621F
721F
Tier 4B (final)
Wheel Loader

SERVICE MANUAL

Part number 47387703
English
February 2015

CASE CONSTRUCTION

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Engine - 10

Engine and crankcase - 001

TECHNICAL DATA

Engine

General specification (*) 3

General specification (*) 3

SERVICE

Engine

Remove (*) 4

Install (*) 25

Remove (*) 47

Install (*) 68

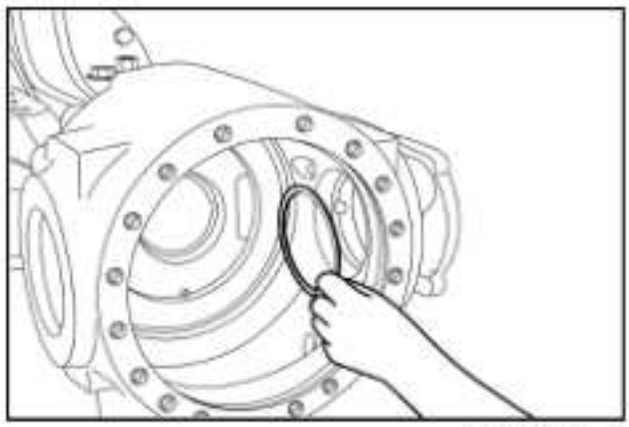
Test 89

(*) See content for specific models

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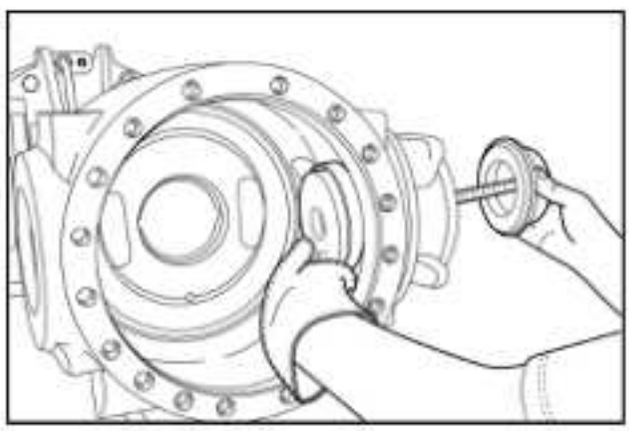
NOTE: *calculation Example "A". Dimension I =* ***182.8 mm (7.197 in)****. Dimension II =* ***148 mm (5.827 in)****. Dimension III =* ***33.6 mm (1.323 in)****. Difference = shim s =* ***1.2 mm (0.047 in)****.*

4. Insert the correct shim into the housing hole. Example = **1.2 mm** (**0.047 in**).



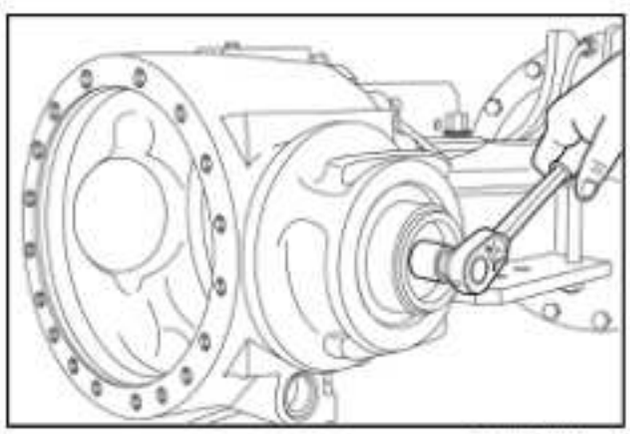
RAL11WEL035088A 4

5. Cool the internal bearing outer ring and insert it into the housing using assembly special tool.



RAL11WEL035089A 5

6. Cool the external bearing outer ring and insert it into the housing using assembly special tool.



RAL11WEL035109A 6

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Harnesses and connectors - Electrical schematic sheet 18

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1323-Battery Voltage Too Low

Cause:

1. Faulty reading from component.
2. Connectors not mated fully, pins not pushed into connector fully, bent pin or broken wire at rear of connector.
3. Wiring or circuits open.
4. Wiring or circuits shorted.

Solution:

1. Verify that the fault code is still active, refer to **0000 - Retrieving fault codes, Wheel Loaders**.
   Prior to clearing fault codes write down all fault codes, number of occurrences, and engine hours at last occurrence.

   (1) Turn ignition switch to RUN position.

   (2) Clear all fault codes.

   (3) To check for fault code: Start and operate machine.

   A. NOT OK – Fault code 1323 is recorded again. Go to Step **2**.

   B. OK – Fault is not recorded again. OK for return to service.
2. Verify the harness and connectors are not damaged.

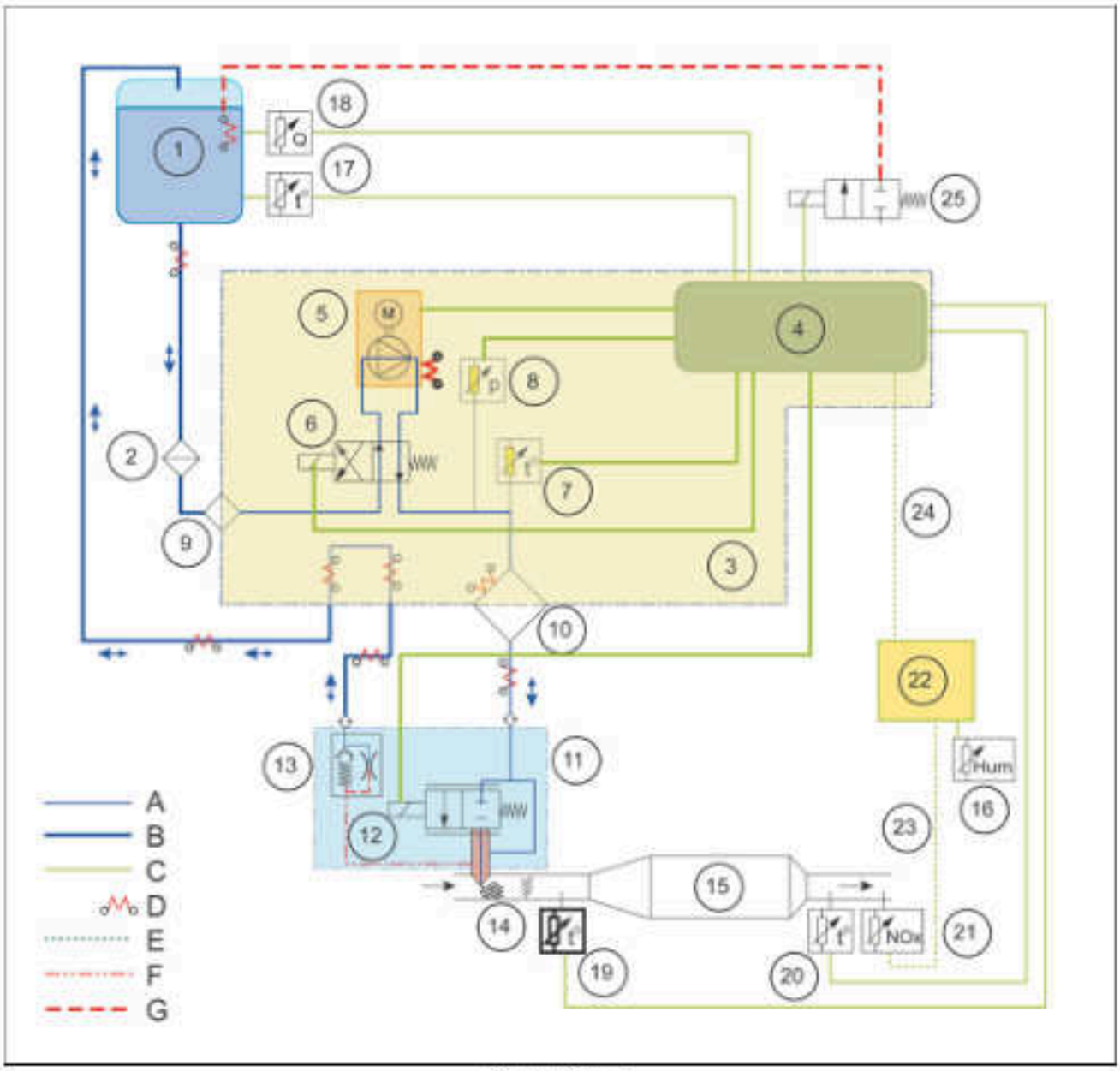
   (1) Turn the key switch OFF.

   (2) Inspect the Instrument Cluster connections, battery and alternator connections. All connections should be secure, tight, free of corrosion, abrasion and damage.

   (3) Inspect the harness from the Instrument Cluster to the battery and alternator. Verify that the harness is free of damage, corrosion, abrasion or incorrect attachment.

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shutdown. This after run draws the DEF fluid from the system and sends it back to tank. Do not turn the master disconnect off until the pump has stopped this after run cycle.

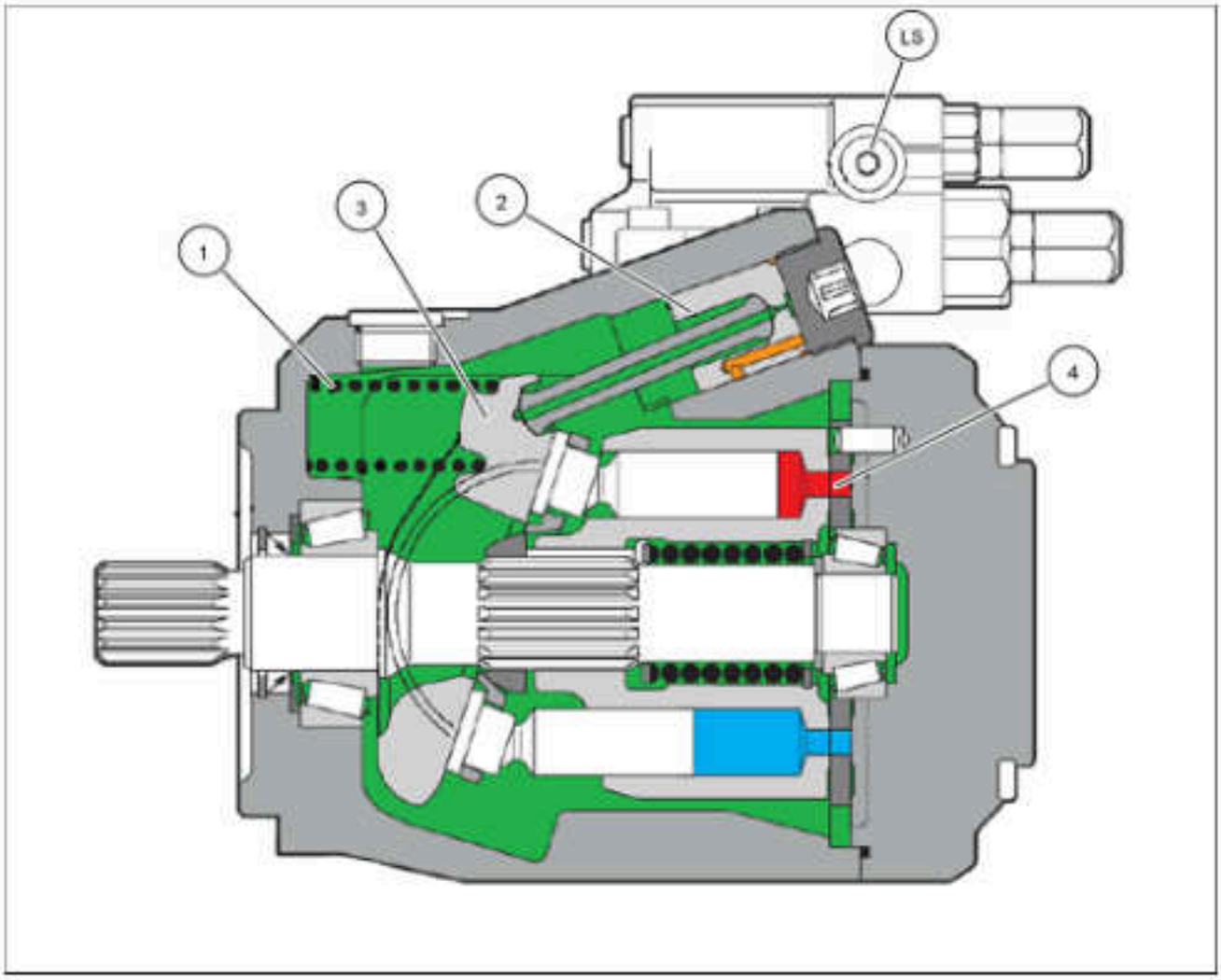


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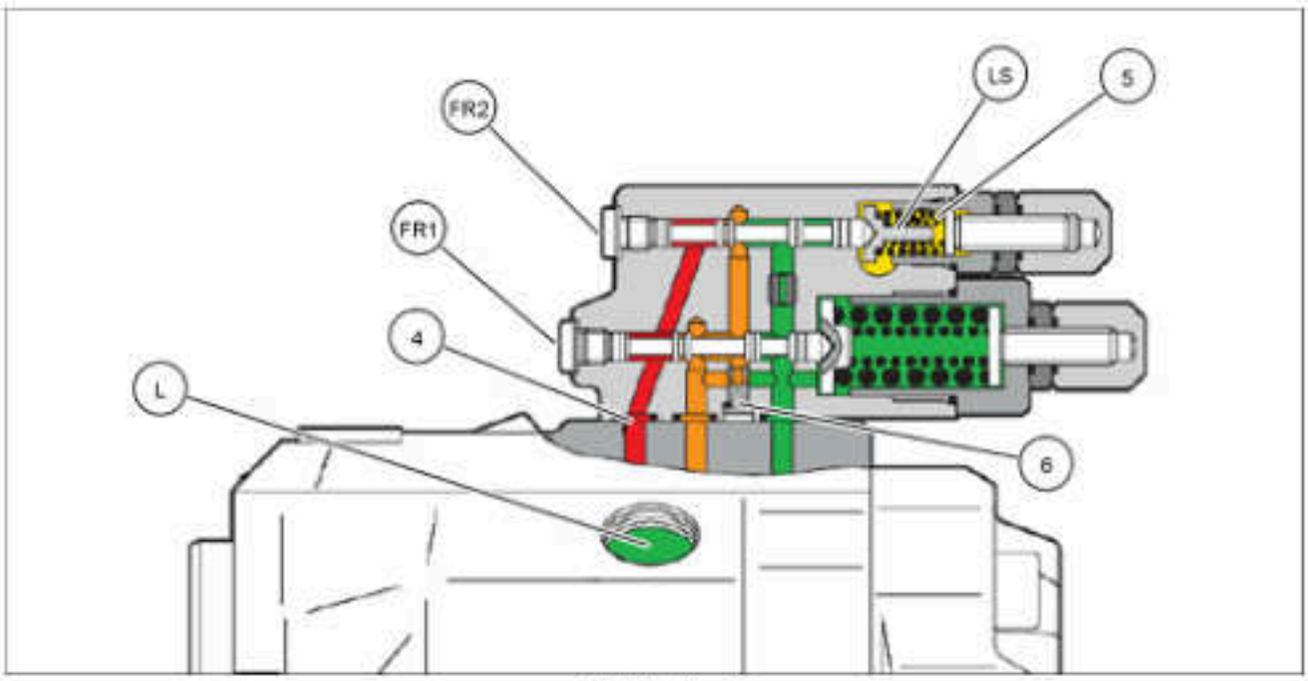
SCR System Components

Graphic Legend	
A – DEF fluid passage	D – Heater
B – DEF fluid hose	E – CAN wire
C – Electrical wiring	F – Dosing module cooling
Components	
1 – Diesel Exhaust Fluid (DEF) tank	14 – Mixer
2 – Inline filter	15 – Catalyst
3 – Supply module	16 – Humidity sensor
4 – Denox Controller Unit (DCU)	17 – DEF tank temperature sensor
5 – Pump	18 – DEF tank level sensor
6 – Reversing valve	19 – Catalyst inlet temperature sensor
7 – DEF temperature sensor	20 – Catalyst outlet temperature sensor
8 – DEF pressure sensor	21 – NOx sensor
9 – Prefilter	22 – Engine Controller Unit (EDC7UC31)
10 – Filter	23 – CAN wire (from NOx sensor to ECU)
11 – Dosing module	24 – CAN wire (between DCU and ECU)
12 – Dosing valve	25 – DEF tank heater solenoid
13 – Return flow valve	

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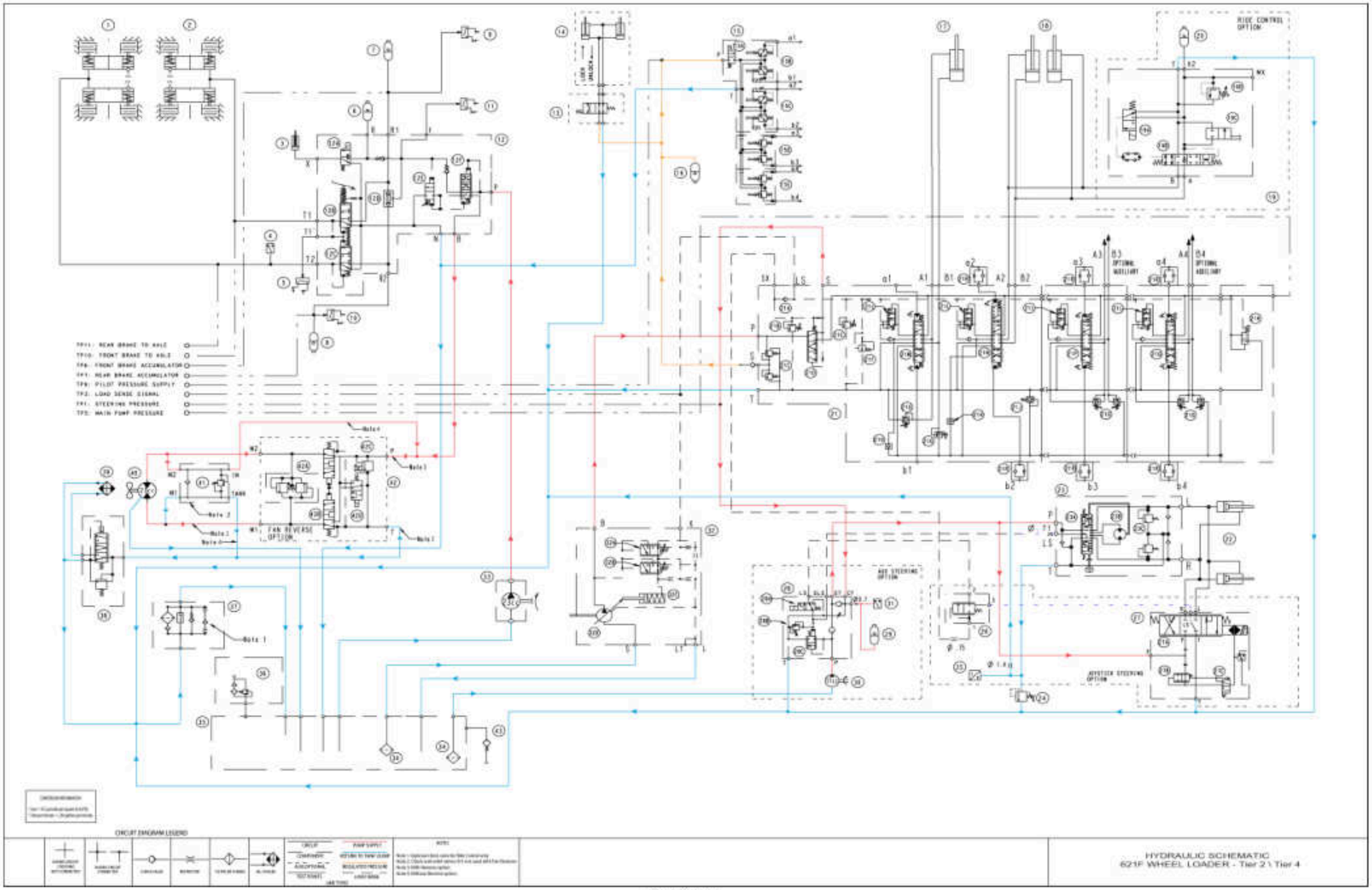


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