

# **INSTRUCTION BULLETIN**

No. 9015142 Machine: M17

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Rev. 00

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in the machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation instructions for kit number 9017253

### SYNOPSIS:

This kit contains the parts needed to install a Pro- Panel kit on M17 sweeper- scrubbers. Please follow step-by-step instructions.

### **SPECIAL TOOLS / CONSIDERATIONS: NONE**

(Estimated time to complete: 5 hours)



#### PROTECT THE ENVIRONMENT

Please dispose of packaging materials, used machine components such as batteries and fluids in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

### PREPARATION:

- If steering pod assembly on machine is operable, turn the key to the ON position, check the machine hours on the hour meter, and record the reading from the hour meter. The new steering pod assembly (1) must be set to the same hours as the previous steering pod assembly.
- If steering pod assembly on machine is operable, connect service computer to the pod, turn the key to the ON position, start the Capture application, and note machine settings. The new steering pod assembly (1) must be configured to the same settings.

NOTE: If steering pod assembly is completely inoperable, the machine configuration settings will need to be set to the optional equipment on the machine and / or set to the standard default settings.

FOR SAFETY: Before leaving or servicing machine, stop on level surface, turn off machine, and remove key.

3. Disconnect the battery cable from the machine.



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

 Remove the electrical access panel from the machine. Set the electrical access panel and all hardware aside. (Fig. 1)



FIG. 1

5. Remove the battery from the machine.

FOR SAFETY: When servicing machine, use a non-conductive battery removal device, use a hoist and adequate assistance when lifting batteries, follow site safety guidelines concerning battery removal, and battery installation must be done by trained personnel.

NOTE: Skip Step 4 and proceed to the installation instructions on the following page if the machine is already equipped with the rear view camera cable.

 Remove the seat / upper platform and lower platform from the machine. Set the seat / upper seat platform, lower platform, and all hardware aside. (Fig. 2)

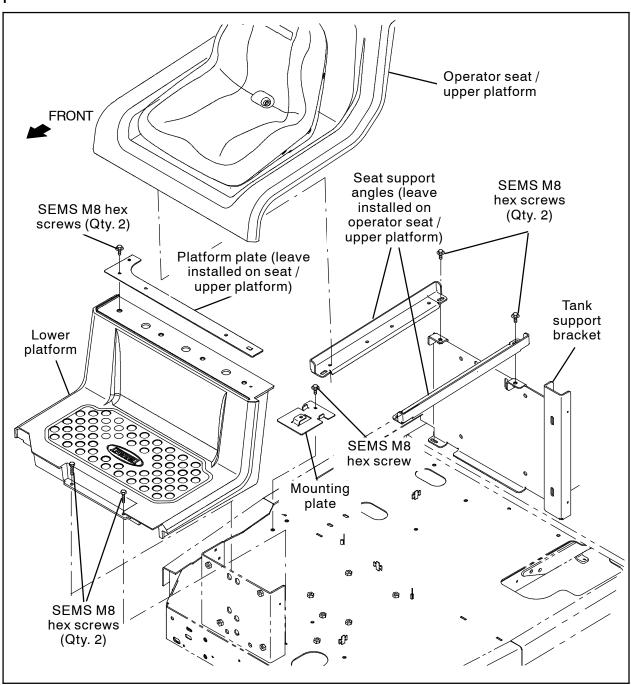


FIG. 2

### **INSTALLATION:**

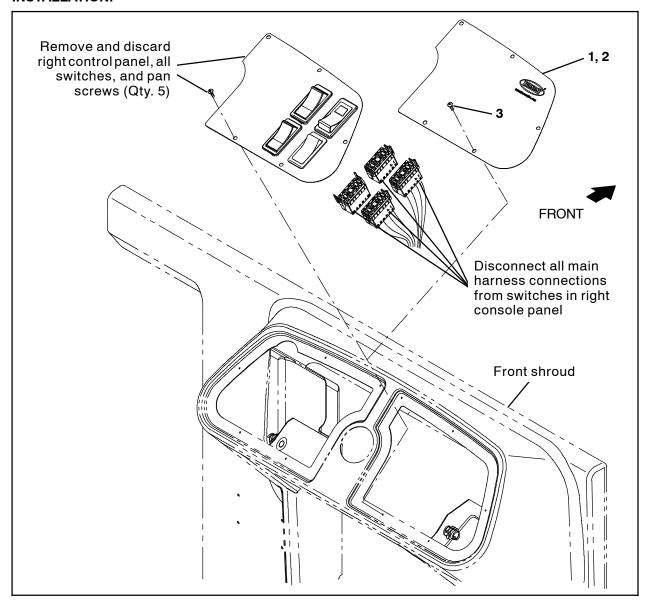


FIG. 3

- 1. Remove the five pan screws securing the right console panel to the front shroud. Discard the removed pan screws. (Fig. 3)
- 2. Lift the right console panel from the front shroud and disconnect all wire harness connectors from the right console panel switches. Discard the removed right console panel / switches. (Fig. 3)
- Insert the connectors disconnected from the right console panel switches back inside the front shroud
- Use five pan screws (3) to install the new right console panel assembly (1) (2) onto the front shroud. (Fig. 3)

- 5. Disconnect the main wire harness from the standard panel assembly. (Fig. 4)
- 6. Loosen both M6 set screws securing the standard panel assembly inside the bearing plate. (Fig. 4)
- 7. Remove the standard panel assembly from the steering assembly. Set both thrust washers aside. Discard the the removed standard panel assembly. (Fig. 4)
- 8. Slide the thrust washers onto the shaft of the new touch screen panel assembly (4). (Fig. 4)

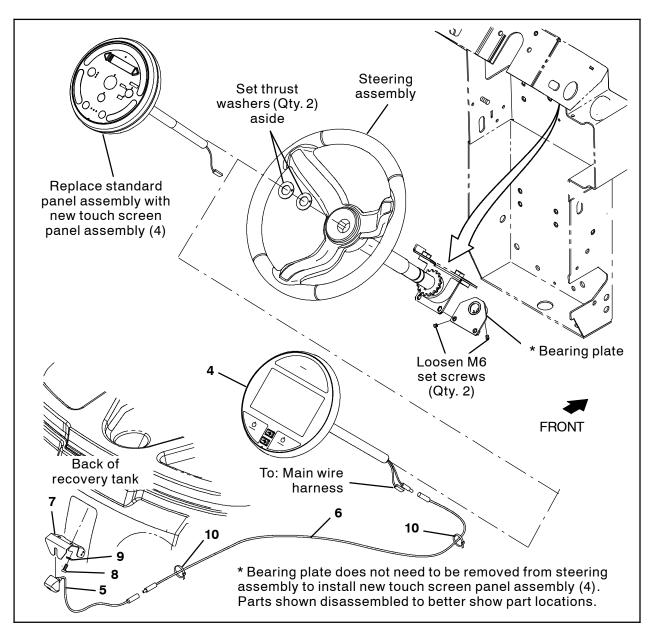


FIG. 4

- 9. Insert the touch screen panel assembly (4) into the steering assembly. (Fig. 4)
- Position the touch screen panel assembly (4) in the steering assembly and tighten both M6 set screws to secure the touch screen panel into place in the bearing plate. (Fig. 4)
- 11. Connect the main wire harness to the touch screen panel assembly (4). (Fig. 4)
- 12. Loosen nut on the camera (5) and install the camera onto the camera bracket (7). (Fig. 4)
- 13. Use two pan screws (8) and two flat washers(9) to install the camera (5) / camera bracket(7) onto the recovery tank. (Fig. 4)

- 14. Connect the camera cable (6) to the camera (5). (Fig. 4)
- 15. Machines not already equipped with rear camera cable only: Route the camera cable (6) through the channel located in the back of the recovery tank and into the battery compartment. If necessary, move or remove the vacuum hose to have better access to channel.

- 16. Machines not already equipped with rear camera cable only: Continue routing the camera cable (6) down the back of the battery compartment, around the frame of the machine to the main wire harness, along the main the wire harness, and to the touch screen panel assembly (4).
- 17. Connect the camera cable (6) to the touch screen panel assembly (4). (Fig. 4)
- 18. Machines not already equipped with rear camera cable only: Use cable ties (10) to secure the camera cable (6) to the machine and away from moving parts or areas where the cable could be damaged. (Fig. 4)
- Machines not already equipped with rear camera cable only: Reinstall the seat / upper platform and lower platform onto the machine. (Fig. 2)
- 20. Reinstall the battery into the battery compartment.
- 21. Reinstall the electrical access panel onto the machine.
- 22. Reconnect the battery cable to the machine.

# ACCESSING TENNANT SERVICE APPLICATION SOFTWARE:

Tennant Service Application Software is required to program the new control console control board. The software can be accessed or installed.

For Tennant service personnel equipped with ServiceLink computers, the software is already installed on the service computer.

Proceed to PROGRAM THE CONTROL BOARD.

For other Service Groups, download the Service Application Software from the "My Tennant" website. Frequently check site for latest version of the Service Application Software.

 Go to www.tennantco.com and click on the "My Tennant Customer Sign In" tab in the upper left corner. (Fig. 5)



FIG. 5

2. Log on to the "My Tennant" website or register as a new user. (Fig. 6)

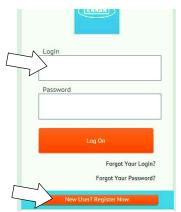


FIG. 6

 Once logged on to the "My Tennant" website, click on the "Service Application Software" link in the "Product Support & Solution" section. (Fig. 7)



FIG. 7

4. Within the Service Application Software page, click on the "Service Diagnostics..." link to download the application installer. (Fig. 8)

NOTE: If the version is the same as current install, there is no need to update..



FIG. 8

5. Click the Save button.(Fig. 9)

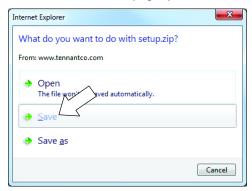


FIG. 9

6. Open the Downloads folder and click on the "Setup" file to install the application software onto the computer. (Fig. 10)



FIG. 10

7. After the application software is installed on the computer, Proceed to PROGRAM THE CONTROL BOARD.

### PROGRAM THE CONTROL BOARD:

If any problems are encountered during the programming process, contact the Technical Service Department for support.

 Access the software through either the desktop icon or the Start Menu. The software application is titled "Service Diagnostics". ( Fig. 11 / Fig. 12 / Fig. 13)



FIG. 11

#### From Start menu

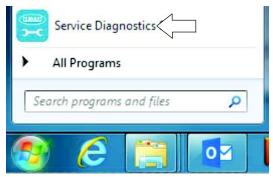


FIG. 12

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

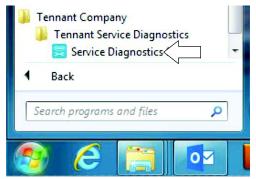


FIG. 13

2. Start the Service Software Application program. The following screen will appear. (Fig. 14)

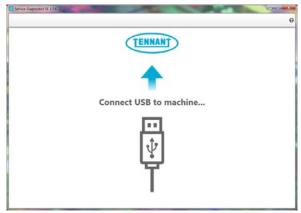


FIG. 14

- 3. Connect the USB cable to the computer and the USB port on machine. Turn the key switch to the ON position.
- 4. The application software will connect to the machine. (Fig. 15)

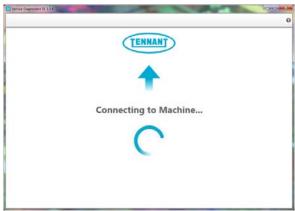


FIG. 15

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.

 The following screen appears when the application software is connected to machine (Fig. 16). Enter the machine serial number from the label on machine (ex. M17-12345678). Select the appropriate model from the drop-down menu. Press the arrow button to advance to next screen.



FIG. 16

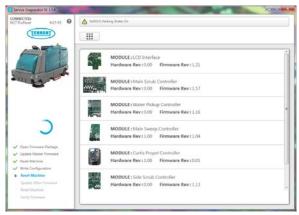
 Carefully select the correct installed options on the machine (Fig. 17). This may require visually inspecting the machine to confirm all installed options. Press the arrow button to advance to next screen.

NOTE: If the machine is configured with an option it does not have, a fault code may appear during machine start up.



FIG. 17

7. The application will begin configuring the new control board. Allow the configuration process to be completed. (Fig. 18)



**FIG. 18** 

8. The Machine Setup Complete screen appears after configuration is complete. (Fig. 19)

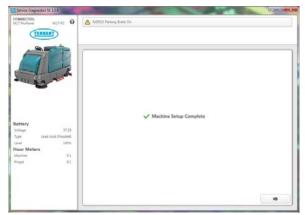


FIG. 19

- Disconnect the USB cable from the machine and turn key off. The machine is now ready for operation.
- 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. Reconnect the USB cable to the computer and the machine. The Main Menu will appear on the computer screen.

12. Check the machine configuration selections for incorrect installed options. Select the Configuration button. (Fig. 20)

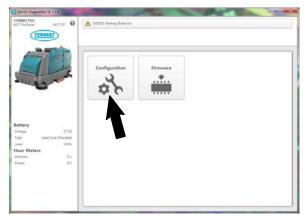


FIG. 20

13. Correct the installed options. (Fig. 21)

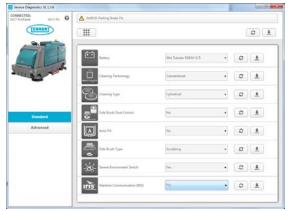


FIG. 21

 Press the down arrow button to program the machine. A green check appears next to the down arrow button when programmed. (Fig. 21)

- Cycle key to apply the corrected configuration setting.
- 16. Disconnect the USB cable from the machine.
- 17. Use the keypad to enter the supervisor mode log in number into the display above the keypad. Press the enter button when finished entering the log in number. (Fig. 22)

NOTE: If necessary, call Field Service Support for the service log in number.



FIG. 22

18. The supervisor mode screen should appear in the display. Press the settings button to access the settings screen. (Fig. 23)



FIG. 23

 Select the Service Modes button to access the service modes. If necessary use up and down arrows to scroll to the Service Modes button. (Fig. 24)



FIG. 24

 Use the left arrow and right arrow to scroll to the Configuration Mode. Press the Check Mark button to access the configuration mode. (Fig. 25)



FIG. 25

21. Use the left arrow and right arrow to scroll to the C16: Propel H.M.. Press the Check Mark button to access the C16: Propel H.M. log in. (Fig. 26)



FIG. 26

22. Log in to the C16: Propel H.M. Screen (hour meter reset password is 0000): Use the minus (-) button to enter 0 (zero) at first asterisk. Use right arrow button to move to next asterisk and again use the minus (-) button to enter 0 (zero). Repeat for the remaining asterisks. Press the Check Mark button when finished. (Fig. 27)

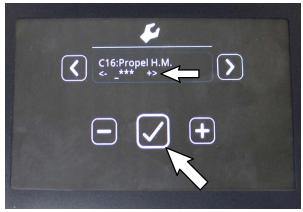


FIG. 27

- 23. Press the Check Mark button when finished entering 0 (zero) at the last asterisk. (Fig. 27)
- 24. Reset the hour meter at the C17: Chg Prpl Hr screen: Use the minus (-) button and plus (+) button to set / reset numbers and the right arrow button to move to the next number. (Fig. 28)



FIG. 28

NOTE: If hour meter was inaccessible due to pod being inoperable call Field Service Support for the hour meter time from last time the machine was serviced.

25. Press the Check Mark button when finished entering the time for the hour meter. (Fig. 28)

26. Retest machine to ensure all installed options are functioning. Activate the rear view camera to ensure it functions. Operate the machine with the various scrub / sweep functions to ensure all the controls / buttons function.

## Bill Of Materials For Control Kit, Pro-Panl, DI - 9017253

		Tennant		
R	Ref.	Part No.	Description	Qty.
	1	1218625	Panel, Console, RH [Dlx]	1
	2	1218630	Label, Opertnl, Console, RH [Dlx]	1
	3	140825	Screw, Pan, Phl, 06 X 0.50, Fmg/Ab, Blk	5
	4	1215588	Panel Assy [M17, UI, Touch Screen]	1
	5	1218851	Camera, Color, Fixed	1
	6	1218852	Cable, Camera, 197.0L [HVS]	1
	7	1219037	Bracket, Mount, Camera	1
	8	360973	Screw, Pan, Phl, 12-16 X 0.50, f/ Plstc	2
	9	19066	Washer, Flat, 0.25B 0.56D .05, PL, 10	2
	10	763114	Tie, Cable, 11.3L, 2.75D Max	6

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