WHEELED EXCAVATOR

SERVICE MANUAL

R170W-9S

HYUNDAI

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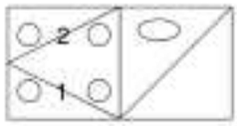
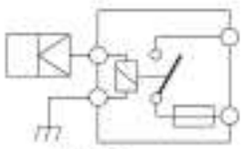
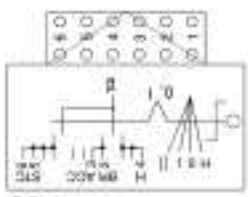
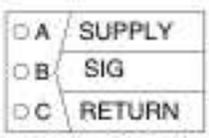
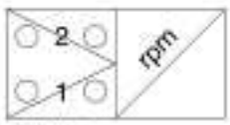
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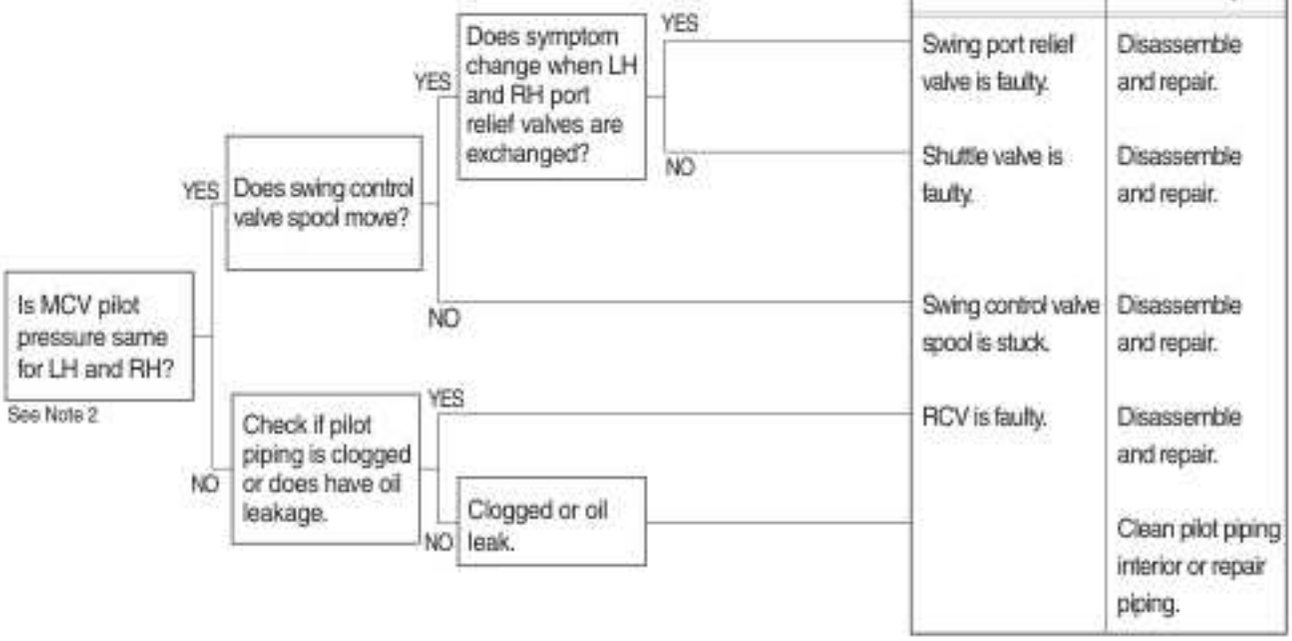
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GROUP 3 ELECTRICAL COMPONENT SPECIFICATION

Part name	Symbol	Specifications	Check
Battery		12V × 80Ah (2EA)	※ Check specific gravity 1.280 over : Over charged 1.280 – 1.250 : Normal 1.250 below : Recharging
Battery relay	 CR-1	Rated load : 24V 100A (continuity) 1000A (30 seconds)	※ Check coil resistance (M4 to M4) Normal : About 50 Ω ※ Check contact Normal : ∞ Ω
Glow plug relay	 CR-24	24V 200A	※ Check contact Normal : 0.942 Ω (For terminal 1-GND)
Start key	 CS-2	B-BR : 24V 1A B-ACC : 24V 10A B-ST : 24V 40A	※ Check contact OFF : ∞ Ω (for each terminal) ON : 0 Ω (for terminal 1-3 and 1-2) START : 0 Ω (for terminal 1-5)
Pressure sensor	 CD-4 CD-6 CD-7 CD-31 CD-38 CD-42 CD-43 CD-44 * CLUSTER TYPE 1 only (CD-3, CD-5, CD-24, CD-32, CD-69)	8~30V	※ Check contact Normal : 0.1 Ω
Speed sensor	 CD-17	-	※ Check resistance Normal : 300 Ω (For terminal 1, 2)

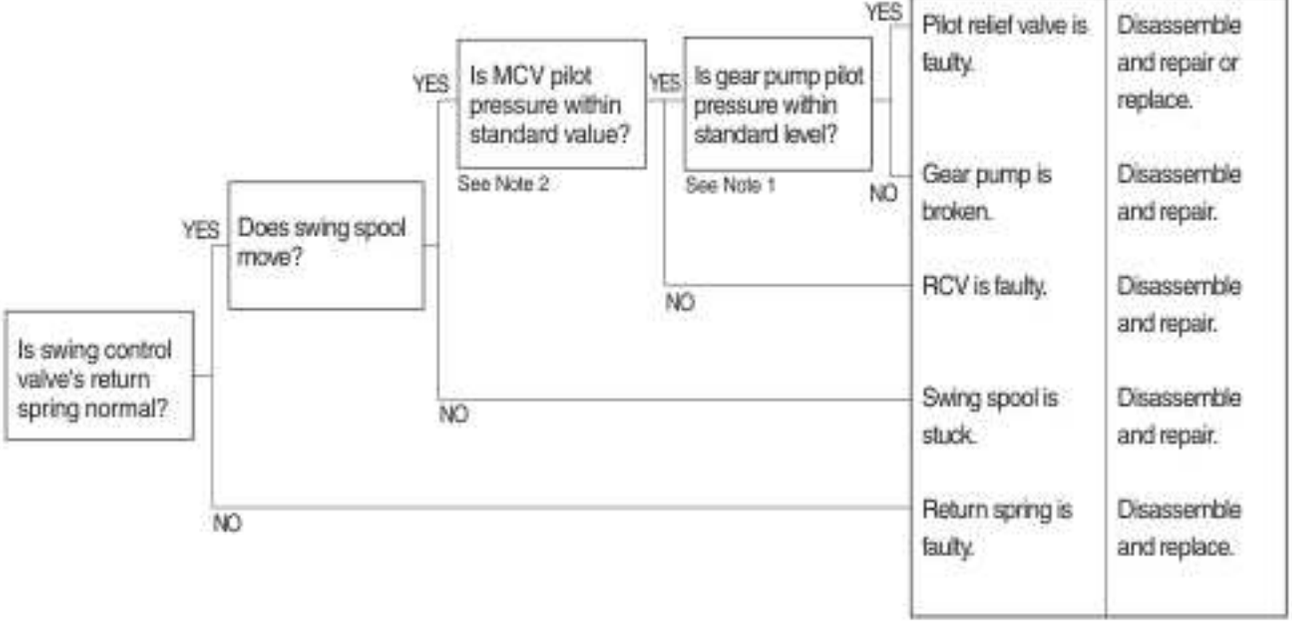
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3) SWING MOTION IS IMPOSSIBLE IN ONE DIRECTION



Cause	Remedy
Swing port relief valve is faulty.	Disassemble and repair.
Shuttle valve is faulty.	Disassemble and repair.
Swing control valve spool is stuck.	Disassemble and repair.
RCV is faulty.	Disassemble and repair.
Clogged or oil leak.	Clean pilot piping interior or repair piping.

4) MACHINE SWINGS BUT DOES NOT STOP



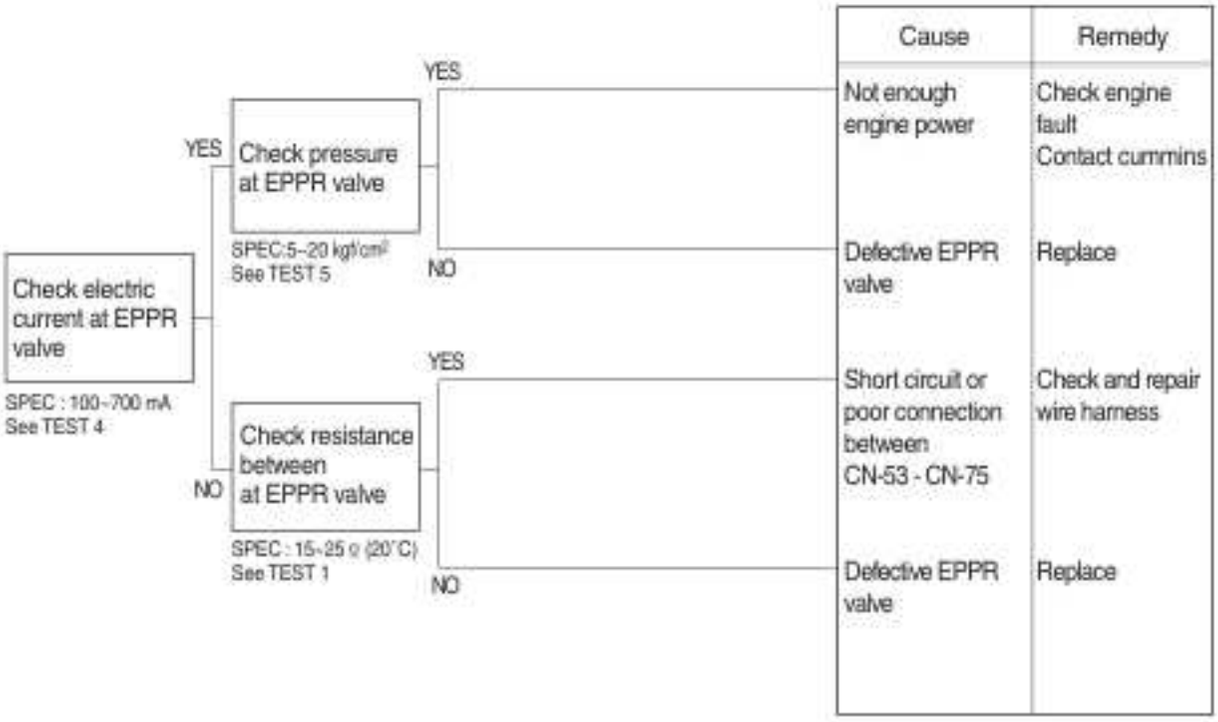
Cause	Remedy
Pilot relief valve is faulty.	Disassemble and repair or replace.
Gear pump is broken.	Disassemble and repair.
RCV is faulty.	Disassemble and repair.
Swing spool is stuck.	Disassemble and repair.
Return spring is faulty.	Disassemble and replace.

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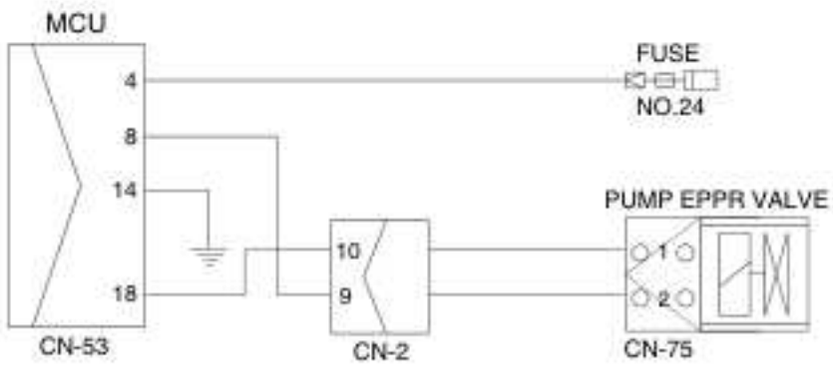
2. ENGINE STALL

※ Before carrying out below procedure, check all the related connectors are properly inserted.

1) INSPECTION PROCEDURE



Wiring diagram

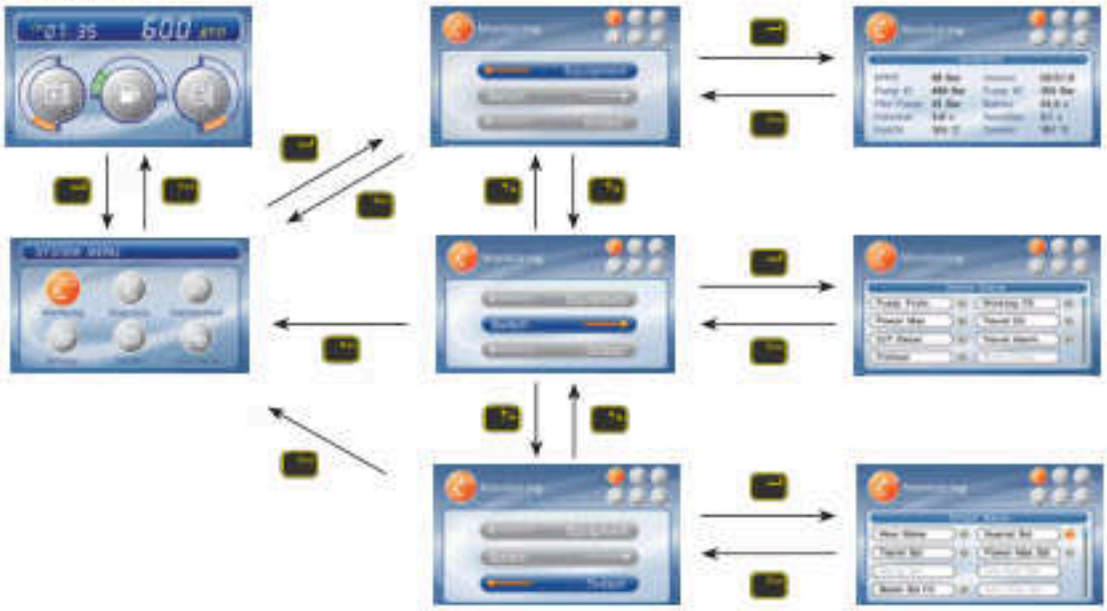


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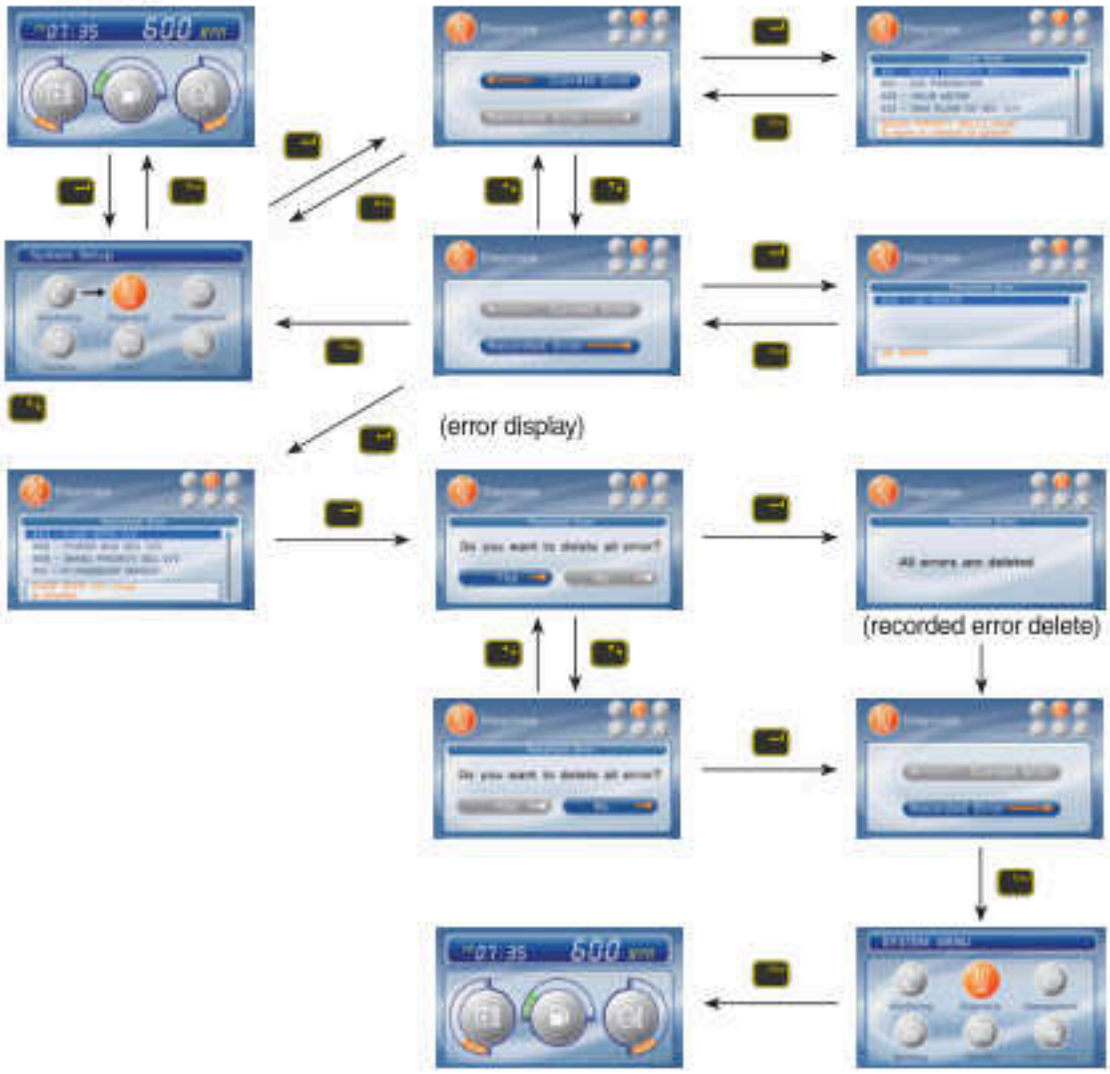
(2) Display map

① Monitoring



② Diagnosis

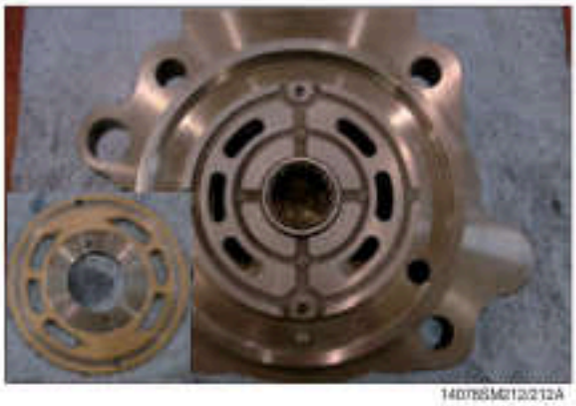
a. Protocol type 1



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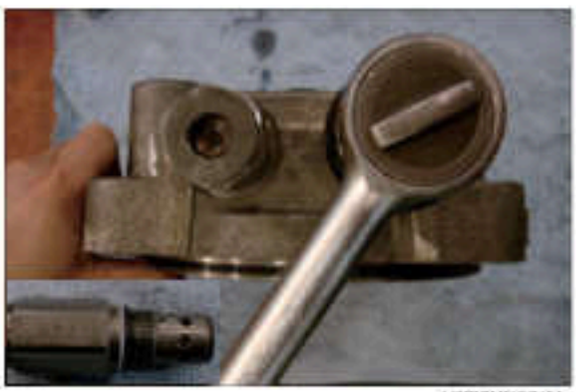
(3) Disassemble rear cover assy sub

① Disassemble pin (8, 23), valve plate (24) from rear cover (21).



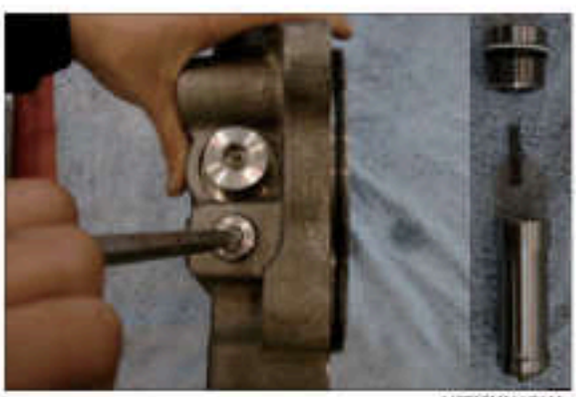
14078SM212/212A

② Using a torque wrench, disassemble relief valve assy (31) 2 set from rear cover (21).



14078SM213/213A

③ After disassembling plug with a L-wrench from rear cover (21), disassemble respectively back up ring, O-ring, O-ring, spring, anti-inversion valve assy (32)



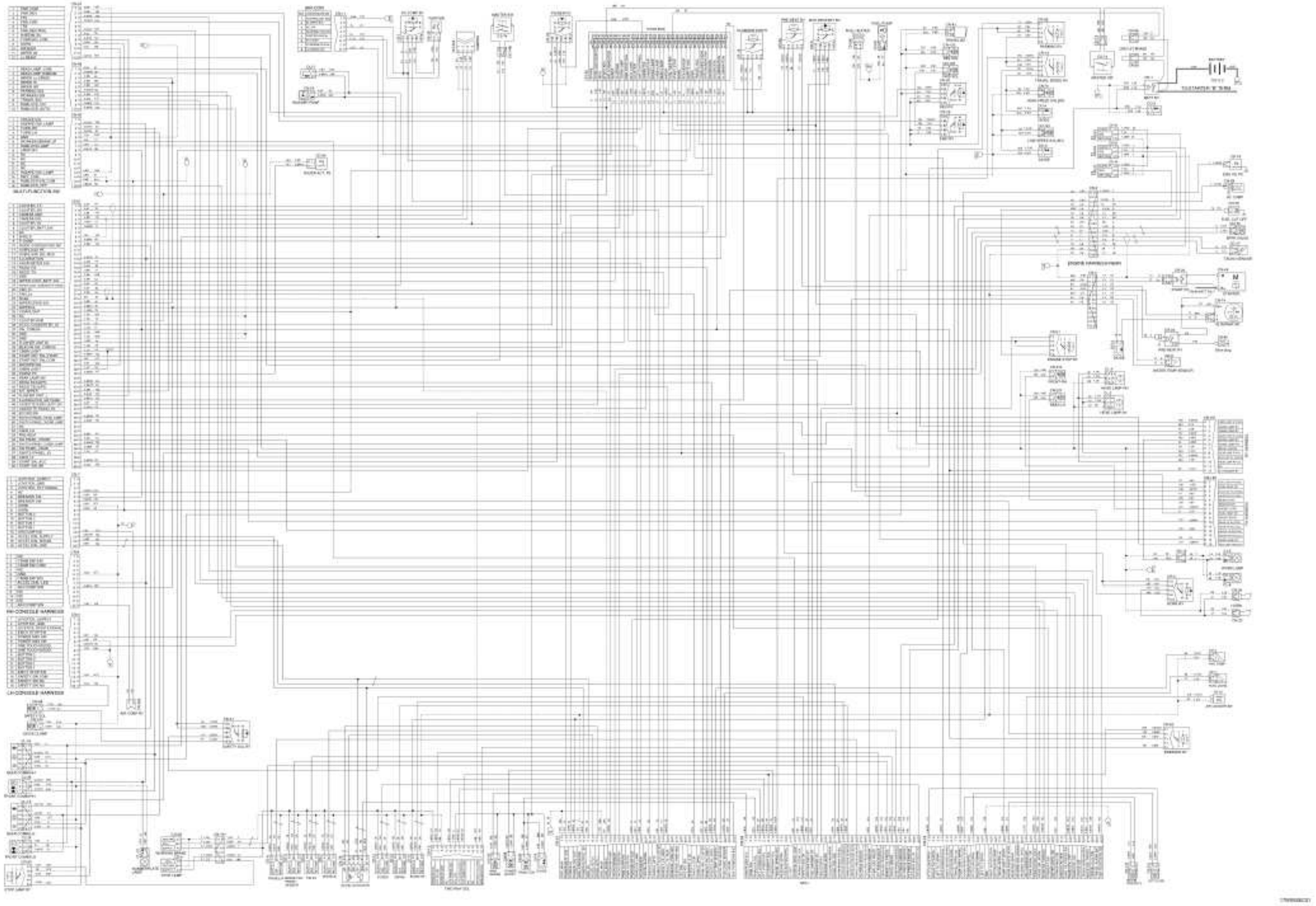
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④ Disassemble make up check valve assy with a torque wrench from rear cover (21).



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