TEREX

TA30
Articulated Dumptruck
Service Manual



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ASSEMBLY

Numbers in parentheses refer to Fig. 1 unless specified otherwise.

Note: Tighten all fasteners without special torques specified to torques listed in Section 300-0080, AXLE BOLT AND NUT TORQUE SPECIFICATIONS.

Note: During assembly and installation, make sure that mated, punch marked, or otherwise identified parts are returned to their original positions, if still serviceable.

1. Align the index marks on bearing caps (62) and differential housing (73) and fasten with washers (64) and bolts (63). Install the special shims and measuring shaft into the differential bearing bores. Measure the distance from the middle of the differential bearing flange face. Refer to Fig. 17. This will be dimension 'A'. e.g. 164.2 mm (6.40 in).

2. Install bearing retaining bush (58) into countershaft case (49) until it is seated. Measure dimension 'B' from the flange face of countershaft case (49) to the bearing contact face using a straightedge and depth micrometer as shown in Fig. 18. e.g. 25.75 mm (1.00 in).

3. Measure the width of roller bearing (60) as shown in Fig. 19. e.g. 37.05 mm (1.50 in).

Example:

	Dimension 'A'	164.2 mm (6.40 in)
+	Dimension 'B'	25.75 mm (1.00 in)
		= 189.95 mm (7.40 in)
-	Bearing width	37.05 mm (1.45 in)
	Dimension 'X'	= 152.90 mm (5.95 in)

4. Refer to Fig. 20. Read distance dimension etched on the face of pinion gear (61). e.g. 151.80 mm (5.92 in).

Example:

	Dimension 'X'	152.90 mm (5.95 in)
-	Pinion Dimension	151.80 mm (5.92 in)
	Shim Size	= 1.10 mm (0.03 in)

5. Place the determined size shim (59) in bearing retaining bush (58), then press or drive roller bearing (60) into its bore in the retaining bush.

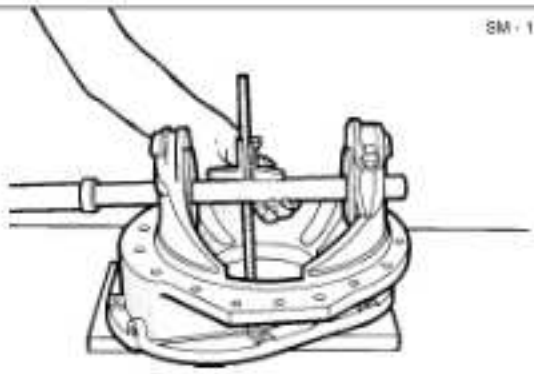


Fig. 17 - Measuring Dimension 'A'

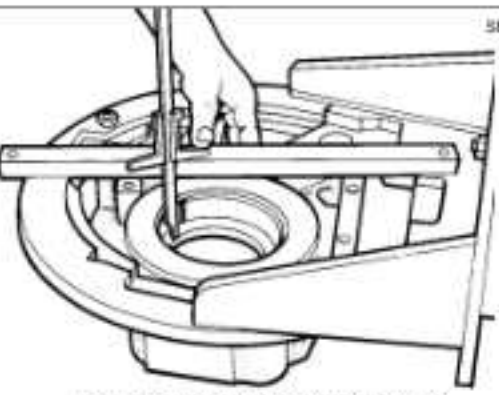


Fig. 18 - Measuring Dimension 'B'

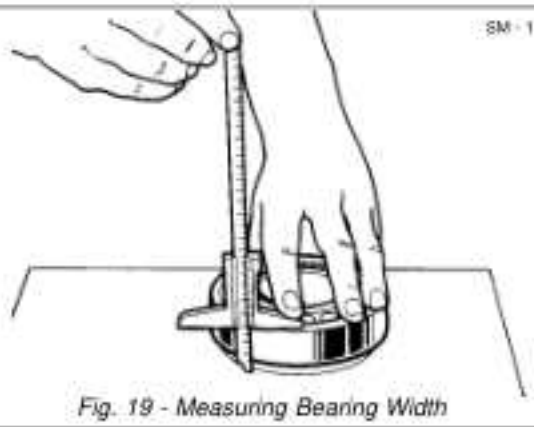


Fig. 19 - Measuring Bearing Width

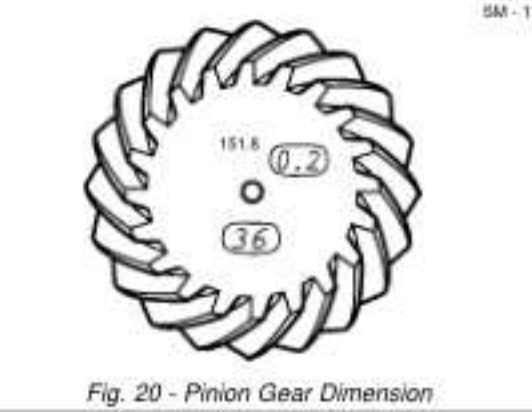
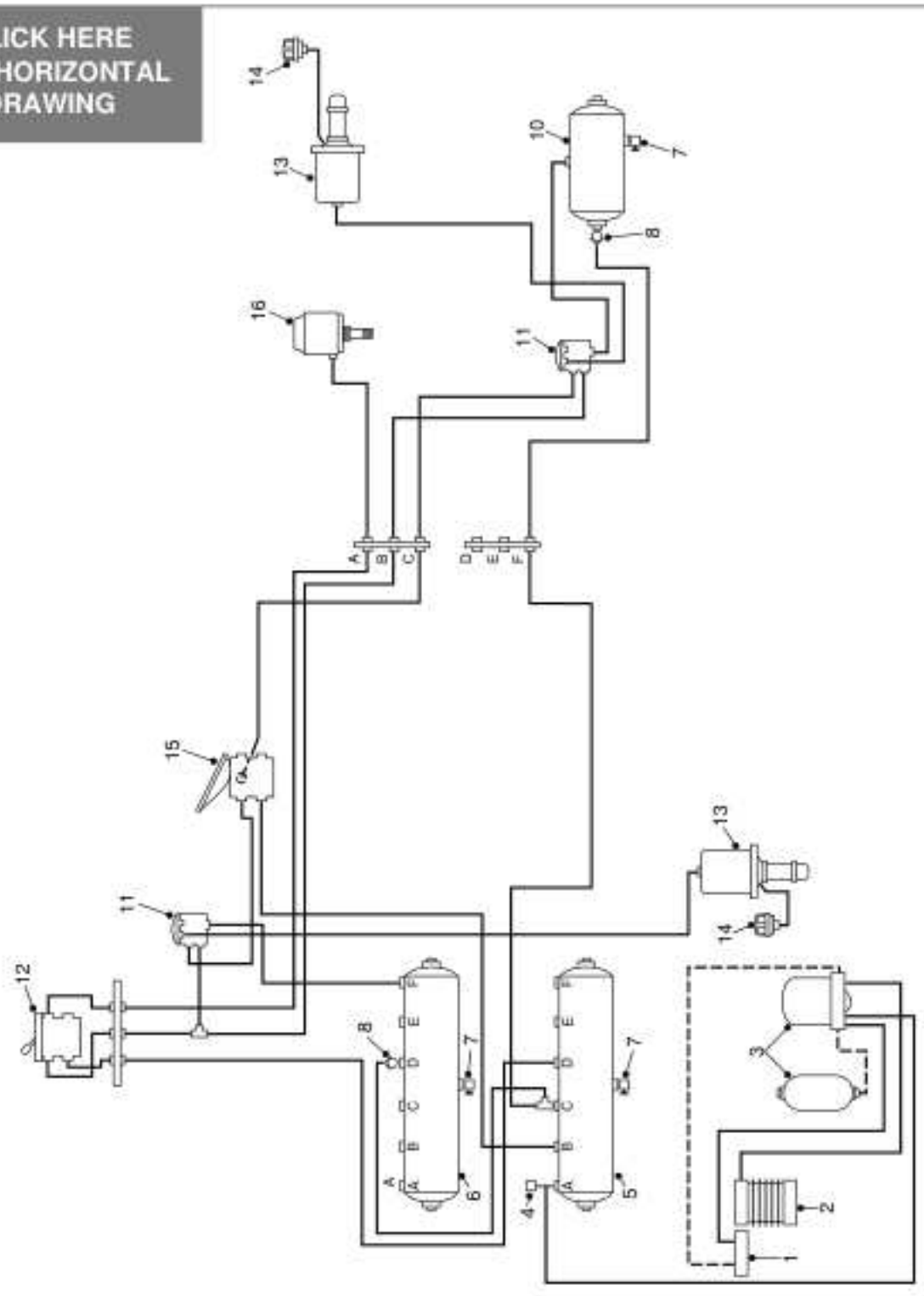


Fig. 20 - Pinion Gear Dimension

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CLICK HERE FOR HORIZONTAL DRAWING



1 - Engine Governor
2 - Air Compressor
3 - Air Drier Kit
4 - Safety Valve
5 - Primary Tank
6 - Front Brake Tank
7 - Drain Cock
8 - Check Valve
9 - Not Used
10 - Rear Brake Tank
11 - Relay Emergency Valve
12 - Park/Emergency Control Valve
13 - Pressure Converter
14 - Air Breather
15 - Treadle Valve
16 - Parking Brake Actuator

Fig. 1 - Air Braking System Schematic

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AIR CONDITIONING DIAGNOSIS		TABLE158
CONDITION	PROBLEM	REMEDY
1. Belt Trouble		
Slipping	Loose	Adjust belt to 12 mm (0.5 in) depression
	Overcharge	Correct the charge
	Air in system	Evacuate and re-charge
Excessive wear	Pulley not aligned	Align Pulley
	Belt too tight	Adjust or replace
	Bad idler bearing	Replace idler bearing
	Belt wrong width	Replace with correct belt
2. Vibration/Noise in Compressor area		
Vibration/noise	Stuck compressor or clutch	Replace
Vibration	Overcharge	Correct the charge
	Air in system	Evacuate system and re-charge
	Compressor mounting or belts loose	Tighten
	Drive pulley loose	Tighten
	Belt tension incorrect	Correct tension
	Faulty compressor	Replace compressor
Noise with clutch engaged	Faulty clutch bearing	Replace bearing
Noise with clutch engaged or disengaged		
	Clutch loose	Tighten
Noise	Clutch rubbing field coil	Align clutch
	Faulty belt	Replace belt
	Compressor oil level low	Add oil
Chatter/Knock	Valve plate broken	Repair or replace

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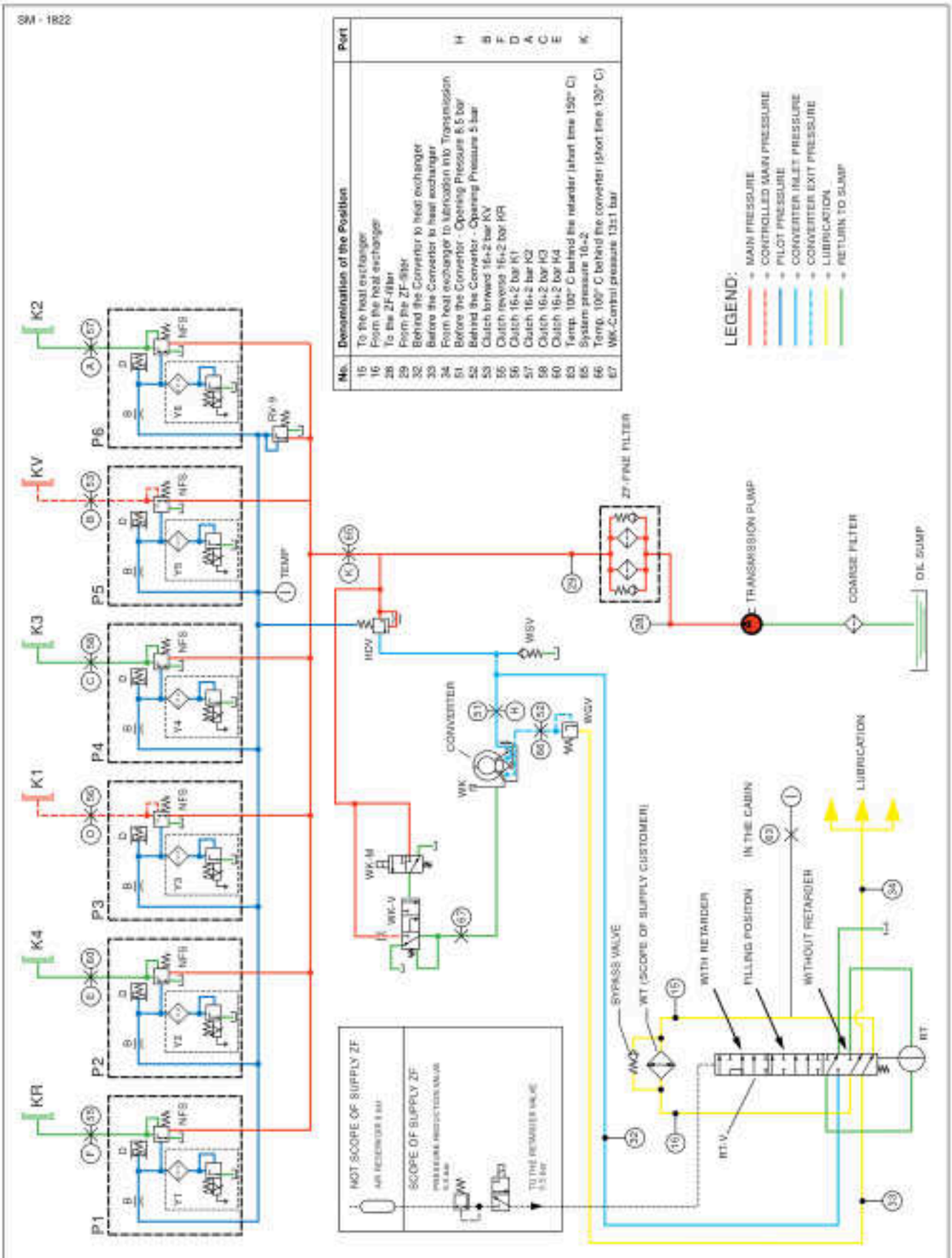
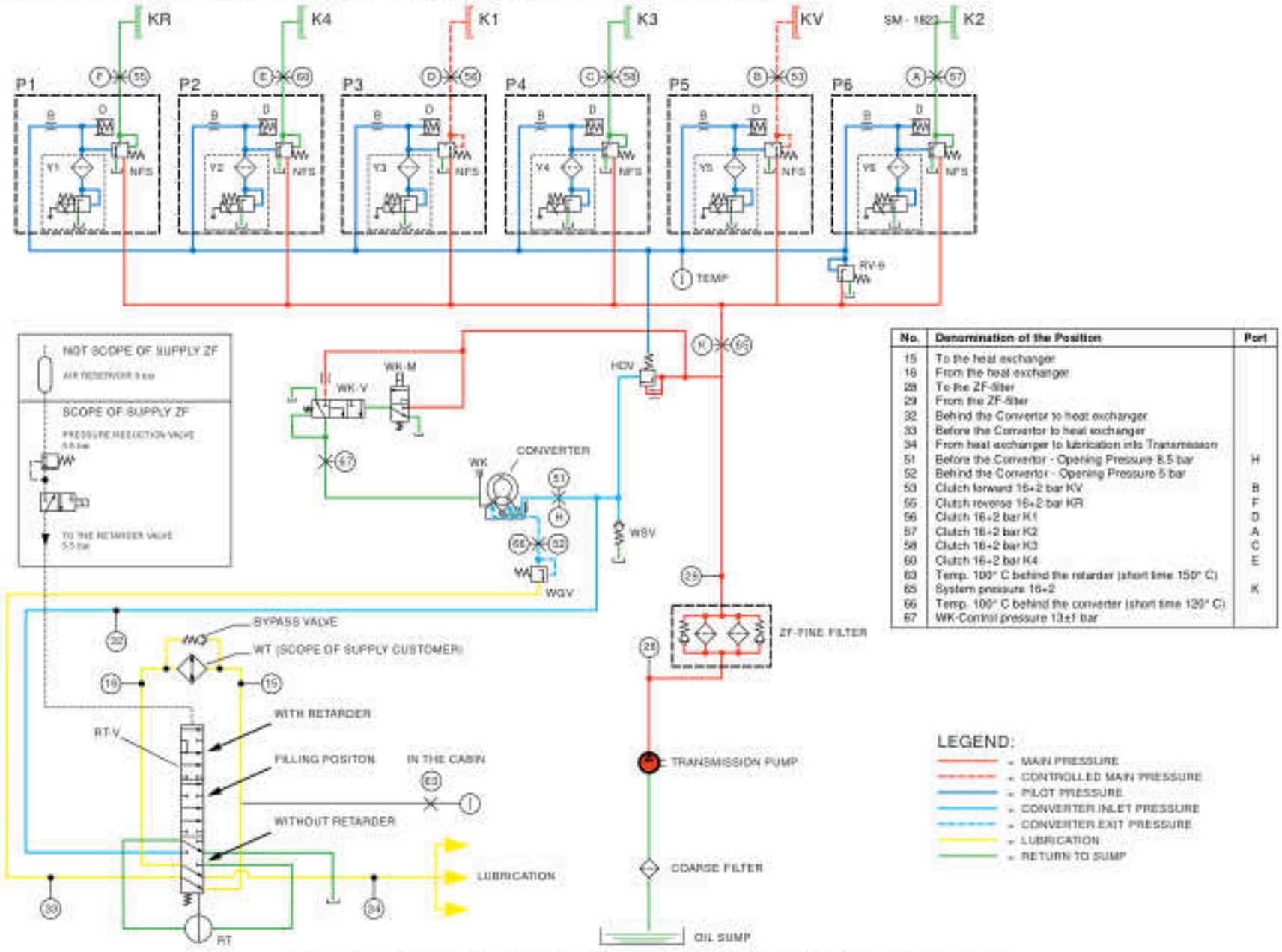


Fig. 5 - Oil Circulation Diagram for Typical Transmission with Lockup Clutch and Retarder

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No.	Denomination of the Position	Port
15	To the heat exchanger	
16	From the heat exchanger	
28	To the ZF-filter	
29	From the ZF-filter	
32	Behind the Convertor to heat exchanger	
33	Before the Convertor to heat exchanger	
34	From heat exchanger to lubrication into Transmission	
51	Before the Convertor - Opening Pressure 8.5 bar	H
52	Behind the Convertor - Opening Pressure 5 bar	
53	Clutch forward 16+2 bar KV	B
55	Clutch reverse 16+2 bar KR	F
56	Clutch 16+2 bar K1	D
57	Clutch 16+2 bar K2	A
58	Clutch 16+2 bar K3	C
60	Clutch 16+2 bar K4	E
63	Temp. 100° C behind the retarder (short time 150° C)	
65	System pressure 16+2	K
66	Temp. 100° C behind the converter (short time 120° C)	
67	WK-Control pressure 13±1 bar	

Fig. 5 - Oil Circulation Diagram for Typical Transmission with Lockup Clutch and Retarder

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