



INSTRUCTION BULLETIN

No. 9008699
Machine: Sentinel
Published: 11-2017
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 9008700**

SYNOPSIS:

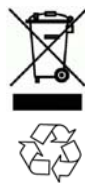
This kit contains the parts needed to replace the piston pump and update electrical connection to the piston pump on Sentinel sweepers.
Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 6 hours)

When assembling / disassembling hydraulic components:

1. To prevent contaminants from entering system, thoroughly clean outside of hydraulic components **before** disconnecting hydraulic hoses or fittings, cap disconnected hoses and open ports, and flush hoses and fittings with air, solvent, or hydraulic fluid.
2. Mark hydraulic hoses with locations of where they are attached. Markings make it easier to reconnect hoses to proper locations.
3. Discard all hydraulic fluid drained from the system. Use only new approved hydraulic fluid to replenish hydraulic reservoir.



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. Park the machine on a clean level surface, 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, and remove key.

2. Disconnect the battery cables from the battery.



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

3. Open the right side panel.

INSTALLATION:

1. Remove THE HARDWARE SECURING the hydraulic gear pump to the piston pump. Set the removed hardware aside. (Fig. 1)
2. Carefully remove the hydraulic gear pump from the piston pump and move the hydraulic gear pump aside. (Fig. 1)
3. Disconnect all hydraulic hoses from the piston pump. (Fig. 1)
4. Disconnect the main wire harness connections from the piston pump.
5. Remove the piston pump from the engine. Set all mounting hardware aside. (Fig. 1)
6. Remove all fittings from the removed piston pump. Set the removed fittings aside. Discard the piston pump.(Fig. 1)
7. Install the fittings removed from the old piston pump in the previous step onto the new piston pump (1). (Fig. 1)
8. Install the piston pump (1) onto the engine. (Fig. 1)

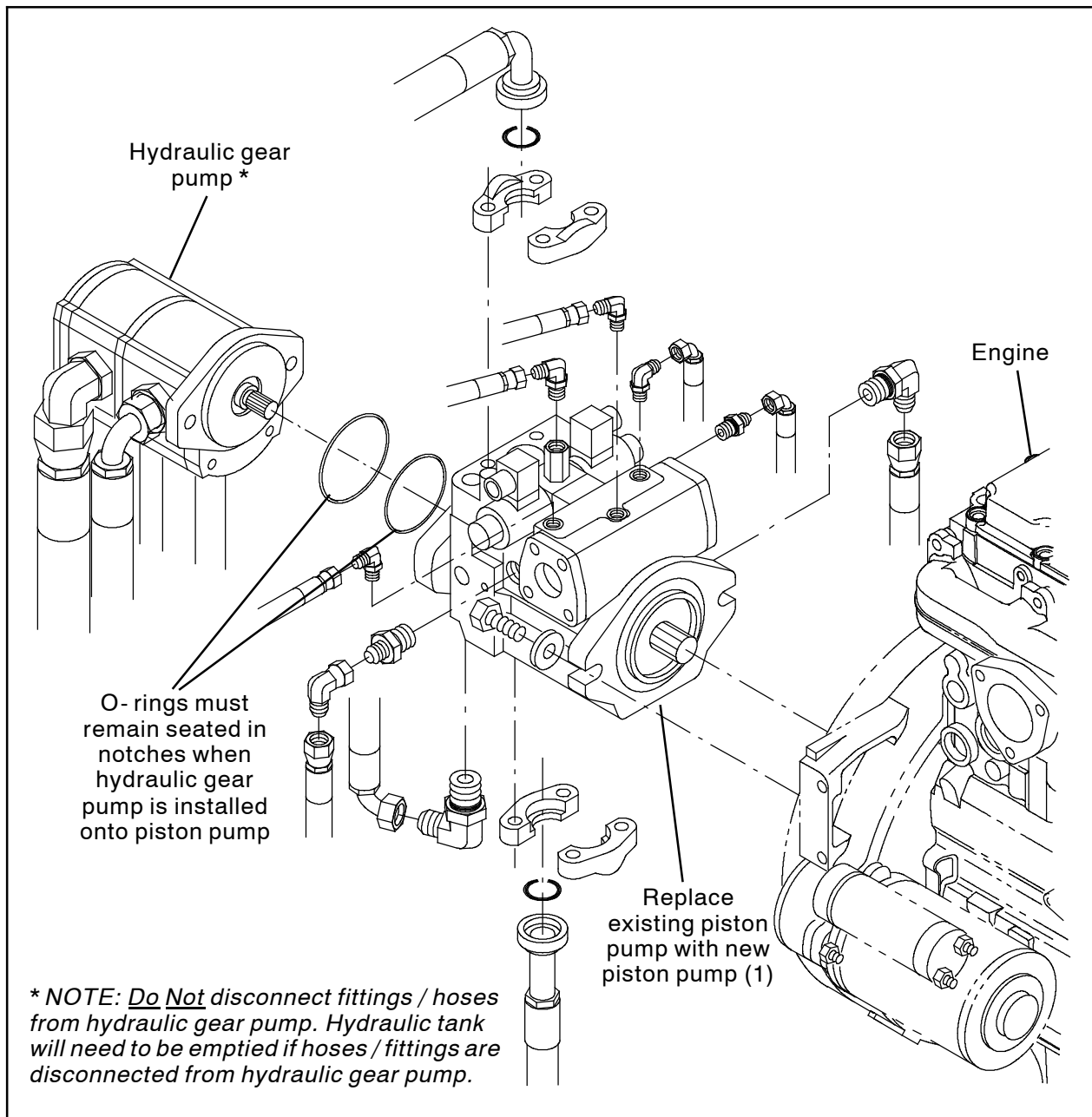


FIG. 1

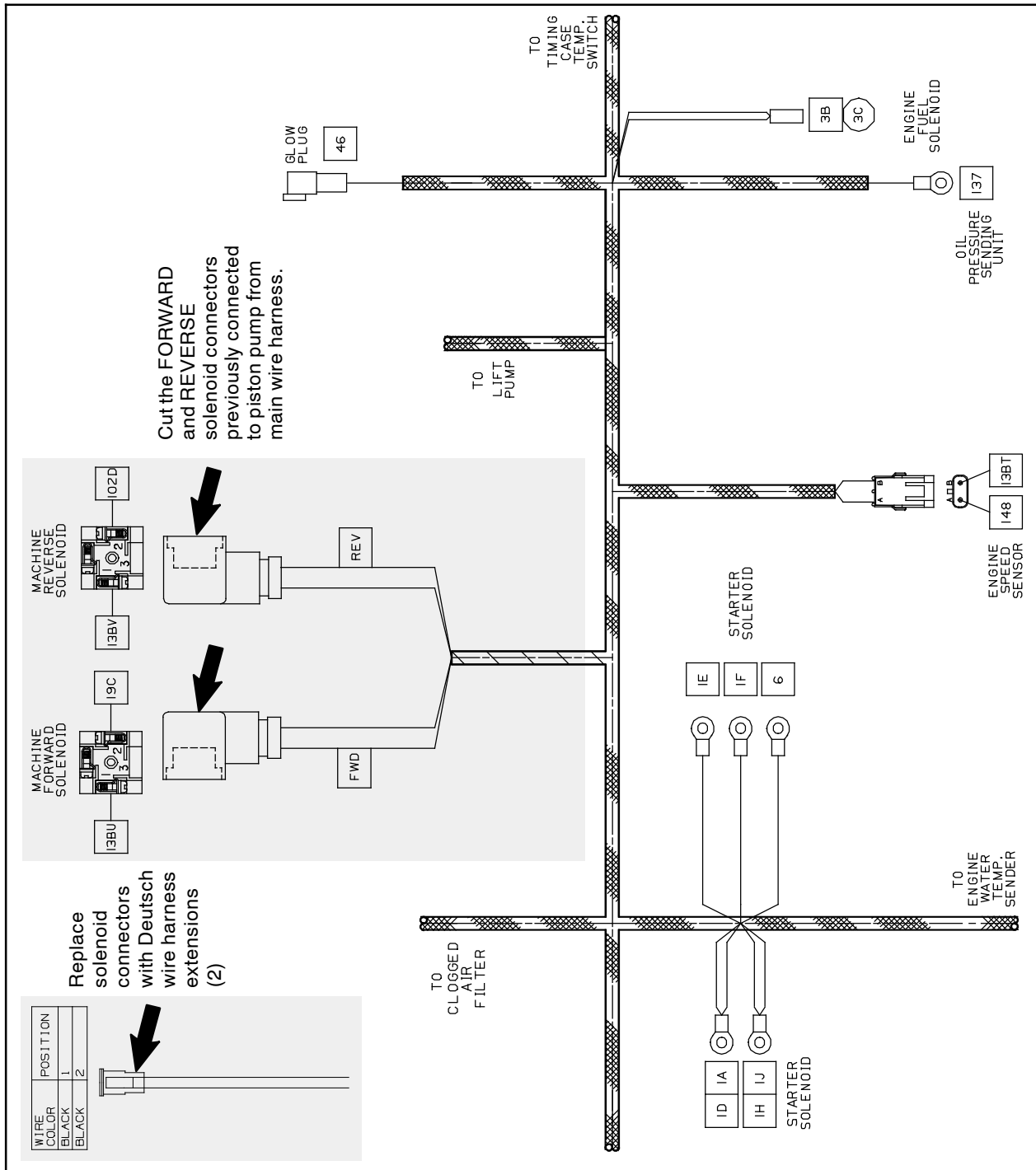


FIG. 2

9. Cut both DIN solenoid connectors previously connected to the piston pump from the main wire harness. (Fig. 2)
10. Use two splice connectors (3) to connect one Deutsch wire harness extension (2) to the FORWARD leads on the main wire harness. The 19 BRN wire should be connected to the black wire from pin 2 on the Deutsch wire harness extension. (Fig. 2)
11. Use two splice connectors (3) to connect the other Deutsch wire harness extension (2) to the REVERSE leads on the main wire harness. The 102 PUR wire should be connected to the black wire from pin 2 on the Deutsch wire harness extension. (Fig. 2)
12. Install the hydraulic gear pump onto the piston pump (1). Be sure the o-rings remain seated in the notches when installing the hydraulic gear pump onto the piston pump. (Fig. 1)

13. Use new approved hydraulic fluid to refill the hydraulic system to the appropriate level.
(Fig. 3)

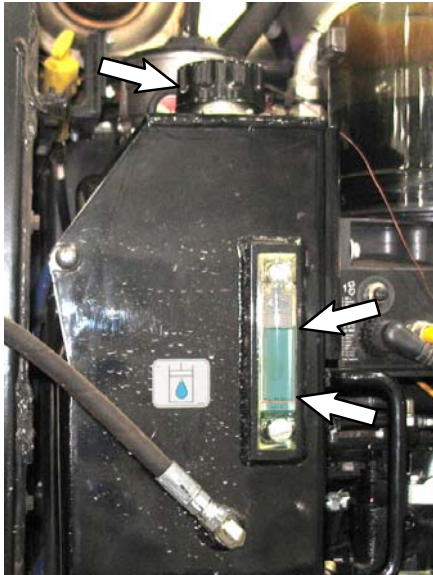


FIG. 3

14. Reconnect the battery cables to the battery / batteries.
15. Start the machine and recheck the hydraulic fluid level. Add additional hydraulic fluid to the hydraulic reservoir as necessary.
16. Observe all hydraulic connections / fittings to the piston pump (1) for leaks.

Bill Of Materials For Pump Kit, Piston, Hyd, Replmt - 9008700

Ref.	Tennant Part No.	Description	Qty.
1	1066392	Pump, Piston	1
2	1066494	Harness, Wire [Deutsch DT Extension]	2
3	04174B	Connector, Ele, Splice, 16ga & 14ga	4

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