

Fig 12.

Service Procedure

Pressure Test

- 1 Park the machine on level ground, engage the parking brake and set the transmission to neutral. Lower the attachments to the ground. Stop the engine and remove the starter key → [Fig 13. \(□ H-15\)](#).
- 2 Turn the steering wheel to the left and to the right several times to vent system pressure.

WARNING

Make the machine safe before working underneath it. Park the machine on level ground, lower the attachments to the ground. Apply the park brake, put the transmission in neutral and stop the engine. Block both sides of all four wheels.

Disconnect the battery, to prevent the engine being started while you are beneath the machine.

GEN-4-1_1

- 3 Connect a 0-400 bar (0-6000 lbf/in²) pressure gauge to test adaptor **A**.
- 4 Run the engine at 1500 revs/min. and turn the steering to full lock. Check the gauge reading which should equal the relief valve pressure, refer to Technical Data → [Fig 14. \(□ H-15\)](#).

Note: The steering wheel must be held on full lock whilst the gauge reading is being checked.

- 5 If necessary, adjust the pressure setting by removing plug **B**, on the hydraulic steer unit.
- 6 Adjust screw **C** using an 'allen key' until the correct.

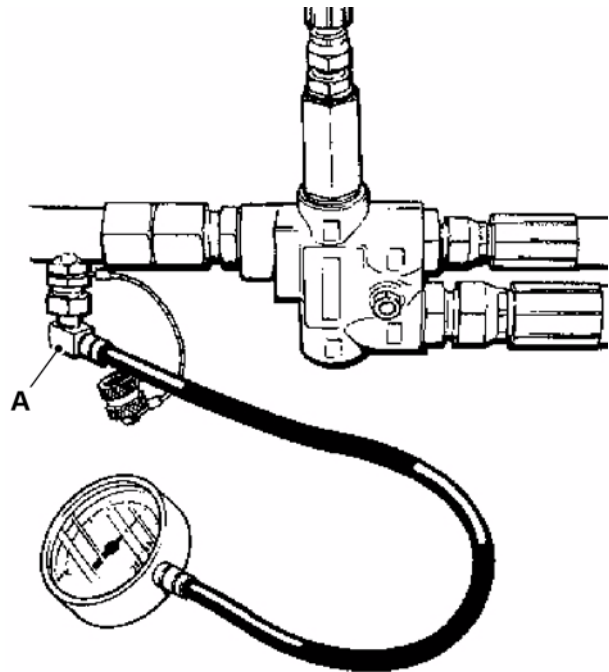


Fig 13.

D070860-25

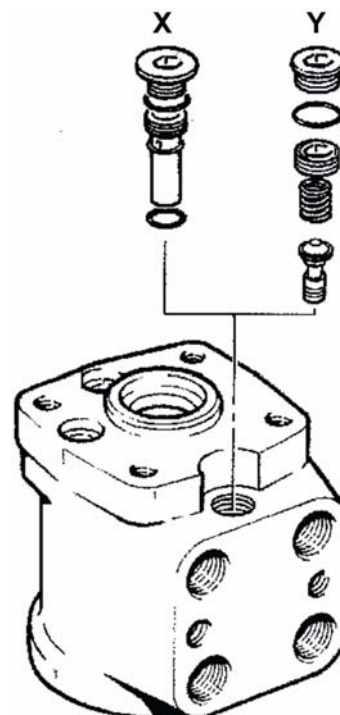


Fig 14.

D070860-24

maximum pressure gauge reading which should be 5.9 to 8.7 bar (86 to 126 lbf/in²).

If the pressure is outside the limits try cleaning the priority valve, refer to Priority Valve - Cleaning.

If cleaning the valve does not rectify, check the hydraulic pump flow rate, refer to Section E Main Pump - Flow and Pressure Testing.

If the hydraulic pump flow and pressure tests are satisfactory, then the priority valve must be renewed.

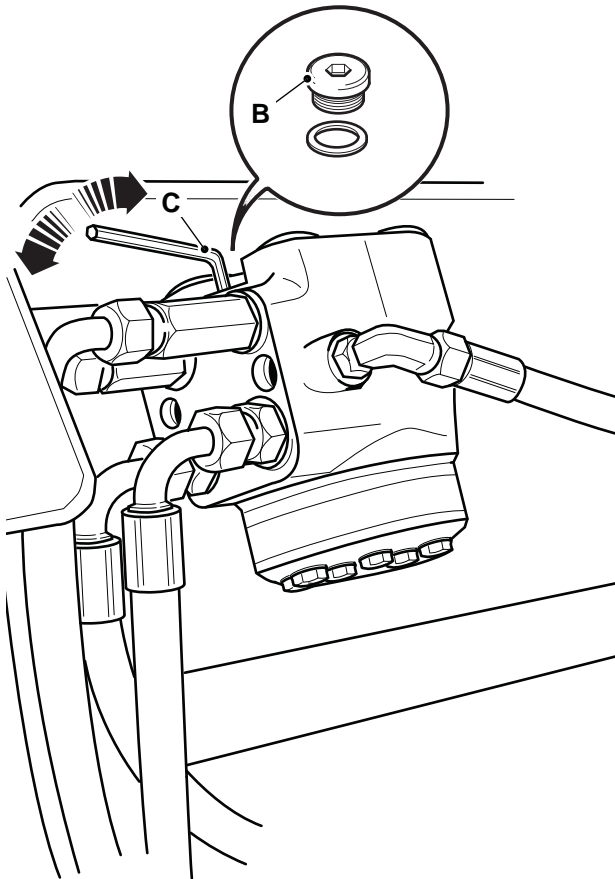


Fig 15.

D070860-26k

Priority Valve - Standby Pressure Testing

- 1 Disconnect hose **A** and install a 0 - 40 bar (0 - 580 lbf/in²) pressure test gauge into the valve port. Position the open end of hose **A** into a clean container in order to collect any oil drainage.
- 2 Disconnect hose **B** from load sensing port adaptor **C** and blank off → Fig 16. (□ H-16).
- 3 Set the steering to neutral, i.e. do not turn the steering wheel, and start the engine. Gradually increase the engine speed to 1000 rev/min. while checking the

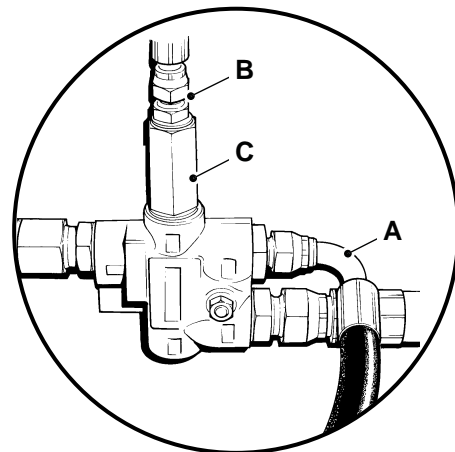


Fig 16.

D070860-27

Priority Valve - Cleaning

The priority valve spool and spring may be removed for cleaning.

- 1 Remove the priority valve from the machine. Refer to Priority Valve - Removal and Replacement → Fig 16. (□ H-16).
- 2 Unscrew adaptor **9** and extract the priority valve spring **11**.
- 3 Remove the blanking plug **7**. Press out the priority valve spool **12** using a nylon pin. Take care not to damage the bore of the valve.
- 4 Clean these components in clean paraffin paying particular attention to the orifices at each end of the spool. Dry off and lubricate with clean hydraulic fluid.

- 5 Refit the priority valve spool **12** making sure that the spring seat end of the spool faces towards the **LS** port. Refit blanking plug **7** and torque tighten.
- 6 Refit the priority valve spring **11** and adaptor **9** and torque tighten ⇒ [Fig 17.](#) ([□ H-17](#)).
- 7 Refit the valve onto the machine. Refer to Priority Valve - Removal and Replacement.
- 8 Bleed the load sensing line. Refer to Priority Valve - Bleeding.

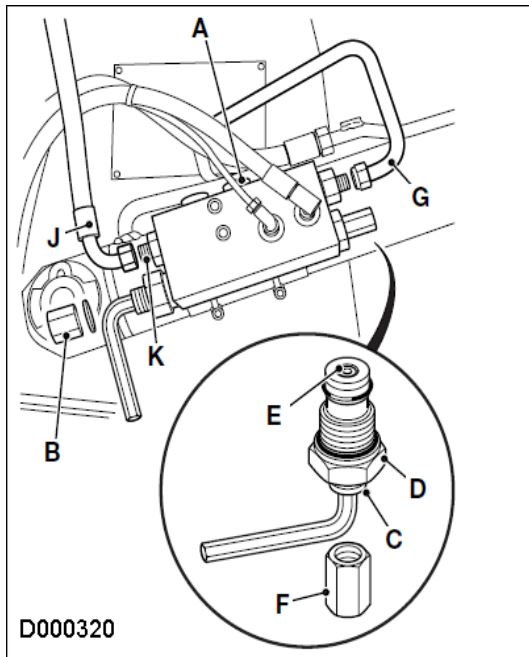


Fig 17.



Page left intentionally blank

Power Track Rod

Removal and Replacement

Introduction

This procedure is for a typical power steering track rod removal and replacement.

WARNING

Make the machine safe before working underneath it. Park the machine on level ground, lower the attachments to the ground. Apply the park brake, put the transmission in neutral and stop the engine. Block both sides of all four wheels.

Disconnect the battery, to prevent the engine being started while you are beneath the machine.

GEN-4-1_1

WARNING

The loader arm safety strut must be fitted before any work is done beneath raised loader arms. Make sure the shovel is empty, then fit the safety strut as instructed below.

GEN-1-7

Removal

- 1 Disconnect and cap hydraulic hoses to prevent loss of fluid and ingress of dirt. Label hoses for identification and correct refitting
⇒ [Fig 18.](#) ([□ H-19](#)).
- 2 On 4WD machines remove the split pin and nut **A**. Remove the track rod ball joint from the wheel hub assembly.

On 2WD machines, remove lock assembly **B** and pin **C** to remove the track rod pivot from the wheel hub assemblies.
- 3 Remove the four fixing bolts **D**.

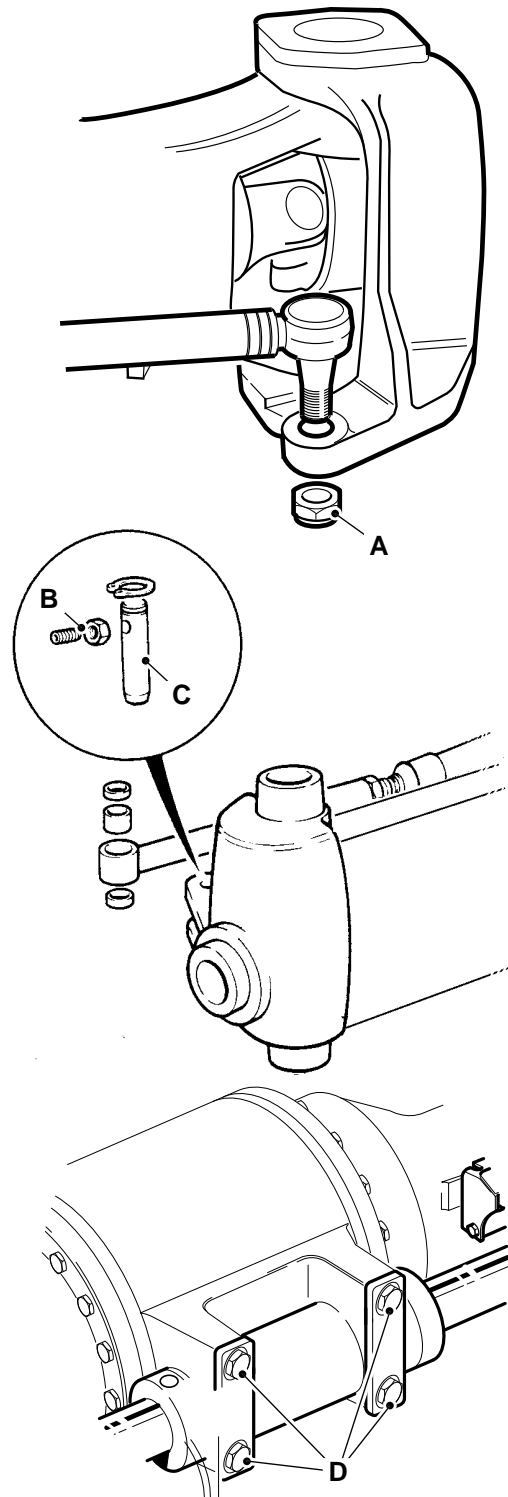


Fig 18.

D070860-28