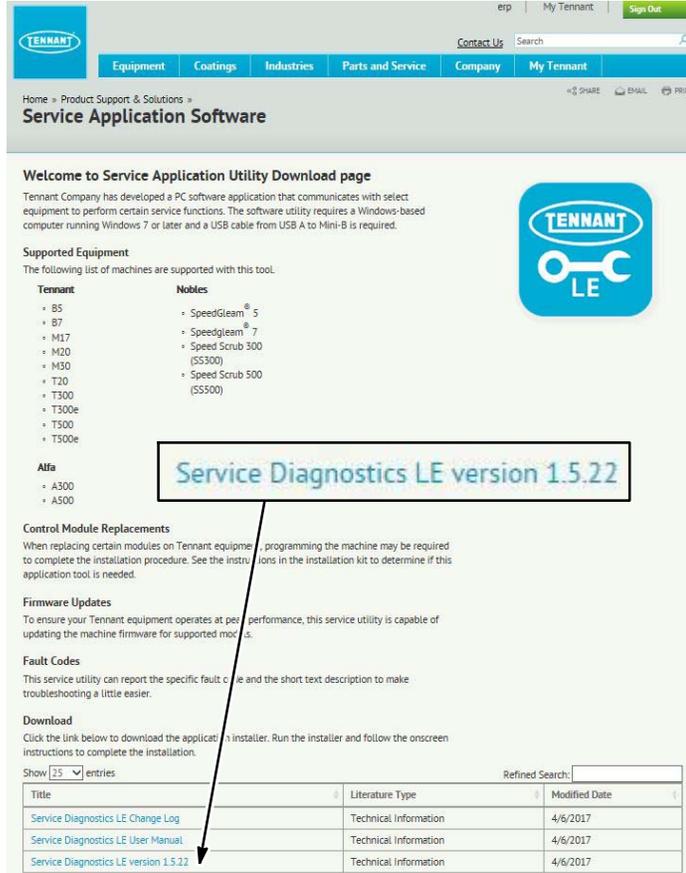


Fig. 22

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 23). Follow instructions on screen to install.

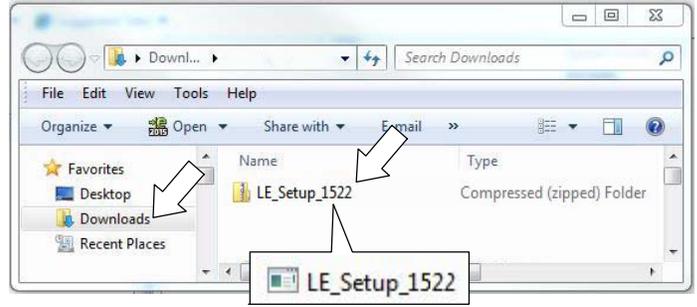
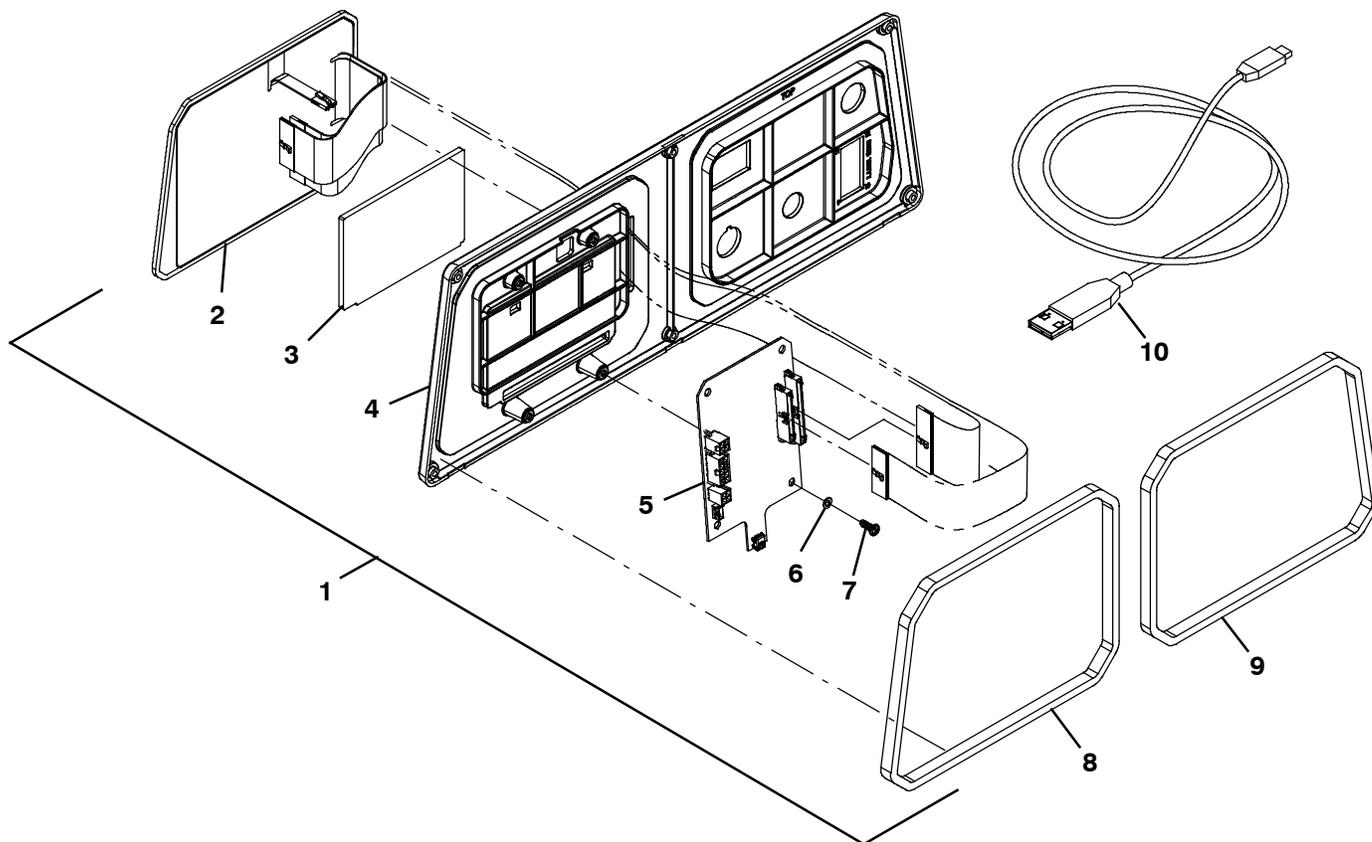


Fig. 23

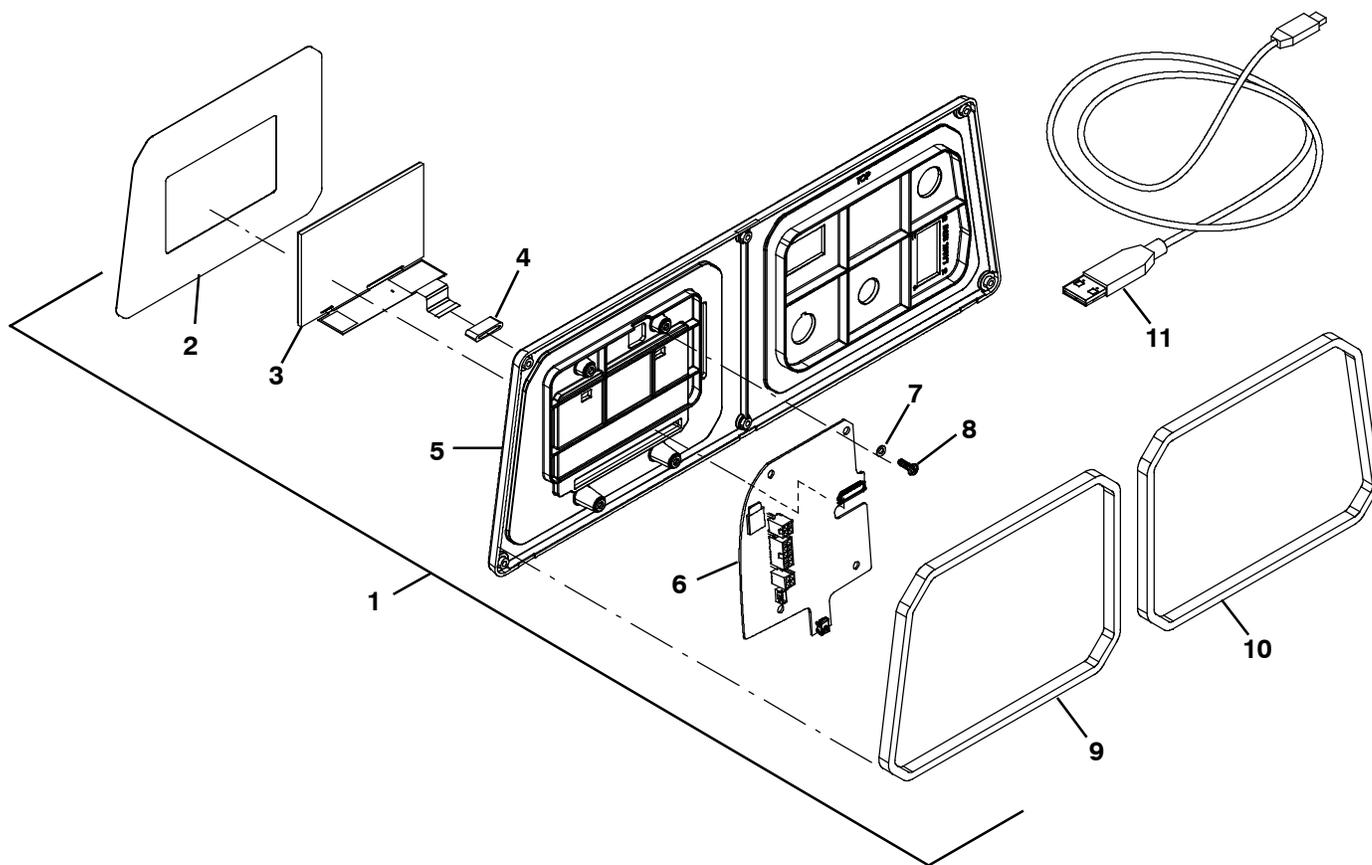
5. After the software is installed on your computer, refer to figure 12 to access the program.

Membrane Control Panel Kit Contents (p/n 9040204)



Ref.	Part No.	Description	Qty.
1	9040204	Control Board Kit, Membrane	1
2	1224562	Panel, Overlay [Membrane, Tennant]	1
3	1232232	Plate, Spacer, Membrane	1
4	1231462	Panel, Instmt, Oprtr station	1
5	1228044	Circuitboard Assy [User interface]	1
6	1202860	Washer, Flat, 0.17B 0.31D .03, Nyl	4
7	49162	Screw, Pan, Phl, 08- 16 x 0.50, f/plstc	4
8	1231800	Gasket, Panel, Instr, RH	1
9	1231801	Gasket, Panel, Instr, LH	1
10	1071235	Cable [USB, 2M, A- Male to Mini- B- Male]	1

Pro- Panel Control Panel Kit Contents (p/n 9040205)



Ref.	Part No.	Description	Qty.
1	9040205	Control Board Kit, Membrane	1
2	1225321	Panel, Overlay [Pro- Panel]	1
3	1210743	Display, Color, 5 in, with touch panel	1
4	1231823	Inductor, Ribbon Cable	1
5	1231462	Panel, Instmt, Oprtr station	1
6	1228045	Circuitboard Assy [User interface]	1
7	1202860	Washer, Flat, 0.17B 0.31D .03, Nyl	4
8	49162	Screw, Pan, Phl, 08- 16 x 0.50, f/plstc	4
9	1231800	Gasket, Panel, Instr, RH	1
10	1231801	Gasket, Panel, Instr, LH	1
11	1071235	Cable [USB, 2M, A- Male to Mini- B- Male]	1