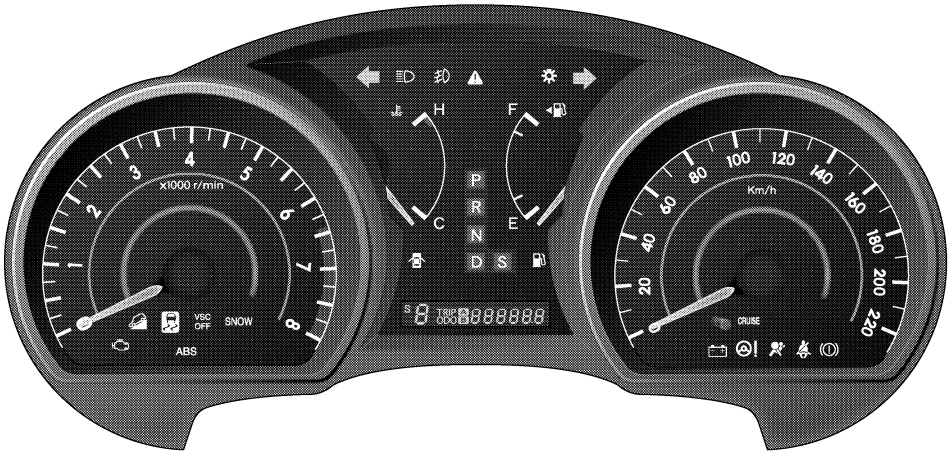
METER

■COMBINATION METER ASSEMBLY

1. General

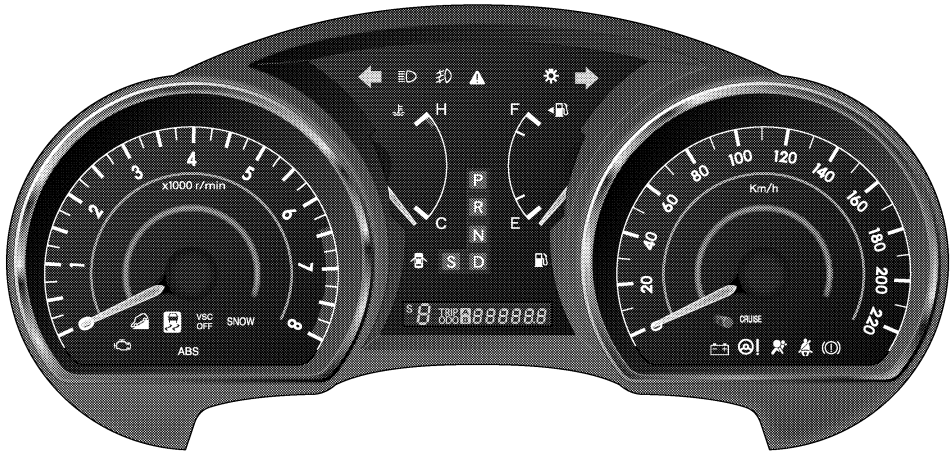
The combination meter assembly has the following features:

- The combination meter assembly is used an optitron display type. This type realizes excellent visibility through the use of smoke acrylic in the protective panel, and bright LEDs (Light Emitting Diodes) that have high contrast to illuminate the indicator and the dial.
- All the meters, gauges, indicator lights and warning lights use LEDs to reduce consumption of electrical energy.
- The combination meter assembly has a built-in Meter ECU and buzzer.
- An LCD (Liquid Crystal Display) combined odometer and trip meter is used.



Models for Australia

06K0BE18Z



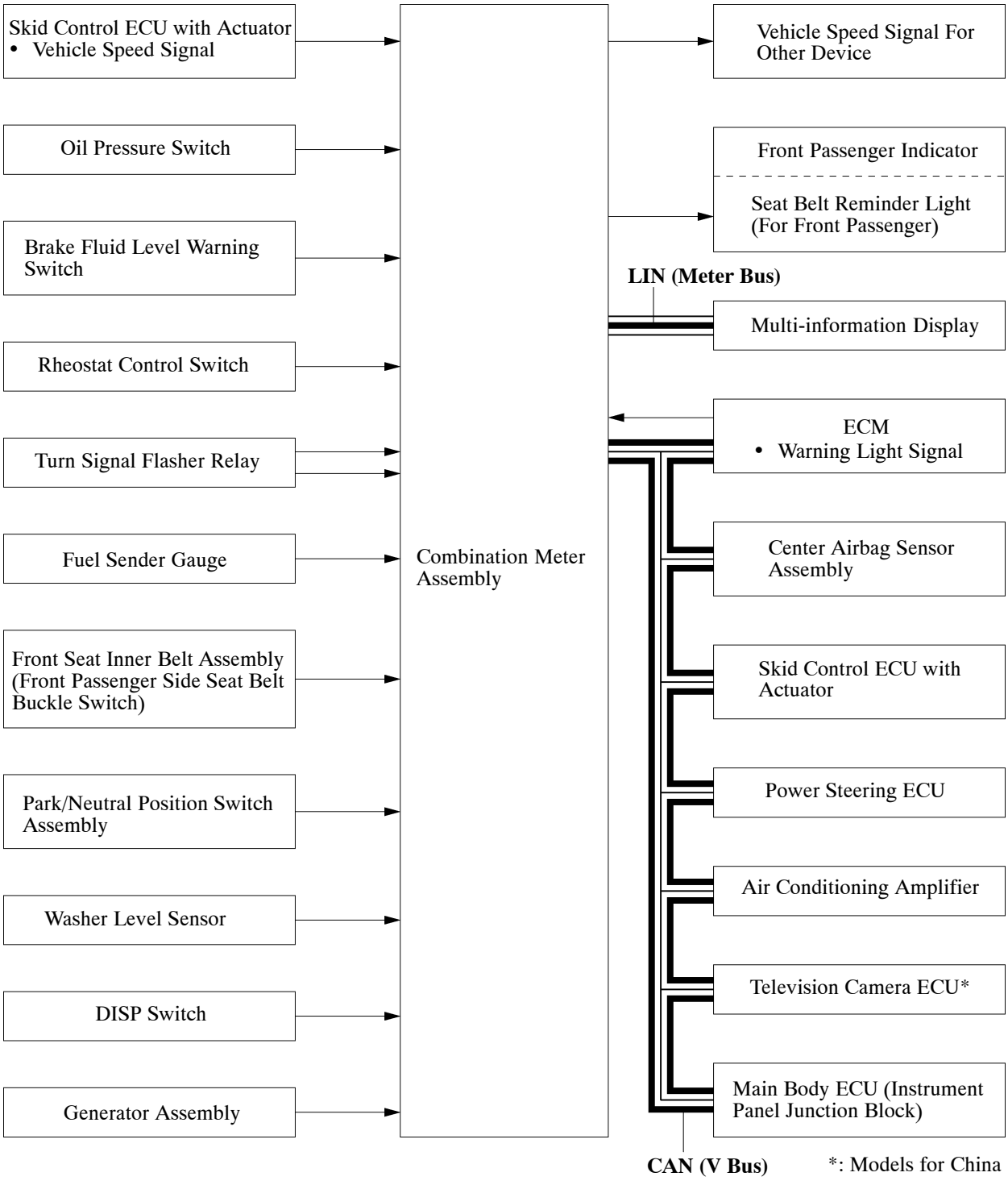
Models for China

06K0BE19Z

Service Tip

If the LEDs malfunction, the entire combination meter assembly must be replaced. For details, see the HIGHLANDER Repair Manual (Pub. No. RM06K0E).

2. System Diagram



3. Input Communication Signals to Combination Meter

Input Communication Signal	Transmitting ECU
• Starter Signal • Engine Type Signal • Cruise Control Signal • TACH Signal • Fuel Injection Information Signal • Engine Coolant Temperature Signal • ATF Temperature Signal • Current Gear Position Signal • Shift Position Signals (P, R, N, D) • Reject Buzzer Signal • Sport Mode Signal • SNOW Switch Signal	ECM
• Outside Temperature Signal	Air Conditioning Amplifier
• SRS Warning Signal • Seat Belt Buckle Switch Signal (For Driver)	Center Airbag Sensor Assembly
• Vehicle Speed Sensor Signal • Brake Warning Signal • ABS Warning Signal • Slip Indicator Signal • VSC OFF Indicator Signal • DAC Switch Signal	Skid Control ECU
• EPS Warning Signal	Power Steering ECU
• Television Camera Signal • Parking Assist Signal	Television Camera ECU (Models for China)
• Courtesy Switch Signals • Seat Belt Buckle Switch Signal (For Driver) • Key Unlock Warning Signal • Light Control Switch Signal • Automatic Dimmer Signal • Parking Brake Signal • Sliding Roof Open Warning Signal	Main Body ECU (Instrument Panel Junction Block)

4. Buzzer

General

The table below shows the warning and reminder functions of the buzzer.

Function	Item
Warning	• Downshift Warning • Multi-information Display Warning Display (See page BE-43)
Reminder	• Key Reminder • Seat Belt Reminder (See page BE-240)

Downshift Warning

When downshifting is attempted on automatic transmission vehicles while driving at a vehicle speed at which downshifting is impossible, the buzzer sounds twice (approx. 0.25 sec. × 2) as a warning and the downshift is prohibited.

- The maximum speeds at which downshifting is possible are shown in the table below.

Shift Operation	Maximum Speed
4th → 3rd	150 km/h
3rd → 2nd	92 km/h
2nd → 1st	39 km/h