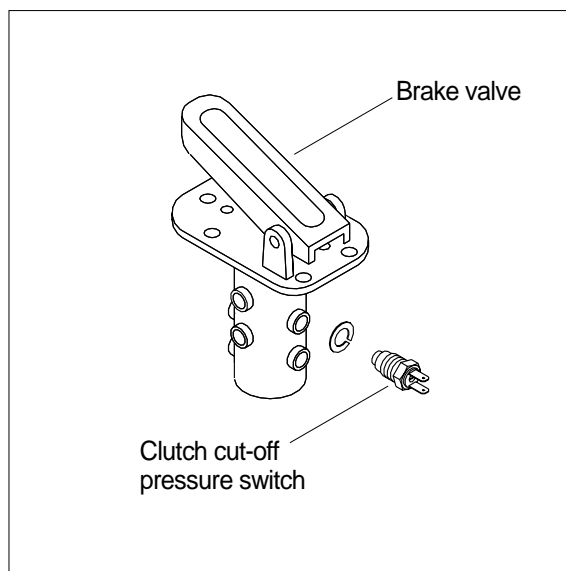


GROUP 3 TESTS AND ADJUSTMENTS

1. CLUTCH CUT-OFF PRESSURE SWITCH TEST

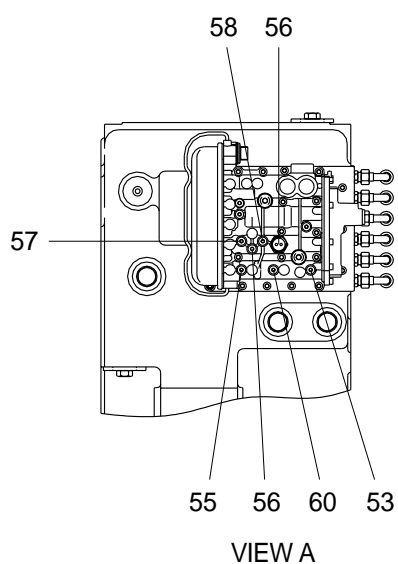
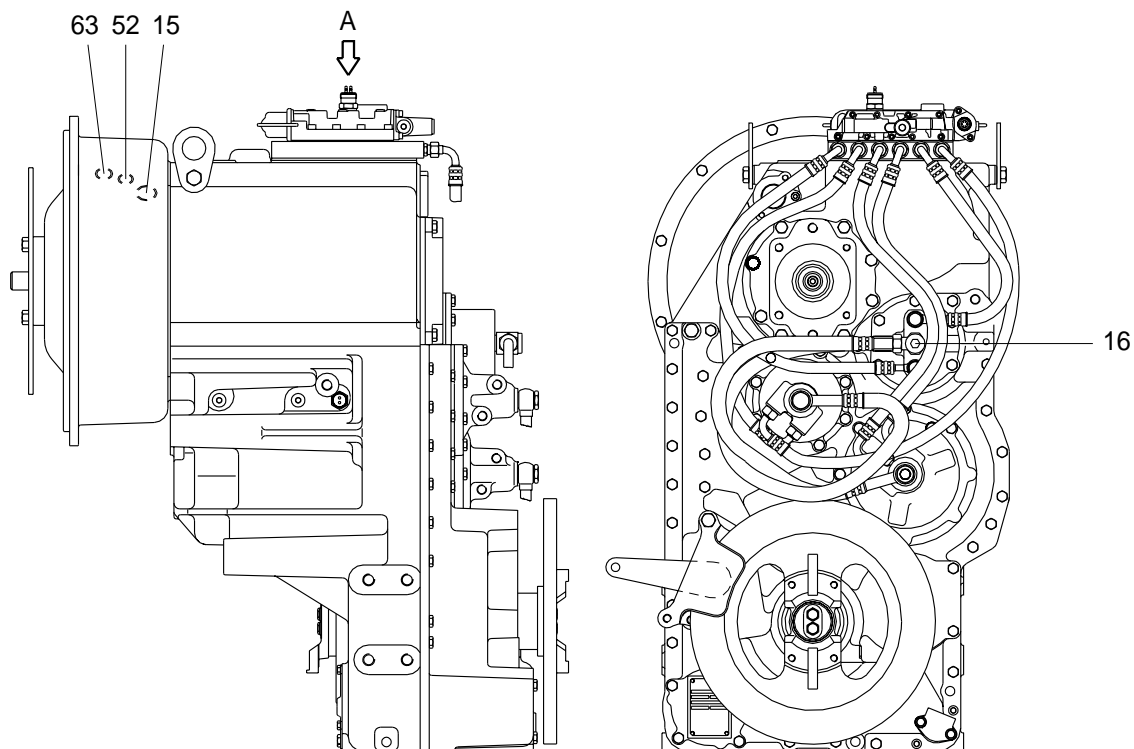
The setting pressure of the clutch cut-off pressure switch should be suited with the specification. The rated pressure is 25kgf/cm². For the detailed method for pressure adjusting, refer to page 4-27.



2. TRANSMISSION PUMP PRESSURE AND FLOW TESTING

1) SCHEDULE OF MEASURING POINTS

Carry out measurements with warm gearbox (about 80~95 °C) and full speed.



Port	Description	Size
15	Connection to heat exchanger	M42 × 2
16	Connection from heat exchanger	M42 × 2
52	Converter out pressure	M10 × 1
53	Forward clutch pressure(KV)	M10 × 1
55	Reverse clutch pressure(KR)	M10 × 1
56	1st clutch pressure(K1)	M10 × 1
57	2nd clutch pressure(K2)	M10 × 1
58	3rd clutch pressure(K3)	M10 × 1
60	4th clutch pressure(K4)	M10 × 1
63	Converter out pressure	M14 × 1.5
65	Central control pressure	M10 × 1

① **Measuring points for pressure oil**

- 52, 63 : Converter out pressure
- 53 : Forward clutch pressure(KV)
- 55 : Reverse clutch pressure(KR)
- 56 : 1st clutch pressure(K1)
- 57 : 2nd clutch pressure(K2)
- 58 : 3rd clutch pressure(K3)
- 60 : 4th clutch pressure(K4)
- 65 : Central control pressure

② **Temperature measuring point**

- 63 : Converter exit

③ **Measuring points for delivery rates**

Port	Description	Delivery rates
15	Connection to heat exchanger	Nominal value : Min 75cm ³ /min
16	Connection form heat exchanger	

2) TESTING

Before testing is carried out, ensure that the oil is at the correct level and at normal operating temperature.

3) TORQUE CONVERTER STALL TEST

Mark the engine crankshaft pulley with chalk or reflective tape and check the maximum no-load speed of the engine using a stroboscopic tachometer.

Raise the loader arms and set the machine against fixed obstruction. Apply the parking brake firmly and select forward highest. Apply the footbrake and, with the throttle fully open, check engine speed which should be as shown in technical date.

※ **Do not apply the clutch cut off switch during this test as the clutch disconnect will be activated and a false reading will result.**

Repeat the above test whilst simultaneously operating the loader arm raise service to blow off the main relief valve.

Engine speed should be as shown in technical data.

If engine speeds are appreciably below the stated figures, the engine is losing power and should be serviced or overhauled. Where the engine speed does not change significantly from the governed speed, check the transmission for clutch slippage or internal leakage.

4) CLUTCH PRESSURE TEST

Connect a pressure to the clutch pressure tapping point 65. Run the engine at idling speed, engage clutches in sequence(as in previous test) and note the gauge readings which should be as shown in technical data.

Clutch pressure should not vary by more than 0.34 bar(5 lbf/in²) from one another. Any clutch showing a greater variation should be disassembled for servicing.

5) PUMP FLOW TEST

Stop the engine and remove heat exchanger inlet port(16) and out let port(15) of transmission. Assemble flow test tool.

Start the engine and run at 2000rpm. The flow meter will show the pump flow which should be as shown in technical data. A low reading indicates a worn pump.

