

Fig 6. Hydraulic Steer Unit

S210620-1

Inspection

Examine all contact surfaces and replace any parts that have scratches, wear or other damage that could cause leakage. Do not use abrasive or try to file or grind the surfaces. Clean all metal parts with a solvent and blow dry with air.

Assemble

1 Assemble the check valve:

Lower check ball retainer **7-20** into the housing. Make sure the retainer is straight in the valve hole and not on its edge. Fit check ball **7-19** into housing. Lubricate and fit O rings (**7-A** 11.1 mm (5/8 in.) **7-B** 15.9 mm (7/16 in.)) to check seat **7-18**. Install check valve seat **7-18** into the housing open end first; push the seat fully into the housing taking care not to twist and damage the O rings. Fit the set screw **7-17** and tighten to 11 Nm (8.1 lbf ft²).

Note: When fitted the top of the set screw should be slightly below the housing top surface.

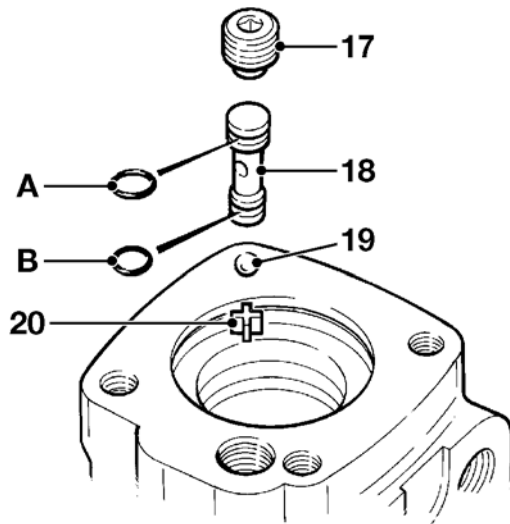


Fig 7.

S210630-1

2 Assemble the spool and sleeve:

Assemble the spool **8-23** and sleeve **8-24** so that on completion the spring slots **8-A** line up at the same

end. Rotate the spool when sliding the parts together and test for free rotation.

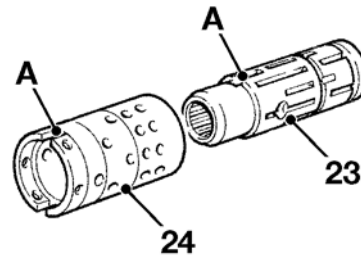


Fig 8.

S210640-1

3 Fit the spring assembly:

Make sure the spring slots are lined up and insert the spring installation tool (Eaton part number 60057) through the slots. Assemble a set of low torque springs **9-22**, extend edge downward, with a pair of spring spacers **9-B** between two sets of centering springs **9-C**. Insert one end of the spring set into the installation tool. Compress protruding springs and push set into the slot at the same time withdraw the installation tool. Centre the spring set in the spool and sleeve assembly so that they push down evenly and are flush with the upper surface of the assembly. Fit pin **9-21** to the assembly making sure it is flush both sides of the sleeve **9-24**.

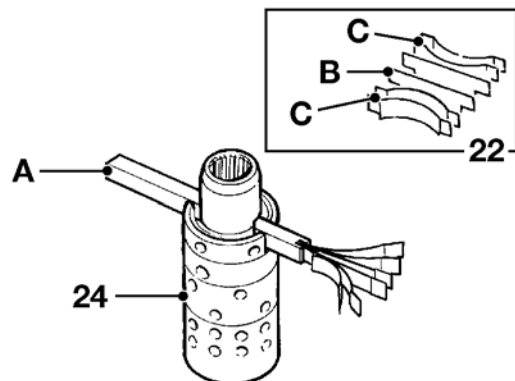


Fig 9.

S210650-1

4 Installing the spool and sleeve assembly:

Position the spool and sleeve assembly so that the splined end of the spool enters the valve housing as

shown. Push the assembly gently into place with a slight rotating action until the parts are flush at the insertion end face. ⇒ Fig 10. (□ H2-11). Check for free rotation of the spool and sleeve assembly within the housing by applying finger tip force to the spool splined end.

Note: Do not move the spool and sleeve assembly beyond the flush position because the pin 6-21 may drop into the housing discharge groove.

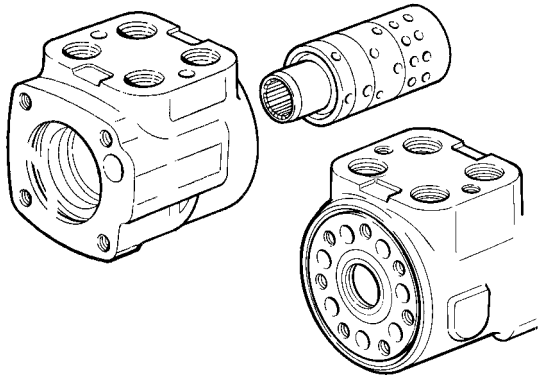


Fig 10.

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5 Fit the drive end seals:

- a Place the housing 11-25 upright on a clean lint free cloth. Lubricate all seals before assembly. Fit seals 11-16 and the bearing race components 11-14 into the housing.

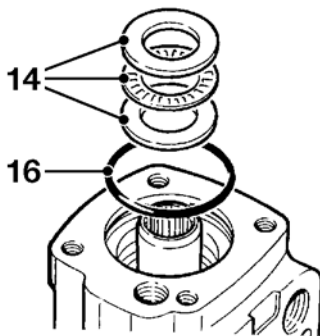


Fig 11.

S210670-1

- b Assemble the Teflon seal components 12-13 (seal 12-A, 'O' ring 12-B and back up ring 12-C) above the bearing race 12-14.

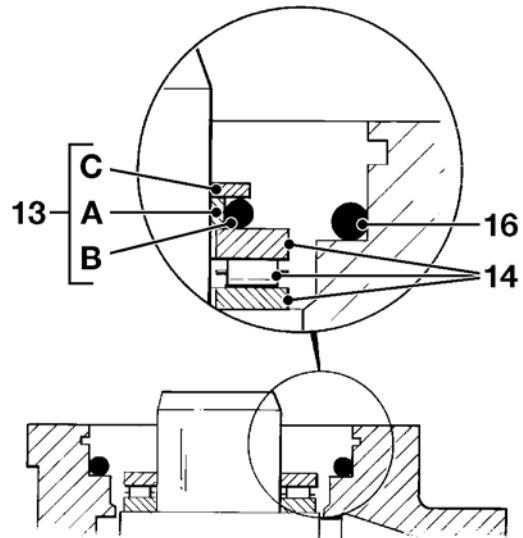


Fig 12.

S210680-1

- c Fit the dust seal 13-12, flat smooth side down, into the gland bushing 13-11. Assemble the gland seal bushing over the splined end of the spool 13-15 and tap the bushing into place with a soft faced hammer, making sure the bushing is flat against the bearing race. Fit the retaining ring 13-10 pressing it into position around the spool sleeve 13-24 with a screwdriver blade.

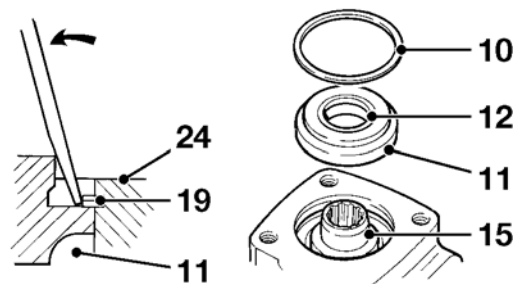


Fig 13.

S210690-1

6 Fitting the meter end seal and drive:

Insert seal **14-9** into housing **14-25**. Fit spacer plate **14-7** together with its seal **14-8** and align with housing bolt holes. Rotate the sleeve and spool assembly **14-15** until it is seen that the pin **14-21** is parallel with face **14-A**. Fit the drive **14-6** making sure it is fully engaged with the pin. Mark the drive head as shown at **14-B**.

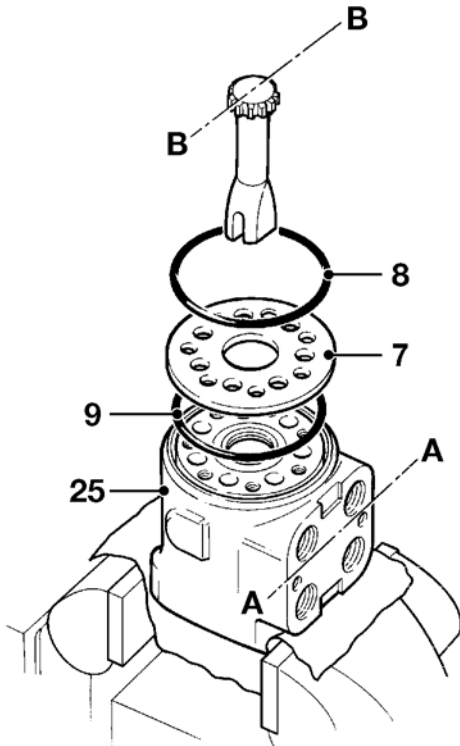


Fig 14.

S210700-1

7 Time and fit the meter:

Fit seal **15-4** into the groove on the meter **15-3**. Position the meter so that the seal is away from the housing **15-25** and align the meter valleys as shown at **15-C**. Reference lines **15-A**, **15-B** and **15-C** should be parallel. Fit the meter over the drive head **15-6** and align the bolt holes without disengaging from the drive.

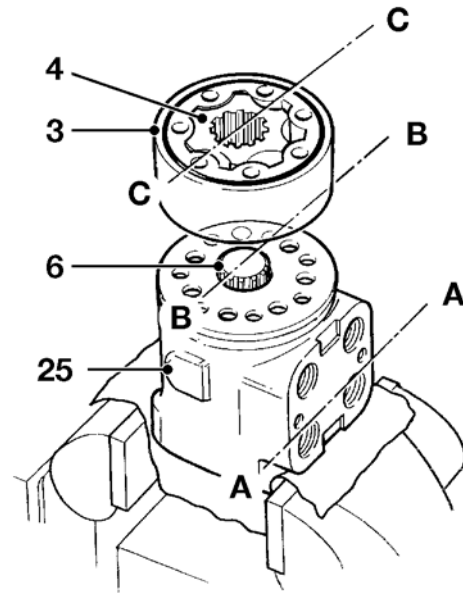


Fig 15.

S210710-1

8 Fit and secure the end cap:

Fit any drive spacers **16-5** that are required. Locate the end cap **16-2** over the meter and align the bolt holes. Fit seven cap screws **16-1** and pre tighten to 17 Nm (12.5 lbf ft). Finally, viewed from face **16-A** torque tighten the screws to 31 Nm (22.9 lbf ft) in the sequence shown.

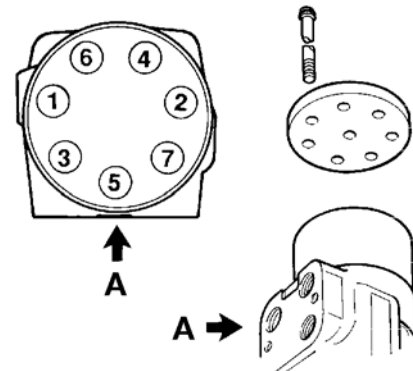


Fig 16.

S210720-1

Priority Valve

Introduction

This topic contains information about a machine DEVICE. Make sure you are referring to the correct device. Refer to the applications table.

Descriptions and procedures relate to the device and not related systems. For information about the systems refer to the relevant topics.

This topic is intended to help you understand what the device does and how it works. Where applicable it also includes procedures such as removal and replacement and dismantle and assemble.

[⇒ *Related Topics* \(□ H3-2\)](#)

[⇒ *Operation Overview* \(□ H3-3\)](#)

[⇒ *Hydraulic Operation and Schematics* \(□ H3-4\)](#)

[⇒ *Cleaning* \(□ H3-6\)](#)

[⇒ *Removal and Replacement* \(□ H3-7\)](#)

[⇒ *Removal* \(□ H3-7\)](#)

[⇒ *Replacement* \(□ H3-7\)](#)