

No. 340417 Machine: 7100 Published: 10-2005

Rev: 03

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 391057

SYNOPSIS:

This kit contains the parts needed to install a power wand kit on the 7100 scrubber. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 2 hours)

PREPARATION:

(Refer to FIG. 1 thru 9)

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

- 1. Turn the machine power on. Press the scrub switch to lower the scrub head to the floor. Turn the machine power off.
- 2. Disconnect battery cable from machine under the seat pan.



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

SWITCH INSTALLATION: (Refer to FIG. 2)

- 1. Remove and set aside the six control panel assembly mounting screws. Rotate the panel down towards the operator seat.
- 2. Remove the plug from the power wand switch location on the control panel.
- 3. Lift the control panel assembly just high enough to access the connections behind it. Install the power wand switch (9) in the control panel. Connect the switch (9) to the main harness. (Refer to FIG. 2 and 7)
- 4. Install the circuit breaker (10) in circuit breaker slot #4. Connect wires 6C/Blue and 39A/White to CB-4. (Refer to FIG. 2 and FIG. 7)
- 5. Reinstall the control panel assembly with the set aside mounting screws.

POWER WAND PUMP INSTALLATION:

(Refer to FIG. 1 thru 9)

- 1. Locate the rear squeegee linkage frame under the rear of the machine. (Refer to FIG. 2)
- 2. Disconnect the rear squeegee vacuum hose and remove the rear squeegee assembly. Remove and set aside the five linkage frame mounting bolts. Disconnect the rear squeegee actuator from the main harness. Pull the linkage frame out from under the machine. (Refer to FIG. 2)
- 3. Connect one end of the 7" hose (8) to the end of the water pump (1) with a hose clamp (5). (Refer to FIG. 2)
- 4. Connect one end of the 1.5" hose (6) to the side opening of the water pump (1) with a hose clamp (5). Connect the other end of the 1.5" hose (6) to a 90° fitting (2) with a hose clamp (5). Connect the long 20" hose (7) to the 90° fitting (2) with a hose clamp (5). (Refer to FIG. 2)
- 5. Guide the 7" hose (8) on the water pump through the hole in the back plate on the linkage frame. Mount the water pump (1) to the linkage frame with two hex screws (3) and lock nuts (4). Connect the 90° fitting (18) to the other end of the hose (7) with a hose clamp (5). Rotate the 90° fitting (18) so the open end faces up. Tighten the hose clamp. (Refer to FIG. 2)
- Push the linkage frame back into position under the rear of the machine. Reconnect the linkage frame to the
 machine with set aside mounting hardware. Reconnect the rear squeegee actuator to the main harness.
 (Refer to FIG. 2)
- 7. Disconnect and remove the 18" hose connecting the water valve elbow and the tank hose elbow. Set the mounting hose clamps aside. (Refer to FIG. 1)
- 8. Thread the tee fitting (15) onto the 90° fitting (18). Connect the straight fitting (16) to the right side of the tee fitting (15). Connect the 90° fitting (17) to the left side of the tee fitting. (Refer to FIG. 2)
- 9. Connect one end of the 14.5" hose (19) to the water valve elbow using a set aside hose clamp. Connect the other end of the 14.5" hose (19) to the straight fitting (16) on the right side of the plastic tee fitting (15) with a set aside hose clamp. (Refer to FIG. 2)
- 10. Connect the hose from the tank to the 90° fitting (17) on the left side of the plastic tee fitting (17) with set aside hose clamp. Recheck all hose clamps and fittings. (Refer to FIG. 2)
- 11. Install the water line mounting bracket (11) underneath the left rear corner bumper wheel with the bumper wheel mounting hardware. (Refer to FIG. 2)
- 12. Assemble the brass straight fitting (12) to the mounting bracket (11). Connect the quick disconnect fitting into the rear end of the brass fitting (12). (Refer to FIG. 2)
- 13. Connect the 90° fitting (13) to the front end of the brass fitting (12). Connect the open end of the 20" hose (7) to the 90° fitting (13) with a hose clamp (5). (Refer to FIG. 2)
- 14. Reinstall the rear squeegee assembly on the machine and connect the vacuum hose to the rear squeegee.
- 15. Mount power wand bag (1) to the rear of the machine using bag mounting strip (2), hex screws (3), washers (5) and lock nuts (4). Keep power wand assembly and hose in bag when not in use. (Refer to FIG. 3 and 4)
- 16. Reconnect the battery cable to the machine. Check all hoses and connections for leaks. Check machine and new power wand for proper operation.

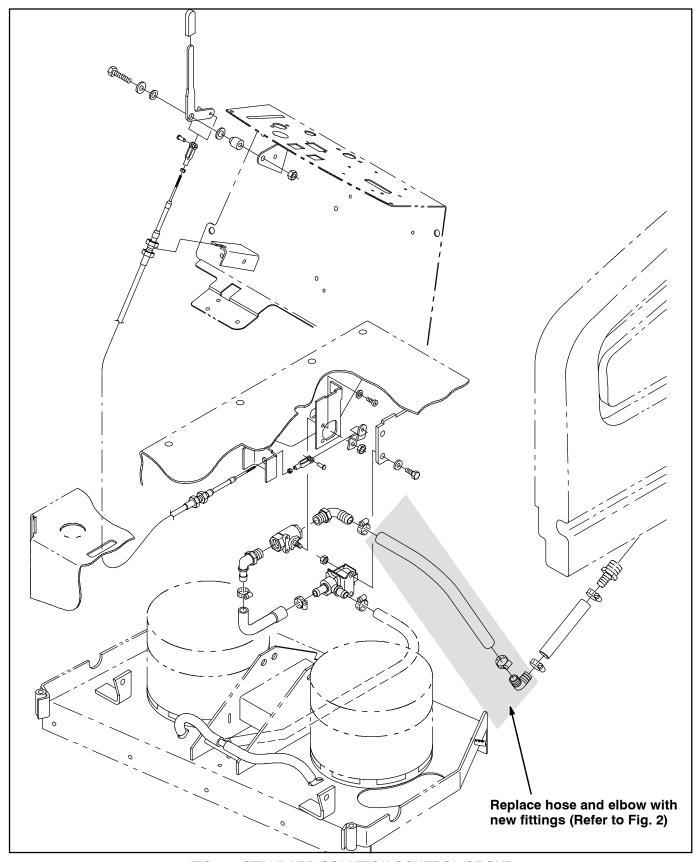


FIG. 1 - STANDARD SOLUTION CONTROL GROUP

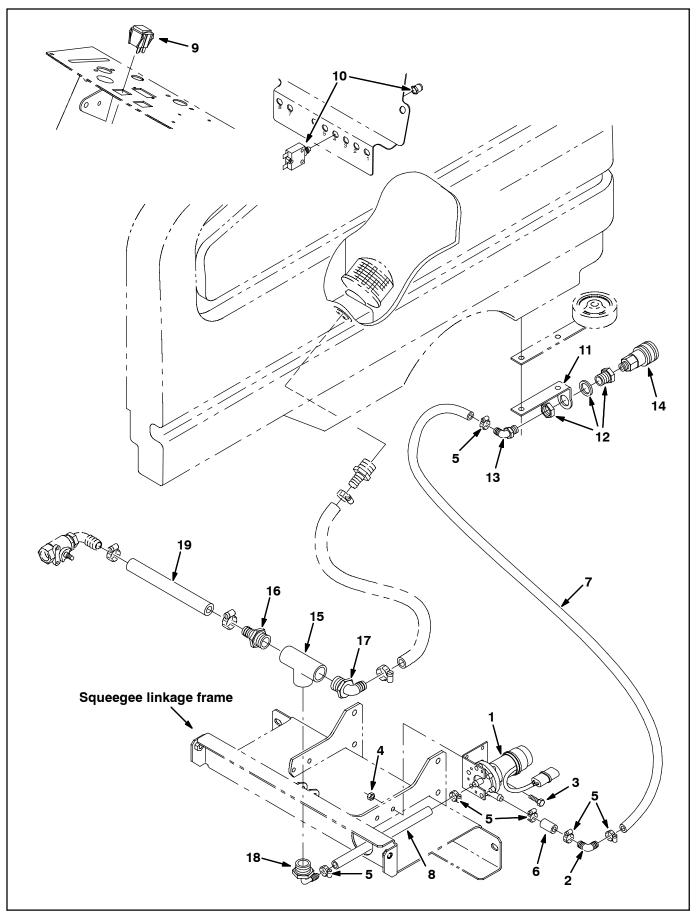


FIG. 2 - POWER WAND PUMP AND FITTINGS GROUP

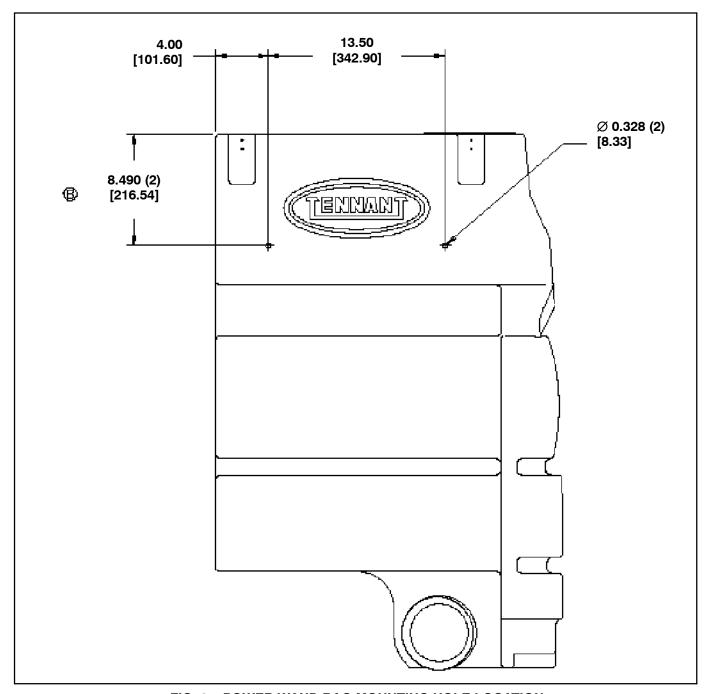


FIG. 3 - POWER WAND BAG MOUNTING HOLE LOCATION

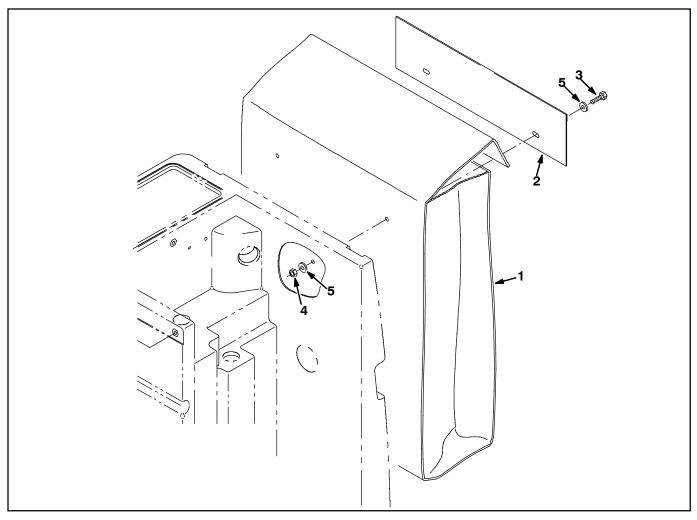


FIG. 4 - POWER WAND BAG MOUNTING GROUP

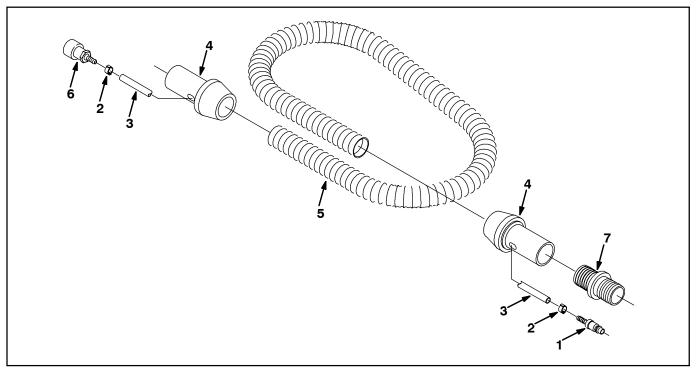


FIG. 5 - POWER WAND HOSE ASSEMBLY

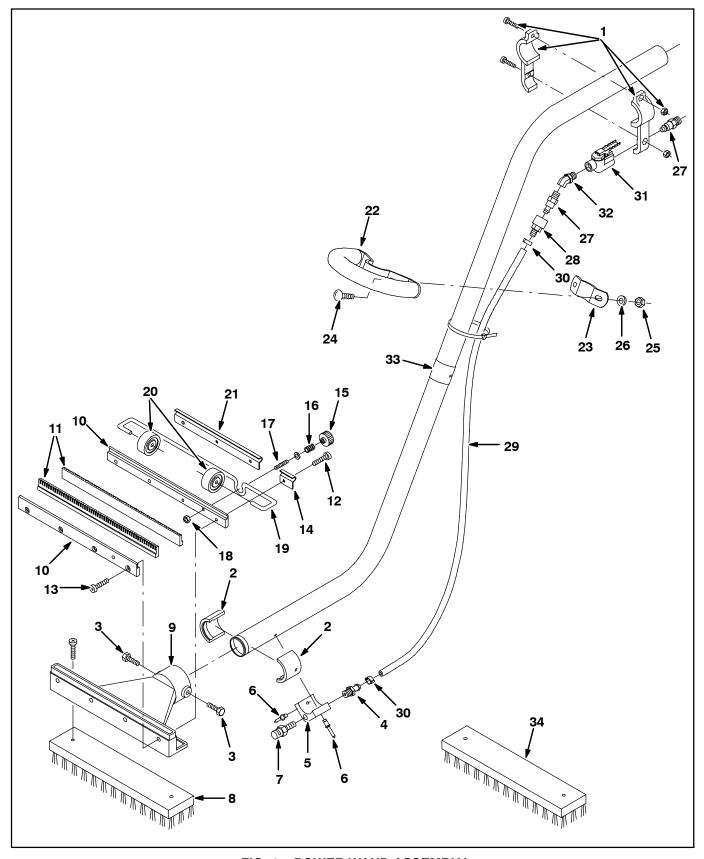


FIG. 6 - POWER WAND ASSEMBLY

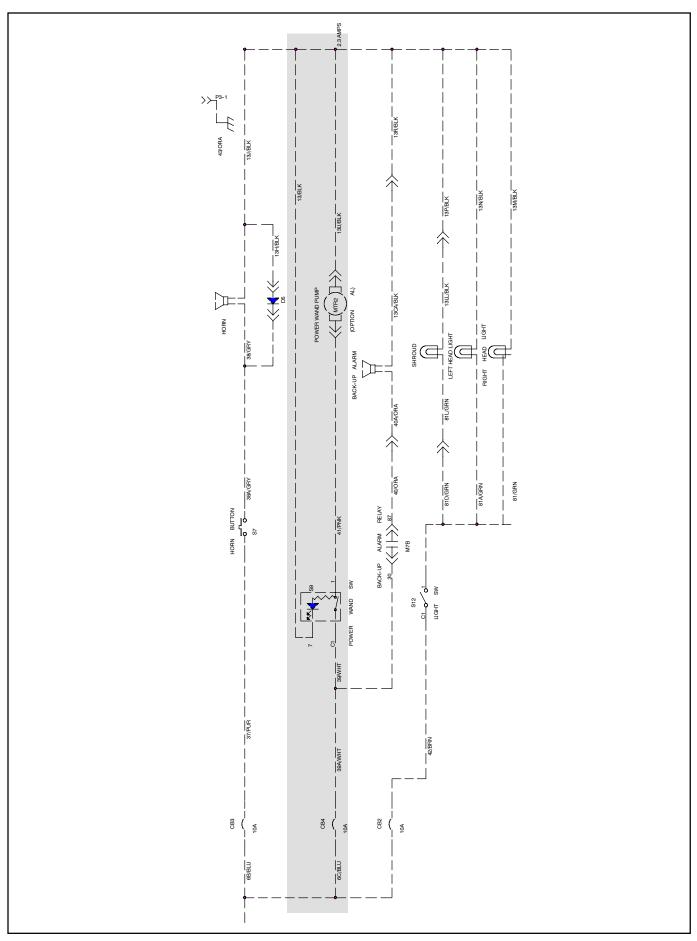


FIG. 7 - ELECTRICAL SCHEMATIC

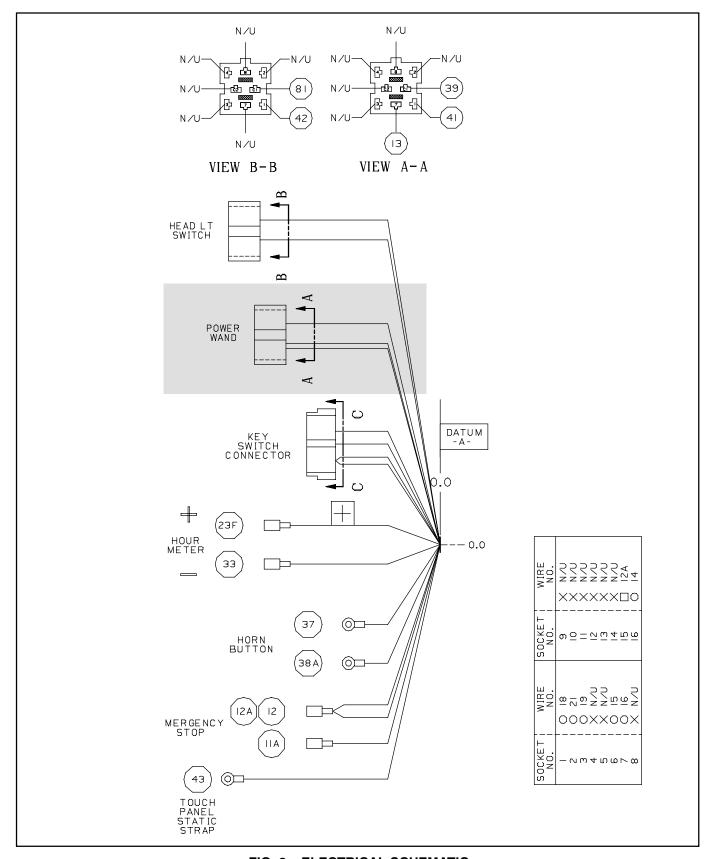


FIG. 8 - ELECTRICAL SCHEMATIC

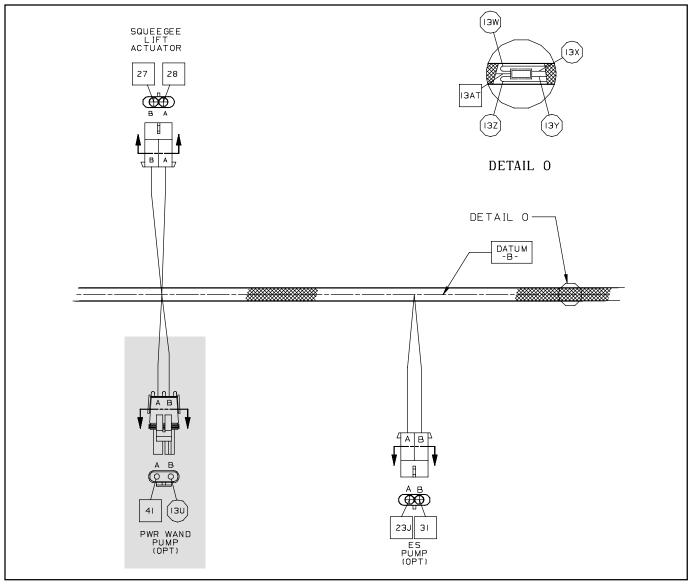


FIG. 9 - WIRE HARNESS

BILL OF MATERIALS FOR FIG. 2 - POWER WAND PUMP AND FITTINGS GROUP

NOTE: Power Wand Kit, Tennant Part Number 391057, includes; Fig. 2, Fig 4, Fig 5 and Fig 6.

Ref.	TENNANT Part No.	Description	Qty.
1	223496	Pump, water, 36vdc, Gpm Psi	1
2	391294	Fitting, plstc, E90, Bm06/Bm06	1
3	24199	Screw, hex, M05 X 0.8 X 16, Ss	2
4	09739	Nut, hex, lock, M05 X 0.8, NI, Ss	2
5	43844	Clamp, hose, wormdrive, 0.25-0.62d	6
6	391291	Hose, Pvc, Brd, 0.38id 0.60od 01.50l	1
7	391289	Hose, Pvc, Brd, 0.38id 0.60od 20.00l	1
8	391293	Hose, Pvc, Brd, 0.38id 0.60od 07.00l	1
9	222117	Switch	1
10	383721	Circuitbreaker, 10.0a	1
11	390887	Bracket, water line	1
12	78122	Fitting, brs, str, Pf04/Pf04 Bkhd	1
13	57248	Fitting, plstc, E90, Bm06/Pm04	1
14	65342	Fitting, brs, Qdc, Pm04/Qf06	1
15	42133A	Fitting, plstc, tee, Pf12/Pf12/Pf12	1
16	71628	Fitting, plstc, str, Bm10/Pm12, nyln	1
17	73468	Fitting, plstc, E90, Bm10/Pm12	1
18	79484	Fitting, plstc, E90, Bm06/Pm12	1
19	391249	Hose, Pvc, Brd 0.62id 0.88od 14.5l	1
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BILL OF MATERIALS FOR FIG. 4 - POWER WAND BAG MOUNT GROUP

NOTE: Power Wand Kit, Tennant Part Number 391057, includes; Fig. 2, Fig 4, Fig 5 and Fig 6.

Ref.	TENNANT Part No.	Description	Qty.
1	391258	Bag, power wand	1
2	391342	Strip, mtg, bag	1
3	09011	Screw, hex, M08 X 1.25 X 30, Ss	2
4	08713	Nut, hex, lock, M08 X 1.25, NI, Ss	2
5	01685	Washer, flt, 0.31 Ss	4

BILL OF MATERIALS FOR FIG. 5 - POWER WAND HOSE ASSEMBLY

NOTE: Power Wand Kit, Tennant Part Number 391057, includes; Fig. 2, Fig 4, Fig 5 and Fig 6.

Ref.	TENNANT Part No.	Description	Qty.
1	578318000	Fitting, Brs, Qdc, Pm04/Qm06	1
2	578160000	Clamp, hose, plstc, 0.43d	2
3	578820000	Hose, vacuum	1
4	578072000	Cuff, swivel	2
5	578276000	Hose, vacuum, 38.1mm D X 3.05cm	1
6 7	578071000 12694	Fitting, brs, Qdc, Bm04/Qm06 Fitting, plstc, str, Bm24/Bm24	1 1

BILL OF MATERIALS FOR FIG. 6 - POWER WAND ASSEMBLY

NOTE: Power Wand Kit, Tennant Part Number 391057, includes; Fig. 2, Fig 4, Fig 5 and Fig 6.

Ref.	TENNANT Part No.	Description	Qty.
1	578077000	Bracket, mtg, valve	1
2	578061000	Adaptor, head to wand	2
3	01696	Screw, hex, 0.25-20 X 0.50, Ss	2
4	61686	Fitting, brs, str, Pm02/Em04	1
5	391311	Adaptor, spray nozzle	1
6	68567	Rivet, blind, 0.187d X 0.53 X 0.62d, alm	2
7	578066000	Nozzle, spray, 02pm, 75deg	1
8	65610	Brush, power wand, w/fastener, pyp	1
9	578063000	Head, wand	1
10	578078000	Strip, retainer	2
11	578074000	Blade, sqge, wand	2
12	06933	Screw, pan, M05 X 0.8 X 16, 4.8	4
13	06932	Screw, pan, M05 X 0.8 X 10, 4.8	4
14 15	578124000 578439000	Bracket, axle, 1-hole	1
	578439000	Nut, thumb, M6 X 30mm dia	1
16	578228000	Spring, cmpr, 0.42od 0.04wir 0.6l	1
17	578143000	Rod, thrd, 2 end, M06 X 1.0 01.6l	1
18	07785	Nut, hex, std, M06 X 1.0, Ss	1
19	578126000	Axle, wand	1
20	578125000	Wheel	2
21	578123000	Bracket, axle, 3-hole	1
22	578155000	Handle, wand	1
23	578154000	Bracket, mtg, handle to wand	1
24	20399	Bolt, carriage, 0.25-20 X 0.75	2
<u>25</u>	41169	Nut, hex, lock, 0.25-20, NI, Ss	2
26	01684	Washer, flt, 0.25 Ss	2
27	578091000	Fitting, brs, Qdc, Pm04/Qm04	2
28	578071000	Fitting, brs, Qdc, Bm04/Qm06	2
29	578821000	Hose, wand	1
30	578161000	Clamp, 0.31-0.43d	2
31	578064000	Valve, water	1
32	47720	Fitting, hyd, E45, Pm04/Pf04	1
33	391310	Wand	1
34	65582	Brush, power wand, w/fastener, abr	1

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