



INSTRUCTION BULLETIN

No. 9006701
Machine: S20
Published: 01-2011
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 9006698 / 9006699 / 9006700**

SYNOPSIS:

This kit contains the parts needed to replace the main wire harness on S20 machines. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 8 hours)

PREPARATION:

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

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

2. Pull the main cover open.
3. Disconnect the battery cables from the battery (batteries).



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

INSTALLATION:

NOTE: Complete Steps 1 through 6 on only machines serial numbers 000000-001362 not equipped with the new Thermo-Sentry temperature switch (2). Proceed to Step 7 if installing kit onto a machine above serial number 001362.

1. Open the hopper cover and support the cover open.
2. Disconnect the main wire harness from the temperature switch (Thermo-Sentry) located on the shaker assembly top cover. Refer to Fig. 1.

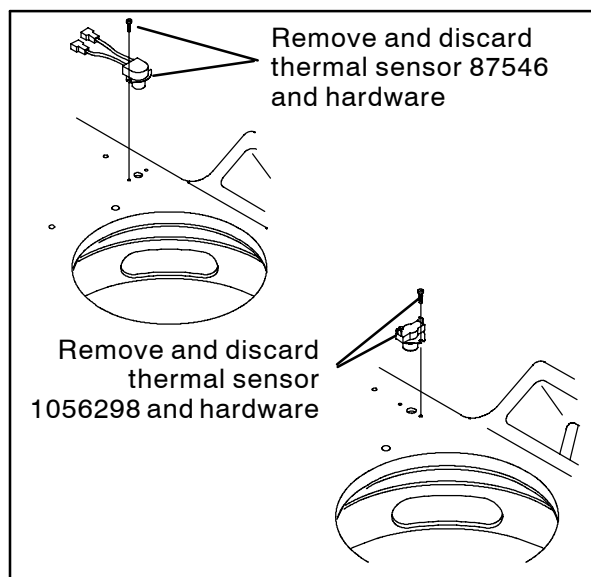


FIG. 1

- Remove the temperature switch from the shaker assembly top cover. Discard the temperature switch and hardware. Refer to Fig. 1.
- Use two pan screws (6) to install the new temperature switch (2) onto the shaker assembly top cover. Refer to Fig. 2.

NOTE: ***Do Not** attach main wire harness to the new temperature switch (2). Attach new main wire harness (1) to temperature switch when installing the new harness onto the machine.*

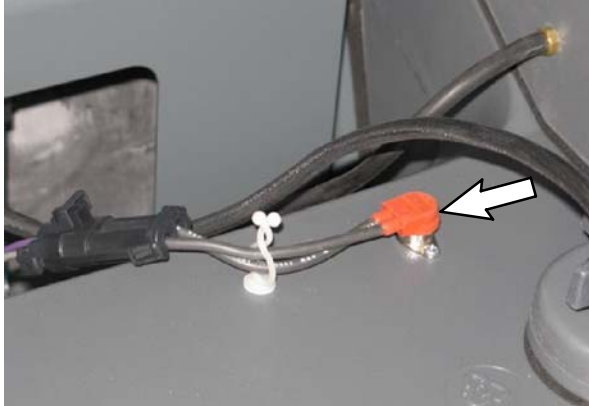


FIG. 2 - All Machines

- Close the hopper cover.
- Reconnect the battery cables to the battery (batteries) and close the main cover.
- Start the machine, raise the hopper, shut off the machine, set the parking brake, and remove the key.

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

- Engage the hopper support.

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

- Raise the main cover.
- Disconnect the battery cables from the battery (batteries).

- Gas / LPG / Diesel Machines Only:** Look for a relay located next to the fuse box. Refer to Fig. 3.

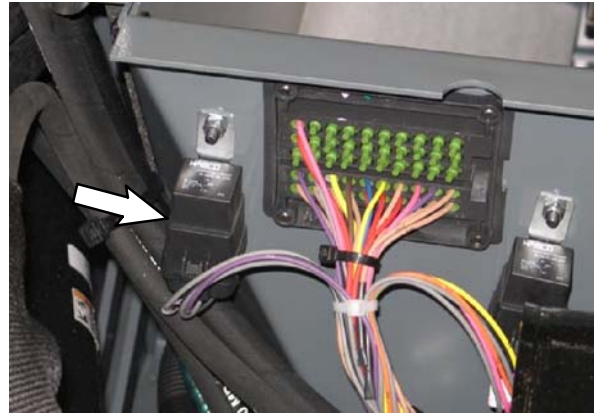


FIG. 3

- Gas / LPG / Diesel Machines Only:** If there is no relay located next to the fuse box use a M5 hex screw (4) and a M5 hex nut (5) to install the 12 VDC relay (3) onto the operator station. Refer to Fig. 4.

NOTE: ***Do Not** attach main wire harness to the new 12 VDC relay (3). Attach new main wire harness (1) to temperature switch when installing the new harness onto the machine.*

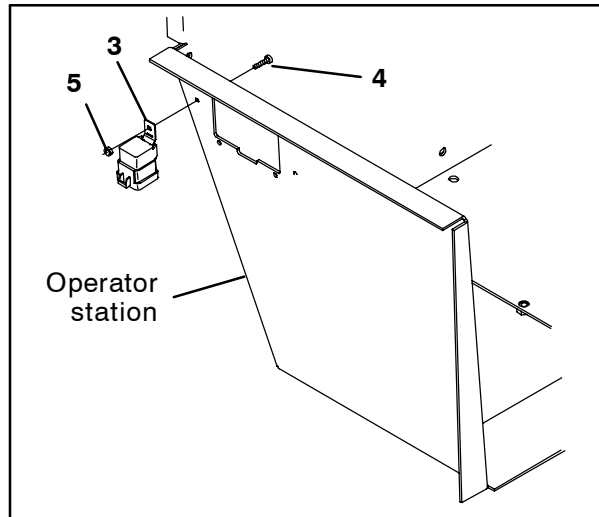


FIG. 4 - Gas / LPG / Diesel Machines Only

13. **Battery Powered Machines Only:** Look for the relay located on the circuit breaker mounting bracket. Refer to Fig. 5.

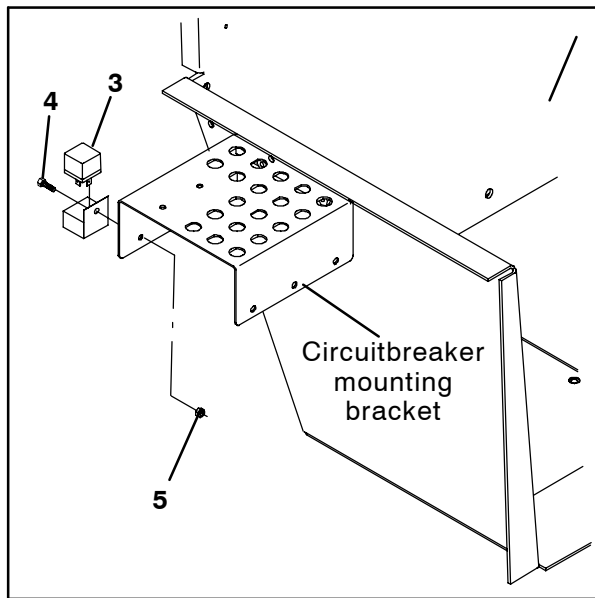


FIG. 5

14. **Battery Powered Machines Only:** If there is no relay located on the circuit breaker mounting bracket use a M5 hex screw (4) and a M5 hex nut (5) to install the 36 VDC relay (3) onto the circuit breaker mounting bracket. Refer to Fig. 5.

NOTE: ***Do Not** attach main wire harness to the new 36 VDC relay (3). Attach new main wire harness (1) to temperature switch when installing the new harness onto the machine.*

15. Starting from the front of the machine, at the hopper, and working to the back of the machine, remove the old wire harness from the machine. Connect the new main wire harness (1) to components immediately after removing the old main wire harness from that same component. Refer to connector labels and the wire diagrams and schematics in Fig. 5 through Fig. 19 for harness connection locations.
16. Use cable ties to secure the main wire harness (1) to the machine and away from moving components.
17. Reconnect the battery cables to the battery (batteries).
18. Disengage the hopper support bar.
19. Start the machine and lower the hopper.
20. Test the machine. Operate the machine and check all sweeping functions, lights, and alarms to ensure they function properly.

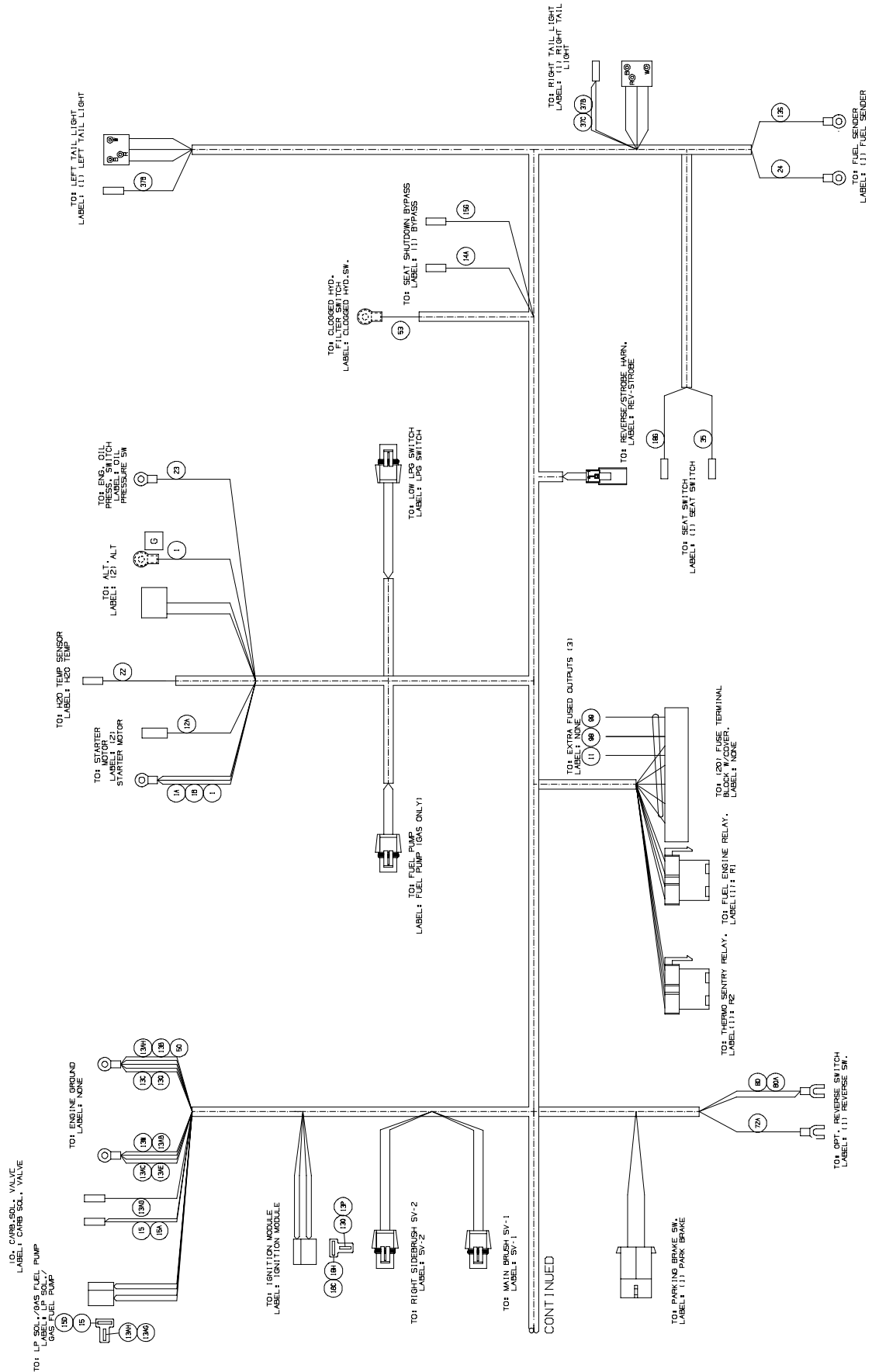


FIG. 7 - Gas / LPG Wire Diagram

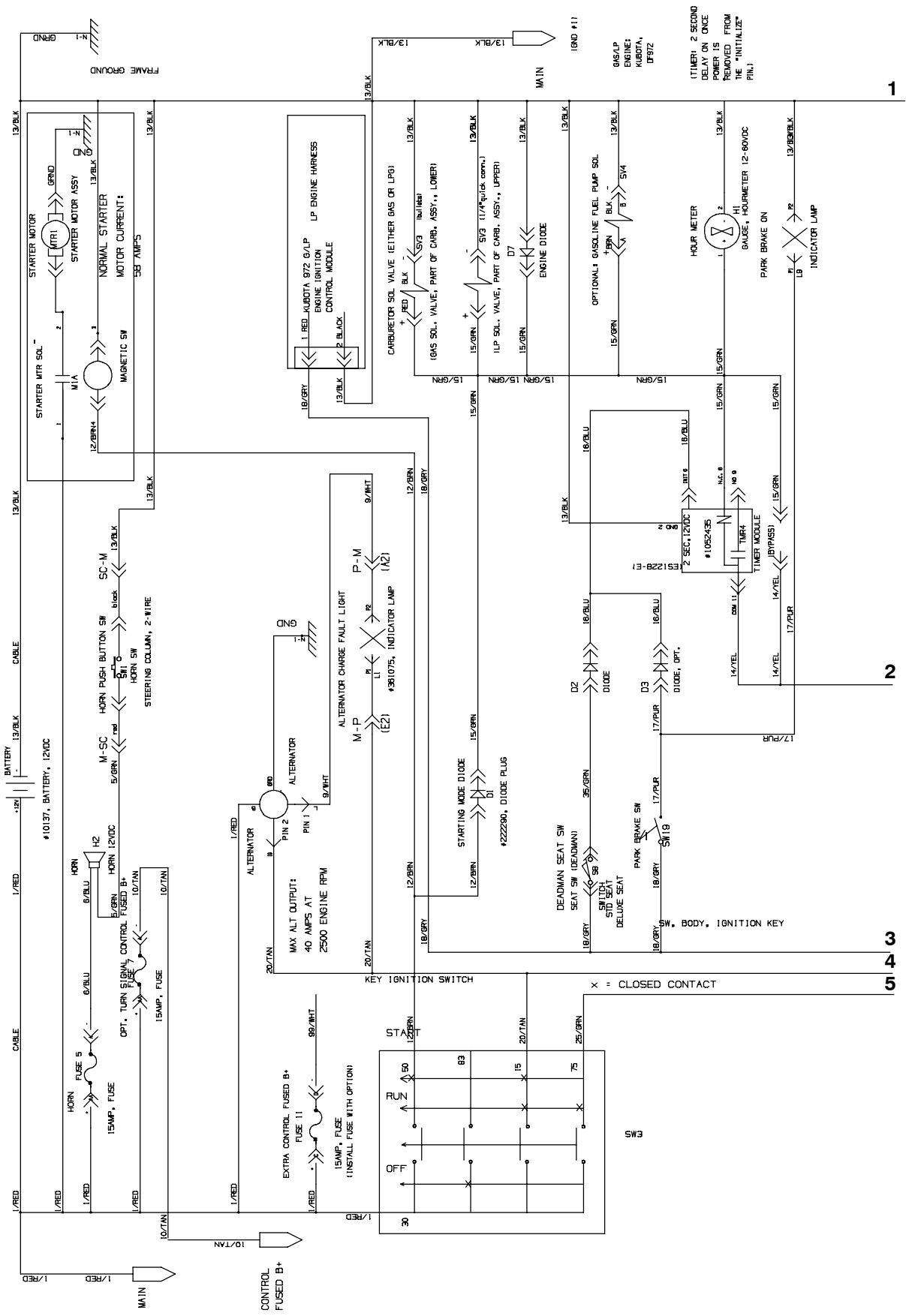


FIG. 8 - Gas / LPG Schematic

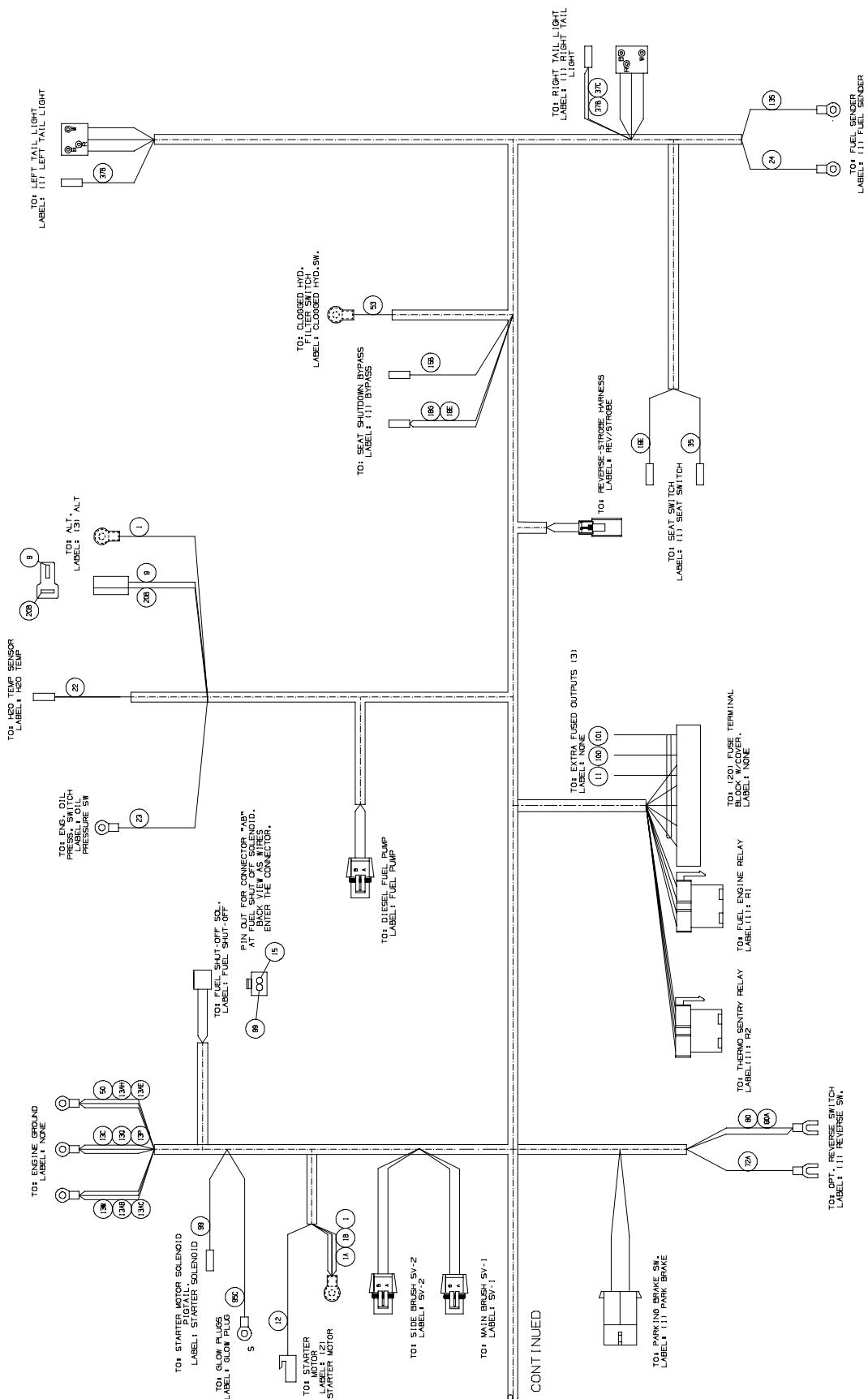


FIG. 12 - Diesel Wire Diagram

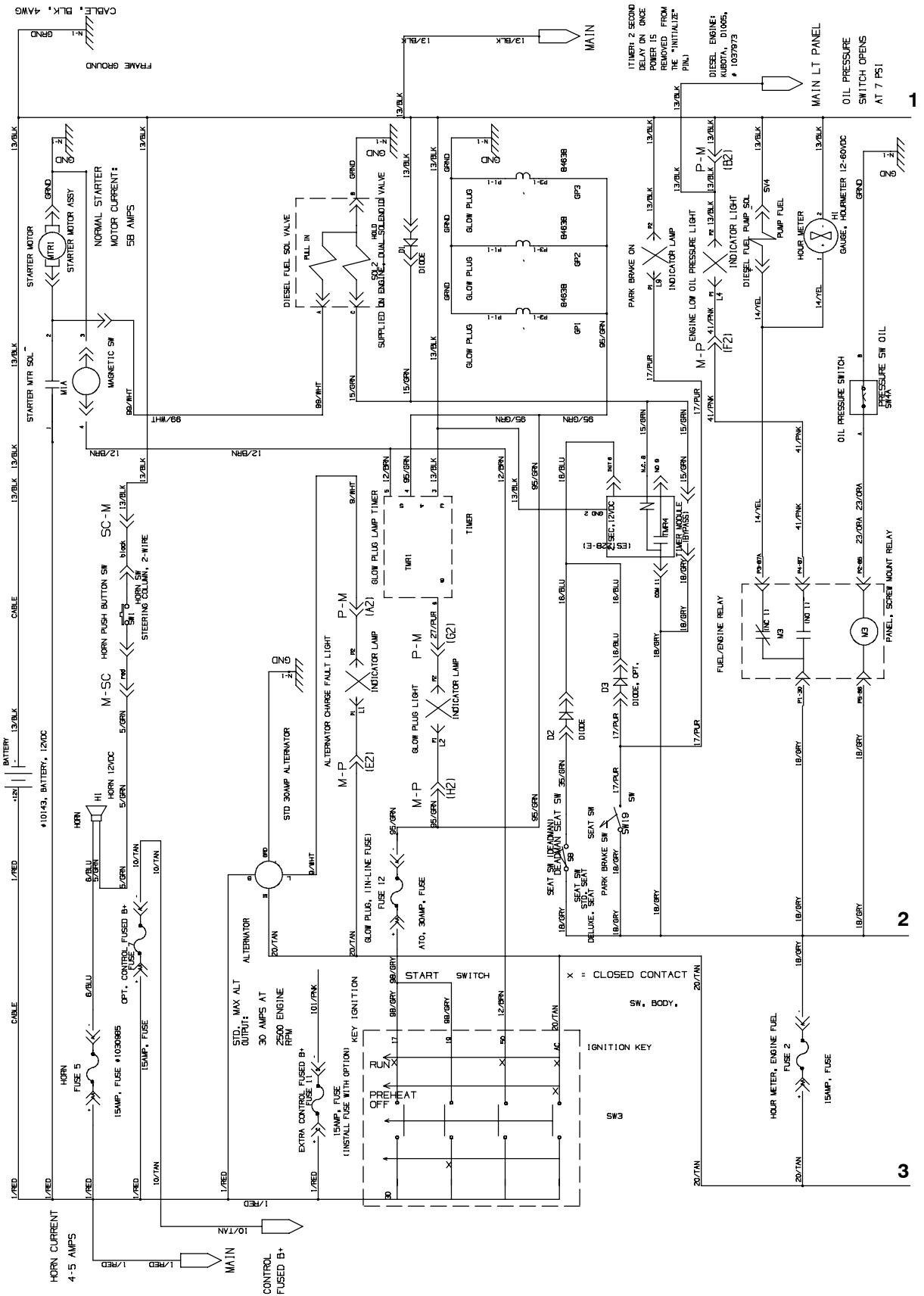


FIG. 13 - Diesel Schematic

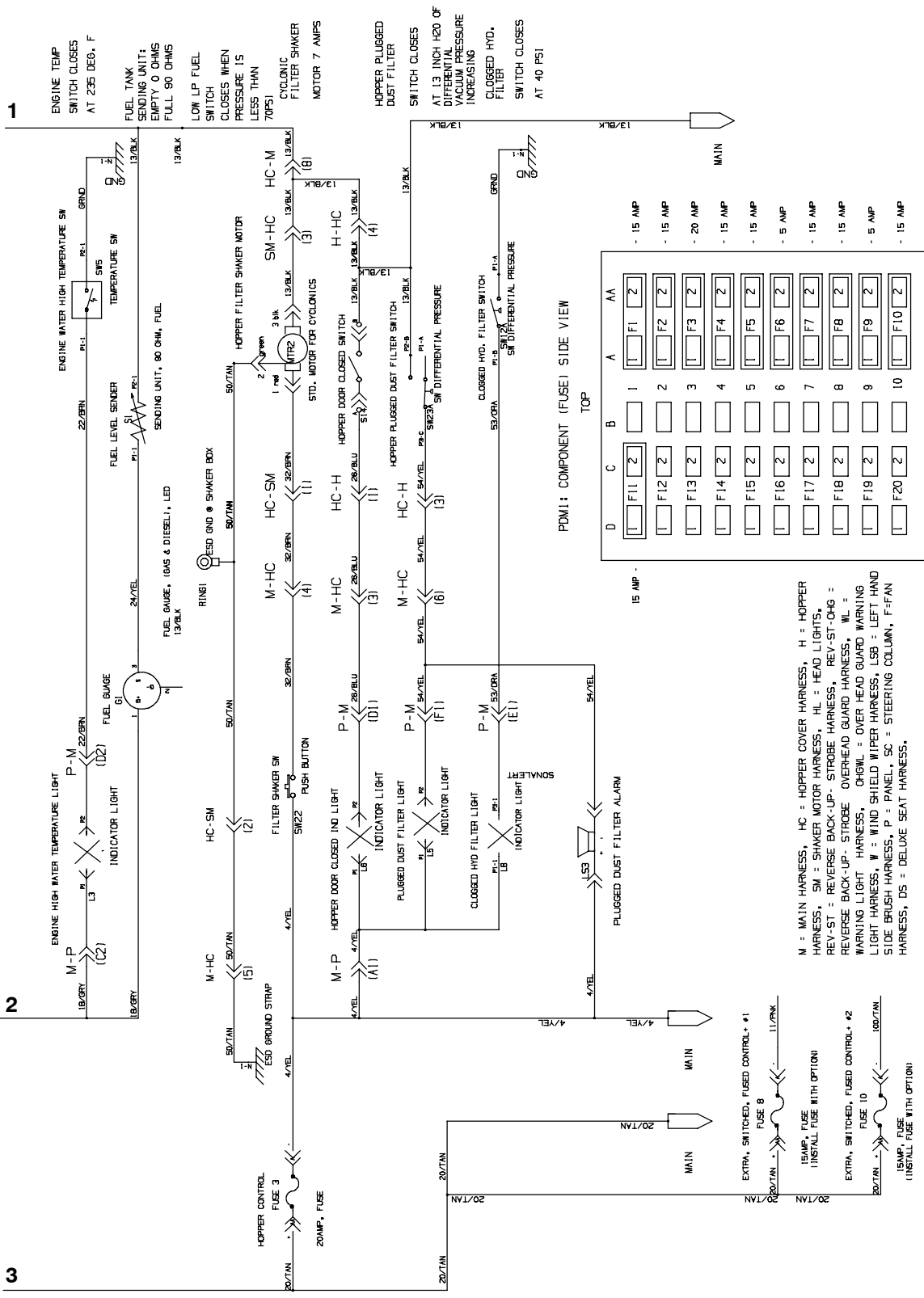


FIG. 14 - Diesel Schematic

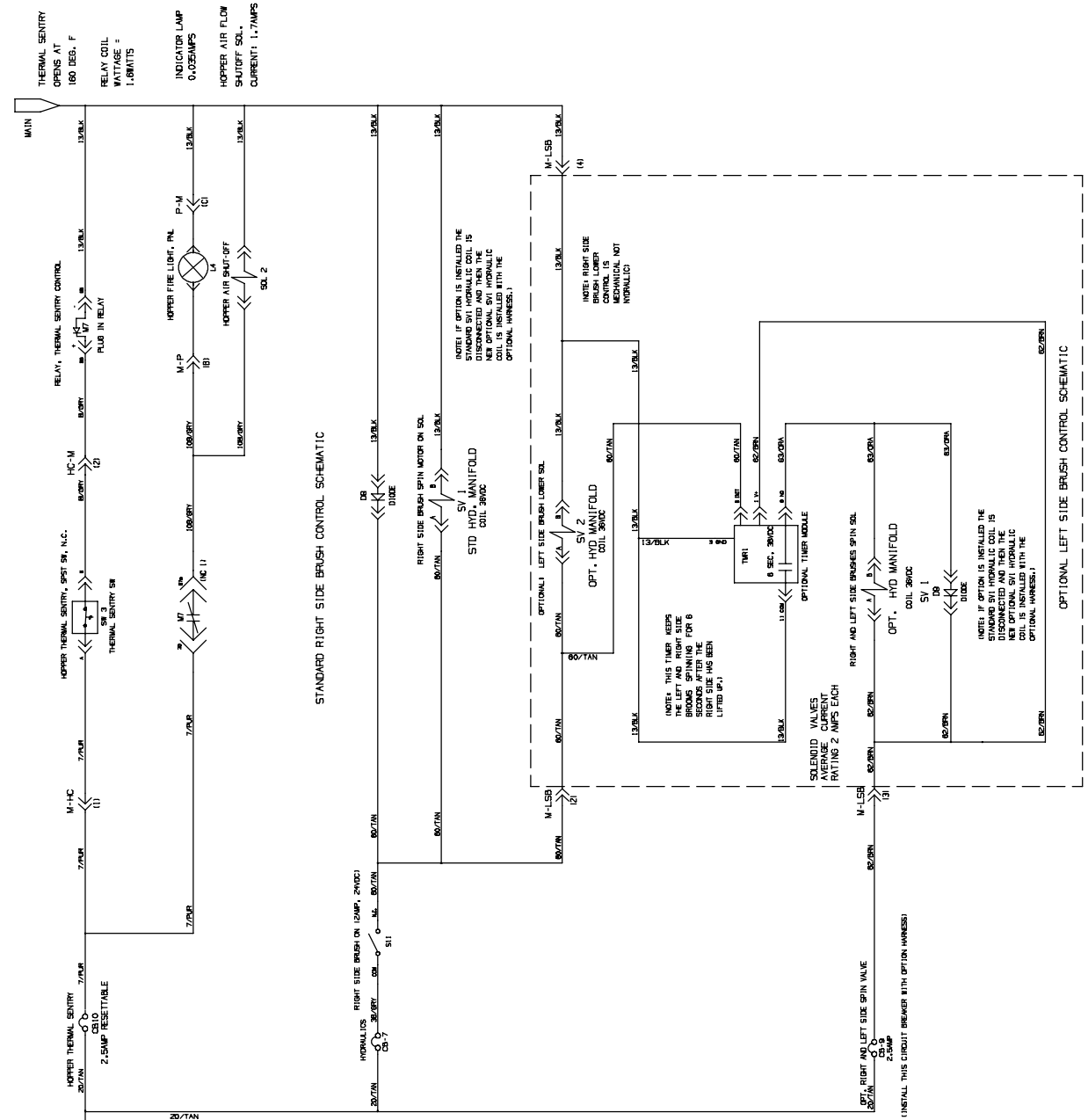


FIG. 20 - Electric Model Schematic

Bill Of Materials For Harness Kit, Main, Dsl, Replmt [S20] - 9006700

	Ref.	Tennant Part No.	Description	Qty.
▽		9006700	Harness Kit, Main, Dsl, Replmt [S20]	1
▲	1	1056625	Harness, Main, Dsl [S20]	1
▲	2	1061575	Switch, Temp, Sealed, NC	1
▲	3	56186	Relay, 12VDC, 040A, SPDT NO	1
▲	4	1054875	Screw, Hex, M5 X 1.0 X 16, Blk	1
▲	5	06549	Nut, Hex, Lock, M5 X 0.80, NL	1
▲	6	763149	Screw, Pan, 06-x 0.38, F/ Plstc	2

Bill Of Materials For Harness Kit, Main, Ele, Replmt [S20] - 9006699

	Ref.	Tennant Part No.	Description	Qty.
▽		9006699	Harness Kit, Main, Ele, Replmt [S20]	1
▲	1	1056624	Harness, Main, Ele [S20]	1
▲	2	1061575	Switch, Temp, Sealed, NC	1
▲	3	398526	Relay, 36VDC, 005A, SPDT NO [Greenwich]	1
▲	4	1054875	Screw, Hex, M5 X 1.0 X 16, Blk	1
▲	5	06549	Nut, Hex, Lock, M5 X 0.80, NL	1
▲	6	763149	Screw, Pan, 06-x 0.38, F/ Plstc	2

Bill Of Materials For Harness Kit, Main, Gas/LPG, Replmt [S20] - 9006698

	Ref.	Tennant Part No.	Description	Qty.
▽		9006698	Harness Kit, Main, Gas/LPG, Replmt [S20]	1
▲	1	1056626	Harness, Main, Gas/LPG [S20]	1
▲	2	1061575	Switch, Temp, Sealed, NC	1
▲	3	56186	Relay, 12VDC, 040A, SPDT NO	1
▲	4	1054875	Screw, Hex, M5 X 1.0 X 16, Blk	1
▲	5	06549	Nut, Hex, Lock, M5 X 0.80, NL	1
▲	6	763149	Screw, Pan, 06-x 0.38, F/ Plstc	2

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