

OUTLANDER



MODEL YEAR 2010 FEATURES



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MY 10 CHANGE OF FEATURES LIST

1. New design Head lamps with AFS
2. New design Front grill with silver finish
3. High contrast cluster with colour LCD display
4. New design Front bumpers with painted front garnish
5. New design fenders
6. Anti theft alarm with SIREN and Ultrasonic and angle sensors
7. Aluminum brake and accelerator pedals
8. Upper glow box with cooler dial
9. Instrument panel with Leather cover
10. Reflector type fog lamp with BEZEL
11. Vanity mirror with lamp & lid
12. Door mirror with turn signal lamp
13. USB & AUXILIARY port
14. Roof rail

SPORTY FRONT LOOK

- Newly designed Front Bumpers
- Newly designed Front grill (Jet fighter grill) with silver finish and painted front garnish
- Newly designed Projector type (HID) Head lamps with AFS function
- Newly designed fenders and fog lamp reflectors with bezels



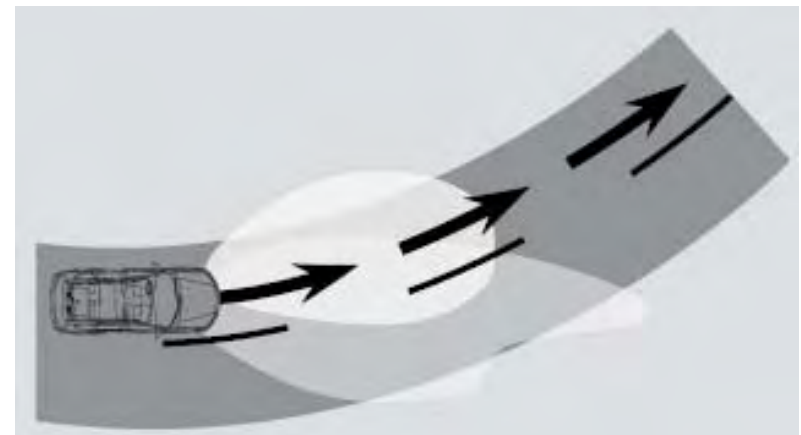
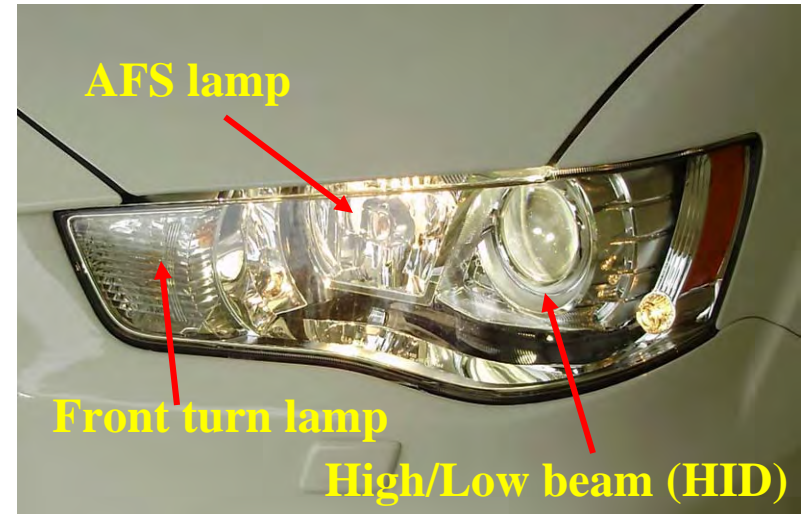
BS IV COMPLIANCE REFINED ENGINE



There is no change in Engine and control systems. Same engine meets BS 4 emission requirement. BS 4 sticker provided on tailgate

AFS - ADAPTIVE FRONT-LIGHTING SYSTEM

- The AFS makes it easier for the driver to see ahead at night while cornering
- AFS turns ON/ OFF in the bending automatically and illuminate the corners in the direction in which the car is being turned
- When the Head lamp is on. Based on steering angle sensor information auto leveling ECU turns on/off the AFS lamp.



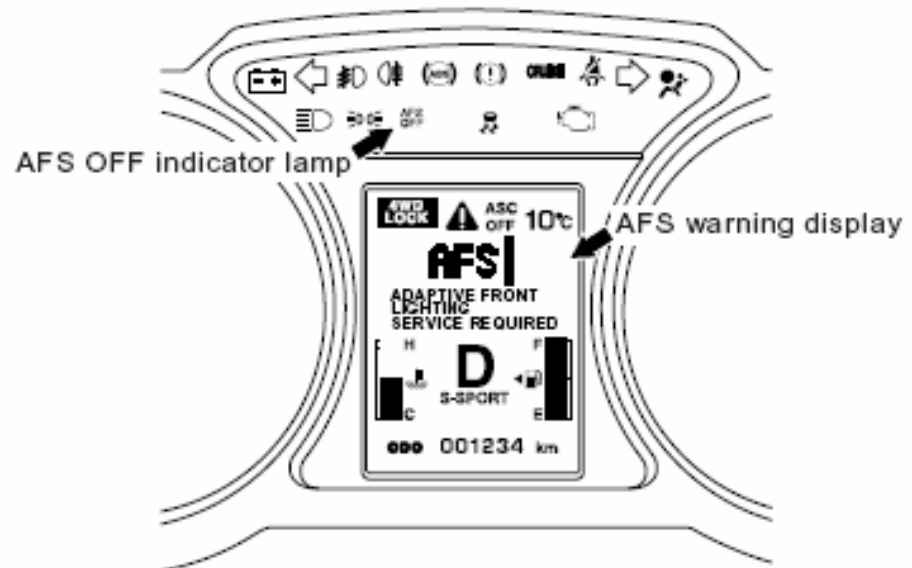
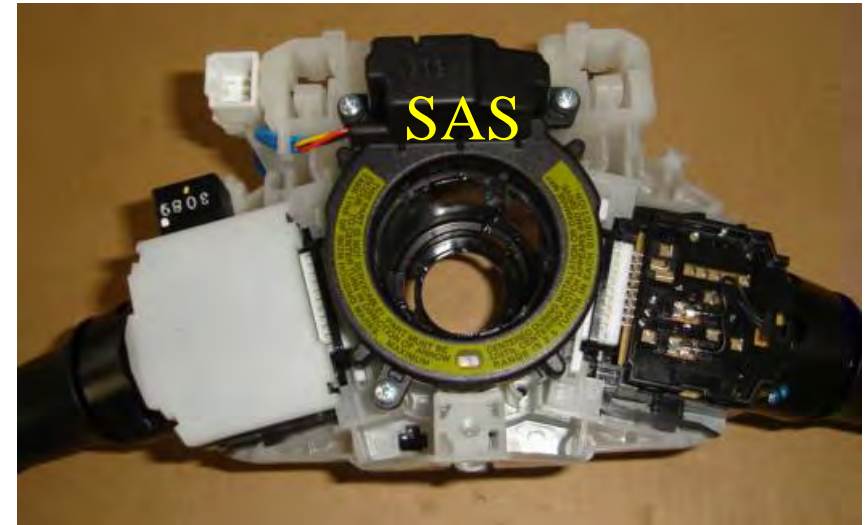
AFS - OFF FUNCTION



AFS control can be turned OFF by operating the AFS control switch
AFS off indication is displayed on the Cluster

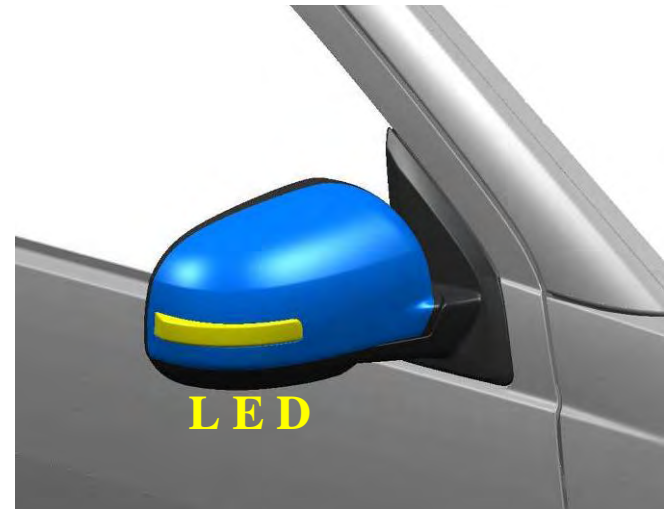
AFS DIAGNOSIS

- If any malfunction occurs in AFS, AFS off indicator blinks and warning display blinks in the multi info display to inform the driver and AFS function is deactivated
- If Steering angle sensor is disconnected or neutral position is disturbed. Carry out SAS neutral learning procedure by using **MUT-3**
- If vehicle speed is approx 80 kmph or less the AFS turns ON automatically in turnings
- If vehicle speed is 100 kmph or more or the AFS is ON for more than 15 minutes the AFS turns OFF automatically



DOOR MIRROR WITH TURN SIGNAL LAMP

- Side indicator lamp is integrated into the side view mirror.
- While locking and unlocking the central lock by using KOS or keyless entry the indicator lamps blink and the side view mirrors folds/unfolds automatically



USB & AUXILIARY PORTS ADDED TO PLAY i-pods

- **USB**

- USB adapter transfers the music files from i-pod and USB memory stick to CD player via the USB box
- To activate USB mode press the CD button after inserting USB



- **AUXILIARY AUDIO INPUT**

- You can listen to commercially available audio equipment, such as a portable audio system from your vehicle speakers
- To activate press the CD button for more than 2 seconds AUX mode will be activated



- High Contrast Colour LCD display meter has been adopted
- The Multi Information Display layout has been simplified by displaying fuel and temperature gauges continuously
- Even in ignition switch OFF position Odo, trip meters or service reminder info can be displayed by pressing info button.

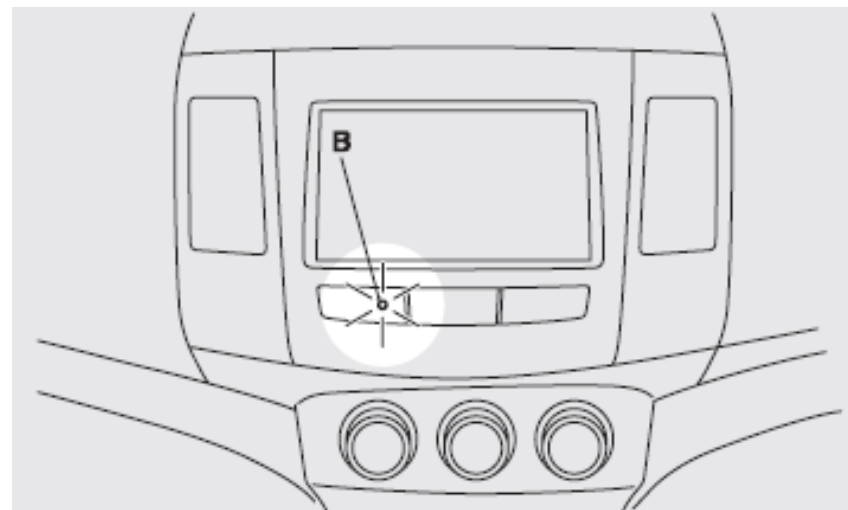
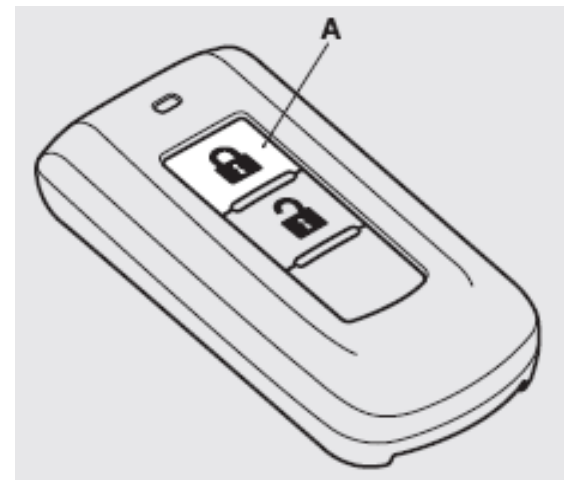


By locking the vehicle using remote or KOS the system preparation mode is activated

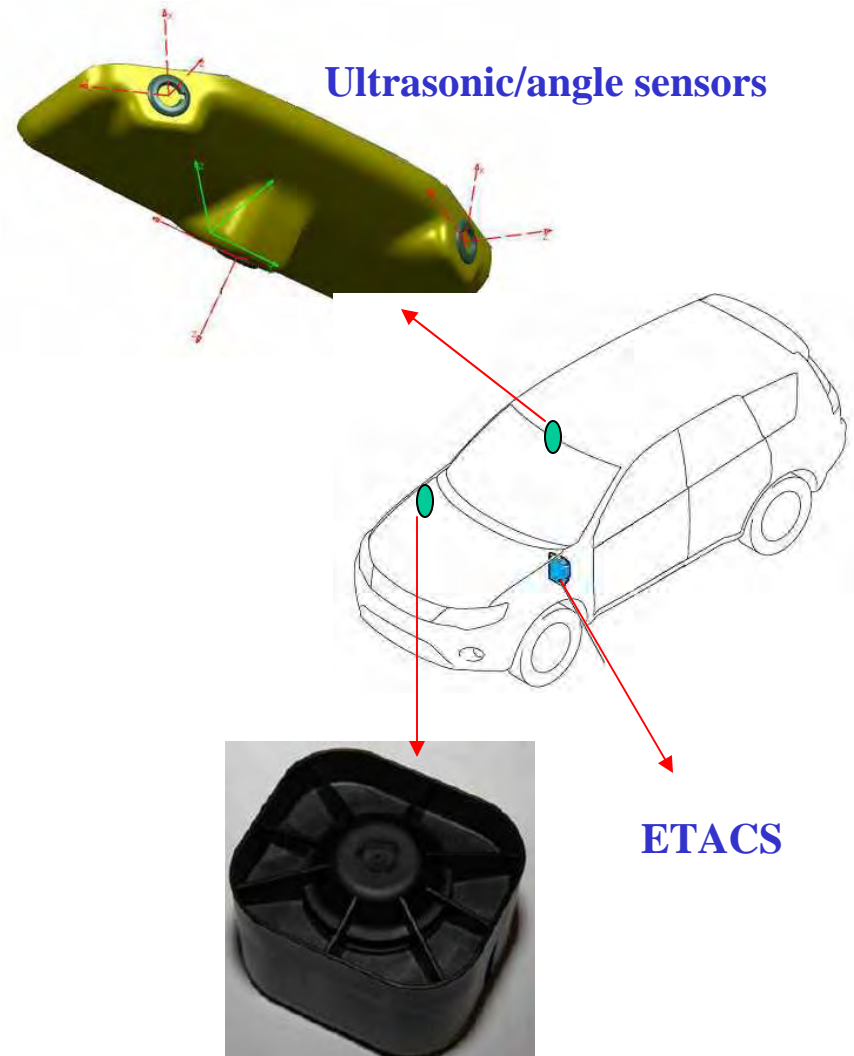
The buzzer makes an intermittent beep sound and the security indicator B flashes

If the bonnet is open the system does not enter into the arming preparation mode. When the bonnet is closed the system enters into arming mode after 20 seconds

After 20 seconds the buzzer stops and security indicator flashing slows down to indicate the Arming mode activation

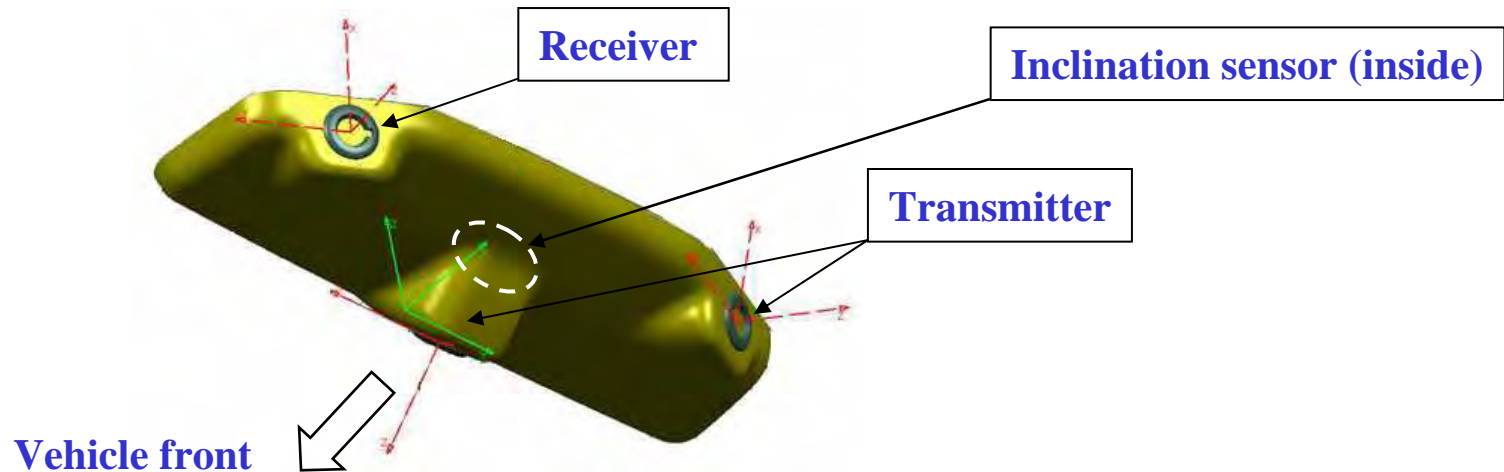


- Anti theft alarm is improved against robbery and trespass with siren, Ultrasonic sensors and angle sensor
- If anybody tries to tamper doors/bonnet or trying to enter by braking door glasses or trying to cut the battery cables or trying to lift the vehicle in armed mode, the siren sounds continuously
- Sensors function can be deactivated temporarily by holding wiper mist switch for 5 seconds and sensitivity can be adjusted through MUT 3



Siren incorporates a rechargeable battery

Anti Theft system consists of supersonic wave sensor and inclination sensor inside.



Supersonic wave sensor (for motion detection inside vehicle) Composed of 2 transmitters and 1 receiver. Supersonic wave of approximately **40kHz** emitted by the transmitters and the reflected wave (echo) received by receiver. Judgment of trespass made if the changes of reflected wave (echo) is detected.

Inclination sensor (for vehicle inclination detection) . Detects the vehicle inclination angle by accelerometer IC. If the angle of vehicle changes of **3°** over the rate of 1 degree per minute allows the judgment of robbery. (The initial angle does not affect the detection performance)

In case of the cut off of power supply and the interruption of communication are detected, the theft alarm siren blow with the internal battery power supply automatically.

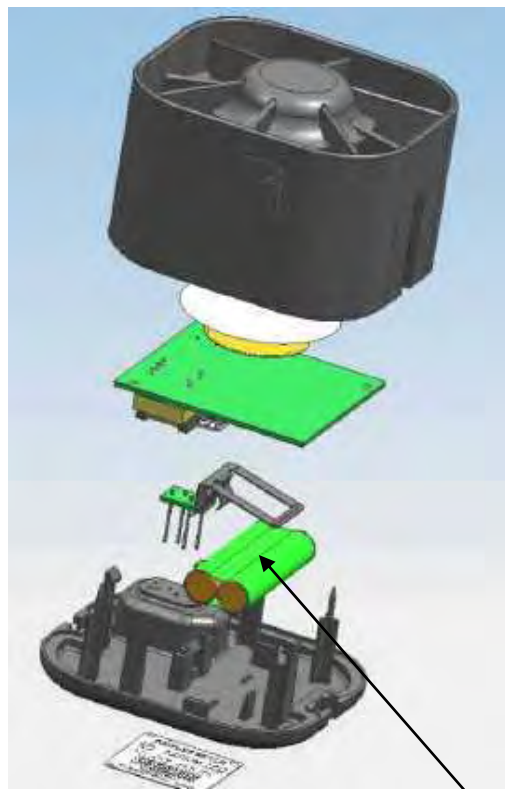
1. Internal battery

- Built-in rechargeable battery
- Rechargeable when IG-SW : ON

2. Automatic blowing

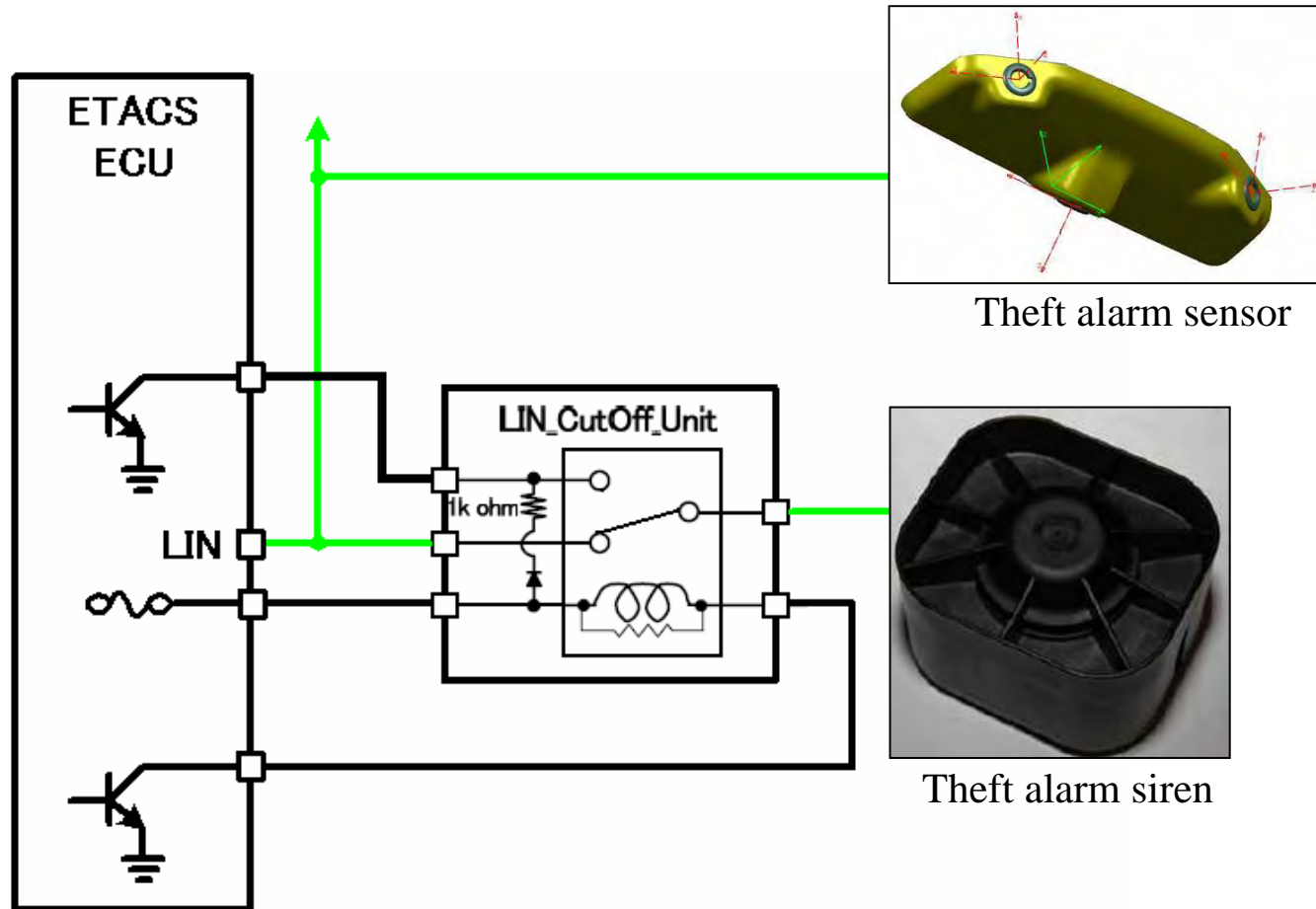
During the alert condition, either one of the following condition is being detected, system will judge as an illegal action and blow the siren within 1 second.

- Cut off of the battery power supply to theft alarm siren.
- Cut off of the battery power supply to ETACS-ECU.
- Interruption of communication with ETACS-ECU.



Internal battery

The siren is connected with ETACS via LIN communication through LIN cut off relay, This relay cuts off the communication via LIN to suppress the **dark current** . when it is in alert mode (Dark current is reverse current which may affect the LIN communication since siren is having a battery for back up)



The condition of alert shifting

Meeting of all the following requirements for more than 20 second.

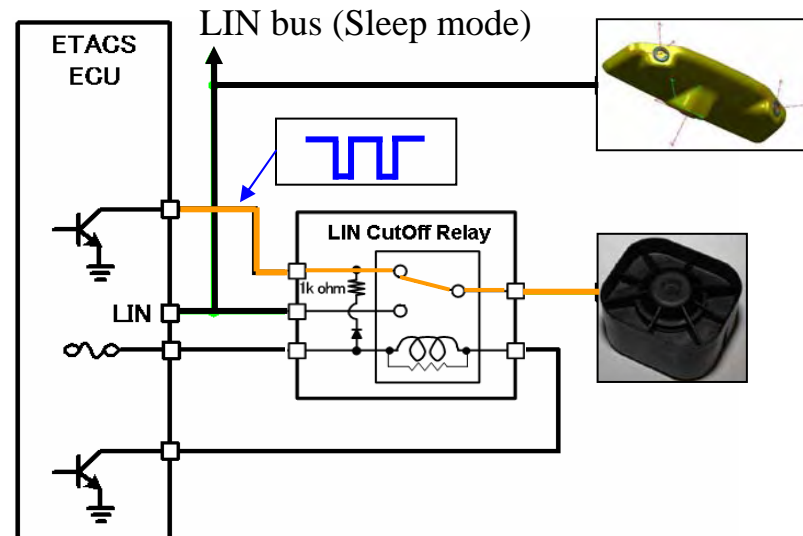
- IG-SW : OFF , engine hood SW : OFF (close)
- All doors are locks by keyless entry key or keyless operation key.

1. Alert condition shifting

ETACS-ECU switching the LIN Cut Off Relay contact point. (Disconnect the theft alarm siren from LIN bus.)

2. Alert condition

- ETACS-ECU sends pulse signals to theft alarm siren periodically. Theft alarm siren receives the pulse signals and confirms the condition of communication with ETACS-ECU.
- Theft alarm sensor is activated.
- LIN bus is sleep state.



3. Detection of trespass or robbery.

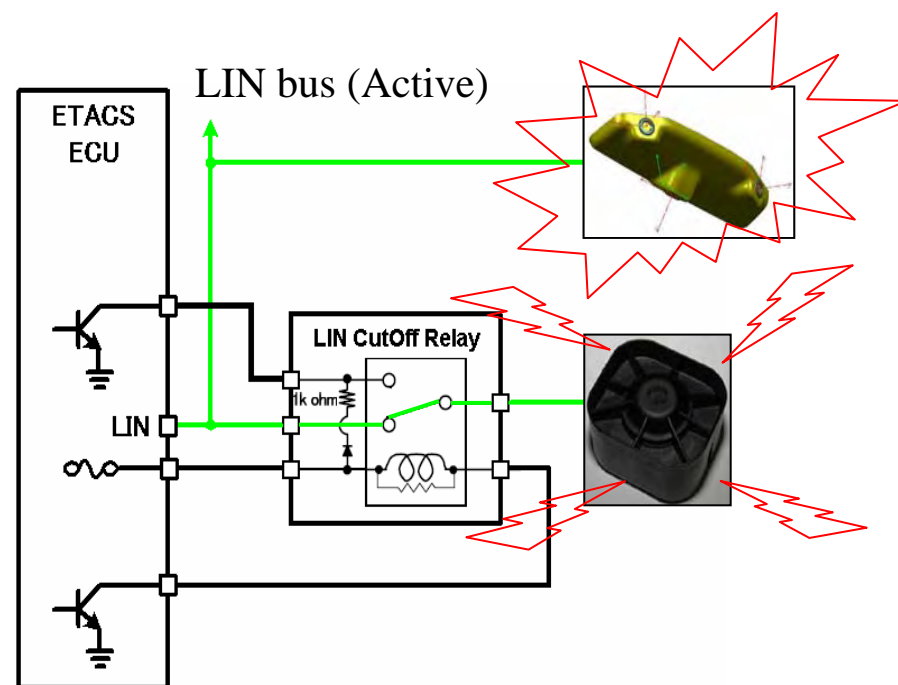
A) Detection by theft alarm sensor

- 1) Theft alarm sensor send LIN wake-up signal to ETACS-ECU.
- 2) ETACS-ECU starts LIN communication.
- 3) Theft alarm sensor sends trespass signal to ETACS-ECU.
- 4) ETACS-ECU switch LIN Cut Off Relay terminal to LIN communication side, then sends blowing request signal to theft siren.
- 5) Theft alarm beeps for during seconds.

B) Detection by theft alarm siren

Beep by the internal battery power supply automatically.

- Beep once for approximately 30 seconds and maximum repeats for 10 times.
- Beep stops after 10 times repeated or after the recovery of detected part.



ETACS DTC table

Theft alarm sensor

DTC	Diagnosis item
B120B	Theft alarm sensor error

Theft alarm siren

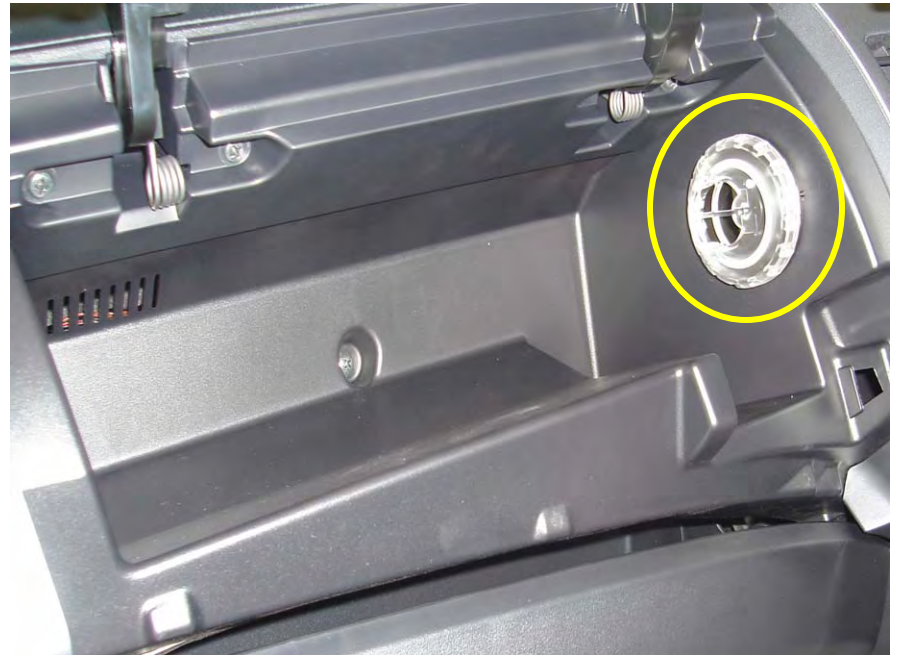
DTC	Diagnosis item
B120A	Theft alarm siren error

ETACS-ECU (New theft alarm system related)

DTC	Diagnosis item
U1006	Theft alarm siren LIN time out
U1007	Theft alarm sensor LIN time out

UPPER GLOW BOX WITH COOLER

- Open/close dial is provided on the upper glow box, which cools the glow box by using Cabin air condition in open mode



SPORTY ROOF RAILS



REFLECTOR TYPE FOG LAMP **BEZEL**



Sporty roof rails and Silver bezel fog lamps give elegance look

LEATHER COVERED INSTRUMENT PANEL



Instrument panel and upper glove box are covered with leather for **rich look**

SPORTY ALUMINIUM PEDALS



Sporty anti slip aluminium brake and accelerator pedals adopted

VANITY MIRROR WITH LAMP



Vanity mirror comes with lamp, which enables view after sunset



Thank you
Service Training Centre
Hindustan Motors Ltd