INSTRUCTION BULLETIN

No. 9016097
Machine: S30 / S30XP
Published: 07-2017
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.

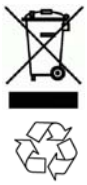
Installation instructions for **kit number 9016091** / **9016146**

SYNOPSIS:

This kit contains the parts needed to install the dual brush wet dust control system on S30 sweepers. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 4 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:

1. Stop the machine on a clean level surface, completely raise the hopper, turn off the machine, engage the hopper support bar, turn on the machine, and lower the hopper until the hopper support is resting on the bracket.

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

WARNING: Lift arm pinch point. Stay clear of hopper lift arms.

WARNING: Raised hopper may fall. Engage hopper support bar.

2. Turn off the machine and remove the key.

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

3. Disconnect the battery cables from the battery.

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

4. Open the top cover and the side shroud.

5. Remove the rubber dust skirt from the front of the operator station / frame of the machine. Set the rubber dust skirt aside.

INSTALLATION:

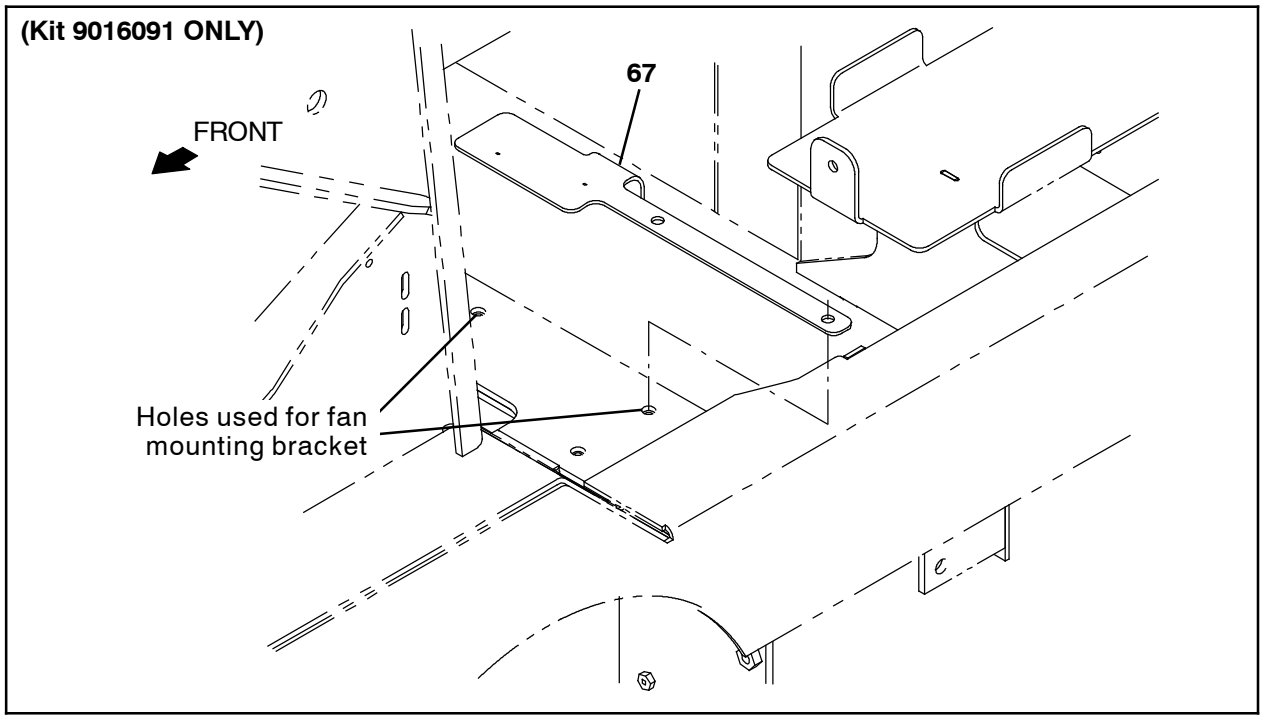


FIG. 1

1. **(Kit 9016091 ONLY):** Remove the fan mounting bracket from the machine. Set the fan mounting bracket, both SEMS M8 hex screws, and the M8 hex screws / flat washers aside. (Fig. 1 / Fig. 3)

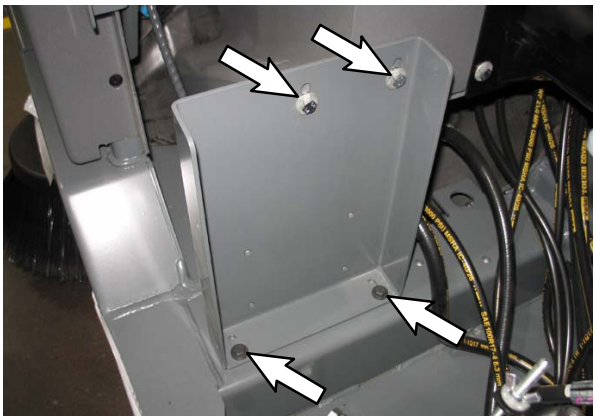


FIG. 2

2. **(Kit 9016091 ONLY):** Align the two larger holes in the drill template (67) with the two existing holes where the fan mounting bracket was previously installed on the frame of the machine and drill two 9/32 in. (7.50 mm) holes through the frame of the machine. (Fig. 1 / Fig. 2)

NOTE: If necessary, use the two SEMS M8 hex screws to secure the drill template (67) into place before drilling holes into frame of machine.

3. Use two SEMS M8 hex screws (6) to install the water tank support brace (15) onto the frame of the machine. (Fig. 4)

4. Thread two nylon fittings (36) into the solution pump (32). (Fig. 3)

5. Cut a 4 in. (101. 6 mm) length of PVC hose (29).

6. Use a hose clamp (26) to connect the 4 in. (101. 6 mm) PVC hose (29) to the nylon fitting (36) installed on the solution pump (32). (Fig. 3)

7. Use a hose clamp (26) to connect the plastic t- fitting (28) onto the 4 in. (101. 6 mm) PVC hose (29). (Fig. 3)

8. Cut a 60 in. (1524 mm) length of PVC hose (29).

9. Use a hose clamp (26) to connect the 60 in. (1524 mm) PVC hose (29) onto the plastic t- fitting (28). (Fig. 3)

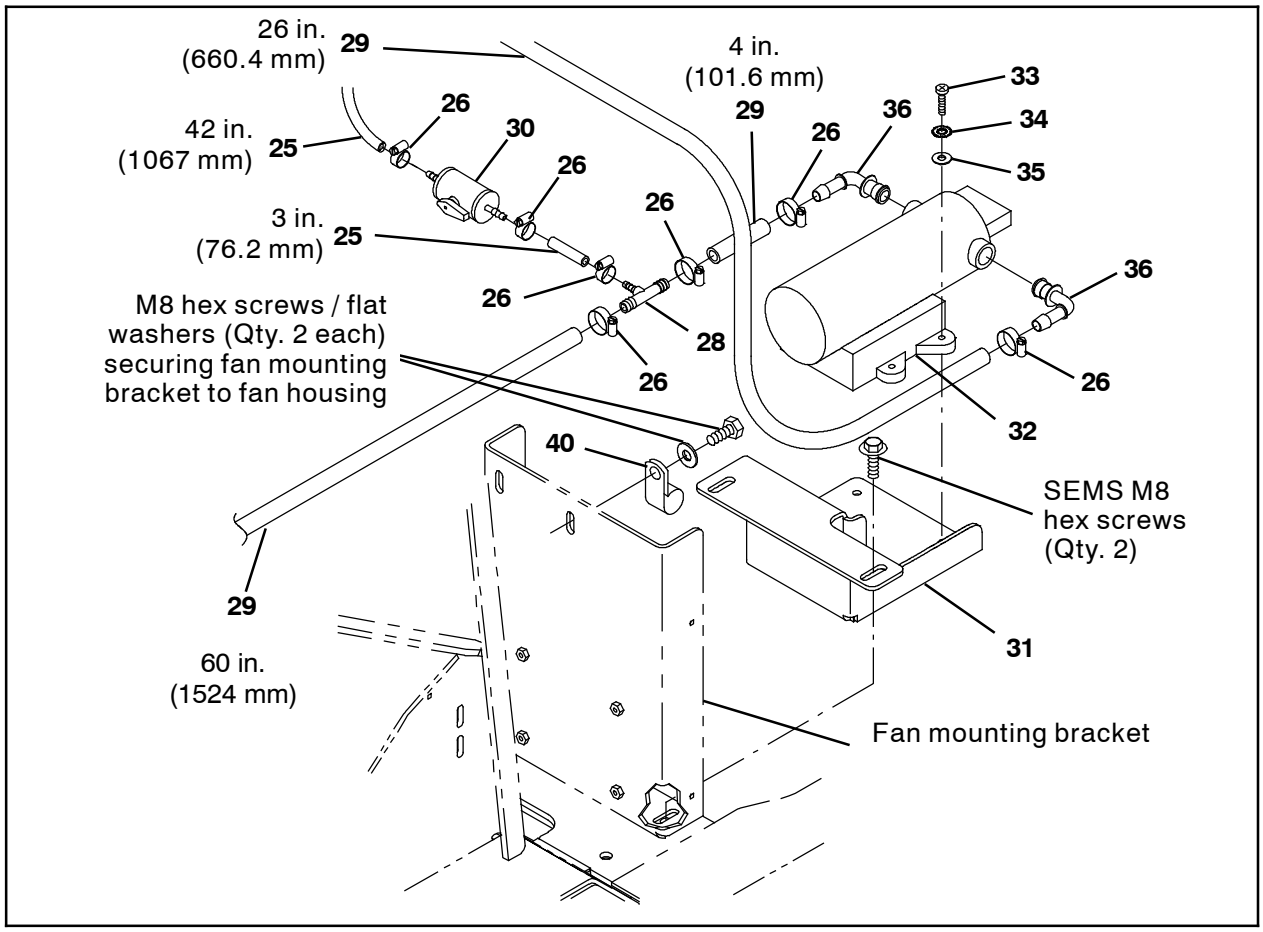


FIG. 3

10. Cut a 3 in. (76.2 mm) length of PVC hose (25).

11. Use a hose clamp (26) to connect the 3 in. (76.2 mm) PVC hose (25) onto the plastic t- fitting (28). (Fig. 3)

12. Cut a 26 in. (660.4 mm) length of PVC hose (29).

13. Use a hose clamp (26) to connect the 26 in. (660.4 mm) PVC hose (29) to the nylon fitting (36) installed on the solution pump (32). (Fig. 3)

14. Use four M5 pan screws (33), four lock washers (34), and four flat washers (35) to install the solution pump (32) onto the pump mounting bracket (31). (Fig. 3)

15. Use the SEMS M8 hex screws to install the solution pump (32) / pump mounting bracket (31) and the fan mounting bracket onto the frame of the machine. (Fig. 3)

16. Reinstall one M8 hex screw and flat washer to secure the fan mounting bracket to the fan housing. (Fig. 3)

17. Use the remaining M8 hex screw and flat washer to install the cable clamp (40) onto the fan mounting bracket. Do not completely tighten the M8 hex screw. (Fig. 3)

18. Use a hose clamp (26) to connect the shutoff valve (30) to the 3 in. (76.2 mm) PVC hose (25) connected to the plastic t- fitting (28). (Fig. 3)

19. Use two M8 hex screws (3) and two flat washers (4) to install the tank rear bracket (2) onto the water tank (1). (Fig. 4)

20. Ensure the drain cock fitting (27) handle is turned to off position. (Fig. 4)

21. Apply thread sealant onto the drain cock fitting (27) and thread the drain cock fitting into the water tank (1). (Fig. 4)

22. Apply thread sealant onto the straight fitting (19) and thread the straight fitting into the elbow fitting (20). (Fig. 4)

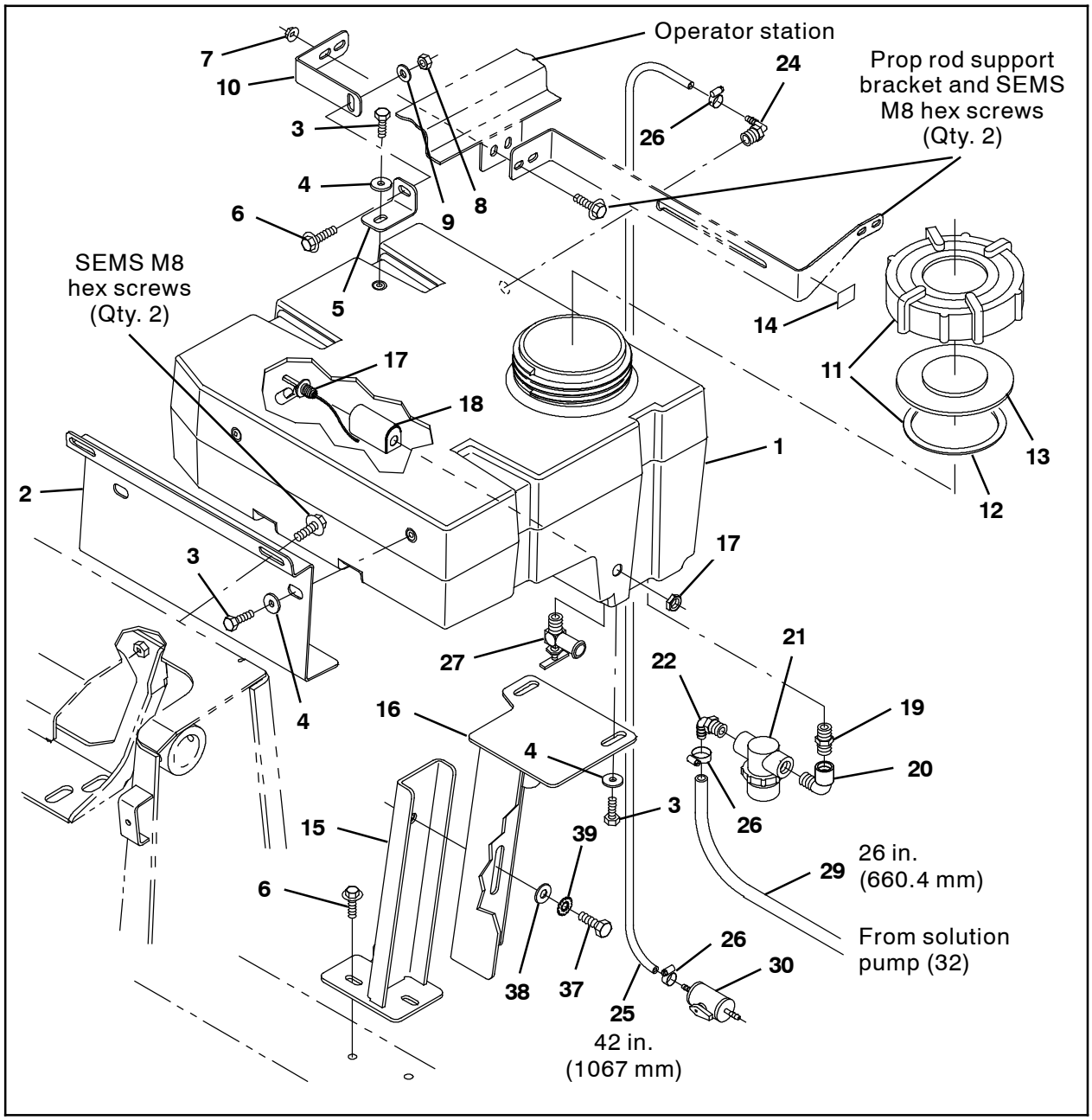


FIG. 4

23. Apply thread sealant onto the elbow fitting (20) from the previous step and elbow fitting (22) and thread both elbow fittings into the in- line filter (21). (Fig. 4)

24. Apply thread sealant onto the straight fitting (19) and thread the in- line filter assembly assembled in the previous several steps into the water tank (1). (Fig. 4)

25. Apply thread sealant onto the elbow fitting (24) and thread the elbow fitting into the water tank (1). (Fig. 4)

26. Cut a 42 in. (1067 mm) length of the PVC hose (25). (Fig. 4)

27. Use a hose clamp (26) to connect the 42 in. (1067 mm) PVC hose (25) to the elbow fitting (24) installed in the water tank (1). (Fig. 4)

28. Remove the connector from the liquid level sensor (17). Set the connector aside. (Fig. 4)

29. Remove the jam nut and rubber gasket from the liquid level sensor (17). Set the jam nut and rubber gasket aside. (Fig. 4)

30. Insert the liquid level sensor (17) into the protector bracket (18) and slide the rubber gasket onto the liquid sensor wires. (Fig. 5 / Fig. 4)

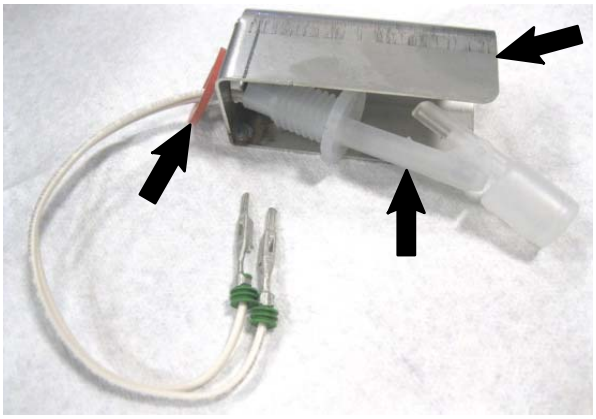


FIG. 5

31. Insert the liquid level sensor (17) / protector bracket (18) into the water tank (1). (Fig. 4)

32. Apply pipe sealant to the threads of the liquid level sensor (17) protruding out from the water tank (1). (Fig. 4)

33. Tighten the jam nut onto the liquid level sensor (17) to secure the liquid level sensor / protector bracket (18) inside the water tank (1). (Fig. 4)

34. Reinstall the connector onto the liquid level sensor (17) wires. (Fig. 4)

35. Use one M10 hex screw (37), one lock washer (39), and one flat washer (38) to install the tank top bracket (16) onto the water tank support brace (15). Do not completely tighten hardware. (Fig. 4)

36. Remove the two SEMS M8 hex screws securing the fan mounting bracket to the machine. (Fig. 4 / Fig. 6)

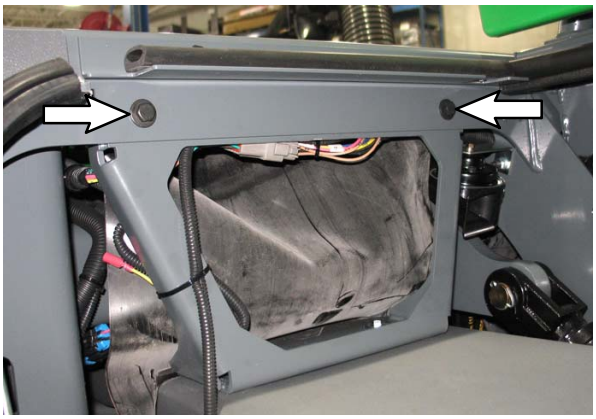


FIG. 6

37. Use the two SEMS M6 hex screws removed from the machine in the previous step to install the tank rear support bracket (2) / water tank assembly (1) onto the machine. (Fig. 4 / Fig. 6)

38. Use one M8 hex screw (3), one flat washer (4) to install the top tank support bracket (5) onto the water tank (1). (Fig. 4)

39. Remove the SEMS M8 hex screws securing the prop rod support bracket to the operator station. Set the SEMS M8 hex screws aside. (Fig. 4)

40. Use one SEMS M8 hex screw (6), one flat washer (9), and one M8 hex nut (8) to install the tank angle bracket (10) onto the top tank support bracket (5). Do not completely tighten hardware. (Fig. 4)

41. Use two saved SEMS M8 hex screws and two M8 flange nuts (7) to install the prop rod support bracket and tank angle bracket (10) onto the operator station. (Fig. 4)

42. Adjust the angle of the water tank (1) so that it slopes slightly downward (allowing optimal water drainage, but does not touch the outlet tube. (Fig. 4)

43. Tighten all loose hardware on the tank top bracket (16), tank angle bracket (10), and top tank support bracket (5) to fully secure the water tank (1) at the previously set angle on the machine. (Fig. 4)

44. If necessary, remove the gasket (12) from the cap assembly (11). (Fig. 4)

45. Insert the cap plug (13) into the cap assembly (11) and reinsert the gasket (12) into the cap assembly. (Fig. 4)

46. Install the cap assembly (1) assembled in the previous several steps onto the water tank (1). (Fig. 4)

47. Use a cable clamp (26) to connect the 26 in. (660.4 mm) PVC hose (29) connected to the solution pump (32) to the in- line filter assembly (21). (Fig. 7)

48. Use a cable clamp (26) to connect the 42 in. (1067 mm) PVC hose (25) connected to the water tank (1) to the shutoff valve (30). (Fig. 7)

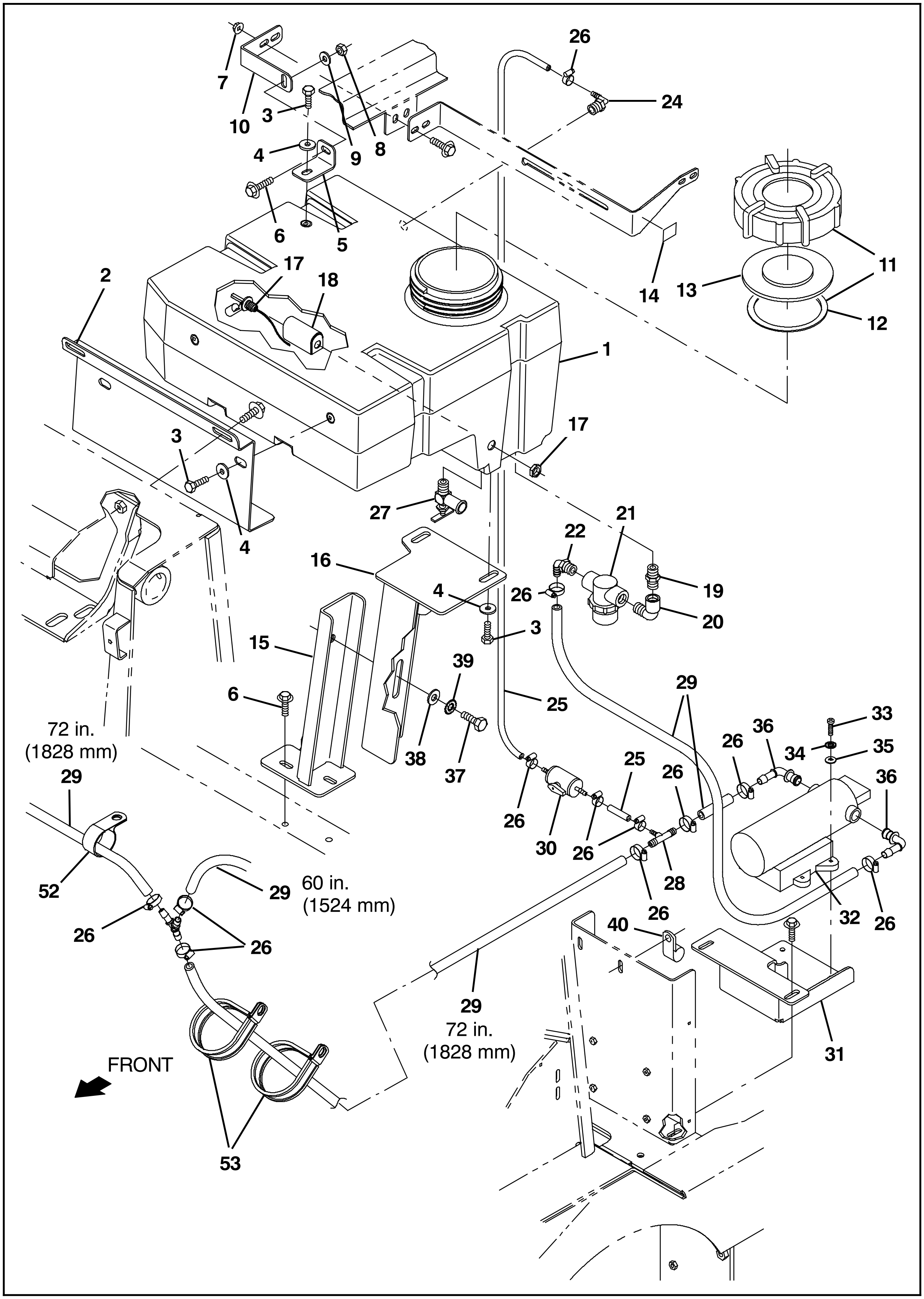

26
24
7
10
3
8
9
4
6
5
11
17
18
2
14
13
12
1
17
3
4
27
21
22
19
16
4
26
20
3
15
39
6
25
29
72 in.
(1828 mm)
38
37
26
36
33
34
35
36
25
26
29
26
30
26
28
52
29
60 in.
(1524 mm)
26
26
26
32
26
40
29
72 in.
(1828 mm)
31
FRONT
53

FIG. 7

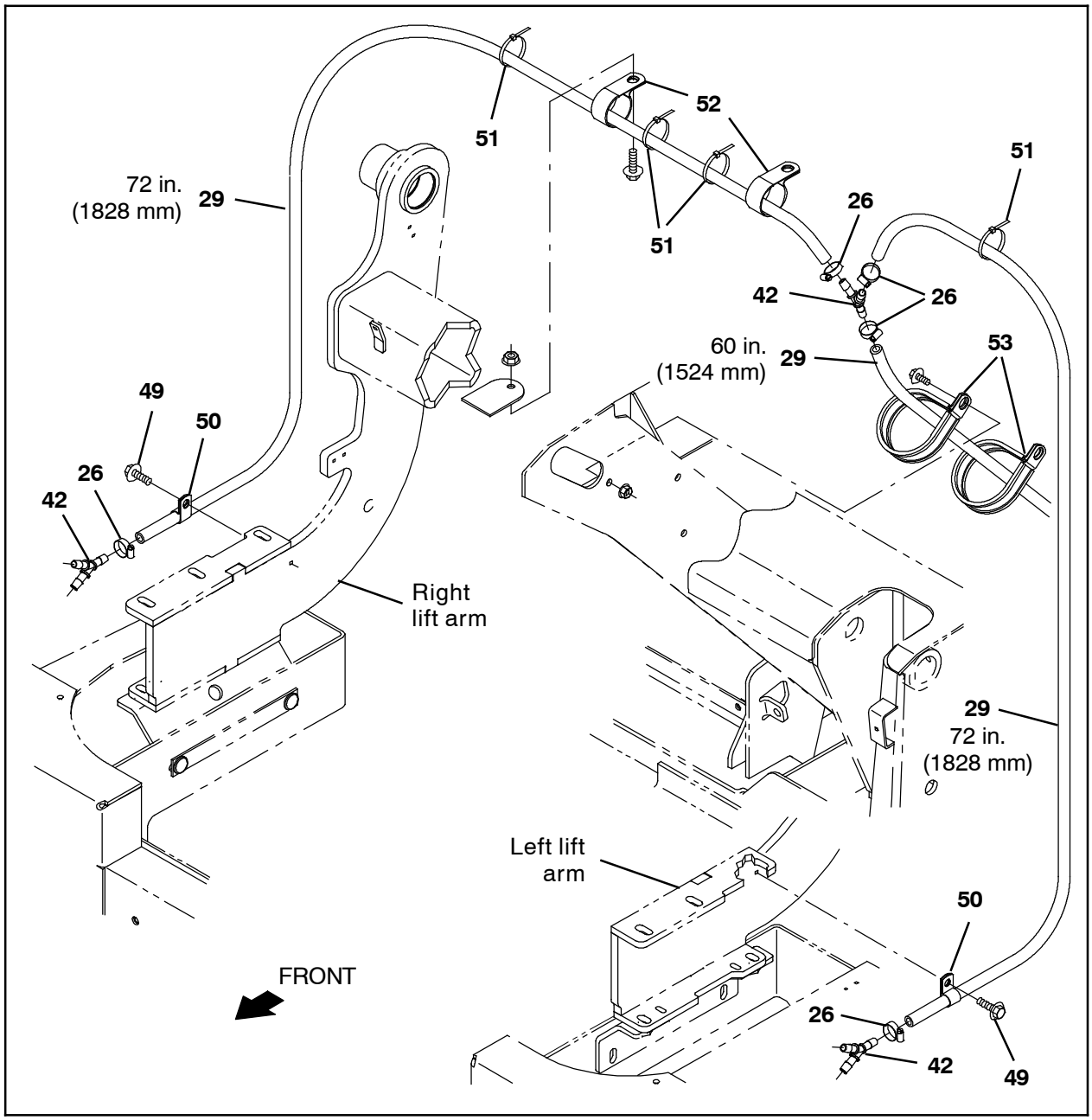


FIG. 8

49. Remove existing cable clamps securing the side brush hydraulic hoses to the hopper lift arm assembly. Set the SEMS M8 hex screws aside. Discard the cable clamps. (Fig. 7 / Fig. 8)

50. Use the SEMS M8 hex screws from the previous step to install the new cable clamps (53) where the removed cable clamps were previously installed. (Fig. 7 / Fig. 8)

51. Route the 60 in. (1524 mm) PVC hose (29) along the side brush hydraulic hoses and through the cable clamps (53) installed on the hopper lift arm assembly. (Fig. 7 / Fig. 8)

52. Use a hose clamp (26) to connect a y- fitting (42) to the 60 in. (1524 mm) PVC hose (29). (Fig. 7 / Fig. 8)

53. Cut two 72 in. (1828 mm) lengths of PVC hose (29).

54. Use a hose clamp (26) to connect both 72 in. (1828 mm) PVC hose (29) to the y- fitting (42). (Fig. 7 / Fig. 8)

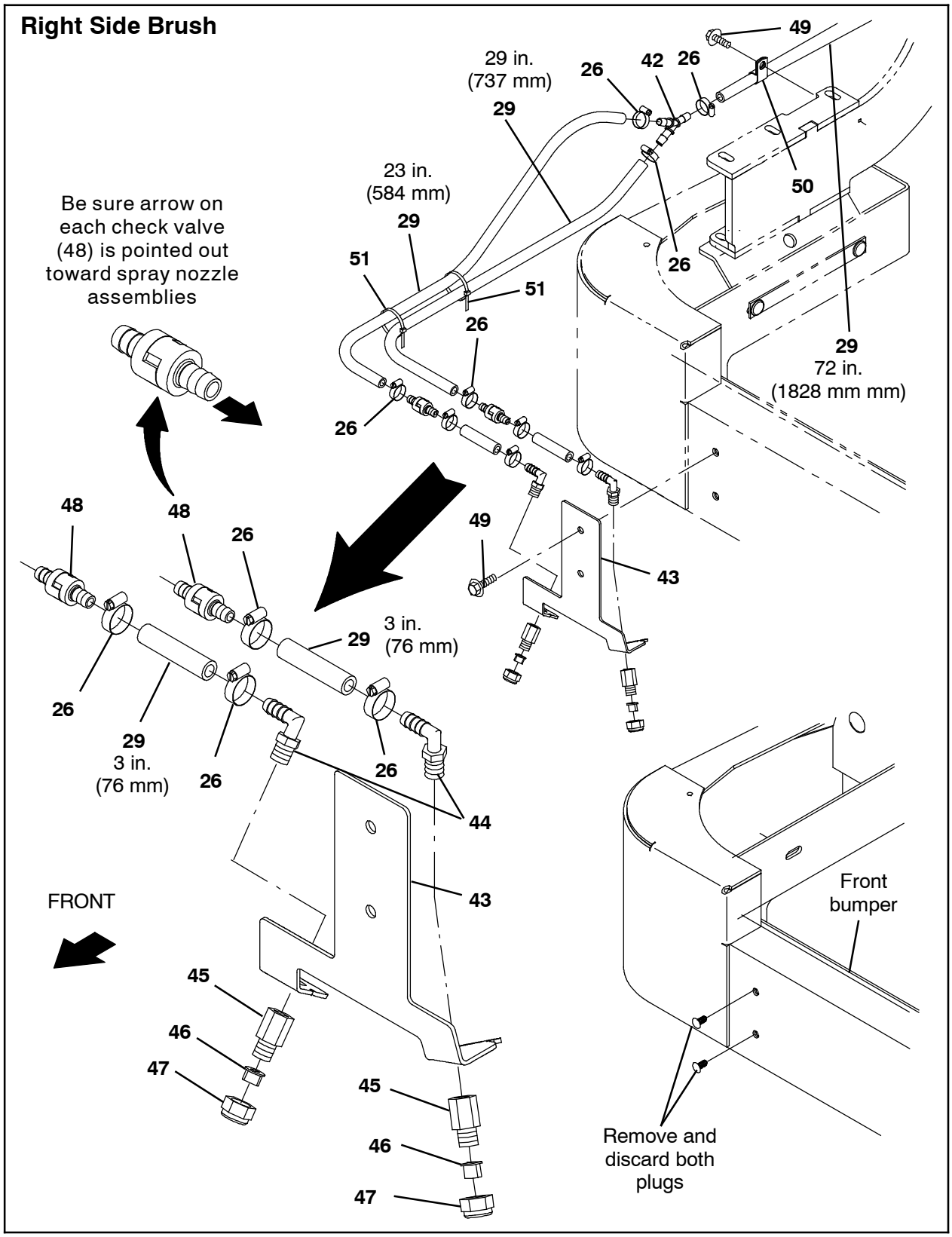

Right Side Brush
49
29 in.
(737 mm)
26
42
26
29
23 in.
(584 mm)
50
Be sure arrow on each check valve (48) is pointed out toward spray nozzle assemblies
29
51
51
26
26
26
29
72 in.
(1828 mm mm)
48
48
26
49
43
3 in.
(76 mm)
29
26
29
3 in.
(76 mm)
26
26
44
43
FRONT
45
46
47
45
46
47
Front bumper
Remove and discard both plugs

FIG. 9

55. Place a spray nozzle (46) into each nozzle fitting (45) and thread a cap fitting (47) onto each nozzle fitting to secure the spray nozzle inside the fitting. Do not completely tighten the cap fittings. (Fig. 9 / Fig. 12)

56. Insert two plastic elbow fittings (44) into the right dual nozzle bracket (43) and left dual nozzle bracket (41) and tighten a spray nozzle assembly assembled in the previous step onto each elbow fitting. (Fig. 9 / Fig. 12)

57. Cut four 3 in. (76 mm) sections of PVC hose (29).

58. Use a hose clamp (26) to connect each 3 in. (76 mm) PVC hose cut in the previous step to the plastic elbow fittings (44) installed on the right dual nozzle bracket (43) and the left dual nozzle bracket (41). (Fig. 9 / Fig. 12)

59. Use a hose clamp (26) to connect a check valve (48) onto the other end of each 3 in. (76 mm) PVC hose. (Fig. 9 / Fig. 12)

60. Cut a 29 in. (737 mm) and 23 in. (584 mm) length of PVC hose (29).

61. Use a hose clamp (26) to connect the 29 in. (737 mm) and 23 in. (584 mm) PVC hoses (29) to the check valves (48) on the right dual nozzle bracket (43). (Fig. 9)

62. Cut two 30 in. (762 mm) lengths of PVC hose (29).

63. Use a hose clamp (26) to connect the 30 in. (762 mm) PVC hoses (29) to the check valves (48) on the left dual nozzle bracket (41). (Fig. 12)

64. Remove the plugs from the front bumper. Discard both plugs. (Fig. 10)

65. Use two SEMS M8 hex screws (49) to install the right dual nozzle mounting bracket (43) and left dual nozzle bracket (41) onto the machine. (Fig. 9 / Fig. 12)

66. Remove the cap fittings (47) from the each nozzle fitting (45). Set the spray nozzle (46) aside. (Fig. 9 / Fig. 12)

67. Apply thread sealant onto the threads of each nozzle fitting (45). (Fig. 9 / Fig. 12)

68. Reinstall the cap fittings (47) and spray nozzles (46) into each nozzle fitting (45). Do not tighten the cap fittings (47). (Fig. 9 / Fig. 12)

69. Align the notches in the spray nozzles (46) with the notches in the right dual nozzle bracket (43) and tighten the cap fittings (47). (Fig. 10)

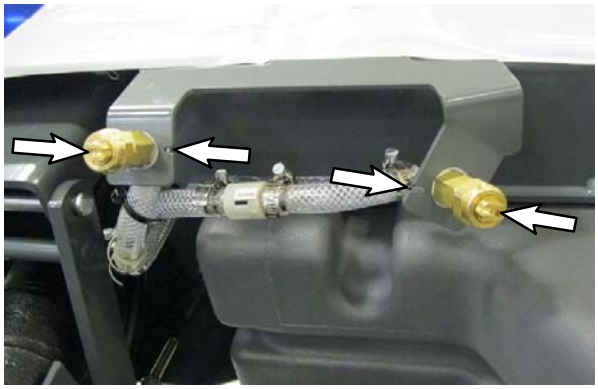


FIG. 10 - Right Spray Nozzle Assembly

70. Align the notches in the spray nozzles (46) with the notches in the left dual nozzle bracket (41) and tighten the cap fittings (47). (Fig. 11)

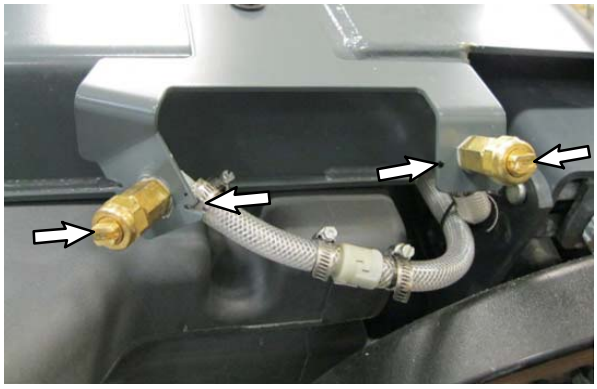


FIG. 11 - Left Spray Nozzle Assembly

71. Use a hose clamp (26) to connect a y-fitting (42) to each 72 in. (1829 mm) PVC hose (29). (Fig. 9 / Fig. 12)

72. Use cable clamps (26) to connect the 29 in. (737 mm) and 23 in. (584 mm) PVC hoses (29) to the y-fitting (42). (Fig. 9)

73. Use cable clamps (26) to connect each 30 in. (762 mm) PVC hose (29) to the y-fitting (42). (Fig. 12)

74. Arrange the 29 in. (737 mm) 23 in. (584 mm), and 30 in. (762 mm) PVC hoses away from the side brush linkage (moving parts) and use two cable ties (51) to secure the PVC hoses to the machine, away from any moving parts. (Fig. 9 / Fig. 12)

75. Use a cable clamp (50) and SEMS M8 hex screw (49) to secure both 72 in. (1829 mm) PVC hoses (29) to the machine. (Fig. 9 / Fig. 12)

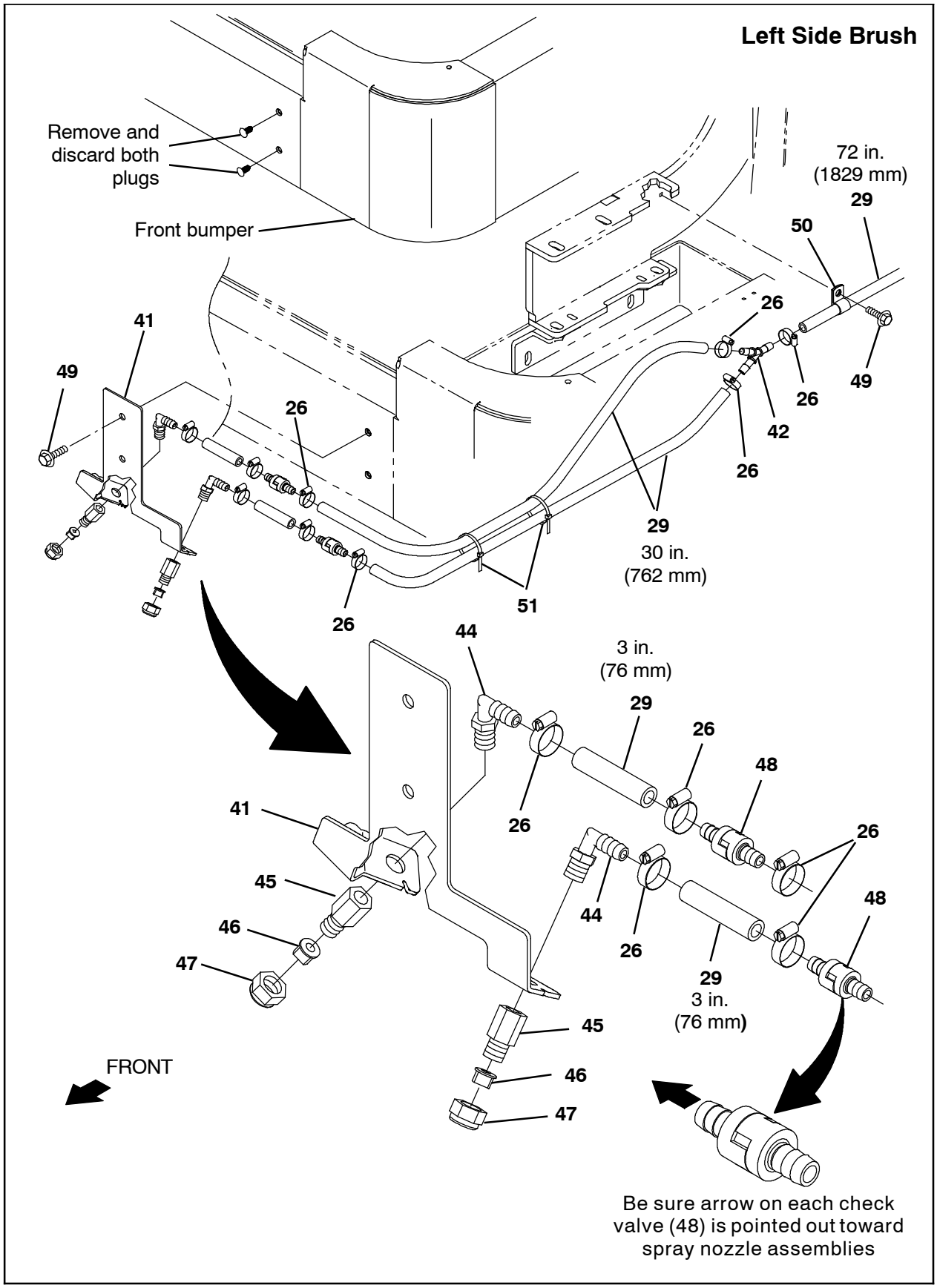

Left Side Brush
Remove and discard both plugs
Front bumper
72 in. (1829 mm)
29
50
26
41
49
26
49
26
42
26
29
30 in. (762 mm)
26
51
44
3 in. (76 mm)
29
26
48
41
26
26
45
44
48
46
26
47
29
3 in. (76 mm)
45
FRONT
46
47
Be sure arrow on each check valve (48) is pointed out toward spray nozzle assemblies

FIG. 12

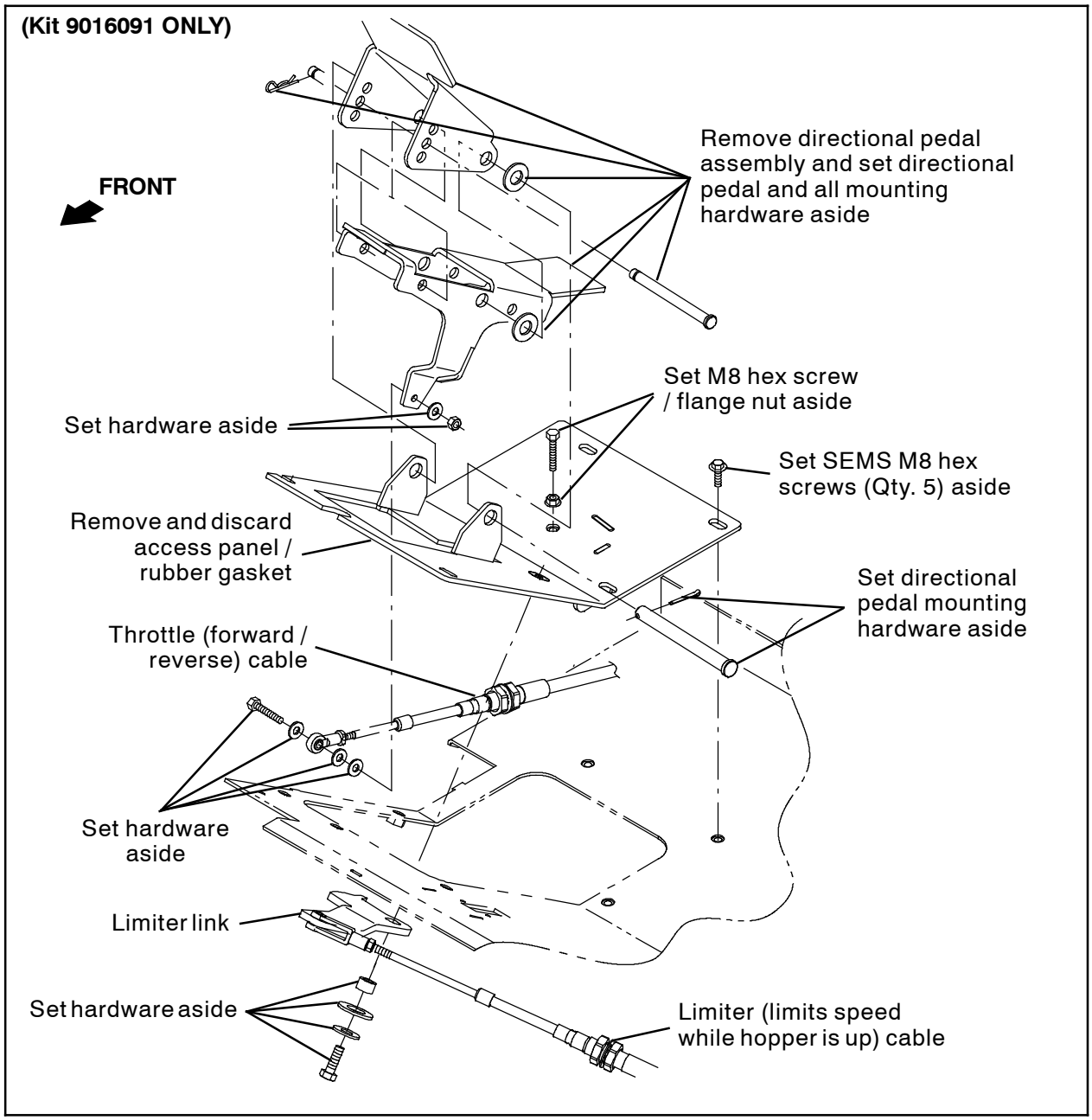


FIG. 13

NOTE: Complete Step 76 through Step 92 only if installing kit 9016091 onto machines serial numbers 000000 - 006501. Proceed to Step 93 if installing kit 9016146 onto machines serial numbers 006501 -).

76. **(Kit 9016091 ONLY):** Remove the hardware securing the limiter link / limiter cable to the access panel. Set all removed hardware aside. (Fig. 13)

77. **(Kit 9016091 ONLY):** Remove the hardware securing the throttle cable to the directional pedal. Set all removed hardware aside. (Fig. 13)

78. **(Kit 9016091 ONLY):** Remove the access panel from the floor of the operator compartment. Set the five SEMS M8 hex screws aside. (Fig. 13)

79. **(Kit 9016091 ONLY):** Remove the directional pedal assembly from the access panel. Set the directional pedal and all mounting hardware aside. (Fig. 13)

80. **(Kit 9016091 ONLY):** Remove the M8 hex screw and flange nut from the access panel. Set the M8 hex screw and flange nut aside. Discard the access panel / rubber gasket. (Fig. 13)

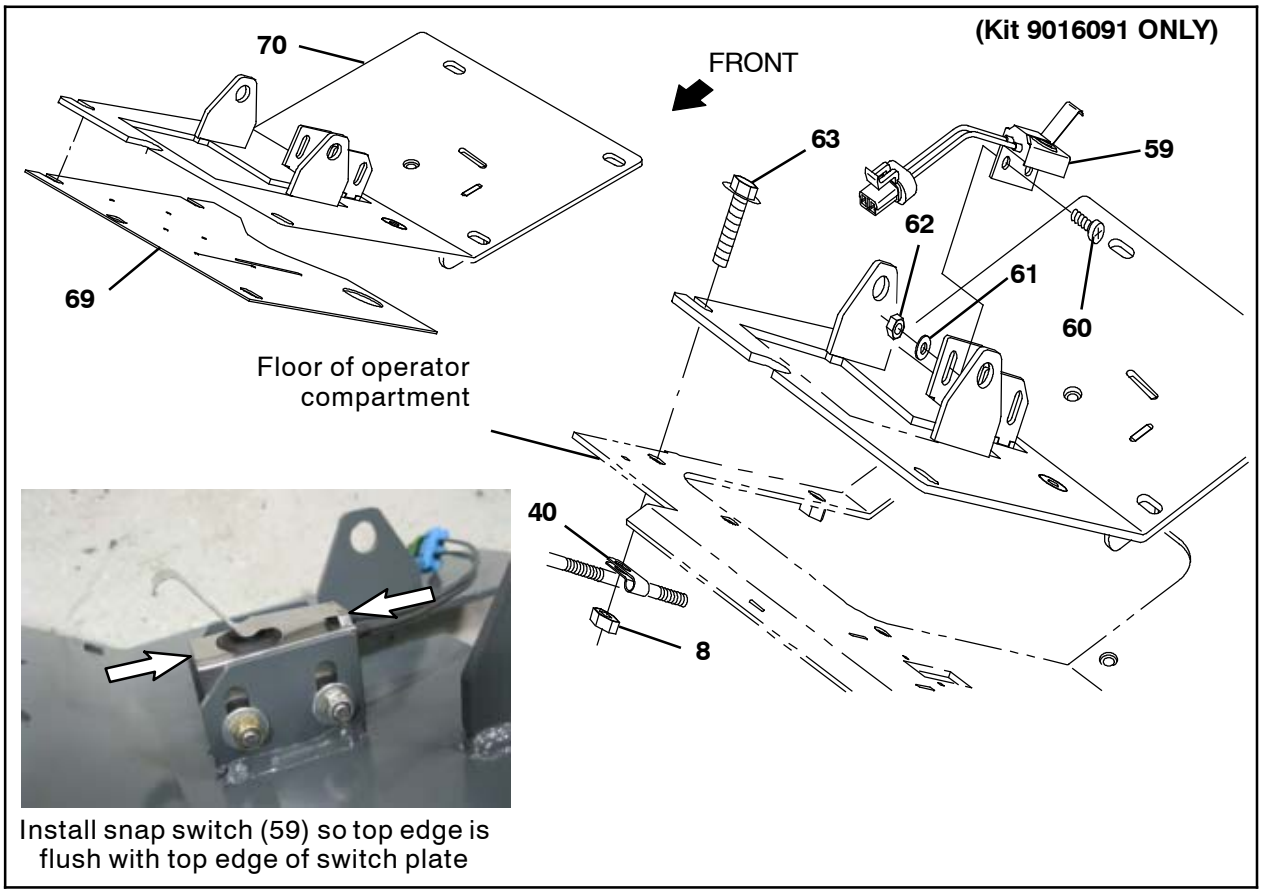


FIG. 14

81. **(Kit 9016091 ONLY):** Use two M5 pan screws (60), two flat washers (61), and two M5 lock hex nuts (62) to install the snap switch (59) onto the new access panel (69). (Fig. 14)

82. **(Kit 9016091 ONLY):** Remove the connector from the snap switch (59). Set the connector aside. (Fig. 14)

83. **(Kit 9016091 ONLY):** Route the snap switch (59) wires through the rectangular hole next to the switch plate in the access panel (69) where the snap switch is installed, and reconnect the connecter to the snap switch (59) wires. (Fig. 14)

84. **(Kit 9016091 ONLY):** Apply adhesive to the rubber gasket (70) and install the rubber gasket onto the access panel (69). (Fig. 14)

85. **(Kit 9016091 ONLY):** Reinstall the directional pedal assembly onto the access panel (69). (Fig. 13)

86. **(Kit 9016091 ONLY):** Reinstall the M8 hex screw and flange nut onto the access panel (69). (Fig. 13)

87. **(Kit 9016091 ONLY):** Use a SEMS M8 hex screw (63) and M8 hex nut (8) to install the cable clamp (40) onto the access panel (69). Do not tighten M8 hex screw or M8 hex nut. These items are tightened later when cable connections are completed. (Fig. 14)

88. **(Kit 9016091 ONLY):** Set the access panel (69) into the operator compartment. (Fig. 14)

89. **(Kit 9016091 ONLY):** Use saved SEMS M8 hex screws to secure the access panel (69) into the operator compartment. (Fig. 14 / Fig. 13)

90. **(Kit 9016091 ONLY):** Reconnect the throttle cable to the directional pedal assembly. (Fig. 13)

91. **(Kit 9016091 ONLY):** Reconnect the limiter link / limiter cable to the access panel. (Fig. 13)

92. **(Kit 9016091 ONLY):** Proceed to Step 94.

93. **(Kit 9016146 ONLY):** Remove the hardware securing the limiter link / limiter cable to the access panel. Set all removed hardware aside. (Fig. 15)

94. **(Kit 9016146 ONLY):** Remove the directional pedal assembly from the access panel. Set the directional pedal and all mounting hardware aside. (Fig. 15)

95. **(Kit 9016146 ONLY):** Use two M5 pan screws (6), two flat washers (61), and two M5 luck hex nuts (62) to install the snap switch (59) onto the new access panel (69). (Fig. 15)

96. **(Kit 9016146 ONLY):** Remove the connector from the snap switch (59). Set the connector aside. (Fig. 15)

97. **(Kit 9016146 ONLY):** Route the snap switch (59) wires through the rectangular hole next to the switch plate in the access panel (69) where the snap switch is installed, and reconnect the connecter to the snap switch (59) wires. (Fig. 15)

98. **(Kit 9016146 ONLY):** Use a SEMS M8 hex screw (63) and M8 hex nut (8) to install the cable clamp (40) onto the access panel. Do not tighten M8 hex screw or M8 hex nut. These items are tightened later when cable connections are completed. (Fig. 15)

99. **(Kit 9016146 ONLY):** Reinstall the directional pedal assembly onto the access panel (69). (Fig. 15)

100. **(Kit 9016146 ONLY):** Reconnect the throttle cable to the directional pedal assembly. (Fig. 15)

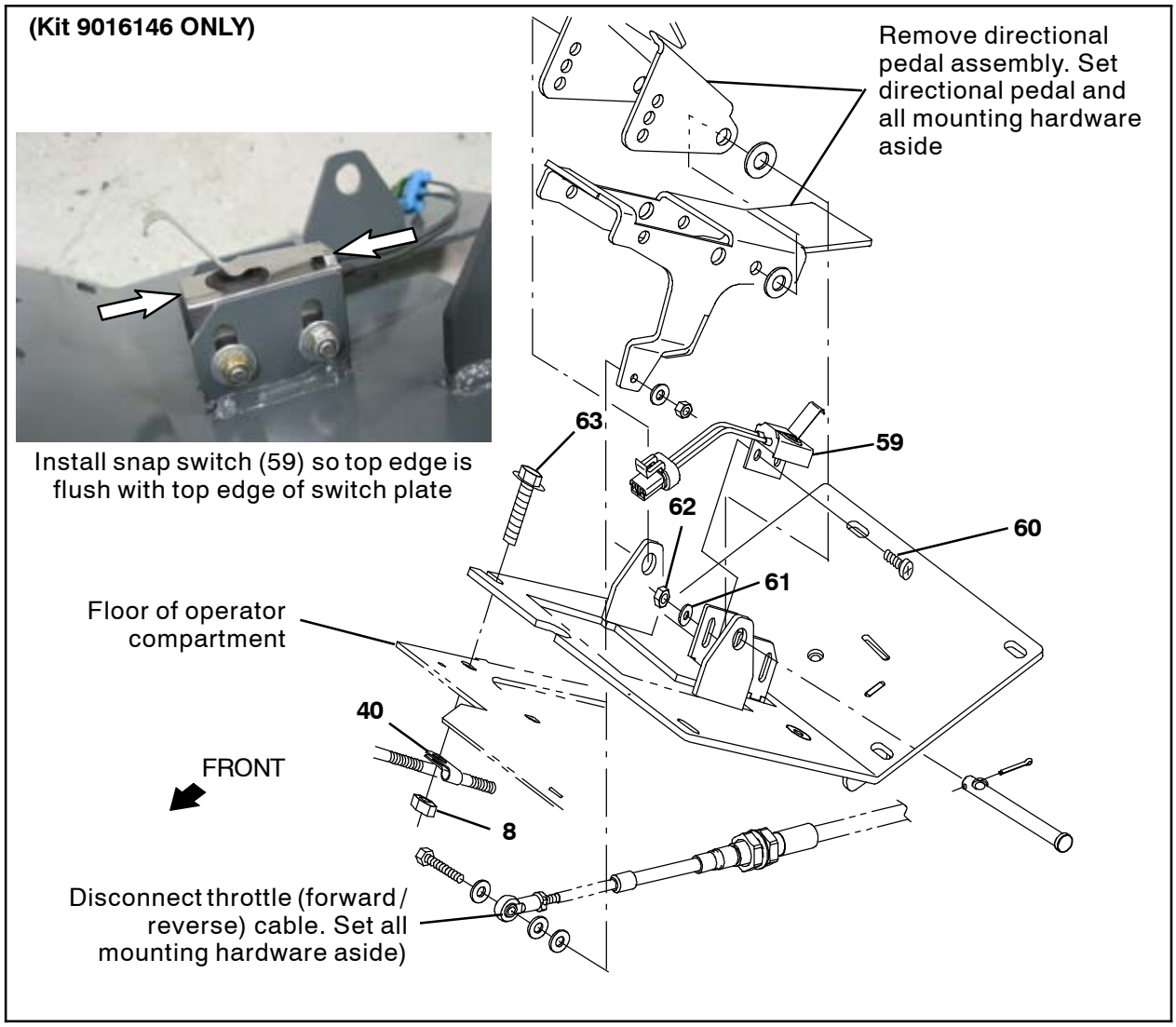


FIG. 15

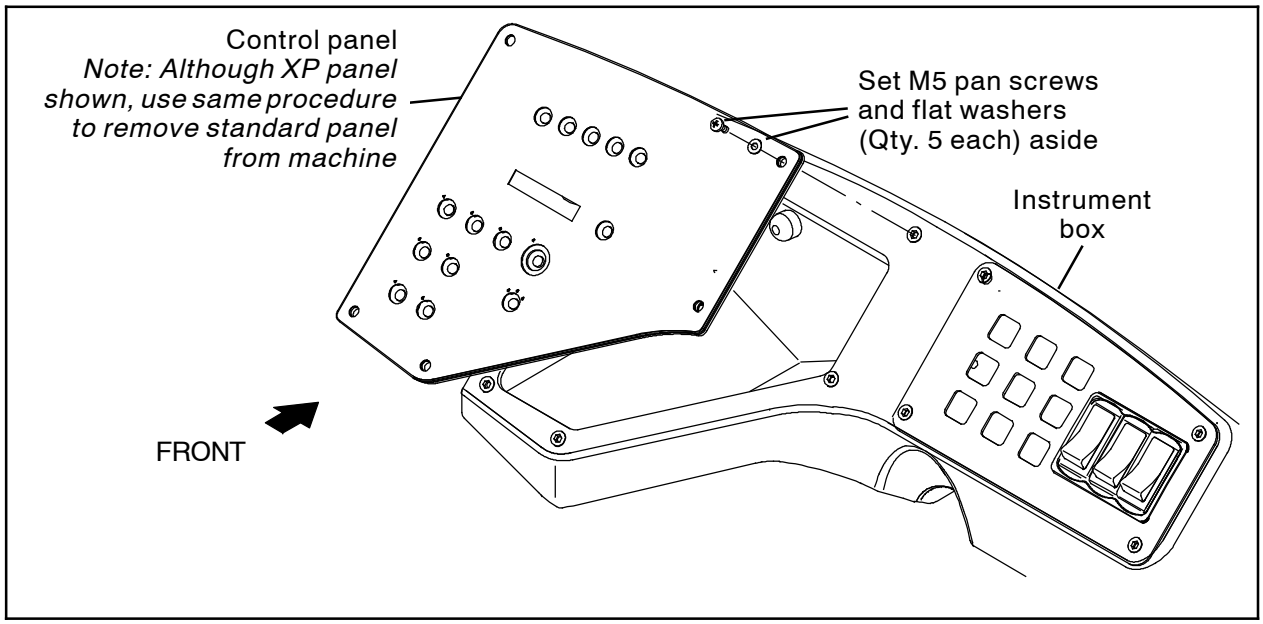


FIG. 16

101. Remove the M5 pan screws and flat washers securing the control panel to the instrument box. Set the M5 pan screws and flat washers aside. (Fig. 16)

102. Carefully pull the control panel from the instrument box. Do not break any wire / cable connections when pulling control panel from the instrument panel. (Fig. 16)

NOTE: Complete Step 103 through Step 108 only if installing kit 9016091 onto machines serial numbers 000000 - 006501. Proceed to Step 109 if installing kit 9016146 onto machines serial numbers 006501 -).

103. **(Kit 9016091 ONLY):** Remove the two M5 pan screws and flat washers securing the switch panel assembly to the instrument box and use two M5 pan screws (73) to install the control console template (68) onto the instrument box. Set both removed M5 pan screws and flat washers aside. (Fig. 17)

104. **(Kit 9016091 ONLY):** Use the control console template (68) as a template to mark the locations for the LED light (54) and the rocker switch (55) on the instrument box. (Fig. 17)

105. **(Kit 9016091 ONLY):** Remove the control console template (68) from the instrument box and reinstall the M5 pan screws and flat washers to completely secure the switch panel assembly to the instrument box. (Fig. 17)

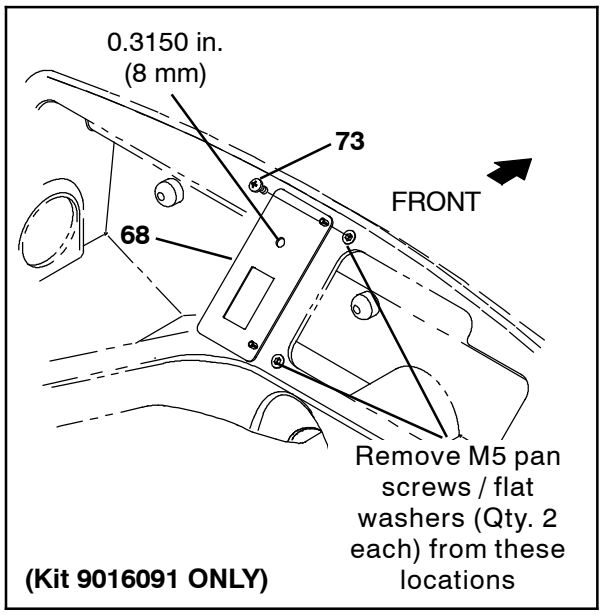


FIG. 17

106. **(Kit 9016091 ONLY):** Carefully drill a 0.3150 in. (8 mm) hole into the hole in the instrument box for the LED light (54). **Do Not** cut or damage cables / components located behind the instrument box when drilling into the instrument box. (Fig. 17)

107. **(Kit 9016091 ONLY):** Carefully cut a hole into the instrument box for the rocker switch (55). **Do Not** cut or damage cables / components located behind the instrument box when cutting into the instrument box. (Fig. 17)

108. **(Kit 9016091 ONLY):** Proceed to Step 110.

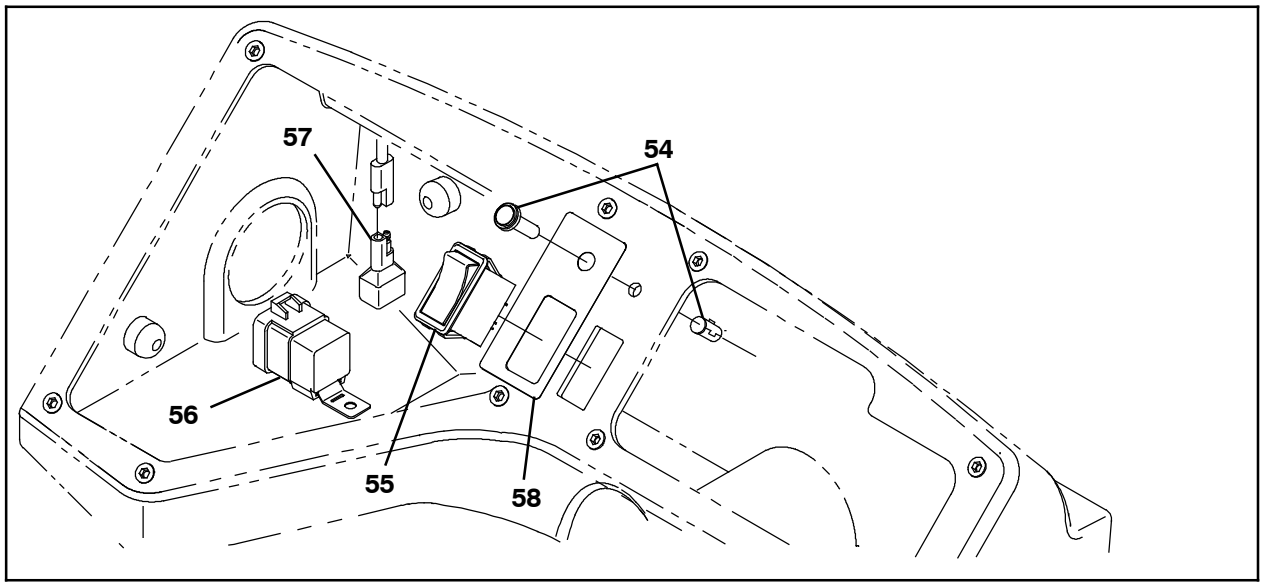


FIG. 18

109. **(Kit 9016146 ONLY):** Remove the plugs from the instrument box. Discard the removed plugs (Fig. 19)

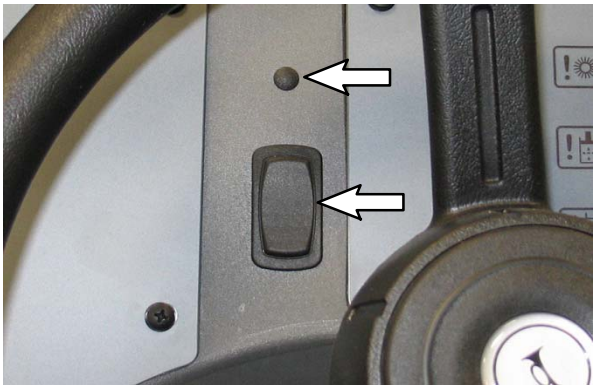


FIG. 19

110. Insert the rocker switch (55) into the instrument box. (Fig. 18)

111. Insert the LED light (54) into the instrument box and use the spring sleeve included with the eh LED light to secure the LED light in the instrument box. (Fig. 18)

112. Connect the wet dust harness (66) to the LED light (54) and the rocker switch (55). (Fig. 18 / Fig. 26)

113. Install the wet dust control label (58) onto the instrument box. (Fig. 18)

114. Connect the 12 VDC relay (56) and diode (57) to the wet dust harness (66). (Fig. 18 / Fig. 25)

115. Insert the 12 VDC relay (56) and diode (57) into the instrument box and route the wet dust harness (66) along the main wire harness and down to the hydraulic solenoid valve. (Fig. 18)

116. Disconnect the main wire harness from the solenoid in the valve SV3 terminal. (Fig. 20)

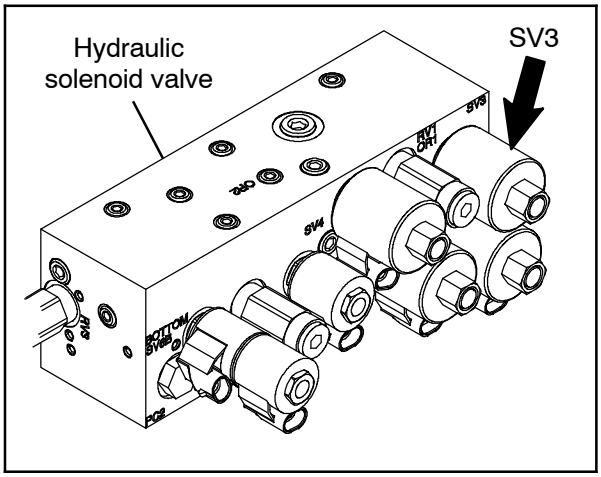


FIG. 20

117. Connect the wet dust harness (66) to the solenoid in the valve SV3 terminal. (Fig. 20 / Fig. 25)

118. Connect the main wire harness disconnect from the solenoid valve SV3 terminal to the wet dust harness (66). (Fig. 25)

119. Route the wet dust harness (66) to the horn (Fig. 21)

120. Connect the VW terminal (23) to the wet dust harness (66) 213 BLK. (Fig. 25)

121. Disconnect the negative (black) lead from the horn and connect it to the VW terminal (23) on the wet dust harness (66). (Fig. 21 / Fig. 25)

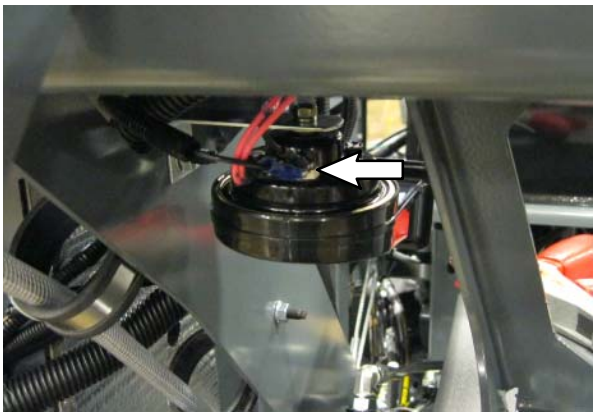


FIG. 21

122. Connect the VW terminal (23) on the wet dust harness (66) to the horn. (Fig. 21 / Fig. 25)

123. Clean the area on the front of the operator station where the two cable tie mounts (64) will be installed. (Fig. 22)

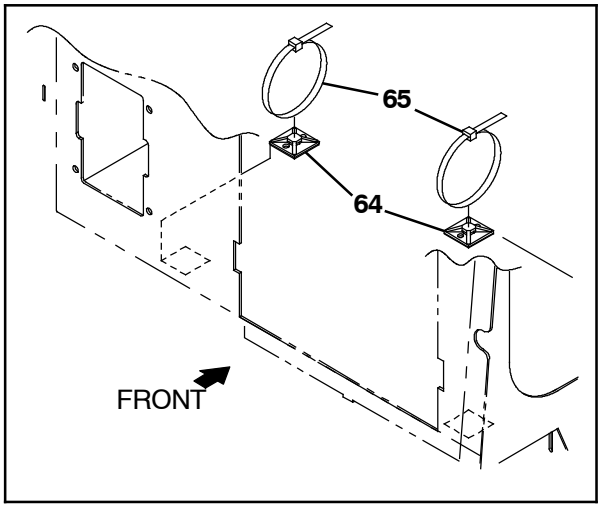


FIG. 22

124. Use two cable ties (65) to secure the wet dust harness (66) to the cable tie mounts (64) installed on the operator station. (Fig. 22 / Fig. 23)

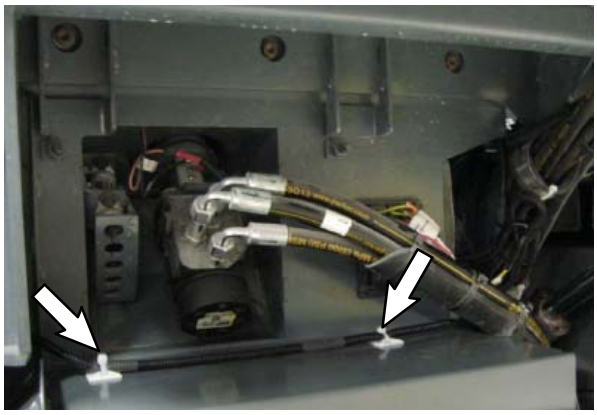


FIG. 23

125. Use two cable ties (65) to secure the wet dust harness (66) to the cable tie mounts (64) installed on the operator station. (Fig. 22 / Fig. 23)

126. Connect the wet dust harness (66) to the snap switch (59). (Fig. 25)

127. Use the SEMS M8 hex screw (63), cable clamp (40), and M8 hex nut (8) to secure the wet dust harness (66) to the access panel (69). (Fig. 14 / Fig. 15)

128. Connect the wet dust harness (66) to the yellow wire from Fuse 9. (Fig. 24 / Fig. 25)

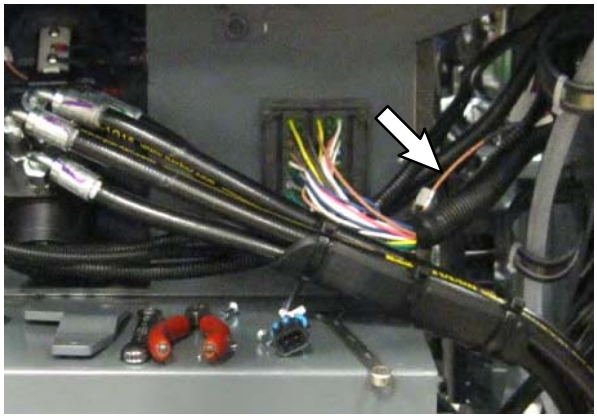


FIG. 24

129. Connect the wet dust harness (66) to the solution pump (32). (Fig. 25)

130. Connect the wet dust harness (66) to the liquid level sensor (17). (Fig. 25)

131. Use the M8 hex screw, flat washer, and cable clamp (4) to secure the wet dust harness (66) to the fan mounting bracket. (Fig. 3)

132. Reconnect the battery cables to the battery.

133. Start the machine and completely lower the hopper.

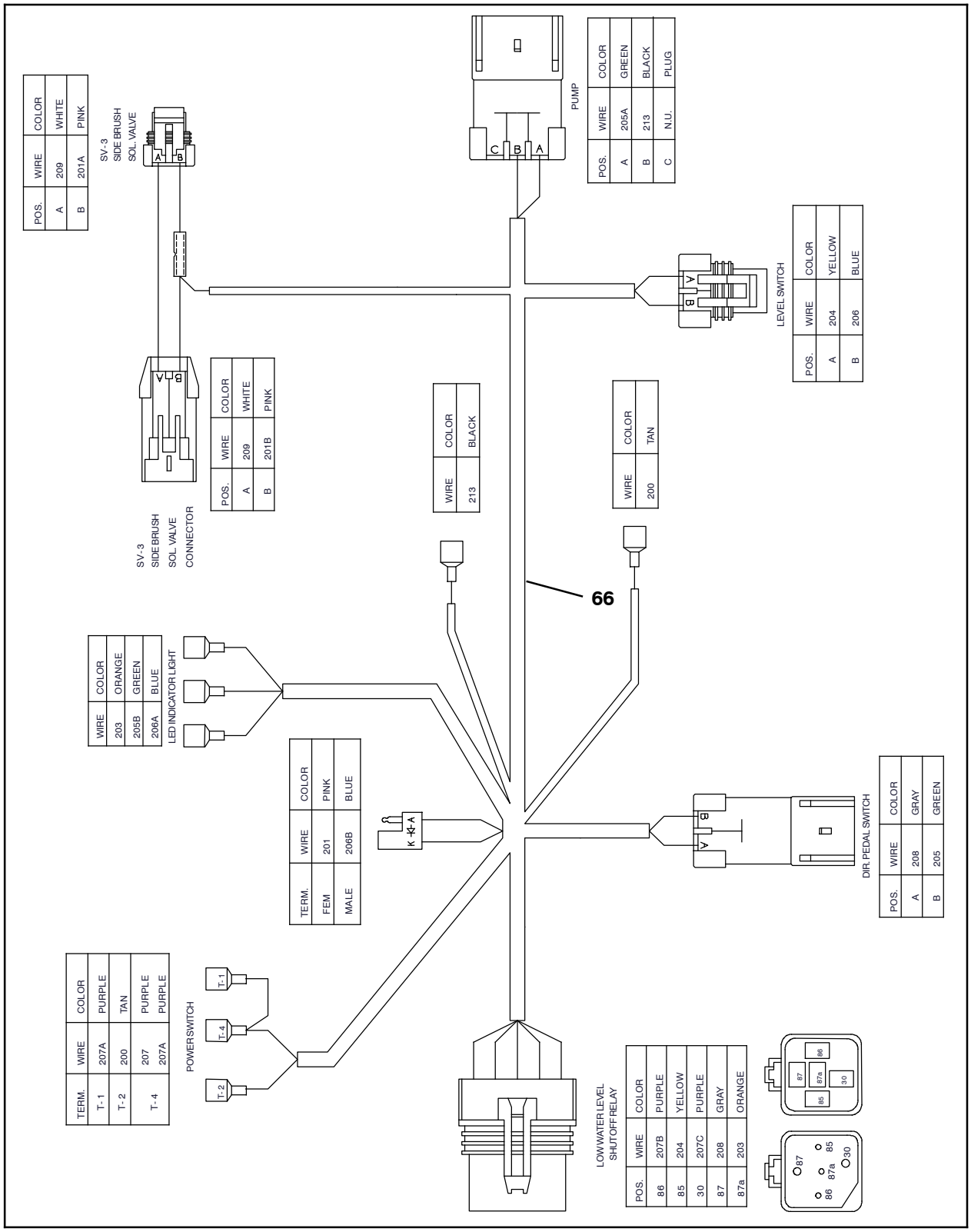


FIG. 25

TEST / ADJUST THE MACHINE:

134. Start the the side brush(es) and slightly press the directional pedal. The LED light should illuminate RED.

135. Turn off the machine.

136. Fill the water tank with enough water to activate the level sensor.

NOTE: Pump may need to prime before the spray nozzles can function. If necessary allow pump several minutes to prime.

137. Start the machine and again slightly press the directional pedal forward. The LED light should illuminate GREEN.

138. Turn off the machine.

NOTE: If the LED is not functioning, the snap switch (59) located under the directional pedal may need to be adjusted. Loosen hardware and adjust the position of the snap switch. (Fig. 26)

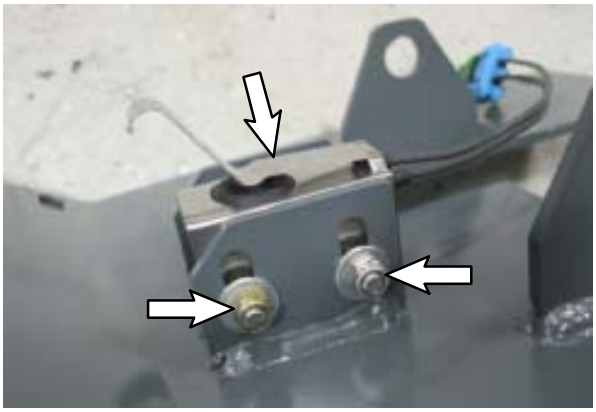


FIG. 26

139. Adjust the water output / spray. Start with the blue knob on the shut off valve (30) open approximately 10° (degrees). Do Not completely open the valve. The system will not pressurize if the valve is completely opened. Observe the water output / spray from the spray nozzles. Use the blue knob to adjust the water output / spray as necessary. (Fig. 27)

FIG. 27

140. Start the machine, completely raise the hopper, turn off the machine, engage the hopper support bar, turn on the machine, lower the hopper until the hopper support is resting on the bracket, and turn off machine.

141. Reinstall the rubber dust skirt onto the operator station / frame of the machine.

142. Start the machine and completely lower the hopper.

143. Operate machine for several minutes in an area where the machine is typically operated and observe if dust is being adequately suppressed. If necessary, make additional adjustments to the shut off valve (30).

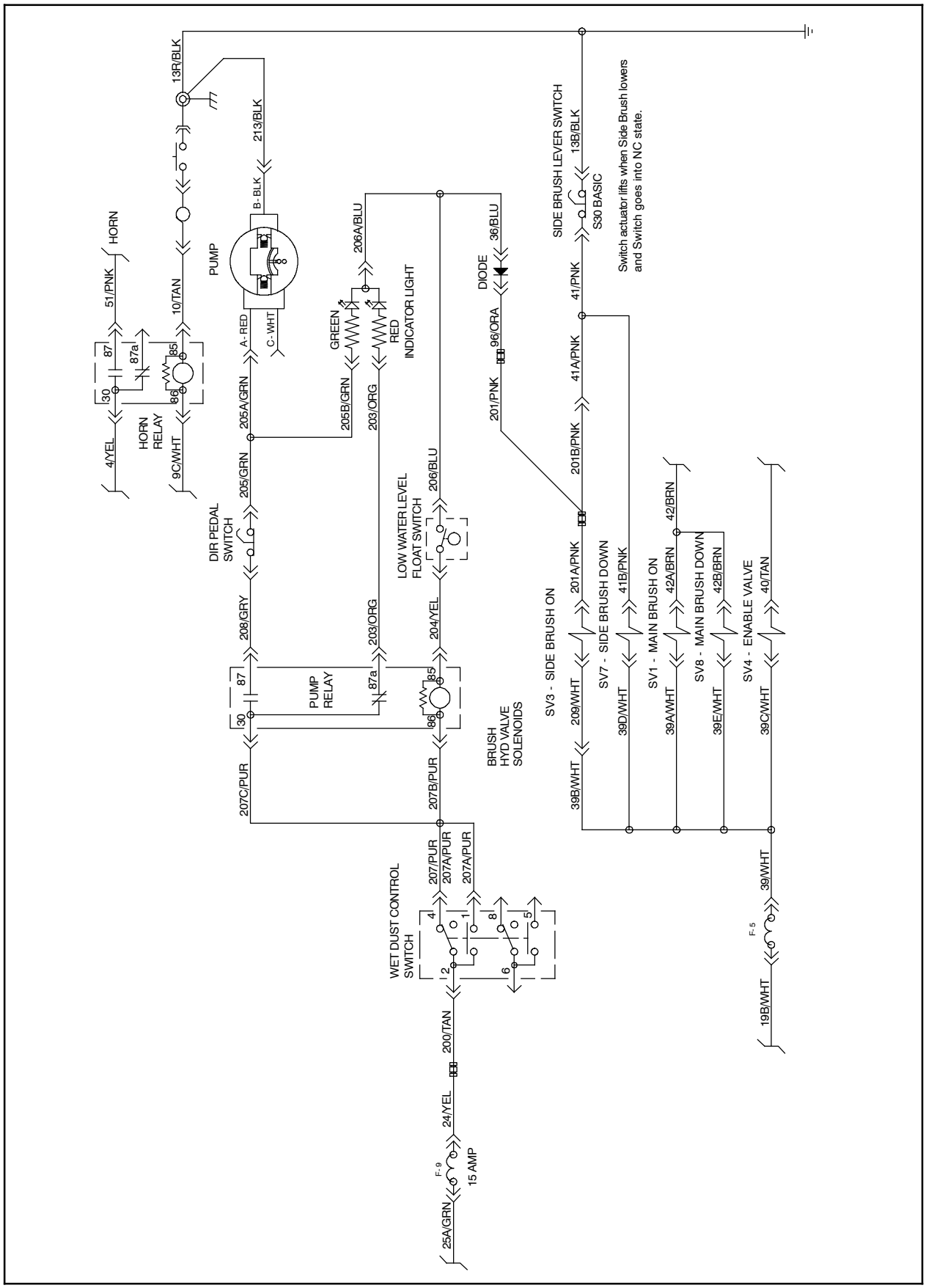

13R/BLK
HORN
51/PNK
10/TAN
4/YEL
9C/WHT
HORN RELAY
87
87a
85
86
30
PUMP
B - BLK
213/BLK
A - RED
C - WHT
205A/GRN
205/GRN
205B/GRN
206A/BLU
GREEN
RED
INDICATOR LIGHT
203/ORG
DIODE
36/BLU
96/ORA
201/PNK
SIDE BRUSH LEVER SWITCH
13B/BLK
S30 BASIC
Switch actuator lifts when Side Brush lowers and Switch goes into NC state.
41/PNK
41A/PNK
201B/PNK
DIR PEDAL SWITCH
208/GRY
LOW WATER LEVEL FLOAT SWITCH
206/BLU
204/YEL
PUMP RELAY
87a
85
86
30
87
207C/PUR
207B/PUR
BRUSH HYD VALVE SOLENOIDS
SV3 - SIDE BRUSH ON
201A/PNK
209/WHT
39B/WHT
SV7 - SIDE BRUSH DOWN
41B/PNK
39D/WHT
SV1 - MAIN BRUSH ON
42A/BRN
39A/WHT
SV8 - MAIN BRUSH DOWN
42B/BRN
39E/WHT
SV4 - ENABLE VALVE
40/TAN
39C/WHT
42/BRN
F- 5
39/WHT
19B/WHT
WET DUST CONTROL SWITCH
4
1
8
5
2
6
207/PUR
207A/PUR
207A/PUR
200/TAN
24/YEL
F- 9
15 AMP
25A/GRN

FIG. 28

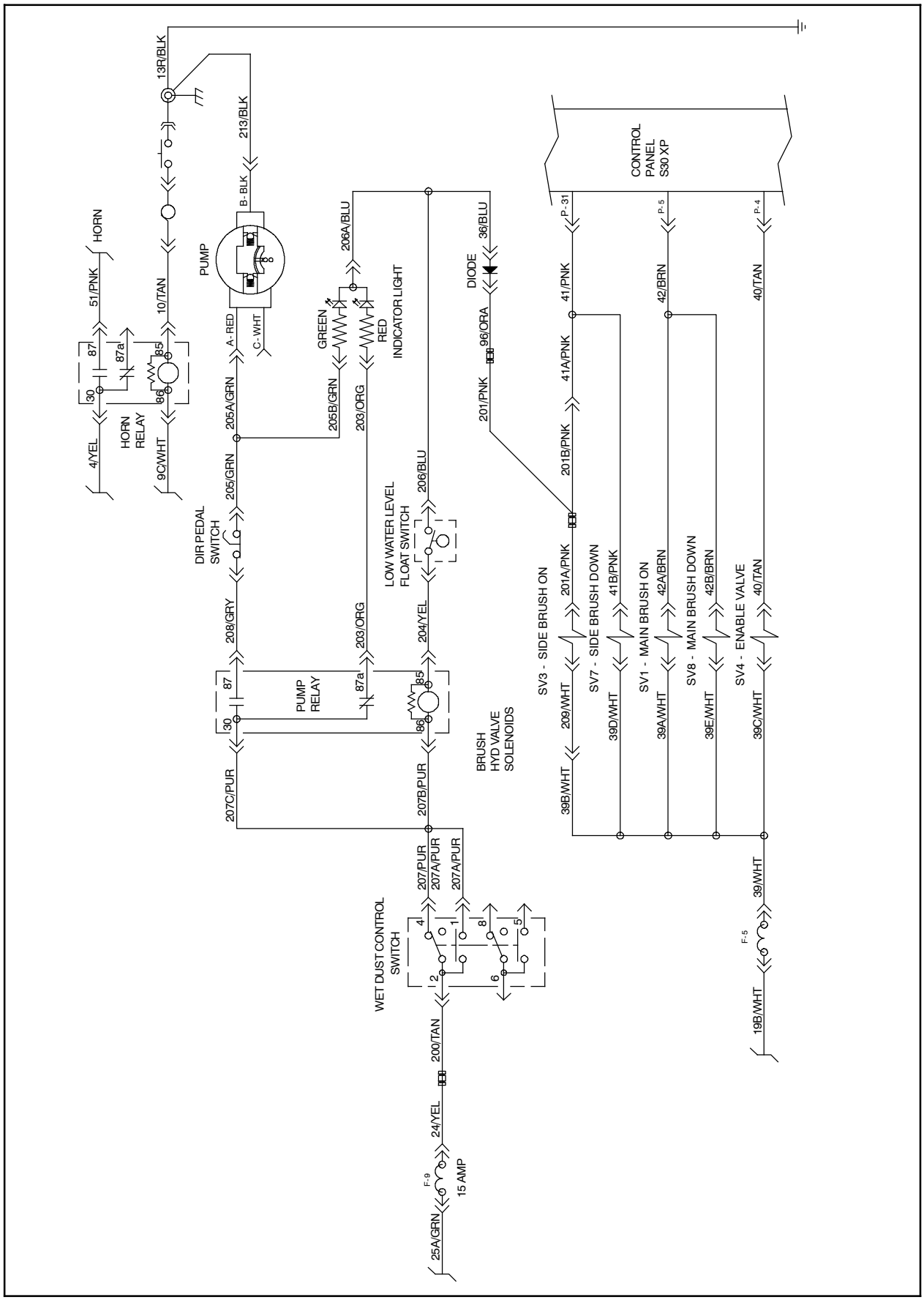

13R/BLK
213/BLK
B- BLK
PUMP
A- RED
C- WHT
HORN
51/PNK
10/TAN
4/YEL
9C/WHT
HORN RELAY
87
87a
85
86
30
205A/GRN
205B/GRN
205/GRN
206A/BLU
GREEN
RED
INDICATOR LIGHT
203/ORG
DIR PEDAL SWITCH
208/GRY
206/BLU
LOW WATER LEVEL FLOAT SWITCH
204/YEL
PUMP RELAY
207C/PUR
207B/PUR
DIODE
36/BLU
96/ORA
201/PNK
BRUSH HYD VALVE SOLENOIDS
SV3 - SIDE BRUSH ON
SV7 - SIDE BRUSH DOWN
SV1 - MAIN BRUSH ON
SV8 - MAIN BRUSH DOWN
SV4 - ENABLE VALVE
201A/PNK
201B/PNK
41/PNK
41A/PNK
41B/PNK
42/BRN
42A/BRN
42B/BRN
40/TAN
209/WHT
39D/WHT
39A/WHT
39E/WHT
39C/WHT
39B/WHT
39/WHT
19B/WHT
F-5
P-31
P-5
P-4
CONTROL PANEL S30 XP
WET DUST CONTROL SWITCH
207/PUR
207A/PUR
200/TAN
24/YEL
F-9
15 AMP
25A/GRN

FIG. 29

Bill Of Materials For Watershield Kit, Dual, SBDC, Cl [S30 Rwk] - 9016091 / Watershield Kit, Dual, SBDC, Cl [S30] - 9016146

	Ref.	Tennant Part No.	Description	Qty.
	1	9016474	Tank, Water, Plstc, 11.0 Gal, Trim[S30]	1
	2	1232002	Bracket, Sppt, Rear, Tank [S30]	1
	3	09740	Screw, Hex, M8 X 1.25 X 20, SS	6
	4	1017218	Washer, Flat, 0.32b 1.00d .12, SS	6
	5	1232001	Bracket, Angle, Tank Sppt, Top [S30]	1
	6	1037354	Screw, Hex, M8 X 1.25 X 30, 9.8, SEMS	3
	7	07791	Nut, Hex, Flng, M8 X 1.25	2
	8	08709	Nut, Hex, Lock, M8 X 1.25, Nl	3
	9	32491	Washer, Flat, 0.31, Std	2
	10	1232000	Bracket, Angle, Tank Brace	1
▽	11	24358	Cap Assy, Tank, Drain	1
▲	12	1031699	Gasket, .19, 4.05id 5.29od [Buna]	1
	13	86636	Plug, Cap, Nat	1
	15	1231991	Brace Wldt, Sppt, Water Tank	1
	16	1231994	Bracket Wldt, Sppt, Top, Tank	1
	17	385685	Sensor, Level, Liq, 14vdc 01a .62- 11	1
	18	1019285	Bracket, Protector, Float Switch	1
	19	1232027	Fitting, Plstc, Str, Pm06/Pm06	1
	20	1005318	Fitting, Plstc, E90, Pf06/Pm06, Nyl	1
▽	21	1005302	Filter, In- Line, Pf06/Pf06 080mesh 02.6l	1
▲		1005304	Screen, Fltr, 80 Mesh, SS	1
	22	150412	Fitting, Plstc, E90, Bm06/Pm06	1
	23	378953	Terminal, VW, .250 x .032	1
	24	150417	Fitting, Plstc, E90, Bm04/Pm06	1
	25	1014985	Hose, PVC, Clr, 0.25id, 0.38od (48 in. / 1219 mm)	1
	26	43844	Clamp, Hose, Wormdrive, 0.25- 0.62d, .31w	36
	27	764183	Fitting, Draincock, E90 Pm06	1
	28	61456	Fitting, Plstc, Tee, Bm03/Bm06/Bm06, Br	1
	29	1014981	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr (240 in. / 6096 mm)	1
	30	1232030	Valve, Shutoff, Bm04/Bm04, PVC	1
	31	1232051	Bracket Wldt, Sppt, Pump Mtg	1
	32	1036801	Pump, Soltn, 13.7vdc, 65psi [Fast II+]	1
	33	140293	Screw, Pan, Phl, M5 X 0.80 X 30, SS	4
	34	07514	Washer, Lock, Int, 10, SS	4
	35	01683	Washer, Flat, 10, SS	4
	36	1049259	Fitting, Nyl, Qdc, E90, Bm06/ Qm10	2
	37	39283	Screw, Hex, M10 X 1.50 X 25, 8.8	1
	38	32492	Washer, Flat, 0.38, Std	1
	39	32988	Washer, Lock, Int, 0.38	1
	40	46236	Clamp, Cable, Stl, 0.25d X 0.56w, 1hole	2
	41	1232004	Bracket, Mtg, Dual Nozzle, LH	1
	42	1017255	Fitting, Plstc, Y, Bm06/Bm06/Bm06, Nyl	1
	43	1232003	Bracket, Mtg, Dual Nozzle, RH	1
	44	57248	Fitting, Plstc, E90, Bm06/Pm04, Nyl	2
	45	1232066	Fitting, Body, Nozzle, Brs	4
	46	1232065	Nozzle, Spray, 110 Deg, 0.05 GPM	4
	47	769778	Fitting, Brs, Cap [Unijet]	4
	48	1015455	Valve, Check, 0005psi Bm06/Bm06	4
	49	1037346	Screw, Hex, M8 X 1.25 X 25, 9.8, SEMS	6

Ref.	Tennant Part No.	Description	Qty.
50	82829	Clamp, Cable, Stl, 0.63d X 0.75w, 1hole	4
51	763114	Tie, Cable, 11.3l, 2.75d Max	12
52	41016	Clamp, Cable, Stl, 2.25d X 1.00w, 1hole	2
53	1207562	Clamp, Cable, Stl, 3.25d X 1.00w, 1hole	2
54	1232342	Light, Led, .312d, 12 Vdc [Tri- Color]	1
55	398528	Switch, Rocker, Dpdt, On / Off / Mom	1
56	56186	Relay, 12vdc, 040a, Spdt No	1
57	222290	Diode, Ele, Plug	1
58	1232091	Label, Wet Dust Cntrl [S30]	1
59	1212400	Switch, Snap, 15a NC	1
60	06933	Screw, Pan, Phl, M5 X 0.80 X 16, 4.8	2
61	19324	Washer, Flat, 10, SAE	2
62	06549	Nut, Hex, Lock, M5 X 0.80, Nl	2
63	1037355	Screw, Hex, M8 X 1.25 X 35, 9.8, SEMS	1
64	55248	Mount, Cable Tie	4
65	49266	Tie, Cable, Nyl, 07.3l .19w 1.8 Max D	4
66	1232183	Harness, Cntrl, Wet Dust [S30]	1
67	1232297	Drill Template, S30 Water Tank Sppt **(Kit 9016091 ONLY)**	1
68	1232549	Template, Drill, Cntrl Console [S30] **(Kit 9016091 ONLY)**	1
69	1026688	Panel Wldt, Access **(Kit 9016091 ONLY)**	1
70	1038360	Gasket, Rbr, Pedal, Propel **(Kit 9016091 ONLY)**	1
71	130040	Tie, Cable, Nyl, 06.0l .12w	1
72	763115	Tie, Cable, 6.0l, 1.25d Max	1
73	1045487	Screw, Pan, Phl, M5 X 0.80 X 16, Blk	2

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Minneapolis, MN 55440-1452