1042/1052 Draper Headers Service Manual 7-90260 Table of Contents

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Section 8000

HOW IT WORKS

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NOTE: Case Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

OBJECTIVES

After completion of this section of the training manual, the learner will be able to accomplish the following:

Understand how to read hydraulic schematics.

- 1. Know the location of all hydraulic components.
- 2. Know how all hydraulic components function.
- 3. Know how each hydraulic circuit functions.
- 4. Be able to pressure test each hydraulic circuit.
- 5. Be able to properly disassemble and reassemble the main valve assembly.
- 6. Be able to diagnose and systematically troubleshoot defects in the hydraulic system.

GENERAL INFORMATION

This section addresses the hydraulic system of the 1042 and 1052 Draper Headers

There are two hydraulic systems that control the functions of the header as follows:

Combine Hydraulics: Same as with the 1010 and 1020 grain headers

- Operate the Reel Drive
- Raise and Lower the Reel
- Move the Reel Fore and Aft

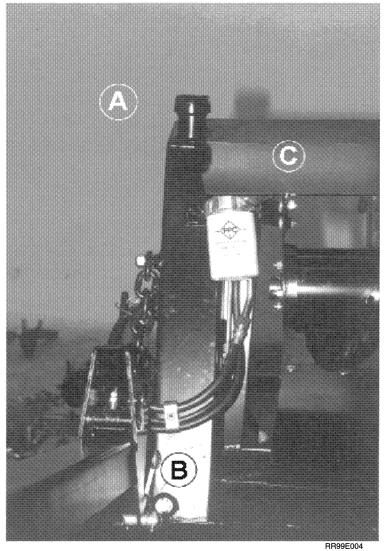
Header Hydraulics: Totally self contained on the header

- Is used to operate the Feeder Auger and Feeder Draper
- Is used to operate and control the speed of the Right and Left Drapers

HYDRAULIC SYSTEM SPECIFICATIONS

Pump output (Max)	32 Litres (8.5 gpm)
Pump output (min)	24.5 Litres (6.5 gpm)
Relief Valve Setting	190 \pm 3 bar (2750 \pm 50 PSI)
Reservoir Capacity	System 25 Litres (6.6 US gal) Tank only 17 Litres (4.5 US gal)
Oil Type	SAE 15W40 Class SH or CH-4 engine oil
Change Interval	1000 hours or 3 years
Filter Change Interval	First 50 hours and every 250 hours after

HYDRAULIC RESERVOIR AND FILTERS



Right Front View Of Adapter Housing

- A. Reservoir Tank Fill Cap, Dipstick and Breather
- B. Reservoir Drain
- C. Filter

HYDRAULIC RESERVOIR AND FILTERS

Hydraulic Reservoir

The hydraulic reservoir is located on the left-side of the header. It has a capacity of 17 Litres (4.5 gals.) of SAE 15W40 engine oil. The reservoir contains a separate filtered breather assembly. The fill cap contains a dipstick for checking the oil level, add oil until the level is in the safe zone. Do not overfill.

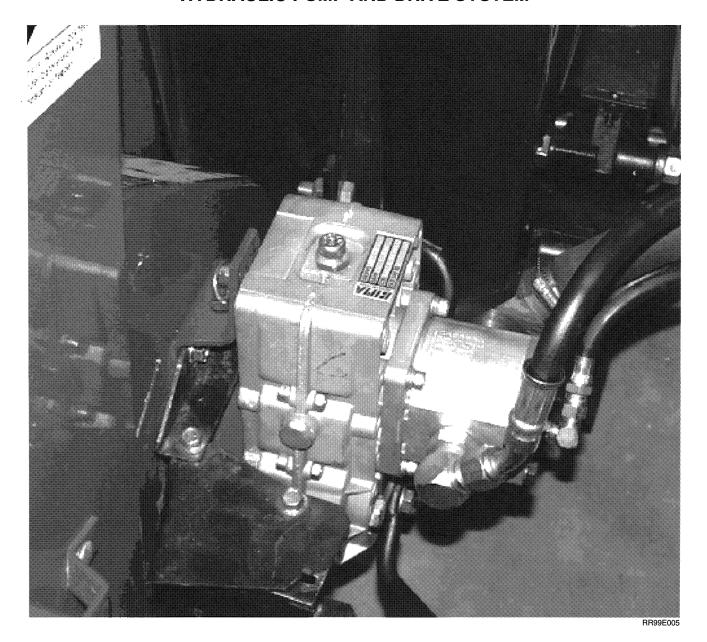
Filtration System

The filtration system consists of one external spin-on filter. This element is 95% efficient at a 10 micron rating. The service interval is after the first 50 hours and every 250 hours or once a year thereafter. The spin-on hydraulic filter is in the return line to the reservoir, therefore it is important clean oil is added to the reservoir. The filter base contains a 1.1 bar (15 psi) bypass valve to protect the filter from rupturing. There is no warning light or alarm to tell the operator that the oil is bypassing, so it is important that the filter is serviced at the recommended intervals.

Hydraulic oil cooling system

Heat is generated as oil moves through the system. The reservoir tank and lines provide cooling for the system. The system will normally run $100 \pm 20^{\circ}$ F above ambient temperature.

HYDRAULIC PUMP AND DRIVE SYSTEM



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