T500 Spray Nozzle Rinse Kit

This kit includes the necessary parts to add the spray nozzle rinse kit to a standard model.
Kit installation is required by Tennant *True* Service or authorized distributor service providers.

INSTALLATION INSTRUCTIONS:

Installation Time: 2 Hours

Kit Installation Requirements: Tennant Service Application Software and USB cable (p/n 107235). *Computer System Requirements: Windows® 7 OS, Microsoft .NET Framework 4.5 or later, USB Port.*

ATTENTION: Authorized distributor service providers. If the Tennant Service Application Software is currently installed on your computer, ensure latest software version is installed for new firmware updates.

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.
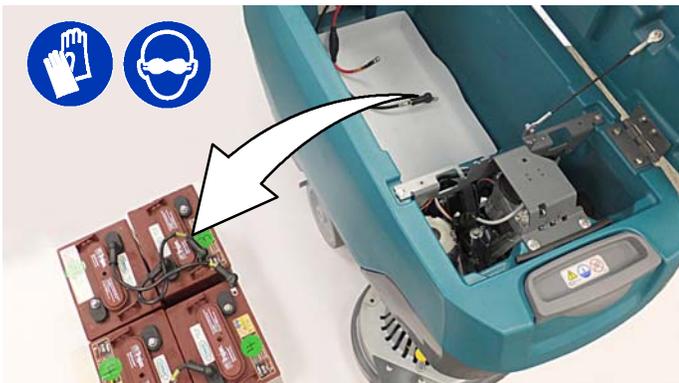
Fig. 1

4. On a non-marring surface, with assistance, carefully lay the machine on its left side to access bottom side of machine (Figure 2). **Before laying machine on its side, remove scrub head from machine or use an elevated platform to prevent possible damage to scrub head assembly.**

Fig. 2

INSTALL SPRAY NOZZLE PUMP ASSEMBLY:

1. Remove solution filter assembly as shown (Figure 3).

Fig. 3

2. Disconnect the brake spring and the designated solution hose connections (Figure 4).

Brake Spring

If equipped, ec-H2O pump solution hose

Solution hose
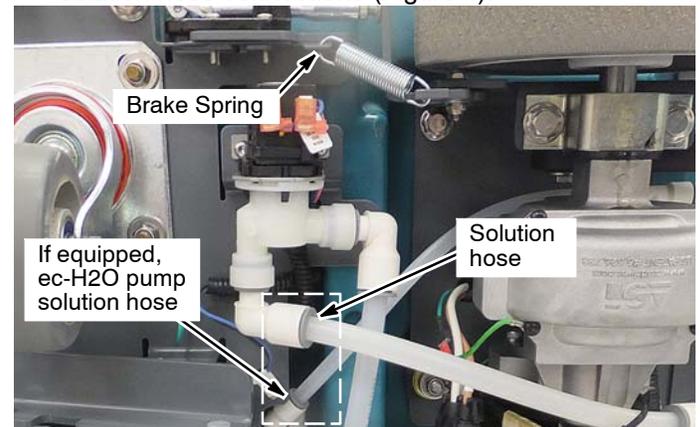
Fig. 4

3. Remove four screws from the machine frame and carefully lower frame to floor. Disconnect the ec- H2O pump wire connection, if installed (Figure 5).
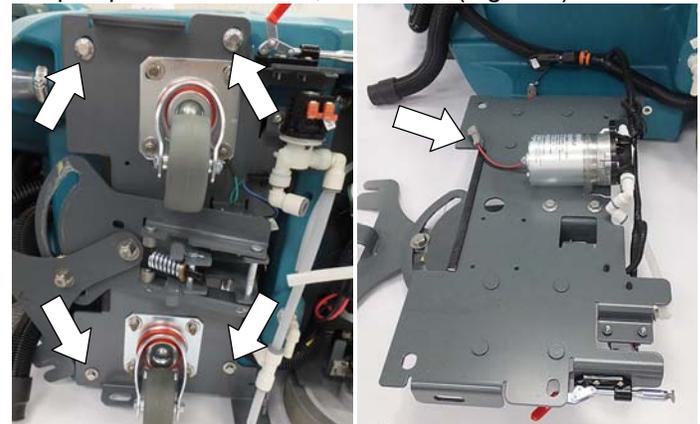
Fig. 5

4. Using hardware shown, mount the spray pump to the machine frame as shown (Figure 6).

M5 Lock Nut [09739]

#10 Flat Washer [01683]

M5x30 Hex Screw [1228033]
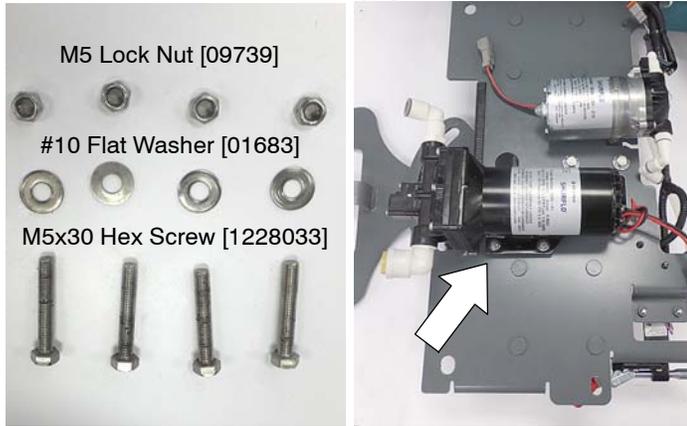
Fig. 6

5. Locate the factory installed spray pump wire harness connector and connect to pump (Figure 7).

Factory installed harness
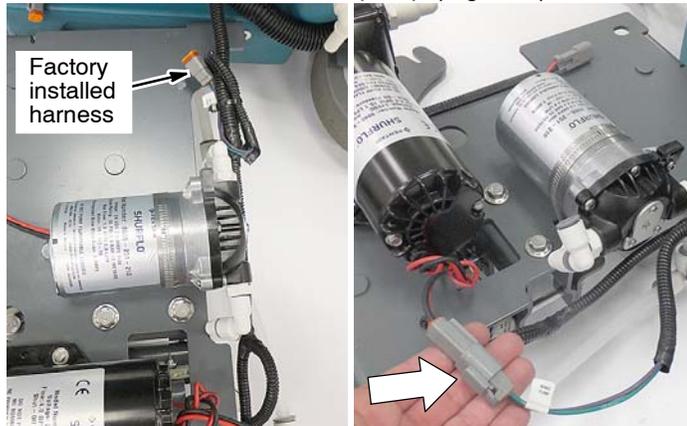
Fig. 7

6. Install new T-fitting as shown (Figure 8).

Cut 2 in/50 cm from hose

T-Fitting [1212806]
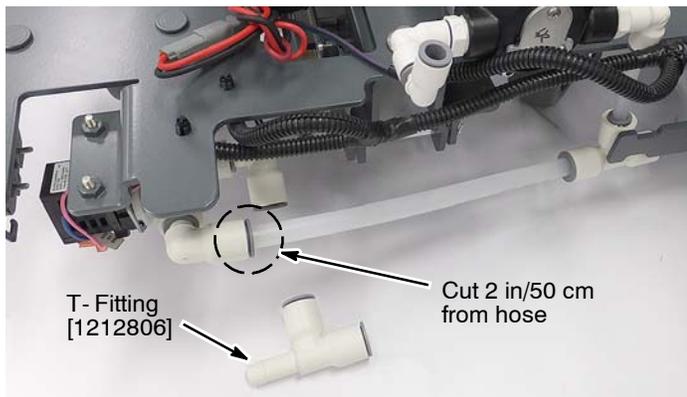
T-Fitting

Fig. 8

7. Install the 16 in/40 cm solution hose to spray pump and T-fitting as shown (Figure 9).

16 in/40 cm Solution hose

Fig. 9

8. Reconnect wire connector to e-H2O pump and refasten machine frame (Figure 10).
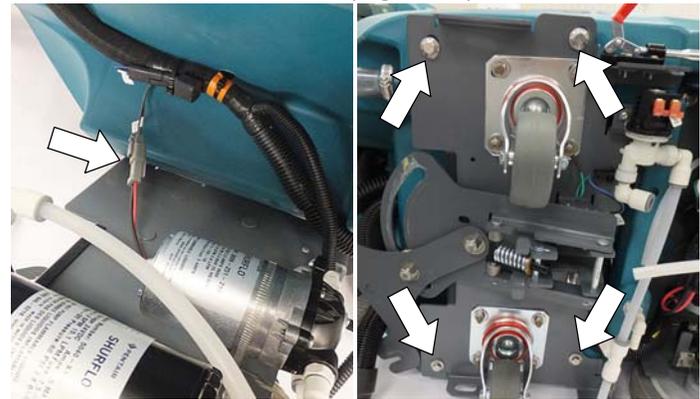
Fig. 10

9. Reconnect spring and solution hoses (Figure 11).

Spring

ec-H2O pump solution hose

Solution hose
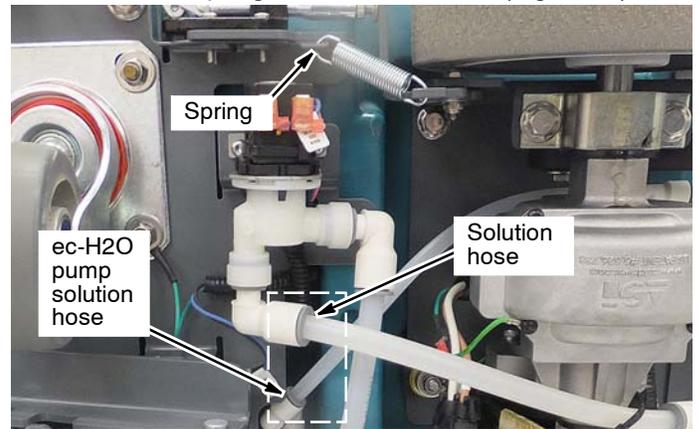
Fig. 11

10. Reinstall solution filter assembly (Figure 12).
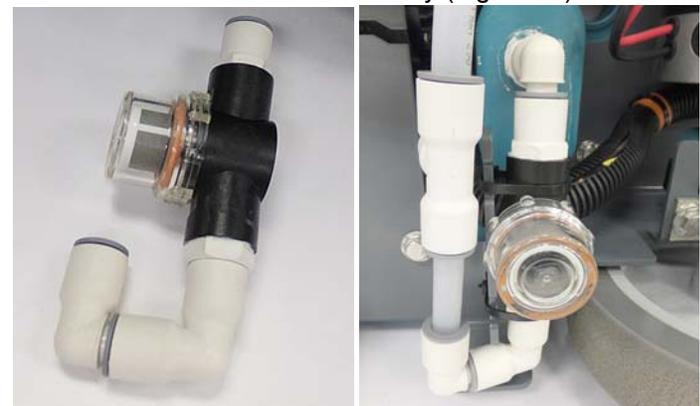
Fig. 12

INSTALL SPRAY NOZZLE ASSEMBLY:

1. Using the two thread cutting screws, install the spray nozzle hanger bracket below the right side accessory rail as shown (Figure 13).

M5x16 Screws [1018155]

Bracket [1227293]
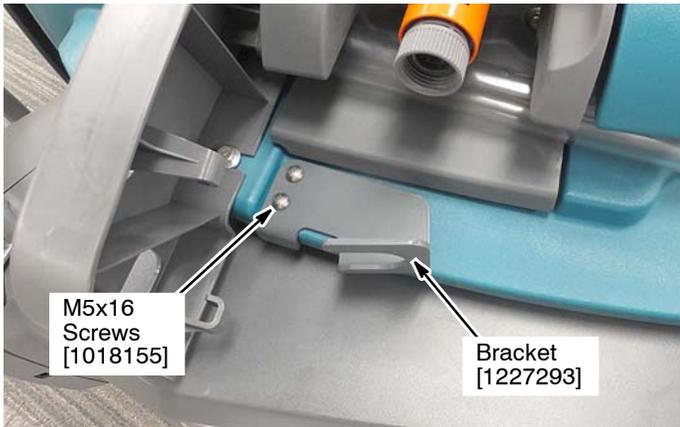
Fig. 13

2. Carefully stand machine upright.

3. Install spray nozzle assembly as instructed (Figure 14).

Spray Nozzle Assembly

Hose Clamp [40678]

Sems Screw [1034731]

Fig. 14

4. Connect the spray nozzle hose to the spray pump and secure the hose to the machine with clamp as shown (Figure 15). Store spray nozzle on hanger bracket.

Fig. 15

INSTALL SPRAY PUMP CIRCUIT BREAKER:

1. Remove two screws from circuit breaker panel and lower panel as shown (Figure 16).
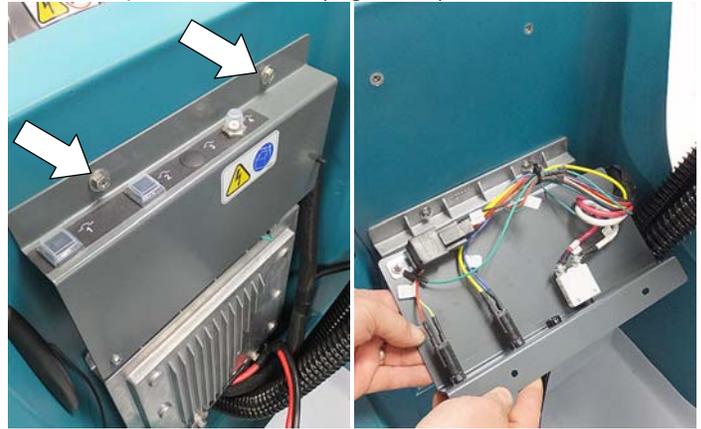
Fig. 16

2. Install the 15A circuit breaker with boot into the circuit breaker panel as shown (Figure 17).

Circuit Breaker Boot [1064191]

15A Circuit Breaker [1064188]
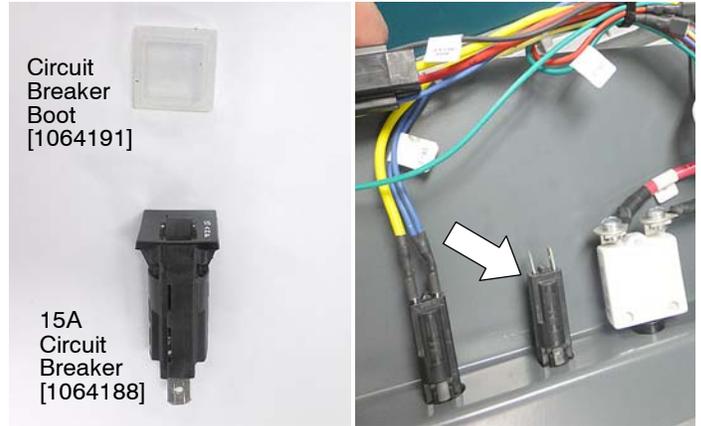
Fig. 17

3. Connect the factory installed CB-3 green and red wires to the 15A circuit breaker as shown (Figure 18). Refasten the circuit breaker panel to the machine.
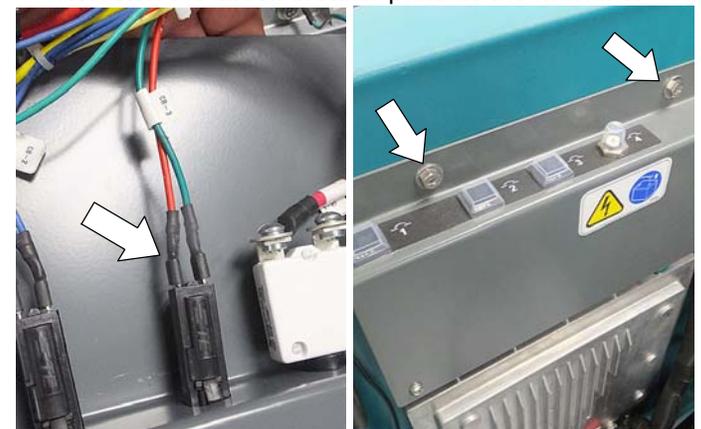
Fig. 18

INSTALL SPRAY NOZZLE SWITCH:

1. Remove the two lower torque screws at bottom of control console and carefully lower console cover as shown (Figure 19). T-25 torque screwdriver required.
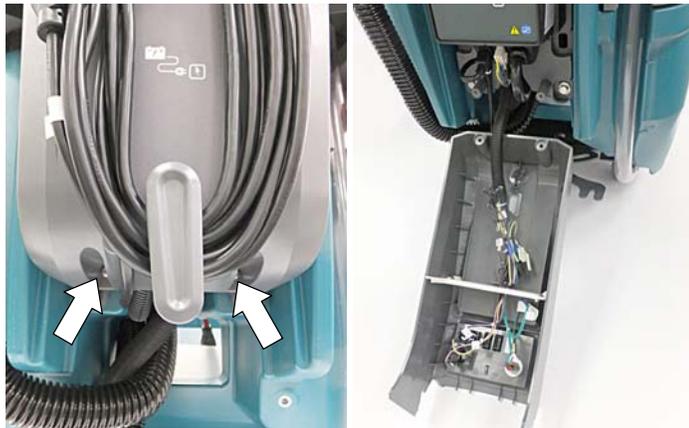
Fig. 19

2. Locate the factory installed black and purple spray pump switch wires that are cable-tied to the main harness. Cut cable-tie. Lift the console partition and route the two wires to the switch area (Figure 20). Replace partition.

Console Partition

Black and Purple Spray Pump Switch Wires

Switch Area
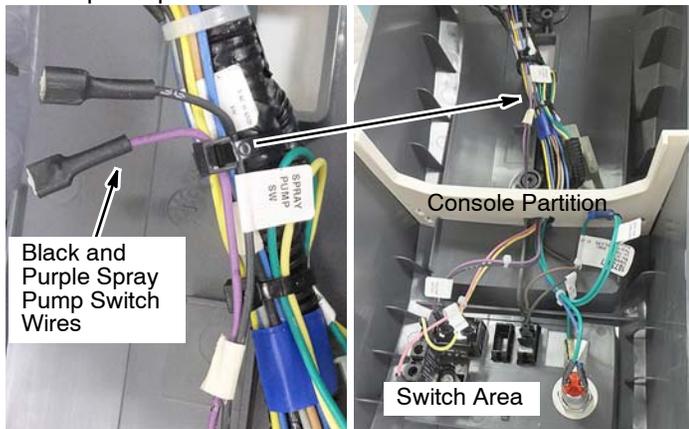
Fig. 20

3. Remove the switch plug from the console and install the spray pump switch in the orientation as shown (Figure 21).

Spray Pump Switch [1044393]
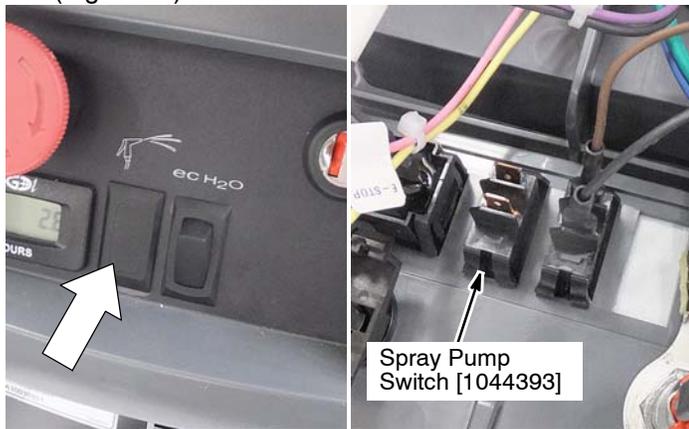
Fig. 21

4. Connect the factory installed spray pump wires, 13G/BLK and 27/PUR, to switch as shown (Figure 22).

27/PUR Wire

13G/BLK Wire
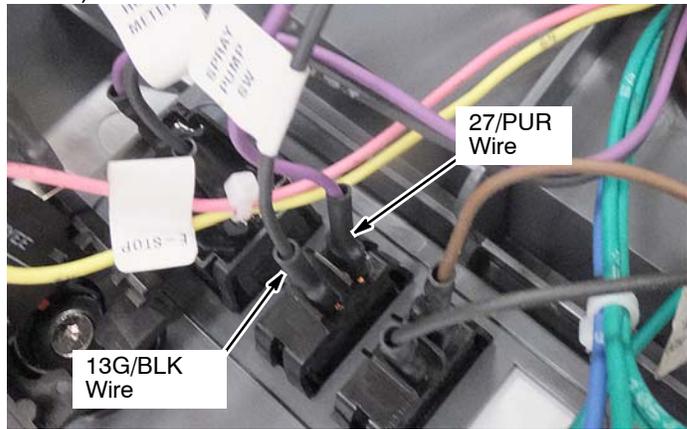
Fig. 22

5. Replace the control console. When replacing console, engage the top half of the console first then align the lower screw mounting locations (Figure 23). Make sure the side panels align and engage correctly before replacing the lower torque screws.

Fig. 23

6. Reinstall batteries and reattach scrub head if removed (Figure 24).

FOR SAFETY: When handling batteries, wear protective gloves and eye protection. Avoid contact with battery acid.
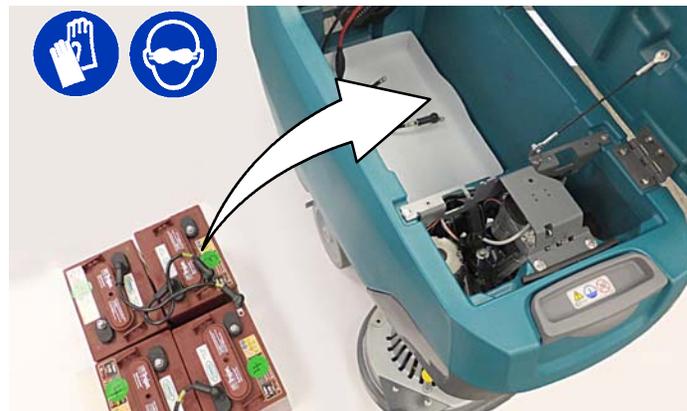
Fig. 24

RECONFIGURE THE MACHINE'S CONTROL BOARD FOR SPRAY NOZZLE OPTION:

Tennant Service Application Software is required to reconfigure the machine's control board to recognize the installed spray nozzle option. See **TENNANT SERVICE APPLICATION SOFTWARE** on page 6 to access software.

ATTENTION: Authorized distributor service providers. If the Service Application Software is currently installed on your computer, ensure latest software version is installed for new firmware updates.

1. Start the Service Software Application program (Figure 25). Refer to Figure

Icon on Desktop

Fig. 25

2. After start up, the following screen will appear (Figure 26).
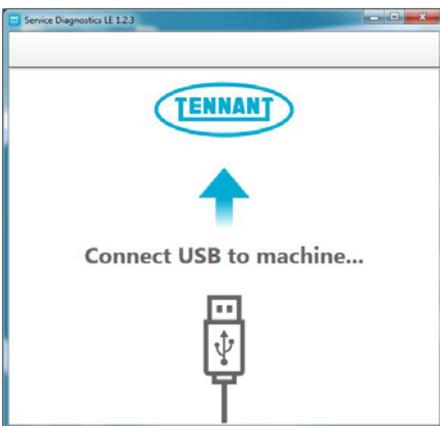
Fig. 26

3. Connect the USB cable *(not included with kit, p/n 107235)* to computer and to the USB port on machine as shown. Turn the key switch to the on position (Figure 27).
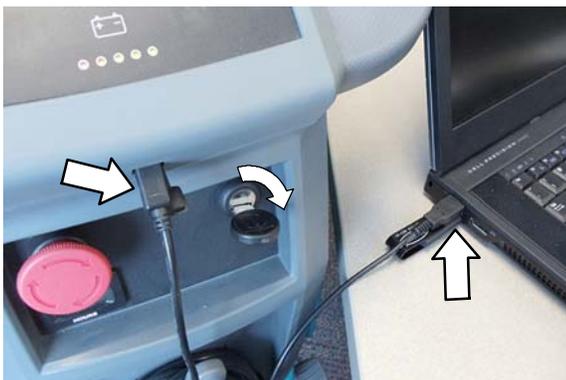
Fig. 27

4. Once connected, the home screen will appear (Figure 28). Before configuring the machine with the new installed option, first check if any firmware updates are required. The **"Firmware"** button will be highlighted in yellow if updates are required. Press button to update firmware (Figure 29).
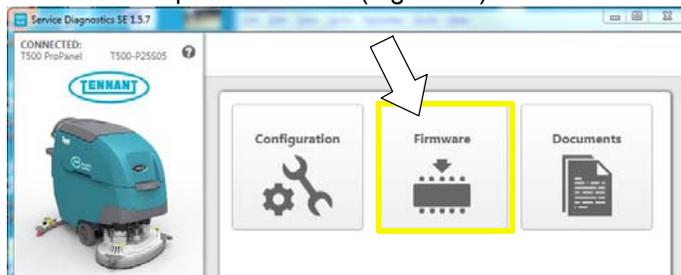
Continue with the firmware update by pressing the yellow "Update" button as shown

Fig. 28

5. To configure machine with the Spray nozzle option, press the **"Configuration"** button (Figure 29).
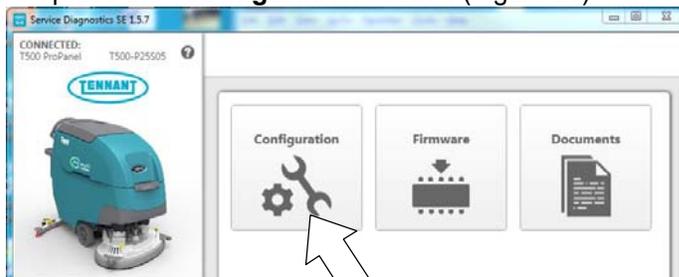
Fig. 29

6. Change the **"Spray Nozzle with Hose"** configuration to **"Yes"** (Figure 30). Then press the down arrow button to program the machine. A green check will appear next to the down arrow button when programmed.
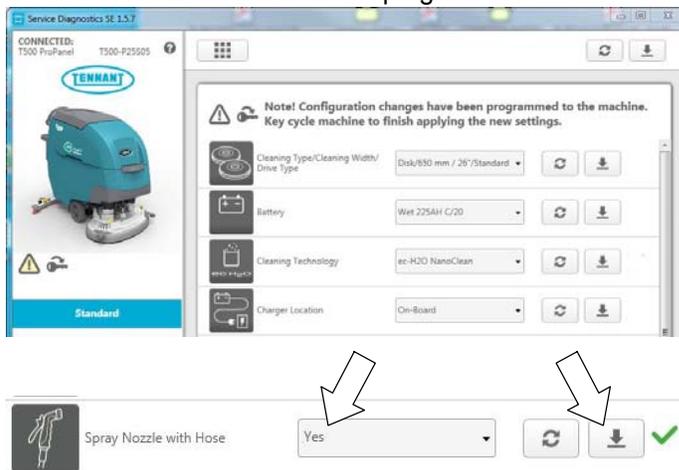
Fig. 30

7. Cycle the key to apply the new machine configuration. Disconnect the USB cable.

TENNANT SERVICE APPLICATION SOFTWARE:

The Tennant Service Application Software is required to reconfigure the machine's control board to recognize the installed spray nozzle option. The software can be accessed or installed 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 31).

See PROGRAM THE CONTROL BOARD on next page for programing instructions.

Icon on Desktop

From Start menu
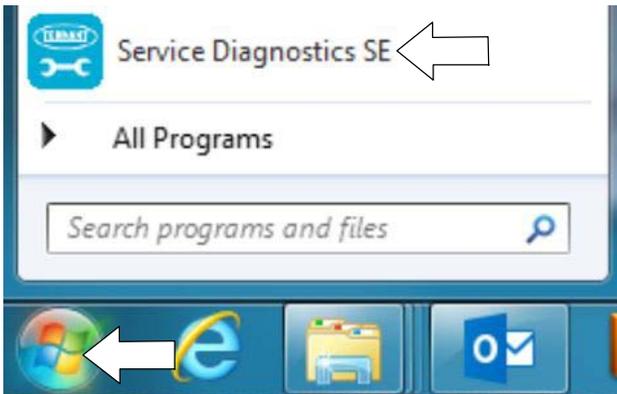
From Start menu > All Programs > Tennant Company > Tennant Service Diagnostics
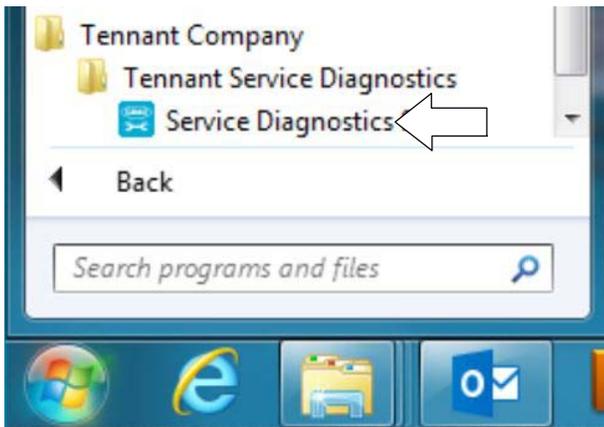
Fig. 31

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**. 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 32).

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

Website with "My Account Log In/Sign Up" button (Access to "My Account")

OR

Website with "My Tennant Customer Sign In" tab (Access to My Tennant)
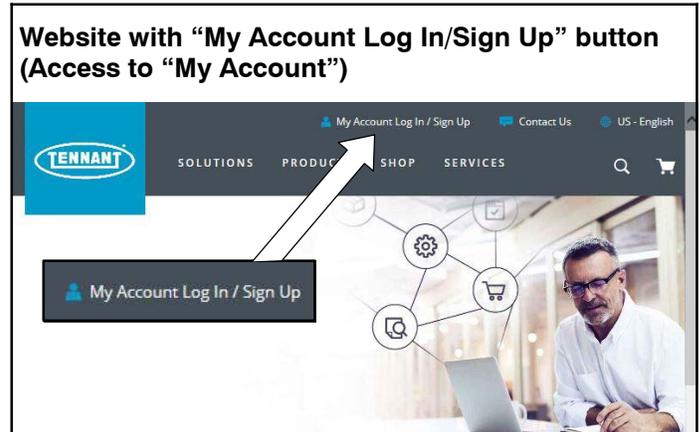
Fig. 32

Website with "My Account Log In/Sign Up" button:

1. Press "My Account Log In/Sign Up" to open or create an account (Figure 33).
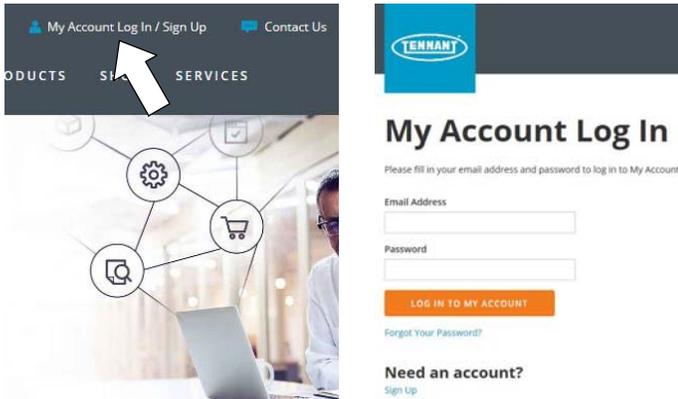
Fig. 33

2. Once logged in to the "My Account" website, click on the **"INTERNAL RESOURCES"** link as shown below (Figure 34).
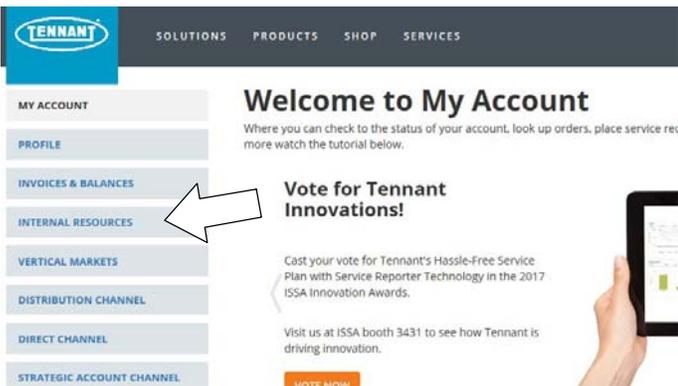
Fig. 34

3. Click on the **"SERVICE APPLICATION SOFTWARE"** link as shown below (Figure 35).
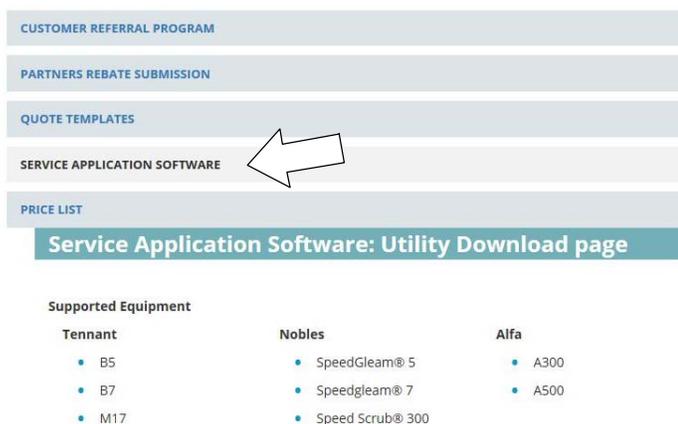
Fig. 35

4. Within the Service Application Software page, click on the link titled **"Service Diagnostics LE version 1.5.22" or later** (Figure 36).

Fig. 36

5. To download the service software continue to click as instructed then click the Save button (Figure 37).
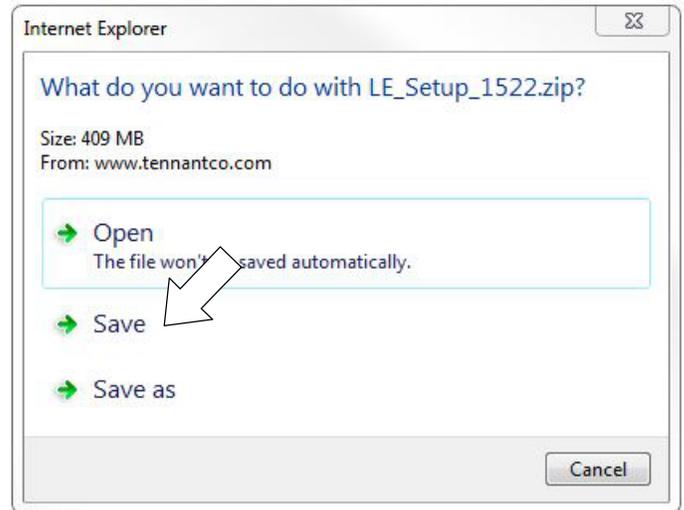
Fig. 37

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. 38

7. After the service application software is installed on your computer, refer to figure 31 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 39).
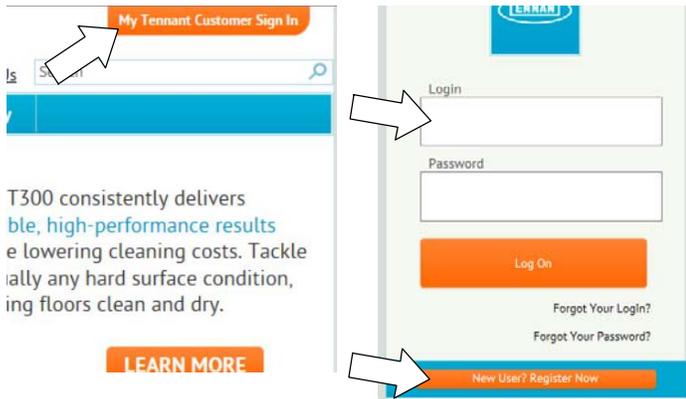
Fig. 39

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 40).

Fig. 40

3. Within the Service Application Software page, click on the link titled **"Service Diagnostics LE version 1.5.22" or later** to download the application installer then click the Save button (Figure 41).
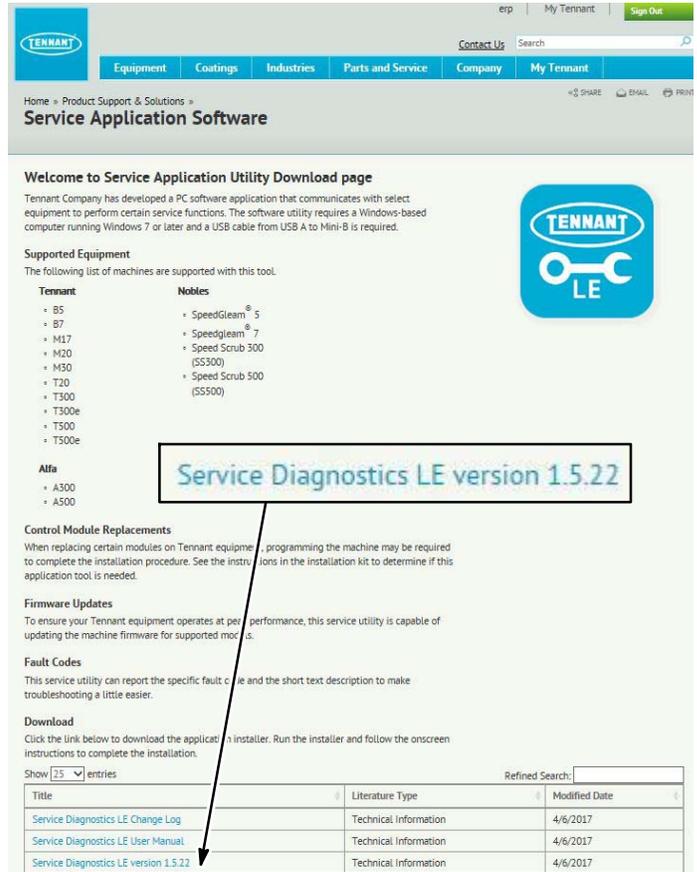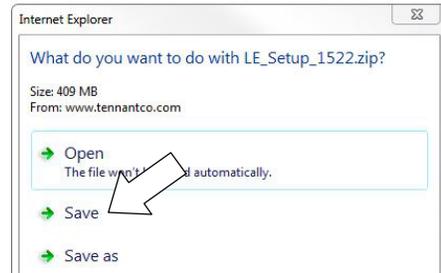
Fig. 41

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 42). Follow instructions on screen to install.

Fig. 42

5. After the application software is installed on your computer, refer to figure 31 to access the program.

Spray Nozzle Rinse Kit Parts List
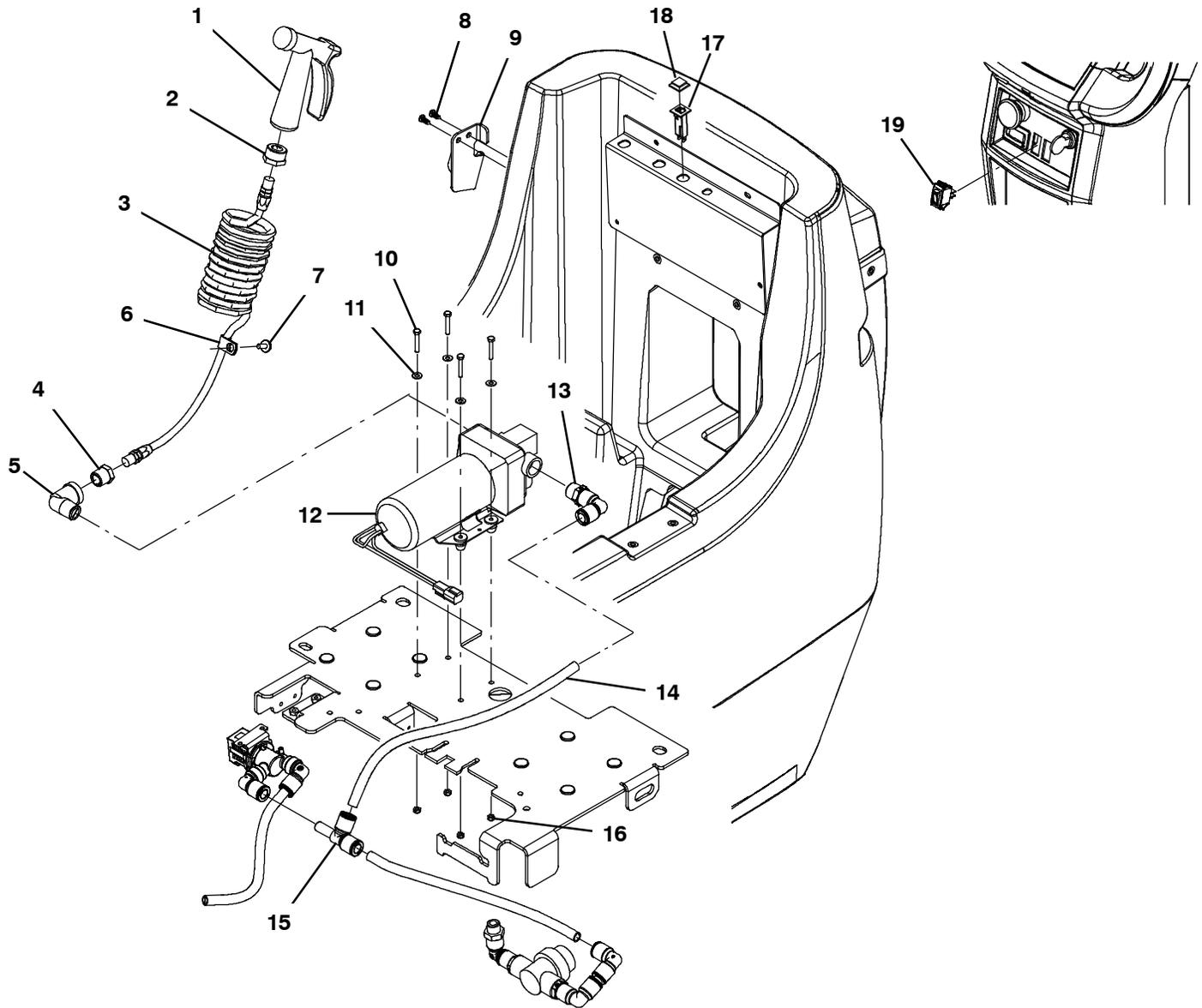
Ref.	Part No.	Description	Qty.
	9015481	Rinse Kit, Tank, Rec [T500] , Ci	1
1	769785	Nozzle, Spray, Hand	1
2	1220554	Fitting, Brs, Str, Pf04/Garden Hose	1
3	160132	Hose Assy, 0.25id X 12ft Coil	1
4	1220546	Fitting, Brs, Str, Pm08/Pf04	1
5	1220131	Fitting, Plstc, E90, 1/2" Npt Male- Femal	1
6	40678	Clamp, Cable, Stl, 0.44d X 0.62w, 1hole	1
7	1034731	Screw, Hex, M6 X 1.00 X 16, Sems, Ss	1
8	1018155	Screw, Pan, Phl, M5 X 0.80 X 16, Tcut,Ss	2
9	1227293	Bracket, Hanger, Hose	1
10	1228033	Screw, Hex, M5 X 0.80 X 30, Ss	4
11	01683	Washer, Flat, 10, Ss	4
12	1220123	Pump, Soltn, Ele, 24 Vdc, 60 Psi, 4 Gpm	1
13	1212764	Fitting, Plstc, E90, Qf08/Pm08, Swivel	1
14	9014145	Hose, Afmkt, Pe, .375id .50od, 05ft	1
15	1212806	Fitting, Plstc, Tee, Qf08/Qf08/Qm08	1
16	09739	Nut, Hex, Lock, M5 X 0.80, NI, Ss	4
17	1064188	Circuitbreaker, 15.0a, Resetable	1
18	1064191	Boot, Circuitbreaker	1
19	1044393	Switch, Rocker, Spst, Mom	1