



INSTRUCTION BULLETIN

No. 9016476
Machine: See Synopsis
Published: 03-2022
Rev. 01

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 9016477**

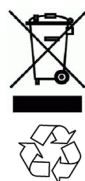
Kit installation must be performed by TennantTrue[®] service or an authorized service provider.

SYNOPSIS:

This kit contains the parts needed to update the wire harness on M20/T20/M30/M17/T17 machines to be equipped with a newer model solenoid water valve.
Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 1 hour)



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:

NOTE: The following instructions can be used to update the wire harness on both the main scrub head and the scrubbing side brush.

1. Remove the brush(es) from the main scrub head and the scrubbing side brush. Set the brush(es) aside.
2. Turn on the machine, completely lower the main scrub head/scrubbing side brush, and turn off the machine.

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

3. Disconnect the battery cable(s) from the machine.



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

4. Remove any other parts/components necessary to access the solenoid water valves located on the main scrub head/scrubbing side brush assembly.

INSTALLATION:

1. Cut the spade terminals from the ends of the wires previously connected to the old water solenoid valve. Cut as close to the spade terminals as possible.
2. Strip approximately 0.375 in. (9.5 mm) of insulation from the end of each wire from the previous step.
3. Cut the leads on the electrical harness (1) to length.
4. Strip approximately 0.375 in. (9.5 mm) of insulation from the end of each electrical harness (1) wire.

5. Crimp a sealed butt connector (2) onto each electrical harness (1) wire. (Fig. 1)

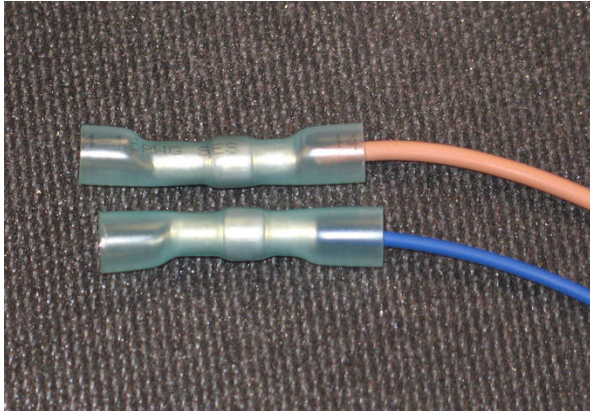


FIG. 1

6. Crimp the other end of the sealed butt connectors (2) connected to the electrical harness (1) wires to the main wire harness wires previously connected to the old water solenoid valve. (Fig. 5/Fig. 6/Fig. 7/Fig. 8/ Fig. 9)

Connector Wire Colors	M20 / T20 / M30 Side Brush	M20 / T20 / M30 Main Brush	M17 / T17 Main Brush
BLU	BLU	BLU	WHT
BRN	PNK	BRN	GRY

7. Use a torch to slowly melt the sealed butt connector (2) solder/protective wrap onto the wires crimped inside the connector. Start from the center of the sealed butt connector and work out to the ends when heating the connector connections. Slowly keep heat moving. Continue heating connector/ connections and until the solder is melted around the wire connections and the wrap is completely sealed around both wires. (Fig. 2)

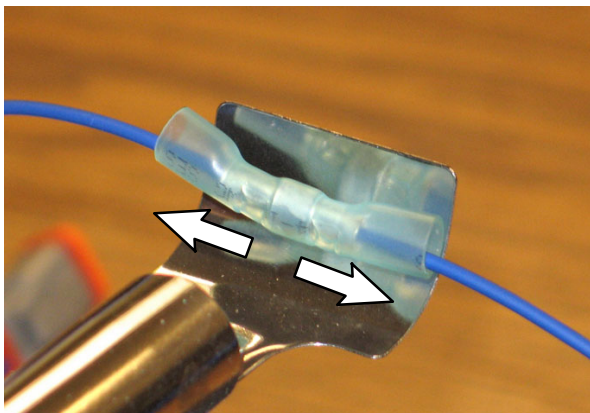


FIG. 2

8. Connect the electrical harness (1) to the water solenoid valve. (Fig. 5/Fig. 6/Fig. 8)

9. Use a cable tie to secure the electrical harness (1) to the frame of the machine and away from any moving parts that could possibly damage the electrical harness. To help prevent moisture from getting into the connector/wire connections, loop the electrical harness. (Fig. 3/Fig. 4)

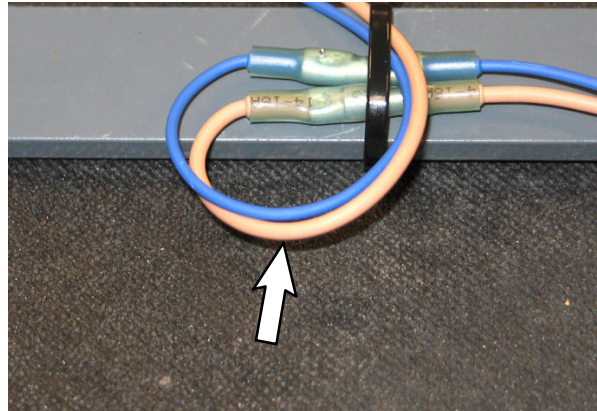


FIG. 3

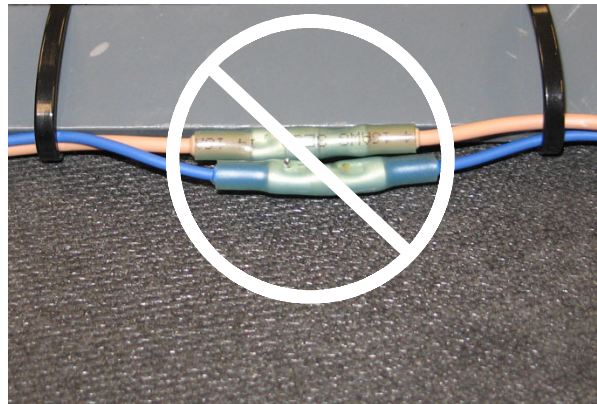


FIG. 4

10. Reconnect the battery cable(s) to the battery(ies).

11. Reinstall any parts or components removed to access the water solenoid valves.

12. Reinstall the brush(es).

13. Turn on the machine. Turn on the the scrub system/solution supply system. Ensure there a supply of solution when the scrub system/ solution supply system is on.

**M20/T20/M30
Main Scrub Water Solenoid Valve**

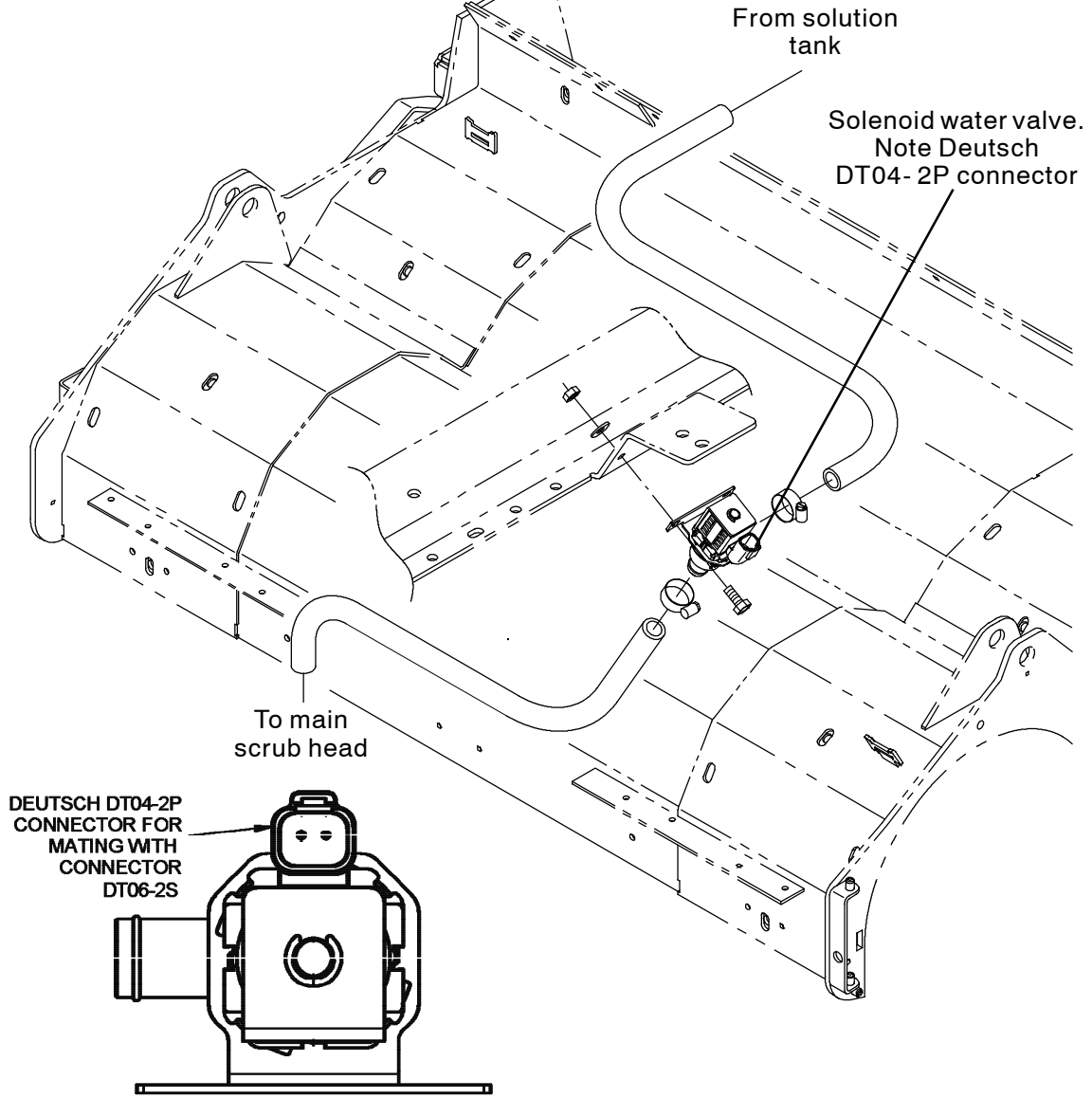


FIG. 5

**M20/T20/M30
Side Scrub Water Solenoid
Valve (Optional)**

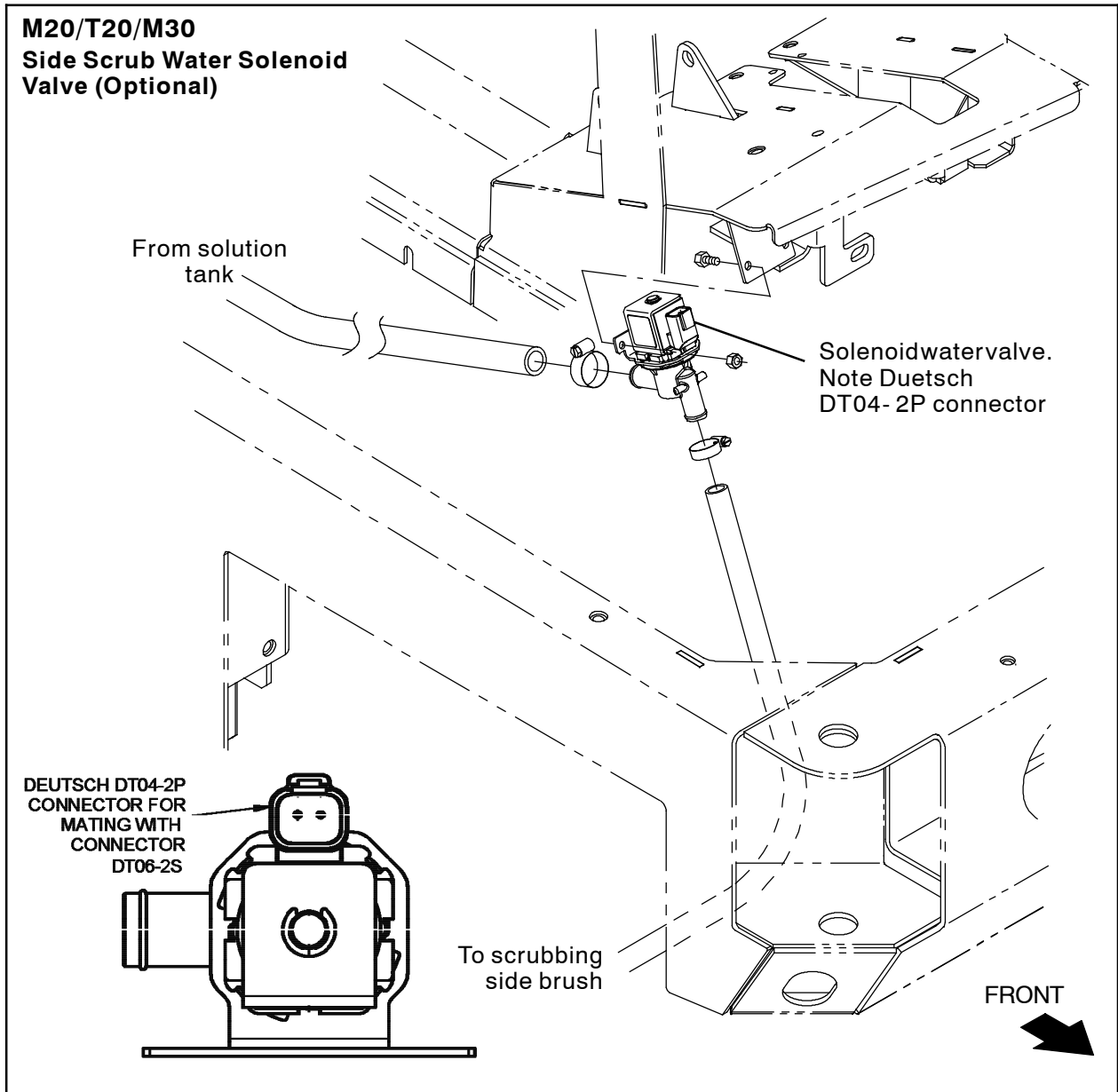


FIG. 6

Cut existing spade connectors from main wire harness connections previously connected to water solenoid valve. Cut wires on electrical harness to length and use sealed butt connectors (2) to install electrical harness (1) onto wires previously connected to old water solenoid valve.

M20/T20/M30

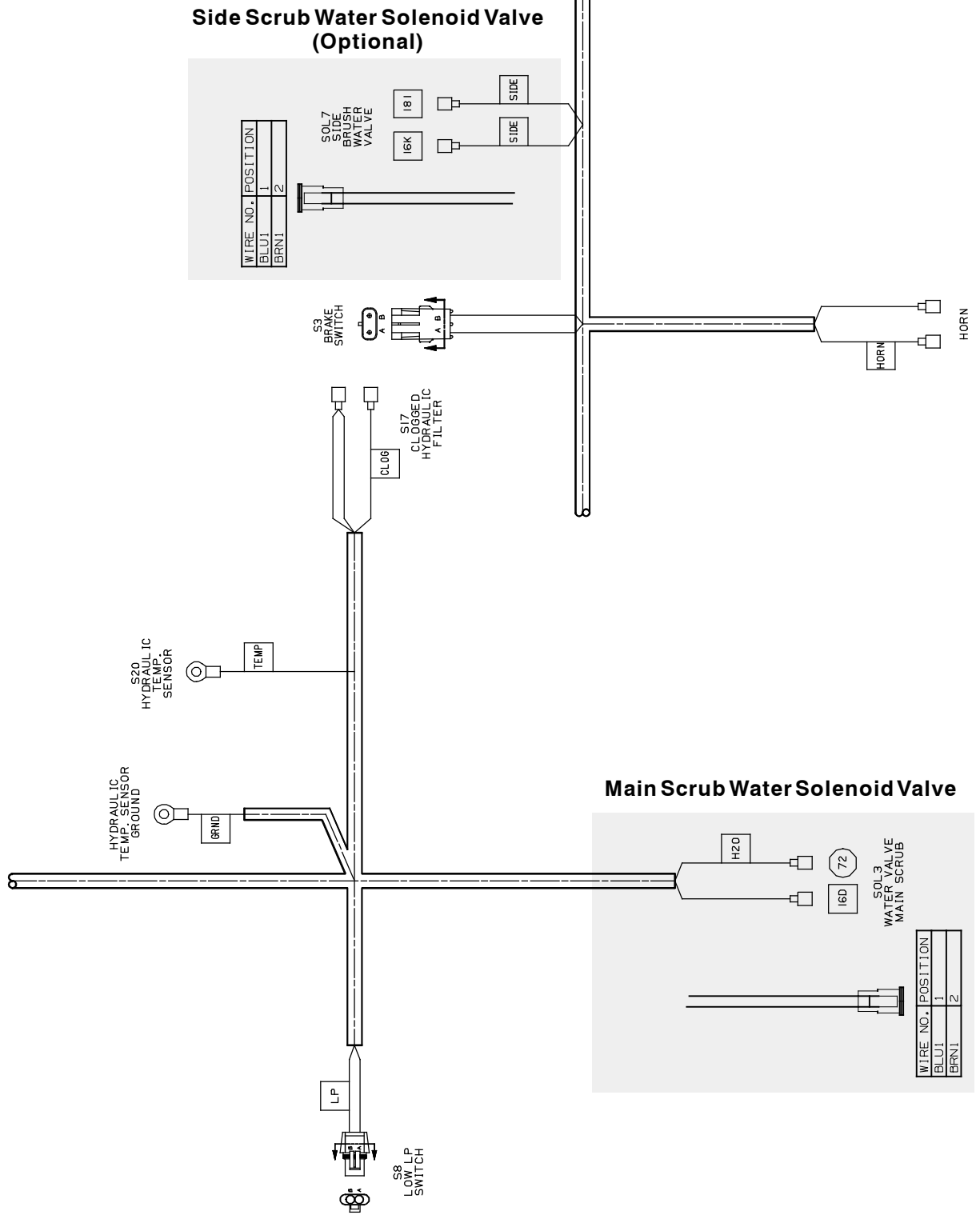


FIG. 7

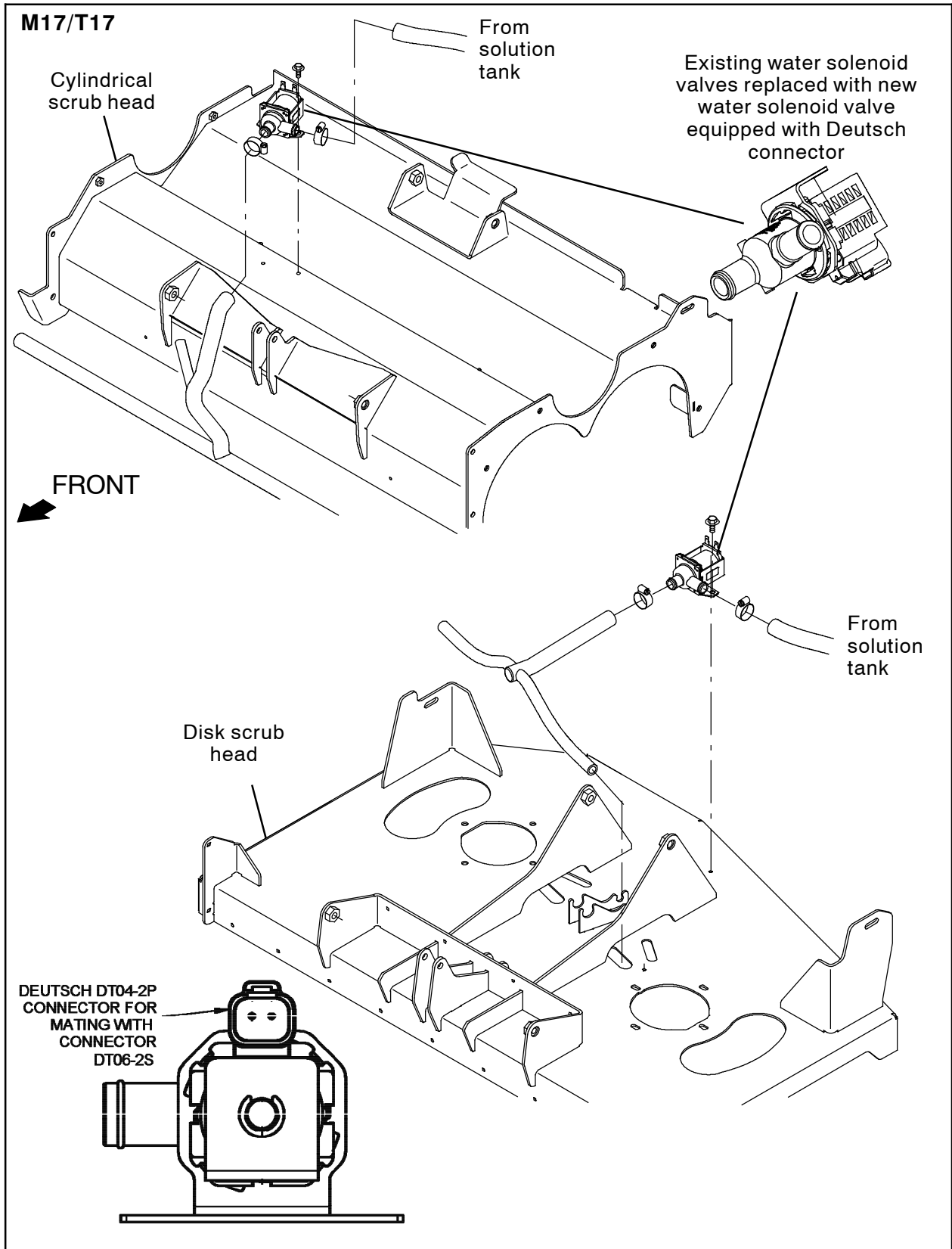


FIG. 8

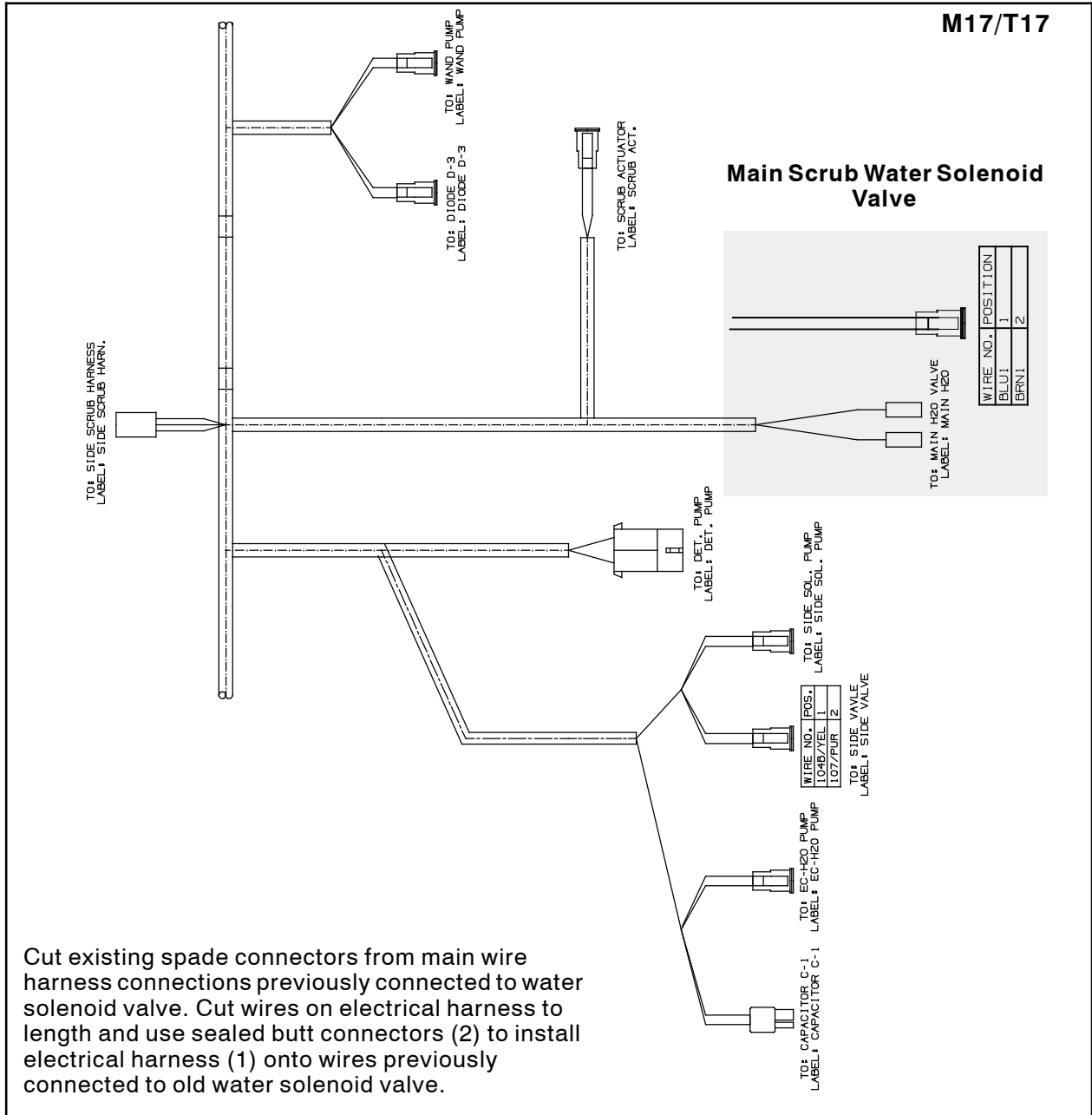


FIG. 9

Bill Of Materials For Connector Kit, DT06- 2S - 9016477

Ref.	Tennant Part No.	Description	Qty.
1	1075954	Harness, Ele [Wire Tail, DT, 2F]	1
2	1075953	Connector, Butt, Sealed [14- 16awg]	2

TENNANT COMPANY
P. O. Box 1452
Minneapolis, MN 55440-1452