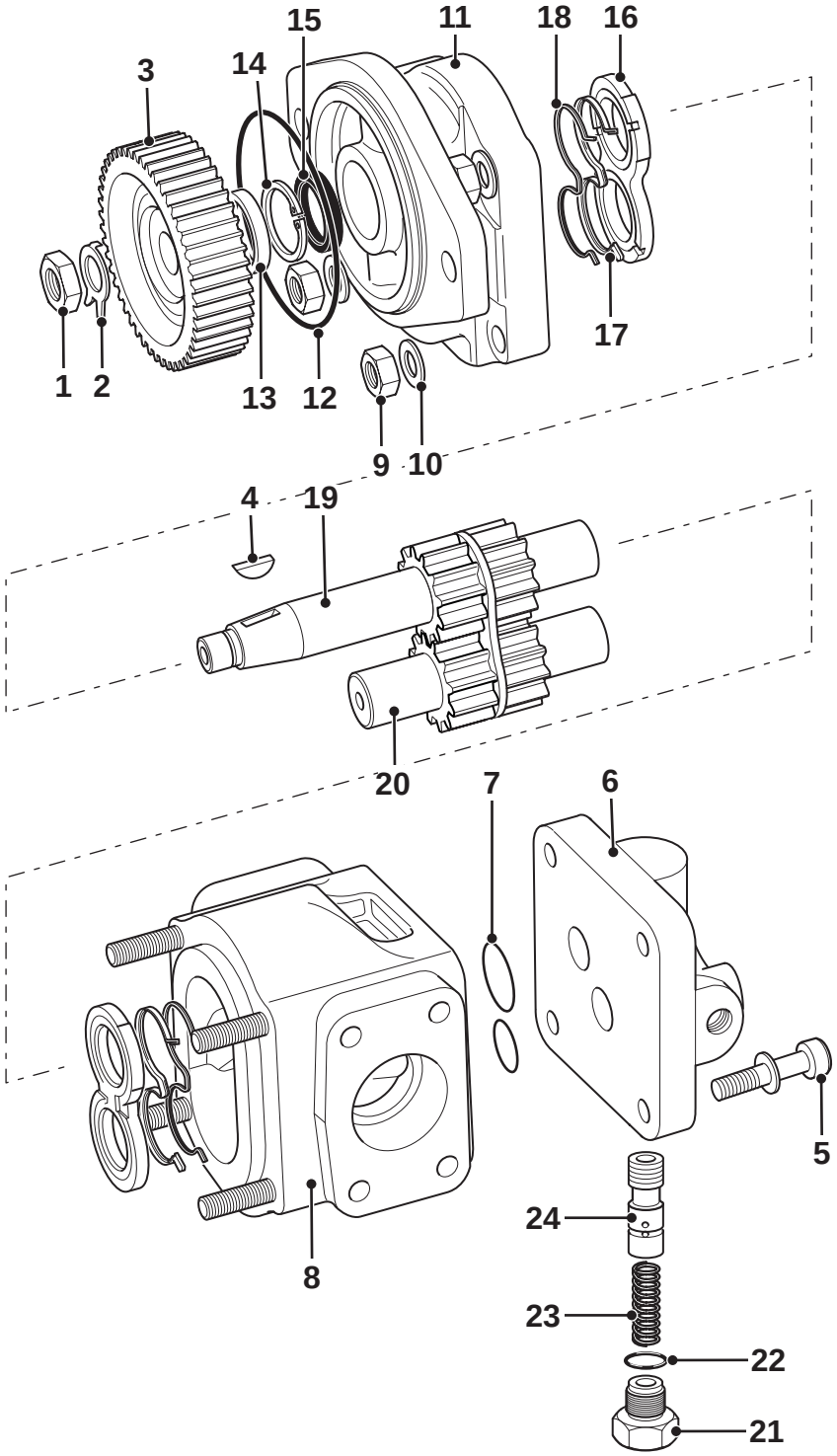

Fig 40. Pump and Priority Valve Components

Assemble

Prior to assembly all parts must be perfectly clean and lubricated with clean hydraulic fluid.

Renew all seals using clean hydraulic fluid as a lubricant.

1 ⇨ *Fig 40. (E-58)*. Fit new inner shaft seal **15** into the mounting flange **11** with the garter spring facing towards the pump, refit the circlip **14**. Fit new outer shaft seal **13** with the garter spring uppermost. Coat the seal lips with a high melting point grease.

2 Stand the pump body on its rear face. Fit new seal **18** and back-up seal **17** into the groove in the balance plate **16** and feed into the bore. Ensure that the seals remain in their groove and that the two small holes in the balance plate are to the low pressure side of the pump, i.e. the side with the largest port.

Note: *A light coating of petroleum jelly may be applied to the seal, back-up seal and balance plate face to keep the seals in place during assembly.*

3 Insert the driveshaft **19** and driven gear assembly **20** into their original bores.

4 Replace the second balance plate **16** into its original position, with the small holes towards the low pressure side, and fit new seal **18** and back-up seal **17**.

5 Fit new 'O' ring **12** into its groove in the mounting flange **11** and also apply a small amount Loctite 574 sealant to the body lower face, i.e. outboard of the oval location. This sealant is to prevent moisture entering this area and causing corrosion and is not a hydraulic seal.

6 Carefully fit the mounting flange **11** in its original position, the 4 mm diameter drain hole in the rear face must be to the low pressure side. Take care not to damage the seal on the shaft.

7 Fit the washers **10** and nuts **9** to the studs and tighten evenly. ⇨ *Table 27. Torque Settings (E-59)*

8 Ensure that the driveshaft taper and the input gear tapered bore are free from oil/grease. Fit the woodruff key **4** into its slot in the driveshaft. Fit the input gear **3**, new tab washer **2** and retaining nut **1**. Torque tighten the retaining nut **1**. ⇨ *Table 27. Torque Settings (E-59)*.

9 Pour a small amount of clean hydraulic fluid into the inlet port and check that the driveshaft can be turned without undue force.

10 Fit new 'O' ring **22** to spring seat **21**.

11 Coat spool **24** in clean hydraulic oil and slide carefully into its bore making sure it is orientated with the spring recess uppermost and that it moves smoothly. Fit the spring **23** and any shim(s) removed during dismantling to the spring seat. Fit the spring seat **21** and torque tighten. ⇨ *Table 27. Torque Settings (E-59)*.

12 Fit new 'O' rings **7** to the pump body, using a thin smear of petroleum jelly to hold them in place. Make sure the pump and priority valve mating faces are clean. Fit the priority valve assembly to the pump body with the four screws **5**, ensuring that the priority valve is correctly orientated using the marks made during dismantling. Torque tighten the screws **5**.⇨ *Table 27. Torque Settings (E-59)*.

Note: *The priority valve must be fitted to the pump in the correct orientation to ensure that the pump oil feed passages align with the valve feed port.*

Table 27. Torque Settings

Item	Nm	Kgf m	lbf ft
1	75 - 85	7.6 - 8.6	55 - 62.7
5	44 - 52	4.5 - 5.3	32.5 - 38.4
9	90 - 100	9.2 - 10.2	66.4 - 74
21	72 - 80	7.3 - 8.1	53 - 59