

**NO: 08-21-96 Rev. A**

**SUBJECT: Wiring Harness Connector Repair Packages**

**DATE: Oct. 18, 1996**

**NOTE: THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 08-21-96, DATED JUL. 26, 1996, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\*.**

**NOTE: THIS BULLETIN APPLIES TO THE 1996 VEHICLES LISTED ABOVE AND 1997 WRANGLERS BUILT PRIOR TO JULY 15TH, 1996 (MDH 0715XX). \*\*ALSO, CHEROKEES (XJ) BUILT ON JULY 15TH, 1996 (MDH 0715XX) OR AFTER WERE BUILT WITH 1997 STYLE WIRING HARNESSSES AND CONNECTORS AND ARE NOT EFFECTED BY THIS BULLETIN.\*\***

## **DISCUSSION:**

Intermittent electrical complaints can be caused by poor electrical connections and can be very difficult to diagnose. Once diagnosed, the repair can be anywhere from simply reconnecting an electrical connector to complete wiring harness replacement. The following drivetrain electrical connector repair components have recently been made available to aid in drivetrain electrical repairs without replacing a complete harness. If you have determined that a customer complaint could be related to a poor electrical connection, use the following diagnosis to inspect the electrical connectors.

## **DIAGNOSIS:**

This bulletin involves only electrical connections to the following components:

- Throttle Position Sensor (TPS)
- Manifold Absolute Pressure (MAP) Sensor
- Oxygen (O2) Sensor
- Crankshaft Position (CKP) Sensor
- Distributor "Sync" Position Sensor
- Vehicle Speed Sensor (VSS)
- Fuel Injector
- Ignition Coil
- Idle Air Control (IAC) Motor
- Purge Solenoid
- Transmission Solenoid (8-way)
- Engine Coolant Temperature (ECT) Sensor and Gauge Sending Unit

Inspection of the connector begins with a thorough inspection of the insulator. If the insulator's locking tab is broke, replace the insulator. If the insulator's end seal or seal ring is damaged, replace the seal. Gently pull on the wires of the connector one at a time. If the wire pulls out of the insulator, remove and inspect the wedge lock. Also, inspect the locking tab inside the insulator. Replace the wedge lock if there are any signs of damage. Replace the insulator if the locking tab is damaged.

Inspect all wire terminals for corrosion. If corrosion is evident, replace the terminal ends and both insulator seals. To verify how secure the terminal fits to the component, insert and remove the harness side connector terminal onto the mating terminal of the component. Then, rotate the terminal 90°, 180°, and 270° while inserting and removing the terminal onto the pin of the component.

**NOTE: YOU WILL NEED TO INDIVIDUALLY CHECK EACH TERMINAL-TO-PIN CONNECTION FOR ANY MULTI-TERMINAL CONNECTOR.**

If any connection is loose, replace the harness side connector terminal after verifying a good connection with the new terminal. For information regarding service procedures of electrical connectors, refer to Section 8W of the appropriate Service Manual.

## **PARTS REQUIRED:**

COMPONENT	INSULATOR PART NUMBER	TERMINAL PART NUMBER	WEDGE LOCK PART NUMBER	END SEAL PART NUMBER	RING SEAL PART NUMBER
Throttle Position and Vehicle Speed Sensors	04450545	04625130	04450091	04450092	04450093
Manifold Absolute Pressure Sensor	04450090	04625130	04450091	04450092	04450093
Front Oxygen Sensor	04707126	04400110	N/A	N/A	N/A
Rear Oxygen Sensor	04707127	04400110	N/A	N/A	N/A
Crank Position Sensor (MANUAL TRANSMISSION)	56016982	04604597	56016987	04414474	56016985
Crank Position Sensor (AUTO TRANSMISSION)	56016983	04604597	56016987	04414474	56016985
Crank Position Sensor Retainer P/N 56016988					
Distributor Synchronization Pickup	04414468	04604597	04414470	04414474	56017460
Engine Coolant Temperature Sensor (3.9L, 5.2L, 5.9L, and 8.0L)	56006291	04558005	N/A	N/A	N/A
Engine Coolant Temperature Sensor (2.5L and 4.0L)	04331569	04331568	N/A	N/A	N/A
Engine Coolant Temperature Gage Sending Unit	56006431	04558005	N/A	N/A	N/A
Intake Air Temperature Sensor	04414270	04331568	N/A	N/A	N/A
Oil Pressure Sensor	04414048	04625130	04414024	04414047	04414049
Fuel Injector	04604512	N/A	N/A	N/A	04604519
Ignition Coil	04481614	04625130	04414024	4414047	04414049
Idle Air Control Motor	56018428	04331568	N/A	N/A	N/A
Purge Solenoid	04661957	04604597	04661974	N/A	N/A
Transmission Solenoid	56017053	56017057	N/A	N/A	N/A

## POLICY:

Information Only