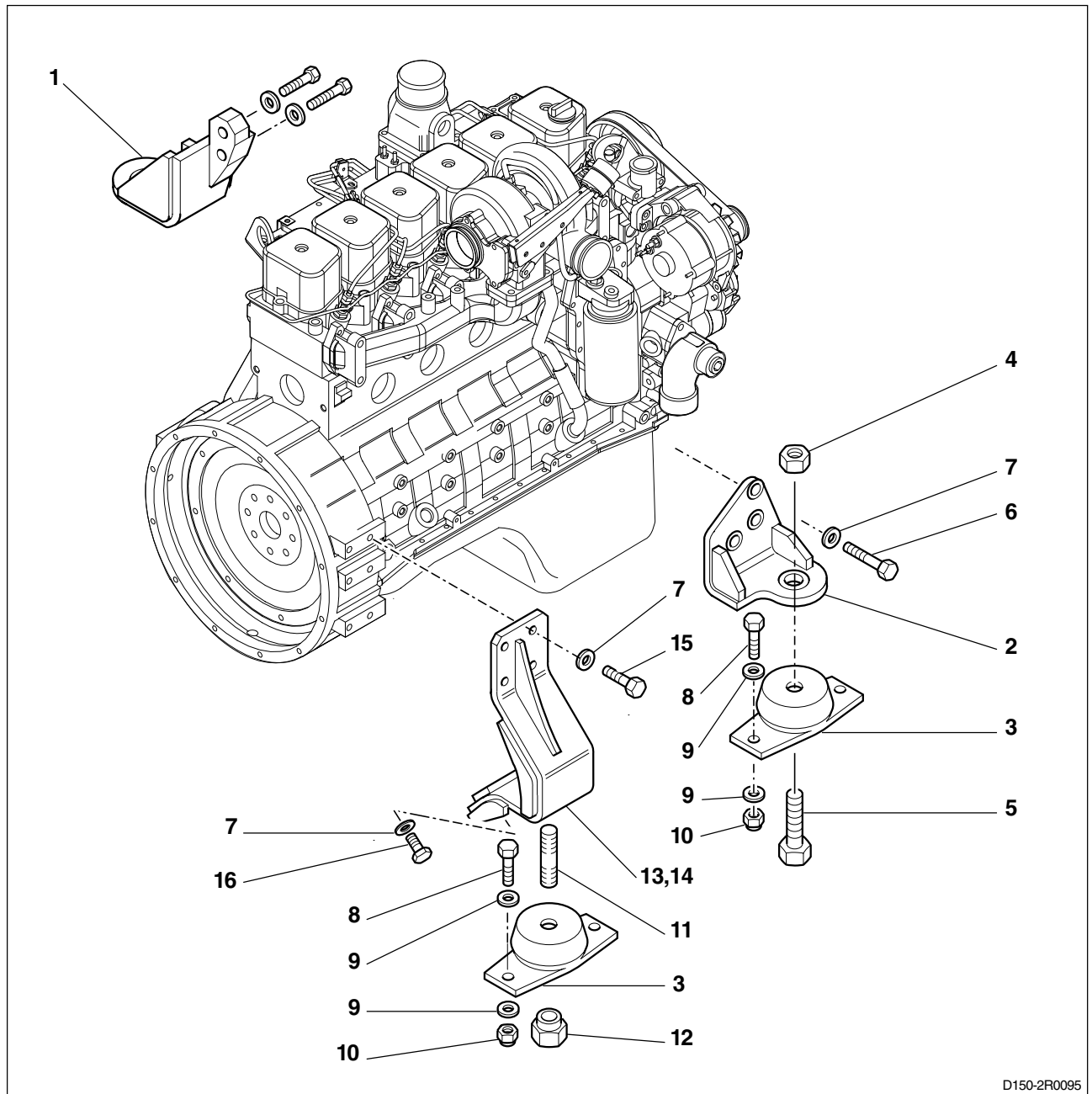


1.4 SECURING THE ENGINE TO THE FRAME



D150-2R0095

Fig. 1-26

N.	Description	Tightening torque	N.	Description	Tightening torque
1	L. h. support		9	Washer 16x30x3	
2	R. h. support		10	Nut 16x1.5x18	
3	Block		11	Stud	47.5 to 52.5 daNm (350.31 to 387.19 ft lb)
4	Nut 24x2x28		12	Nut	
5	Screw 24x2x80	41 to 45 daNm (302.38 to 331.88 ft lb)	13	Support - rear left	
6	Screw 12x1.75x30	17 to 18.5 daNm (125.38 to 136.44 ft lb)	14	Support - rear right	
7	Washer 12x24		15	Screw 12x1.75x40	
8	Screw 16x1.5x50	32.5 to 35.5 daNm (239.69 to 261.81 ft lb)	16	Screw 12x45	

Carefully read personal and machine SAFETY PRECAUTIONS (at the beginning of this manual)

SECTION 2

TRANSMISSION

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2.1 GENERAL DESCRIPTION

2.1.1 TRANSMISSION TORQUE CONVERTER HYDRAULIC DIAGRAM

The transmission is of a "power-shift" type with three forward and three reverse speeds. The system is powered by a dual pump feeding the transmission and the torque converter (1).

The pump sucks oil from the transmission housing through filter (6) and circulates it purifying further through filter (2). A valve (set at 2.5 bar) (36.25 psi) protects filter (2) against over pressures due to the clogging of the cartridge or excessively thick oil.

The oil delivered by feeding pump (1) after being purified by filter (2) reaches pressure relief valve (3) establishing and maintaining the pressure setting of the oil controlling the transmission clutches.

Safety valve (16) protects the torque converter and the heat exchanger against accidental pressure increments, normally due to cold and excessively thick oil, discharging the flow excess into the pump delivery line (1).

The oil flowing out the torque converter, passes through the heat exchanger, the manifold and it is distributed to the lube and cooling ducts of the transmission clutches.

The maximum lube pressure is limited by valve (15) set at 3 bar (43.5 psi).

Modulating valves (9) make the engagement of the clutches progressive, regulating the pressure increment in the control circuits.

A low engine lube oil pressure or an excessive lube oil temperature are indicated on the dashboard in the cab.

Quick discharge valves on the 2nd and 3rd speed clutches, during the speed engagement phase, are in closed position, under the action of pressurised oil. When shifting from one speed to another, the relevant control cylinder is connected to the discharge and the pressure drop causes the centrifugal force to prevail over the action of the oil, moving the balls outwards, facilitating a quick discharge.