

COMBINATION METER

Description

The combination meter has various meters and gauges which show the vehicle's condition, warning lights which monitor abnormalities in the vehicle and inform the driver, indicator lights which inform the driver of the condition of each part of vehicle, and a function for illumination and brightness adjustment of meters and gauges. The component parts of this system and their functions are described in the following table.

Parts Name	Function
Speedometer	The speedometer needle moves in accordance with signals from the speed sensor to indicate the vehicle's speed.
Tachometer	The tachometer needle moves in accordance with signals from the igniter to indicate the engine's speed.
Water Temperature Gauge	The water temperature gauge's needle moves in accordance with signals from the sender gauge and indicates the temperature of the engine coolant.
Fuel Gauge	The fuel gauge needle moves in accordance with signals from the sender gauge, indicating the amount of fuel remaining in the fuel tank.
Odometer	The odometer counts the total distance traveled by the vehicle in accordance with pulse signals from the speed sensor.
Twin Trip Switch	The twin trip meter counts the distance traveled by the vehicle in accordance with pulse signals from the speed sensor. It can be reset using a switch and can be used to switch between trip meters A and B.
Circuit Plate	This plate contains the circuitry for each meter and gauge and for each warning light and indicator light, as well as an internal engine oil level warning drive circuit, drive circuits for the odometer and trip meter and brightness adjustment circuitry for each indicator.
Speed Sensor	Mounted in the transmission, this sensor outputs pulse signals to the combination meter in accordance with the speed of the output shaft.
Twin Trip Switch	Operation of this switch switches between the A and B trip meters and sends reset signals to the combination meter.
Water Temperature Sensor Gauge	This sender converts engine coolant temperatures to a resistance value in signal form to the combination meter.
Fuel Sender Gauge	This sender converts the level of fuel remaining in fuel tank to resistance value and sends the resistance value in signal form to combination meter.
Rheostat Light Control Volume	In order to adjust the degree of illumination of the combination meter, the resistance value of the built-in variable resistor is sent to the combination meter and rheostat light control.
Fuel Level Warning Switch	When the level of fuel remaining falls below a predetermined level, continuity is established with this switch, which is built into the fuel sender gauge, causing a warning light to light up.
Low Oil Pressure Warning Switch	This switch is mounted on the engine block. Continuity is established in this switch when the oil pressure is low, causing a warning light to light up.
Integration Relay (Seat Belt Warning Relay)	This relay receives current from fuse GAUGE and DOME and is connected to each buckle switch, door courtesy switch, key unlock warning switch and warning light. As part of the seat belt warning system, it sounds a chime and lights a warning light when seat belts are unfastened. As part of the key unlock warning system, it sounds a chime when the set conditions are fulfilled.
Light Failure Sensor	This sensor senses when a bulb in rear combination light is burnt out and lights up a warning light.

Parts Name	Function
Coolant Level Warning Switch	This switch is installed in the radiator reservoir tank. It lights up a warning light when the coolant level becomes low.
Engine Oil Level Warning Switch Level	This switch is mounted in the engine oil pan. It lights a warning light when the engine oil level is low.
Brake Fluid Warning Switch	This switch is mounted in the brake master cylinder reservoir tank. It lights up a warning light when the brake fluid level is low.
Parking Brake Switch	This switch is on the parking brake lever bracket. Continuity in this switch is established when the lever is released, causing a warning light to light up.
Door Courtesy Switch	Continuity is established in this switch when a door is opened, causing a warning light to light up.
Warning Light Assembly	This assembly is installed in the meter cluster. When a warning light goes on, the light is projected onto the meter glass as a virtual image.
Warning Lights	When an abnormality is detected in the vehicle, current is sent to these lights, or they are grounded, causing them to light up.
Indicator Lights	Current is sent to these lights, or they are grounded, causing them to light up and indicate the vehicle's condition to the driver.
Window Washer Level Warning Switch	This switch is mounted in the window washer tank. It lights a warning light when the window washer level becomes low.