521G
Tier 4B (final)
Wheel Loader

SERVICE MANUAL

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CASE CONSTRUCTION

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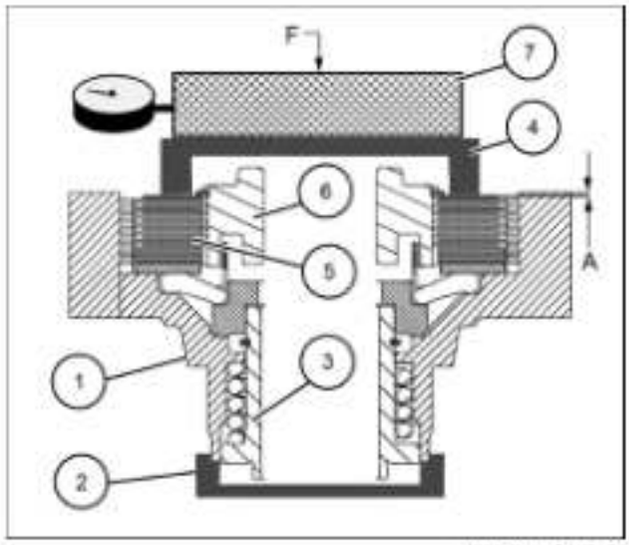
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21. A = Setting dimension = 0.8 +/- 0.1 mm and F = 50 +30 KN.
    1. Lid
    2. Pressure piece
    3. Sliding sleeve
    4. Pressure piece
    5. Disc package
    6. Disc carrier
    7. Load cell

NOTE: *ensure that lid* ***(1)*** *is only supported on the pressure piece* ***(2)*** *but never on the sliding sleeve* ***(3)****.*

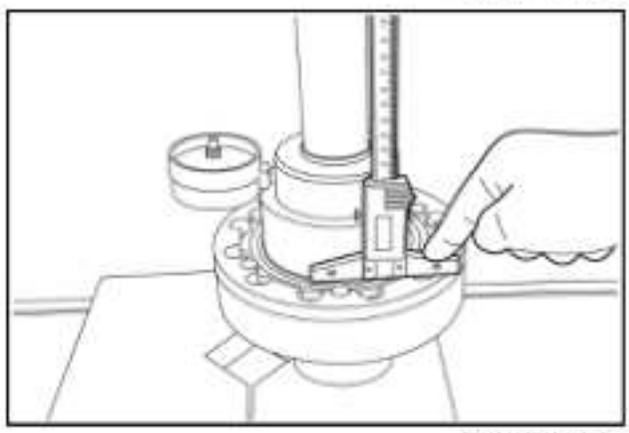
NOTE: *ensure that pressure piece* ***(4)*** *is seated only on disc package* ***(5)****, but not on disc carrier* ***(6)****.*



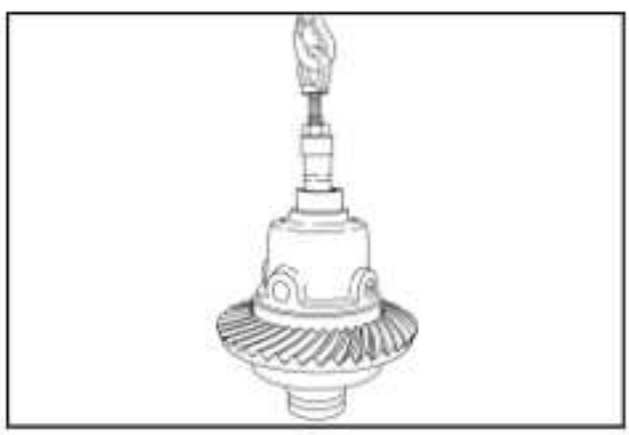
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22. Preload disk package with an axial force of F=50 + 30 KN. Then check the setting dimension "A" = 0.8 +/- 0.1 mm from the collar of the lid to the plane face of the outer disk (see also below sketch).

NOTE: *any deviation from the specified setting dimension must be corrected with a corresponding outer disk.*


RAIL11WEL0480GA 22

23. Position the premounted differential with the lifting device onto the lid. Temporarily secure with new locking bolts.


RAIL11WEL0481GA 23

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Wiring harnesses - Electrical schematic sheet 22 SH22 - UCM-LOADER BOOM CONTROL

Type	Component	Connector / Link	Description
ECU	**A-EH_VLV**	**X-PILOT_ENABLE** **X-BOOM_RAISE** **X-BOOM_LOWER** **X-BUCKET_ROLL** **X-BUCKET_DUMP** **X-AUX_1_LEFT** **X-AUX_1_RIGHT** **X-AUX_2_LEFT** **X-AUX_2_RIGHT**	ELECTROHYDRAULIC VALVE
ECU	**A-UCM**	**X-UCM3B X-UCM4B** **X-UCM2B**	47749442 WAS 84328725
Sensor	**B-BKT_ANG**	**X-BUA**	BUCKET ANGLE
Sensor	**B-BM_ANG**	**X-BOA**	BOOM ANGLE
Switch	**SW-PRB**	**X-PRB**	ROLL BACK PR SW
Connector	X-AUX_1_LEFT	**X-AUX_1_LEFT**	AUX 1 LEFT
Connector	X-AUX_1_RIGHT	**X-AUX_1_RIGHT**	AUX 1 RIGHT
Connector	X-AUX_2_LEFT	**X-AUX_2_LEFT**	AUX 2 LEFT
Connector	X-AUX_2_RIGHT	**X-AUX_2_RIGHT**	AUX 2 RIGHT
Connector	X-BOA	**X-BOA**	BOOM ANGLE SENSOR
Connector	X-BOOM_LOWER	**X-BOOM_LOWER**	BOOM LOWER SOLENOID
Connector	X-BOOM_RAISE	**X-BOOM_RAISE**	BOOM RAISE SOLENOID
Connector	X-BTM	**X-BTM**	BOTTOM TO CAB STD
Connector	X-BTM_EH	**X-BTM_EH**	BOTTOM TO CAB EH
Connector	X-BTM_F	**X-BTM_F**	BOTTOM TO FRONT STD
Connector	X-BTM_FEH	**X-BTM_FEH**	BOTTOM TO FRONT EH
Connector	X-BUA	**X-BUA**	BUCKET ANGLE SENSOR
Connector	X-BUCKET_DUMP	**X-BUCKET_DUMP**	BUCKET DUMP SOLENOID
Connector	X-BUCKET_ROLL	**X-BUCKET_ROLL**	BUCKET ROLL SOLENOID
Connector	X-CAB_B	**X-CAB_B**	CAB TO BOTTOM
Connector	X-CAB_EH	**X-CAB_EH**	CAB TO BOTTOM EH
Connector	X-FAX	**X-FAX**	FRONT AXLE TEMP SENSOR
Connector	X-FRNT	**X-FRNT**	FRONT TO BOTTOM STD
Connector	X-FRNT_EH	**X-FRNT_EH**	FRONT TO BOTTOM EH
Connector	X-PILOT_ENABLE	**X-PILOT_ENABLE**	PILOT ENABLE SOLENOID
Connector	X-PRB	**X-PRB**	ROLL BACK PRESSURE SWITCH
Connector	X-UCM1A	**X-UCM1A**	UCM
Connector	X-UCM1B	**X-UCM1B**	UCM
Connector	X-UCM2B	**X-UCM2B**	UCM
Connector	X-UCM3B	**X-UCM3B**	UCM
Connector	X-UCM4A	**X-UCM4A**	UCM
Connector	X-UCM4B	**X-UCM4B**	UCM
Connector	X-YPE	**X-YPE**	COUPLER VALVE
Connector	X-YRC	**X-YRC**	RIDE CONTROL SOLENOID
Solenoid	**Y-YPE**	**X-YPE**	COUPLER VALVE SOL
Solenoid	**Y-YRC**	**X-YRC**	YRC RIDE CONTROL SOL

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4. Replace the intake manifold pressure sensor .

   Use the EST to verify that this fault code has been resolved.

   A. If the fault has been resolved, use the EST to perform the Engine Restart Counter Reset / Unlock Inducement configuration, (see **Selective Catalytic Reduction (SCR) exhaust treatment - Configure - Engine restart counter reset (10.500)** if necessary). Then perform the SCR Fault Repair Verification Test, see **Selective Catalytic Reduction (SCR) exhaust treatment - Service instruction - SCR fault repair verification test (10.500)**, if necessary. Then return the machine to service.

   B. If the fault has not been resolved, check the ECU for the appropriate software and re-flash, if necessary.

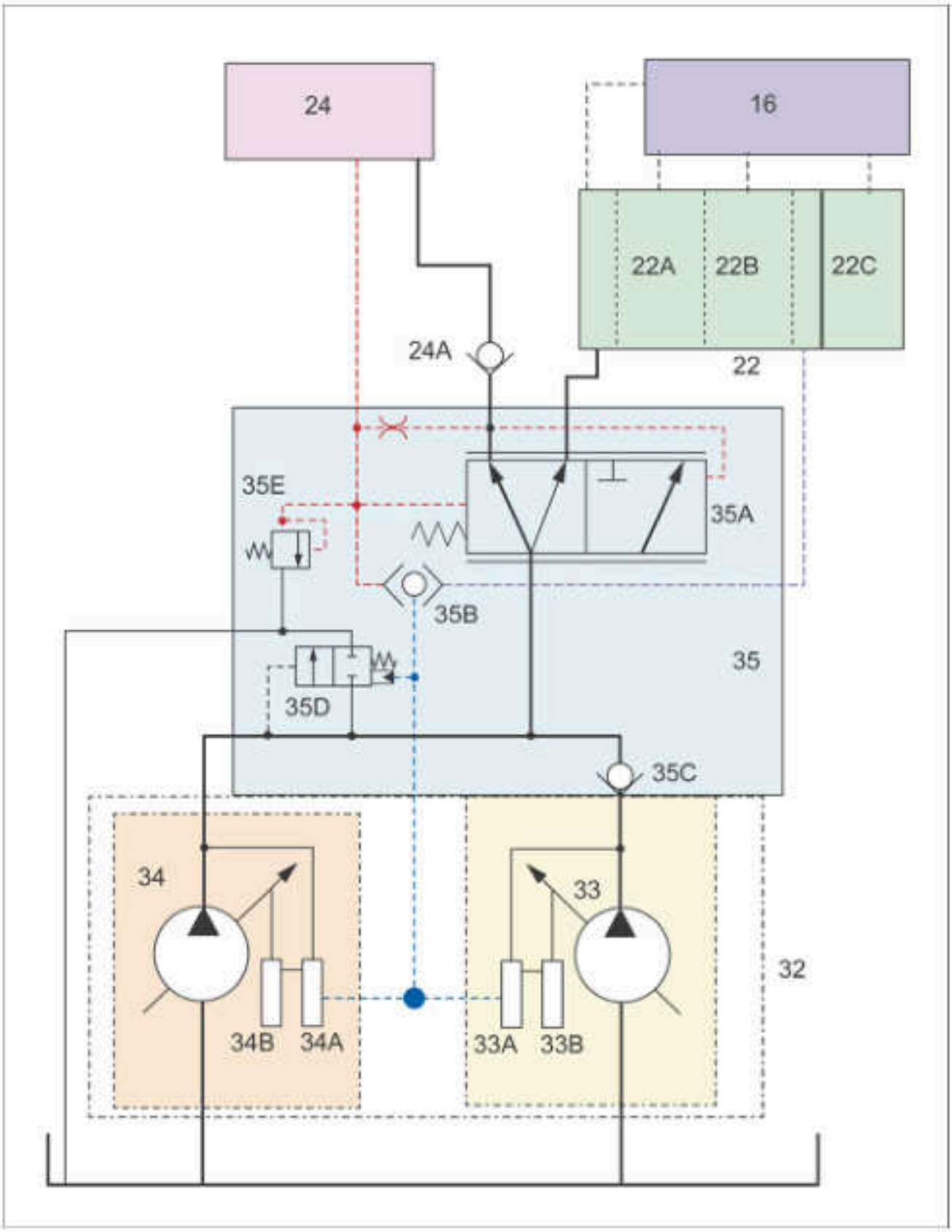
5. Visually inspect the relevant harnesses and connectors for damage, bent or dislocated pins, corroded terminals, or broken wires. Verify that the connectors are fully installed. Flex the harnesses involved to reveal intermittent breaks or shorts in the wiring concerned. Operate the machine while you monitor the display.

   A. If you find damage or the display indicates other than normal display readings, repair the damage discovered during the inspection or locate and repair the other than normal display condition and verify that the error has been resolved.

   B. If you do not find damage and the display indicates only normal readings, erase the fault code and continue operation.

Wiring harnesses - Electrical schematic sheet 05 (55.100)

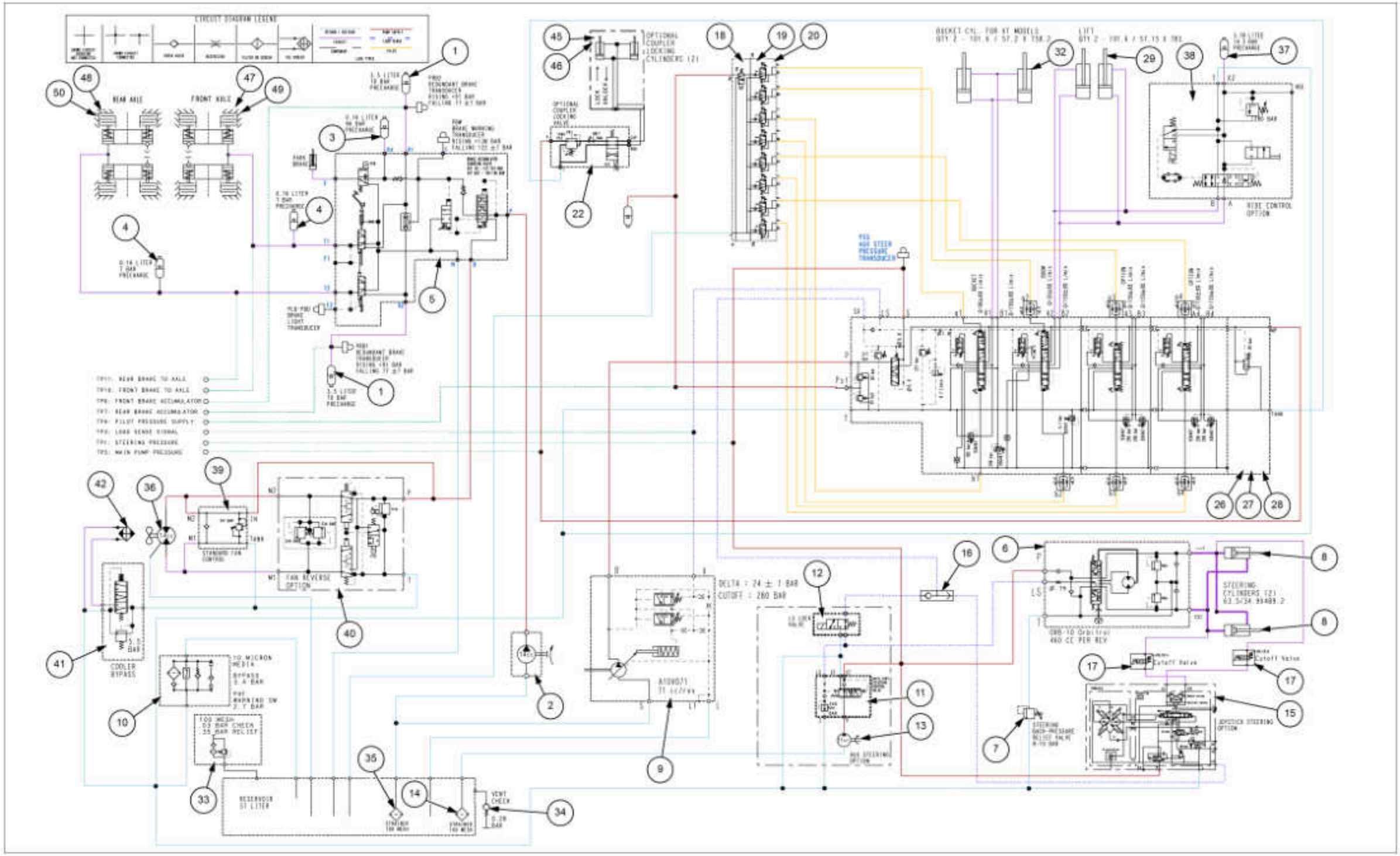
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RCPH1YWH1103HAN 1

Component Flow Chart

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