



# Service Repair Manual

## **Models**

120H Motor Grader

---

Product: MOTOR GRADER

Model: 120H MOTOR GRADER 6TM

Configuration: 120H Motor Grader 6TM00001-00442 (MACHINE) POWERED BY 3116 Engine

## Disassembly and Assembly 120H & 135H MOTOR GRADERS MACHINE SYSTEM

Media Number -SEN8544-01

Publication Date -01/10/2004

Date Updated -04/02/2016

SEN85440036

## Implement Hydraulic Pump

SMCS - 5070-011; 5070-012; 5070-017

## Remove Implement Hydraulic Pump

1. Articulate the machine to the right in order to achieve working space.
2. Release pressure in the hydraulic system as follows:



**WARNING**

**At operating temperature, the hydraulic oil is hot and under pressure. Hot oil can cause burns. Sudden movement of the machine or release of oil pressure can cause injury to persons on or near the machine. To prevent possible injury, perform the following procedure before working on the hydraulic and steering systems.**

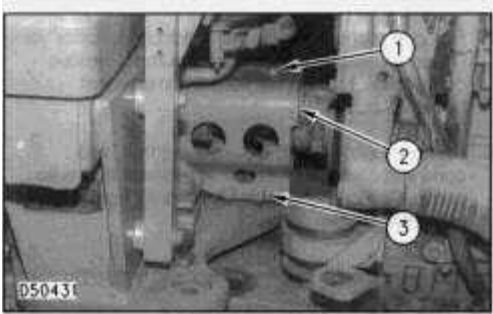
- a. Move the machine to a smooth horizontal location. Move away from working machines and personnel. Lower all implements to the ground. Install the wheel lean pin in front axle.
- b. Permit only one operator on the machine. Keep all other personnel either away from the machine or in view of the operator.
- c. Activate the parking brake. Place all implements on the ground and put the blade in the "FLOAT" position.
- d. Stop the engine.
- e. Turn the steering wheel back and forth several times to relieve pressure in the steering accumulator.
- f. Carefully loosen the filler cap on the hydraulic tank to release pressure in the tank.

- g. Be sure all hydraulic pressure is released before any fitting, hose, or component is loosened, tightened, removed or adjusted.
- h. Tighten the cap on the hydraulic tank.
- i. The pressure in the hydraulic system must be released before lines or components can be removed.

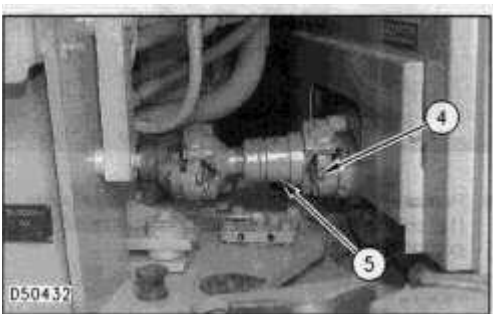


**Hydraulic pressure can exist in the hydraulic lines between the control valves and the cylinders with the engine stopped. Manually relieve pressure before working on any hydraulic circuit.**

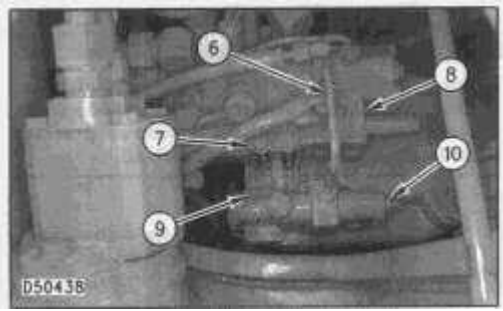
3. Drain hydraulic system. Remove plug from ecology drain at the bottom of the oil tank. Drain the hydraulic oil in a suitable container for storage or disposal. The capacity of the hydraulic oil tank is **63 liters (16.8 U.S. gal)**.



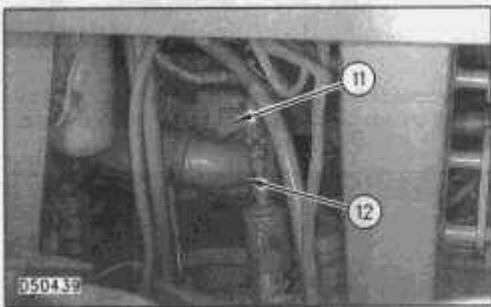
4. Remove bolts (1), (3) and the washers that hold two split shields (2) together and to the machine frame.



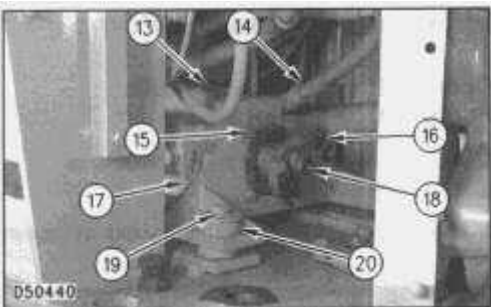
5. Remove bolts (4) and the washers from pump drive shaft (5). Remove pump drive shaft (5) from the implement hydraulic pump.



6. Remove tube assembly (6) from valves (8) & (10).
7. Remove cap screws (9) that hold compensator valve (10) to the implement hydraulic pump. Remove compensator valve (10) from the implement hydraulic pump.
8. Remove bolts (7) and the washers that hold combination valve (8) to the implement hydraulic pump. Remove combination valve (8) from the implement hydraulic pump.



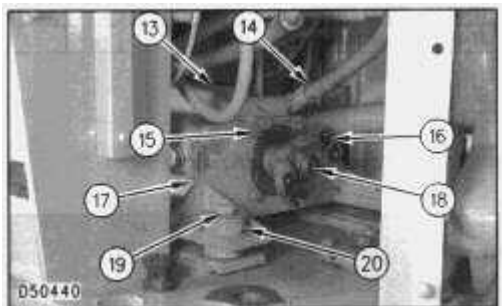
9. Remove bolts (11) from elbow (12). Move elbow (12) and its seal from the implement hydraulic pump.



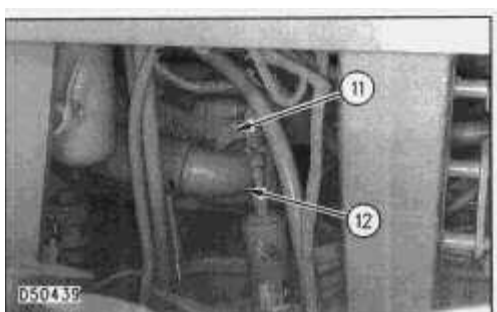
10. Remove hose assembly (14) from implement hydraulic pump (13).
11. Remove nut (18) and the washer from the implement hydraulic pump shaft.
12. Remove yoke (16) from implement hydraulic pump (13).
13. Remove bolts (15) and the washers that hold bracket (15) to implement hydraulic pump (13).
14. Remove mounting bolts (19), the washers and rubber mountings (20) that hold mounting bracket (17) to the machine frame. Remove mounting bracket (17) from the machine frame.
15. Use a lifting sling and a hoist, or a power truck in order to remove implement hydraulic pump (13) from the left side of the vehicle. the weight of implement hydraulic pump (13) is **50 Kg (110 lb)**.

# Install Implement Hydraulic Pump

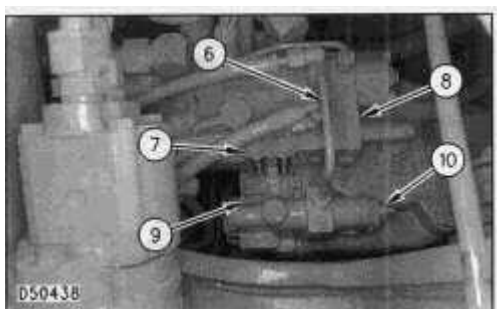
1. Make sure that all components of the implement Hydraulic Pump and the matching components are clean prior to installation of the pump. During the installation of the Implement Hydraulic Pump, check the condition of all O-ring seals used in the assembly. If any of the seals are damaged, use new parts for replacement.



2. Position implement hydraulic pump (13) to the machine frame.
3. Position mounting bracket (17) to the machine frame and to implement hydraulic pump (13).
4. Install rubber mounts (20), bolts (16) and the washers that that hold mounting bracket (17) to the machine frame.
5. Install bolts (15) and the washers that hold bracket (15) to implement hydraulic pump (13). Tighten bolts (15) to a torque of **160 ± 30 N·m (118 ± 22 lb ft)**.
6. Install yoke (16), nut (18) and the washer to implement hydraulic pump (13). Tighten nut (18) to a torque of **190 ± 25 N·m (140 ± 18 lb ft)**.
7. Install hose assembly (14) to implement hydraulic pump (13).



8. Position elbow (12) and its seal to implement hydraulic pump (13). Install bolts (11) that hold elbow (12) to implement hydraulic pump (13).



Thank you so much for reading.  
Please click the “Buy Now!”  
button below to download the  
complete manual.



After you pay.

You can download the most  
perfect and complete manual in  
the world immediately.

Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)