
GROUP 54-00D TROUBLESHOOTING

TROUBLESHOOTING

1. Power and Charging

Symptoms		Possible causes						Reference Gr
		Battery fluid (electrolyte) decreases too fast.	Battery temperature is too high.	Battery is normal but excessively discharged.	Charge warning lamp is not illuminated when starter switch is in ON position with engine not running.	Alternator is normal but battery is excessively discharged.	Alternator does not generate electricity.	
Connector connection faulty, harness broken, grounding faulty				○		○		
Fuse blown				○	○	○		
High-current fuse blown				○	○	○		
Belt tension insufficient				○		○		Gr14
Belt cut off				○		○		Gr14
Defective battery		○				○		
Communication failure of controller area network (Controller area network communication)					○			
Alternator	Open-circuited stator coil			○				
	Short circuit between stator coil and core			○				
	Open-circuited field coil			○				
	Defective regulator		○	○	○			
	Brush worn			○				
	Permanent set of brush spring in fatigue			○				
	Improper wiring			○				
Power is not supplied to alternator R terminal	Relay "Optional power supply (IGN)" inoperative			○		○	○	Gr54ES (Performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (039/067/071); inspection and disconnection/connection of relay (D))
	Fuse blown			○		○	○	Gr54-01 (Inspection and removal/installation of fuse (F04))
Defective meter cluster					○			

2. Engine Starting, Stopping and Preheating

Symptoms		Starter is activated but engine does not start			Engine does not stop.	Engine cannot be warmed up.	Engine is slow to start.	Exhaust brake is nonfunctional.	Reference Gr
		Starter is not activated.	Pinion does not mesh with ring gear.	Pinion meshes with ring gear but does not rotate.					
Possible causes									
Connector connection faulty, harness broken, grounding faulty		O			O	O	O	O	
High current fuse blown		O				O		O	
Fuse blown		O				O		O	
Signal detect and actuation modules malfunctioning		O				O		O	
Battery capacity insufficient		O		O					
Starter	Magnet switch contact stuck, fused	O							
	Magnet switch coil open circuited	O							
	Overrunning clutch malfunctioning		O						
	Pinion worn, damaged		O						
Defective starter relay		O							
Defective starter switch		O			O				
Flywheel ring gear worn, damaged			O						Gr11
Common rail system malfunctioning		O			O	O	O	O	Gr13E
Faulty starter relay (for drive)		O							
Defective glow plug						O	O	O	Gr11
Glow electronic control unit malfunctioning						O	O	O	Gr13E
Connecting plate poorly fitted						O	O	O	Gr11
Defective water temperature sensor						O	O		
Exhaust brake system malfunctioning								O	Gr35E
Combination switch	Defective exhaust brake switch							O	
Warning lamp (red) for signal detect and actuation module is illuminating.		O							Gr54ES
Communication failure (Controller area network / Local interconnect network)		O				O		O	Gr54ES
Power is not supplied to starter switch.		O							Gr54-01 (Inspection and removal/installation of fuse (F13)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (3B))

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Symptoms		Starter is activated but engine does not start			Engine does not stop.	Engine cannot be warmed up.	Engine is slow to start.	Exhaust brake is nonfunctional.	Reference Gr
		Starter is not activated.	Pinion does not mesh with ring gear.	Pinion meshes with ring gear but does not rotate.					
Possible causes									
Starter switch signal is not received.		O							Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (15B/18B); perform inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (063 - 066); performing FUSO Diagnostics actuator test (actuators) (002))
Power is not supplied to related electronic control units/components	Blown fuse	O							Gr54-01 (Inspection and removal/installation of fuses (F01/F04/F09/F13/F19/F28/F31/F34))
	Starter signal relay (ACC) inoperative	O							Gr54ES (Performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (036/068))
	Starter signal relay (IGN) inoperative	O							Gr54ES (Performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (038/070/071); inspection and removal/installation of relay (E))
	Fuel pump relay inoperative	O							Gr54ES (Inspection and removal/installation of relay (F))

Symptoms		Starter is activated but engine does not start							Reference Gr	
		Starter is not activated.	Pinion does not mesh with ring gear.	Pinion meshes with ring gear but does not rotate.	Flywheel rotates but engine does not start.	Engine does not stop.	Engine cannot be warmed up.	Engine is slow to start.		Exhaust brake is nonfunctional.
Possible causes										
Output conditions are satisfied but S signal is not outputted	Faulty communication of controller area network	O								Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (17B); performing inspections based on diagnosis codes)
	Low input voltage	O								Gr54ES (Check of input terminals (8C/9C/10C) of signal detect and actuation module; performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (087))
	Low output voltage	O								Inspect by replacing with a known-good signal detect and actuation module.
Communication failure (Controller area network / Local interconnect network)							O		O	Gr54ES
Power is not supplied to Combination switch.								O		O Gr54-01 (Inspection and removal/installation of fuse (F09)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (2B))
Combination switch signal is not received.								O		O Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B); performing inspections based on diagnosis codes)
Faulty controller area network function of signal detect and actuation module								O		O Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (17B); performing inspections based on diagnosis codes)

TROUBLESHOOTING

3. Lighting

Symptoms	Headlamp						Reference Gr
	Not illuminated.	Cannot be turned off	Dim.	Not switched to main beam.	Not switched to dipped beam.	Leveling function dose not operate.	
Possible causes							
Connector connection faulty, harness broken, grounding faulty	○					○	○
High current fuse blown	○					○	○
Signal detect and actuation modules malfunctioning	○		○	○	○	○	○
Battery insufficient in capacity			○				
Defective alternator			○				
Bulb blown out	○						○
Combination switch	○	Defective lighting switch					○
		Defective dimmer switch			○	○	
Defective headlamp leveling switch						○	
Defective headlamp leveling actuator						○	
Defective starter switch						○	
Signal detect and actuation modules malfunctioning		○					
Failure of combination switch		○					
Warning lamp (amber) for signal detect and actuation module is illuminating.		○					○ Gr54ES
Power is not supplied to combination switch.	○						○ Gr54-01 (Inspection and removal/installation of fuse (F09)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (2B))
Combination switch is not received.	○	○		○	○		○ Gr54-01 (Inspection and removal/installation of fuse (F09)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (002); performing FUSO Diagnostics actuator test (actuators) (002))
Combination switch signal is not received.							Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B); performing inspections based on diagnosis codes)

Possible causes		Symptoms	Headlamp						Reference Gr
			Not illuminated.	Cannot be turned off	Dim.	Not switched to main beam.	Not switched to dipped beam.	Leveling function dose not operate.	
Outputting although the output conditions are not satisfied.	External factor			O					Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B)); Gr54-03 (Check and removal of additional wiring)
	Internal factor of signal detect and actuation module			O					Inspection by replacing with a known-good signal detect and actuation module
Low voltage	Low input voltage				O				Gr54ES (Check of input terminals (8C/9C/10C) of signal detect and actuation module; performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (087))
	Low output voltage				O				Inspection by replacing with a known-good signal detect and actuation module
Changeover conditions are not satisfied.	Combination switch signal is not received.					O	O		Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B); performing inspections based on diagnosis codes)

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Symptoms		Headlamp						Reference Gr
		Not illuminated.	Cannot be turned off	Dim.	Not switched to main beam.	Not switched to dipped beam.	Leveling function dose not operate.	
Possible causes								Tail lamp is not illuminated.
Output conditions are satisfied.	Key switch position		O				O	Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (15B/18B); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (038/063 - 071))
							O	Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (15B/18B); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (063 - 066))
	Combination switch ON signal is received.		O					Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B); performing inspections based on diagnosis codes)

Symptoms		Headlamp						Reference Gr
		Not illuminated.	Cannot be turned off	Dim.	Not switched to main beam.	Not switched to dipped beam.	Leveling function dose not operate.	
Possible causes								
Output conditions are satisfied but output is halted.	External factor	O						Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (14B/16B); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (000 - 001); performing FUSO Diagnostics actuator test (actuators) (000))
							O	O
	Internal factor of signal detect and actuation module	O					O	O

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Symptoms		Position lamp is not illuminated.	License plate lamp is not illuminated.	Stop lamp is not illuminated.	Turn signal lamp (also used as hazard lamp)				Backup lamp is not illuminated.	Back buzzer does not sound.	Reference Gr	
					Will not remain illuminated.	Remains illuminated constantly.	Flashes too slowly.	Flashes too fast.				Flashes at unsteady intervals.
Possible causes												
Connector connection faulty, harness broken, grounding faulty		○	○	○	○					○	○	
High-current fuse blown		○	○	○	○					○	○	
Signal detect and actuation modules malfunctioning		○	○	○	○	○	○	○	○	○	○	
Battery insufficient in capacity					○							
Defective alternator					○							
Bulb blown out		○	○	○	○			○		○		
Defective stop lamp switch				○								
Bulb lower than specified in wattage								○				
Combination switch	Defective lighting switch	○	○									
	Defective turn signal switch				○							
Defective hazard switch					○							
Defective backup lamp switch									○	○		
Defective back buzzer										○		
Warning lamp (amber) for signal detect and actuation module is illuminating.		○	○	○								Gr54ES
Faulty signal detect and actuation module	Internal factor of signal detect and actuation module					○			○			Inspection by replacing with a known-good signal detect and actuation module
Power is not supplied to combination switch		○			○							Gr54-01 (Inspection and removal/installation of fuse (F09)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (2B))
combination switch signal is not received.		○			○		○					Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B); performing inspections based on diagnosis codes)

Possible causes		Symptoms		Turn signal lamp (also used as hazard lamp)							Reference Gr
		Position lamp is not illuminated.	License plate lamp is not illuminated.	Stop lamp is not illuminated.	Will not remain illuminated.	Remains illuminated constantly.	Flashes too slowly.	Flashes too fast.	Flashes at unsteady intervals.	Backup lamp is not illuminated.	
Stop lamp switch signal is not received.				O							Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B); check of FUSO Diagnostics service data (actual values) (079))
Output is halted.	External factor			O							Gr54ES (Inspection of signal detect and actuation module connectors (15B/18B/12C/13C); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (006/007/078/079))

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Possible causes		Symptoms										Reference Gr	
		Position lamp is not illuminated.	License plate lamp is not illuminated.	Stop lamp is not illuminated.	Turn signal lamp (also used as hazard lamp)	Will not remain illuminated.	Remains illuminated constantly.	Flashes too slowly.	Flashes too fast.	Flashes at unsteady intervals.	Backup lamp is not illuminated.		Back buzzer does not sound.
Output is halted.	External factor					O							Gr54ES (Inspection of signal detect and actuation module connectors (14B/16B/18B/12C/13C); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (002 - 005/023/024); performing FUSO Diagnostics actuator test (actuators) (000))
											O		Gr54ES (Inspection of signal detect and actuation module connectors (17B/18B/13C); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (044/080))

Possible causes		Symptoms										Reference Gr	
		Position lamp is not illuminated.	License plate lamp is not illuminated.	Stop lamp is not illuminated.	Turn signal lamp (also used as hazard lamp)	Will not remain illuminated.	Remains illuminated constantly.	Flashes too slowly.	Flashes too fast.	Flashes at unsteady intervals.	Backup lamp is not illuminated.		Back buzzer does not sound.
Output is halted.	External factor (broken wire detected)												Gr54ES (Inspection of signal detect and actuation module connectors (14B/16B/18B/12C/13C); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (002 - 005/023/024))
	Internal factor of signal detect and actuation module												Inspection by replacing with a known-good signal detect and actuation module

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Possible causes		Symptoms										Reference Gr	
		Position lamp is not illuminated.	License plate lamp is not illuminated.	Stop lamp is not illuminated.	Turn signal lamp (also used as hazard lamp)	Will not remain illuminated.	Remains illuminated constantly.	Flashes too slowly.	Flashes too fast.	Flashes at unsteady intervals.	Backup lamp is not illuminated.		Back buzzer does not sound.
Output conditions are not satisfied.	Key switch position												Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (15B/18B)); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (063 - 071); performing FUSO Diagnostics actuator test (actuation) (000))
	Reverse signal is not received.										O		Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B)); check of FUSO Diagnostics service data (actual values) (045/080); check of coding data for signal detect and actuation module)

Possible causes		Symptoms										Reference Gr	
		Position lamp is not illuminated.	License plate lamp is not illuminated.	Stop lamp is not illuminated.	Turn signal lamp (also used as hazard lamp)	Will not remain illuminated.	Remains illuminated constantly.	Flashes too slowly.	Flashes too fast.	Flashes at unsteady intervals.	Backup lamp is not illuminated.		Back buzzer does not sound.
Output signals are satisfied but output is halted.	External factor	O											Gr54ES (Inspection of signal detect and actuation module connectors (15B/18B); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (010/011); performing FUSO Diagnostics actuator test (actuation) (000))
	Internal factor of signal detect and actuation module	O											Inspection by replacing with a known-good signal detect and actuation module

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Symptoms		Reference Gr			
		Cab lamp is not illuminated.	Cab lamp fade-out function does not work.	Nighttime illumination of meters and switches is faulty.	
Possible causes					
Connector connection faulty, harness broken, grounding faulty		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
High-current fuse blown		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Signal detect and actuation modules malfunctioning		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Bulb burnt-out		<input type="radio"/>		<input type="radio"/>	
Defective starter switch		<input type="radio"/>	<input type="radio"/>		
Defective cab lamp		<input type="radio"/>	<input type="radio"/>		
Defective door switch		<input type="radio"/>	<input type="radio"/>		
Defective power window switch			<input type="radio"/>		
Defective meter cluster				<input type="radio"/>	
Defective lighting switch				<input type="radio"/>	
Power is not supplied.		<input type="radio"/>		Gr54-01 (Inspection and removal/installation of fuse (F12)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (3B/17B))	
Illumination conditions are not satisfied.	Door switch information	<input type="radio"/>		Gr54ES (Inspection of signal detect and actuation module connector (15B); check of FUSO Diagnostics service data (actual values) (058 - 060))	
	A certain duration has passed after opening a door.	<input type="radio"/>		Open and close the door to check reproducibility.	
Output is halted.	External factor	<input type="radio"/>		Gr54ES (Inspection of signal detect and actuation module connector (17B); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (048))	
		<input type="radio"/>		Gr54ES (Inspection of signal detect and actuation module connector (14B); check of FUSO Diagnostics service data (actual values) (016))	
	Over current			<input type="radio"/>	Gr54-01 (Check of installed after-market parts; inspection of illumination condition of other night illuminations)
	Internal failure of the signal detect and actuation module	<input type="radio"/>		<input type="radio"/>	Inspection by replacing with a known-good signal detect and actuation module

<p>Possible causes</p>	Symptoms				Reference Gr
Illumination turning-off conditions are not satisfied.		Cab lamp is not illuminated.	Cab lamp fade-out function does not work.	Nighttime illumination of meters and switches is faulty.	Gr54ES (Inspection of signal detect and actuation module connectors (15B/17B); check of FUSO Diagnostics service data (actual values) (048/058/059))
Output conditions are not satisfied.	Power is not supplied to the combination switch.			O	Gr54-01 (Inspection and removal/installation of fuse (F09)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (2B))
	Combination switch is not received.			O	Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (18B); performing inspections based on diagnosis codes)
	Key switch position				O

TROUBLESHOOTING

4. Meter

Symptoms		Possible causes					Reference Gr
		Indicating pointer is stuck.	Indicating pointer is unsteady in movement.	Reading error is excessive in indicating pointer.	Abnormal sound is heard from meter.	Buzzer (built in meter) does not sound.	
Connector connection faulty, harness broken, grounding faulty		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	
Fuse blown		<input type="radio"/>				<input type="radio"/>	
Signal detect and actuation modules malfunctioning		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	Gr54ES
Defective meter cluster		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Odometer and trip meter	The coding data for electrical control unit is improper.			<input type="radio"/>			Gr54EM
Tachometer	Defective tachometer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Engine speed sensor poorly fitted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			Gr11
	Defective engine speed sensor	<input type="radio"/>					
	Defective engine electronic control unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			Gr13E
Speedometer	Defective speedometer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Defective vehicle speed sensor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Vehicle speed sensor poorly fitted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			Gr22E
	Tire not as specified			<input type="radio"/>			Gr31
	Tire worn and tire pressure not as specified			<input type="radio"/>			Gr31
	The coding data for electrical control unit is improper.			<input type="radio"/>			Gr54EM
Water temperature gauge	Defective water temperature sensor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Defective engine electronic control unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			Gr13E
Fuel level gauge	Defective fuel level gauge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
	Defective fuel level sensor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
Defective buzzer (built in meter)						<input type="radio"/>	
Controller area network communication faulty		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	
Faulty controller area network communication		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (17B)); perform inspections based on diagnosis codes)
Power is not supplied.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	Gr54-01 (Inspection and removal/installation of fuses (F09/F22)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (1B/2B))

Possible causes	Symptoms					Reference Gr
Switch signal is not received.	Indicating pointer is stuck.	Indicating pointer is unsteady in movement.	Reading error is excessive in indicating pointer.	Abnormal sound is heard from meter.	Buzzer (built in meter) does not sound.	Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (15B/18B); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (063 - 071))
	○	○	○		○	

TROUBLESHOOTING

	Symptoms	Indicator and warning display function				Reference Gr
		Warning items are not indicated on LCD in meter cluster.	Buzzer does not sound.	Warning item LED lamp is not illuminated.	Warning item LED lamp will not extinguish.	
Possible causes						
Controller area network communication faulty		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Initialization of meter cluster is not done yet		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signal detect and actuation modules malfunctioning		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Related system electronic control unit malfunctioning		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Faulty controller area network communication		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (17B); perform inspections based on diagnosis codes)
Power is not supplied.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gr54-01 (Inspection and removal/installation of fuses (F09/F22)); Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (1B/2B))
Switch signal is not received.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (15B/18B)); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (063 - 071))

5. Cigarette Lighter and Audio

Symptoms	Cigarette lighter		Audio				Reference Gr
	Will not turn red-hot.	Will not return.	Noise occurs.	Quality of sound is poor.	Sound comes out from one side only.	Sound volume is different between left and right.	
Possible causes							
Connector connection faulty, harness broken, grounding faulty	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		
Fuse blown	<input type="radio"/>						
Signal detect and actuation modules malfunctioning	<input type="radio"/>						
Defective cigarette lighter	<input type="radio"/>	<input type="radio"/>					
Antenna and antenna feeder poorly connected			<input type="radio"/>				
Defective speaker			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Left and right speakers are different in impedance						<input type="radio"/>	
Starter switch signal is not received.	<input type="radio"/>						Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connectors (15B/18B); performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (063 - 071))
Power is not supplied.	Blown fuse	<input type="radio"/>					Gr54-01 (Inspection and removal/installation of fuse (F16))
	ACC relay inoperative	<input type="radio"/>					Gr54ES (Performing inspections based on diagnosis codes; check of FUSO Diagnostics service data (actual values) (036/068); inspection and removal/installation of relay (J))

Source of accessory noise

Accessory	Noise	Status
Alternator	Beep-beep	High-pitched sound that occurs when accelerator pedal is quickly depressed. (Sound stops as soon as engine is stopped.)
Fuel level sensor	Scratchy sound	Heard when engine is suddenly revved up, vehicle is running on rough road or starter switch is turned ON
Horn	Hushing sound	Heard when horn button is pressed or released
Wiper motor	Whizzing sound	Heard depending on windshield wiper speed
Washer motor	Whizzing sound	Heard when washer is operating on front windshield

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6. Horn

Symptoms	Horn				Reference Gr
	Horn does not sound.	Horn does not stop sounding.	Horn sound volume is insufficient.	Horn sound quality is poor.	
Possible causes					
Connector connection faulty, harness broken, grounding faulty	O				
Fuse blown	O				
Defective horn switch	O	O			
Defective horn relay	O	O			
Signal detect and actuation modules malfunctioning	O	O			
Defective horn	O		O	O	
Horn stay bent			O	O	
Battery insufficient in capacity	O		O		
Horn switch signal is not received.	O				Gr54ES (Inspection and disconnection/connection of signal detect and actuation module connector (15B))
Horn switch signal is received.		O			
Power is not supplied.	Blown fuse	O			Gr54-01 (Inspection and removal/installation of fuse (F14))
	Horn relay inoperative	O			Gr54ES (Inspection and removal/installation of relay (B))
Power is supplied continuously.	Fused horn relay		O		