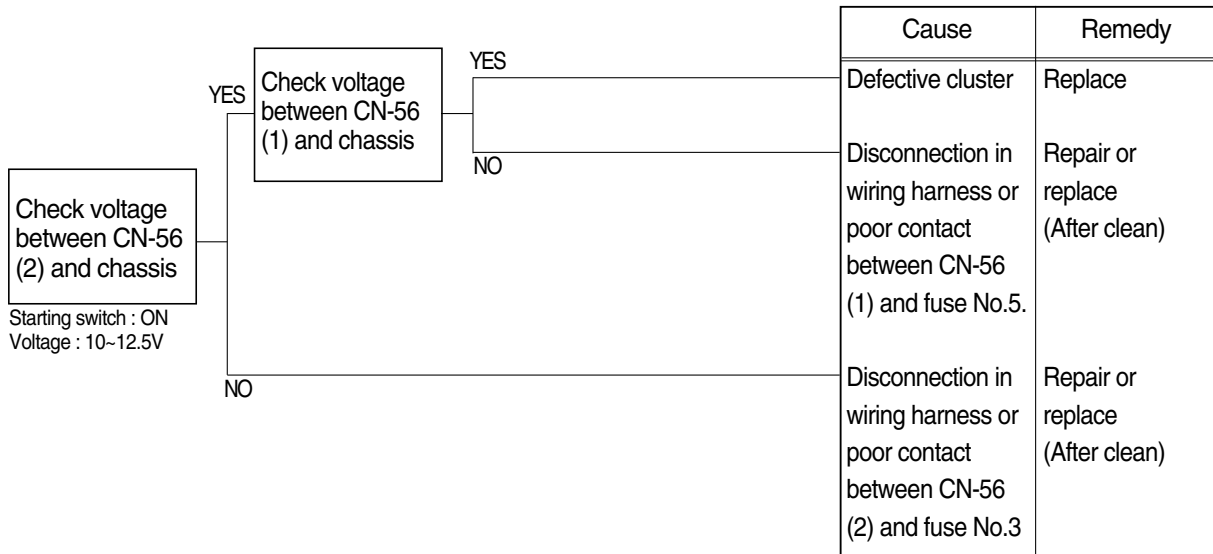


GROUP 3 ELECTRICAL SYSTEM

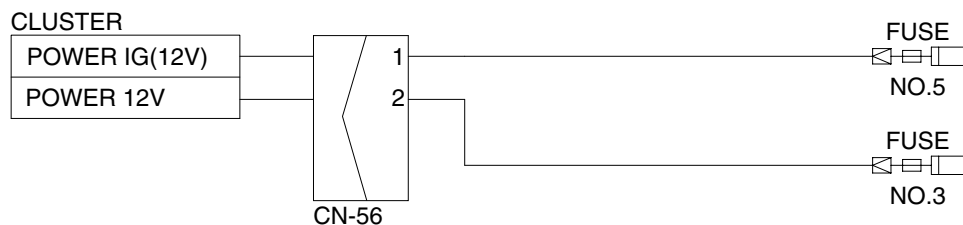
1. WHEN STARTING SWITCH IS TURNED ON, MONITOR PANEL DISPLAY DOES NOT APPEAR

- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted and short of fuse No.3 and No.5.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



Check voltage

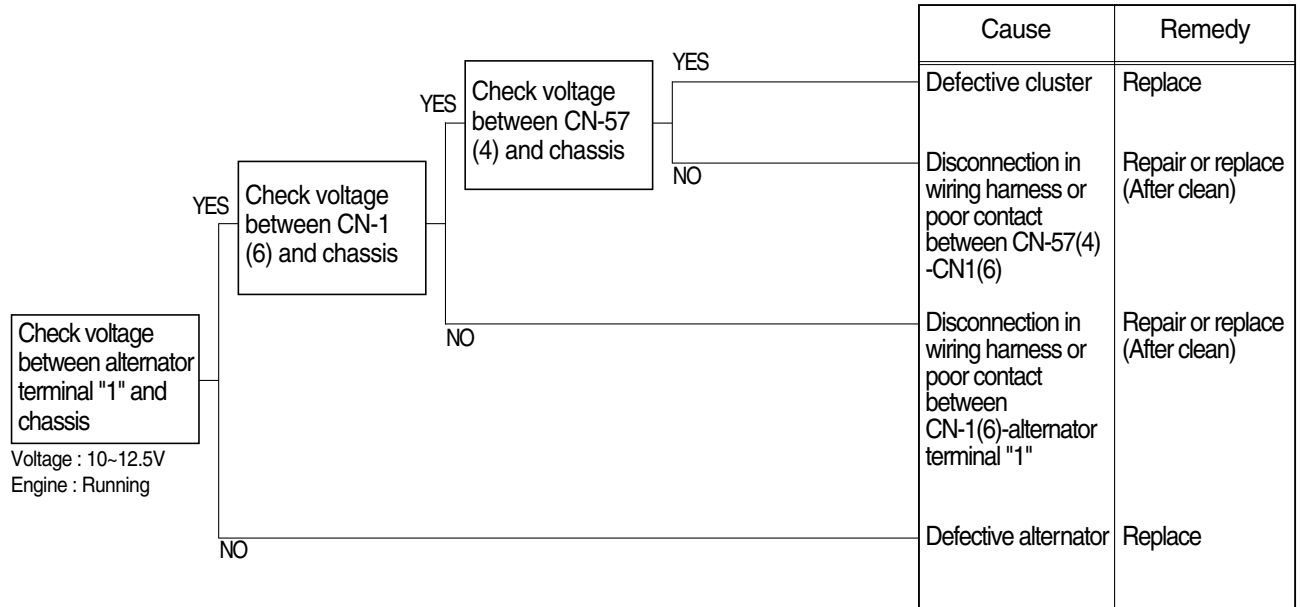
YES	10 ~ 12.5V
NO	0V



R5575TS10

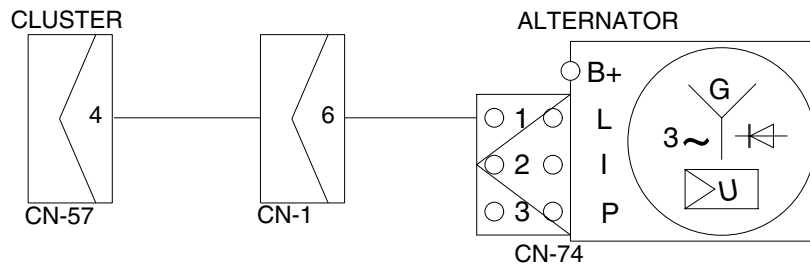
2. BATTERY CHARGING WARNING LAMP LIGHTS UP(Starting switch : ON)

- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



Check voltage

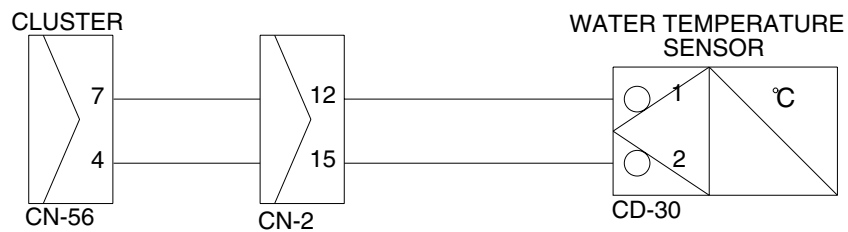
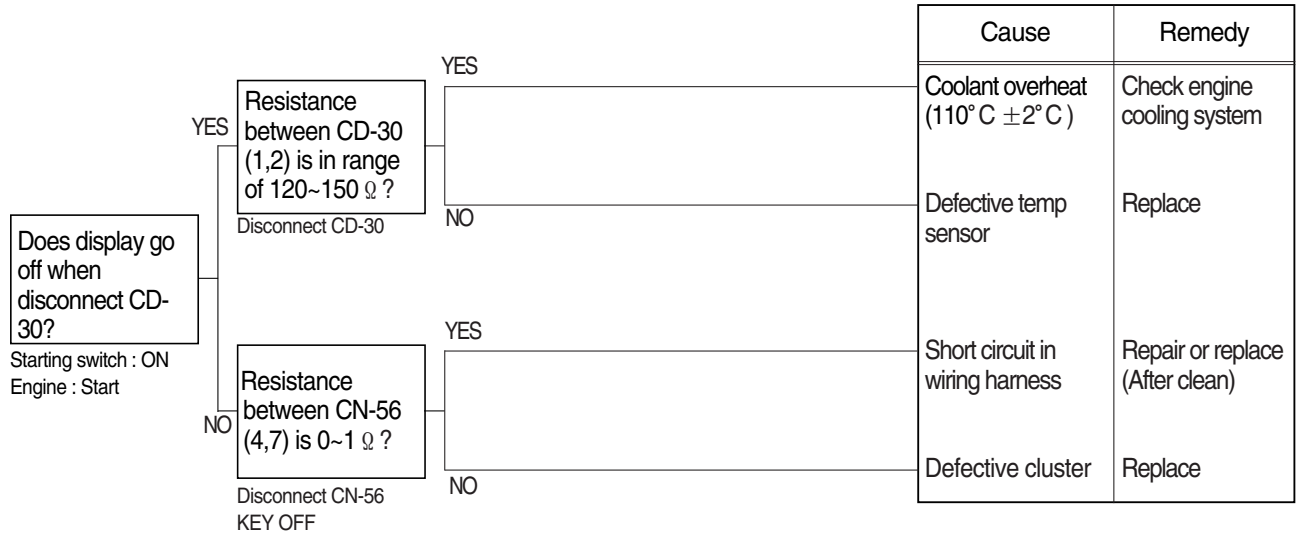
YES	10 ~ 12.5V
NO	0V



R5575TS11

3. WHEN COOLANT OVERHEAT WARNING LAMP LIGHTS UP(Engine is started)

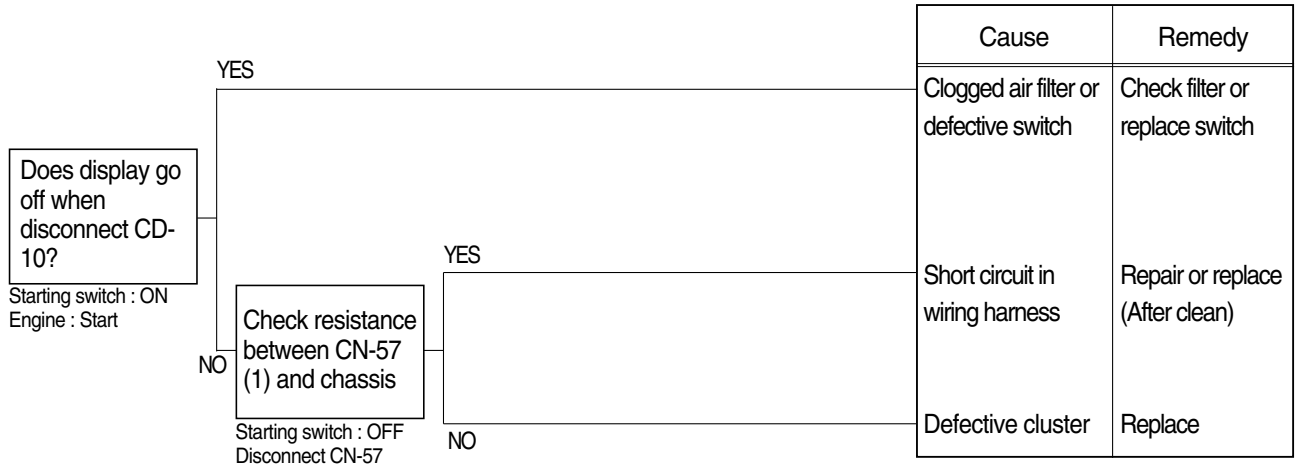
- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



R5575TS12

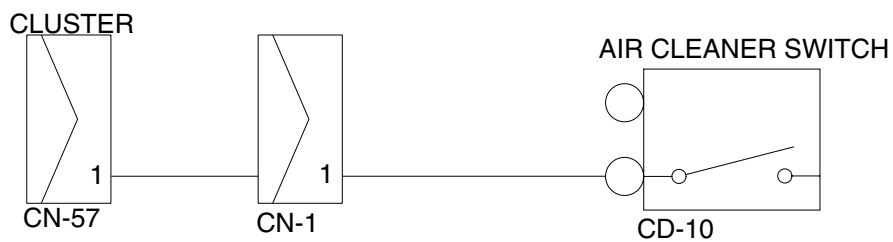
4. WHEN AIR CLEANER WARNING LAMP LIGHTS UP (Engine is started)

- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



Check resistance

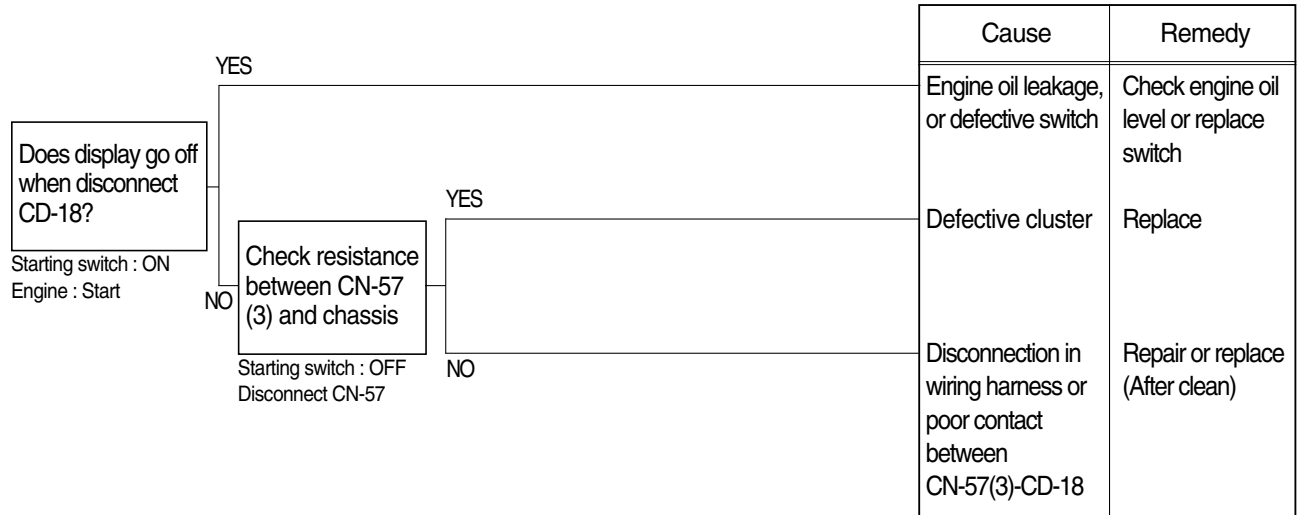
YES	MAX 1Ω
NO	MIN 1M Ω



R5575TS13

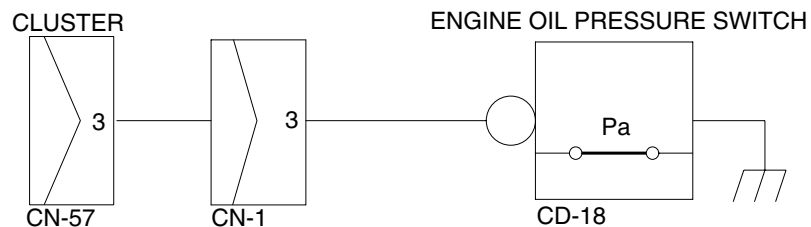
5. WHEN ENGINE OIL PRESSURE WARNING LAMP LIGHTS UP (Engine is started)

- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



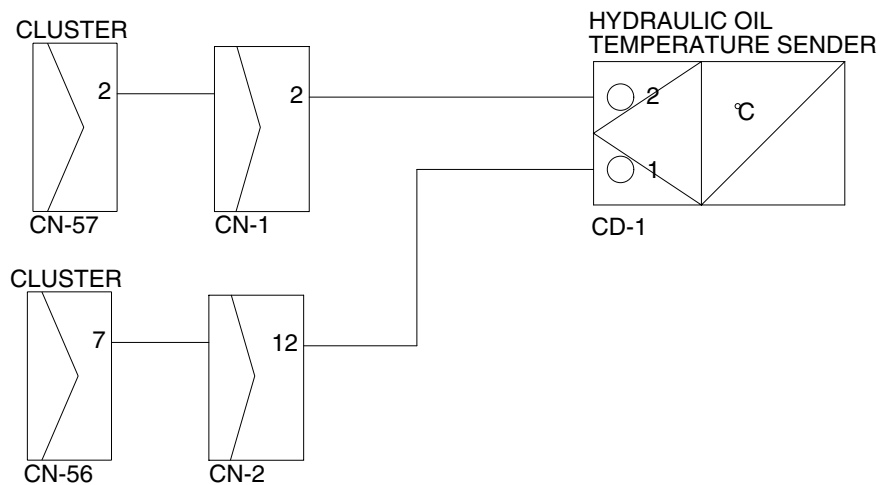
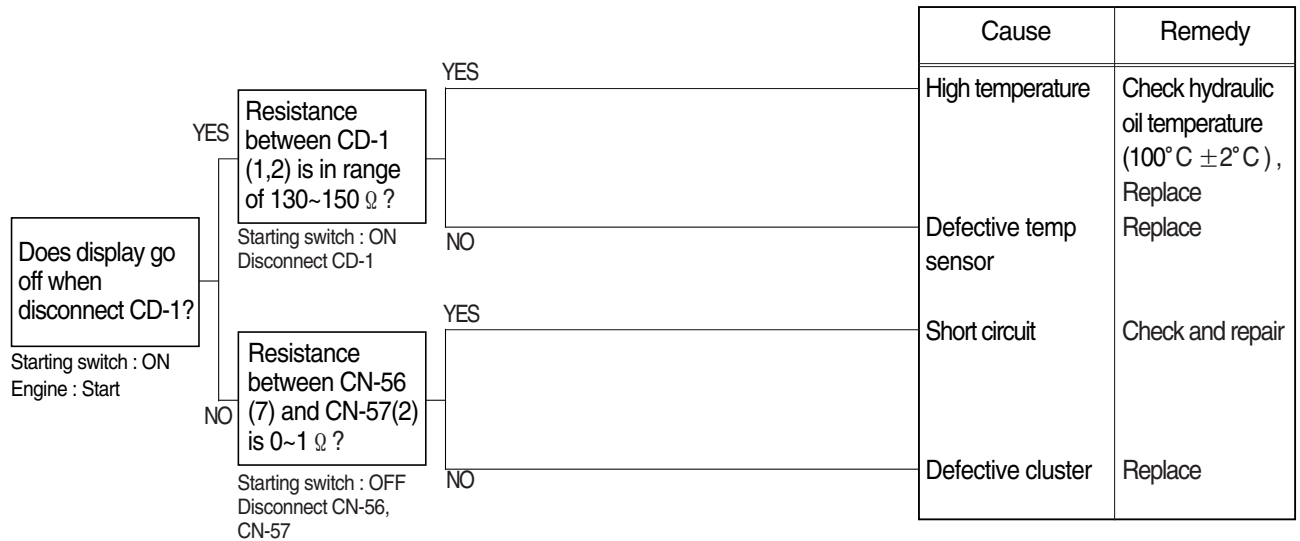
Check resistance

YES	MAX 1Ω
NO	MIN 1MΩ



6. WHEN HYDRAULIC OIL TEMPERATURE WARNING LAMP LIGHTS UP(Engine is started)

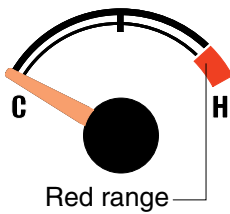
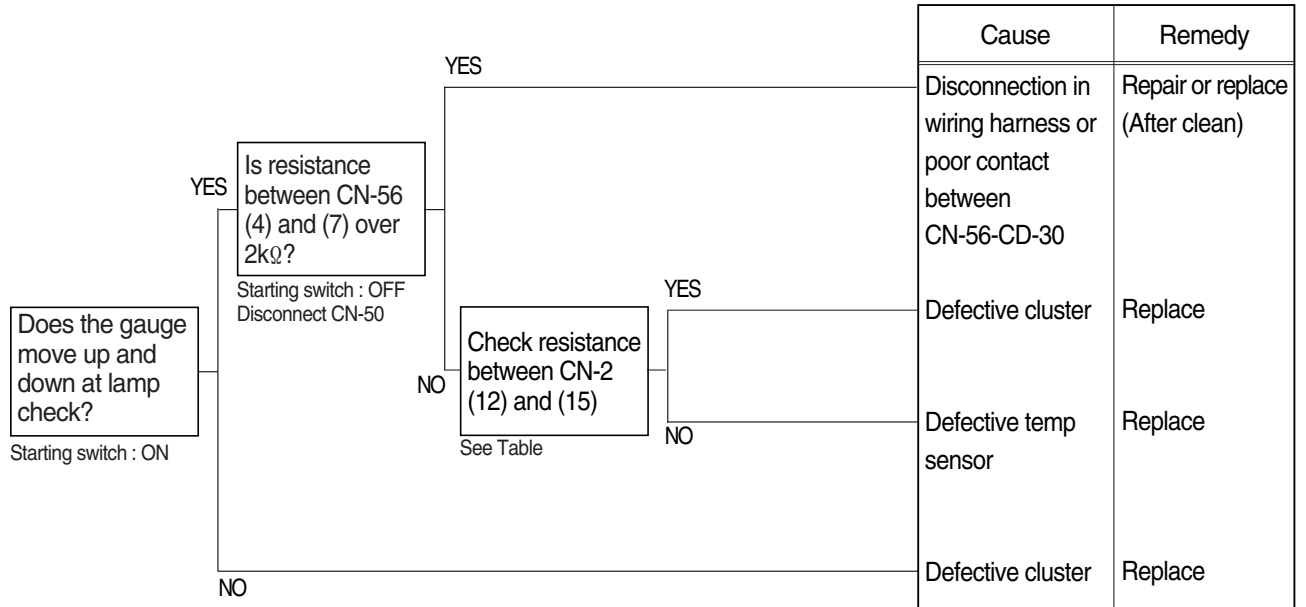
- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



R5575TS15

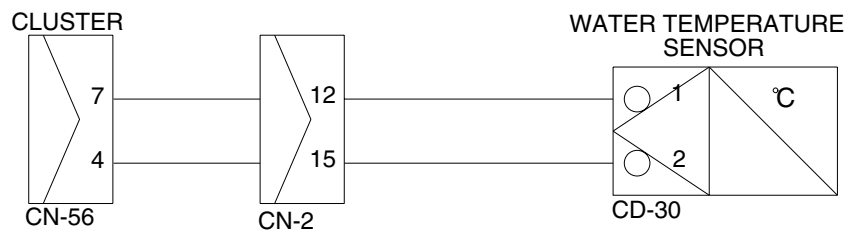
7. WHEN COOLANT TEMPERATURE GAUGE DOES NOT OPERATE

- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



Check Table

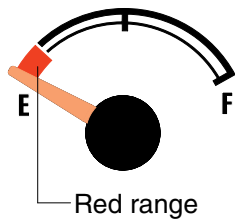
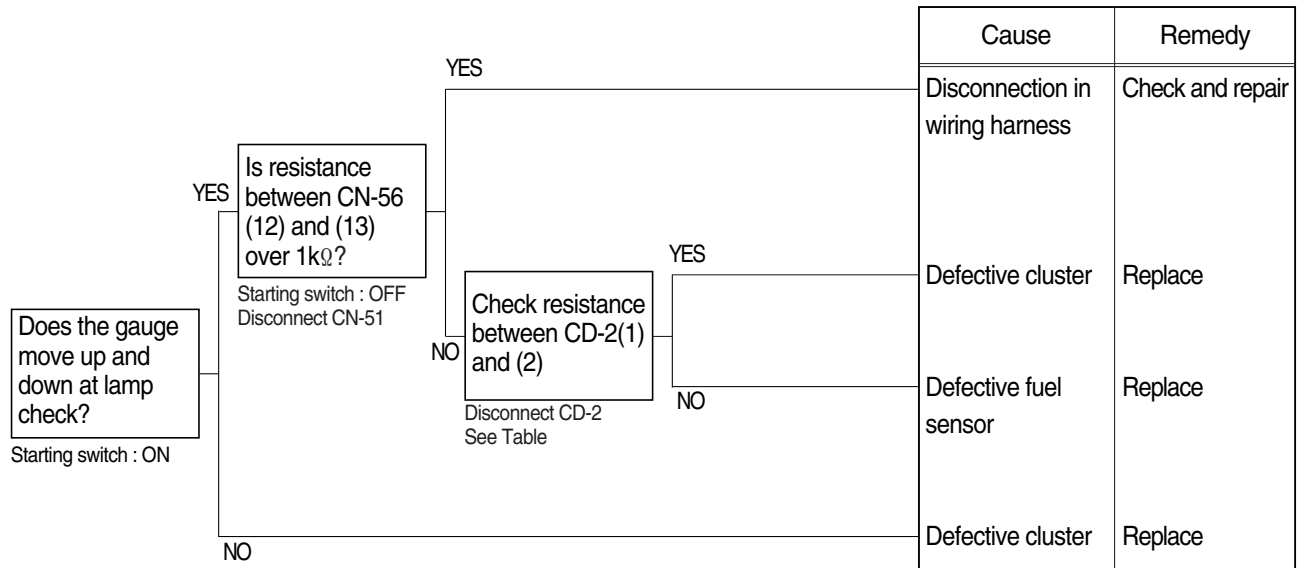
Temperature	40°C	85~110°C	115°C (Red range)
Item			
Unit Resistance(Ω)	1170~	270~130	~124
Tolerance(%)	± 5	-8~0	± 5



R5575TS12

8. WHEN FUEL GAUGE DOES NOT OPERATE(Check warning lamp ON/OFF)

- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



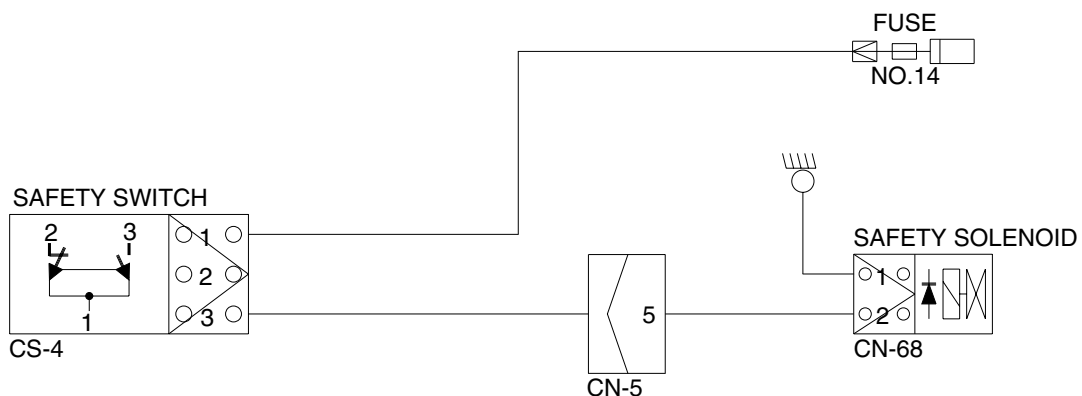
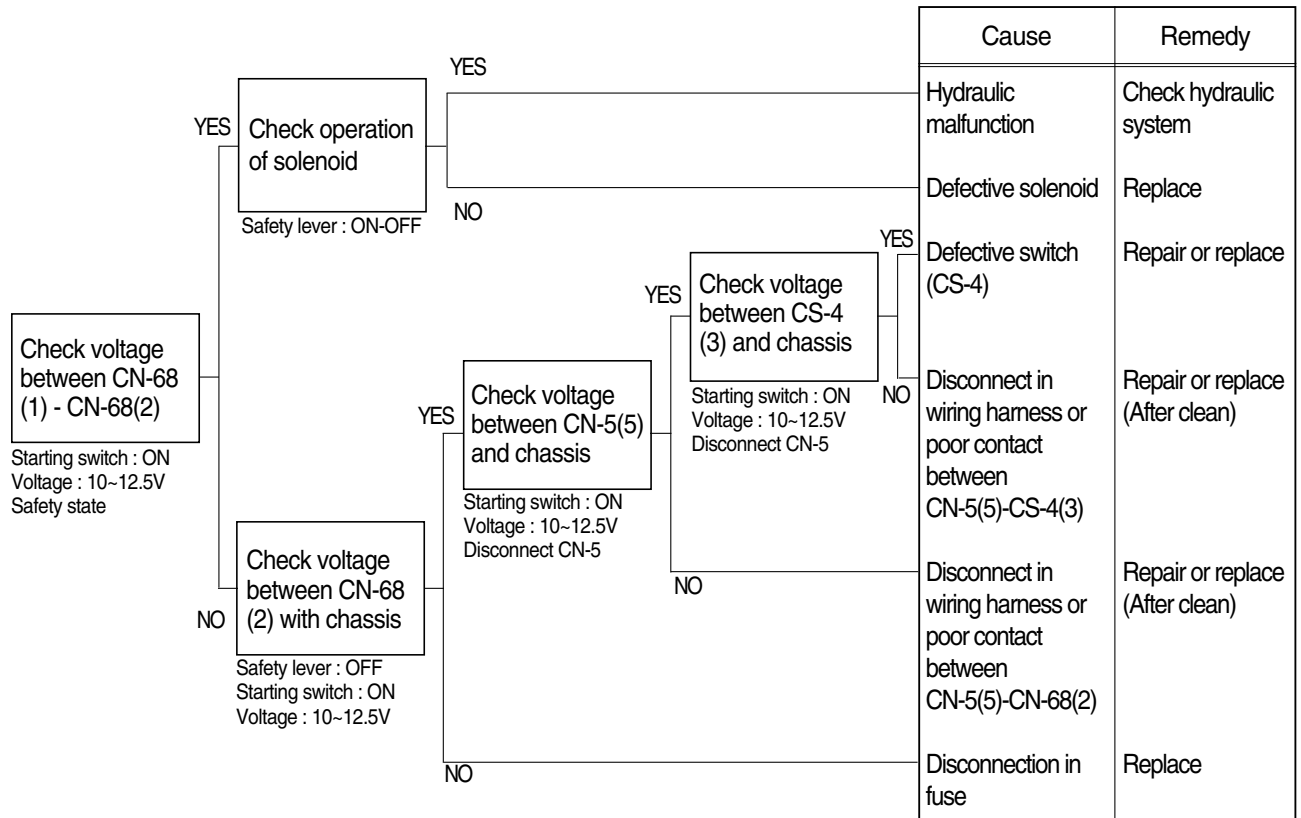
Check Table

Item \ Level	Empty	1/2	Full
Unit Resistance(Ω)	700	300	~100
Tolerance(%)	±5	±8	±5



9. WHEN SAFETY SOLENOID DOES NOT OPERATE

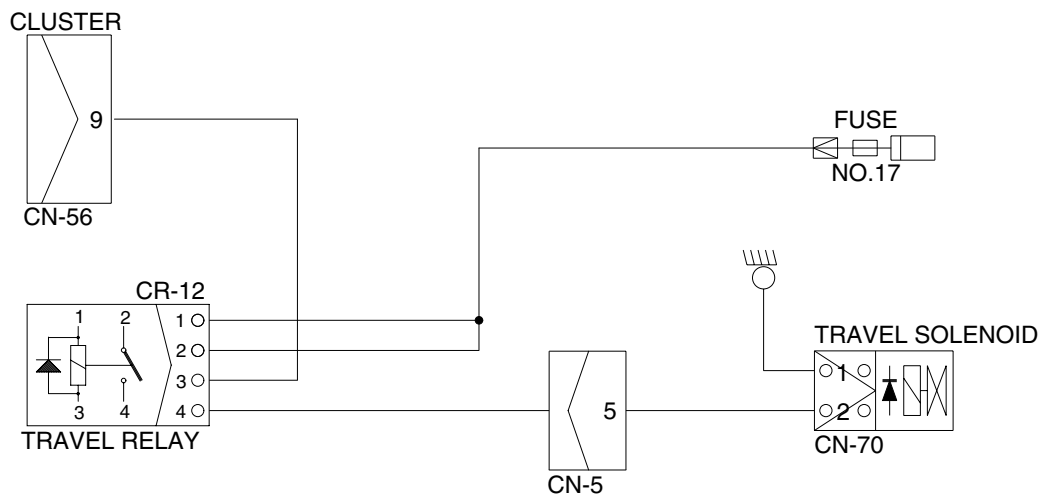
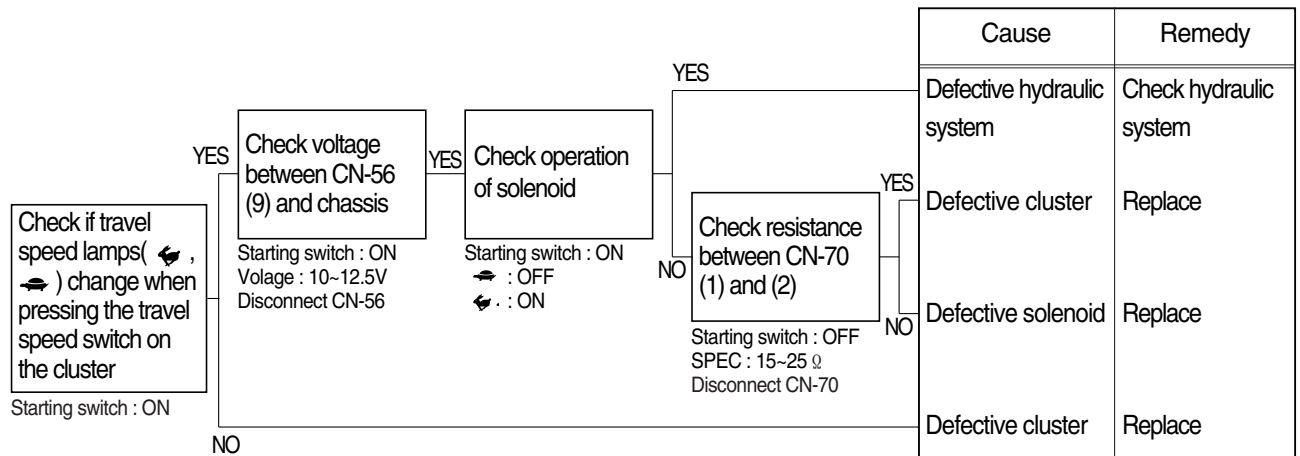
- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted and short of fuse No.14.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



R5575TS17

10. WHEN TRAVEL SPEED 1, 2 DOES NOT OPERATE

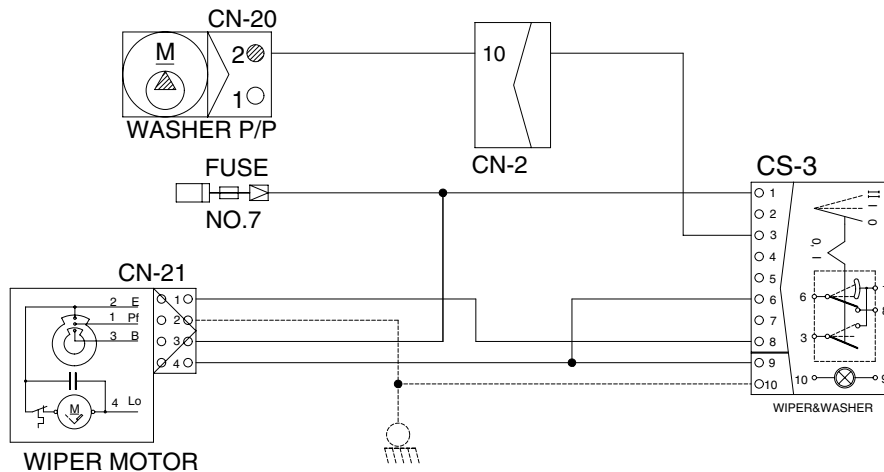
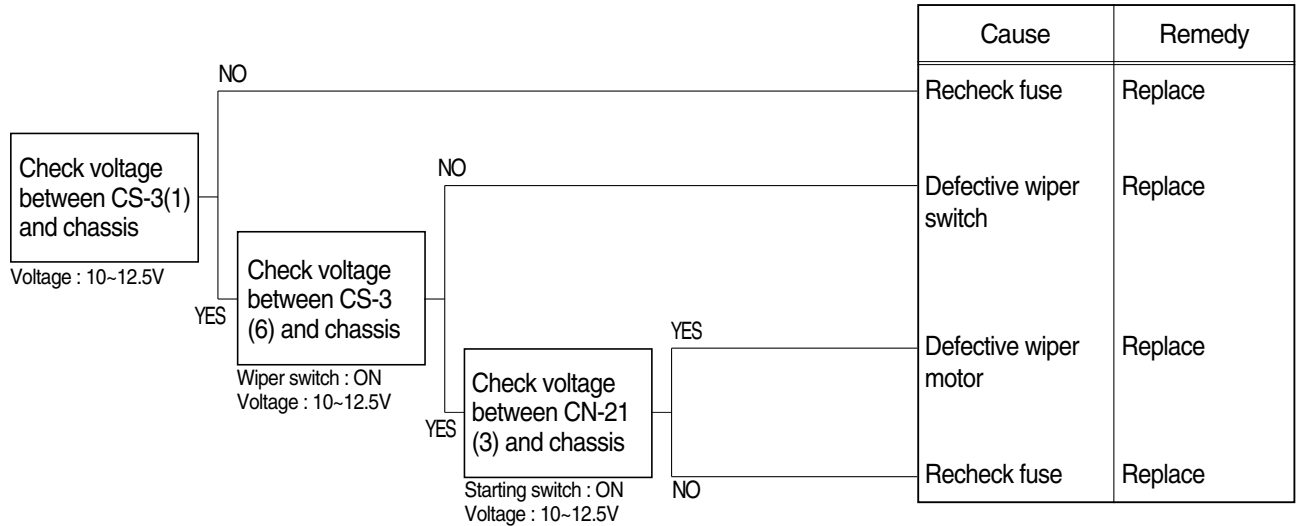
- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted and short of fuse No.22 .
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



R5575TS18

11. WHEN STARTING SWITCH IS TURNED ON, WIPER MOTOR DOES NOT OPERATE

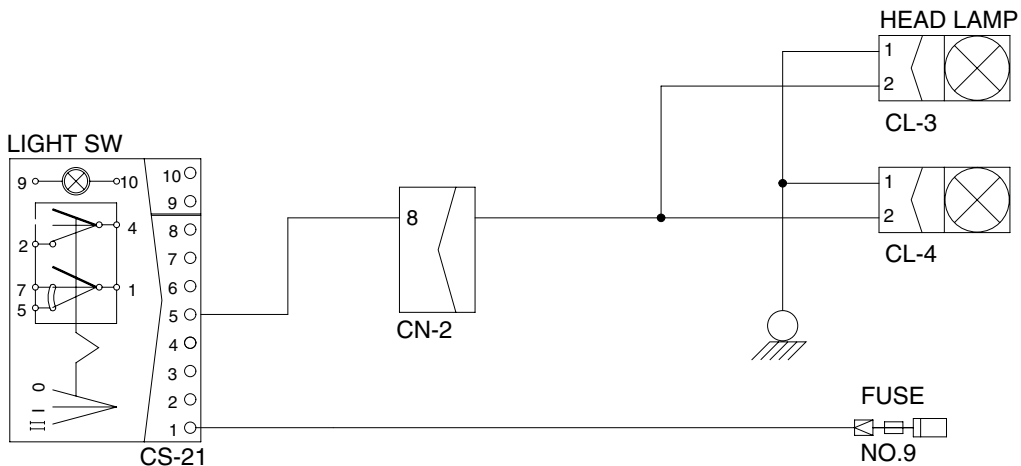
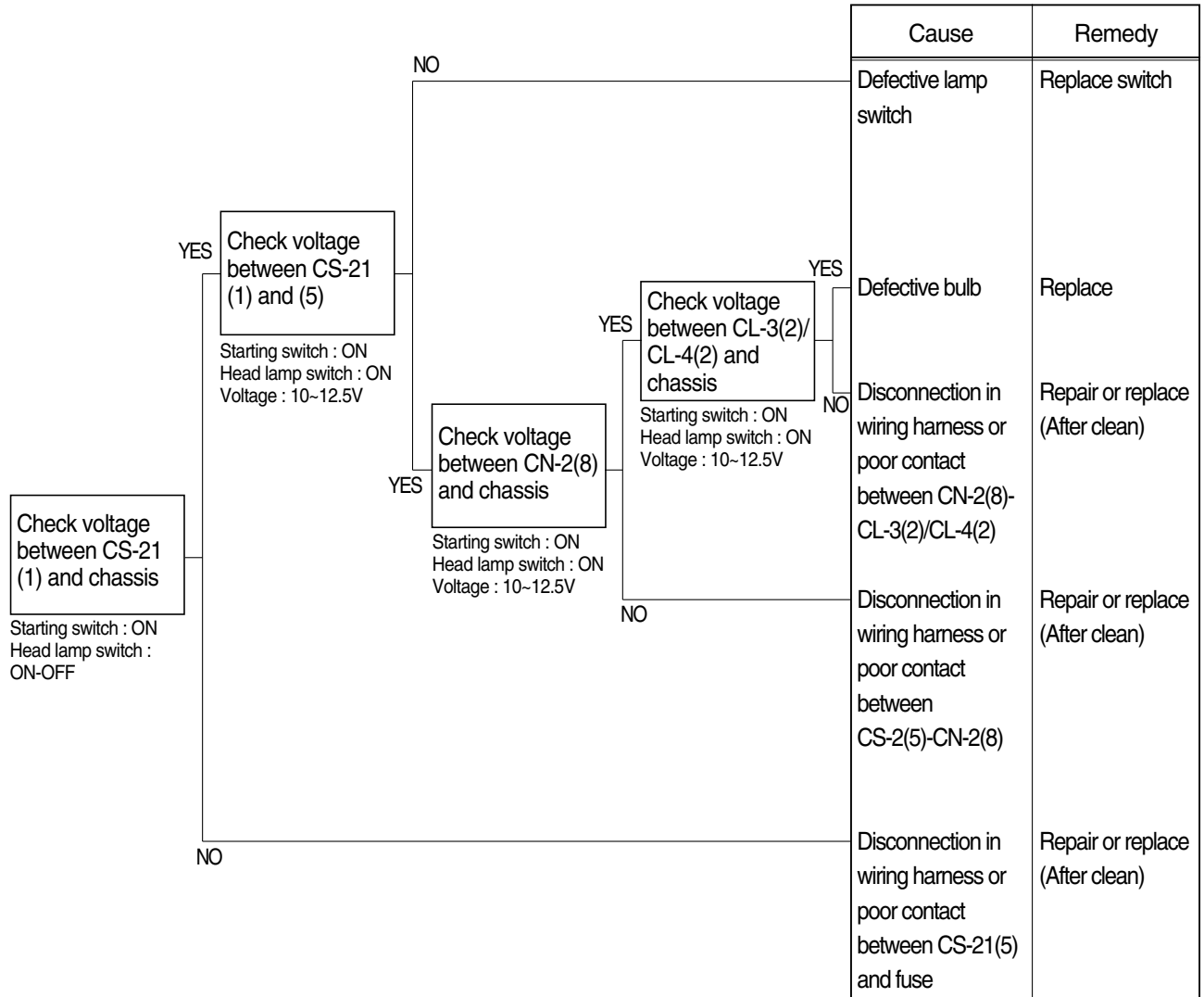
- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted and the fuse No.7 is not blown out.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



R5575TS21

12. WHEN STARTING SWITCH IS TURNED ON, HEAD LAMP DOES NOT LIGHTS UP

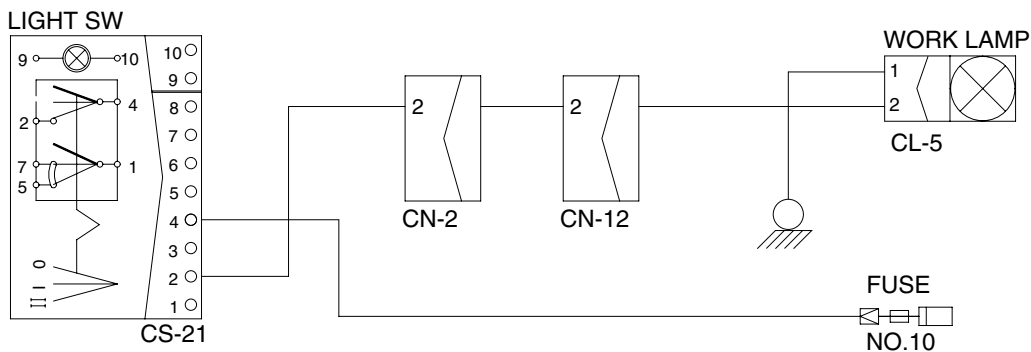
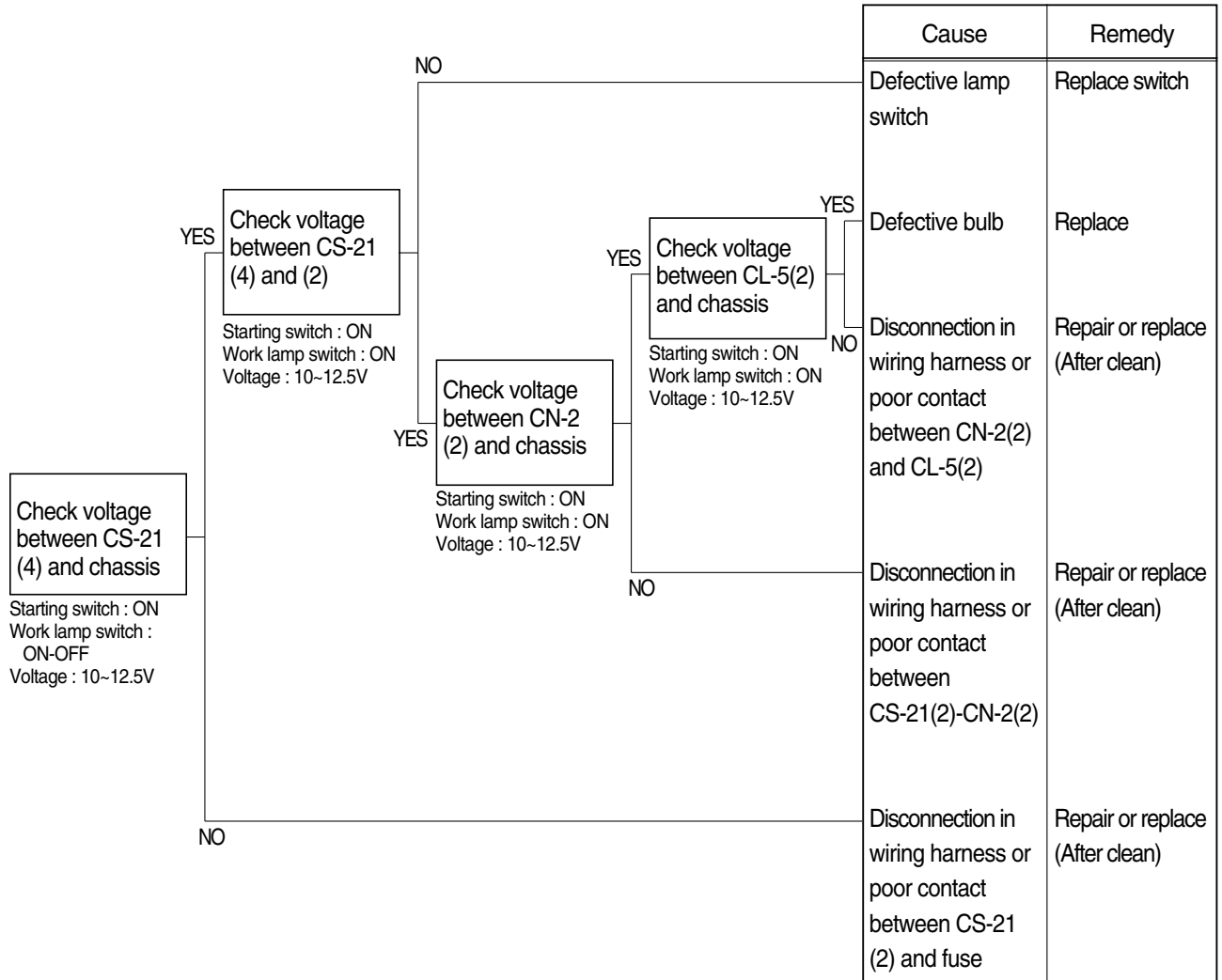
- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted and short of fuse No.9.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.



R5575TS22

13. WHEN STARTING SWITCH IS TURNED ON, WORK LAMP DOES NOT LIGHTS UP

- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted and short of fuse No.10.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.

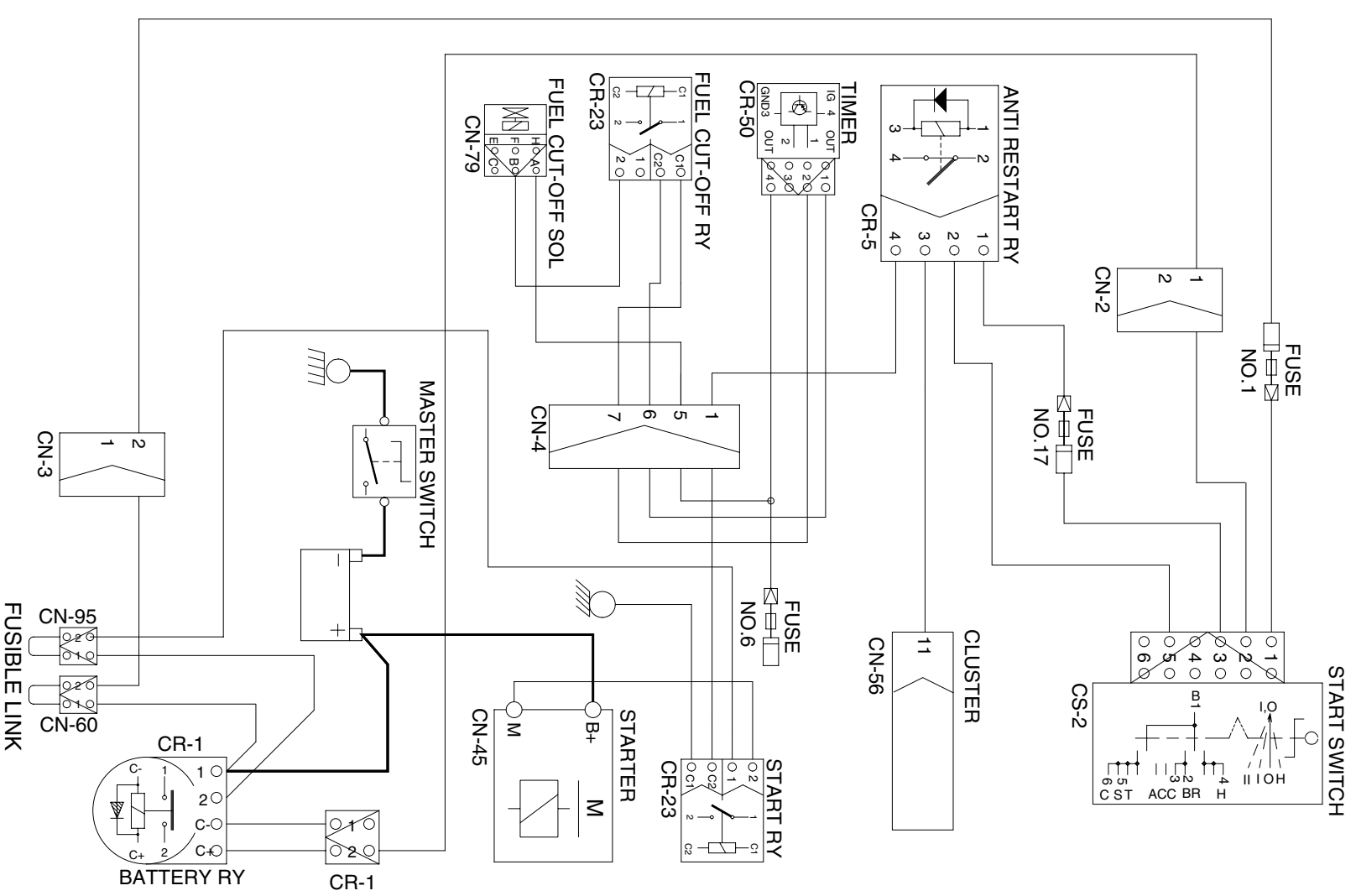


R5575TS23

14. WHEN ENGINE DOES NOT START

- Check supply of the power at engine stop solenoid while starting switch is ON.
- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.

Check operation of start motor	Starting switch : START	YES	Defective battery	Check engine system charge or replace (After checking specific gravity of battery)			
	NO	Check operation of start relay	Starting switch : START	NO	Check voltage between starter magnet coil and chassis Starting switch : START SPEC : 10~12.5V	YES	Defective magnet of start motor
Check operation of start relay	Starting switch : START	YES	Defective start relay	Replace			
	NO	Check operation of start safety relay	Starting switch : ON	NO	Check voltage between CR-5(1) and chassis Starting switch : START	YES	Disconnection in wiring harness or poor contact between CR-5 (86) and CN-8(9)
Check voltage between starter magnet coil and chassis	Starting switch : START	YES	Defective relay	Replace			
	NO	Check voltage between CR-5(4) and chassis Starting switch : ON	YES	Defective relay	Replace		
Check voltage between CR-23 and chassis	Starting switch : ON	YES	Defective relay	Replace			
	NO	Check voltage between CN-79 and chassis Starting switch : ON	YES	Defective fuel cut-off solenoid	Replace		
Check voltage between CN-79 and chassis	Starting switch : ON	YES	Disconnection in wiring harness or poor contact between CR-5(4)-CR-23(2)	Repair or replace (After clean)			
	NO	Check voltage between CN-79 and chassis Starting switch : ON	YES	Disconnection in wiring harness or poor contact between CN-79 and CR-23(2)	Repair or replace (After clean)		



15. WHEN STARTING SWITCH ON DOES NOT OPERATE

- Before disconnecting the connector, always turn the starting switch OFF.
- Before carrying out below procedure, check all the related connectors are properly inserted and master switch ON.
- After checking, insert the disconnected connectors again immediately unless otherwise specified.

Cause	Remedy
Disconnection in wiring harness or poor contact between CN-2(2)-CR-1(2) or defective battery relay	Repair or replace (After clean)
Disconnection in wiring harness or poor contact between CS-2(2)-CN-2(1)	Replace
Defective start switch	Replace
Disconnection in wiring harness or poor contact between CS-2(1)-fuse No.1	Replace
Battery capacity too low	Charge or replace (After clean)

Check voltage and specific gravity of battery
Specific gravity : MIN 1.28
Voltage : MIN 12V

Check voltage between CS-2(1) and chassis
Voltage : 10-12.5V

Check voltage between CS-2(2) and chassis
Voltage : 10-12.5V

Check voltage between CR-1(2) and chassis
Voltage : 10-12.5V

