



INSTRUCTION BULLETIN

No. 340856
Machine: M20 / T20
Published: 03-2007
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 9003487**

SYNOPSIS:

This kit contains the parts needed to install a flashing light/alarm kit on M20 and T20 machines. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 1.5 hours)

PREPARATION:

1. Park the machine on a clean level surface, turn off the machine, remove the key, and set the parking brake.

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

2. Open the front shroud and the engine shroud.
3. Disconnect the negative terminal and then the positive terminal from the battery.



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

NOTE: If installing the flashing light (13) onto the bracket (5), proceed to the instructions beginning on this page. If installing the flashing light (13) onto the overhead guard, proceed to the instructions starting on page 6.

INSTALLATION: (w/flashing light (13) installed onto bracket (5))

1. Use two hex screws (2), two flat washers (3), and two hex nuts (4) to install the backup alarm (1) onto the bracket (5). Refer to Fig. 1.

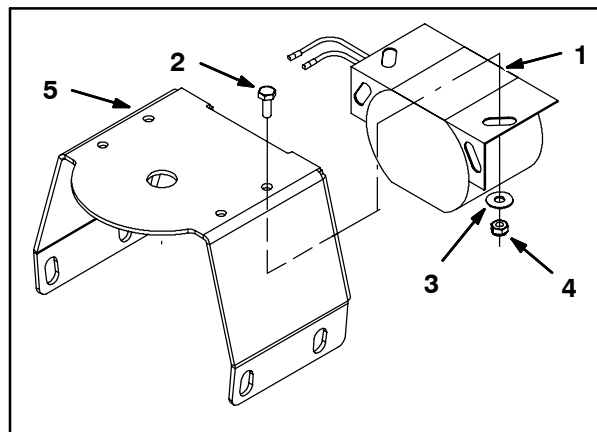


FIG. 1

2. Route the wires from the flashing light (13) down through the hole in the light support bracket (5) and use a hex screw (2), flat washer (3), and hex nut (4) to install the light onto the bracket. Refer to Fig. 2.

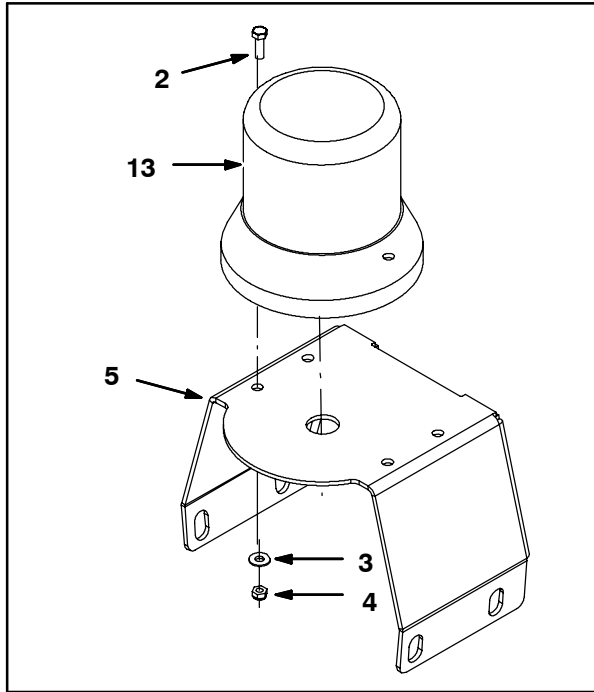


FIG. 2

3. Route the wires from the flashing light (13) through a cable clamp (9) and use a hex screw (2), two flat washers (3), and hex nut (4) to install the cable clamp underneath the lamp support bracket (5) and completely secure the light to the bracket. Refer to Fig. 3.

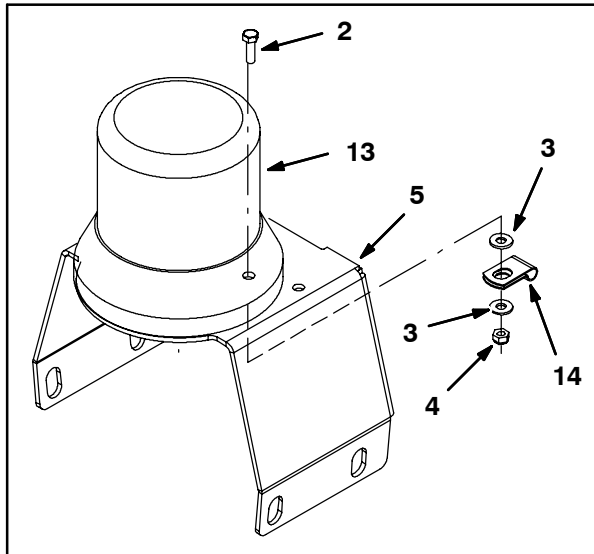


FIG. 3

4. Open the recovery tank cover and pull the main wire harness backup alarm and revolving light connector from between the recovery and solution tank. Connect the warning/backup harness (8) to the main wire harness. Refer to Fig. 4 or Fig. 5, and Fig. 8.

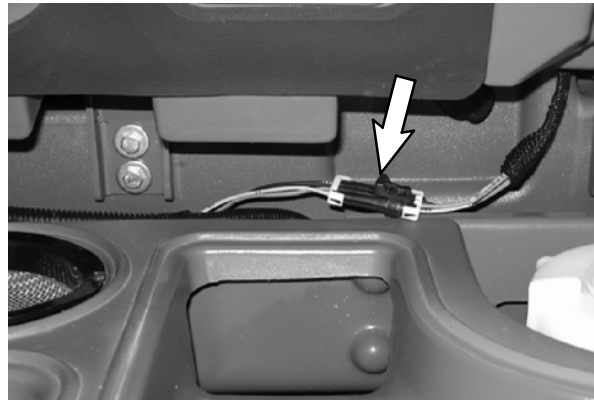


FIG. 4 - M20 Harness Location

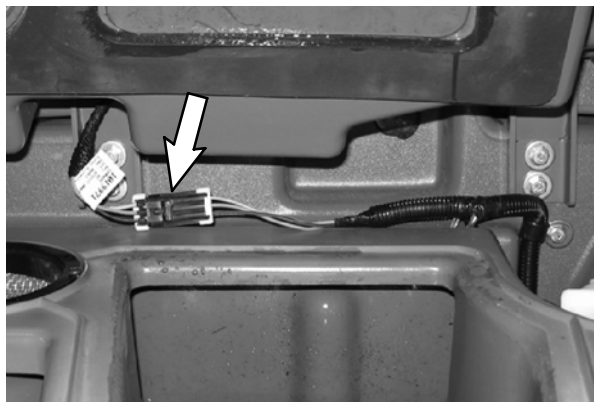


FIG. 5 - T20 Harness Location

5. Route the warning/backup harness (8) through the notch in the solution tank and install a cable clamp (9) onto the harness. Refer to Fig. 8.

6. Use three hex screws (6) and three flat washers (7) to install the bracket (5) onto the back of the machine. Refer to Fig. 6.

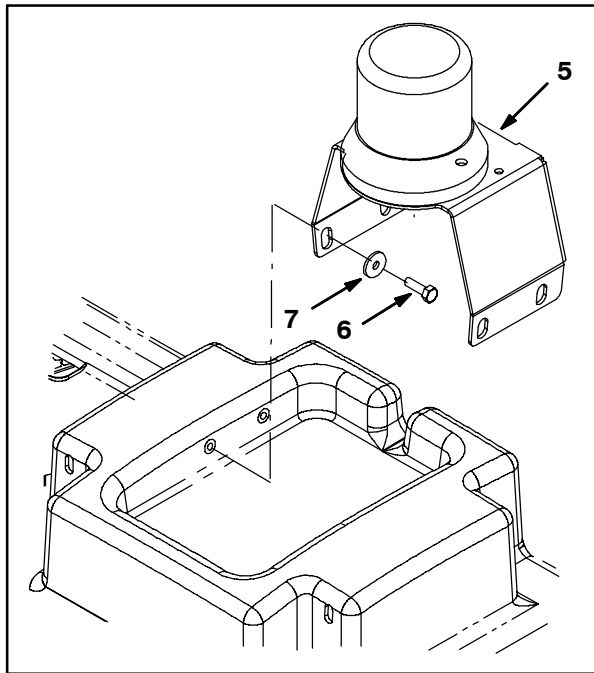


FIG. 6

7. Use a hex screw (6) and flat washer (7) to install the cable clamp (9) on the warning/backup harness (8) onto light support bracket (5) and solution tank. Refer to Fig. 7.

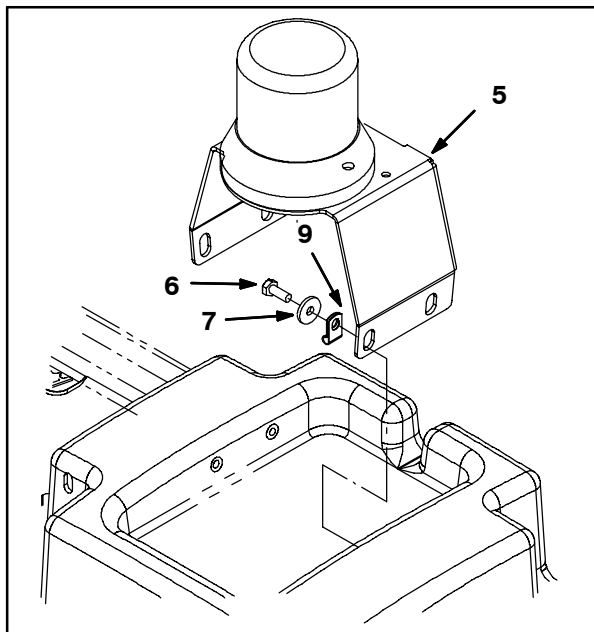


FIG. 7

8. Connect the wires from the backup alarm (1) and the flashing light (13) to the warning/backup harness (8). Refer to Fig. 4.
9. Route excess cable from the main wire harness and the warning/backup harness (8) back down between the recovery and solution tank. Refer to Fig. 3 and Fig. 4.
10. Reconnect the positive terminal and then the negative terminal to the battery.
11. Start the machine and move the machine in reverse. The backup alarm should sound while machine is moving in reverse. The light should flash while the engine is operating.

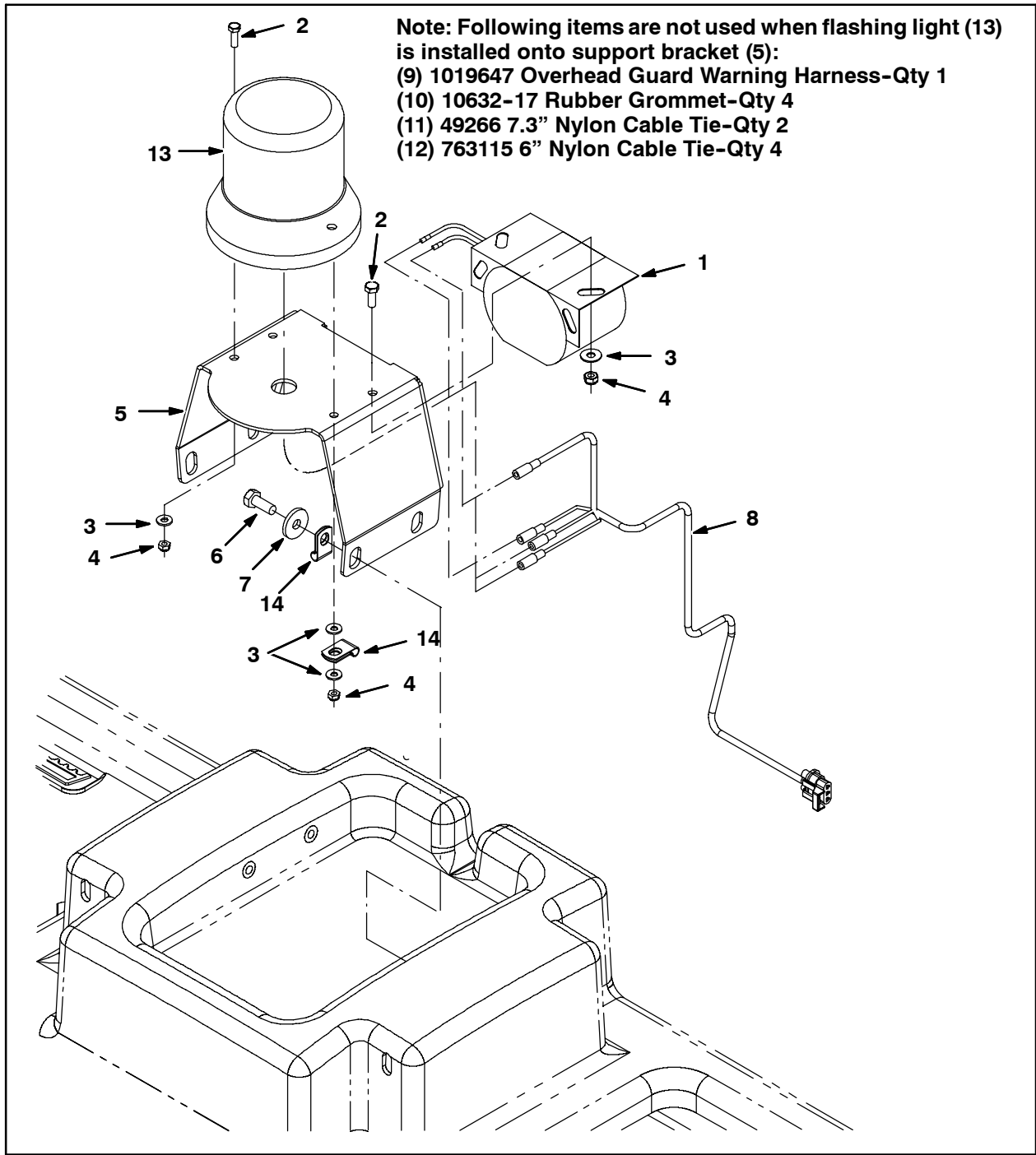


FIG. 8

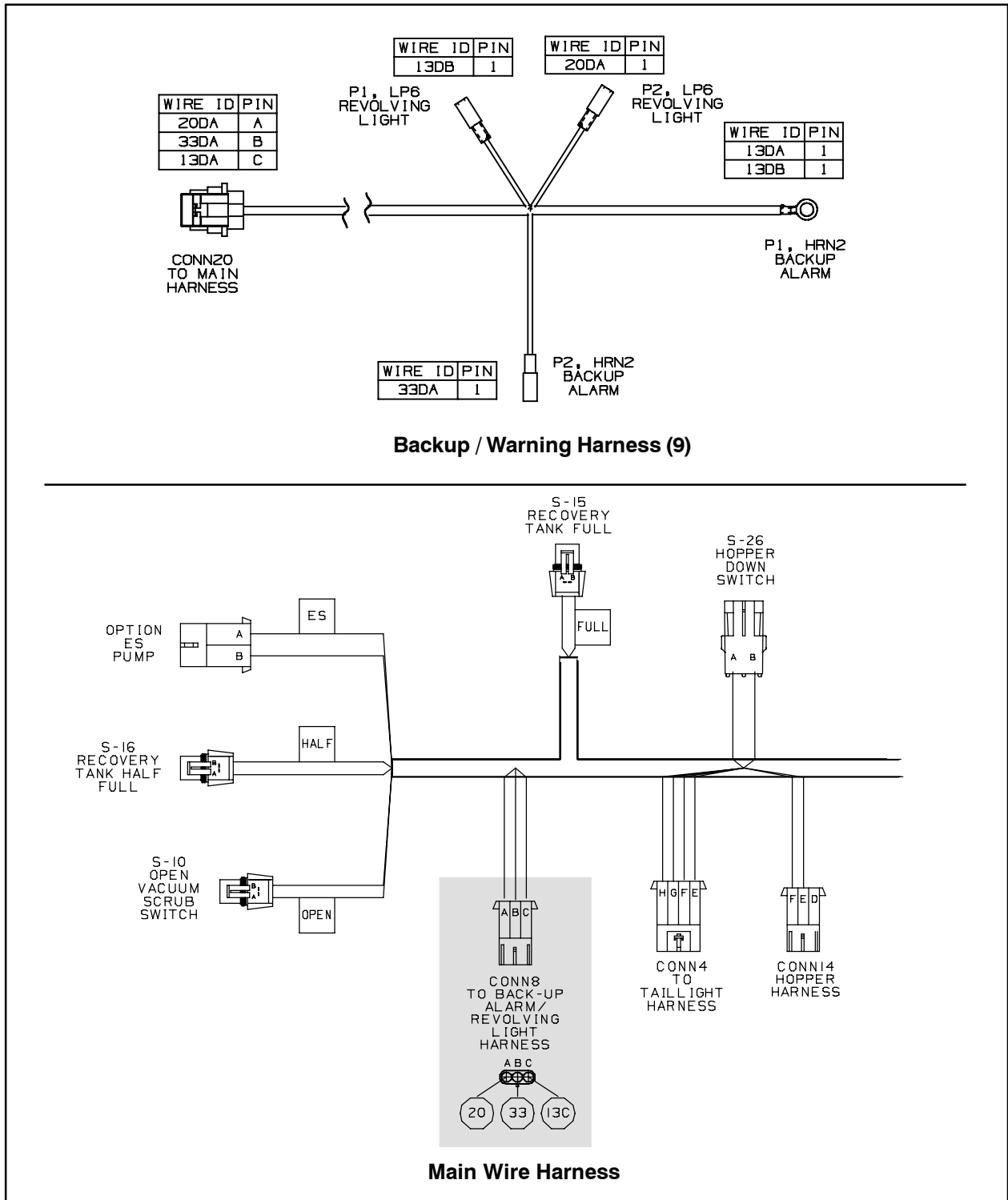


FIG. 9

INSTALLATION: (w/flashing light (13) installed onto overhead guard)

1. Pull the insulation away from the operator compartment panel and drill a 13/16" hole into the panel. If there is already a hole in the panel, remove the plug from the hole. Refer to Fig. 1 and Fig. 2.



FIG. 1

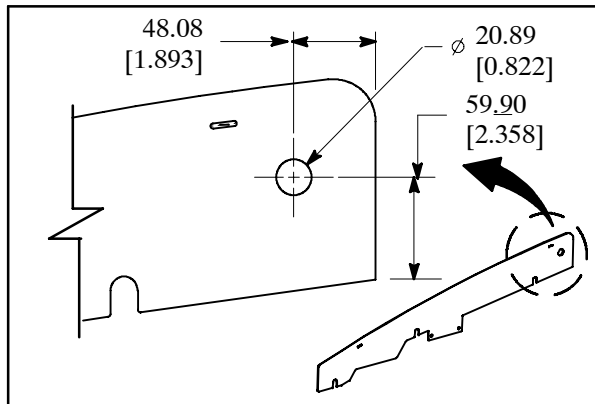


FIG. 2

2. Insert a grommet (10) into the hole in the operator compartment panel and the hole on top the overhead guard. Refer to Fig. 3 and Fig. 4.



FIG. 3

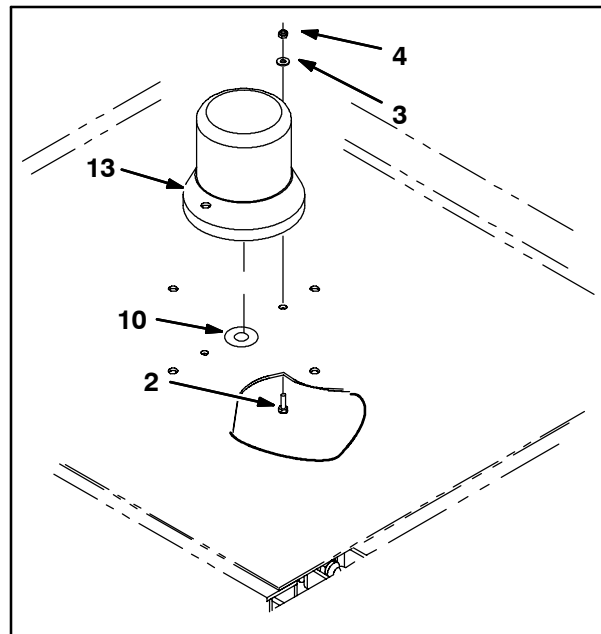


FIG. 4

3. Route the wires from the flashing light (13) down through the grommet (10) installed in the overhead guard and use two hex screws (2), two flat washers (3), and two hex nuts (4) to install the light onto the overhead guard. Refer to Fig. 4.
4. Connect the warning/overhead harness (9) to the main wire harness, route the warning/overhead harness through the grommet (10) installed in the operator compartment panel, up along leg of the overhead guard, and to the rear cross member of the overhead guard. Refer to Fig. 9 and Fig. 10.

5. Insert a grommet (10) into the rear hole in the rear cross member of the overhead guard and route the warning/overhead harness (9) through the grommet and the front hole in the rear cross member. Refer to Fig. 5.

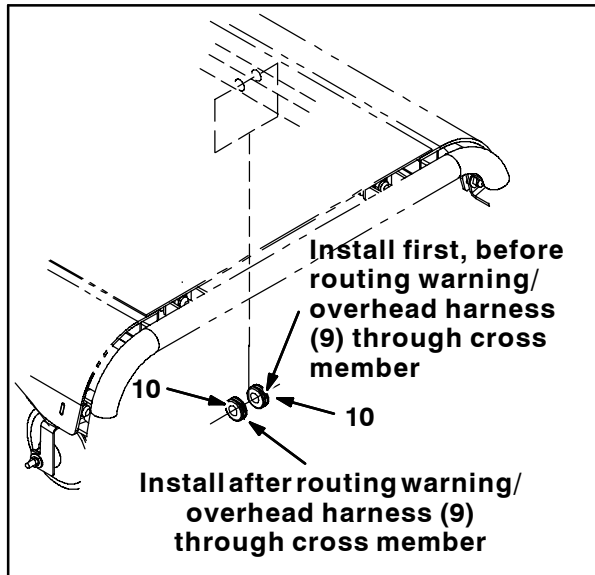


FIG. 5

6. Slide the remaining grommet (10) onto the warning/overhead harness (9) and insert the grommet into the front hole in the rear cross member of the overhead guard. Refer to Fig. 5.
7. Route the warning/OHG harness (9) through the notch in the overhead guard insulation and connect the harness to the flashing light (13). Refer to Fig. 6 and Fig. 10.

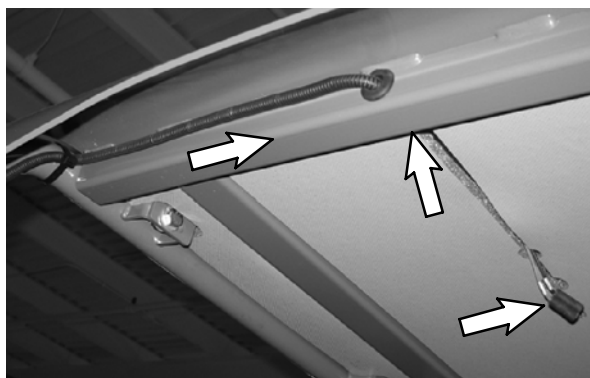


FIG. 6

8. Use four cable ties (12) to secure the warning/overhead harness (9) to the leg of the overhead guard. Refer to Fig. 7 and Fig. 8.

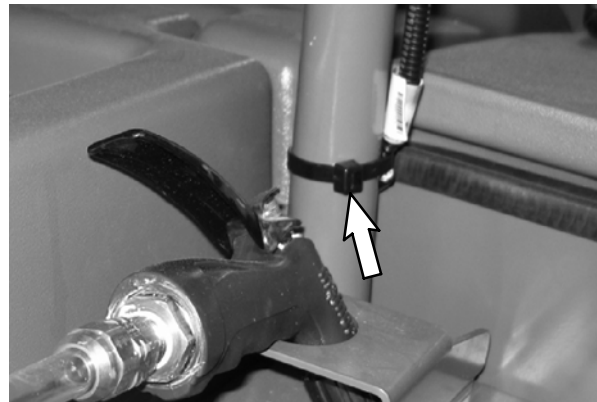


FIG. 7

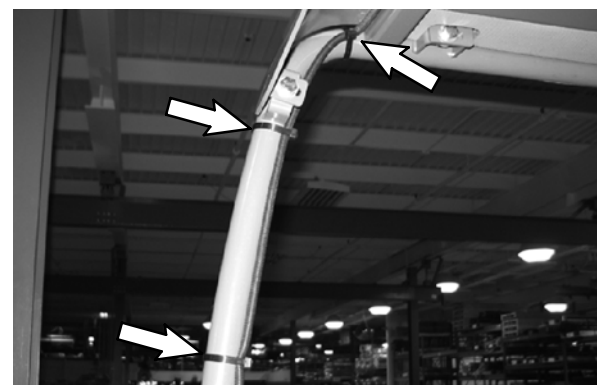


FIG. 8

9. Use two cable ties (11) to secure the warning/overhead harness (9) to the top of the overhead guard. Refer to Fig. 12.
10. Use two hex screws (2), two flat washers (3), and two hex nuts (4) to install the backup alarm (1) onto the bracket (5). Refer to Fig. 9.

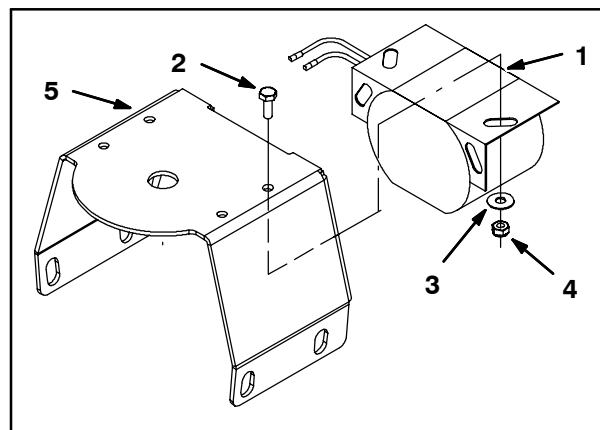


FIG. 9

11. Open the recovery tank cover and pull the main wire harness backup alarm connector from between the recovery and solution tank. Connect the warning/backup harness (8) to the main wire harness. Refer to Fig. 10 or Fig. 11, and Fig. 14.

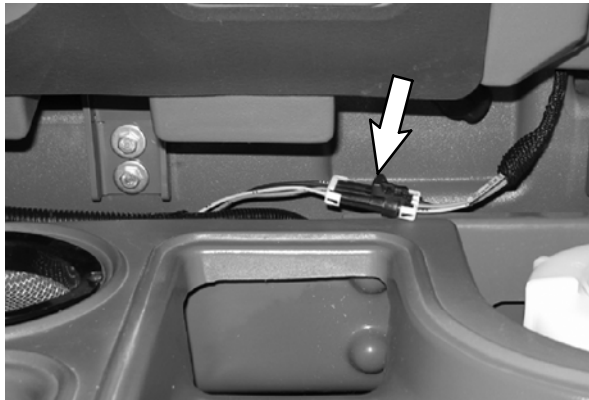


FIG. 10 - M20 Harness Location

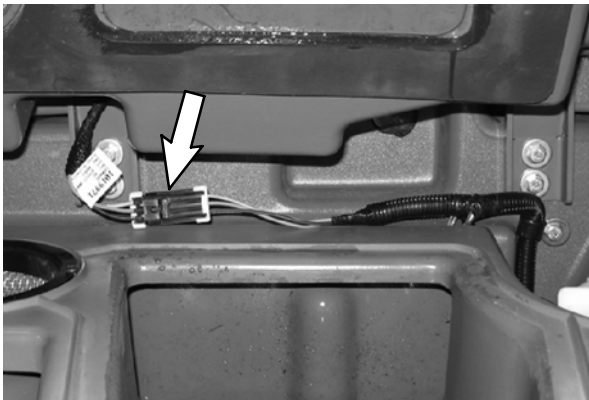


FIG. 11 - T20 Harness Location

12. Route the warning/backup harness (8) through the notch in the solution tank and install a cable clamp (9) onto the harness. Refer to Fig. 8.

13. Connect the wires from the backup alarm (1) to the warning/ backup harness (8). Refer to Fig. 14.
14. Neatly bundle the flashing light wires on the warning/ backup harness (8) and secure them to the harness with either cable ties or electrical tape.
15. Route excess cable from the main wire harness and the warning/backup harness (8) back down between the recovery and solution tank. Refer to Fig. 3 and Fig. 4.
16. Reconnect the negative battery cable and then the positive terminal to the battery.
17. Start the machine and move the machine in reverse. The backup alarm should sound while machine is moving in reverse. The light should flash while the engine is operating.

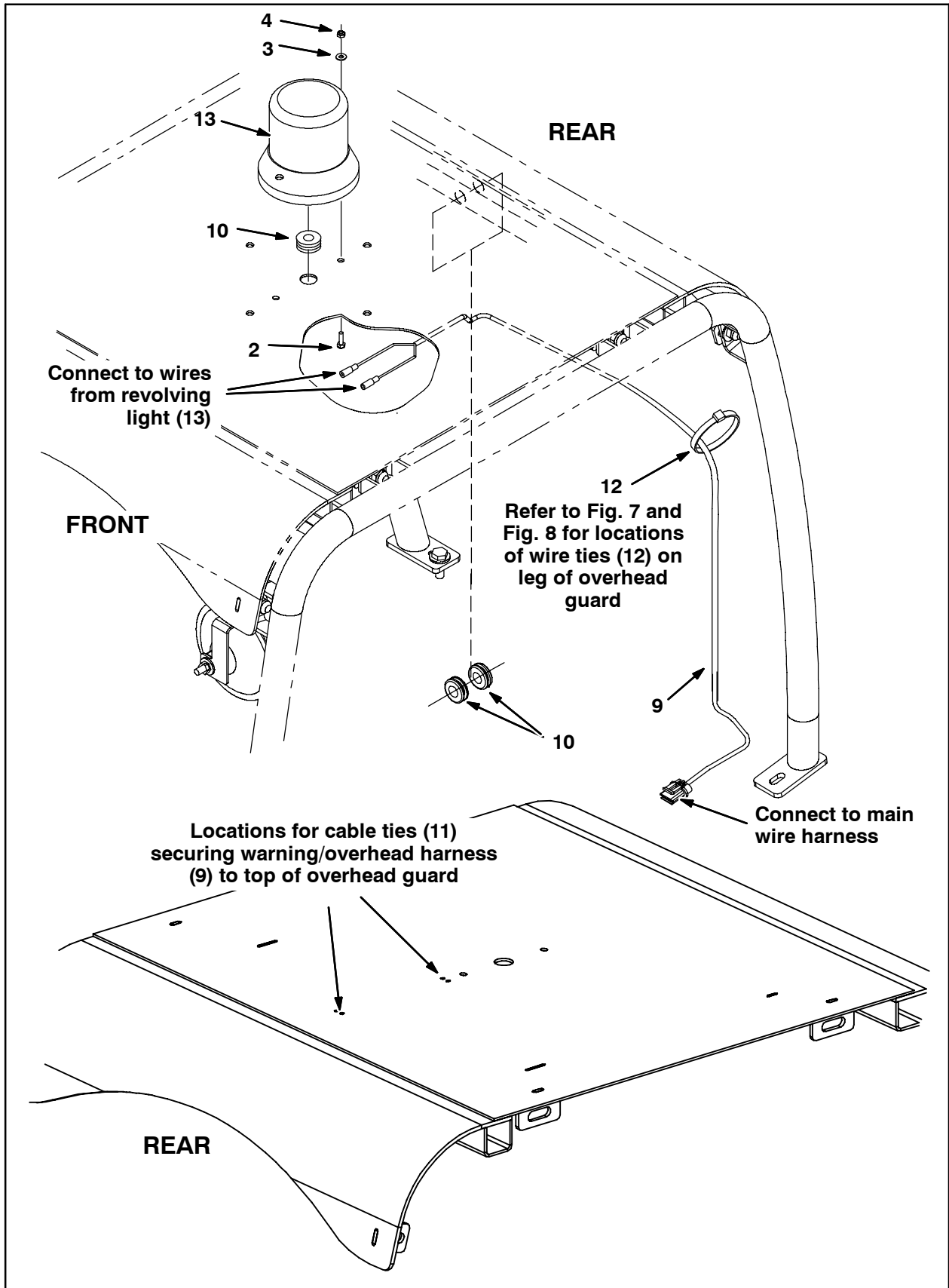


FIG. 12

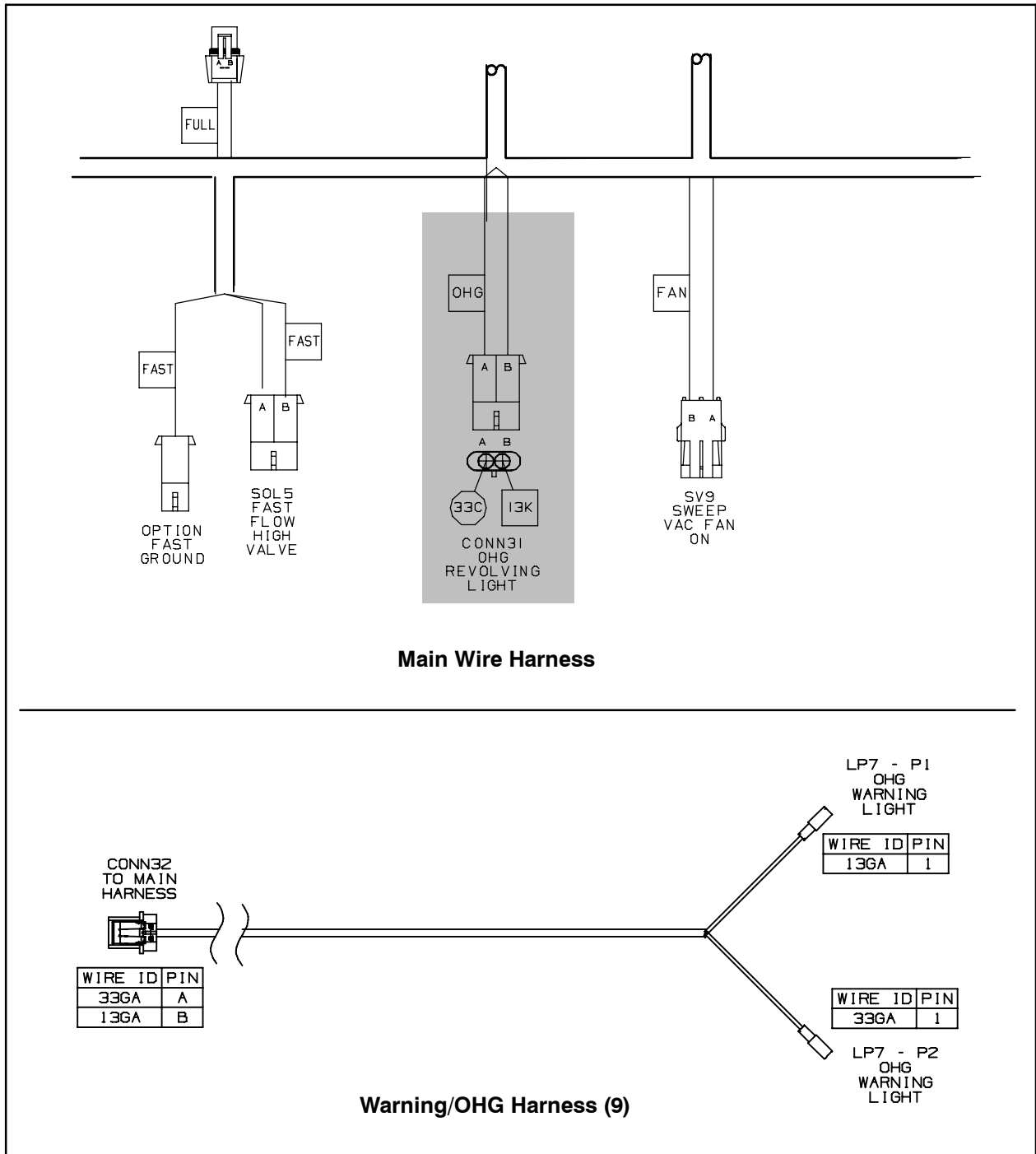


FIG. 13

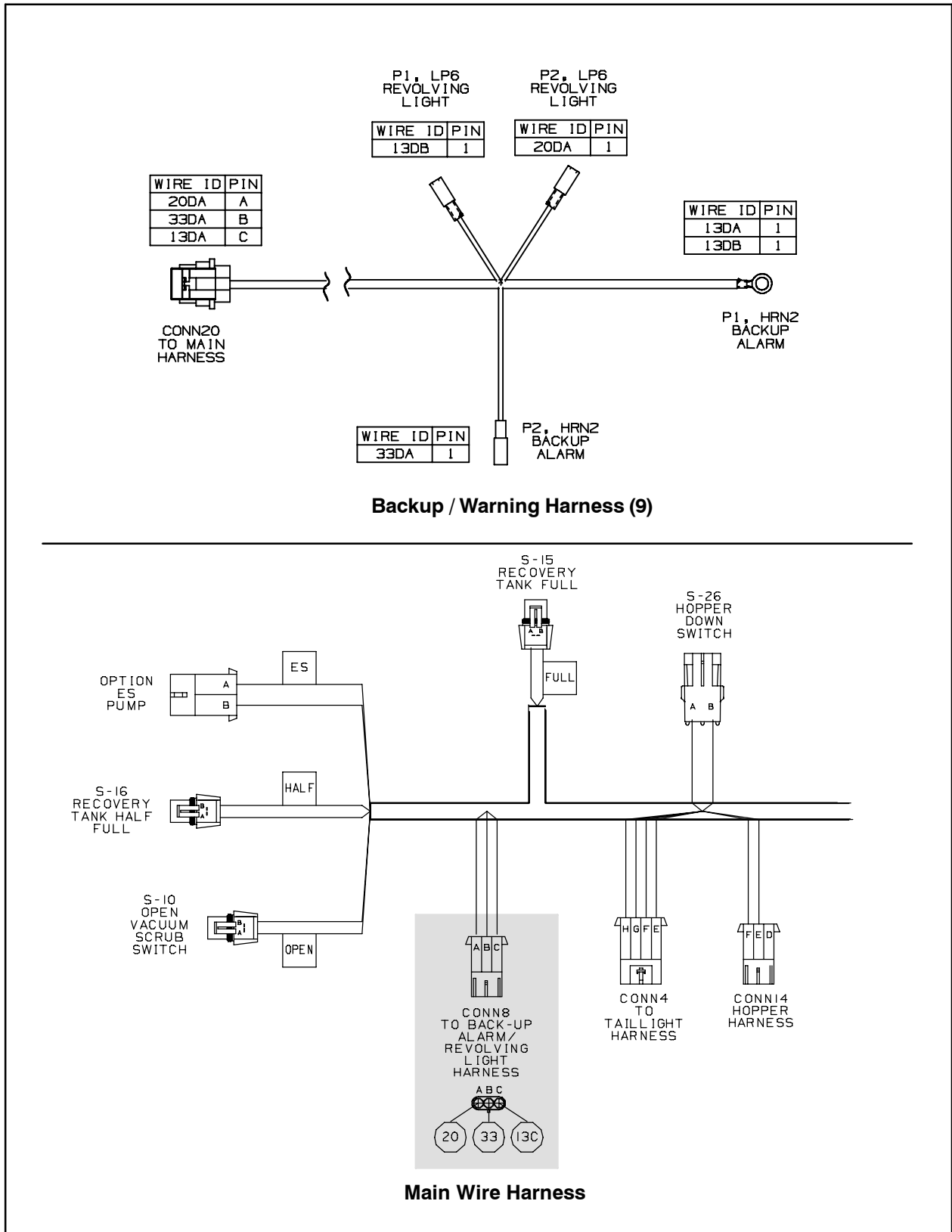


FIG. 14

Bill of Materials for A/V Kit, Flsh, CI [M20/T20]-9003487

	Ref.	Tennant Part No.	Description	Qty.
▽		9003487	A/V Kit, Flsh, CI [M20/T20]	1
▲	1	61920	Alarm Assy, Backup, 12-24vdc 82-107dba	1
▲	2	24196	Screw, Pan, M5 X 0.8 X 20, SS	4
▲	3	19066	Washer, Flat, #10	4
▲	4	09739	Nut, Hex, Lock, M5 X 0.80, NL, SS	4
▲	5	1019445	Bracket, Sppt, Revl Light	1
▲	6	09740	Screw, Hex, M8 X 1.25 X 20, SS	4
▲	7	1017218	Washer, Flat, 0.32b 1.00d .12, SS	4
▲	8	1019971	Harness, Warning / Backup [M20 & T20]	1
▲	9	1019647	Harness, Warning / OHG [M20]	1
▲	10	10632-17	Grommet, Rbr, 0.50ID, F/0.8H, .12 Matl	4
▲	11	49266	Tie, Cable, Nyl, 07.3L .19W 1.8 Max D	2
▲	12	763115	Tie, Cable, 6.0L, 1.25D Max	4
▲	13	1017248	Light, Flsh, Amb, 12-48VDC	1
▲	14	46236	Clamp, Cable, Stl, 0.26D X 0.56W, 1 Hole	2

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