

IGNITION SYSTEM - MITSUBISHI ELECTRONIC

1986 Isuzu Trooper II

Distributors & Ignition Systems
MITSUBISHI ELECTRONIC IGNITION

Isuzu P'UP, Trooper II

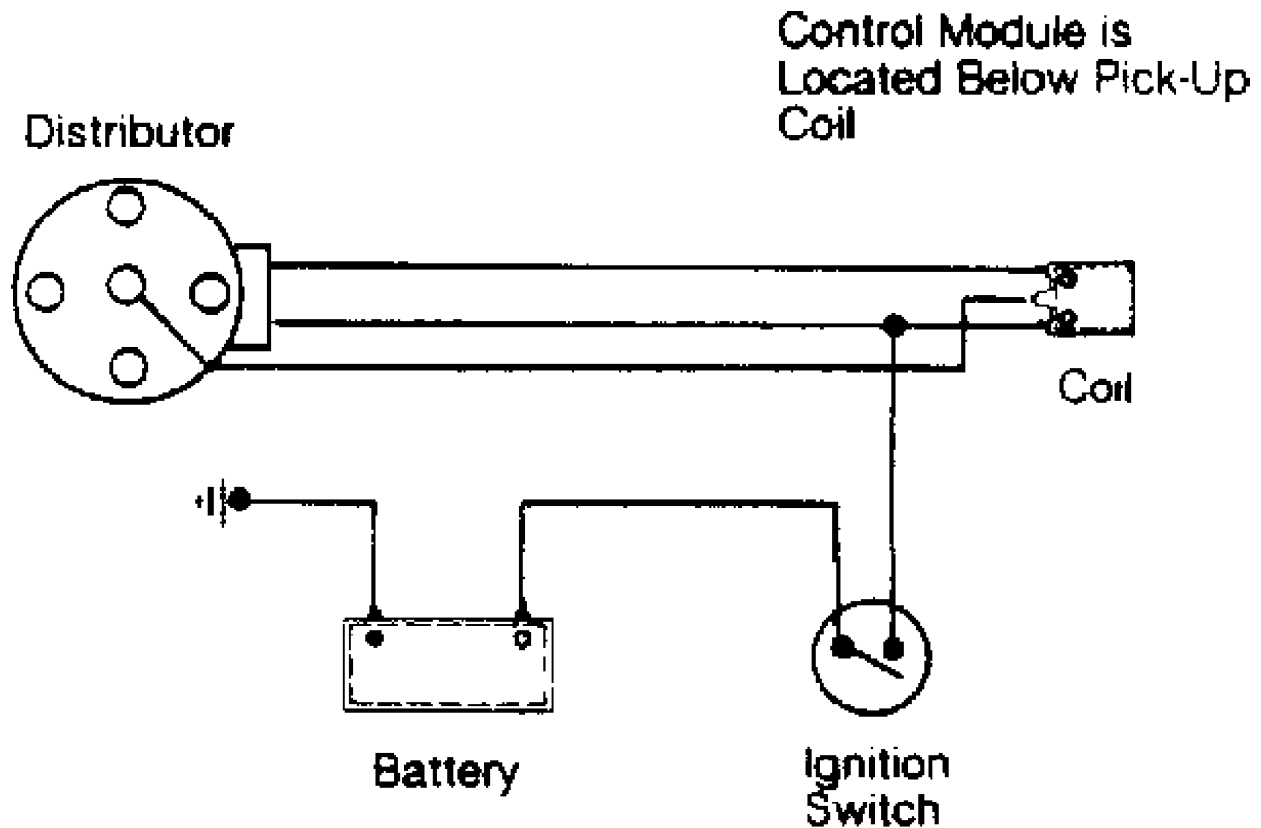
DESCRIPTION

Mitsubishi breakerless ignition consists of an ignitor, ignition coil, pick-up coil and distributor. The control module is mounted inside the distributor with the pick-up coil assembly.

OPERATION

Whenever ignition is on, ignition coil primary circuit is energized. As distributor shaft rotates, the reluctor rotates inside the stator assembly.

As armature teeth pass the pegs of the pick-up coil, a signal is sent to the ignitor. The ignitor then breaks the primary circuit in the coil. This causes a high voltage surge in the coil secondary circuit. This high voltage is required to fire the spark plugs.



29005

Fig. 1: Mitsubishi Electronic Ignition System
With Internal Control Module

ADJUSTMENTS

RELUCTOR-TO-PICK-UP COIL AIR GAP

Align reluctor teeth with pegs of pick-up coil and breaker plate assembly. Using a feeler gauge, check for correct air gap. To adjust, loosen set screws and move pick-up coil.

PICK-UP COIL AIR GAP

Application	In. (mm)
All Models012-.022 (.30-.56)

TROUBLE SHOOTING

NOTE: See the TROUBLE SHOOTING - BASIC PROCEDURES article in the GENERAL TROUBLE SHOOTING section.

TESTING

NOTE: Ensure battery is fully charged and in good condition before making any tests. Check all wiring, ignition switch, coil, spark plug cables and connectors.

HIGH VOLTAGE TEST

Connect a remote starter switch in starting circuit. Remove coil wire from distributor cap. Turn ignition on and hold coil wire 1/4" from cylinder block. Crank engine. If no spark or only a weak spark results, perform following tests.

SECONDARY WIRE RESISTANCE TEST

1) Test coil and spark plug cables with an ohmmeter. Do not puncture secondary wires when making resistance check. Connect leads to each end of cable.

2) Resistance for Mazda, Mitsubishi and Hyundai should not exceed 16,000 ohms for each 39" (1 m). For Chrysler Motors vehicles, resistance should not exceed 22,000 ohms per cable.

IGNITION COIL RESISTANCE TEST

1) Turn ignition off. Remove wires from coil primary terminals to isolate it from the rest of the system. Set an ohmmeter to the low scale, and attach the leads to the coil positive and negative terminals. Check primary resistance reading.

2) Set ohmmeter to x1000 scale. Attach leads to coil positive terminal and secondary tower. Check secondary resistance reading.

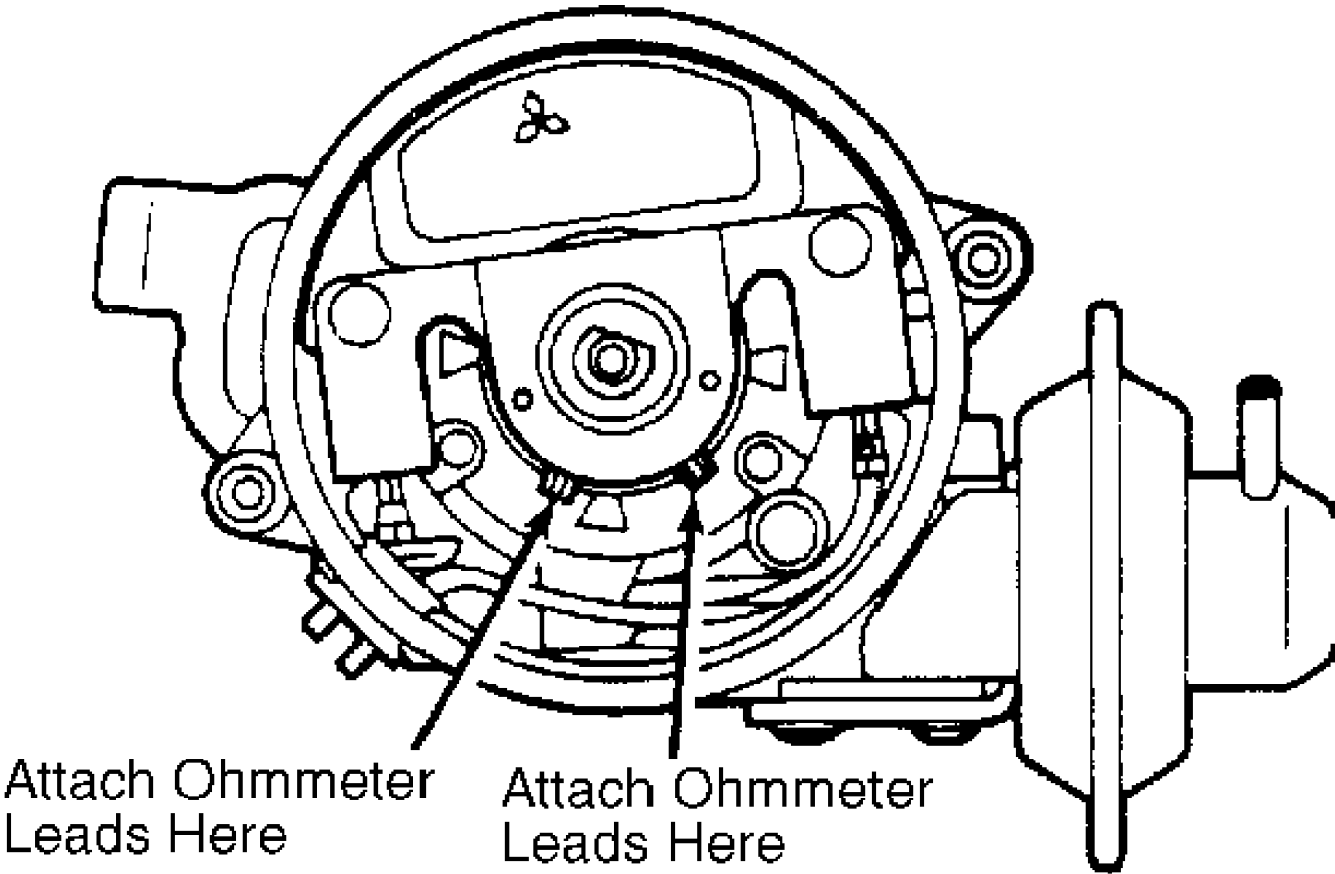
IGNITION COIL SPECIFICATIONS

IGNITION COIL RESISTANCE SPECIFICATIONS (OHMS) TABLE

Application	Primary	Secondary
All Models	1.1-1.4	8600-13,000

MAGNETIC PICK-UP COIL RESISTANCE TEST

Turn ignition off. Set ohmmeter to x100 scale. Attach leads to pick-up coil's distributor connector terminals. See Fig. 2. Compare resistance readings obtained with table. See PICK-UP COIL RESISTANCE table below.



29007

Fig. 2: Checking Pick-Up Coil Resistance
Attach ohmmeter leads to points shown.

PICK-UP COIL RESISTANCE	
Application	Ohms
Isuzu	130-190