

Fig 3.

⇒ Motor Low Speed, High Traction Selected (where applicable) (□ 1-59).

**Motor High Speed, Low Traction
Selected (where applicable)**

⇒ [Fig 4. \(□ 1-62\)](#).

With the high speed button selected, servo pressure from the servo pressure maintenance valve via the rotary coupling fills the cavity under the two speed selector spool **B** and lifts it against the return spring **A**.

Service ports **C** and **D** are connected via the rotary coupling to the track spool in the valve block. Depending on whether track forward or track reverse is selected either port **C** or **D** may be pressurised, the other port then returns exhaust oil back to tank via the rotary coupling and the track spool.

The illustration shows the upper service port **C** pressurised. Because servo pressure has lifted spool **B**, pressurised oil crosses the top waisted section only of the spool into the centre port of the valve plate **E**, supplying a maximum of two of the motor pistons, driving the motor at maximum speed (minimum torque/tractive effort).

The opposite two pistons of the track motor displace the oil to tank via the lower waisted section of the two speed selector spool.

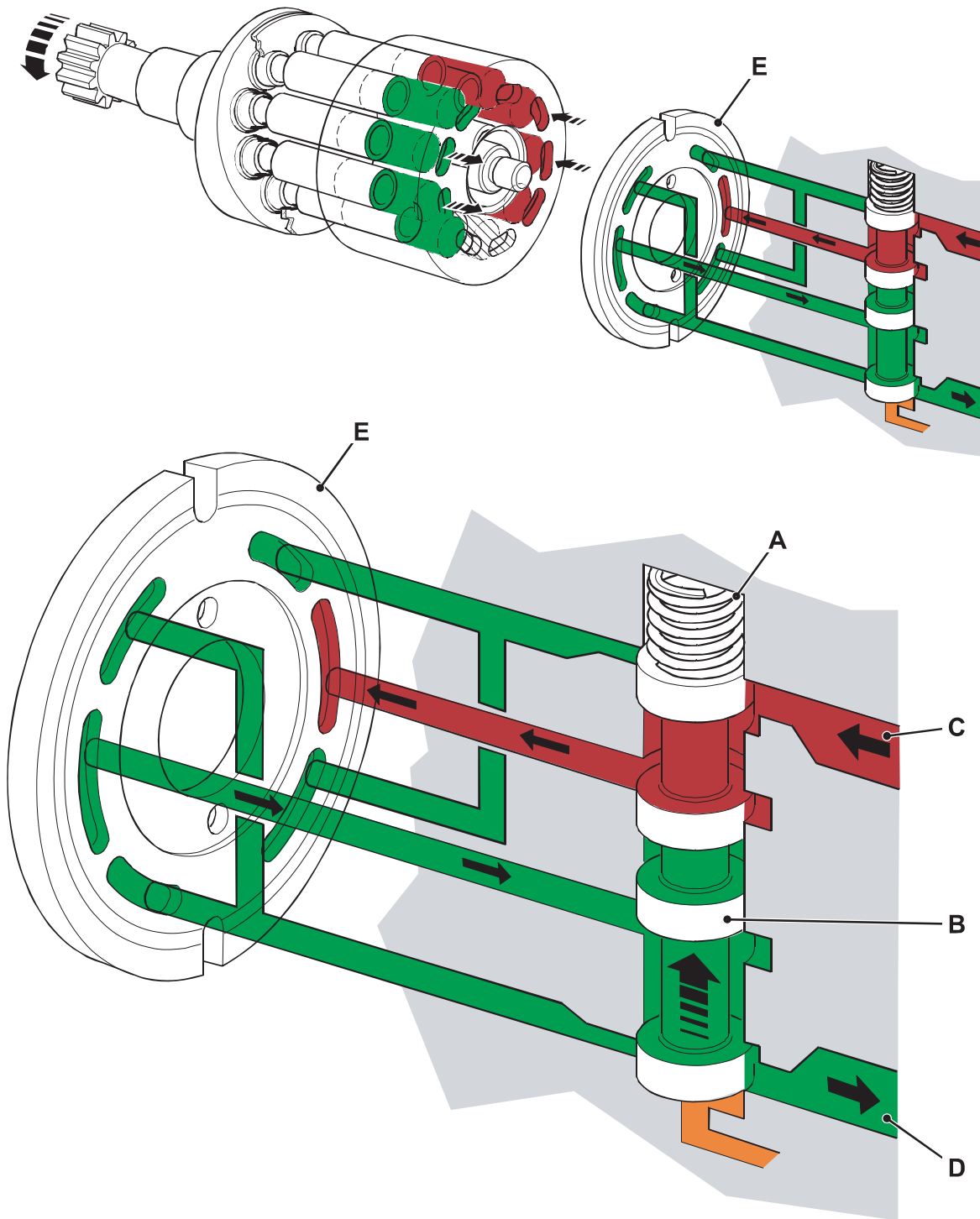


Fig 4.

⇒ Motor High Speed, Low Traction Selected (where applicable) (□ 1-61).

Auto Kick Down Function (where applicable)

When the pilot switch for high speed is turned on, the pilot pressure for high speed is led into chamber #1 of the auto kick down valve **A**, and force **F1** is applied. Force **F1** overcomes spring force **F4**, and shifts the auto kick down valve to the right, then the motor is switched to high speed mode.

On the other hand, drive pressure of the hydraulic motor is led into chambers #2 and #3, generating forces **F2** and **F3**. At this point, force **F3** is larger than force **F2** due to the larger cross-sectional area. The difference between **F2** and **F3** becomes larger when higher pressure is applied.

When the motor drive pressure exceeds the specified value to change the speed from high to low mode, the total force of **F3** and **F4** becomes larger than the total of **F1** and **F2**, and the auto kick down spool shifts to the left, then the motor is switched to low speed mode.

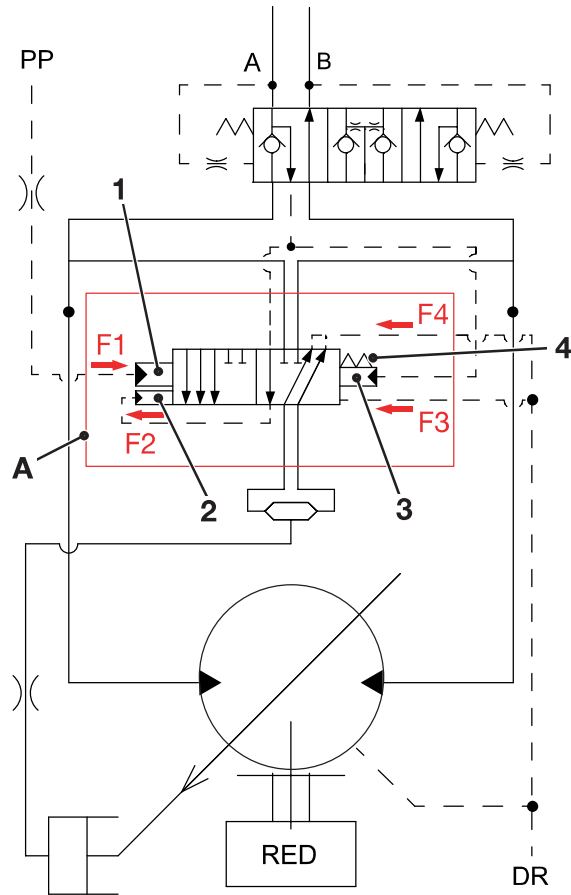


Fig 5.