

Mitsubishi Ignition timing on 1987-96 fuel injected vehicles with timing adjustment (diagnostic) connectors.

Symptom: Misfire, loss of power, ping, and other ignition-related problems.

Contributing Source: Mitsubishi Service Manuals.

The ECU controls ignition timing and advance after base timing is set. To check and adjust base timing:

1. Make sure the scanner is not connected to the vehicle. Ground the timing adjustment connector test terminal with a jumper wire. This puts the system into base timing mode. The connector usually is taped to a wiring harness, and may have a protective cap installed over the end to keep moisture out. Two styles of connectors have been used, figures 1 and 2. See table 1 for connector locations. To verify proper connector, check for 5-volt reference with KOER.
2. After grounding the test terminal, start the engine and check base timing.
3. To adjust base timing:
 - SOHC engine - loosen distributor retaining nuts; rotate as necessary;
 - DOHC engine - loosen crank angle sensor retaining nuts; rotate as necessary. (Sensor located at rear of intake camshaft).
4. After base timing is properly set, tighten the distributor holddown, shut the engine off, remove the jumper wire from the test terminal and reinstall the protective cap if used.

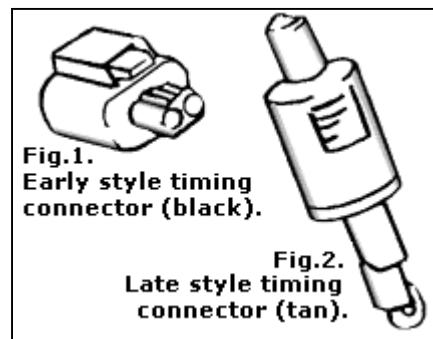


Table 1. Timing terminal connector locations.

| Model | Year | Engine | Location | Color |
|--------------|-------|------------|----------------------------------|--------------|
| Van/Wagon | 87-90 | 2.4L | Above/behind valve cover | Black |
| Galant | 87-94 | 2.0L, 2.4L | Bulkhead center | Black or Tan |
| Galant/Sigma | 88-90 | 3.0L | LF strut tower, next to coil | Black |
| Montero | 89-92 | 3.0L | Left bulkhead, below wiper motor | Black |
| Montero | 93-94 | 3.0L | Right bulkhead, below VIN plate | Tan |
| Truck | 90-96 | 2.4L, 3.0L | Right fender panel | Tan |
| Mirage | 89-92 | 1.5L, 1.6L | Bulkhead center | Black |
| Mirage | 93-95 | 1.5L, 1.8L | Bulkhead center | Tan |
| Mirage | 87-88 | Turbo | Bulkhead center | Black |
| Eclipse | 90-94 | 1.8L, 2.0L | Bulkhead, near battery | Black |
| Precis | 90-94 | 1.5L | Near air flow meter | Black |
| 3000 GT | 90-94 | 3.0L | Right strut tower, near bulkhead | Tan |
| Starion | 87-89 | 2.6L | Bracket, left of center bulkhead | Black |
| Expo/LRV | 87-89 | 1.8L, 2.4L | Bracket, left of center bulkhead | Tan |
| Diamante | 92-94 | 3.0L SOHC | Bulkhead center | Tan |
| Diamante | 92 | 3.0L DOHC | Bulkhead center | Tan |