WHEEL LOADER

SERVICE MANUAL

HL730-9A

HYUNDAI

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2) MAIN PUMP

Item	Specification
Type	Variable displacement piston pump
Capacity	36+32.3 cc/rev
Maximum operating pressure	250 kgf/cm² (3560 psi)
Rated operating speed	2100 rpm
Rated output flow	126 ℓ /min (33.3 U.S.gpm)

3) FAN AND BRAKE PUMP

Item	Specification	
	Fan	Brake
Type	Fixed displacement tandem gear pump	
Capacity	11.9 cc/rev	9.17 cc/rev
Maximum operating pressure	120 kgf/cm² (1710 psi)	150 kgf/cm² (2130 psi)
Rated operating speed	2100 rpm	
Rated output flow	25 ℓ /min (6.6 U.S.gpm)	19 ℓ /min (5.0 U.S.gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool
Operating method	Hydraulic pilot assist
Main relief valve set pressure	250 kgf/cm² (3560 psi)
Overload relief valve set pressure	300 kgf/cm² (4270 psi) ★150 kgf/cm² (2130 psi)

★ : Bucket dump (HL730TM-9A)

5) REMOTE CONTROL VALVE

Item		Specification
Type		Joystick (or with aux lever)
Control pressure	Minimum	3.7 kgf/cm² (52.6 psi)
	Maximum	30 kgf/cm² (427 psi)

6) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 100 × ø 65 × 750 mm
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 110 × ø 65 × 510 mm
Bucket cylinder ★	Bore dia × Rod dia × Stroke	ø 90 × ø 50 × 775 mm
Steering cylinder	Bore dia × Rod dia × Stroke	ø 60 × ø 35 × 412 mm

★ : HL730TM-9A

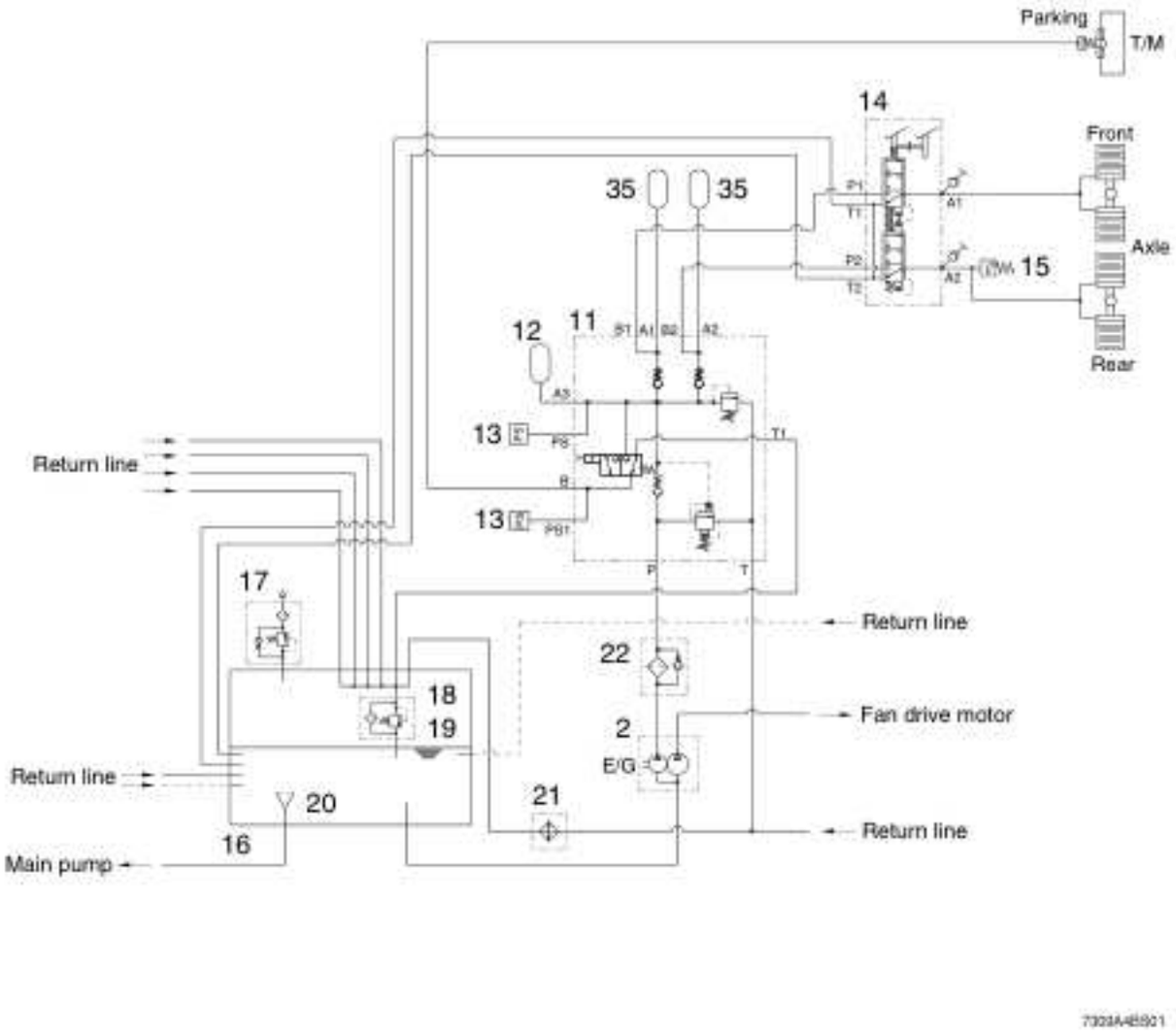
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Fault code (Hex)	Meaning of the fault code possible reason for fault detection	Reaction of the TCU	Possible steps to repair
93	O.C. at relay reverse warning alarm TCU detected a wrong voltage at the output pin, that looks like a O.C. for this output pin ·Cable is defective and has no connection to TCU ·Backup alarm device has an internal defect ·Connector has no connection to TCU	No reaction OP mode : Normal	· Check the cable from TCU to the backup alarm device · Check the connectors from backup alarm device to TCU · Check the resistance* of backup alarm device * See page 3-60
94	S.C. to ground at relay starter interlock TCU detected a wrong voltage at the output pin, that looks like a S.C. to vehicle ground ·Cable is defective and is connection to vehicle ground ·Starter interlock relay has an internal defect ·Connector pin is contacted to vehicle ground	No reaction OP mode : Normal	· Check the cable from TCU to the stater interlock relay · Check the connectors from starter interlock relay to TCU · Check the resistance* of starter interlock relay * See page 3-60
95	S.C. to battery voltage at relay starter interlock TCU detected a wrong voltage at the output pin, that looks like a S.C. to battery voltage ·Cable is defective and has no connection to battery voltage ·Starter interlock relay has an internal defect ·Connector pin is contacted to battery voltage	No reaction OP mode : Normal	· Check the cable from TCU to the starter interlock relay · Check the connectors from starter interlock relay to TCU · Check the resistance* of starter interlock relay * See page 3-60
96	O.C. at relay starter interlock TCU detected a wrong voltage at the output pin, that looks like a O.C. for this output pin ·Cable is defective and has no connection to TCU ·Starter interlock relay has an internal defect ·Connector has no connection to TCU	No reaction OP mode : Normal	· Check the cable from TCU to the starter interlock relay · Check the connectors from starter interlock relay to TCU · Check the resistance* of starter interlock relay * See page 3-60
9A	S.C. to ground at converter lock up clutch solenoid TCU detected a wrong voltage at the output pin, that looks like a S.C. to vehicle ground ·Cable is defective and is contacted to vehicle ground ·Converter clutch solenoid has an internal defect ·Connector pin is contacted to vehicle ground	No reaction OP mode : Normal	· Check the cable from TCU to the converter clutch solenoid · Check the connectors from converter clutch solenoid to TCU · Check the resistance* of converter clutch solenoid * See page 3-60

※ Some fault codes are not applied to this machine.

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2. HYDRAULIC CIRCUIT



2	Fan & brake pump	15	Pressure switch	20	Strainer
11	Cut off valve	16	Hydraulic tank	21	Oil cooler
12	Accumulator	17	Air breather	22	Pressure filter
13	Pressure sensor	18	Return filter	35	Accumulator
14	Brake valve	19	Bypass valve		

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5) DISASSEMBLY AND ASSEMBLY

(1) Spool

① Loosen the bolt (2EA).

·Tool : Wrench 4 mm

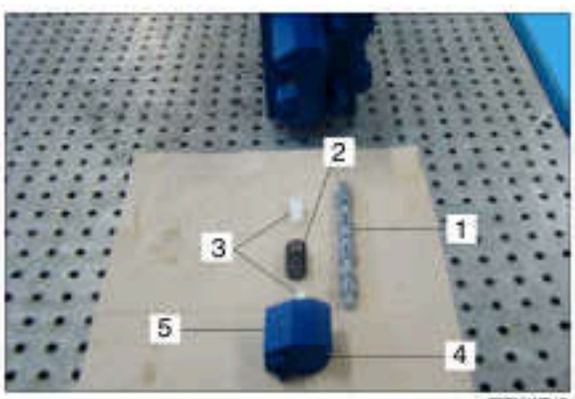
·Tightening torque : 0.85 kgf·m
(61 lbf·ft)



② Remove the cover, spring retainer, spring and spool.

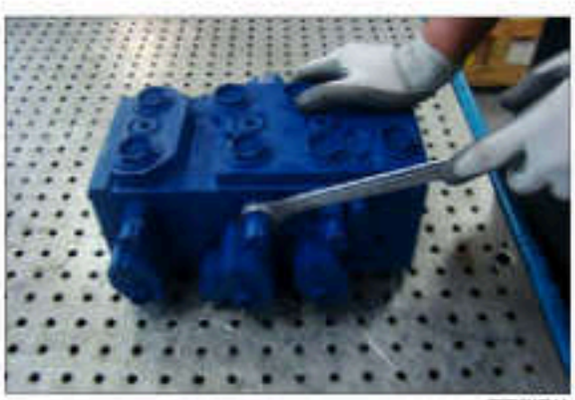


1 Spool
2 Spring
2 Spring ratainer
4 Bolt
5 Cover



(2) Port relief valve

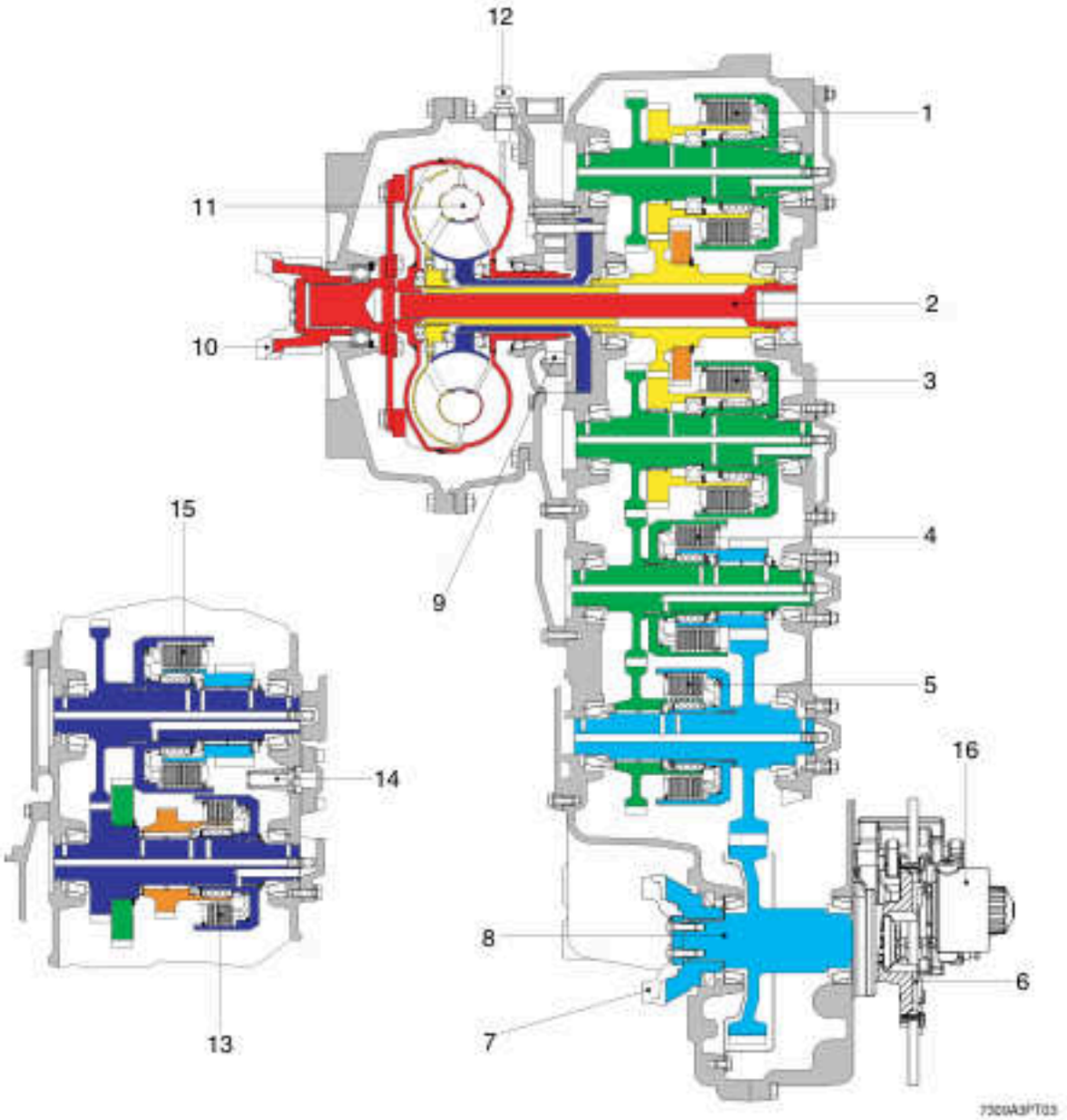
·Tool : Spanner 24 mm



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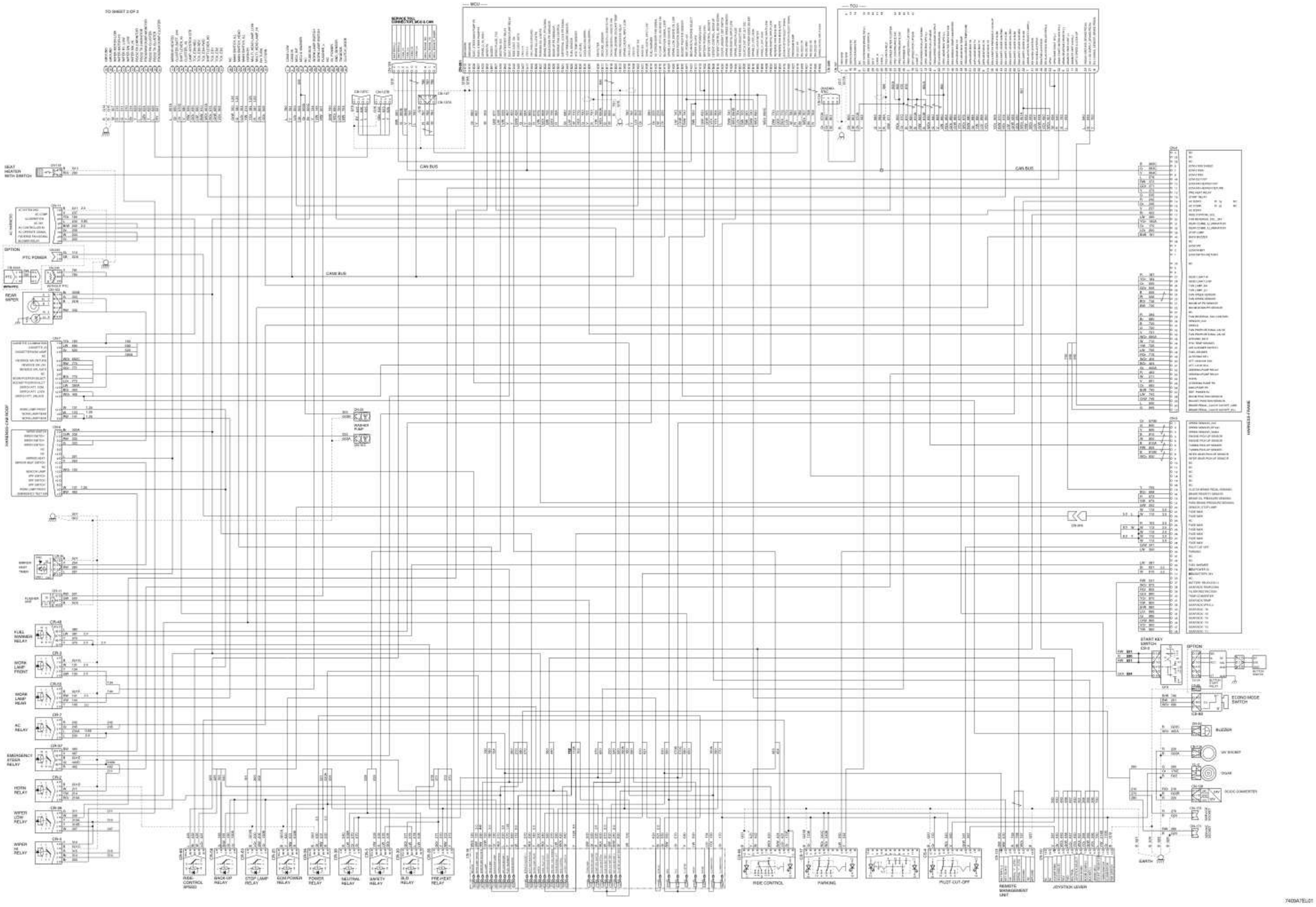
3. TRANSMISSION

1) LAYOUT



1	Reverse clutch (KR)	7	Converter side output flange	12	Inductive transmitter for engine speed
2	Engine-dependent power take-off	8	Output shaft	13	4th clutch (K4)
3	Forward clutch (KV)	9	Transmission pump	14	Converter relief valve
4	2nd clutch (K2)	10	Connection to engine	15	1st clutch (K1)
5	3rd clutch (K3)	11	Converter	16	Parking brake
6	Rear output flange				

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