



Service Kit

753-05195

Date: 9/12/2005

Subject: 718-0684 Hydraulic Pump Service Replacement

Models Affected: N/A

Read through and understand these instructions completely before proceeding with repair.

PURPOSE: This service kit provides the new pump, coupler hardware, mounting hardware and instructions to replace the 718-0684 hydraulic pump which is no longer available.

NOTE: These materials are prepared for use by trained technicians who are experienced in the service and repair of equipment of the kind described in this publication, and are not intended for use by untrained or inexperienced individuals. Such individuals should seek the assistance of an authorized service technician or dealer.

NOTE: Save this Instruction Sheet. Refer to it when ordering replacement parts.

Service Kit Contents

(See Figure 1)

ITEM NO.	PART NUMBER	QTY	DESCRIPTION
1	718-04128	1	PUMP: HYDRAULIC: 15 GPM (W/KEY)
2	710-0376	4	SCREW: HEX: 5/16"-18 x 1.0:GR5:STD
3	712-04063	4	NUT: FLANGELOCK: 5/16"-18:GRF
4	718-04393	1	COUPLING HALF: 1.00" DIAMETER
5	718-04395	1	COUPLING HALF: .875 DIAMETER
6	718-04392	1	COUPLING HALF: .500 DIAMETER
7	735-04103	1	BUSHING: SPIDER: COUPLING
8	714-0114	1	KEY: SQ: 1/4" x 2.00
9	710-1842	2	SCREW: SOC: SET: 1/4"-20 x .38
10	*	1	THIS INSTRUCTION SHEET

* - Not Available Separately

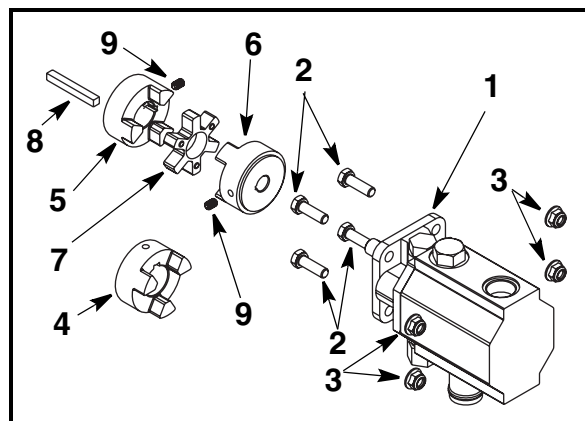


FIGURE 1

Pre-service Preparation:

1. Turn off the engine and allow engine and muffler to cool.
2. Disconnect the spark plug wire from the spark plug and ground wire to the engine block.
3. Block both log splitter wheels in the front and rear so the log splitter cannot roll forward or backwards.

CAUTION! Operate the ram directional control lever to the EXTEND and RETRACT positions several times to relieve any pressure in the hydraulic system.

4. Drain the hydraulic oil reservoir tank into a suitable container.
5. Contaminants in the fluid can damage the hydraulic components. Flushing the reservoir tank and hoses with kerosene whenever service is performed on the tank, hydraulic pump or valve is recommended.

6. With the hydraulic oil reservoir tank empty, disconnect both hoses from the hydraulic pump. Drain the hoses into a suitable container and flush with kerosene. Remove and retrain the pressure port adapter fitting from the old pump.

NOTE: Always dispose of used hydraulic oil and engine oil at approved recycling centers only.

7. Change the hydraulic filter every 50 hours of operation or when service is performed on the tank, hydraulic pump or valve. Use only a 10 micron hydraulic filter. Order filter part number 723-0405.

Disassembly Instructions: (Refer to Figure 2)

8. Remove and retain the three nuts and lock washers that secure the pump w/ coupling half and pump support bracket subassembly to the coupling shield. Two nuts are at the bottom corners and one is at the top center.
9. Remove the pump w/ coupling half and pump support bracket subassembly.
10. Rotate the engine by slowly pulling the recoil starter handle until the engine coupling half set screw is visible.

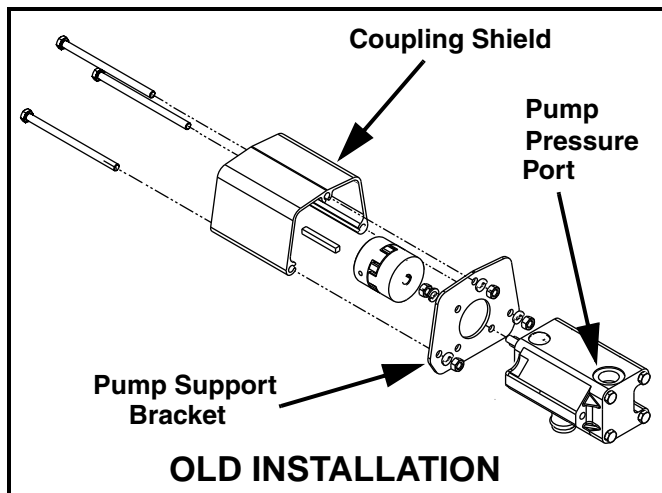


FIGURE 2

11. Loosen the set screw using an allen wrench. Slide the engine coupling half off the engine crankshaft and discard.

12. Loosen the set screw on the pump coupling half. Remove and discard the pump coupling half and urethane spider insert.

NOTE: Observe the position of the pump's pressure output port and the orientation of the pump support bracket for correct reassembly later.

13. Remove and discard the two nuts and lock washers that secure the pump to the pump support bracket. Discard the old pump.

New Pump Installation: (Refer to Figure 3)

14. Attach new Pump w/ key, Item 1, to the pump support bracket using the four Hex Screws, Item 2, and four Flange Lock Nuts, Item 3. Tighten securely. Ensure that the new pump is orientated in the correct position on the pump support bracket to properly align with the hydraulic hoses. Install the pressure port fitting removed in Step 6.

15. Install the pump Coupling Half, Item 6, onto the pump shaft with key. Install a new Set Screw, Item 9, into the pump's coupling half. Do not tighten at this time.

16. Select the appropriate new Coupling Half to match the crankshaft diameter, Item 4 for a 1" diameter crankshaft or Item 5 for a 7/8" diameter crankshaft. Discard the unused alternate coupling. See Figure 3.

17. Slide the new engine coupling half and new Key, Item 8, onto the engine shaft until the end of the shaft and Key are flush with the inner portion of the engine coupling half. (Check to ensure that there is space between the end of the engine support bracket and coupling half). Tighten engine coupling half to the crankshaft using a new Set Screw, Item 9. See Figure 4.

18. Align the pump w/pump support bracket and coupling half subassembly to the coupling shield. Rotate the pump's coupling half until the set screw faces the opening in the coupling shield. Do not tighten the set screw.

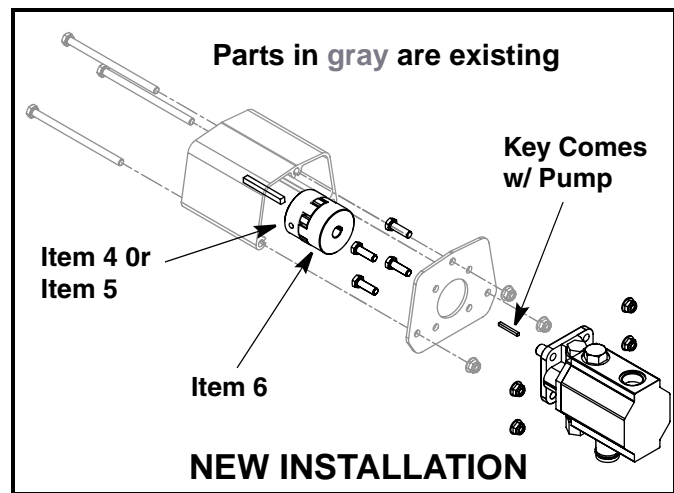


FIGURE 3

19. Install the new Urethane "Spider", Item 7, either onto the engine coupling or the pump coupling half that best facilitates assembly.

20. Align both engine and pump coupling halves with the urethane "spider" by rotating the engine using the recoil starter handle. Slide the pump subassembly into place while guiding the three mounting bolts through the holes in the pump support bracket.

21. Secure the pump subassembly to the coupling shield and engine mounting bracket with the nuts and washers removed in Step 8.

22. Slide the pump coupling half towards the engine coupling half until there is a .010" to .060" clearance/gap between the nylon "spider" and the engine coupling half. Use a feeler gauge between the nylon "spider" and the engine coupling half. Secure the pump coupling half to the pump input shaft with the set screw. Tighten securely. See Figure 4.

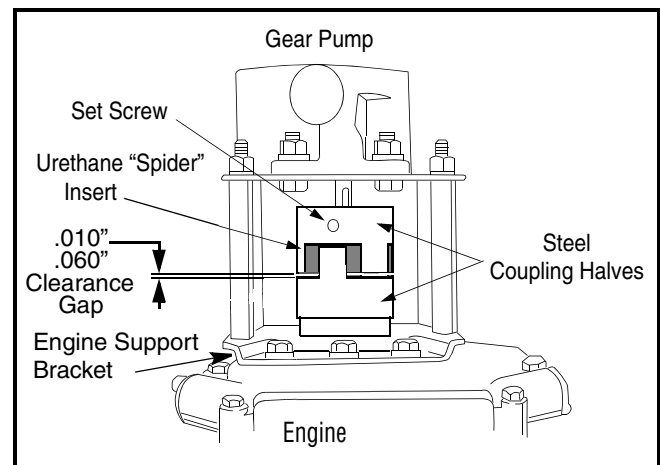


FIGURE 4

23. Refill the reservoir tank and hydraulic system with fresh, clean recommended fluid and bleed air from the system. Refer to appropriate Operator's Manual set-up instructions.

This completes the installation of the new pump.