

# Diagnosis and Repair Bulletin

**Subject: Carbon Knock**

**Application: 1980-81 Jeep Vehicles with Four-, Six-, or Eight-Cylinder Engine**

**File: POWER PLANT Engines**

**No.81-2 Feb. 19, 1981**

The four-, six-, and eight-cylinder engines used in 1980-81 Jeep vehicles may develop a knock caused by carbon buildup on the pistons and combustion chambers. Carbon knock is more likely to occur on high mileage engines but may also occur on low mileage engines depending on the type of driving involved. Carbon knock is not sensitive to engine loading and is most noticeable when the engine is not under load. Carbon knock may be loudest when the engine is cold and may continue after the engine warms up.

Service correction involves removing carbon buildup using Jeep Carburetor and Combustion Area Cleaner, or equivalent, if the knock is not sensitive to engine load.

The following part may be required.

| <u>Description</u>                      | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|---|-----------------|-----------------|--------------|
| CLEANER, Carburetor and Combustion Area | Case of 12      | 8993813         | 15.410       |

The following standard servicing operation and work time will apply:

| OPERATION DESCRIPTION                           | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |     |    | SKILL LEVEL |
|---|-----------|------------------|-------|---------------|-----|----|-------------|
|   |           |                  |       | 80            | 81  | 82 |             |
| COMBUSTION CHAMBERS, CYLINDER HEAD — CLEAN..... | 1.059     | 1117             | All   | 0.3           | 0.3 |    | G           |

81-039-01A/J

## PROCEDURE

- (1) Remove air cleaner top.
- (2) Operate engine until it is at normal operating temperature.
- (3) Operate engine at fast idle speed and spray cleaner directly into carburetor venturi until container is empty.
- (4) Stop engine when container is empty and allow cleaner to penetrate carbon for five minutes.
- (5) Start engine and open and close throttle rapidly for two minutes.
- (6) Install air cleaner top.

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# Diagnosis and Repair Bulletin

**Subject: Six-Cylinder Camshaft Pin Breakage**

**Application: 1977-80 Jeep Vehicles With Six-Cylinder Engines**

**File: POWER PLANT Engines**

**No. 80-3 Feb. 4, 1980**

If incorrect valve timing is indicated after checking valve timing, the cause may be a broken camshaft pin. It is no longer necessary to replace the camshaft because of pin failure. A spring pin is now available as a service replacement part.

Service correction involves replacing a broken camshaft pin with a new spring pin.

The following parts are available and will be required.

| <u>Description</u>             | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|--------------------------------|-----------------|-----------------|--------------|
| PIN, Spring (Camshaft)         | 1               | GM456384        | 1.040        |
| GASKET SET, Timing Case Cover  | 1               | 8129097         | 1.121        |
| SCREW, Hex Washer Head Tapping | 1               | G448423         | 17.671       |

## PROCEDURE

- (1) Disconnect battery negative cable.
  - (2) Drain radiator.
- NOTE: Do not waste usable coolant. Collect drained coolant in a clean container.**
- (3) Remove fan and shroud.
  - (4) Disconnect overflow hose, radiator hoses and transmission cooler lines from radiator and remove radiator.
  - (5) If equipped with air conditioning:
    - (a) Remove air conditioning belt intermediate pulley.
    - (b) Disconnect and remove alternator.

**CAUTION: Do not loosen or disconnect any air conditioning system fittings. Move the condenser aside as a complete assembly.**

- (c) Remove air conditioning condenser attaching bolts and move condenser up and out of way.

(6) Remove all drive belts.

(7) Remove crankshaft vibration damper.

(8) Remove timing chain cover.

(9) Remove camshaft gear bolt and remove gear and chain.

**CAUTION: The following procedural step must be performed to prevent the camshaft from damaging the rear camshaft plug during pin installation.**

(10) Remove fuel pump. Insert suitable tool into fuel pump opening and wedge tool against side of opening and camshaft to prevent camshaft movement.

(11) Inspect damaged camshaft pin.

(a) If pin is spring pin, remove broken pin by inserting G448423 screw into pin and carefully pulling pin from camshaft.

(b) If pin is dowel pin:

**CAUTION: Be sure the exact center is located when center punching the pin.**

1. Center punch pin.

2. Drill through pin center using 5/32-inch drill bit.

3. Insert G448423 screw into drilled pin and carefully pull pin from camshaft.

**NOTE: Cover the open oil pan area to prevent metal chips from entering the pan.**

(12) Clean camshaft pin hole of any loose material.

(13) Compress replacement spring pin in center using vise grips. Carefully drive pin into camshaft until it is seated.

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**CAUTION:** *If the camshaft moves rearward, reposition the tool wedged against the camshaft so that the camshaft cannot move. If the camshaft moves rearward, damage to the rear camshaft plug may result.*

(14) Install camshaft gear and timing chain. Tighten camshaft gear bolt to 50 foot-pounds (68 N·m) torque. Check valve timing as outlined in 1980 Jeep Technical Service Manual.

(15) Remove tool wedged in fuel pump opening. Install fuel pump. Tighten pump bolts to 16 foot-pounds (22 N·m) torque and connect fuel lines.

(16) Remove timing case cover seal and clean cover.

(17) Position oil pan tab gaskets on oil pan and use RTV type sealer to hold gasket in place. Coat both sides of timing case cover gasket with sealer. Apply 1/8-inch (3 mm) bead of sealer to joint formed at oil pan and cylinder block.

(18) Loosen front four oil pan bolts about 3 turns to allow oil pan movement during timing case cover installation.

(19) Position timing case cover on engine. Place timing case alignment tool and seal installer J-22248, in crankshaft opening of cover.

(20) Install and tighten oil pan and front cover screws.

**NOTE:** *Tighten 1/4-20 oil pan screws to 7 foot-pounds (9 N·m) torque and 5/16-18 oil pan screws to 11 foot-pounds (15 N·m) torque.*

(21) Remove cover aligning tool and position replacement oil seal on tool with lip facing outward. Apply

light film of AMC Perfect Seal, or equivalent, on outside diameter of seal.

(22) Position tool and seal in front cover opening. Use vibration damper bolt to pull seal into front cover. Turn bolt until tool bottoms against cover.

(23) Remove tool and install vibration damper on crankshaft. Tighten damper bolt to 80 foot-pounds (108 N·m) torque.

**NOTE:** *If the crankshaft turns before the damper bolt torque value is reached, the damper can be held from turning by placing two 5/16 X 1-1/2-inch bolts into the vibration damper front pulley holes and wedging a bar between them. Rotate the bar until it contacts the frame member to prevent the damper from turning.*

(24) If equipped with air conditioning:  
 (a) Install air conditioning belt intermediate pulley.  
 (b) Install alternator.  
 (c) Install air conditioner condenser.

(25) Install drive belts on pulleys.

(26) Install radiator. Connect radiator hoses, transmission cooler lines if equipped and fill cooling system.

(27) Install fan and shroud.

(28) Follow belt tightening procedure outlined in 1980 Jeep Technical Service Manual.

(29) Tighten fan assembly nuts to 18 foot-pounds (24 N·m) torque.

(30) Connect battery negative cable.

The following operation and standard work times will apply:

| OPERATION DESCRIPTION                                  | COST CODE    | OPERATION NUMBER | MODEL         | YEAR AND TIME |            |            |            | SKILL LEVEL |
|--|--------------|------------------|---------------|---------------|------------|------------|------------|-------------|
|  |              |                  |               | 77            | 78         | 79         | 80         |             |
| <b>PIN, SPRING CAMSHAFT GEAR DRIVE-- REPLACE</b> ..... | <b>1.040</b> | <b>1163</b>      | <b>6-Cyl.</b> | <b>1.7</b>    | <b>1.7</b> | <b>1.7</b> | <b>1.7</b> | <b>G</b>    |
| With Air Conditioning-- Add .....                      |              |                  |               | <b>0.3</b>    | <b>0.3</b> | <b>0.3</b> | <b>0.3</b> |             |
| With Power Steering-- Add .....                        |              |                  |               | <b>0.4</b>    | <b>0.4</b> | <b>0.4</b> | <b>0.4</b> |             |
| Includes 6 minutes helper time.                        |              |                  |               |               |            |            |            |             |

80-044-01A/J

# Diagnosis and Repair Bulletin

**Subject: Exhaust Manifold to Exhaust Pipe Studs and Nuts**

**Application: 1980 Jeep Vehicles with Six-Cylinder Engines**

**File: POWER PLANT Engines**

**No. 80-2 Nov. 2, 1979**

A new design exhaust manifold locking stud and hexagon nut has been introduced for 1980 six-cylinder engines.

The stud incorporates a special thread design that contains a locking feature (the thread design can be recognized by its shallow thread depth). The stud also has a triangular shaped surface (as opposed to a round surface) that helps in the locking process. The hexagon nut is coated with "Seez Pruf" coating and is an SAE grade 8 nut. These are the only stud and nut assemblies that should be used on 1980 six-cylinder engines.

Because of the assembly design, special procedures are needed for service. When servicing the joint only, as in the case of a cylinder head removal, follow the Nut Removal Procedure. If stud(s) are being replaced, as in the case of stud damage or loss of the "shallow thread" locking feature, the Stud Removal Procedure must be followed to prevent possible damage to the exhaust manifold.

## NUT REMOVAL PROCEDURE

(1) Saturate stud and nut assemblies with AMC/Jeep Heat Valve Lubricant part number 8993552 and allow to penetrate for approximately five minutes.

**CAUTION:** Do not use impact tools as this can damage the stud and/or manifold.

(2) Remove existing nuts using hand tools.

(3) Clean stud of foreign material.

(4) Position exhaust pipe flange over studs.

(5) Install two new hexagon nuts and tighten them in equal amounts to 20 foot-pounds (27 N-m) torque.

## STUD REMOVAL PROCEDURE

(1) Clean foreign matter from stud.

(2) Turn two standard 3/8-inch x 16 nuts down stud.

(3) Using hand tools, turn nuts in opposite directions to lock together.

(4) Using hand tools, remove stud using locked nuts as leverage point.

(5) Start standard 3/8-inch x 16 nut onto new stud. Install nut onto end that contains approximately 1 inch of threads before band.

(6) Start stud into manifold.

(7) Carefully tighten nut until about four threads are exposed past nut.

**NOTE:** Do not tighten nut down on stud any farther than necessary as stud locking design may be disturbed.

(8) Start another standard 3/8-inch x 16 nut onto exposed threads. Using hand tools, tighten nuts in opposite directions to lock together.

(9) Tighten stud into manifold to 20 foot-pounds (27 N-m) torque.

(10) Remove two nuts taking care not to back out stud.

The following operations and standard work times will apply:

| OPERATION DESCRIPTION                                 | COST CODE | OPERATION NUMBER | MODEL  | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|--------|---------------|----|----|-------------|
|   |           |                  |        | 80            | 81 | 82 |             |
| STUD, EXHAUST PIPE FLANGE TO MANIFOLD -- REPLACE..... | 4.178     | 4192             | 6-Cyl. | 0.7           |    |    | G           |
| Both .....  | 4.178     | A                |        | 0.9           |    |    | G           |

80-020-04AJ

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# Diagnosis and Repair Bulletin

**Subject: Rear Crossmember and Torque Reaction Bracket Reposition**

**Application: 1980 CJ-7 Four-Cylinder Equipped Vehicles Built Between VIN J0M93XX009040 and J0M93XX014233**

**File: POWER PLANT Engines**

**No. 80-1 Oct. 30, 1979**

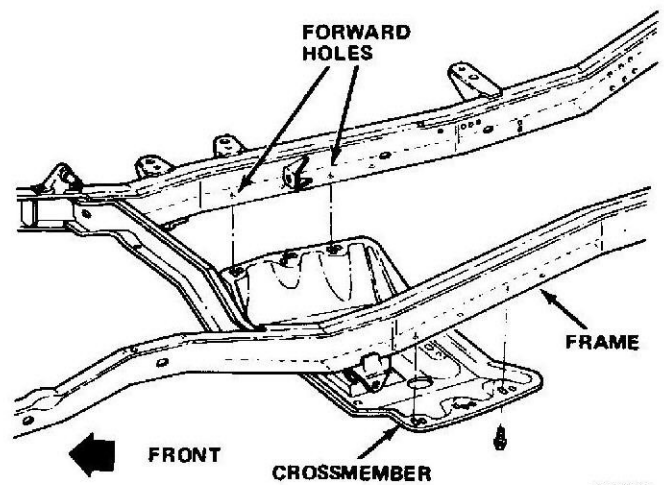
Some 1980 CJ-7 four-cylinder equipped vehicles built between VIN J0M93XX009040 and J0M93XX014233 were assembled with the torque reaction bracket installed in the rear (towards the rear of the vehicle) set of holes in the transmission-to-transfer case adapter and the rear crossmember positioned incorrectly. This combination results in a noise being caused by contact between the transfer case and the rear crossmember reinforcement.

Service correction involves moving the torque reaction bracket to the front set of holes in the adapter and correctly positioning the rear crossmember.

### PROCEDURE

- (1) Raise vehicle.
- (2) Support transfer case assembly.
- (3) Remove rear engine mount nuts and torque reaction bracket stud nut.
- (4) Remove rear crossmember bolts and rear crossmember.
- (5) Remove torque reaction bracket from transmission-to-transfer case adapter.
- (6) Install torque reaction bracket to adapter using forward (towards the front of vehicle) set of holes in adapter. Tighten bolts to 30 foot-pounds (41 N·m) torque.

- (7) Align forward slot in rear crossmember over forward hole in frame (see illustration). Install rear engine mount nuts loosely to hold crossmember in place while crossmember bolts are installed. Tighten crossmember bolts to 30 foot-pounds (41 N·m) torque.



**Rear Crossmember Location**

90957

- (8) Tighten rear engine mount nuts to 40 foot-pounds (54 N·m) torque. Install and tighten torque reaction bracket stud nut to 25 foot-pounds (34 N·m) torque.

- (9) Remove support at transfer case.
- (10) Lower vehicle.

The following operation and standard work time will apply:

| OPERATION DESCRIPTION  | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------|---------------|----|----|-------------|
|  |           |                  |       | 80            | 81 | 82 |             |
| CROSSMEMBER, REAR AND TORQUE REACTION BRACKET — REPOSITION . . . . . | 1.010     | 1215             | 93    | 0.3           |    |    | G           |

80-021-BSA

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# Diagnosis and Repair Bulletin

**Subject: Coolant Recovery Return Hose Kinked**

**Application: 1980 Cherokee, Wagoneer and Truck Models With Six-Cylinder Engine**

**File: POWER PLANT Cooling**

**No. 80-1 March 31, 1980**

On some 1980 Cherokee, Wagoneer and Truck models with a six-cylinder engine and coolant recovery system, the coolant return hose may kink near the coolant recovery bottle. A kinked hose may not allow coolant to return from the recovery bottle to the radiator and may cause the radiator upper hose to collapse.

Service correction involves replacing the existing coolant recovery return hose with a molded-type hose.

The following part is available and required.

| Description                               | Quantity | Part No. | Group |
|---|----------|----------|-------|
| HOSE, Coolant Recovery Bottle to Radiator | 1        | 3237203  | 2.025 |

### PROCEDURE

- (1) Place drain pan under radiator.

**WARNING:** *Cooling system pressure must be relieved before removing the radiator cap. Place two or three shop towels over the cap. Turn the cap counterclockwise to its safety catch and allow pressure to release. Do not press the cap down or attempt to remove it until all pressure is released.*

The following operations and standard work times will apply:

| OPERATION DESCRIPTION                        | COST CODE | OPERATION NUMBER | MODEL  | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|--------|---------------|----|----|-------------|
|  |           |                  |        | 80            | 81 | 82 |             |
| HOSE, RADIATOR CORE OVERFLOW — REPLACE ..... | 2.020     | 2026             | 6 Cyl. | 0.2           |    |    | M           |
| HOSE, COOLING SYSTEM — REPLACE .....         |           | 2020             |        |               |    |    | M           |
| Includes hose clamps as required             |           |                  |        |               |    |    |             |
| Upper radiator .....                         | 2.038     |                  | 6 Cyl. | 0.3           |    |    |             |

80-089-02J

- (2) Remove radiator cap.

- (3) Inspect radiator upper hose for signs of pressure or fan belt rubbing. Replace radiator upper hose if necessary.

**NOTE:** *Do not waste reusable coolant.*

- (4) Remove coolant recovery hose clamps at radiator and coolant recovery bottle.

- (5) Remove and discard existing coolant recovery return hose.

- (6) Trim replacement coolant recovery hose as follows: Cut 1.25 inches from short end of hose and cut 5.25 inches from long end of hose. Cut short hose end at 45° angle and cut long end at 90° angle.

- (7) Install replacement coolant recovery hose. Insert short end of hose into coolant recovery bottle and install long end on radiator filler neck. Be sure hose end inserted in recovery bottle will always be submerged in coolant.

- (8) Install hose clamps. Refill radiator and install radiator cap.

**NOTE:** *If the radiator fills prior to complete usage of the expelled coolant, pour the remainder of the coolant into the recovery bottle.*

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# Diagnosis and Repair Bulletin

**Subject: Spark Knock Repair**

**Application: 1980 49-State Cherokee and J-10 Truck Models With Manual Transmission, 360-CID Engine, and Standard or Heavy-Duty Cooling**

**File: POWER PLANT Engine Electrical**

**No. 80-2 April 10, 1980**

Some early production 49-State Cherokee and J-10 Truck models with manual transmission, 360 CID eight-cylinder engine, and standard or heavy-duty cooling may develop a persistent spark knock at a steady speed of about 40 mph.

Service correction involves adding a vacuum ported spark CTO switch, relocating the EGR CTO switch on models with heavy-duty cooling, and replacing the EGR valve restrictor plate.

The following parts kit is required and will be available the week of May 5, 1980. Do not order parts before this date.

| Description                | Quantity | Part No. | Group |
|----------------------------|----------|----------|-------|
| KIT, Spark Knock Eliminate | 1        | 8130428  | 4.700 |

This kit contains the following parts:

| Description  | Quantity | Part No. | Group |
|--|----------|----------|-------|
| TEE, Vacuum Ported Switch and Heater Hose Nipple-to-Manifold | 1        | G444150  | 4.704 |
| TEE, Vacuum  | 1        | 3210891  | 4.701 |
| GASKET, Exhaust Gas  | 2        | 3221283  | 4.700 |
| TEE, Vacuum Hose   | 1        | 3233134  | 4.701 |
| PLATE, Exhaust Gas Recirculating Valve Restrictor            | 1        | 3235342  | 4.700 |
| SWITCH, Vacuum Ported (Spark CTO)                            | 1        | 3229450  | 4.704 |
| HOSE 0.0156 ID 50 Inches Long                                | 1        | 8125812  | 4.701 |

The following parts may be required:

| Description                            | Quantity | Part No. | Group |
|--|----------|----------|-------|
| GASKET, Thermostat HOUSING, Thermostat | AR       | 3187543  | 2.102 |
|  | AR       | 3210852  | 2.102 |

## INSPECTION PROCEDURE

Determine if vehicle has standard or heavy-duty cooling as follows:

- If vehicle has CTO switch in thermostat housing, vehicle has heavy-duty cooling system. Refer to Correction Procedure — With Heavy-Duty Cooling.
- If vehicle does not have CTO switch in thermostat housing, vehicle has standard cooling system. Refer to Correction Procedure — With Standard Cooling.

## Correction Procedure — With Standard Cooling

- (1) Remove air cleaner assembly.
  - (2) Remove EGR valve. Discard EGR valve restrictor plate and gaskets but retain EGR valve.
  - (3) Position gasket on each side of replacement EGR restrictor plate and install restrictor plate and EGR valve. Tighten valve attaching bolts to 14 foot-pounds (19 N-m) torque.
  - (4) Drain approximately three quarts of engine coolant from radiator into clean container.
- WARNING:** *Be very careful when draining the coolant as it may be hot enough to cause potentially serious injury through scalding.*
- (5) Remove pipe plug from rear of thermostat housing.
- NOTE:** *If the thermostat housing does not contain a pipe plug, replace the thermostat housing with housing 3210852.*
- (6) Install ported vacuum spark CTO switch in pipe plug hole in thermostat housing. Tighten switch to 20 foot-pounds (27 N-m) torque.
  - (7) Remove reverse delay valve and short length of vacuum hose that connects valve to distributor vacuum advance. Retain delay valve and short length of hose.

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(8) Connect hose from vacuum line T-connector to distributor vacuum advance unit. Then disconnect opposite end of this hose and connect it to center port of spark CTO switch.

(9) Connect 12-inch length of vacuum hose to vacuum line T-connector and to inner port of spark CTO switch.

(10) Connect short length of vacuum hose and reverse delay valve to top port of spark CTO switch. Be sure brown color coded side of delay valve is toward spark CTO switch.

(11) Connect a two-inch length of vacuum hose to reverse delay valve and install vacuum line T-connector, supplied in kit, in opposite end of this hose.

(12) Using vacuum line T-connector as guide, cut vacuum hose connected to diverter valve and manifold vacuum port and connect cut ends of this hose to T-connector.

(13) Fill cooling system and purge system of air.

(14) Verify vacuum hose routing. Refer to Figure 1.

(15) Install air cleaner and close hood.

#### Correction Procedure — With Heavy Duty Cooling

(1) Remove air cleaner.

(2) Remove EGR valve. Discard EGR valve restrictor plate and gaskets but retain EGR valve.

(3) Position gasket on each side of replacement EGR valve restrictor plate and install restrictor plate and EGR valve. Tighten valve attaching bolts to 14 foot-pounds (19 N·m) torque.

(4) Drain approximately three quarts of engine coolant from radiator into clean container.

**WARNING:** *Be very careful when draining the coolant as it may be hot enough to cause potentially serious injury through scalding.*

(5) Remove EGR CTO switch from front of intake manifold. Retain switch.

**NOTE:** *It may be necessary to remove the coil bracket to gain access to the EGR CTO switch.*

(6) Disconnect heater hose from heater hose elbow and remove elbow from intake manifold.

(7) Install heater hose elbow in female end of vacuum ported switch and heater hose nipple-to-manifold tee.

(8) Install two-port EGR CTO switch (removed previously) in nipple-to-manifold tee and tighten switch to 20 foot-pounds (27 N·m) torque. Position CTO switch so switch ports are pointing upward. Tighten tee so that CTO switch faces front of vehicle.

(9) Connect heater hose to heater hose elbow.

(10) Remove and discard vacuum hose connected to carburetor spark port. Replace this hose with 24-inch length of vacuum hose and connect new hose to carburetor spark port and to inner port of EGR CTO switch.

(11) Connect EGR thermal vacuum switch hose to remaining port on EGR CTO switch. Shorten hose as necessary to obtain satisfactory hose routing.

(12) Install three-port vacuum ported spark CTO switch in front of intake manifold at location formerly occupied by EGR CTO switch. Tighten switch to 20 foot-pounds (27 N·m) torque.

(13) Remove reverse delay valve and vacuum harness that connects top port of CTO switch (in thermostat housing) to carburetor spark port tee fitting. Retain harness and delay valve.

(14) Connect nine-inch length of vacuum hose to carburetor spark port tee fitting and to bottom port of three-port vacuum ported spark CTO switch in manifold.

(15) Locate vacuum hose that connects manifold vacuum tee fitting to bottom port of CTO switch in thermostat housing and remove manifold vacuum tee fitting tee and replace it with four-port hose tee supplied in kit.

(16) Connect vacuum hose from bottom port of CTO switch in thermostat housing to a port on four-port hose tee.

(17) Install vacuum harness and reverse delay valve. Connect short vacuum hose to top port of three-port vacuum ported spark CTO switch and connect long hose to remaining open port of four-port vacuum tee.

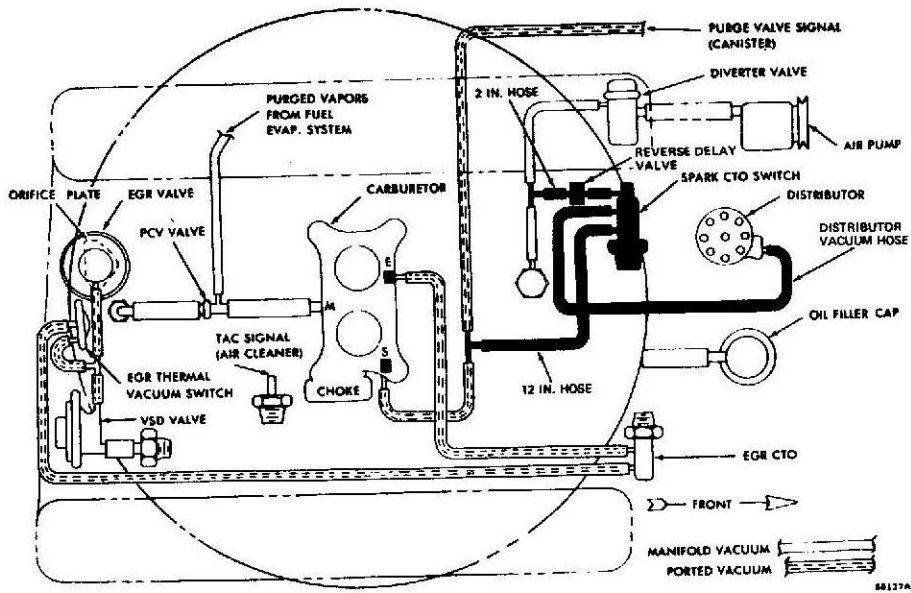
(18) Connect 9-inch length of vacuum hose to top port of CTO switch in thermostat housing and to center port of three-port vacuum ported spark CTO switch.

(19) Fill cooling system and purge system of air.

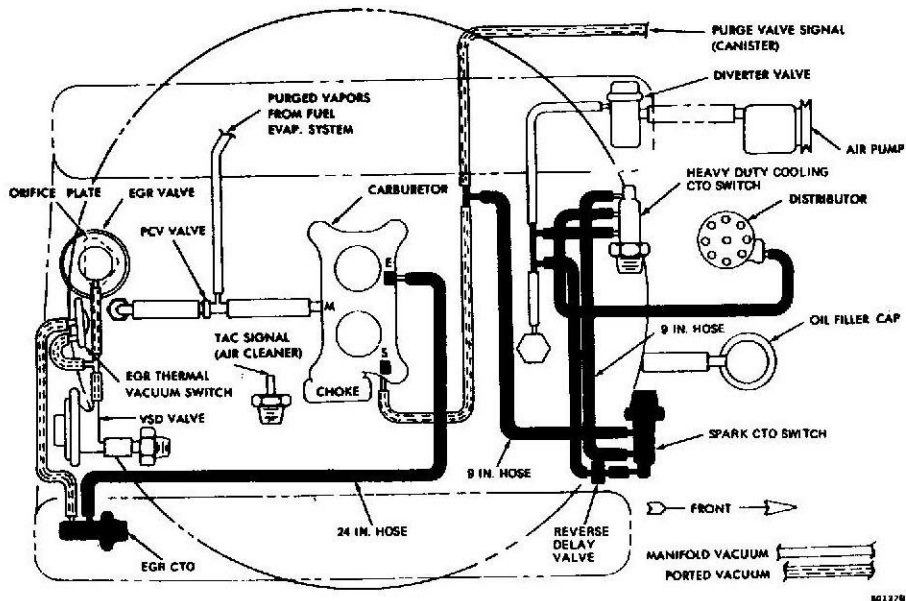
(20) Install coil bracket if removed.

(21) Verify correct hose routing. Refer to Figure 2.

(22) Install air cleaner and close hood.



**Fig. 1 49-State 360 With Manual Transmission and STD Cooling**



**Fig. 2 49-State 360 With Manual Transmission and HD Cooling**

The following operation and standard work time will apply:

| OPERATION DESCRIPTION                                 | COST CODE | OPERATION NUMBER | MODEL              | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|--------------------|---------------|----|----|-------------|
|   |           |                  |                    | 80            | 81 | 82 |             |
| <b>KIT, SPARK KNOCK ELIMINATE —<br/>INSTALL</b> ..... | 4.700     | 4297             | Cke-Trk<br>Cke-Trk |               |    |    | G           |
| With standard cooling .....                           |           |                  |                    | 0.5           |    |    |             |
| With heavy-duty cooling .....                         |           |                  |                    | 0.7           |    |    |             |

80-075-04J

# Diagnosis and Repair Bulletin

**Subject: Electric Choke and Idle Solenoid Feed Wire Routing**

**Application: 1980 Jeep Models Equipped with Six-Cylinder Engine**

**File: POWER PLANT Engine Electrical**

**No. 80-1 Oct. 26, 1979**

On 1980 Jeep models with six-cylinder engines, the idle solenoid wire and the electric choke wire should be routed with a clearance of at least 1/4 inch from the air injection manifold. If these wires have less than 1/4 inch clearance, they must be relocated.

**NOTE:** The electric choke and idle solenoid feed wires are fused to protect the circuit if a short or overload should occur.

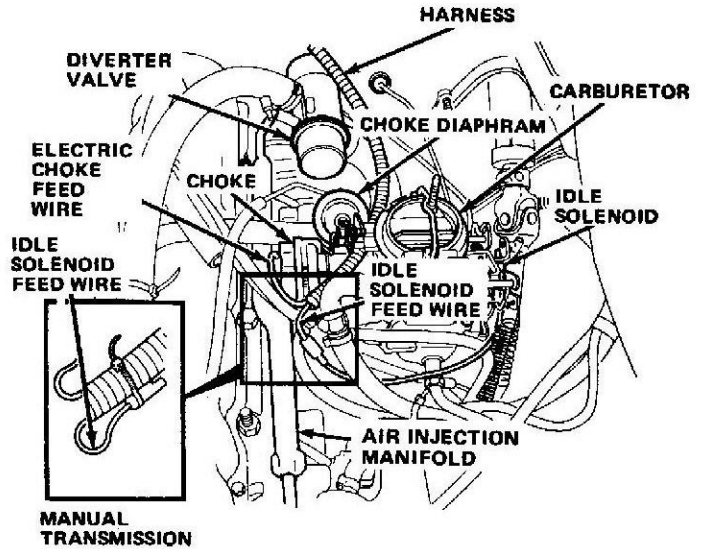
Service correction involves routing the harness containing both wires OVER the diverter valve hose and between the carburetor and choke diaphragm.

### PROCEDURE

- (1) Remove air cleaner.
- (2) Disconnect electric choke feed wire from electric choke.
- (3) Disconnect idle solenoid feed wire from idle solenoid.

**NOTE:** The idle solenoid is not used on manual transmission equipped vehicles and the feed wire must be tied back with a nylon strap, part number 3223227 (see illustration).

- (4) Route harness containing both feed wires OVER diverter valve hose and between carburetor and choke diaphragm (see illustration).
- (5) Connect idle solenoid feed wire to idle solenoid if equipped.



**Electric Choke and Idle Solenoid Feed Wire Routing**

- (6) Connect electric choke feed wire to electric choke.
- (7) Install air cleaner.

**CAUTION:** Route and secure wires and hoses so that they are not pinched, kinked, pulled too tight or interfering with moving parts such as the carburetor linkage or edges of the hood.

The following operation and standard work time will apply:

| OPERATION DESCRIPTION  | COST CODE | OPERATION NUMBER | MODEL  | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|--------|---------------|----|----|-------------|
|  |           |                  |        | 80            | 81 | 82 |             |
| WIRES, IDLE SOLENOID AND ELECTRIC CHOKER FEED - REPOSITION ..... | 3.165     | 3315             | 6-Cyl. | 0.1           |    |    | G           |

80-007-03J

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# Diagnosis and Repair Bulletin

**Subject: Altitude Performance Adjustments**

**Application: 1968-80 Jeep Vehicles**

**File: POWER PLANT—Fuel and Exhaust**

No. 80-7 Nov. 10, 1981

This bulletin is being issued to outline the altitude performance adjustments for 1968-80 Jeep vehicles required under a newly established Federal standard. The adjustments are intended to improve driveability performance as well as emissions performance at altitudes other than that for which the vehicles were originally certified.

Any Jeep vehicle that has been so adjusted must have a unique emission control information label installed. These unique labels are available in a kit, part number 3242106 from the following facility:

American Motors Corporation  
Distribution Services  
37200 Amrhein Road  
Livonia, Michigan 48150

The adjustment procedures and unique labels must be made available at no cost to independent repair facilities and the general public. A notification is also provided in current owners manuals to make customers aware of these adjustments.

## ADJUSTMENT PROCEDURES

On Jeep vehicles originally sold for operation at altitudes **below** 4,000 feet that are being operated above 4,000 feet, the ignition timing, as shown on the vehicle emission control label located in the engine compartment or specified in the appropriate Jeep Technical Service manual should be advanced 5° (not to exceed 15° total advance). The engine idle speed should be reset according to the procedures and idle speed specification outlined in the appropriate Jeep Technical Service Manual for the year of vehicle being serviced.

After performing these adjustments, attach emission control label, part number EF 8130457, to the engine compartment dash panel. Do not attach the label to any component that can be readily removed from the vehicle.

These adjustments apply to all 1968-80 Jeep vehicles that were sold for principal use at altitudes below 4,000 feet. Refer to the vehicle emission control label in the engine compartment to identify these vehicles.

On 1968-80 Jeep vehicles originally sold for operation at altitudes **above** 4,000 feet that are being operated below 4,000 feet, the ignition timing, as shown on the vehicle emission control label located in the engine compartment or specified in the appropriate Jeep Technical Service Manual should be retarded 5°. The engine idle speed should be reset according to the procedures and idle speed specifications outlined in the appropriate Jeep Technical Service Manual for the year of the vehicle being serviced. After performing these adjustments, attach emission control label, part number EF 8130458, to the engine compartment dash panel. Do not attach the label to any component that can be readily removed from the vehicle.

These adjustments apply only to 1968-80 Jeep vehicles that were sold for principal use at altitudes above 4,000 feet. Refer to the vehicle emission control label in the engine compartment to identify these vehicles.

81-114-04A/J

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# Diagnosis and Repair Bulletin

**Subject: Exhaust Gas Recirculation (EGR) System Revision**

**Application: 1980 49-State Cherokee Wagoneer, and Truck Models With 360 CID Engine, Automatic Transmission, 2.73 or 3.31 Ratio Axles and Standard or Heavy-Duty Cooling System**

**File: POWER PLANT Fuel and Exhaust Systems**

**No. 80-6 Oct. 27, 1980**

The EGR system on 1980 Cherokee, Wagoneer, and Truck models with 360 CID engine, automatic transmission, 2.73 or 3.31 ratio axles, and standard or heavy-duty cooling system may be revised to improve acceleration. This revision is an EPA approved change and applies to all similarly equipped 1980 Cherokee, Wagoneer, and Truck models.

Service revision involves replacing the EGR valve restrictor plate and forward delay valve, and adding a non-linear valve to the EGR system.

The following parts kit is required and available:

| <u>Description</u>                      | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|---|-----------------|-----------------|--------------|
| KIT, EGR System Revision                | 1               | 8130437         | 4.700        |
| Kit Contents:                           |                 |                 |              |
| GASKET, EGR Valve                       | 2               | 3221283         | 4.700        |
| FITTING, Vacuum Hose Connector          | 1               | 3233134         | 4.701        |
| VALVE, Non-Linear                       | 1               | 3233991         | 3.051        |
| Valve, Forward Delay                    | 1               | 3235261         | 4.700        |
| RESTRICTOR PLATE, EGR Valve (Code T)    | 1               | 3235343         | 4.700        |
| HOSE, Vacuum Eight Inches Long          | 1               | 3228064         | 4.700        |
| FITTING, Vacuum Hose Tee (H.D. Cooling) | 1               | 3210891         | 3.050        |

## PROCEDURE

### Inspection Procedure

Determine if vehicle has standard or heavy-duty cooling as follows:

- If vehicle has EGR/CTO switch in right front corner of intake manifold, vehicle has standard cooling. Refer to Revision Procedure With Standard Cooling.

- If vehicle has EGR/CTO switch in right rear corner of intake manifold, vehicle has heavy-duty cooling system. Refer to Revision Procedure — With Heavy-Duty Cooling System.

### Revision Procedure — With Standard Cooling

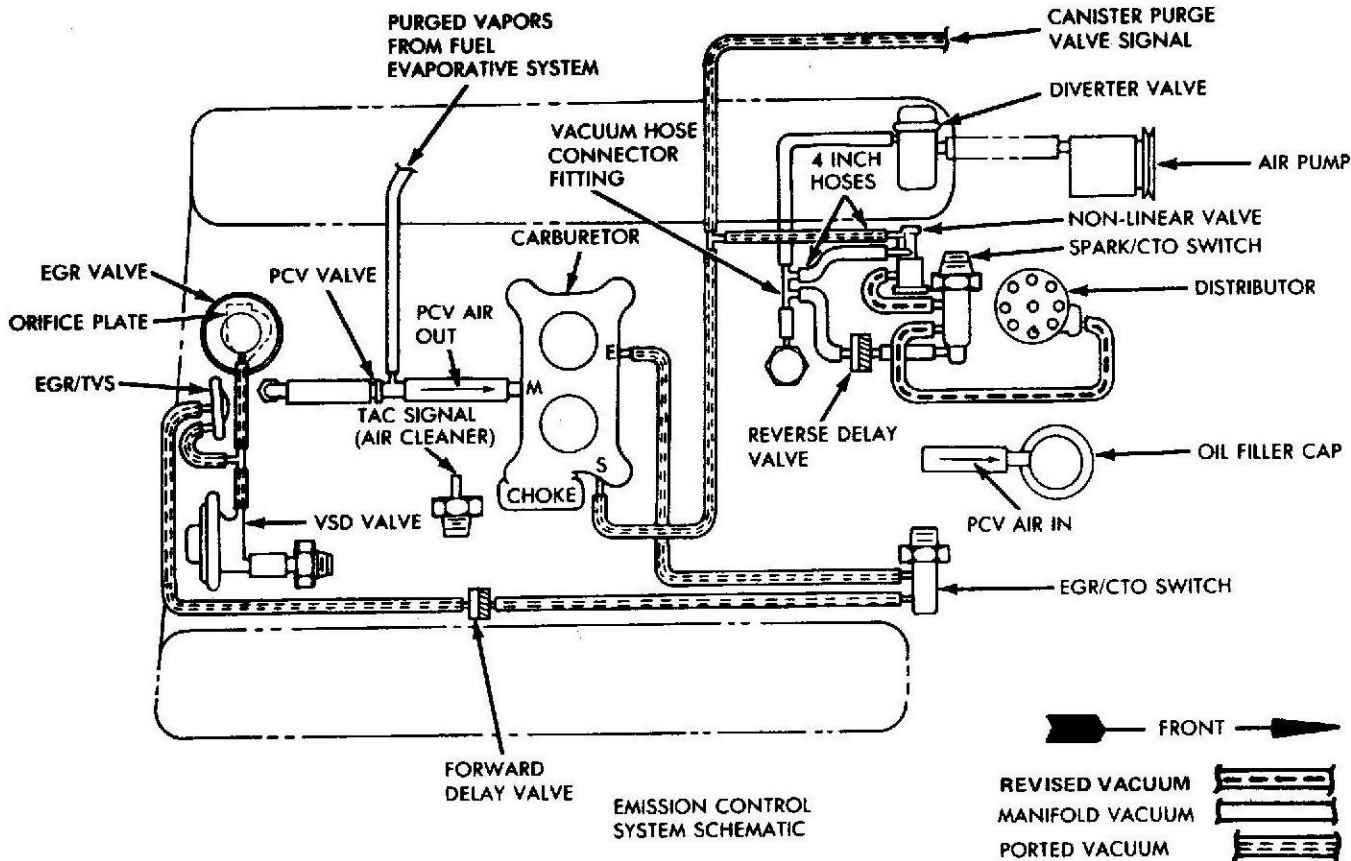
- (1) Remove air cleaner assembly.
- (2) Remove EGR valve and remove valve gaskets (2) and restrictor plate. Retain valve but discard gaskets and plate.
- (3) Install replacement gaskets and restrictor plate (code T) on EGR valve and install valve on manifold. Tighten valve attaching bolts to 14 foot-pounds (19 N-m) torque.
- (4) Remove and discard forward delay valve from vacuum hose that connects EGR/CTO switch to EGR/TVS switch.
- (5) Install replacement forward delay valve in hose with black side of valve toward EGR/CTO switch (Fig. 1).
- (6) Remove and discard tee fitting in manifold vacuum-to-diverter valve vacuum hose and install vacuum hose connector fitting in place of tee fitting.
- (7) Connect 4-inch length of vacuum hose to center port of non-linear valve and to open port on vacuum hose connector fitting installed in previous step (Fig. 1).
- (8) Disconnect vacuum hose attached to tee fitting in canister purge valve signal-to-carburetor hose and connect hose to bottom port of non-linear valve (Fig. 1).
- (9) Connect 4-inch length of vacuum hose to upper port of non-linear valve and to open port of tee fitting in canister purge valve signal-to-carburetor hose (Fig. 1).

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**Fig. 1 Standard Cooling System**

**Revision Procedure—With Heavy-Duty Cooling System**

- (1) Remove air cleaner assembly.
- (2) Remove EGR valve and remove valve gaskets (2) and restrictor plate. Retain valve but discard gaskets and plate.
- (3) Install replacement gaskets and restrictor plate (code T) on EGR valve and install valve on manifold. Tighten valve attaching bolts to 14 foot-pounds (19 N·m) torque.
- (4) Remove and discard forward delay valve from vacuum hose that connects EGR/CTO switch to carburetor (Fig. 2).
- (5) Install replacement forward delay valve in hose with black side of valve toward carburetor (Fig. 2).

- (6) Connect 4-inch length of vacuum hose to center port of non-linear valve.
- (7) Locate vacuum hose that connects bottom port of spark/CTO switch to vacuum tee fitting and cut hose midway between switch and tee fitting. Connect hose from spark/CTO switch to bottom port of non-linear valve and connect hose from the fitting to top port of non-linear valve (Fig. 2).
- (8) Locate vacuum hose that connects reverse delay valve to manifold vacuum fitting and cut hose midway between valve and fitting; then connect cut ends of hose to vacuum hose tee fitting supplied in kit.
- (9) Connect 4-inch length of vacuum hose attached to center port of non-linear valve to vacuum hose tee fitting installed in previous step.

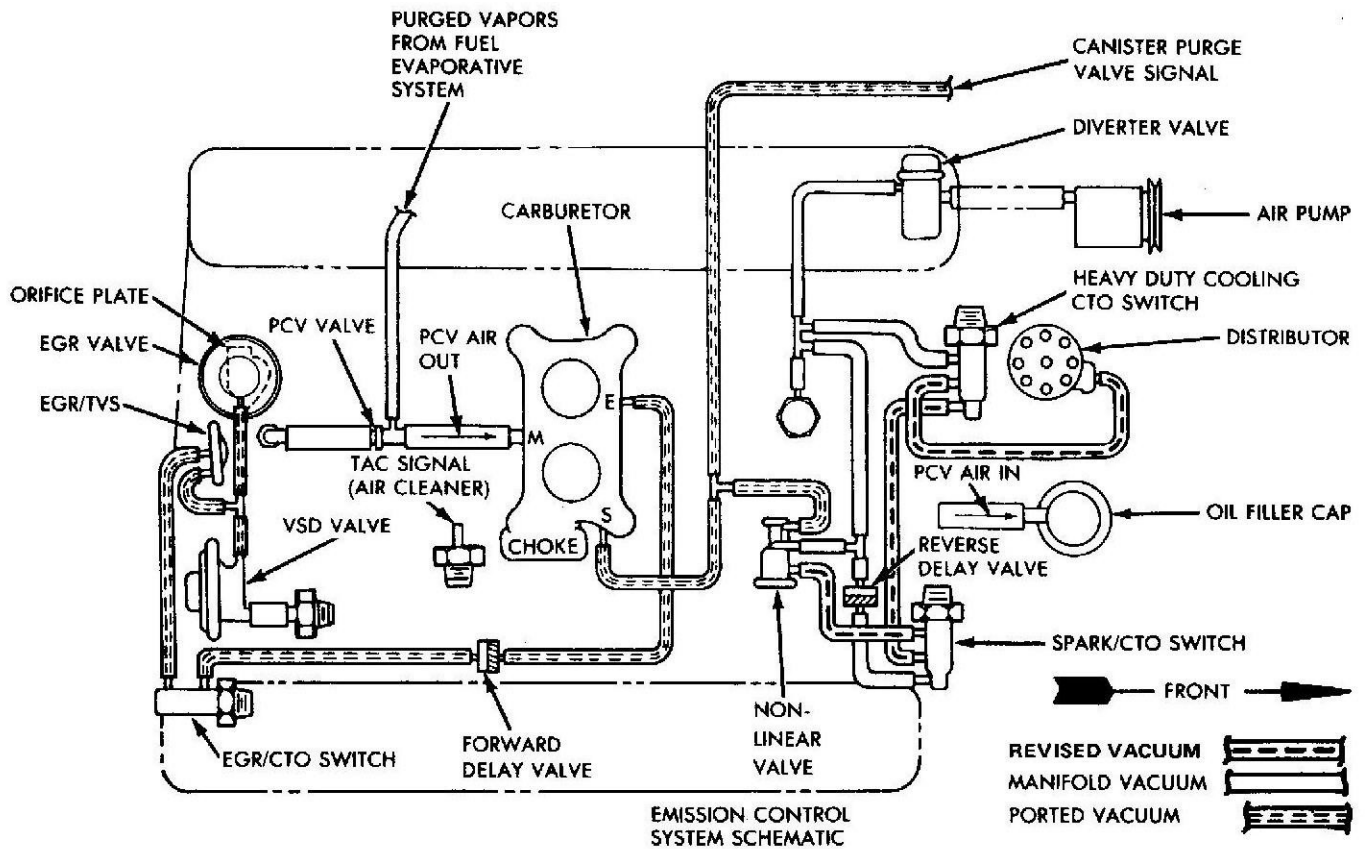


Fig. 2 Heavy-Duty Cooling System

The following standard servicing operation and work time will apply:

| OPERATION DESCRIPTION  | COST CODE | OPERATION NUMBER | MODEL       | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------------|---------------|----|----|-------------|
|  |           |                  |             | 80            | 81 | 82 |             |
| EGR SYSTEM—REVISE. . . . .<br>Includes replacement of EGR valve restrictor plate, forward delay valve, and installation of non-linear valve. . . . . | 4.700     | 4289             | Cke-Wag-Trk | 0.4           |    |    | G           |

# Diagnosis and Repair Bulletin

**Subject: Running Change to Four-Cylinder Engine Choke System**

**Application: 1980 CJ Models With Four-Cylinder Engine**

**File: POWER PLANT Fuel and Exhaust Systems**

**No. 80-5 July 18, 1980**

The choke operating time has been extended on 1980 CJ models with four-cylinder engines. This revision entered production as an EPA approved running change in April of this year and can also be applied to 1980 four-cylinder CJ models built before April.

Service revision of 1980 four-cylinder CJ models built before April of this year involves installing a revised choke cover and adjusting primary side vacuum break, fast idle cam position, and fast idle speed.

The following parts are required and are available.

| <u>Description</u>    | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|-----------------------|-----------------|-----------------|--------------|
| COVER AND COIL, Choke | 1               | 8133347         | 4.001        |
| RIVET, Drive          | 3               | 8133348         | 4.001        |

## PROCEDURE

(1) Raise hood and inspect number on sticker attached to choke cover.

(a) If number on sticker is 70172, revised choke cover has been installed. Return automobile to owner.

(b) If number on sticker is other than number indicated in step (a), proceed to step (2).

(2) Remove carburetor air cleaner.

(3) Disconnect fuel line, vapor vent line, vacuum hoses, electrical connectors, and throttle linkage from carburetor.

(4) Remove bolts and nuts attaching carburetor to manifold and remove carburetor.

(5) Mount carburetor on holding fixture J-9789-118.

**CAUTION:** *The holding fixture must be used to avoid damaging the carburetor throttle plates.*

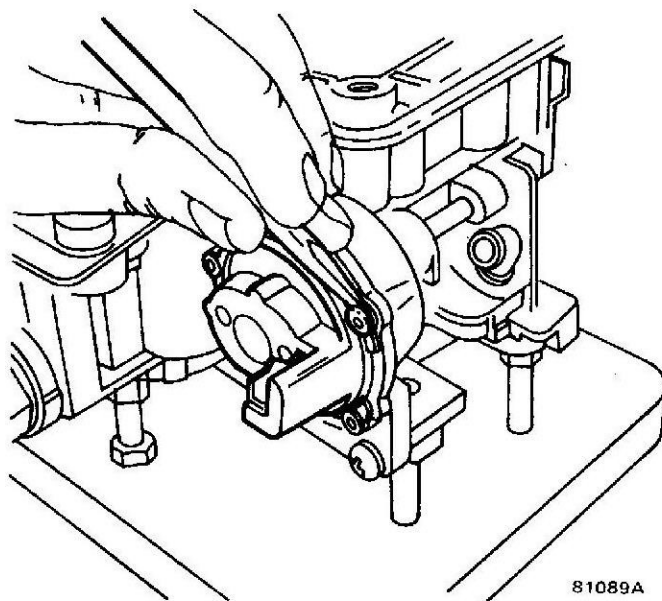
(6) Cut heads from rivets that attach choke cover to carburetor choke housing using hammer and small chisel (Fig. 1). Take care to avoid damaging choke housing or choke cover retainers when removing rivet heads.

(7) Remove remainder of each rivet from choke housing using hammer and small pin punch. Do not damage choke housing when removing rivets.

(8) Remove retainers and choke cover. Discard choke cover but keep retainers.

(9) Rotate fast idle cam until fast idle adjusting screw is on highest step of cam.

(10) Position replacement choke cover on choke housing and align notch on cover with projection on choke housing to index cover.



**Fig. 1 Removing Choke Cover Rivets**

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**NOTE:** Be sure the tang on the choke cover coil is engaged with the choke coil lever in the choke housing.

(11) Install choke cover retainers and secure cover to choke housing using drive rivets. Tap rivets into place using hammer and punch to expand and seat rivets in housing (Fig. 2).

(12) Perform Primary Side Vacuum Break Adjustment to obtain setting of 19°. Refer to page 83 in 1980 Jeep Technical Service Manual Supplement for procedure.

**NOTE:** The vacuum break adjustment setting of 19° is a revised specification. Please note this change in your 1980 Jeep Technical Service Manual Supplement.

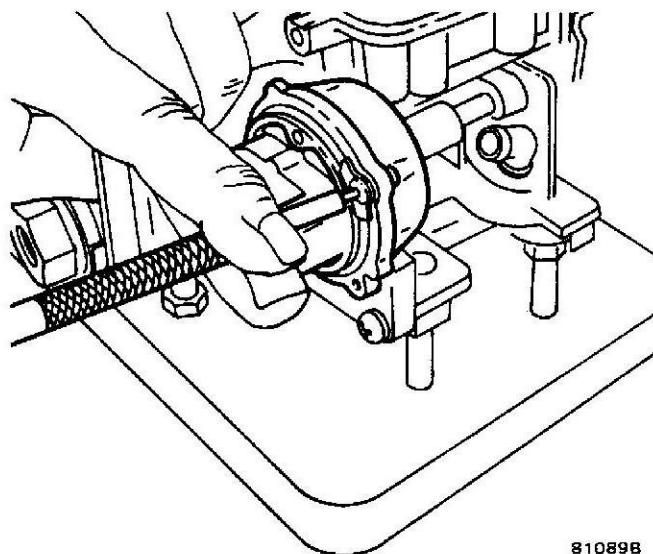
(13) Perform Fast Idle Cam Position Adjustment to obtain setting of 18°. Refer to page 82 in 1980 Jeep Technical Service Manual Supplement for procedure.

(14) Install carburetor on manifold. Tighten carburetor attaching bolts and nuts to 13 foot-pounds (17 N·m) torque.

(15) Connect fuel line, vapor vent line, vacuum hoses, electrical connectors, and throttle linkage to carburetor.

(16) Perform Fast Idle Speed Adjustment to obtain setting of 2500 RPM. Refer to page 84 in 1980 Jeep Technical Service Manual Supplement for procedure.

(17) Install carburetor air cleaner.



81089B

Fig. 2 Seating Drive Rivets

The following standard servicing operations and work times will apply:

| OPERATION DESCRIPTION                           | COST CODE    | OPERATION NUMBER | MODEL         | YEAR AND TIME |    |    | SKILL LEVEL |
|---|--------------|------------------|---------------|---------------|----|----|-------------|
|   |              |                  |               | 80            | 81 | 82 |             |
| <b>COVER, CARBURETOR CHOKE — INSPECT</b> .....  | <b>4.021</b> | <b>4131</b>      | <b>4-cyl.</b> |               |    |    | <b>G</b>    |
| Model 2SE.....                                  |              |                  |               | 0.1           |    |    |             |
| <b>Cover, carburetor choke — Replace</b> .....  | <b>4.021</b> | <b>A</b>         |               |               |    |    |             |
| Model 2SE.....                                  |              |                  |               | 0.7           |    |    |             |
| <b>Primary side vacuum break — Adjust</b> ..... | <b>4.906</b> | <b>B</b>         |               |               |    |    |             |
| Model 2SE.....                                  |              |                  |               | 0.1           |    |    |             |
| <b>Fast idle cam position — Adjust</b> .....    | <b>4.908</b> | <b>C</b>         |               |               |    |    |             |
| Model 2SE.....                                  |              |                  | 0.1           |               |    |    |             |
| <b>Idle speed, fast — Adjust</b> .....          | <b>4.908</b> | <b>D</b>         |               |               |    |    |             |
| Model 2SE.....                                  |              |                  | 0.1           |               |    |    |             |

80-103-05J

# Diagnosis and Repair Bulletin

**Subject: Fuel Tank Sending Unit Service**

**Application: 1980 Cherokee and Wagoneer Models Built After December 17, 1979**

**File: POWER PLANT Fuel and Exhaust Systems**  
  
**No. 80-4 April 2, 1980**

It is not necessary to lower the fuel tank to service the fuel gauge sending unit on Cherokee and Wagoneer models built after December 17, 1979. Vehicles built after this date will have an access hole in the rear floorpan that allows the sending unit to be serviced from within the vehicle.

When servicing the fuel tank sending unit on subject models use the procedure provided in this bulletin.

The following parts are required:

| Description                  | Quantity | Part No. | Group  |
|------------------------------|----------|----------|--------|
| RIVETS<br>(.125 x .275 inch) | 4        | 4005899  | 20.035 |
| GASKET-IN-A-TUBE             | AR       | 8993317  | 15.260 |

**PROCEDURE**

(1) Fold rear seat forward and secure seat by attaching holding strap to B-post.

(2) Remove rear mat retainer, if equipped, and remove skid strips as necessary.

(3) Remove heads from rivets that attach access cover to floorpan using a 5/32 drill.

**CAUTION: Do not drill through the floorpan.**

(4) Remove access cover using a chisel or large flat blade screwdriver.

(5) Remove remaining rivets and clean rivet holes. Remove all rivet material from top of fuel tank.

The following operations and standard work times will apply:

| OPERATION DESCRIPTION  | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------|---------------|----|----|-------------|
|  |           |                  |       | 80            | 81 | 82 |             |
| SENDING UNIT, FUEL TANK — REPLACE ..<br>Includes R & R fuel tank ..... | 3.614     | 4154             | 83-93 | 0.8           |    |    | G           |
| Wag-Cke-Trk  |           |                  | 1.0   |               |    |    |             |
| With floor access cover .....  |           |                  | 0.3   |               |    |    |             |
| Fuel tank — Drain and refill as required .....                         |           | A                |       | 0.2           |    |    | G           |

(6) Disconnect sending unit wire and ground wire.

(7) Disconnect fuel lines from sending unit.

(8) Remove locknut that retains sending unit in fuel tank and remove sending unit.

(9) Inspect condition and fit of sending unit O-ring in groove around tank opening. Replace O-ring if it is damaged or does not fit properly.

(10) Install sending unit and locknut. Tighten locknut to 14-18 foot-pounds (19-24 N-m) torque.

**NOTE: Socket Wrench J-23726 may be used to tighten the locknut.**

(11) Connect fuel lines to sending unit.

(12) Connect sending unit wire and ground wire.

(13) Apply 1/8-inch bead of RTV silicone sealer around outer edge of access cover.

(14) Install and secure access cover using 0.125 x 0.275 rivets. Remove any excess sealer after installing rivets.

**CAUTION: Do not use screws to attach the access cover to the floorpan.**

(15) Position mat or carpet and install retainer, if equipped.

(16) Place seat in upright position and latch seat securely.



# Diagnosis and Repair Bulletin

**Subject: Microprocessor (ECM) Shield**

**Application: 1980 California CJ Models With Four-Cylinder Engine Built Prior to VIN J0M93AB058103**

**File: POWER PLANT Fuel & Exhaust Systems**

**No. 80-3 June 16, 1980**

1980 California CJ Models with a four-cylinder engine built after VIN J0M93AB058103 are equipped with a protective shield for the microprocessor (ECM).

This shield may also be installed on 1980 California CJ models with four-cylinder engine that were built prior to VIN J0M93AB058103. Service installation involves affixing a decal to the shield, then installing the shield over the microprocessor (ECM).

The following parts are available for service installation.

| Description                  | Quantity | Part No. | Group |
|------------------------------|----------|----------|-------|
| KIT, Shield                  | 1        | 8130433  | 3.053 |
| Kit Contents:                |          |          |       |
| SHIELD, Microprocessor (ECM) | 1        | 5752624  |       |
| DECAL                        | 1        | 5752657  |       |
| RETAINER, Shield             | 2        | 4200319  |       |
| NUT, Shield Retainer         | 2        | 4200408  |       |

## PROCEDURE

(1) Clean smooth, recessed area on face of shield with isopropyl alcohol and allow area to dry.

(2) Remove backing from decal and affix decal to cleaned area on shield.

**NOTE: Do not touch the adhesive surface of the decal after it is exposed.**

(3) Remove nuts attaching microprocessor to left inner cowl panel and move microprocessor away from panel. Remove nylon spacers from microprocessor studs and set spacers aside.

(4) Disconnect harness connectors from microprocessor and remove microprocessor.

(5) Insert two shield retainers into slots in microprocessor.

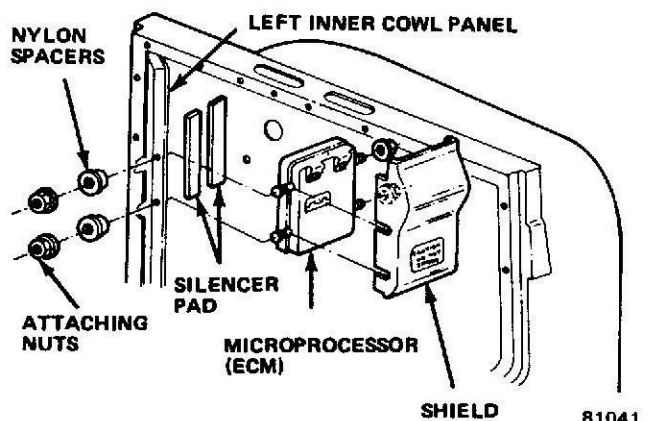
(6) Install shield on retainers using two holes in shield as guide. Position shield on microprocessor studs and install shield retainer nuts finger-tight.

(7) Install microprocessor on left inner cowl panel and install nylon spacers on mounting studs with small shoulder of spacers facing microprocessor (see illustration).

(8) Connect plug connectors to microprocessor.

(9) Install and tighten microprocessor attaching nuts to 3 foot-pounds (4 N-m) torque.

**NOTE: If the protective felt on the cowl seam near the microprocessor interferes with microprocessor installation, trim the felt as necessary.**



**Microprocessor Shield Installation**

**American Motors Sales Corporation**

**Service Engineering Department • 14250 Plymouth Road • Detroit, Michigan 48232**

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The following operation and standard work time will apply:

| OPERATION DESCRIPTION   | COST CODE | OPERATION NUMBER | MODEL  | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|--------|---------------|----|----|-------------|
|   |           |                  |        | 80            | 81 | 82 |             |
| SHIELD, MICROPROCESSOR (ECM) --<br>INSTALL (California) ..... | 4.750     | 4051             | 4-Cyl. | 0.3           | -  | -  | G           |

80-081-04J

# Diagnosis and Repair Bulletin

**Subject: Vacuum Diagram Correction to 1980 Jeep Technical Service Manual**

**Application: 1980 49-State Cherokee and J-10 Truck Models with 360 CID Eight-Cylinder Engine, Manual Transmission, and Heavy Duty Cooling**

**File: POWER PLANT Fuel and Exhaust Systems**

**No. 80-2 March 12, 1980**

The vacuum diagram on page V-23 of the 1980 Jeep Technical Service Manual is incorrect. The diagram is for 49-State Cherokee and J-10 Truck Models equipped with 360 CID eight-cylinder engine, manual transmission, and heavy duty cooling.

Please correct your manual by moistening and affixing the attached correction diagram over the existing diagram on page V-23.

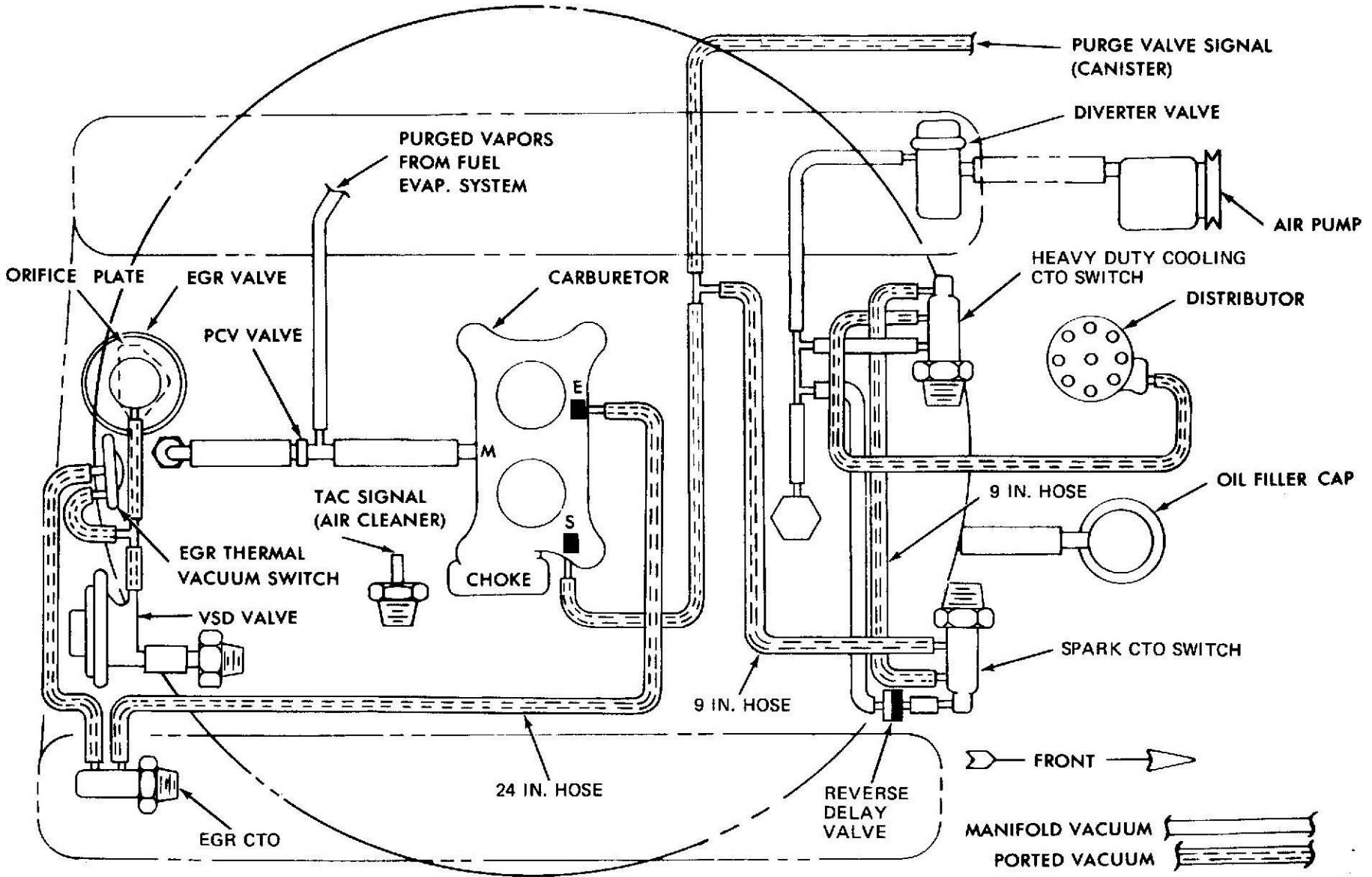
80-063-04J

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80-21



49 STATE 360 WITH MANUAL TRANSMISSION AND HD COOLING

# Diagnosis and Repair Bulletin

**Subject: Exhaust Pipe to Exhaust Manifold Leak**

**Application: 1980 Six-Cylinder Equipped Jeep Models**

**File: POWER PLANT Fuel and Exhaust Systems**  
**No. 80-1 Oct. 31, 1979**

Some early built six-cylinder engine equipped Jeep vehicles may develop an exhaust leak between the exhaust pipe and exhaust manifold. This may be due to the loss of the design interference locking feature of the locking stud and hexagon nut.

If a leak should occur, service correction involves tightening the existing nut to 20 foot-pounds (27 N·m) torque and installing a second nut to lock it in place.

The following parts are available and will be required.

| <u>Description</u> | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|--------------------|-----------------|-----------------|--------------|
| NUT, Hexagon       | 2               | 4006567         | 4.178        |

## PROCEDURE

- (1) Raise vehicle.
- (2) Tighten existing nuts to 20 foot-pounds (27 N·m) torque.
- (3) Turn second nut onto each stud.
- (4) While holding first nut, tighten second nut on each stud to 20 foot-pounds (27 N·m) torque.
- (5) Lower vehicle.
- (6) Start engine and check for exhaust leaks.

The following operation and standard work time will apply:

| OPERATION DESCRIPTION   | COST CODE | OPERATION NUMBER | MODEL  | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|--------|---------------|----|----|-------------|
|   |           |                  |        | 80            | 81 | 82 |             |
| NUTS, EXHAUST PIPE FLANGE TO MANIFOLD -- TIGHTEN AND INSTALL..... | 4.178     | 4219             | 6-Cyl. | 0.3           |    |    | M           |

80-017-04J



# Diagnosis and Repair Bulletin

|   |  |  |
|---|--|--|
| <b>Subject: T-176 Four-Speed Manual Transmission Used in 1980 Four-Cylinder CJ Models</b> | <b>Application: 1980 Four-Cylinder CJ Models Built Between VIN JOM93AB725578 and VIN JOM93EB727300</b> | <b>File: CHASSIS Clutch — Manual Transmission</b><br><br><b>No. 80-4 June 16, 1980</b> |
|---|--|--|

Due to a supplier shortage of SR-4 four-speed manual transmissions, 1980 four-cylinder CJ models built between VIN JOM93AB725578 (March 24, 1980) and VIN JOM93EB727300 (April 22, 1980) were equipped with a T-176 four-speed manual transmission and 4.09:1 ratio axles.

The following parts list outlines the components that are unique to these models.

| <u>Description</u>                      | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|---|-----------------|-----------------|--------------|
| TRANSMISSION, T-176 (83-93)             | 1               | 5359390         | 6.001        |
| HOUSING, CLUTCH (83-93)                 | 1               | 3251256         | 5.054        |
| PIPE, Exhaust (83)                      | 1               | 5362826         | 4.178        |
| PIPE, Exhaust (93)                      | 1               | 5362827         | 4.178        |
| SHAFT ASSEMBLY, Front Propeller (83-93) | 1               | 5362815         | 9.100        |

| <u>Description</u>                                 | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|--|-----------------|-----------------|--------------|
| SHAFT ASSEMBLY, Rear (83)                          | 1               | 5362813         | 9.100        |
| SHAFT ASSEMBLY, Rear (93)                          | 1               | 5362814         | 9.100        |
| KNOB, Gear Shift Lever (83-93)                     | 1               | 5361405         | 7.030        |
| LEVER, Floor Gear Shift (83-93)                    | 1               | 5359835         | 7.001        |
| WIRE, Backup Lamp (83-93)                          | 1               | 5751748         | 3.318        |
| BRACKET, Transmission Exhaust Pipe Support (83-93) | 1               | 5362829         | 18.200       |

The standard servicing operations and work times as published in the current SSO Manual are not affected by this bulletin.

80-121-06J

# Diagnosis and Repair Bulletin

**Subject: Clutch Pedal Return Adjustment**

**Application: 1980 CJ Models With Manual Transmission and Six- or Eight-Cylinder Engine**

**File: CHASSIS Clutch - Manual Transmission**

**No. 80-3 May 28, 1980**

If the clutch pedal on 1980 CJ models with manual transmission and six- or eight-cylinder engine does not return completely after the pedal is released, the pedal may be adjusted using the procedure provided in this bulletin.

Service correction involves adjusting clutch pedal freeplay and installing an additional return spring on the clutch pedal if necessary.

The following part is available and may be required.

| Description | Quantity | Part No. | Group |
|-------------|----------|----------|-------|
| SPRING      | 1        | 3197208  | 8.180 |

### PROCEDURE

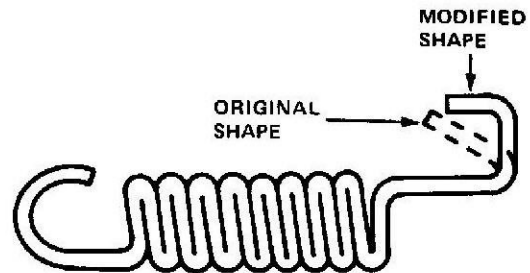
- (1) Raise vehicle.
- (2) Check clutch linkage operation. Repair binding or bent linkage components if necessary.
- (3) Adjust clutch pedal freeplay to 1/2- to 3/4-inch maximum freeplay.

The following operation and standard work time will apply:

| OPERATION DESCRIPTION  | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------|---------------|----|----|-------------|
|  |           |                  |       | 80            | 81 | 82 |             |
| SPRING, CLUTCH PEDAL RETURN —<br>INSTALL .....<br>Includes adjust clutch pedal free play | 5.135     | 5007             | 83-93 | 0.3           |    |    | G           |

80-103-05J

- (4) Check clutch pedal operation.
  - (a) If pedal returns completely, return vehicle to owner.
  - (b) If pedal does not return completely, proceed to next step.
- (5) Modify hooked-end of spring 3197208 by re-shaping it to configuration shown in illustration.



Modifying Spring 3197208

- (6) Install modified spring as follows: Install modified end of spring on clutch pedal stop and install opposite (curved end) in unused hole in overcenter spring bracket.
- (7) Lower vehicle.

# Diagnosis and Repair Bulletin

**Subject: T-176 4-Speed Manual Transmission Shift Problems**

**Application: 1980 Jeep CJ, Cherokee and J-10 Truck Models With T-176 4-Speed Manual Transmission**

**File: CHASSIS Clutch-Manual Transmission**

**No. 80-2 March 20, 1980**

Some early production T-176 4-speed manual transmissions used in the subject models may develop shifting problems such as high shift effort, loose shifting, or the transmission locks in two gears at once preventing vehicle movement with the clutch engaged. These conditions may be the result of loose transmission case cover shift lever fulcrum pins, a damaged reverse rocker arm assembly, missing poppet balls, springs, or interlock rings or burrs on the edges of the shift lever pivot ball.

Service correction involves replacing the transmission case cover and any missing poppet balls, springs and interlocks, and chamfering rough edges on the shift lever pivot ball if necessary.

The following parts are required and will be available the week of April 7, 1980. Do not order parts before this date.

| <u>Description</u>                  | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|-------------------------------------|-----------------|-----------------|--------------|
| KIT, Transmission Case Cover Repair | 1               | 8130431         | 6.009        |
| Kit contents:                       |                 |                 |              |
| Cover Assembly                      | 1               | 8130429         |              |
| Parts Package                       | 1               | 8130430         |              |

## PROCEDURE

- (1) Remove transfer case and transmission shift lever knobs, trim rings and boots.
- (2) Remove floor covering and transmission access cover from floorpan.
- (3) Shift transmission into third gear.
- (4) Remove transmission control housing cap (Fig. 1). Push cap down and turn counterclockwise to remove.
- (5) Remove transmission case cover attaching bolts.
- (6) Remove transmission case cover.

(7) Position transmission case cover in vise so shift forks are facing upward. Use wood blocks to protect cover from vise jaws and do not overtighten vise.

(8) Place all shift forks in neutral position.

(9) Remove shift rail support plate attaching bolts and tabbed washers and remove support plates (Fig. 1).

(10) Remove first-second shift rail.

(11) Remove third-fourth shift rail, shift lug, and interlock pin.

(12) Remove reverse shift rail.

(13) Remove poppet balls.

(14) Remove shifter interlock rings.

(15) Remove poppet springs.

(16) Remove cover from vise.

(17) Clean all components in solvent and dry using compressed air.

(18) Inspect all components. Replace any components that are nicked, cracked, broken or excessively worn.

(19) Clamp replacement transmission case cover and reverse rocker arm assembly in vise using protective wood blocks and install replacement fulcrum pins in cover.

**CAUTION:** To avoid damaging the cover do not overtighten the vise jaws.

(20) Lubricate shift rails and shift rail grooves in cover with petroleum jelly.

(21) Install replacement poppet springs in transmission case cover bores.

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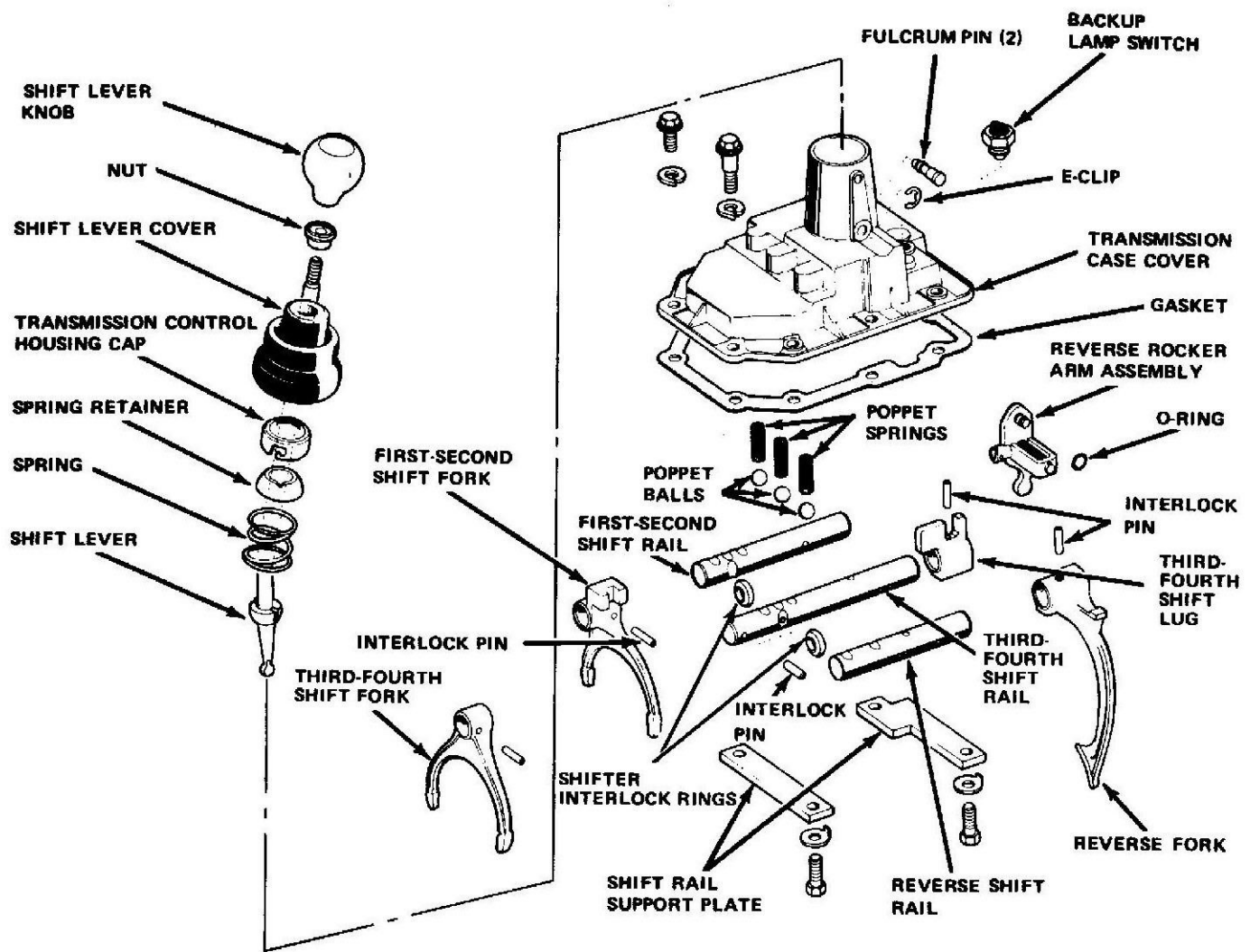


Fig. 1 Transmission Case Cover Assembly — Model T-176

81035B

(22) Install poppet balls (one on each spring).

(23) Position reverse gear shift rail and fork on reverse rocker arm in transmission case cover.

**NOTE:** Be sure the notch on the shift rail is positioned over the reverse poppet ball and that reverse rocker arm is engaged in the reverse fork slot.

(24) Install third-fourth shift rail and shift fork assembly in transmission case cover.

**NOTE:** Be sure the interlock pin is in position in the shift rail before further assembly.

(25) Install first-second shift rail and fork assembly. Be sure shift rail notch is over poppet ball in transmission case cover.

(26) Install shifter interlock rings in cover and between poppet balls.

(27) Press downward on shift rails to compress poppet balls and springs. Use wood block long enough to

contact all three shift to rails to press rails downward evenly.

(28) While holding shift rails downward, position shift rail retaining plates on housing and install plate attaching bolts and tabbed washers finger-tight.

(29) Remove wood block and tighten shift rail retaining bolts to 12-15 foot-pounds (16-19 N·m) torque. Be sure tabbed washers are in correct position before bending washer tabs.

(30) Check shift rail operation. Each rail must slide smoothly in cover groove. Be sure it is not possible to over shift into another gear position. After checking shift operation, place forks in third gear position.

(31) Install replacement gasket on transmission case cover.

(32) Install transmission case cover and gasket on transmission. Be sure all shift forks are seated in corresponding gear sleeves, and be certain that reverse fork is seated in reverse sliding gear groove.

(33) Apply sealant to threads of transmission case cover attaching bolts.

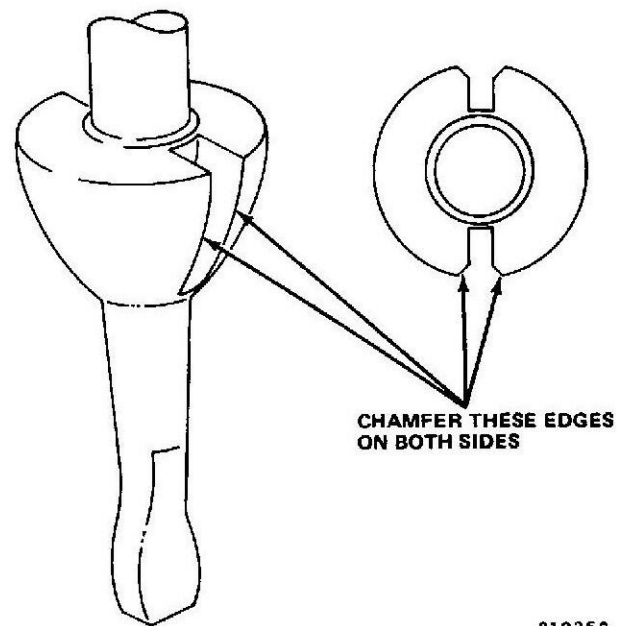
(34) Install two transmission case cover shoulder bolts (only) to hold cover in position. Tighten bolts to 12-15 foot-pounds (16-19 N-m) torque.

(35) Grind and file edges of shift lever pivot ball slot to approximate chamfer of 1/32-inch (Fig. 2). This will ensure smooth contact surface with fulcrum pins in transmission case cover.

(36) Install shift lever, spring, spring retainer, and control housing cap (Fig. 1). Push cap downward and turn clockwise to install and seat. Be sure transmission is still in third gear before installing shift lever.

(37) Check shift operation in all gear positions. If operation is OK, install and tighten remaining case cover attaching bolts to 12-15 foot-pounds (16-19 N-m) torque. If shift problem persists, loosen cover attaching bolts and align cover on transmission case.

(38) Install access cover, floor covering, boots, trim rings, and shift lever knobs.



81035A

Fig. 2 Shift Lever Chamfer Areas

The following standard servicing operation and work times will apply:

| OPERATION DESCRIPTION                        | COST CODE | OPERATION NUMBER | MODEL   | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|---------|---------------|----|----|-------------|
|  |           |                  |         | 80            | 81 | 82 |             |
| COVER, TRANSMISSION CASE — R & R . . . . .   | 6.009     | 6006             | 83-93   | 0.7           |    |    | G           |
| Includes replace gasket . . . . .            |           |                  | Cke-Trk | 0.9           |    |    |             |
| Transmission case cover — Overhaul . . . . . | 6.009     | A                |         | 0.5           |    |    | G           |
| With carpet — Add . . . . .                  |           |                  |         | 0.1           |    |    |             |

80-065-06J

# Diagnosis and Repair Bulletin

**Subject: Inspection of Clutch Housing and Clutch Lever Clearance**

**Application: 1980 Cherokee, Wagoneer and Truck Models with Manual Transmission Built Prior to VIN JOD25NN008776**

**File: CHASSIS Clutch-Manual Transmission**

**No. 80-1 Jan. 11, 1980**

If one of the specified vehicles requires clutch service, the clutch housing and clutch lever clearance must be inspected.

On the specified vehicles, service correction requires an initial inspection to determine which clutch housing has been installed and modification and/or replacement of the clutch housing as necessary.

The following parts may be required and will be available after Jan. 7, 1980. Do not order parts before this date.

| Description                                      | Quantity | Part No. | Group  |
|--|----------|----------|--------|
| HOUSING, Clutch<br>15-16-17-18-25-45<br>(6-Cyl.) | 1        | 3238423  | 5.054  |
| HOUSING, Clutch<br>15-16-17-18-25-45<br>(V-8)    | 1        | 3235827  | 5.054  |
| HOUSING, Clutch<br>46 (V-8)                      | 1        | 3235826  | 5.054  |
| STUD,<br>Adapter-to-Clutch<br>Housing            | 1        | 5356352  | 5.054  |
| NUT, Hex<br>(9/16 inch<br>x 12)                  | 1        | G9419144 | 6.005  |
| WASHER, Lock<br>(9/16 inch)                      | 1        | G120898  | 17.820 |

## INSPECTION PROCEDURE

(1) Raise vehicle.

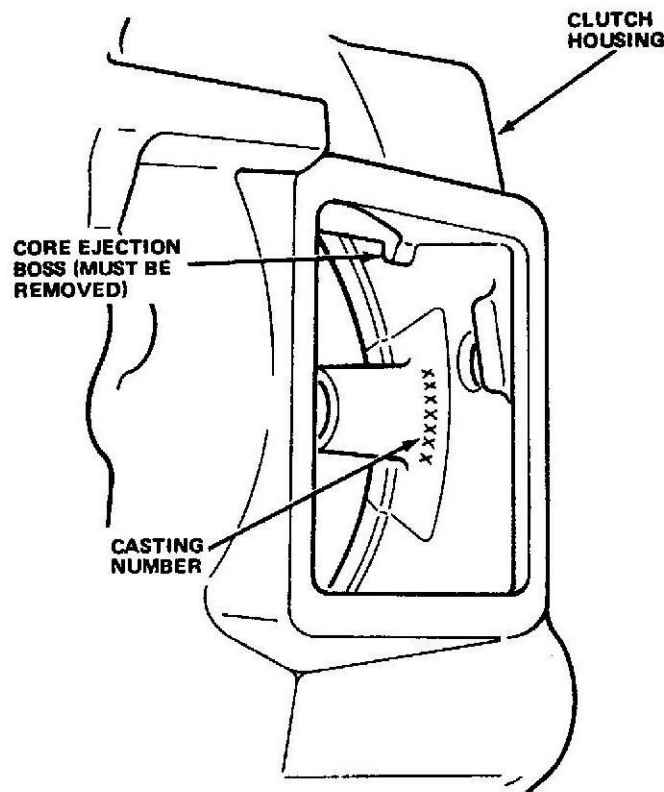
(2) Inspect clutch housing release lever opening. If opening is 3-1/2 inch x 2-1/8 inch, replace housing as described in Clutch Housing Replacement and Modification Procedure.

(3) Loosen clutch lever release lever boot and read casting numbers (see illustration).

a. On six-cylinder engines:

- Casting number must be 3238422.

If not, replace housing.



Clutch Housing Inspection

b. On eight-cylinder engines:

- Casting numbers must be 3235887 or 3238422.

- On J-20 Trucks left lower transmission bolt (next to lever opening) must be removed and shortened to 1.25 inch (32 mm).

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**NOTE:** *If transmission bolt threads are damaged in clutch housing on J-20 Trucks, refer to Clutch Housing Replacement and/or Modification Procedure.*

(4) Inspect core injection boss (see illustration) for interference with clutch throwout lever. If throwout lever is contacting ejection boss, refer to Core Ejection Boss Removal Procedure.

#### **CORE EJECTION BOSS REMOVAL PROCEDURE**

- (1) Remove front propeller shaft at front axle U-joint yoke.
- (2) Using long punch, centerpunch starter hole in boss.
- (3) Using 3/8 inch drill bit, drill hole through boss.
- (4) Using sharp chisel, chip away remainder of boss.
- (5) Remove clutch housing inspection plate. Use compressed air to remove all loose metal.
- (6) Install clutch housing inspection plate.
- (7) Install boot and connect clutch linkage and adjust pedal free play.
- (8) Install front U-joint straps and bolts and tighten to 15 foot-pounds (23 N·m) torque.
- (9) Lower vehicle.

#### **CLUTCH HOUSING REPLACEMENT AND/OR MODIFICATION PROCEDURE**

- (1) Disconnect battery negative cable.
- (2) Remove shift and transfer case lever boot.

**CAUTION:** *Be sure shift lever pin does not fall into transmission.*

- (3) Unscrew shift lever cap, remove pin and shift levers.
- (4) Mark front and rear propeller shafts and yokes for assembly reference. Disconnect rear propeller shaft at transfer case.
- (5) Disconnect speedometer cable at transfer case.
- (6) Disconnect parking brake cable at crossmember and at C-clips.
- (7) Support transmission, disconnect rear cross-member bolts and remove crossmember.

(8) Disconnect transfer case shift rod at transfer case.

(9) Disconnect front propeller shaft at transfer case.

(10) Remove lower bolts from adapter plate to transmission. Loosen exhaust pipe bracket and remove exhaust support.

(11) Disconnect transfer case vent hose and lockout switch connectors.

(12) Support transfer case. Remove upper bolts from adapter to transmission and remove transfer case.

(13) Disconnect backup light switch connector from transmission.

(14) Support engine. Remove transmission bolts at clutch housing and remove transmission.

(15) Remove starter motor bolts and cable and remove starter motor.

(16) Remove clutch release idler pivot bolts and disconnect adjuster and lever spring.

(17) Remove inspection plate.

(18) Remove clutch housing bolts and housing.

(19) Remove clutch throwout lever spring, lever, throwout bearing, and pivot ball from housing.

**CAUTION:** *Do not allow the hole to be machined larger than 0.6250 inch.*

(20) On J-20 Truck, drill out lower left (next to lever opening) transmission hole to 5/8 inch. Coat lower half of stud (opposite-threaded end) with Loctite 271 or equivalent. Press stud into housing.

(21) Completely remove core ejection boss, if present, following steps (2) through (4) of Core Ejection Boss Removal Procedure.

**NOTE:** *This step applies to an original or a new clutch housing if the core ejection boss is found.*

(22) Coat pivot ball with grease and install in clutch housing.

(23) Install clutch housing, tighten top retaining bolts to 30 foot-pounds (41 N·m) torque. Tighten dowel bolts to 45 foot-pounds (61 N·m) torque.

(24) Install starter motor. Tighten bolts to 20 foot-pounds (27 N·m) torque. Tighten starter terminal nut to 55 inch-pounds (6 N·m) torque.

(25) Install inspection cover, inner support bracket with bellcrank, and tighten bolts to 14 foot-pounds (19 N·m) torque.

(26) Install transmission aligning clutch shaft and clutch driven plate splines and tighten bolts to 55 foot-pounds (75 N·m) torque.

(27) Install clutch throwout lever boot. Loosen jamnut and adjuster to obtain freeplay. Align linkage to throwout lever and remove freeplay.

(28) Connect backup lamp switch wires.

(29) Clean mating surface of transmission and transfer case, apply Permatex No. 3 or equivalent sealer to both sides of replacement transfer case-to-transmission gasket and position gasket on transmission.

(30) Align and install transfer case assembly. Be sure transfer case input gear splines are aligned with transmission output shaft.

**NOTE:** Do not install any transfer case attaching bolts until transfer case is completely seated against transmission.

(31) Attach exhaust pipe support bracket. Install transfer case retaining bolts and tighten to 40 foot-pounds (54 N·m) torque.

(32) Tighten exhaust pipe clamp.

(33) Connect vent line and retaining clip. Connect lockout switch connector.

(34) Connect transfer case shift rod, wave washer, flat washer and cotter pin.

(35) Install speedometer cable.

(36) Install front propeller shaft using reference marks made during removal. Tighten shaft-to-yoke bolts to 15 foot-pounds (20 N·m) torque.

(37) Install crossmember. Tighten bolts to 35 foot-pounds (48 N·m) torque. Remove support stand.

(38) Connect parking brake cable and adjust.

(39) Install rear propeller shaft using reference marks made during removal. Tighten bolts to 15 foot-pounds (20 N·m) torque.

(40) Check and refill transmission and transfer case if necessary.

(41) Install gear shift lever, locating pin and tighten shift lever cap.

(42) Install shift lever and transfer case lever boot.

(43) Connect battery negative cable.

(44) Reset clock.

(45) Check and adjust clutch pedal freeplay if necessary.

(46) Check transmission and transfer case for proper shifting.

The following operation and standard work times will apply:

| OPERATION DESCRIPTION                        | COST CODE | OPERATION NUMBER | MODEL       | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------------|---------------|----|----|-------------|
|  |           |                  |             | 80            | 81 | 82 |             |
| HOUSING, CLUTCH— INSPECT .....               | 5.054     | 5031             | Wag-Cke-Trk | 0.1           |    |    | G           |
| Bolt, Transmission— Shorten .....            | 5.054     | A                | J-20        | 0.1           |    |    | G           |
| Boss, Core Ejection—Remove .....             | 5.054     | B                |             | 0.5           |    |    | G           |
| Housing, Clutch— Replace and/or Modify ..... | 5.054     | C                |             | 2.4           |    |    | G           |

80-022-05J



# Diagnosis and Repair Bulletin

**Subject: Moan or Buzzing Noise From Automatic Transmission When Shifting Into Reverse**

**Application: 1980 Jeep CJ Models With Model 999 Automatic Transmission Built Prior To Build Date Code 6863**

**File: CHASSIS Automatic Transmission**

**No. 80-1 Mar. 17, 1981**

On some 1980 CJ models with a model 999 automatic transmission built prior to build date code 6863, the transmission may occasionally produce a moan or buzzing noise when shifted into reverse or when the gear-shift selector lever is between the Park and Reverse detents. This condition may be caused by the normal rapid flow of transmission fluid over the finely machined center land of the switch valve in the transmission valve body. On transmissions built after date code 6863, a new switch valve with an undercut center land was phased into production and is now available for service (see illustration). The new valve design eliminates the possibility of any occasional noise caused by normal fluid flow over the center land.

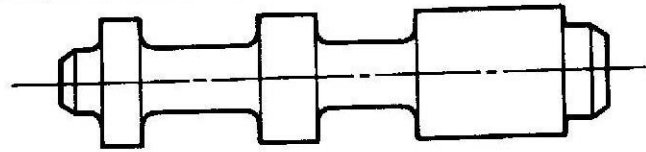
Service correction involves verifying the condition using the diagnosis procedure provided in this bulletin and installing the new switch valve if diagnosis indicates this is necessary.

The following part is available and may be required.

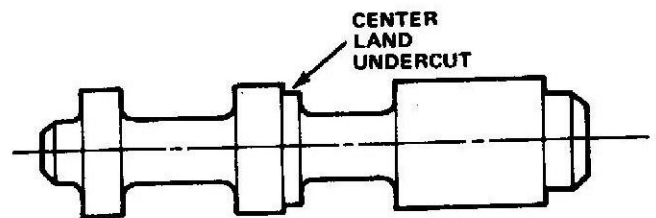
| Description   | Quantity | Part No. | Group  |
|---------------|----------|----------|--------|
| VALVE, Switch | 1        | 8130452  | 16.495 |

## DIAGNOSIS PROCEDURE

- (1) Check transmission build date code. If transmission was built **prior** to date code 6863, proceed to step (2). If transmission was built **after** date code 6863, refer to automatic transmission diagnosis section in Chapter 2C of Technical Service Manual for additional diagnosis.
- (2) Apply parking brake firmly.
- (3) Start engine and apply service brakes.
- (4) Shift transmission into all gear ranges; then shift transmission into Neutral.
- (5) Check transmission fluid level and condition as outlined in Technical Service Manual. Correct fluid level if necessary.



PREVIOUS SWITCH VALVE DESIGN



NEW SWITCH VALVE DESIGN

## Switch Valve Comparison

- (6) Apply service brakes and shift transmission into Reverse.
- (7) Increase engine speed until moan or buzzing noise occurs. Maintain engine speed at point where noise is loudest for approximately one minute then return engine to idle speed.

**CAUTION:** If the noise is loudest at an engine speed that is at or near torque converter stall speed, do not maintain engine speed for more than 5 seconds.

- (8) Shift transmission into Park, remove dipstick immediately, and inspect oil on dipstick for evidence of foaming (aeration).
  - (a) If oil **does not** display evidence of foaming (aeration), proceed to Switch Valve Replacement procedure.
  - (b) If oil **does** display evidence of foaming, refer to automatic transmission diagnosis section in Chapter 2C of Technical Service Manual for additional diagnosis.

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## Switch Valve Replacement

- (1) Raise vehicle on hoist.
- (2) Remove transmission oil pan and valve body as outlined in Chapter 2C of Technical Service Manual.
- (3) Remove oil filter from valve body.
- (4) Remove screws that attach throttle pressure adjusting screw spring retainer and bracket and remove retainer and bracket. Hold retainer and bracket firmly against spring force while removing last attaching screw.
- (5) Release pressure applied to spring retainer and bracket and remove bracket, line pressure adjusting screw assembly, line pressure regulator spring, switch valve spring, and switch valve. Do not disturb line and throttle pressure adjusting screw settings during removal.
- (6) Install replacement switch valve in valve body bore. Be sure valve is new-type with undercut on center land (see illustration).
- (7) Install switch valve and line pressure regulator springs.
- (8) Install line pressure adjusting screw assembly and spring retainer and bracket. Tighten bracket attaching screws to 35 inch-pounds (4 N·m) torque.
- (9) Install replacement oil filter on valve body. Tighten filter attaching screws to 35 inch-pounds (4 N·m) torque.
- (10) Install valve body and oil pan as outlined in Chapter 2C of Technical Service Manual.
- (11) Lower Vehicle.
- (12) Fill transmission to correct level with AMC, Dexron, or equivalent automatic transmission fluid.
- (13) Verify noise correction by performing steps (2) through (7) of Diagnosis Procedure again.
  - (a) If noise is eliminated, return vehicle to owner.
  - (b) If some noise is still present, check for restriction in transmission oil cooler and cooler lines and correct as necessary. Refer to oil cooler and cooler line flushing procedure in Technical Service Manual.

The following standard servicing operations and work times will apply:

| OPERATION DESCRIPTION                         | COST CODE | OPERATION NUMBER | MODEL   | YEAR AND TIME |     |    | SKILL LEVEL |
|---|-----------|------------------|---------|---------------|-----|----|-------------|
|   |           |                  |         | 79            | 80  | 81 |             |
| NOISE AUTOMATIC TRANSMISSION — DIAGNOSE ..... | 36.495    | 16221<br>A       | 904-998 | 0.1           | 0.1 |    | G           |
| Switch valve — Replace .....                  |           |                  |         | 0.8           | 0.8 |    | G           |
| Includes oil pan and valve body R & R         |           |                  |         |               |     |    |             |

81-068-16A/J



FILE: Axles-Suspension-  
Brakes-Steering (CHASSIS -  
Transfer Case/Quadra-Trac)

No. 3-04-82 Mar. 8, 1982

## TECHNICAL BULLETIN

**PROBLEM AND APPLICATION:** Transfer case shift lever rattles or makes a buzzing noise in some 1980-82 CJ and Scrambler models.

**CORRECTION:** Install a flat washer and rubber bumper on the transfer case shift lever ball-end (see illustration).

| <u>PARTS:</u> | <u>Description</u> | <u>Quantity</u> | <u>Part Number</u> | <u>Group</u> |
|---------------|--------------------|-----------------|--------------------|--------------|
|               | WASHER, Flat       | 1               | G131016            | 17.814       |
|               | BUMPER, Rubber     | 1               | 637936             | 35.300       |

**WARRANTY ELIGIBILITY:** Reimbursable within the provisions of the applicable warranty.

**SSO INFORMATION:**

| <u>Operation Description</u>           | <u>Cost Code</u> | <u>Operation Number</u> | <u>Model</u> | <u>Year and Time</u><br><u>-80- -81- -82-</u> | <u>Skill Level</u> |
|--|------------------|-------------------------|--------------|---|--------------------|
| LEVER, TRANSFER CASE<br>SHIFT - MODIFY | 18.135           | 18019                   | CJ           | 0.2 0.2 0.2                                   | G                  |

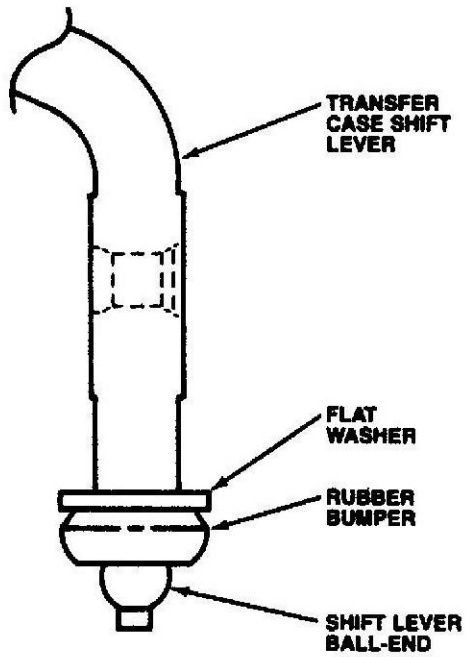
**PROCEDURE:**

1. Raise the vehicle.
2. Remove the shifter shaft nut and slide the shifter shaft out of the shift lever.
3. Lift the shift lever upward and out of the shift control link.
4. Install the flat washer and rubber bumper on the ball-end of the shift lever (see illustration). Be sure the flat washer is seated against the shoulder at the ball-end of the shift lever.

(continued)

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5. Seat the shift lever firmly in the shift control link. Reinsert the shifter shaft into the shift lever and front output bearing cap and install the shifter shaft nut.
6. Lower the vehicle.



**Installing Washer and Bumper  
On Shift Lever Ball-End**

# Diagnosis and Repair Bulletin

**Subject: Transfer Case Drive Sprocket Thrust Washer Noise**

**Application: 1980 Jeep Cherokee, Wagoneer, and Truck Models with Model 208 Transfer Case**

**File: CHASSIS — Transfer Case/Quadra-Trac**

**No. 80-3 Oct. 2, 1981**

On some 1980 Cherokee, Wagoneer, and Truck models with a model 208 transfer case, the transfer case drive sprocket thrust washer inside diameter may have a rough surface finish that could cause a squeal noise to occur occasionally. The noise is most noticeable in the 30-55 mph range and only when the transfer case is in two wheel drive high (2H) position, the front hubs unlocked, and when the transfer case is at normal operating temperature.

Service correction involves road testing to verify the noise condition and replacing the transfer case drive sprocket thrust washer if necessary.

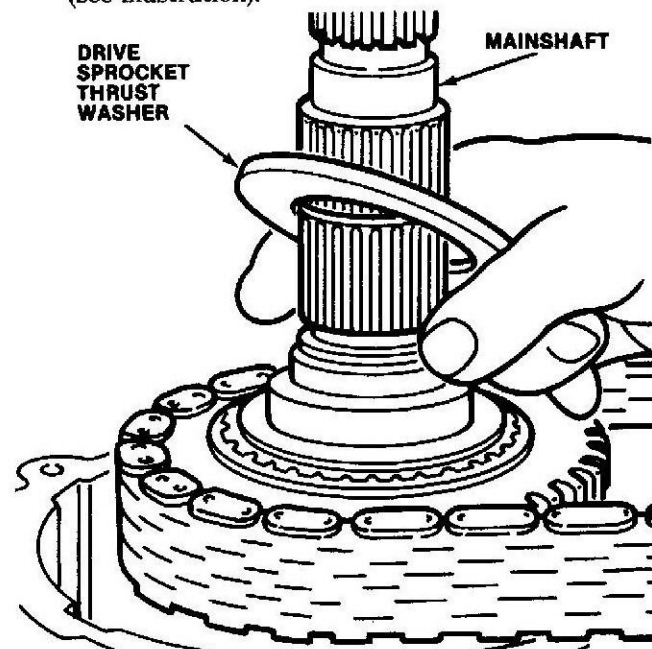
The following parts may be required and will be available after October 19, 1981. Do not order parts before this date.

| <u>Description</u> | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|--------------------|-----------------|-----------------|--------------|
| WASHER, Thrust     | 1               | 8134130         | 18.820       |
| SEAL, Output       | 1               | 8133432         | 18.870       |

### PROCEDURE

- (1) Road test vehicle in 30-55 mph range with hubs unlocked and with transfer case in two-high position and at normal operating temperature.
  - (a) If squeal noise occurs, proceed to step (2).
  - (b) If squeal noise does not occur, thrust washer is not problem. Refer to 1980 Jeep Technical Service Manual for additional diagnosis.
- (2) Raise vehicle on hoist.
- (3) Position drain pan under transfer case. Remove fill plug and drain plug and drain lubricant from transfer case.
- (4) Mark rear propeller shaft and transfer case yoke for assembly alignment reference.
- (5) Disconnect rear propeller shaft from transfer case yoke and secure shaft to underside of vehicle.
- (6) Remove speedometer adapter and cable.
- (7) Remove and discard transfer case rear yoke retaining nut and seal. Use tool J-8614-01 to hold yoke while removing nut.

- (8) Remove transfer case rear yoke using tools J-8614-01, -02, -03 if necessary.
- (9) Inspect output seal in rear retainer if seal exhibits signs of oil leakage, remove and discard seal.
- (10) Remove speedometer driven gear and sleeve from rear retainer.
- (11) Mark rear retainer for assembly alignment reference and remove retainer attaching bolts. Tap retainer with rubber mallet to loosen it and remove retainer.
- (12) Remove pump housing.
- (13) Remove speedometer gear.
- (14) Remove oil pump.
- (15) Remove drive sprocket retaining ring.
- (16) Remove and discard drive sprocket thrust washer (see illustration).



**Drive Sprocket Thrust Washer Removal/Installation**

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- (17) Clean rear case and rear retainer mating surfaces thoroughly.
- (18) Check pump housing seal for nick, cuts, or signs of abrasion. Replace seal if damaged.
- (19) Lubricate replacement drive sprocket thrust washer with 10W-30 motor oil and install thrust washer.
- (20) Install drive sprocket retaining ring.
- (21) Install oil pump.
- (22) Install speedometer gear.
- (23) Install output seal in retainer if necessary.
- (24) Lubricate lip of rear seal and pump housing seal and tabs of pump housing with petroleum jelly.
- (25) Install pump housing in rear retainer.
- (26) Apply Loctite 515, or equivalent sealer, to mating surfaces of rear case and rear retainer.
- (27) Align rear retainer and rear case index marks and install rear retainer on case. Install and tighten rear retainer attaching bolts to 23 foot-pounds (31 N·m) torque.

- (28) Install transfer case rear yoke and install replacement yoke seal and retaining nut. Tighten retaining nut to 120 foot-pounds (163 N·m) torque.
- (29) Install replacement O-ring on speedometer adapter and install adapter and cable. Tighten adapter retainer bolt to 100 inch-pounds (11 N·m) torque.
- (30) Install and tighten drain plug to 18 foot-pounds (24 N·m) torque.
- (31) Fill transfer case to edge of fill plug hole with 10W-30 motor oil.
- (32) Install and tighten fill plug to 18 foot-pounds (24 N·m) torque.
- (33) Connect rear propeller shaft to transfer case yoke. Align shaft and yoke using reference marks made at disassembly. Tighten shaft clamp strap bolts to 14 foot-pounds (19 N·m) torque.
- (34) Lower vehicle and verify proper transfer case operation.

The following standard servicing operations and work times will apply:

| OPERATION DESCRIPTION                        | COST CODE | OPERATION NUMBER | MODEL       | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------------|---------------|----|----|-------------|
|  |           |                  |             | 80            | 81 | 82 |             |
| ROAD TEST (c).....                           |           | 0717             |             | 0.3           |    |    | G           |
| DRIVE SPROCKET THRUST WASHER — REPLACE ..... | 18.350    | 18.011           | Cke-Wag-Trk | 0.8           |    |    | G           |

81-109-18J



# Diagnosis and Repair Bulletin

**Subject: Transfer Case Output Shaft Seal Leak Diagnosis**

**Application: 1980-81 Jeep Vehicles Equipped with Model 219 Quadra-Trac Transfer Case**

**File: CHASSIS Transfer Case/Quadra-Trac**

**No. 81-1 Feb. 23, 1981**

On some 1980-81 Jeep vehicles with a model 219 Quadra-Trac transfer case built prior to 10-28-80, the adhesive tape strip on the vent chamber seal may separate from the seal and block the rear retainer vent passage. If the vent passage becomes blocked, pressure buildup within the transfer case could cause lubricant to leak from one or both output shaft seals and be incorrectly diagnosed as a seal problem. Model 219 transfer cases built on or after 10-28-80 have a new self adhering vent chamber seal that does not require an adhesive tape strip.

Service diagnosis and correction of a leak condition involves first checking the transfer case build date, replacing the vent chamber seal if necessary, and replacing one or both output shaft seals if diagnosis indicates this is necessary.

The following parts are available and required:

| <u>Description</u>          | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|-----------------------------|-----------------|-----------------|--------------|
| SEAL, Vent Chamber          | 1               | 8133743         | 18.000       |
| SEAL, Front and Rear Output | AR              | 8130808         | 18.000       |

## PROCEDURE

### Vent Chamber and Rear Output Shaft Seal Replacement

- (1) Raise vehicle on hoist.
- (2) Remove transfer case fill and drain plugs and drain lubricant from transfer case.
- (3) Mark rear propeller shaft and transfer case yoke for assembly alignment reference.
- (4) Disconnect rear propeller shaft at transfer case yoke and secure shaft to underside of vehicle.

- (5) Remove and discard transfer case rear yoke nut and seal washer. Use tool J-8614-01 to hold yoke while removing nut.
- (6) Remove rear yoke using tools J-8614-01, 02, 03, if necessary.
- (7) Remove speedometer cable and adapter from rear retainer. Discard adapter seal, it is not reusable.
- (8) Mark rear retainer and rear case half for assembly alignment reference and remove rear retainer bolts and retainer. Tap retainer with rawhide or plastic mallet to loosen and pry retainer from case using slots in retainer only.
- (9) Remove vent chamber seal from retainer interior and clean seal mating surface in retainer thoroughly. Clean mating surfaces of retainer and rear case and dry both surfaces thoroughly.
- (10) If diagnosis indicated that rear output seal (in retainer) was leaking, remove seal and clean seal bore in rear retainer thoroughly.
- (11) Coat outer edge of replacement output seal with silicone sealer and install seal in retainer using tool J-29162.
- (12) Install replacement vent chamber seal. Remove seal adhesive protector strip and position seal over vent hole inside retainer. Be sure hole in seal is aligned with hole in retainer and that length of vent seal is parallel with front face of retainer.
- (13) Coat retainer mating surface of rear case with silicone sealer.
- (14) Align rear retainer and rear case reference marks and install retainer on case.
- (15) Install and tighten retainer attaching bolts to 23 foot-pounds (31 N.m) torque.
- (16) Install rear yoke, replacement yoke seal washer, and replacement nut. Tighten nut to 120 foot-pounds (163 N.m) torque.

**AM American Motors Sales Corporation**

**Service Engineering Department • 14250 Plymouth Road • Detroit, Michigan 48232**

*Additional copies of this bulletin are available through your zone office.*



**CAUTION:** Do not attempt to reuse the original yoke nut. This nut is a self locking design and should not be reused.

- (17) Install replacement speedometer adapter seal and install speedometer driven gear assembly in transfer case.

**NOTE:** Do not reuse the adapter O-ring seal, it is designed to swell in service to provide improved sealing qualities and could be cut or torn if reuse is attempted.

- (18) Install and tighten transfer case drain plug to 18 foot-pounds (24 N.m) torque.
- (19) Align and connect rear propeller shaft to yoke using assembly alignment reference marks. Tighten clamp strap bolts to 15 foot-pounds (20 N.m) torque.

**NOTE:** If diagnosis indicated that the front output shaft seal was leaking, proceed to Front Output Shaft Seal Replacement.

- (20) Fill transfer case to edge of fill plug opening with 10W30 motor oil, API grade SF or SE.
- (21) Install and tighten transfer case fill plug to 18 foot-pounds (24 N.m).
- (22) Lower Vehicle.

**Front Output Shaft Seal Replacement**

- (1) Mark front propeller shaft and transfer case yoke for assembly alignment reference.

- (2) Disconnect front propeller shaft from yoke and secure shaft to underside of vehicle.
- (3) Remove and discard transfer case front yoke nut and seal washer. Use tool J-8614-01 to hold yoke while removing nut.
- (4) Remove transfer case front yoke using tools J-8614-01, 02, 03, if necessary.
- (5) Remove front output shaft seal. Clean seal bore thoroughly.
- (6) Coat replacement front output seal outer surface with silicone sealer.
- (7) Install replacement output seal in front case bore using tool J-29162.
- (8) Install front yoke, replacement yoke seal washer, and replacement yoke nut. Tighten yoke nut to 120 foot-pounds (163 N.m) torque.

**CAUTION:** Do not attempt to reuse the original yoke nut. It is a self-locking design and should not be reused.

- (9) Align and connect front propeller shaft to yoke using assembly reference marks. Tighten clamp strap bolts to 15 foot-pounds (20 N.m) torque.
- (10) Fill transfer case to edge of fill plug hole with 10W30 motor oil, API grade SE or SF.
- (11) Install and tighten fill plug to 18 foot-pounds (24 N.m) torque.
- (12) Lower vehicle.

The following standard servicing operations and work times will apply:

| OPERATION DESCRIPTION   | COST CODE | OPERATION NUMBER | MODEL        | YEAR AND TIME |     |    | SKILL LEVEL |
|---|-----------|------------------|--------------|---------------|-----|----|-------------|
|   |           |                  |              | 80            | 81  | 82 |             |
| SEAL, VENT CHAMBER — REPLACE . . . .<br>Includes rear bearing retainer R & R and rear output shaft replacement if necessary | 18.436    | 18009            | Cke-Wag -Trk | 0.8           | 0.8 |    | G           |
| SEAL, FRONT OUTPUT SHAFT — REPLACE . . . . .  | 18.218    | 18007            | Cke-Wag -Trk | 0.6           | 0.6 |    | G           |

81-046-18A/J

# Diagnosis and Repair Bulletin

**Subject: Transfer Case Shift Lever Rattle**

**Application: 1980 Cherokee, Wagoneer, and Truck Models With Automatic Transmission**

**File: CHASSIS Transfer Case**

**No. 80-2 July 29, 1980**

Some 1980 Cherokee, Wagoneer, and Truck models with automatic transmission may develop a transfer case shift lever rattle. The rattle occurs at the point where the transfer case shift lever is connected to the upper shift rod (see illustration).

Service correction involves installing a spring washer and flat washers on the upper shift rod to decrease clearance between the shift rod and shift lever.

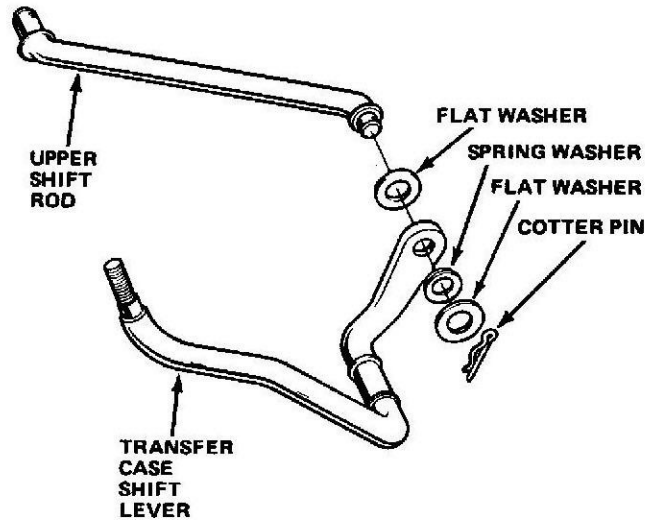
The following parts are required.

| Description    | Quantity | Part No. | Group  |
|----------------|----------|----------|--------|
| WASHER, Spring | 1        | 815535   | 7.125  |
| WASHER, Flat   | 2        | 943961   | 7.125  |
| PIN, Cotter    | 1        | 4004295  | 23.406 |

### PROCEDURE

- (1) Raise vehicle on hoist.
- (2) Remove shift lever-to-shift rod retainer and disconnect lever from rod.
- (3) Install one flat washer on shift rod (see illustration).

- (4) Install shift lever on shift rod.
- (5) Install spring washer and remaining flat washer on shift rod (see illustration).
- (6) Install cotter pin.
- (7) Lower vehicle and check transfer case shift lever operation.



Correcting Transfer Case Shift Lever

The following standard servicing operation and work time will apply:

| OPERATION DESCRIPTION                         | COST CODE | OPERATION NUMBER | MODEL           | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|-----------------|---------------|----|----|-------------|
|   |           |                  |                 | 80            | 81 | 82 |             |
| LEVER, TRANSFER CASE SHIFT —<br>Correct ..... | 18.450    | 18049            | Cke-<br>Wag-Trk | 0.2           |    |    | G           |

80-133-09J

**American Motors Sales Corporation**

Service Engineering Department • 14250 Plymouth Road • Detroit, Michigan 48232

Additional copies of this bulletin are available through your zone office.

# Diagnosis and Repair Bulletin

**Subject: Transfer Case Shift Lever and Shaft Replacement**

**Application: 1980 CJ Models**

**File: CHASSIS  
Transfer Case/  
Quadra-Trac**

**No. 80-1 Jan. 9, 1980**

Some 1980 CJ models may have a transfer case that is difficult to shift. This may be the result of the transfer case shift lever shaft being bent at the threaded end.

Service correction involves replacement of the shift lever shaft and lever, if necessary.

The following parts are required and will be available the week of Jan. 28, 1980. Do not order parts before this date.

| Description   | Quantity | Part No. | Group  |
|---|----------|----------|--------|
| SHAFT, Transfer Case Shift  | 1        | 5360045  | 18.180 |
| LEVER, Transfer Case 83-93(w/4-cyl. and SR4) 93(w/6 or 8-cyl. and T176) | 1        | 5360044  | 18.125 |
| LEVER, Transfer Case 93(w/SR4 and 6-cyl.)                               | 1        | 5360129  | 18.125 |

The following standard servicing operations and work times will apply:

| OPERATION DESCRIPTION                   | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|-------|---------------|----|----|-------------|
|   |           |                  |       | 80            | 81 | 82 |             |
| CASE ASSEMBLY, TRANSFER—R & R . . . . . | 18.135    | 18000            | 83-93 | 1.0           |    |    | G           |
| Shaft, Shift Lever—Replace . . . . .    | 18.135    | E                |       | 0.1           |    |    | G           |

80-041-09J

**American Motors Sales Corporation**

**Service Engineering Department • 14250 Plymouth Road • Detroit, Michigan 48232**

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# PRODUCT RECALL CAMPAIGN

## Diagnosis and Repair Bulletin No. 80-3

Subject: REPAIR KIT (Type "S" Product Recall Campaign)  
 Rear Wheel Bearing Retainers and Seals May  
 Be Installed Improperly.

# SAFETY

Date: June 19, 1980  
 Application: 1979-80 Jeep  
 Cherokee, Wagoneer and J-10  
 Trucks  
 File: CHASSIS-Prop.  
 Shaft-Axles

This is a Type "S" Product Recall Campaign subject to all campaign procedures and involving safety-related elements.

Some 1979 and 1980 Jeep Cherokee, Wagoneer and J-10 Truck models equipped with the AMC/Jeep rear axle built between 1979 VIN numbers J9A18NN069283 and J9F45NC154704 and 1980 VIN numbers JOE18NN000048 and JOD45NN024993 may have rear wheel bearing retainers and seals on some of the subject models which may have been assembled improperly during production. This condition could result in wheel bearing damage and possible disengagement of the wheel and axle shaft from the axle while the vehicle is in motion.

Service correction involves an inspection to determine what type of axle (Dana or AMC/Jeep) is in the vehicle and replacement of *BOTH* right and left rear wheel bearings, seals, retainer rings, and retainer plates on AMC/Jeep axles.

The following parts kit is required:

**NOTE:** Each vehicle will require *TWO* kits.

| Description             | Qty. | Part No. | Group | Price   |
|-------------------------|------|----------|-------|---------|
| KIT, Rear Wheel Bearing | 2    | 8130510  | 8.300 | \$13.40 |

KIT Contents: inner oil seal, retaining ring, wheel bearing, outer seal, retainer plate

The Zone will provide a VIN list and an initial supply of parts equal to 40% of the vehicles on your VIN list for each dealer with any vehicles involved. However, the campaign procedures apply to all dealers. On all undelivered, campaign-involved vehicles, the correction must be made before the vehicle is sold or otherwise put in service.

Additional parts can be ordered, as needed, on or after July 7, 1980. Because campaign parts supplies are

limited, replacement rear wheel bearing kits are not to be ordered for dealer stock!

### INSPECTION PROCEDURE

- (1) Raise and support vehicle.
- (2) Inspect rear axle housing cover to determine what type of axle is in vehicle.
  - (a) If axle has round, dome shaped cover (Fig. 1), vehicle has AMC/Jeep axle and will require repair if campaign identification mark is not present. Place campaign-inspection identification paint mark on cover (Fig. 1) and proceed to repair procedure.
  - (b) If axle has oval, irregular shaped cover (Fig. 1), vehicle has Dana axle and does not require any repairs.
- (3) Lower vehicle.

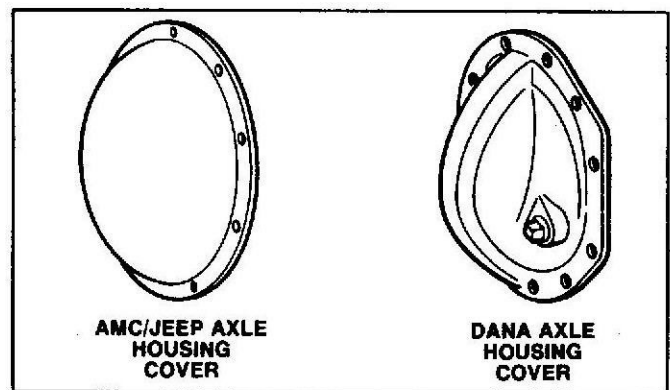


Fig. 1 Axle Housing Cover Identification

### JEEPAXLE REPAIR PROCEDURE

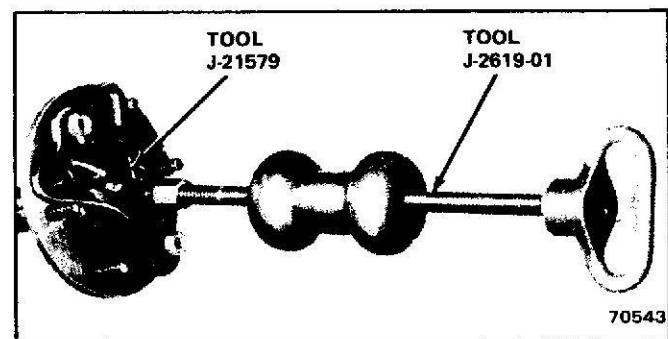
#### Axle Shaft and Bearing Removal

- (1) Raise and support vehicle and remove rear wheels.
- (2) Remove rear brake drums.

**NOTE:** Make sure that the brake linings are kept free of grease and oil.

(3) Remove nuts attaching brake support plates and retainers to axle tube flanges. Nuts are accessible through holes in axle shaft flanges.

(4) Remove axle shafts using Adapter Tool J-21579 and Slide Hammer J-2619-01 (See Fig. 2).



**Fig. 2 Axle Shaft Removal — Cherokee-Wagoneer-J-10 Truck**

(5) If cup portion of wheel bearing assembly remains in the axle housing after the axle shafts are removed, remove the bearing cups using tools J-2619-01 and J-26941.

(6) Remove axle shaft inner oil seals from axle housing tubes.

### Axle Shaft Bearing Replacement

**CAUTION:** Under no circumstance should the axle shaft retaining ring or bearing be removed using a torch. Heat will transfer into the axle shaft bearing journal and weaken it.

(1) Mount axle shaft in vise. Use protective jaws on vise to avoid scratching or damaging shaft.

(2) Drill  $\frac{1}{4}$ -in. (6mm) diameter hole in retaining ring. Hole depth should be approximately three-fourths of ring thickness.

**CAUTION:** Do not allow drill to contact the axle shaft.

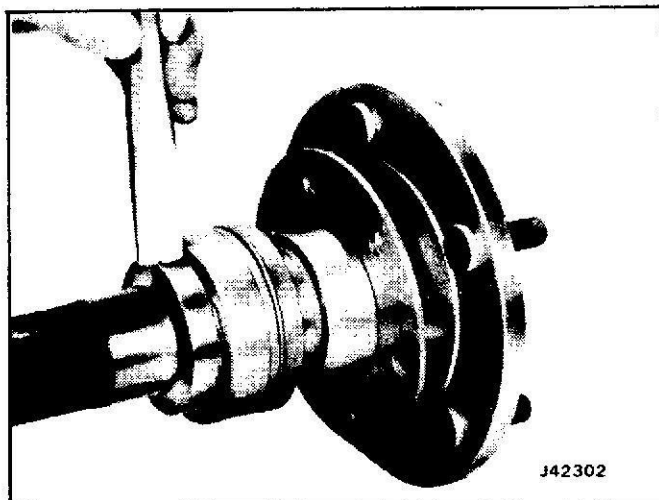
(3) Position a chisel over the drilled hole in the retaining ring and cut a deep groove in the retaining ring with the chisel. This will enlarge or split the ring allowing the ring to be removed from the axle shaft (See Fig. 3).

(4) Slide retaining plate and oil seal toward axle shaft flange to provide room for bearing removal tool between seal and bearing.

(5) Remove axle shaft bearing using arbor press and tool J-22912-01 or J-23674 (See Fig. 4).

(6) Inspect axle shaft bearing and seal surfaces for scratches. Remove scratches using crocus cloth.

(7) Install retainer plate on axle shaft.



**Fig. 3 Notching Bearing Retaining Ring — Cherokee-Wagoneer-J-10 Truck Axle**

(8) Pack wheel bearing lubricant in cavity of replacement oil seal and between seal lips and install seal on axle shaft seat. Outer face of seal must face axle shaft flange.

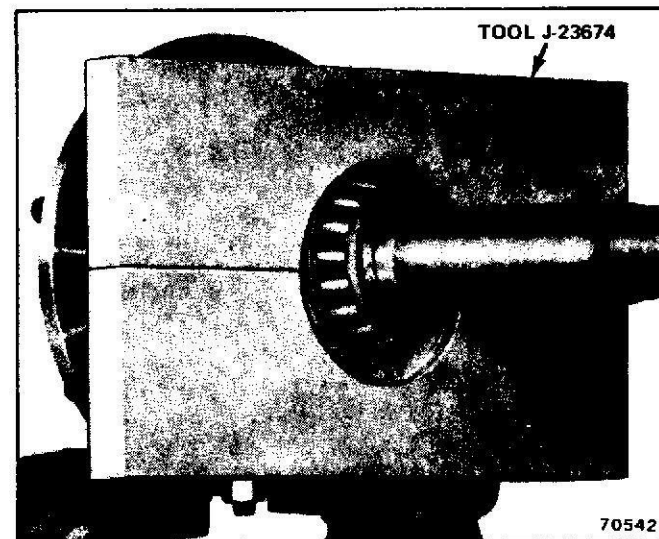
**NOTE:** In order to prevent damaging the seal, it is important that the seal lips be lubricated before installation and that the seal lips contact the machined portion of the shaft only.

(9) Pack replacement wheel bearing with wheel bearing lubricant. Force lubricant through cup rib ring end until it comes out at other end, around bearing.

(10) Install wheel bearing on axle shaft. Be sure cup rib ring is facing axle shaft flange.

(11) Install bearing retainer ring on axle shaft.

(12) Press bearing and retainer ring on axle shaft simultaneously using tool J-22912-01 or J-23674 and



**Fig. 4 Axle Shaft Bearing Removal — Cherokee-Wagoneer-J-10 Truck Axle**



arbor press. Be sure bearing and retainer ring are properly seated (squarely) against axle shaft shoulder.

**NOTE:** When the seal and bearing seat against each other, some lubricant should be forced out of the other side of the bearing.

**Axle Shaft and Bearing Installation**

(1) Clean inner oil seal and bearing bores in axle housing tube and install replacement inner seal using tool J-25135-01, then apply wheel bearing lubricant to seal and to bottom one-third of cavity between seal and bearing bore shoulder.

(2) Apply thin coating of wheel bearing lubricant to outside diameter of wheel bearing cup and outer oil seal.

**CAUTION:** Take care to avoid damaging the oil seal when installing the shaft.

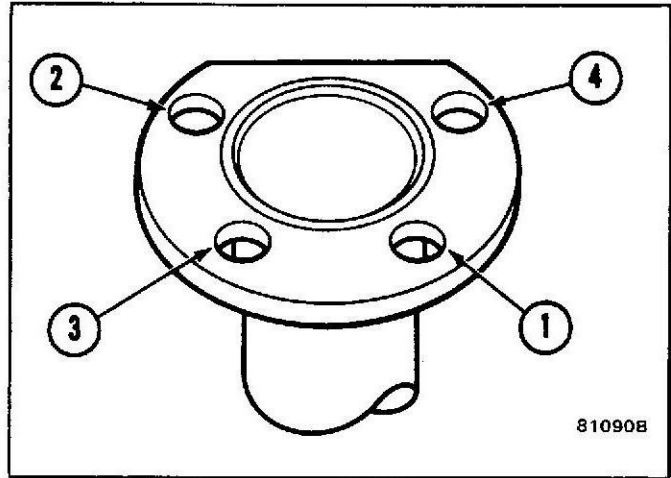
(3) Insert splined end of shaft into differential side gears and start cup rib rings and seals into axle tube.

(4) Align retainer plate and bolts and push axle shaft into housing as far as possible. Install nuts on bolts finger tight only.

**NOTE:** The outer oil seal must be squarely seated against the bearing.

(5) Tighten all nuts alternately and evenly in a cross pattern (Fig. 5) to approximately 15 foot-pounds (20 N.m.) torque to seal and cup rib ring evenly in axle tube.

**CAUTION:** This procedure is necessary to ensure that the seal and bearing cup rib ring are seated squarely in the axle tube. The seal can be damaged if this procedure is not followed.



**Fig. 5 Axle Tube Flange Bolt and Nut Tightening Sequence**

(6) Tighten nuts to final torque of 50 foot-pounds (68 N.m) torque in a cross pattern (Fig. 5).

(7) Install rear brake drum, locknuts and wheels. Tighten rear wheel nuts to 72 foot-pounds (98 N.m.) torque.

(8) Remove supports and lower vehicle.

The following operation and standard work time will apply:

| OPERATION DESCRIPTION  | ALPHA SERVICE CODE FOR CLAIM | MODEL         | YEAR & TIME |      | SKILL LEVEL |
|--|------------------------------|---------------|-------------|------|-------------|
|  |                              |               | -79-        | -80- |             |
| REAR AXLE — Inspect & Identify<br>(includes Drive-in/Drive out) .....                                | A                            | Wag-Che Truck | 0.1         | 0.1  | G           |
| BEARINGS, REAR AXLE SHAFT — Replace both sides<br>(includes inspection and Drive-in/Drive-out) ..... | B                            |               | 1.4         | 1.4  | G           |

**CLAIM HANDLING & CAMPAIGN REPORTING**

Owners of record will be mailed the AMC and Jeep combined Product Recall Campaign Notice and Claim Form (Fig. 6). This form is to be used in place of a warranty claim and a campaign reporting card.

This Product Recall Campaign Notice and Claim Form is a six-page form that is pre-printed with the customer's name and address and the campaign name and number. The entire form will be mailed to the owner of record along with a cover letter outlining the defect and instructions to present the complete form to the dealer at the time the vehicle is serviced.

The six copies are:

**Cover Sheet:** contains instructions for the owner and shows the dealer where to imprint his dealer plate.

**CCD Copy:** to be submitted to CCD for campaign reporting and crediting.

**Factory Copy:** to be used as a packing copy for returnable parts when required.

**Dealer Accounting/Dealer Service/Owner File Copy:** this copy is for the dealer file.

**Customer Copy:** to be given to the customer as a record of the campaign service performed.

**Reply Card:** to be used by the owner if ownership or address has changed.

Upon presentation of this form by an owner, the dealer should:

- Imprint the combined notice and claim form in the upper right hand corner with his dealer plate and remove the cover sheet.
- Complete the header information boxes.
- Have the owner sign the form on the owner signature line.
- Perform the required campaign service as outlined in the DRB.
- Complete the form by entering the R.O. date, mileage and placing an X in the appropriate alpha code box indicating the campaign service which was performed. (The alpha code, which takes the place of the cost code and operation number, can be found on page 3 of this DRB.)
- Sign the form in the area provided and mail the CCD to CCD in Milwaukee.

**NOTE:** Do not make out a separate warranty claim. The new form is the warranty claim.

In the event the owner misplaces or neglects to bring in the campaign notice and claim form, the dealer should use a blank Campaign Notice and Claim Form. A small supply is included with this DRB. Should you need more forms, they are available from your Zone Service Department.

Before providing campaign services for a vehicle where the owner fails to present the campaign notice and claim form, the dealer must check the Vehicle Identification Number (VIN) against his Campaign VIN List or the

total campaign VIN range contained in the Campaign DRB to ensure the vehicle is eligible to receive campaign services.

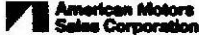
When using a blank form, be sure to enter the owner's name and address, VIN, Zone PDC and Dealer Code, campaign name or number, date of compliance and dealer's signature in the areas provided and X the appropriate service box as outlined in the Diagnosis and Repair Bulletin.

Based on the alpha box checked, the dealer will automatically be credited on the mid or end-of-month memorandum of warranty transactions (code 40) referencing the claim number on the form. The single credit shown will include Drive-in/Drive-out, corresponding labor, parts cost and applicable parts mark-up.

Although it will no longer be necessary for the dealer to enter the parts and labor costs for processing of the recall claim, the dealer may wish to complete the internal records box in the lower left hand corner of the claim. The figure shown in this box should be entered on the dealer's claim register along with the claim number.

Starting with this JEEPAXLE Campaign, it will no longer be necessary to complete a warranty claim form and a campaign reporting card after servicing an AMC or Jeep vehicle involved in a product recall campaign.

**PLEASE NOTE:** All prior campaign claims will continue to be handled as in the past.



**PRODUCT RECALL CAMPAIGN NOTICE (AND CLAIM FORM)**

I authorize that the repair work be performed on the described motor vehicle. The vehicle may be operated by you or your personnel for test and inspection purposes.

*[Signature]*  
Owner's Signature

**SERVICING DEALER:**  
After the required campaign service has been performed, please imprint your plate to the right and sign the claim and complete the applicable information below. Follow the instructions in the Diagnosis and Repair Bulletin (DRB) for this campaign. Please be accurate and legible since this information will be used for campaign reporting and crediting. Mail this claim to CCD in Milwaukee. If returnable parts are involved, follow the applicable bulletin instructions.

**SERVICING DEALER IDENTIFICATION**

Dist: 31080

Dealer's Name (Last, First, Initial):  
RED CARPET MOTORS  
00000000 AMERICA  
ANYTOWN, RI 00000

Servicing Dist. Code: 00-0000    M.P. 10.00

**R.O. DATE**    Mileage    Case No.    VIN

5 12 80    510    B 326919    J0000048

Mo Day Year (No Zeros)

**Campaign No.**    X Appropriate Box(es) as outlined in the Diagnosis and Repair Bulletin

8003    A B C D E F G

**Authorized Dealer Signature** X *[Signature]*

This is to certify that the required campaign service has been performed free of charge to the owner of the above vehicle.

Upon completion this form should be submitted with your Warranty Claims to CCD.

**OWNER INFORMATION**

NAME: Ann Owner  
ADDRESS: 1234 Orleans Road  
CITY, STATE, ZIP: Anytown, USA 12345  
VEHICLE IDENTIFICATION NO.: JOE10HND00048

Campaign Name and No.: JEEPAXLE (8003)

**FOR SERVICING DEALER INTERNAL RECORDS USE ONLY**

**COST / SALE**

Labor Value \$ \_\_\_\_\_

Net Parts Value \$ \_\_\_\_\_

% Allowance \$ \_\_\_\_\_

Total Claim Value \$ \_\_\_\_\_

**FOR CCD USE**

STATUS CODE

Part Claim Misc Reference No. \_\_\_\_\_

| Claim Approved | Total Claim Debited | Claim Return Codes | Remarks          |
|----------------|---------------------|--------------------|------------------|
| Initials       | Debit Code          |                    |                  |
| Date           |                     |                    | Initials    Date |

T CENTRAL CLAIM DEPARTMENT (CCD)

**Fig. 6 Sample Completed Combined Product Recall Campaign Notice and Claim Form**

**NOTE:** This sample claim represents inspection and replacement of the rear axle shaft bearings. An inspection only would be alpha code A.



# PRODUCT RECALL CAMPAIGN

## Diagnosis and Repair Bulletin No. 80-2

Subject: "VIN Type S" Product Recall Campaign  
 Propeller Shaft U-joint to Yoke Attaching  
 Bolts and Clamps

# SAFETY

Date: May 27, 1980  
 Application: 1979 and 1980  
 Jeep CJs  
 File: CHASSIS — Axle and  
 Prop Shaft

This is a Type "S" campaign subject to all campaign procedures and involving safety-related elements.

Some 1979 Jeep CJ models built between VIN J9M83AC849545 and J9M83AC851591 and 1980 Jeep CJ models built between VIN J0M93AH700384 and J0M83AC701781 may have been assembled with other than specified universal joint to yoke attaching clamps and bolts. As a result, these bolts may not hold torque due to interference between the bolthead flange and the clamp. This could result in the loosening of the bolts, uncoupling of the propeller shaft U-joints and yokes and loss of drive to the front and/or rear wheels.

Service correction involves inspecting the subject vehicles for the proper universal joint to yoke clamps and bolts and replacing the substandard components. Refer to the Inspection Procedure.

The Zone will provide a VIN list to each dealer with vehicles involved. However, the campaign procedures apply to all dealers. On all undelivered campaign-involved vehicles, the inspection/correction must be made before the vehicle is sold or otherwise put in service.

The parts required for this campaign have already been shipped to all dealers on a no-charge basis. Each dealer has received bolts and clamps for every vehicle on his VIN list. Additional parts may be ordered as needed from your Zone Parts Distribution Center.

The following parts may be required:

| Description                    | Qty. | Part No. | Group |
|--------------------------------|------|----------|-------|
| BOLT, Propeller Shaft to Yoke  | A/R  | 4006363  | 9.100 |
| CLAMP, Propeller Shaft to Yoke | A/R  | 3235473  | 9.100 |

### INSPECTION PROCEDURE

- (1) Place transmission gear selector in neutral and raise vehicle.
- (2) Rotate propeller shafts and inspect the following U-joint to yoke attaching clamp bolts with Torx heads.

**1979 CJ Models** — Inspect bolts and clamps at both front axle yoke and rear axle yoke.

**1980 CJ Models** — Inspect bolts and clamps at all yokes.

If all bolt heads have small flange (Fig. 1) and there is no interference with clamp, clean yoke using wire brush and shop cloth with solvent. Color every yoke with dab of light colored paint where screws and clamps were correct to note campaign completion, and return vehicle to owner.

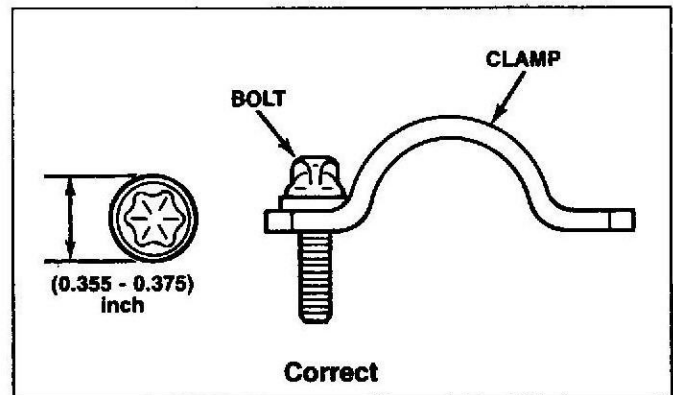


Fig. 1

If any bolt heads have large flange (Fig. 2), then clamp and bolts must be replaced. Refer to the Replacement Procedure.

**REPLACEMENT PROCEDURE**

(1) Remove and discard propeller shaft yoke bolts and clamps identified as faulty during inspection.

**NOTE:** These torx head bolts require a thin wall, E8 Torx-drive socket as found in the J-25359-02 Torx bit and socket set.

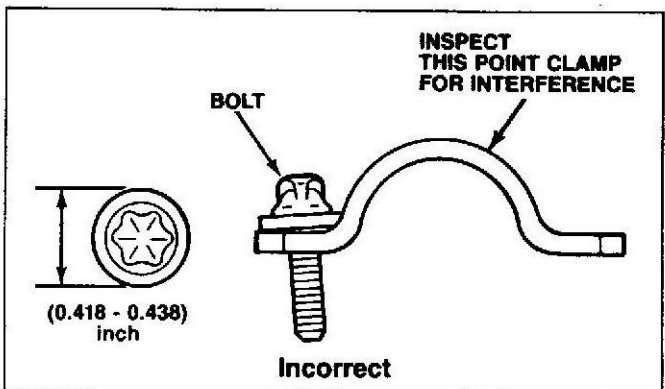
(2) Install new bolts and clamps and tighten replacement bolts to 15 ft. lbs. (19N.m) torque.

(3) Clean yoke using wire brush and shop cloth with solvent.

(4) Color every yoke with dab of light colored paint where screws and clamps were replaced to note campaign completion.

(5) Lower vehicle.

The following operations and standard work times will apply:



**Fig. 2**

| OPERATION DESCRIPTION  | ALPHA SERVICE CODE FOR CLAIM | MODEL        | YEAR & TIME<br>-79- -80- | SKILL LEVEL |
|--|------------------------------|--------------|--------------------------|-------------|
| <b>BOLTS/CLAMPS, Propeller Shaft to Yoke — Inspect (includes Drive-in/Drive-out)</b> ..... | <b>A</b>                     | <b>83-93</b> | <b>0.2</b>               | <b>M</b>    |
| <b>Replace (includes Drive-in/Drive-out and Inspection Time Allowance)</b>                 |                              |              |                          |             |
| <b>One</b> .....   | <b>B</b>                     |              | <b>0.4</b>               |             |
| <b>Two</b> .....   | <b>C</b>                     |              | <b>0.5</b>               |             |
| <b>Three</b> .....   | <b>D</b>                     |              | <b>0.6</b>               |             |
| <b>All</b> .....   | <b>E</b>                     |              | <b>0.7</b>               |             |

**CLAIM HANDLING AND CAMPAIGN REPORTING**

Beginning with this campaign, owners of record will be mailed a new AMC and Jeep combined Product Recall Campaign Notice and Claim Form (Fig. 3). This new form is to be used in place of a warranty claim and a campaign reporting card.

This new Product Recall Campaign Notice and Claim Form is a six-page form that is pre-printed with the customer's name and address and the campaign name and number. The entire form will be mailed to the owner of record along with a cover letter outlining the defect and instructions to present the complete form to the dealer at the time the vehicle is serviced.

The six copies are:

**Cover Sheet:** contains instructions for the owner and shows the dealer where to imprint his dealer plate.

**CCD Copy:** to be submitted to CCD for campaign reporting and crediting.

**Factory Copy:** to be used as a packing copy for returnable parts when required.

**Dealer Accounting/Dealer Service/Owner File Copy:** this copy is for the dealer file.

**Customer Copy:** to be given to the customer as a record of the campaign service performed.

**Reply Card:** to be used by the owner if he or she no longer owns the vehicle or has moved.

Upon presentation of this form by an owner, the dealer should:

- Imprint the combined notice and claim form in the upper right hand corner with his dealer plate and remove the cover sheet.
- Complete the header information boxes.
- Have the owner sign the form on the owner signature line.
- Perform the required campaign service as outlined in the DRB.



- Complete the form by entering the R.O. date, mileage and placing an X in the appropriate alpha code box indicating the campaign service which was performed. (The alpha code, which takes the place of the cost code and operation number, can be found in the SSO Block of this DRB).

- Sign the form in the area provided and mail the CCD copy to CCD in Milwaukee.

In the event the owner misplaces or neglects to bring in the campaign notice and claim form, the dealer should use a blank Campaign Notice and Claim Form. A small supply is included with this DRB. Should you need more forms, they are available from your Zone Service Department.

If an owner fails to present the campaign notice and claim form, the dealer must check the Vehicle Identification Number (VIN) against his Campaign VIN List or the total campaign VIN range contained in the Campaign DRB to ensure the vehicle is eligible to receive campaign services.

When it is necessary to use a blank campaign form, be sure to enter the owner's name and address, VIN, Zone PDC and Dealer Code, campaign name or number, date of campaign service and dealer's signature in the areas


provided and "X" the appropriate service box as outlined in the Diagnosis and Repair Bulletin.

Based on the alpha box checked, the dealer will automatically be credited on the mid or end-of-month memorandum of warranty transactions (code 40) referencing the claim number on the form. The single claim credit will include Drive-in/Drive-out, corresponding labor, parts cost at dealer net and applicable parts mark-up.

Although it will no longer be necessary for the dealer to enter the parts and labor costs for processing of the recall claim, the dealer may wish to complete the internal records box in the lower left hand corner of the claim. The figure shown in this box should be entered on the dealer's claim register along with the claim number.

Starting with this UJOINT Campaign, it will no longer be necessary to complete a warranty claim form and a campaign reporting card after servicing an AMC or Jeep vehicle involved in a product recall.

**PLEASE NOTE:** All prior campaign service claims must be handled as in the past, (using a warranty claim form properly completed for the campaign repair.)



**PRODUCT RECALL  
CAMPAIGN NOTICE (AND  
CLAIM FORM)**

I authorize that the repair work be performed on the described motor vehicle. The vehicle may be operated by you or your personnel for test and inspection purposes.

A. Owner  
Owner's Signature

**SERVICING DEALER:**  
After the required campaign service has been performed, please imprint your plate to the right and sign the claim and complete the applicable information below. Follow the instructions in the Diagnosis and Repair Bulletin (DRB) for this campaign. Please be accurate and legible since this information will be used for campaign reporting and crediting. Mail this claim to CCD in Milwaukee. If returnable parts are involved, follow the applicable bulletin instructions.

**SERVICING DEALER IDENTIFICATION**

Date: 51080

Dealer's Name: RED CARPET MOTORS  
0000000 AMERICA  
ANYTOWN, MI 00000

Service Code: 00-0000    W/O: 10,00

|                |
|----------------|
| R.O. DATE      |
| <b>3 21 80</b> |
| Mo Day Year    |

|                    |
|--------------------|
| Miles / Kilometers |
| <b>470</b>         |
| (No. Tests)        |

|                |
|----------------|
| Claim No.      |
| <b>A004347</b> |

|                 |
|-----------------|
| VIN             |
| <b>J0000048</b> |

|              |
|--------------|
| Campaign No. |
| <b>8002</b>  |

|  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
| X Appropriate Boxes as outlined in the Diagnosis and Repair Bulletin |   |   |   |   |   |   |
| A  | B | C | D | E | F | G |
|  |   |   | X |   |   |   |

Authorized Dealer Signature X J.M. Dealer

This is to certify that the required campaign service has been performed free of charge to the owner of the above vehicle.

Upon completion this form should be submitted with your Warranty Claims to CCD.

**OWNER INFORMATION**

NAME: ANN OWNER  
ADDRESS: 1234 ORLEANS ROAD  
CITY, STATE, ZIP: ANYTOWN, USA 12345  
VEHICLE IDENTIFICATION NO.: J0E18N000048

Campaign Name and No.: UJOINT (8002)

**FOR SERVICING DEALER  
INTERNAL RECORDS USE ONLY**

| COST              |    | SALE |
|-------------------|----|------|
| Labor Value       | \$ |      |
| Net Parts Value   | \$ |      |
| % Allowance       | \$ |      |
| Total Claim Value | \$ |      |

**FOR CCD USE**

STATUS CODE

Paid Claim Micro Reference No.

|                |                    |                    |         |
|----------------|--------------------|--------------------|---------|
| Claim Approved | Total Claim Denied | Claim Return Codes | Remarks |
| Initials       | Denial Code        |                    |         |
| Date           |                    |                    |         |

1 CENTRAL CLAIM DEPARTMENT (CCD)

**Fig. 3 — Completed Combined Product Recall Campaign Notice and Claim Form**

The above is a sample claim illustrating Drive-In/Drive-Out and inspection plus replacement of 3 bolts/clamps.

80-47



# Diagnosis and Repair Bulletin

**Subject: Revised Procedure for Measuring and Correcting Steering Knuckle Ball Stud Preload**

**Application: 1980 CJ Models**

**File: CHASSIS  
Axles — Propeller Shaft**

**No. 80-1 Aug. 12, 1980**

A revised procedure for measuring and correcting steering knuckle ball stud preload on 1980 CJ models has been developed. The procedure for 1980 Cherokee, Wagoneer and Truck models remains the same as outlined in the 1980 Jeep Technical Service Manual.

The revised procedures involve measuring ball stud preload, adjusting torque on the upper ball stud split ring seat or replacing the upper and lower ball studs, road testing to evaluate steering, and adjusting front axle caster if necessary.

The following parts may be required and will be available the week of August 4, 1980. Do not order parts before this date.

| <u>Description</u>   | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|--|-----------------|-----------------|--------------|
| RING, Split<br>STUD, Steering                              | 2               | 8121365         | 10.004       |
| Knuckle Ball (Upper)<br>STUD, Steering                     | 2               | 8122495         | 10.006       |
| Knuckle Ball (Lower)<br>SHIM, Front Spring<br>to Axle (3°) | 2               | 8122496         | 10.006       |
|  | 2               | 8129807         | 11.100       |

## PROCEDURE

### Ball Stud Preload Measurement

- (1) Raise vehicle.
- (2) Remove front wheels.
- (3) If vehicle has steering damper, disconnect damper at tie rod and move damper aside.
- (4) Unlock steering column.

(5) Disconnect steering connecting rod at right-side steering knuckle.

(6) Remove cotter pin and retaining nut that attach tie rod to right-side steering knuckle. Retain nut but discard cotter pin.

(7) Rotate both steering knuckles through complete arc several times. Work from right side of vehicle to rotate knuckles.

(8) Assemble socket and 0-50 foot-pound (0-68 N·m) capacity torque wrench and install wrench on tie rod retaining nut.

*NOTE: The torque wrench must be positioned at a 90° angle to the steering knuckle arm to obtain an accurate reading.*

(9) Rotate knuckles slowly and steadily through a complete arc and measure torque required to rotate knuckles.

(a) If reading is less than 25 foot-pounds (34 N·m), turning effort is within specifications, check steering gear, pump, or column.

(b) If reading is more than 25 foot-pounds (34 N·m), turning effort is excessive. Proceed to next step.

(10) Disconnect tie rod from both steering knuckles.

(11) Install 1/2 x 1 inch bolt, flat washer, and nut in tie rod stud mounting hole in one steering knuckle. Tighten bolt and nut securely.

(12) Install socket and 0-50 foot-pound (68 N·m) capacity torque wrench on bolt previously installed in steering knuckle.

*NOTE: The torque wrench must be positioned at a 90° angle to the steering knuckle arm to obtain an accurate reading.*

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Additional copies of this bulletin are available through your zone office.

(13) Rotate steering knuckle slowly and steadily through complete arc and measure torque required to turn knuckle.

(14) Install bolt, flat washer, nut, torque wrench and socket on opposite steering knuckle and measure torque required to rotate knuckle.

(a) If reading is less than 10 foot-pounds (14 N-m), steering effort is within specifications, check for tight or damaged tie rod ends, lubricate or replace as necessary, and proceed to next step.

(b) If torque reading is more than 10 foot-pounds (14 N-m), turning effort is excessive. Proceed to Ball Stud Preload Correction procedure.

(15) Install tie rod. Tighten tie rod retaining nuts to 40 foot-pounds (54 N-m) minimum torque and install replacement cotter pins.

(16) Install connecting rod. Tighten connecting rod retaining nuts to 40 foot-pounds (54 N-m) minimum torque and install replacement cotter pins.

(17) Install front wheels.

(18) Lower vehicle.

#### Ball Stud Preload Correction

(1) Remove front axle shafts as outlined in chapter 2F of the 1980 Jeep Technical Service Manual.

(2) Loosen lower ball stud jamnut.

(3) Remove cotter pin and slotted nut from upper ball stud.

(4) Unseat upper and lower ball studs by striking studs with lead hammer.

(5) Remove upper ball stud split ring seat using Tool J-23447. Discard seat after removal.

(6) Remove lower ball stud jamnut and remove steering knuckle. Discard jamnut after removal.

(7) Clean following surfaces thoroughly: Upper ball stud split ring seat threads, lower ball stud taper in steering knuckle, threads and tapered surfaces of ball studs, and upper ball stud retaining nut thread.

(8) Position steering knuckle on axle and install replacement lower ball stud jamnut finger-tight (only).

(9) Install and tighten upper ball stud slotted nut to 10-20 foot-pounds (13-27 N-m) torque to draw lower ball stud into tapered hole in axle yoke. Do not install upper ball stud split ring seat at this time.

(10) Tighten replacement lower ball stud jamnut to 80 foot-pounds (108 N-m) torque.

(11) Remove upper ball stud slotted nut and install replacement split ring seat using Tool J-23447. Tighten seat to 65 foot-pounds (88 N-m) torque.

(12) Install slotted nut on upper ball stud. Tighten nut to 100 foot-pounds (136 N-m) torque. Align and install cotter pin without loosening slotted nut.

*NOTE: If the cotter pin holes in the nut and stud are not aligned, tighten the nut (only) to align the holes. Never loosen the nut to align the holes.*

(13) Install front axle shafts and steering spindles loosely and measure turning effort of each steering knuckle as described in Ball Stud Preload Measurement.

(a) If turning effort is less than 10 foot-pounds (14 N-m) torque, proceed to step (14).

(b) If turning effort is more than 10 foot-pounds (14 N-m) torque, replace upper and lower ball studs with replacement parts described in this bulletin and repeat Ball Stud Preload Correction procedure, but, tighten split ring seat to 50-foot pounds (68 N-m) torque instead of torque value indicated in step (11). Then tighten upper ball stud slotted nut to 80 foot-pounds (108 N-m) torque instead of torque value indicated in step (12).

(14) Install front axle shafts.

(15) Connect tie rod to steering knuckle arms. Tighten tie rod end retaining nuts to 40 foot-pounds (54 N-m) minimum torque and install replacement cotter pins.

(16) Attach connecting rod to steering knuckle arms. Tighten connecting rod end retaining nut to 40 foot-pounds (54 N-m) minimum torque.

(17) Connect steering damper to tie rod, if equipped.

(18) Install front wheels. Tighten wheel retaining nuts to 75 foot-pounds (102 N·m) torque.

(19) Lower vehicle.

(20) Road test vehicle to verify steering effort correction and also check steering wheel returnability after making turns.

(a) If steering wheel returns toward center unassisted after turns, return vehicle to owner.

(b) If steering wheel requires assistance to return toward center after making turns, proceed to next step.

(21) Install +3° shim between each front spring and axle spring pad to increase caster to desired maximum angle of +6°.

*NOTE: To maintain proper seating of the spring center bolts in the spring pads, caster should not be increased by more than +3°.*

The Standard Servicing Operations and work times as published in the current SSO Manual are not affected by this bulletin.

80-095-10J

# Diagnosis and Repair Bulletin

**Subject: Disc Brake Noise**

**Application: 1978-79-80 Cherokee, Wagoneer, and Truck Models**

**File: CHASSIS Brakes-Wheels-Tires**

**No. 80-1 Sept. 29, 1980**

Some 1978-80 Cherokee, Wagoneer, and Truck models may develop a low frequency disc brake noise that is similar to a squeal-type noise. This noise is caused by the disc brakeshoes.

Service correction involves replacing the inboard and outboard disc brakeshoes on both front wheels with a shoe set that has a steel noise insulator on the outboard brakeshoe.

The following new brakeshoe set is required and will be available the week of October 6, 1980.

| <u>Description</u>                                   | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|--|-----------------|-----------------|--------------|
| SHOE SET, Front Wheel Disc Brake (Both Front Wheels) | 1               | 8130435         | 8.000        |

## PROCEDURE

(1) Remove disc brake calipers and brakeshoes. Refer to Chapter 2G in 1978-79-80 Jeep Technical Service Manuals for procedure.

(2) Inspect braking surfaces of each disc brake rotor.

(a) If surfaces are only lightly rusted or scored, remove rotors as outlined in appropriate Technical Service Manual, mount rotors in disc brake lathe, and clean rotor surfaces using flat sanding discs while turning rotors in lathe.

(b) If rotor surfaces are severely scored, cracked, chipped, excessively worn, or have hard spots (a series of shiny or dark-colored spots), replace rotor as outlined in appropriate Technical Service Manual.

(3) Install replacement brakeshoes and disc brake calipers on each front wheel as outlined in appropriate Technical Service Manual.

The standard servicing operations and work times as published in the 1978-79-80 SSO Manuals are not affected by this bulletin.

80-100-08J

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FILE: Windshield-Windows  
 -Body Hardware (BODY -  
 Body General)  
 No. 5-01-82 Feb. 15, 1982

## TECHNICAL BULLETIN

**PROBLEM AND APPLICATION:**

Power windows on some 1980-82 Wagoneer, Cherokee, and Truck models may make a scraping, clicking sound when operated or may not open completely. This may be due to the door glass bottom channel becoming cocked on the glass and catching on the regulator arm.

**CORRECTION:**

Install a polypropylene wedge at each end of the door glass bottom channel to prevent cocking.

**PARTS:**

| <u>Part Description</u>          | <u>Quantity</u> | <u>Part Number</u> | <u>Group</u> |
|----------------------------------|-----------------|--------------------|--------------|
| WEDGE, Door Glass Bottom Channel | AR              | 5762644            | 25.030       |

**WARRANTY ELIGIBILITY:**

Reimbursable within the provisions of the applicable warranty.

**SSO INFORMATION:**

| <u>Operation Description</u>                                | <u>Cost Code</u> | <u>Operation Number</u> | <u>Model</u> | <u>Year and Time</u> |      |     | <u>Skill Level</u> |
|---|------------------|-------------------------|--------------|----------------------|------|-----|--------------------|
|   |                  |                         |              | 80                   | -81- | 82  |                    |
| CHANNEL, FRONT OR REAR DOOR GLASS BOTTOM-INSTALL WEDGES.... |                  | 25045                   | Wag-Cke-Trk  |                      |      |     | G                  |
| One door.....   |                  |                         |              | 0.8                  | 0.8  | 0.8 |                    |
| Each additional door - Add.....                             |                  |                         |              | 0.7                  | 0.7  | 0.7 |                    |
| Replace bottom channel - Add....                            |                  |                         |              | 0.2                  | 0.2  | 0.2 |                    |
| Front   | 25.030           |                         |              |                      |      |     |                    |
| Rear  | 25.032           |                         |              |                      |      |     |                    |

**PROCEDURE:**

1. Remove the door glass and bottom channel as outlined in chapter 3J of the 1980-82 Jeep Technical Service Manuals.
2. Inspect the bottom channel. Replace the channel if bent, distorted, or otherwise damaged.
3. Position the sides of the bottom channel parallel to the door glass and install a polypropylene wedge at each end of the channel. Position the wedges between the side of the channel and the seal and press the wedges to the bottom of the channel as shown in the illustration.

(continued)

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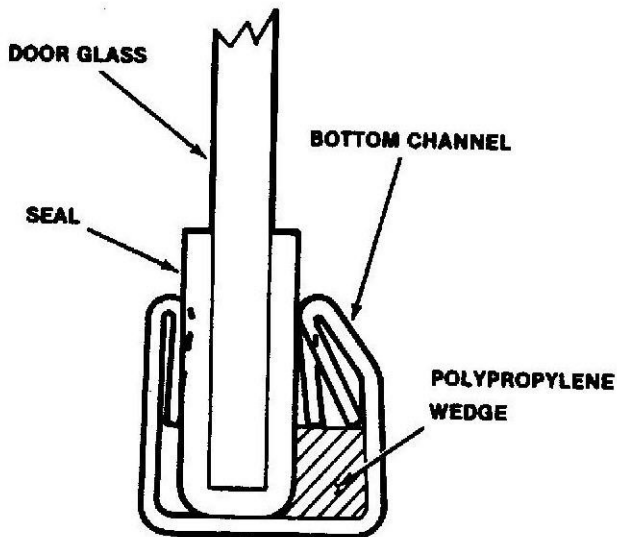
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4. Install the door glass and bottom channel as outlined in chapter 3J of the 1980-82 Jeep Technical Service Manuals.

Caution: Be sure that the division and glass side channels are securely attached to the door. The bottom channel can contact the regulator if either of these channels are loose.

5. Verify proper power window operation.



Installing Wedges in Bottom Channel

\*

# Diagnosis and Repair Bulletin

**Subject: Underbody Spare Wheel Mounting Bar**

**Application: 1980 Cherokee and Wagoneer Models Built Prior to VIN J0M17NC065724 (June 19, 1980)**

**File: BODY  
Body General**

**No. 80-2 July 18, 1980**

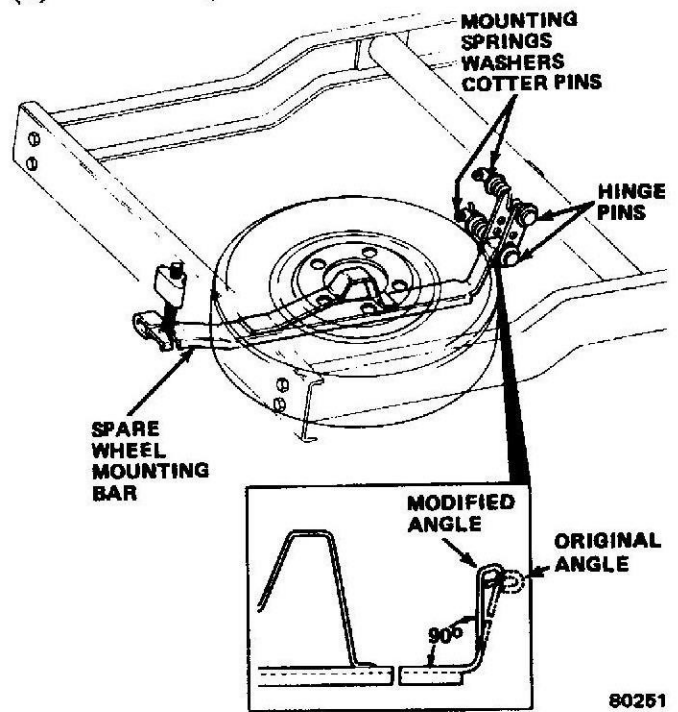
On some 1980 Cherokee and Wagoneer models built prior to VIN J0M17NC065724 and equipped with an underbody mounted spare wheel, an intermittent underbody noise may occur when the vehicle travels over bumps. This condition may be the result of contact between the spare wheel mounting bar and rear axle housing cover.

Service correction involves inspecting the rear axle housing cover for scratch marks, which indicate that contact has occurred, and modification of the spare wheel mounting bar if necessary.

**PROCEDURE**

- (1) Raise and support vehicle.
- (2) Inspect rear axle housing cover for scratch marks.
  - (a) If scratch marks are evident, proceed to step (3).
  - (b) If scratch marks are not evident, inspect all other underbody components for source of noise and repair as necessary.
- (3) Remove spare wheel and tire assembly.
- (4) Remove cotter pin, washer, and spring from hinge pin that attaches mounting bar to mounting plates (see illustration).
- (5) Remove hinge pin and remove spare wheel mounting bar.

- (6) Clamp mounting bar in vise and straighten bar mounting leg until it is at 90° angle to bar frame (see illustration).
- (7) Position mounting bar in mounting plates and install hinge pin, spring, washer, and cotter pin.
- (8) Install spare wheel and tire assembly.
- (9) Remove supports and lower vehicle.



**Spare Wheel Mounting Bar Modification**

80251

The following operations and standard work times will apply:

| OPERATION DESCRIPTION                                 | COST CODE | OPERATION NUMBER | MODEL   | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|---------|---------------|----|----|-------------|
|   |           |                  |         | 80            | 81 | 82 |             |
| BAR, SPARE WHEEL MOUNTING (UNDERBODY) – INSPECT ..... | 14.150    | 20141<br>A       | Wag-Cke | 0.1           |    |    | G           |
| Modify .....  |           |                  |         | 0.2           |    |    |             |

80-129-BSJ

# Diagnosis and Repair Bulletin

**Subject: Soft Top With Metal Door Fit**

**Application: 1980 CJ Models With Soft Top and Metal Doors**

**File: BODY Body General**  
**No. 80-1 Feb. 6, 1980**

On some 1980 CJ models with a soft top and metal doors, the inside top snap on the vertical support blades may be difficult to fasten. This condition may be caused by a misaligned hole in the horizontal support rod.

Service correction involves checking hole position in each support rod and replacing the support rods if the holes are misaligned.

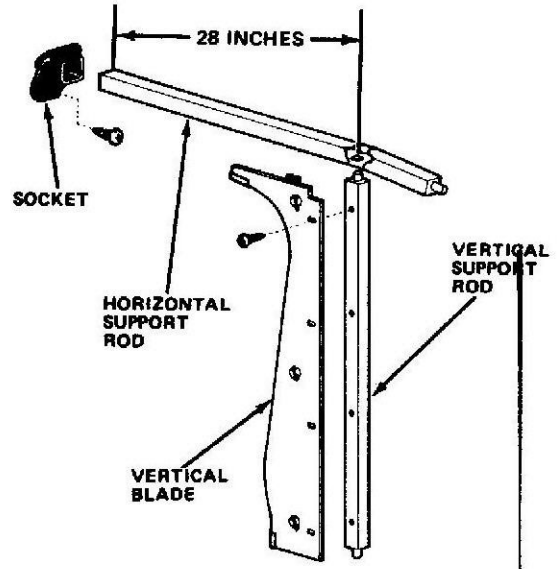
The following parts are available and may be required:

| Description             | Quantity | Part No. | Group  |
|-------------------------|----------|----------|--------|
| ROD, Horizontal Support | 2        | 8132799  | 40.014 |

### PROCEDURE

- (1) Unsnap soft top from vertical support blade and body side panel.
- (2) Unsnap soft top from roof bow and reposition roof bow.
- (3) Remove horizontal support rod from vertical support rod and remove horizontal support rod from socket (see illustration).
- (4) Check hole position in horizontal support rod. Hole should be located 28 inches from end of rod (see illustration). Replace rod if hole is misaligned.

- (5) Insert horizontal support rod into socket.
- (6) Engage vertical support rod tab in horizontal support rod.
- (7) Reposition soft top roof bow and strap on soft top.
- (8) Loosen vertical support blade.
- (9) Adjust blade position as necessary to align it with supports.
- (10) Snap soft top to body panels and vertical support blade.

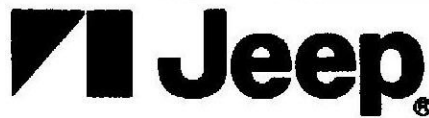


Soft Top Supports for Metal Door

The following standard servicing operation and work time will apply:

| OPERATION DESCRIPTION                         | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|-------|---------------|----|----|-------------|
|   |           |                  |       | 80            | 81 | 82 |             |
| RODS, HORIZONTAL SUPPORT — REPLACE BOTH ..... | 35.682    | 28015            | 93    | 0.2           |    |    | G           |

80-062-BSJ



FILE: Body/Chassis  
Electrical (BODY - Body  
Electrical)

No. 8-05-82 Sept. 10, 1982

## TECHNICAL BULLETIN

**PROBLEM AND APPLICATION:** Oil pressure gauge needle flutters during engine operation on some 1979-82 CJ and Scrambler models.

**CORRECTION:** Install the improved gauge that was phased into production on February 24, 1982. The improved gauges are date coded beginning with code B201 (2-1-82).

| <b>PARTS:</b> | <u>Description</u>  | <u>Quantity</u> | <u>Part Number</u> | <u>Group</u> |
|---------------|---------------------|-----------------|--------------------|--------------|
|               | GAUGE, Oil Pressure | 1               | 5750279            | 3.605        |

**S.R.T. INFORMATION:**

| <u>Operation Description</u>    | <u>T.I.C.</u> | <u>Operation Number</u> | <u>S.R.T.</u> |
|---------------------------------|---------------|-------------------------|---------------|
| CO. GAUGE, OIL PRESSURE REPLACE | 8-352         | 8999                    | 0.3           |

**DEALER REIMBURSEMENT:** Reimbursable within the provisions of the applicable warranty.

**PROCEDURE:**

1. Remove the original oil pressure gauge as outlined in Chapter 1L of the appropriate Jeep Technical Service Manual.
2. Obtain a replacement oil pressure gauge and check the gauge date code before installation to be sure it is one of the improved gauges. The code must be B201 (2-01-82) or later.

**NOTE:** Code letter B indicates the month, such as B for February, C for March, or D for April. The first number indicates the year, which in this case is 1982. The last two numbers represent the day of the month. For example, code C217 would represent March 17, 1982 and code D208 would represent April 8, 1982. Letter I is not used as a code letter.

3. Install the replacement oil pressure gauge as outlined in Chapter 1L of the appropriate Jeep Technical Service Manual.

82-064-J

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# Diagnosis and Repair Bulletin

**Subject: Power Sun Roof Option**

**Application: 1980 Wagoneer Limited Models**

**File: BODY  
Body Electrical**

**No. 80-8 Aug. 11, 1980**

A power sun roof is now available as an option on 1980 Wagoneer Limited models. The sun roof features a sliding glass panel operated by an electric motor and a manually operated sun screen. A nylon knit, one-piece headliner with bonded foam backing and a padded vinyl roof are standard on every Wagoneer model equipped with the optional sun roof.

The electric motor that operates the sliding glass panel is activated by a two-position switch mounted in the windshield header. The electric motor itself is mounted in the forward portion of the sun roof housing assembly. Electrical feed to the motor is through the A/C terminal of the fuse panel. Circuit protection is provided by the A/C terminal fuse and by a 20 amp, in-line fuse in a harness wire located just below the left A-pillar.

An additional feature of the sun roof is the ability to close the sliding glass panel manually if an electrical power failure should occur. A cranking tool is provided with the sun roof for this purpose. Refer to Manual Operation of Glass Panel procedure.

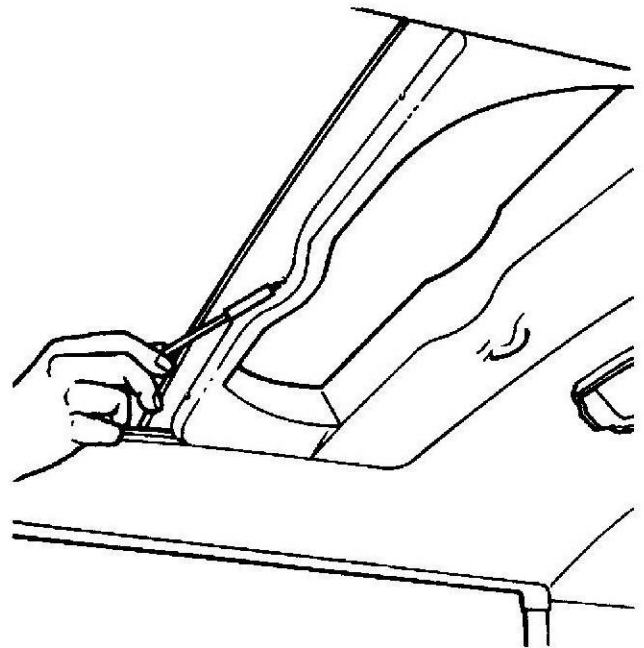
A rubber drain hose is used at each corner of the sun roof housing. These hoses remove any water that may bypass the weatherstrip seal surrounding the roof opening. The forward hoses are routed downward through the A-pillars. The rearward hoses are routed downward through the D-pillars.

Whenever it is necessary to service the power sun roof, refer to the procedures provided in this bulletin.

## POWER SUN ROOF SERVICE AND ADJUSTMENTS

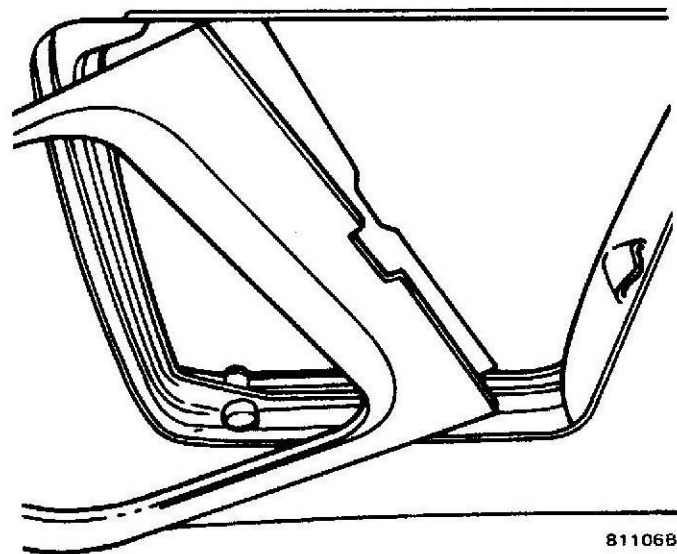
### Halo Assembly Removal

- (1) Open glass panel partially and remove halo assembly attaching screws (Fig. 1).
- (2) Grasp center of halo assembly and pull assembly downward to disengage front tabs from track.



81106A

**Fig. 1 Removing/Installing Halo Assembly Attaching Screws**



81106B

**Fig. 2 Removing/Installing Halo Assembly**

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*Additional copies of this bulletin are available through your zone office.*



(3) Close glass panel fully, slide halo assembly forward, and remove assembly from vehicle (Fig. 2).

#### Halo Assembly Installation

- (1) Close glass panel and position rear portion of halo assembly on glass panel.
- (2) Open glass panel partially.
- (3) Install halo assembly attaching screws.

#### Glass Panel Removal

- (1) Remove halo assembly. Refer to Halo Assembly Removal.
- (2) Close glass panel and remove outboard screws from front guide shoe assemblies (Fig. 3). Then loosen inboard screws and rotate guide shoes to disengage slide portion from track.
- (3) Release rear slide tension springs by rotating them to inboard position (Fig. 3).
- (4) Remove screws attaching rear guide shoes and retainers to tabs in glass panel and remove retainers (Fig. 3).
- (5) Working from outside of vehicle, raise front of glass panel and slide panel forward and out of vehicle.

#### Glass Panel Installation

- (1) Position glass panel in vehicle.
- (2) Install rear guide shoes and retainer brackets on glass panel and install guide shoe and retainer bracket attaching screws.
- (3) Install rear slide tension springs (Fig. 3).

**NOTE:** Be sure the spring is positioned under the spring lock roller.

- (4) Engage slide portion of front guide shoe assemblies in track and install guide shoe attaching screws.
- (5) Install halo assembly. Refer to Halo Assembly Installation.

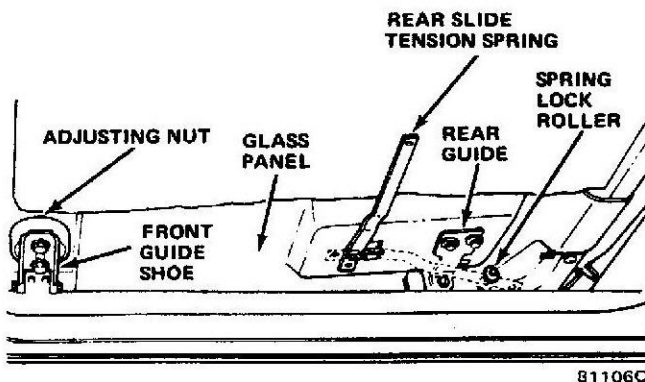


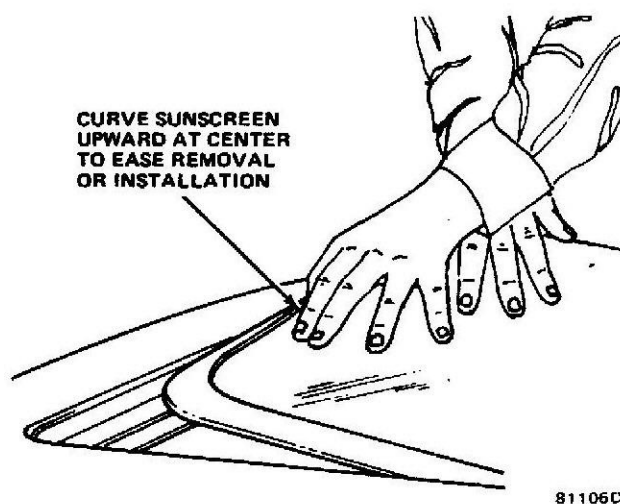
Fig. 3 Front Guide Shoe and Rear Tension Spring

#### Sunscreen Removal

- (1) Remove halo assembly and glass panel. Refer to Halo Assembly Removal and Glass Panel Removal procedures.
- (2) Open sunscreen fully.
- (3) Working from outside of vehicle, push sunscreen upward at center of screen and slide screen forward and upward to remove it (Fig. 4).

#### Sunscreen Installation

- (1) Working from outside of vehicle, curve sunscreen upward at center of screen and slide screen rearward and downward into sun roof opening (Fig. 4).
- (2) Install glass panel and halo assembly. Refer to Glass Panel Installation and Halo Assembly Installation procedure.



81106D

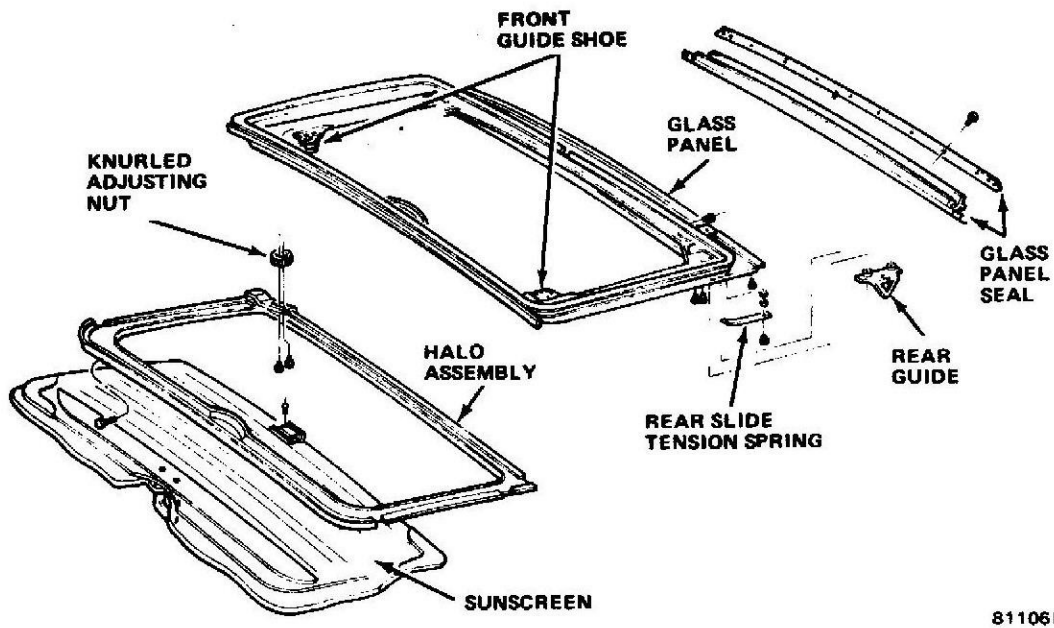
Fig. 4 Sunscreen Removal/Installation

#### Cable and Side Track Removal

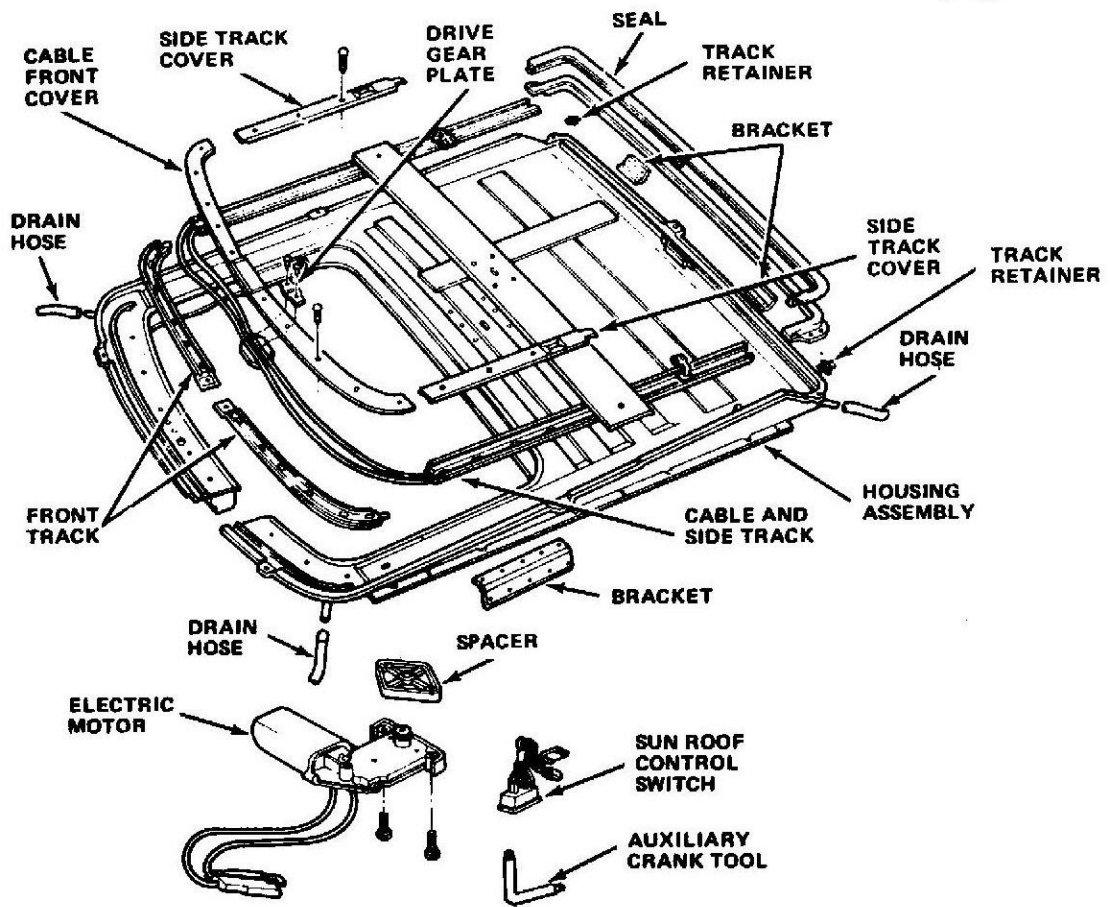
- (1) Remove halo assembly, glass panel and sunscreen. Refer to removal procedures outlined in this bulletin.
- (2) Remove screws that attach cable front cover and remove cover (Fig. 5).
- (3) Remove drive gear plate (Fig. 5).
- (4) Remove side track cover screws and remove side track cover (Fig. 5).
- (5) Disengage cable from front track and motor gear and remove cable by pulling it upward and outward.

**NOTE:** It may be necessary to reposition the front cable guide before the cable can be removed from the track.

- (6) Lift side track upward and remove side track.



81106F



81106E

Fig. 5 Power Sun Roof Assembly

## Cable and Side Track Installation

- (1) Position side track in sun roof housing. Be sure track retainer is seated in hole at rear of housing (Fig. 5).
- (2) Slide cable assembly into side track and install cover on side track.
- (3) Pull cable until rear guide shoe contacts side track cover.

**NOTE:** *If both cables have been disengaged from the motor gear, be sure both rear guide shoes are in contact with the side track covers before proceeding. This is very important.*

- (4) Position cables in front track and engage cables with teeth of drive gear.
- (5) Install drive gear plate.

**CAUTION:** *Do not operate the motor at this time as the cables could be damaged.*

- (6) Install cable front cover.
- (7) Install sunscreen, glass panel, and halo assembly. Refer to installation procedures outlined in this bulletin.

## Power Sun Roof Housing Removal

- (1) Remove halo assembly, glass panel, and sunscreen. Refer to removal procedures outlined in this bulletin.
- (2) Remove headlining. Refer to Headlining Removal.
- (3) Disconnect ground wire at right A-pillar and move wire away from housing assembly.
- (4) Disconnect sun roof switch from motor harness.
- (5) Disconnect drain tubes from sun roof housing (Fig. 5).
- (6) Remove housing attaching nuts.
- (7) Remove shims, if equipped.
- (8) Support housing and remove housing attaching hardware from brackets.
- (9) Lower housing assembly away from reinforcement ring and remove housing from vehicle.

## Power Sun Roof Housing Installation

- (1) Position housing assembly in vehicle.

- (2) Raise and support housing on reinforcement ring.
- (3) Install shims if equipped, and tighten housing attaching hardware.
- (4) Connect drain tubes to housing assembly (Fig. 5).
- (5) Connect sun roof switch to motor harness.
- (6) Position ground wire on housing assembly and connect wire to right A-pillar.
- (7) Install headlining. Refer to Headlining Installation.
- (8) Install sunscreen, glass panel, and halo assembly. Refer to Installation Procedures outlined in this bulletin.

## Vinyl Roof Removal

- (1) Remove moulding clips and remove mouldings around vinyl roof.
- (2) Remove all sealing material around openings to expose vinyl top edges.
- (3) Mask cowl top, sides and rear of vehicle, and windows with paper. Insert paper in windows, then close windows to hold paper in place.
- (4) Remove luggage rack. Refer to Chapter 3L in 1980 Technical Service Manual for procedure.
- (5) Loosen vinyl material at front pillars and along windshield header.

**NOTE:** *It may be easier to remove the vinyl material and padding simultaneously.*

- (6) Remove material and sealer from drip rail. Pry sealer loose using screwdriver or other suitable tool if necessary.
- (7) If vinyl material and padding is difficult to remove, soak adhesive next to fabric using rag dampened with 3M General Purpose Adhesive Cleaner or equivalent.

**NOTE:** *It is not necessary to remove the old vinyl top adhesive. However, it is important that the roof surface be smooth and free of irregularities to prevent highlighting after a new cover is installed.*

- (8) Remove vinyl material from foam padding using 3M General Purpose Adhesive Cleaner, or equivalent.

**WARNING:** *Always use rubber gloves when working with solvents and be sure the work area is well ventilated.*

## Vinyl Roof Installation

(1) Remove all dust and foreign material from roof panel.

(2) Position padding on roof panel and cut away foam padding at sun roof opening and luggage rack attaching screw holes.

(3) Remove paper backing from foam padding to expose padding adhesive and bond padding to roof panel. Use roller or soft cloth to ensure positive bond.

**NOTE:** *Be sure the foam padding is smooth and free from any irregularities to prevent highlighting after a new cover is installed.*

(4) Mark centerline of roof panel above windshield and rear window openings.

(5) Align center of vinyl cover with centerline mark above windshield and rear window.

(6) Secure cover to pinch weld flange at centerline locations with tape.

(7) Check cover for alignment at both sides and at roof extension panels.

(8) Fold cover in half at centerline.

(9) Apply smooth, even coat of 3M Vinyl Trim Adhesive or equivalent to 15-inch wide strip of one side of foam padding and to vinyl cover. Start at center when applying adhesive and work from front to rear.

**NOTE:** *Allow the adhesive applied to the vinyl material and foam padding to dry until it is tacky to the touch.*

(10) Bond cover to foam padding using a roller or soft cloth to ensure positive bond and to eliminate air pockets. Bond cover by starting at centerline and working toward side.

**NOTE:** *To remove wrinkles caused by folding, keep the cover fabric taut while installing it.*

(11) Apply adhesive to remainder of cover and foam padding and in drip moulding at side of cover being installed. Allow adhesive to dry until tacky.

(12) Apply smooth, even coat of adhesive to 15-inch wide strip of foam padding and to vinyl cover on opposite side of vehicle. Start at center and work from front to rear when applying adhesive. Allow adhesive to dry until tacky.

**NOTE:** *When applying the cover to the foam padding, always work from the center to the outside to eliminate air pockets to ensure positive bonding.*

(13) Brush adhesive onto cover, ledge of windshield, and rear window opening. Allow adhesive to dry until tacky before bonding.

(14) Work vinyl cover into crease line areas around roof using smooth fiber stick.

(15) Trim excess cover material from around drip rails, windshield, and rear window.

(16) Trim vinyl material around sun roof opening and luggage rack attaching screw holes.

(17) Brush adhesive onto cover and ledge of sun roof opening. Allow adhesive to dry until tacky before bonding.

(18) Position and work vinyl cover into sun roof opening using smooth fiber stick.

(19) Install luggage rack. Refer to Chapter 3L of 1980 Technical Service Manual.

(20) Apply bead of 3M Super Silicone Sealer (black preferred) or equivalent along top of windshield rubber weather strip and vinyl cover.

**NOTE:** *It may be necessary to apply sealer to the drip rails also.*

(21) Remove excess sealer using 3M General Purpose Adhesive Cleaner or equivalent and remove all masking tape and paper.

(22) Install mouldings and clips.

## Headlining Removal

(1) Remove sun visors, escutcheons, and center support.

(2) Remove windshield moulding and end caps.

(3) Remove sun roof switch and disconnect switch wires.

(4) Remove sun roof opening trim welt and remove motor cap.

(5) Spray 3M Release Agent or equivalent, across headlining at windshield and around sunroof opening. Allow several minutes for release agent penetration.

**CAUTION:** *When removing the headlining, use care to avoid separating the foam backing from the fabric. If the fabric begins to separate from the backing, make a second application of the release agent.*

(6) Remove headlining from roof panel and sun roof opening.

(7) Remove headlining from side retainers

(8) Remove lens from dome lamp. Remove screws attaching lamp to sun roof housing and remove lamp.

(9) Remove coat hooks.

(10) Remove lens from cargo lamp, then remove screws attaching cargo lamp to roof bow and remove lamp and switch.

(11) Remove tailgate opening moulding and end caps.

(12) Spray 3M Release Agent, or equivalent across headlining at tailgate opening moulding. Allow several minutes for release agent penetration.

**CAUTION:** *When removing the headlining, use care to avoid separating the foam backing from the fabric. If the fabric begins to separate from the backing, make a second application of release agent.*

(13) Remove headlining from tailgate opening.

(14) Remove headlining from side retainers and slide headliner rearward and out of headlining brackets.

(15) Remove headlining from vehicle through tailgate opening.

#### Headlining Installation

(1) Install headlining in vehicle through tailgate opening. Insert headlining in headlining brackets and slide headlining forward.

(2) Spray 3M General Trim Adhesive, or equivalent across at roof panel at tailgate opening.

(3) Attach headlining to roof panel at tailgate opening and install tailgate opening moulding and end caps.

(4) Pull headlining forward. Install headlining up to coat hook locations along both sides using Installer Tool J-2772-C.

(5) Connect and install cargo lamp and lens.

(6) Connect and install cargo lamp switch.

(7) Spray 3M General Trim Adhesive or equivalent, on sun roof opening flange.

(8) Install coat hooks.

(9) Pull headlining forward and attach it to sun roof opening flange.

(10) Install sun roof opening trim welt.

(11) Connect and install dome lamp and lens.

(12) Place strip of masking tape across top of windshield at roof panel.

(13) Spray 3M General Trim Adhesive or equivalent, on roof panel along top of windshield.

(14) Using sun visor holes as guides, pull headlining forward and attach it along windshield.

(15) Install headlining along both sides using Installer Tool J-2772-C.

(16) Connect and install sun roof switch.

(17) Install windshield moulding and end caps, and motor cap.

(18) Install sun visors, escutcheons, and center support.

(19) Remove masking tape.

#### Power Sun Roof Switch Removal/Installation

(1) Pull switch downward and disconnect switch wires.

(2) Connect switch wires and install switch in switch opening.

#### Power Sun Roof Motor Removal

(1) Open sun roof glass panel; then disconnect battery negative cable.

(2) Remove sun visors, escutcheons, center support, and windshield moulding and end caps.

(3) Remove sun roof switch and motor cap.

(4) Spray 3M Release Agent or equivalent across headlining at windshield. Allow several minutes for release agent penetration.

**CAUTION:** *When removing the headlining, use care to avoid separating the foam backing from the fabric. If the fabric begins to separate from the backing, make a second application of the release agent.*

(5) Pull front edge of headlining downward.

(6) Remove motor mounting screws and remove motor.

#### Power Sun Roof Motor Installation

(1) Position motor in housing and install motor mounting screws.

(2) Place strip of masking tape across top of windshield at roof panel.

(3) Spray 3M General Trim Adhesive or equivalent on roof panel along top of windshield.

(4) Pull headlining forward and attach it along windshield. Use sun visor holes as guides when attaching headlining.



(5) Connect wires to sun roof switch and install switch and motor cap.

(6) Install sun visors, escutcheons, windshield trim moulding and end caps, and center support.

(7) Connect battery negative cable, and check sun roof operation.

**NOTE:** *If the motor slips and does not open and close the glass panel, the motor clutch located in the gear portion of the motor may have to be adjusted. Refer to Motor Clutch Adjustment in Power Sun Roof Service and Adjustments section.*

#### Motor Clutch Adjustment

(1) Remove motor cap to gain access to adjusting screw. Cap is located in headlining just above, and at center of windshield.

(2) Loosen clutch plate adjusting screw jamnut using deep socket.

(3) Tighten adjusting screw to 50 inch-pounds (5.6 N·m) torque.

(4) Tighten jamnut and install motor cap.

#### Glass Panel Parallel Alignment

**CAUTION:** *Do not operate the electric motor while the glass panel or cables are removed from the track as cable damage could occur.*

(1) Open glass panel approximately 1/4-to-1/2 inch.

(2) Determine how much forward edge of glass panel is out of parallel with forward edge of opening in roof panel and note variation.

(3) Open panel approximately eight inches to gain access to cable and drive gear mechanism.

(4) Remove cable front cover and drive gear plate.

(5) Remove one cable from track.

(6) Move one side of glass panel slightly fore or aft as required to obtain parallel alignment with forward edge of roof panel opening (Fig. 6).

(7) Install cable in front track and insert cable in drive gear teeth.

(8) Install drive gear plate and cable front cover.

(9) Position glass panel approximately 1/4-inch from fully closed position.

(10) Check parallel alignment. Repeat steps (2) through (9) to obtain proper alignment if necessary.

#### Glass Panel Height Adjustment

##### Adjusting Front of Panel

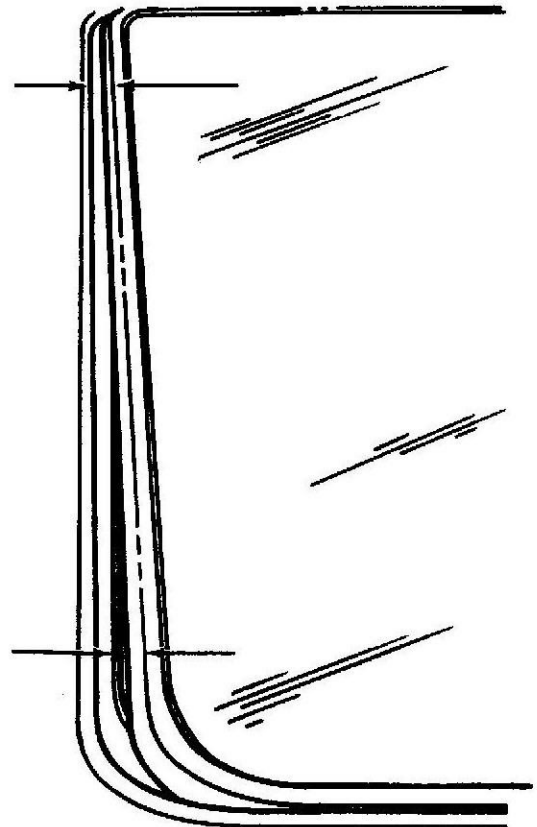
(1) Remove halo assembly. Refer to Halo Assembly Removal.

(2) Loosen front guide shoe attaching screws (Fig. 7).

(3) Turn knurled nut on each front guide shoe clockwise to lower glass panel or counterclockwise to raise panel and obtain desired height adjustment (Fig. 7).

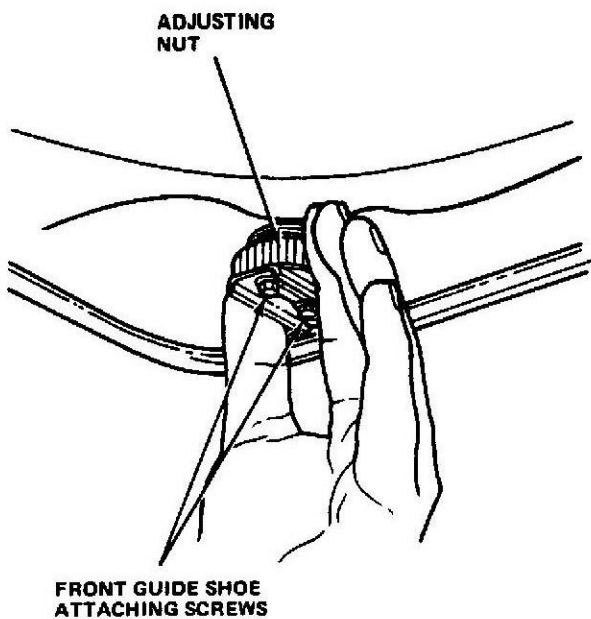
(4) Tighten front guide shoe attaching screws to 20 inch-pounds (2.3 N·m) torque after adjusting panel height.

**CAUTION:** *Do not adjust the glass panel too high as it could be damaged when the panel is opened or closed.*



81106G

Fig. 6 Glass Panel Parallel Alignment



81106H

Fig. 7 Glass Panel Front Height Adjustment

(5) Check glass panel alignment and operation in open and closed positions. Repeat steps (2) through (4) to obtain proper height if necessary.

(6) Install halo assembly. Refer to Halo Assembly Installation.

#### Adjusting Rear of Panel

(1) Remove halo assembly. Refer to Halo Assembly Removal.

(2) Release rear slide tension spring and rotate spring to inboard position (Fig. 3).

(3) Loosen rear slide adjuster nut (Fig. 8) and raise or lower panel as required to obtain desired adjustment.

(4) Tighten rear slide adjuster nut to 30 inch-pounds (3.3 N-m) torque after completing adjustment.

(5) Install halo assembly. Refer to Halo Assembly Installation.

#### Manual Operation of Glass Panel

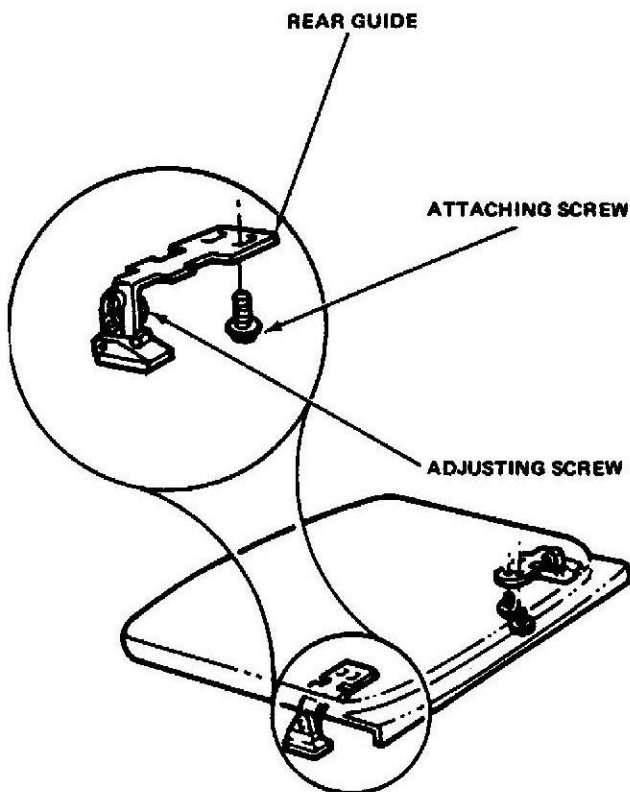
If an electrical malfunction should ever occur, the glass panel can be opened or closed manually as follows:

(1) Remove small round motor cap located in center of windshield header near front edge of sun roof opening. Cap removal will provide access to motor driveshaft.

(2) Remove screw in driveshaft using flat bladed screwdriver or cranking tool blade end located in glovebox.

(3) Rotate motor driveshaft using cranking tool. Rotate driveshaft clockwise to close glass panel, or counterclockwise to open panel.

(4) Install screw in driveshaft and install access plug in windshield header after opening/closing glass panel.



81106J

Fig. 8 Glass Panel Rear Height Adjustment

#### Vinyl Top Repair

##### Bulges or Blisters

Bulges or blisters in the vinyl top indicate poor bonding or trapped air. They can be eliminated by piercing the bulge or blister to expel the air. Heat the area for 10 to 15 seconds with Heat Gun J-25070, held 10 to 15 inches from the material.

Immediately press and hold vinyl material firmly against foam padding and metal with a felt pad or roller until vinyl cover cools. Do not rub vinyl. Rubbing will result in a polished area.

**Wrinkles**

Minor wrinkles in the vinyl top material may be removed with the application of moist heat as follows:

- (1) Wash vinyl top surface thoroughly using AMC Vinyl Cleaner or equivalent.
- (2) Set heat control or household-type flat iron to warm.

(3) Dampen a clean cloth with clean water and apply it over wrinkled area.

(4) With iron at proper operating temperature, move iron continuously over dampened cloth until wrinkle is removed.

Maintain pressure on vinyl top material until material cools.

**CAUTION:** Apply pressure to the vinyl top material only. Do not rub the vinyl top repair area as this could impair the finish of the vinyl.

The following operations and standard work times will apply:

| OPERATION DESCRIPTION                        | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------|---------------|----|----|-------------|
|  |           |                  |       | 80            | 81 | 82 |             |
| PANEL, GLASS SLIDING, SUN ROOF — R & R ..... | 25.405    | 25218            | Wag.  | 0.3           |    |    | G           |
| Panel — Replace .....                        | 25.405    | A                |       | 0.1           |    |    | G           |
| CABLE, SUN ROOF — REPLACE .....              | 28.452    | 25222            | Wag.  |               |    |    | G           |
| Includes cable adjustment                    |           |                  |       |               |    |    |             |
| One .....                                    |           |                  |       | 0.3           |    |    |             |
| Both .....                                   |           |                  |       | 0.4           |    |    |             |
| HEADLINING — R & R .....                     | 29.011    | 29125            | Wag.  | 1.3           |    |    | G           |
| HEADLINING — LOWER FRONT HALF .....          | 29.011    | 29114            | Wag.  | 0.9           |    |    | G           |
| HEADLINING — LOWER REAR HALF .....           | 29.011    | 29116            | Wag.  | 0.5           |    |    | G           |
| HOUSING, SUN ROOF — R & R .....              | 28.454    | 25220            | Wag.  | 1.8           |    |    | G           |
| Includes lower front half of headlining      |           |                  |       |               |    |    |             |
| HALO ASSEMBLY, SUN ROOF — R & R .....        | 28.468    | 25216            | Wag.  | 0.1           |    |    | G           |
| Halo assembly — Replace .....                | 28.468    | A                |       | 0.1           |    |    | G           |
| Sliding Glass Panel — Adjust Height .....    | 25.405    | B                | Wag.  | 0.2           |    |    | G           |
| CLUTCH, SUN ROOF MOTOR — ADJUST .....        | 28.450    | 25224            | Wag.  | 0.1           |    |    | G           |
| MOTOR, SUN ROOF — REPLACE .....              | 28.450    | 25226            | Wag.  | 0.8           |    |    | G           |
| SWITCH, SUN ROOF — REPLACE .....             | 3.810     | 25228            | Wag.  | 0.2           |    |    | G           |

80-123-BSJ

# Diagnosis and Repair Bulletin

**Subject:** Instrument Cluster Lens

**Application:** 1980 Jeep CJ-5 and CJ-7 Models

**File:** BODY  
Body Electrical

**No. 80-7 June 30, 1980**

On some 1980 CJ-5 and CJ-7 models, a slight mist may form on the instrument cluster lens during high humidity conditions. Although the gauges are still quite visible, a customer may be dissatisfied with this condition.

Service correction involves drilling vent holes in the instrument cluster case as outlined in the following procedure.

## PROCEDURE

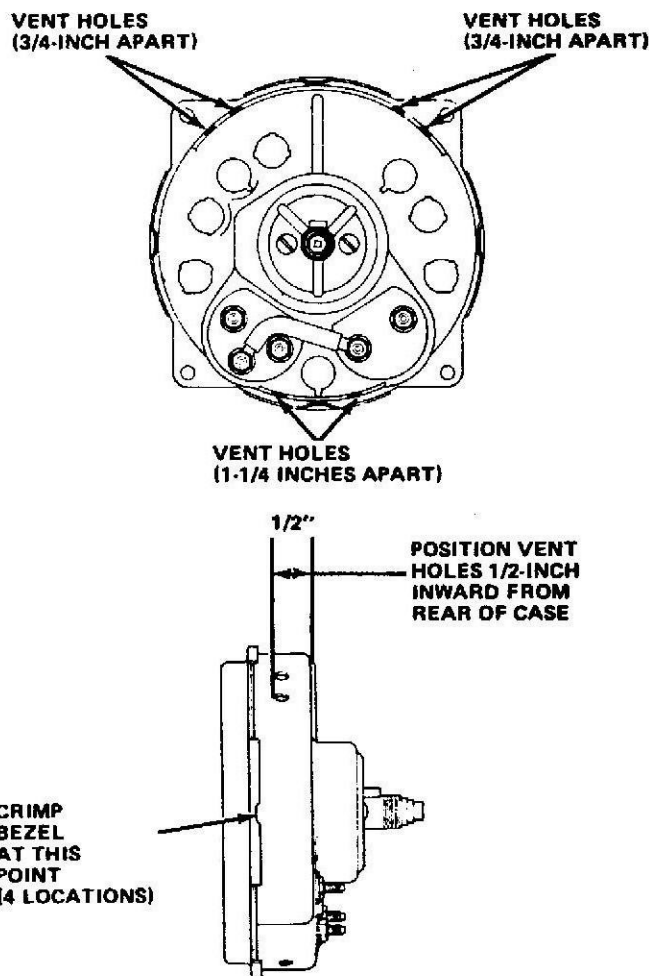
- (1) Disconnect battery negative cable.
- (2) Disconnect speedometer cable at speedometer head.
- (3) Remove windshield holddown knobs and fold windshield forward onto hood.
- (4) Remove dash pad from dash panel.
- (5) Remove steering column bezel.
- (6) Remove screws that attach instrument panel to dash panel and move instrument panel outward to gain access to instrument cluster attaching nuts.
- (7) Remove instrument cluster attaching nuts and move cluster away from instrument panel.
- (8) Tag all bulbs and wires connected to instrument cluster for assembly reference. Then disconnect wires, remove bulbs, and remove instrument cluster.
- (9) Remove bezel, retainer, and lens from instrument cluster.
- (10) Remove speedometer head from instrument cluster case.
- (11) Drill six 1/8-inch diameter holes in instrument cluster case in locations shown in illustration. Position each pair of holes in upper portion of case approximately 3/4-inch apart. Position two holes in lower part of case 1-1/4 inches apart to avoid contacting bulb in this portion of case.

**CAUTION:** Take care to avoid damaging the fuel and temperature gauges when drilling the vent holes in the instrument cluster case.

(12) Clean all metal chips from instrument cluster case.

(13) Install speedometer head in instrument cluster.

(14) Install lens, retainer, and bezel on instrument cluster. Secure parts on cluster by crimping bezel at four locations shown in illustration.



Vent Hole Locations

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Additional copies of this bulletin are available through your zone office.

(15) Connect bulbs and wires to instrument cluster. Refer to assembly reference tags for correct wire locations.

(16) Install instrument cluster in instrument panel and install cluster attaching nuts.

(17) Position instrument panel on dash panel and install instrument panel attaching screws.

(18) Install steering column bezel.

(19) Install dash pad on dash panel.

(20) Raise windshield and install windshield holddown knobs.

(21) Connect speedometer cable to speedometer head.

(22) Connect battery negative cable.

The following operation and standard work times will apply:

| OPERATION DESCRIPTION                         | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|-------|---------------|----|----|-------------|
|   |           |                  |       | 80            | 81 | 82 |             |
| CLUSTER ASSEMBLY, INSTRUMENT —<br>MODIFY..... | 3.505     | 3299             | CJ    | 0.8           |    |    | G           |
| With Air Conditioning — Add .....             |           |                  |       | 0.1           |    |    |             |
| With Fabric Top — Add. ....                   |           |                  |       | 0.1           |    |    |             |
| With Molded Top — Add.....                    |           |                  |       | 0.3           |    |    |             |

80-117-BSJ



# Diagnosis and Repair Bulletin

**Subject: Power Window Operation and Diagnosis**

**Application: 1980 Cherokee, Wagoneer, and Truck Models Equipped With Power Windows and Built Prior to VIN J0D15NC053176**

**File: BODY Body Electrical**

**No. 80-6 June 6, 1980**

The electrically operated power windows in some 1980 Cherokee, Wagoneer and Truck models built prior to VIN J0D15NC053176 may bind, become inoperative, operate slowly, or become inoperative during cold weather conditions.

Service correction requires an accurate diagnosis of the power window system. Slow operation or a binding condition may be caused by improperly adjusted window glass slide or division channels. An inoperative window condition will require the circuit tests outlined in Section 3J of the 1980 Technical Service Manual Supplement to determine if the condition is related to the window switch, motor, or wiring. If diagnosis indicates motor replacement is necessary, use the service replacement motor described in this bulletin.

The following parts may be required.

| <u>Description</u>                                 | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|--|-----------------|-----------------|--------------|
| MOTOR ASSEMBLY, Electric Window Drive (Left Side)  | 1               | 8132691         | 23.300       |
| MOTOR ASSEMBLY, Electric Window Drive (Right Side) | 1               | 8132692         | 23.300       |

The following operations and standard work times will apply:

| OPERATION DESCRIPTION   | COST CODE | OPERATION NUMBER | MODEL       | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|-------------|---------------|----|----|-------------|
|   |           |                  |             | 80            | 81 | 82 |             |
| MOTOR, ELECTRICALLY OPERATED FRONT DOOR WINDOW -- REPLACE . . . . . | 23.103    | 23158            | Wag-Cke Trk | 0.6           |    |    | G           |
| MOTOR, ELECTRICALLY OPERATED REAR DOOR WINDOW -- REPLACE . . . . .  | 23.173    | 23168            | Wag-Cke Trk | 0.5           |    |    | G           |

80-109-BSJ

## PROCEDURE

- (1) Disconnect battery negative cable.
  - (2) Remove door trim panel and water dam paper.
- WARNING: The window regulator assembly is spring loaded. The window glass must be supported in the UP position and the regulator arm connected to the lower slide channel to prevent the regulator spring from unloading.**
- (3) Support window glass in UP position by inserting wood block through door inner panel to support lower slide channel.
  - (4) Disconnect feed wires to motor at connector.
  - (5) Remove motor attaching nuts and bolts and remove motor assembly.
  - (6) Install replacement motor assembly.
  - (7) Connect feed wires to motor.
  - (8) Remove wood block used to support window.
  - (9) Install water dam paper and trim panel.
  - (10) Connect battery negative cable.

# Diagnosis and Repair Bulletin

**Subject: AM/FM Stereo Radio Option**

**Application: 1980 CJ-5 and CJ-7 Models**

**File: BODY — Body Electrical**

**No. 80-5 April 30, 1980**

An AM/FM stereo radio is now available as an option on 1980 CJ-5 and CJ-7 models. This radio option includes dual speakers that are mounted in the instrument panel.

If it is ever necessary to remove the AM/FM radio and/or speakers on 1980 CJ models equipped with this option, refer to the following removal and installation procedure.

### PROCEDURE

- (1) Disconnect battery negative cable.
- (2) On models equipped with air conditioning, remove evaporator housing attaching screws and move housing away from instrument panel.
- (3) Remove radio control knobs and nuts.
- (4) Disconnect speaker wires, radio wires, and antenna wire.

(5) Disconnect radio mounting bracket and remove radio.

(6) Remove nuts that attach speakers to instrument panel and remove speakers.

### Installation

- (1) Position speakers on instrument panel and install speaker retaining nuts.
- (2) Install radio in instrument panel, connect radio mounting bracket, and install radio nuts and control knobs.
- (3) Connect radio wires, speaker wires, and antenna wire.
- (4) On models with air conditioning, position evaporator housing on instrument panel and install housing attaching screws.
- (5) Connect battery negative cable.

The following standard servicing operations and work times will apply:

| OPERATION DESCRIPTION                          | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------|---------------|----|----|-------------|
|  |           |                  |       | 80            | 81 | 82 |             |
| RADIO, AM/FM STEREO — R & R . . . . .          | 15.327    | 3580             | 83-93 | 0.3           |    |    | G           |
| SPEAKERS, AM/FM STEREO RADIO — R & R . . . . . | 15.321    | 3582             | 83-93 | 0.3           |    |    | G           |
| Radio Speaker — Replace . . . . .              | 15.321    | A                | 83-93 | 0.4           |    |    | G           |

80-102-BSJ

**American Motors Sales Corporation**

Service Engineering Department • 14250 Plymouth Road • Detroit, Michigan 48232

*Additional copies of this bulletin are available through your zone office.*

# Diagnosis and Repair Bulletin

**Subject: Stereo Radio Rear Speakers Missing**

**Application: 1980 Cherokee Laredo Models Built Prior to VIN JOE17NN027333**

**File: BODY Body Electrical**

**No. 80-4 Feb. 14, 1980**

Some 1980 Cherokee Laredo models ordered with the four speaker stereo radio option may have been built without the rear speakers.

Service correction involves installation of the rear speakers and speaker wiring harness if necessary.

The following parts are available and required.

| <u>Description</u> | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|--------------------|-----------------|-----------------|--------------|
| JUMPER, Harness    | 1               | 5751957         | 15.320       |
| SPEAKER KIT, Rear  | 1               | 8997198         | 15.320       |

## PROCEDURE

### Vehicles With Power Tailgate

- (1) Remove inside spare tire if equipped.
- (2) Remove both rear quarter trim panels.
- (3) Remove knockouts from trim panels and cut out trim material. Paint bezels and grilles with matching trim colors outlined below. Then install bezels and grilles.

| <u>Black</u> | <u>Blue</u> | <u>Russet</u> | <u>Dark Desert Tan</u> |
|--------------|-------------|---------------|------------------------|
| NA           | 8993597     | 8993596       | 8993499                |

- (4) Install gaskets around speaker openings on back of trim panels.

- (5) Install speakers in left and right mounting brackets.

- (6) Position and attach left and right speaker and bracket assemblies to body panels according to template supplied in speaker kit.

- (7) Connect speaker wires to cross-body harness connections.

- (8) Operate radio to check and ensure that all four speakers are functional.

- (9) Install rear quarter trim panels and inside spare tire if equipped.

### Vehicles Without Power Tailgate

- (1) Remove inside spare tire if equipped.
- (2) Remove both rear quarter trim panels.
- (3) Remove knockouts from trim panels and cut out trim material. Paint bezels and grilles with matching trim colors outlined below. Then install bezels and grilles.

| <u>Black</u> | <u>Blue</u> | <u>Russet</u> | <u>Dark Desert Tan</u> |
|--------------|-------------|---------------|------------------------|
| NA           | 8993597     | 8993596       | 8993499                |

- (4) Install gaskets around speaker openings on back of trim panels.

- (5) Install speakers in left and right mounting brackets.

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(6) Position and attach left and right speaker and bracket assemblies to body panel according to template supplied in speaker kit.

**NOTE:** *The rear speaker harness may have been omitted in production. If the harness cannot be located in the rear quarter panel area, proceed to step (7). However, if the harness is located in the quarter panel area, proceed to step (14).*

(7) Remove glove box from dash panel and inspect wire harness running from radio to speakers. Wire harness part number should be 5751957. If not, replace harness as described in following steps.

(8) Remove left scuff plate and loosen carpeting.

(9) Remove seat belt lower mount.

(10) Remove rear floor moulding at tailgate opening.

(11) Position and route harness under carpeting. Start at jumper harness at radio and route back to left speaker and across to right rear speaker.

(12) Operate radio to check and ensure that all four speakers are functional.

(13) Install glove box, seat belt lower mount, scuff plate and rear floor moulding.

(14) Install both rear quarter trim panels and inside spare tire if required.

The following standard servicing operation and work time will apply:

| OPERATION DESCRIPTION  | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------|---------------|----|----|-------------|
|  |           |                  |       | 80            | 81 | 82 |             |
| SPEAKERS, RADIO REAR – INSTALL . . . .<br>Includes brackets and color coat | 15.321    | 3603             | 17    | 0.7           |    |    | G           |
| Harness—Install . . . . .  | 15.321    | A                |       | 0.5           |    |    | G           |
| Material allowance for paint is \$ 0.70                                    |           |                  |       |               |    |    |             |

80-050-BSJ



# PRODUCT RECALL CAMPAIGN

## Diagnosis and Repair Bulletin No. 80-3

Subject: JLAMP CAMPAIGN (Type "S" Product Recall Campaign) Headlamp Assembly

# SAFETY

Date: January 28, 1980

Application: 1980 Jeep Cherokee, Wagoneer and Truck Models

File: BODY-Body Electrical

This is a Type "S" campaign subject to all campaign procedures and involving safety-related elements. A copy of the combined owner notification and correction reporting card for this campaign is shown in Figure 1.

Some 1980 Jeep Cherokee, Wagoneer and Truck models built between VIN numbers JOE17NN000065 and JOE15NN005299 may have been assembled with incorrect headlamps for the U.S. market.

Service correction involves inspecting both the right and left headlamps and if necessary, replacing the headlamps found to be incorrect with the correct parts.

The following part may be required for correction:

| Description                  | Qty. | Part No. | Group No. |
|------------------------------|------|----------|-----------|
| Bulb, Headlamp (Sealed Beam) | A/R  | 8128683  | 3.280     |

The Zone will provide a VIN list for each dealer with any vehicles involved. However, the campaign procedures apply to all dealers. On all undelivered, campaign-involved vehicles, the inspection/correction must be made before the vehicle is sold or otherwise put in service.

The PDC's already have their supply of campaign parts. Parts can now be ordered, only as needed, from your local PDC.

### INSPECTION PROCEDURE

1) Inspect headlamps. If cat-head shaped logo appears on glass and a bulb is seen in unit, headlamp(s) are incorrect and must be replaced. Refer to replacement procedure below. If both headlamps are sealed beam units, then vehicle should be returned to the owner.

### REPLACEMENT PROCEDURE

- 1) Remove headlamp retaining ring screws and remove retaining ring.
- 2) Disconnect wiring and remove lamp assembly and dispose of it.
- 3) Connect wires on replacement sealed beam headlamp and position lamp in place.
- 4) Position retaining ring and install retaining ring screws.
- 5) Aim headlamps according to local standards.

The following operations and standard work time will apply:

| OPERATION DESCRIPTION                                   | WARRANTY REPORTING CODE | OPERATION NUMBER | MODEL         | YEAR AND TIME |  | SKILL LEVEL |
|---|-------------------------|------------------|---------------|---------------|--|-------------|
|   |                         |                  |               | 80            |  |             |
| Bulb-Headlamp-Inspect .....                             | 3.280                   | 3375             | WAG, CKE, TRK | .1            |  | M           |
| Replace (Both)-Incl. Aiming .....                       |                         | A                |               | .3            |  | M           |
| Applicable Condition Code: 56 - Product Recall Campaign |                         |                  |               |               |  |             |

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## CLAIM HANDLING

Several vehicles may be listed on a single Warranty Claim form, reference the Warranty Administration Manual, Section 7, Product Recall Campaign. Complete and mail the reporting half of the notification

card (Fig. 1) for each vehicle as soon as the campaign service is complete.

**CAUTION:** On multiple-vehicle claims, do not delay any claim so that CCD will receive it beyond the time outlined in the Warranty Administration Manual.

| <b>Product Recall Campaign Reporting Card</b> |  |                      |  |  |  |  |  |  |  |  |  |
|---|--|----------------------|--|--|--|--|--|--|--|--|--|
| <b>Side 2</b> Please see side 1               | <div style="display: flex; justify-content: space-between;"><div style="width: 45%;"><p style="text-align: center;"><b>Instructions: OWNER</b></p><p>If you do not now own this vehicle, please just fill in below (either a, b, or c) and MAIL DIRECTLY TO AMERICAN MOTORS SALES CORPORATION</p><p>a Sold or Traded to: _____<br/>Name (Please Print)</p><p>_____ Address</p><p>_____ City State</p><p>b Present owner name and address not known <input type="checkbox"/></p><p>c Removed from service because of collision damage or otherwise <input type="checkbox"/></p><p>_____ VIN (Vehicle Identification Number)</p></div><div style="width: 45%; border: 1px solid black; padding: 5px;"><p style="text-align: center;"><b>Instructions: DEALER</b></p><p>This section is for the dealer to use when your vehicle goes in for the required attention</p><p><input type="checkbox"/> Correction made<br/><input type="checkbox"/> Correction not required</p><table border="1" style="margin: 0 auto; text-align: center;"><tr><td colspan="5">Zone and Dealer Code</td></tr><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table><p>_____ Dealer Signature</p><p>_____ Date Vehicle Serviced</p><p style="text-align: right;"><b>Campaign Data Reporting Section</b></p></div></div>  | Zone and Dealer Code |  |  |  |  |  |  |  |  |  |
| Zone and Dealer Code                          |  |                      |  |  |  |  |  |  |  |  |  |
|   |  |                      |  |  |  |  |  |  |  |  |  |
| <b>Side 1</b>                                 | <h3 style="text-align: center;">Notice of Product Recall Campaign Involving Your Vehicle</h3> <p>This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.</p> <p>Jeep Corporation has determined that some 1980 Jeep Wagoneers, Cherokees, and Trucks may have headlamps that do not conform to Federal Motor Vehicle Safety Standard No. 108, Lamps, Reflective Devices, and Associated Equipment. Your vehicle may have a headlamp that is not a sealed beam type as required by the Federal Standard. In the interest of your safety and complete satisfaction with our product, Jeep Corporation wants to inspect your vehicle to assure that proper headlamps have been installed. If necessary, we will replace the present headlamp with a sealed beam type. This service may eliminate an inconvenience to you should a replacement unit of your present headlamp become necessary and not be readily available.</p> <p>Jeep Corporation urges that you contact your Jeep dealer immediately to arrange an appointment for the dealer to inspect the right and left headlamps, and if necessary, replace one or both with a sealed beam type. This service will be performed at no charge to you. The time necessary to inspect and service your vehicle will be approximately 45 minutes. Although the time required to service your vehicle is less than one hour, we do suggest that you contact your dealer to arrange an appointment before tendering your vehicle for service.</p> <p>If your dealer does not perform this service on your mutually arranged appointment date or within five days thereafter and without charge, please contact the local American Motors Sales Corporation Zone Office (listed in your Owner's Manual) or American Motors Corporation, Owner Relations, 14250 Plymouth Road, Detroit, MI 48232 (Telephone (313) 493-2341). If your dealer fails or is unable to provide this service within a reasonable time or without charge, you may wish to notify the Administrator, National Highway Traffic Safety Administration, Washington, D.C. 20590.</p> <hr/> <p>When your vehicle goes in for the required attention: Please be sure this complete notification card goes with it because the card is to be used by the dealer for reporting purposes. In case you do not now own this vehicle please send us the "Change of Ownership" information, using side 2 of this card.</p> |                      |  |  |  |  |  |  |  |  |  |

Fig. 1 — Owner Notification and Correction Reporting Card

# Diagnosis and Repair Bulletin

**Subject: Moisture Entering Parking and Front Directional Signal Lamp Assembly**

**Application: 1976-80 CJ Models**

**File: BODY  
Body Electrical**

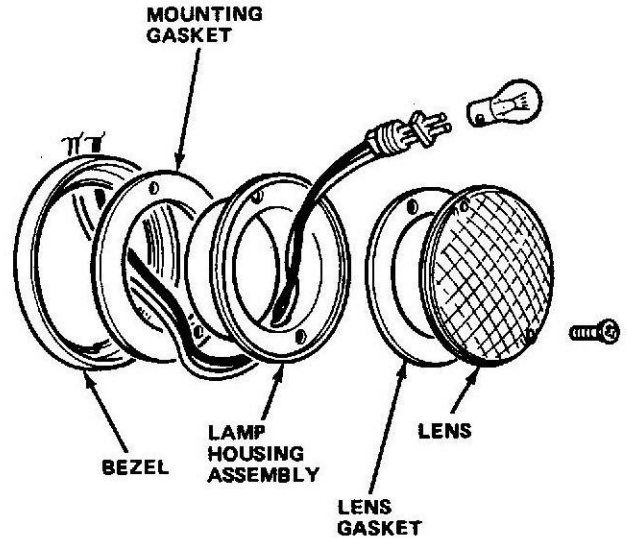
**No. 80-2 Dec. 7, 1979**

Some 1976-80 CJ models may have moisture entering the parking and front directional signal lamp assembly through the wire harness entrance into the upper side of the lamp housing.

Service correction involves repositioning the lamp housing and replacing the lens gasket or the lamp assembly if necessary.

The following parts are available if required:

| Description   | Quantity | Part No. | Group |
|---|----------|----------|-------|
| LAMP, Assembly<br>Parking and Front<br>Directional Signal | AR       | 5461340  | 3.292 |
| GASKET, Directional<br>Lamp Mounting<br>and Parking       | AR       | 991400   | 3.292 |



**Lamp Assembly and Gaskets**

### PROCEDURE

- (1) Remove park and turn signal lamp assemblies from grille panel and inspect mounting gasket for any distortion. Replace gasket if distorted.
- (2) Inspect internal bulb sockets for corrosion.
  - (a) If corrosion is not present, then continue procedure on existing assemblies.
  - (b) If corrosion is present, obtain replacement lamp and continue procedure.
- (3) Apply chassis lubricant or dielectric compound, 8127445, to bulb socket to prevent corrosion.

- (4) Remove two screws that attach lens and gasket to lamp housing. Separate lens from lamp housing and gasket. Rotate housing and gaskets 180° so wires exit from bottom of housing and assemble lens to housing (see illustration).

- (5) Install assembly (with new mounting gasket if required) to grille panel being careful not to strip screws.

**NOTE:** Use locally procured oversized mounting screws if required.

The following operations and standard work times will apply:

| OPERATION DESCRIPTION   | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME 76-80 | SKILL LEVEL |
|---|-----------|------------------|-------|---------------------|-------------|
| LAMP ASSEMBLIES, PARK AND FRONT DIRECTIONAL SIGNAL— INSPECT AND/OR REPOSITION ..... | 3.292     | 3403             | CJ    | 0.1                 | G           |
| Replace (One or both) . . . . .   | 3.292     | A                | CJ    | 0.1                 | G           |

80-032-BSA

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# Diagnosis and Repair Bulletin

**Subject: Front Door Wire Router Plates**

**Application 1980 Wagoneer, Cherokee and Truck Models with Door Speakers**

**File: BODY Body Electrical**

**No. 80-1 Nov. 8, 1979**

Some early built 1980 Wagoneer, Cherokee and Truck Models have 1980 design front doors with a large opening at the front for wire harness routing and previous design front door hinges which allows the door to open farther than 1980 design hinges. This combination of door and hinges causes both an appearance problem due to the large opening and an unusual stress on front door speaker wires.

Service correction involves repairing broken speaker wires, replacing speaker wire retainers if necessary and installing a wire router plate in each front door.

The following parts are required and will be available after November 26, 1979. Do not order parts before this date.

| Description                     | Quantity | Part No. | Group  |
|---------------------------------|----------|----------|--------|
| PLATE, Wire Router              | 2        | 8130421  | 15.320 |
| SCREW, No. 10-16 x .50          | 4        | 8120054  | 17.671 |
| RETAINER, Door Speaker Wire     | AR       | 5454901  | 15.320 |
| RETAINER CAP, Door Speaker Wire | AR       | 5454902  | 15.320 |

The following operations and standard work times will apply:

| OPERATION DESCRIPTION                          | COST CODE | OPERATION NUMBER | MODEL       | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|-------------|---------------|----|----|-------------|
|  |           |                  |             | 80            | 81 | 82 |             |
| PLATES, FRONT DOOR WIRE ROUTER — INSTALL ..... | 15.322    | 15327            | Cke-Wag-Trk | 0.4           |    |    | G           |
| Speaker Wires, Repair .....                    | 15.322    | A                |             | 0.1           |    |    | G           |

80-016-BSJ

## PROCEDURE

(1) Using DuPont Galvanized Iron and Zinc Refinishing System Step 2 227 S, or equivalent, follow manufacturers directions and prepare galvanized plates for painting.

(2) Prime wire router plates.

(3) Remove speaker wire retainer caps and remove speaker wire from retainers. Remove retainers from doors.

(4) Inspect speaker wires for signs of damage. Repair area(s) of insulation damage with electrical tape, or if wire is broken, repair by soldering wire ends together using rosin core solder or equivalent and wrap with electrical tape.

*NOTE: Do not use excessive wrappings of tape as wire may not fit into the retainer.*

(5) Insert speaker wire into plate slot and align plate over opening in front door inner panel. Using two screws, fasten plate to door panel. Make sure tang of plate is engaged into door inner panel.

(6) Color coat plates taking care not to spray front door trim panel.

(7) Slide speaker wires into speaker wire retainers. Install retainer cap. Snap speaker wire retainers into plate and secure retainers with screws. Tape both ends of retainers for added speaker wire retention.

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# Diagnosis and Repair Bulletin

**Subject: Air Control Cable Operation**

**Application: 1978-81 CJ-5 and CJ-7 Models**

**File: BODY Heater — Air Conditioning**

**No. 81-1 April 13, 1981**

In November, 1980, a new cowl fresh air intake duct assembly was phased into production of 1981 CJ models. The new duct assembly provides improved air control cable and intake duct vent operation and can also be used on all 1978-81 CJ-5 and CJ-7 models.

If service diagnosis indicates that a bind in the fresh air intake duct linkage caused the air control cable to bind or break due to excessive cable operating effort, the new fresh air duct assembly should be installed along with a replacement air control cable if necessary.

The following part is available and may be required:

| <u>Description</u>                 | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|------------------------------------|-----------------|-----------------|--------------|
| DUCT ASSEMBLY,<br>Fresh Air Intake | 1               | 5758809         | 22.020       |

## PROCEDURE

### Removal

- (1) Disconnect battery negative cable.
- (2) Drain two quarts of coolant from radiator into clean container.
- (3) Disconnect heater hoses at heater housing.
- (4) Remove heater housing drain hose.
- (5) On models with air conditioning, remove screws attaching evaporator housing to instrument panel. Move housing away from panel and disconnect wires at air conditioning control switches.
- (6) Remove screw attaching heater motor housing to bracket.
- (7) Remove nuts that attach heater housing to engine compartment side of dash panel.
- (8) Disconnect speedometer cable.
- (9) Remove glove box.

- (10) Tilt heater housing back, pull housing rearward, and lower housing.
- (11) Disconnect heater control cables.
- (12) Remove defroster duct and tube assembly.
- (13) Remove fresh air intake panel from cowl.
- (14) Remove fresh air intake duct assembly from cowl.

### Installation

- (1) Install defroster duct and tube assembly.
- (2) Raise and secure windshield.
- (3) Install replacement fresh air intake duct assembly.
- (4) Install fresh air intake panel on cowl.
- (5) Connect heater control cables.
- (6) Position heater housing assembly on dash panel.
- (7) Install nuts attaching heater housing to dash panel.
- (8) Install glove box.
- (9) Connect speedometer cable.
- (10) Install screw attaching heater housing to bracket.
- (11) On models with air conditioning, connect wires to air conditioning control switches and install evaporator housing on instrument panel.
- (12) Connect drain tube to heater housing.
- (13) Connect heater hoses.
- (14) Refill radiator.
- (15) Connect battery negative cable.

The standard servicing operations and work times published in the appropriate SSO manual are not affected by this bulletin.

81-060-13J

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# Diagnosis and Repair Bulletin

**Subject: Sun Roof Glass Frame Seal**

**Application: 1980-81 Cherokee, Wagoneer and Truck Models With Manual Sun Roof**

**File: BODY Headlining — Hardtop Enclosure — Exterior Decals and Overlays**

**No. 81-2 March 2, 1981**

A new sun roof glass frame seal for the pop-up sun roof used on 1980-81 Cherokee, Wagoneer, and Truck models has been released for production and service use. The new seal has an improved configuration for increased compression and sealing ability and entered production on January 5, of this year.

If it becomes necessary to replace the sun roof glass frame seal on a 1980-81 Cherokee, Wagoneer, or Truck model pop-up sun roof, the new seal should be used.

The following part is available and may be required:

| <u>Description</u>         | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|----------------------------|-----------------|-----------------|--------------|
| SEAL, Sun Roof Glass Frame | 1               | 8133809         | 28.811       |

### PROCEDURE

#### Removal

- (1) Remove glass assembly.

- (2) Apply 3M Release Agent, or equivalent, to seal and allow several minutes for penetration.
- (3) Apply second application of release agent to seal and allow several minutes for adhesive bond to soften.
- (4) Remove seal from frame.
- (5) Remove all adhesive residue from frame using 3M General Purpose Adhesive Remover, or equivalent.

#### Installation

- (1) Apply thin bead of 3M Super Weatherstrip Adhesive, or equivalent, in frame channel.
- (2) Position and install replacement seal in channel.
- (3) Apply thin film of petroleum jelly to seal and glass contact surfaces.
- (4) Install glass assembly.

The following standard service operation and work times will apply:

| OPERATION DESCRIPTION                        | COST CODE | OPERATION NUMBER | MODEL           | YEAR AND TIME |     |    | SKILL LEVEL |
|--|-----------|------------------|-----------------|---------------|-----|----|-------------|
|  |           |                  |                 | 80            | 81  | 82 |             |
| SEAL, SUN ROOF GLASS TO FRAME — REPLACE..... | 28.417    | 15.375           | Cke, Wag., Trk. | 0.4           | 0.4 |    | G           |

81-065-BSJ



# Diagnosis and Repair Bulletin

**Subject: Sun Roof Arm Operator**

**Application: 1979-80 CJ-7  
Hardtop Models With Type-1  
Sun Roof**

**File: BODY  
Headlining-Hardtop  
Enclosure-Exterior  
Decals and Overlays**

**No. 80-2 Jan. 14, 1981**

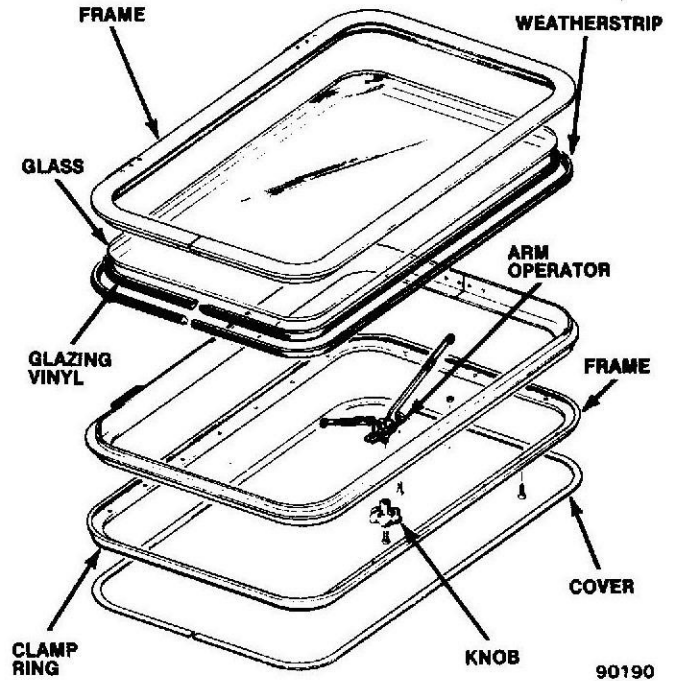
A new metal arm operator for the Type-1 sun roof used on 1979 and some 1980 CJ-7 hardtop models has been released. The new arm operator provides increased sealing ability by applying additional compression force on the sun roof weatherstrip improving sealing against water leaks.

If it becomes necessary to replace the arm operator on a Type-1 sun roof, the following new part should be used.

| Description                    | Quantity | Part No. | Group  |
|--------------------------------|----------|----------|--------|
| OPERATOR, Sun Roof Arm (Metal) | 1        | 8129249  | 28.806 |

### PROCEDURE

- (1) Close sun roof.
- (2) Remove arm operator attaching screws and nuts (see illustration).
- (3) Move arm operator into channel opening and remove arm operator.



**Type-1 Sun Roof Assembly**

- (4) Insert replacement arm operator into channel opening and position arm operator on sun roof.
- (5) Install arm operator attaching screws and nuts.

The following standard servicing operation and work time will apply:

| OPERATION DESCRIPTION                  | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |     |    | SKILL LEVEL |
|--|-----------|------------------|-------|---------------|-----|----|-------------|
|  |           |                  |       | 79            | 80  | 81 |             |
| OPERATOR, SUN ROOF ARM — REPLACE ..... | 28.416    | 25.204           | 93    | 0.2           | 0.2 |    | G           |

80-164-BSJ

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# Diagnosis and Repair Bulletin

**Subject: New Sun Roof Vinyl Trim Ring**

**Application: 1980 Cherokee and Wagoneer Models**

**File: BODY  
Headlining-Hardtop  
Enclosure-Exterior  
Decals and Overlays**

**No. 80-1 Sept. 18, 1980**

On some 1980 Cherokee and Wagoneer models equipped with the manual sun roof option, the sun roof trim ring may hang down due to pressure applied to the trim ring by the headlining. A new sun roof trim ring has been developed to prevent this condition.

Service correction involves measuring the distance between the sun roof frame and headlining, installing a new sun roof trim ring, and replacing the front headlining if necessary.

The following part is available and may be required:

| <u>Description</u>        | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> |
|---------------------------|-----------------|-----------------|--------------|
| RING, Sun Roof Vinyl Trim | 1               | 8133577         | 28.810       |

The following standard servicing operations and work times will apply:

| OPERATION DESCRIPTION                        | COST CODE | OPERATION NUMBER | MODEL    | YEAR AND TIME |    |    | SKILL LEVEL |
|--|-----------|------------------|----------|---------------|----|----|-------------|
|  |           |                  |          | 80            | 81 | 82 |             |
| RING, SUN ROOF VINYL TRIM -<br>REPLACE ..... | 28.415    | 25201            | Cke-Wag. | 0.2           |    |    | G<br>G      |
| Headlining, front - Replace .....            | 29.015    | A                |          | 0.4           |    |    |             |

80-150-BSJ

## PROCEDURE

- (1) Remove sun roof trim ring.
- (2) If headlining extends below trim ring surface of sun roof frame, measure distance between trim ring surface of sun roof frame and headlining.
  - (a) If distance is less than one inch, proceed to step (3).
  - (b) If distance is more than one inch, replace front headlining as outlined in 1980 Jeep Technical Service Manual. Use original headlining as template, cut sun roof opening in replacement headlining before installation, and proceed to step (3).
- (3) Install new sun roof trim ring.

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# Diagnosis and Repair Bulletin

|  |   |   |
|--|---|---|
| <b>Subject: Water Leak or Wind Noise Recommended Sealing Products.</b> | <b>Application: All 1980-81 Jeep Vehicles</b> | <b>File: BODY Metal Repair — Painting — Water Leaks/Wind Noise</b><br><br><b>No. 81-2 Jan. 21, 1981</b> |
|--|---|---|

Some 1981 vehicles may exhibit some water leak and wind noise problems. Locating the leak can be accomplished by following the test procedures described in chapter 3A of the Technical Service Manual.

The following chart describes some of these typical water leak and wind noise areas and recommended products which can be used to seal these areas.

**Water Leak or Wind Noise Recommended Sealing Products**

|                                   | Spot Weld Burn Holes | Interior Heater Plenum Chamber | Body Joints and Seams | Floor Pan Plug Holes | Weld Nut and Screw Holes | Drip Rails | Windshield Structurally Sound | Between Butyl Tape and Glass | Between Glass and Weatherstrip | Between Weatherstrip and Body Panel |
|-----------------------------------|----------------------|--------------------------------|-----------------------|----------------------|--------------------------|------------|-------------------------------|------------------------------|--------------------------------|-------------------------------------|
| <b>3M Products</b>                |                      |                                |                       |                      |                          |            |                               |                              |                                |                                     |
| Brushable Seam Sealer             | •                    |                                | •                     | •                    | •                        |            |                               |                              |                                |                                     |
| Joint and Seam Sealer             |                      | •                              | •                     |                      | •                        |            |                               |                              |                                |                                     |
| All-Around Auto Body Sealant      |                      |                                | •                     | •                    | •                        |            |                               |                              |                                |                                     |
| Drip Check Sealer                 |                      |                                |                       |                      | •                        | •          |                               |                              |                                |                                     |
| Strip Calk                        | •                    |                                | •                     | •                    | •                        |            |                               |                              |                                |                                     |
| Auto Bedding and Glazing Compound |                      |                                |                       |                      |                          |            |                               |                              |                                | •                                   |
| Windshield Sealer                 |                      |                                |                       |                      |                          |            |                               |                              | •                              |                                     |
| Windo-Weld Resealant              |                      |                                |                       |                      |                          |            | •                             | •                            |                                |                                     |
| <b>Kent Industries Products</b>   |                      |                                |                       |                      |                          |            |                               |                              |                                |                                     |
| Quik Leak Check                   | •                    | •                              | •                     |                      | •                        | •          |                               |                              |                                |                                     |
| Seal-a-Seam                       |                      |                                | •                     | •                    |                          |            |                               |                              |                                |                                     |
| Silver Seal                       |                      |                                |                       |                      |                          | •          |                               |                              |                                |                                     |
| Wet/Dry Resealant                 |                      |                                |                       |                      |                          |            | •                             | •                            |                                |                                     |
| Leak Seal                         |                      |                                |                       |                      |                          |            | •                             |                              |                                |                                     |
| Glass Mastic                      |                      |                                |                       |                      |                          |            |                               |                              | •                              | •                                   |
| Liquid Rubber                     |                      |                                |                       |                      |                          |            |                               | •                            |                                |                                     |
| Bedding and Glazing Compound      |                      |                                |                       |                      |                          |            |                               |                              |                                | •                                   |

81-036-BSA/J

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# Diagnosis and Repair Bulletin

**Subject:** Interior Wind Noises

**Application:** 1980-81 Cherokee, Wagoneer and Truck Models

**File:** BODY  
Metal Repair-  
Paint-Water  
Leaks/Wind Noise

No. 80-3 Oct. 9, 1980

Some 1980-81 Cherokee, Wagoneer, and Truck models may develop an interior wind noise or air leak that may be the result of air entering the vehicle in the following areas:

- Front Door Division Channel
- Intersection of Cowl-A-Pillar-Instrument Panel
- Holes in Inner Cowl Panels

Service correction involves performing the repair procedures outlined in this bulletin at each of these areas.

The following parts are available and required:

| Description      | Quantity | Part No. | Group  |
|------------------|----------|----------|--------|
| BUTTON, Plug     | 3        | 4001716  | 27.038 |
| TOUCH-N-FOAM     | AR       | 8130438  | 30.051 |
| GASKET-IN-A-TUBE | AR       | 8993317  | 15.260 |

## PROCEDURE

### Front Door Division Channel

Noise from this area can be isolated by using a stethoscope placed along the rolled edge of the division channel inside the vehicle during road testing.

(1) Insert small flat blade screwdriver in gap between rolled section and flat section of front door division channel. Insert blade at top and bottom (Fig. 1), and open gap slightly to allow application of sealer.

(2) Apply black silicone sealer, Gasket-In-A-Tube, or equivalent, along gap in division channel.

(3) Remove screwdriver.

(4) Wipe off excess sealer.

**NOTE:** Steps (1) through (4) are to be performed on both the inside and outside surfaces of the division channel.

(5) Repeat sealant application on opposite front door division channel.

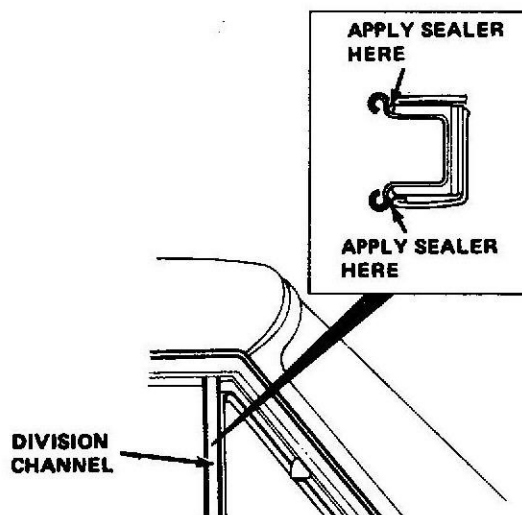


Fig. 1

81161

### Intersection of Cowl-A-Pillar-Instrument Panel

An air leak at this area can be detected from inside the vehicle using a stethoscope placed at the lower corner of the windshield at both A-pillars during a road test. In severe cases, an air leak can be detected by placing a hand in the windshield lower corner area to feel the air flow.

(1) Raise hood.

(2) Using grease pencil, place mark on both outer cowl panels 1-inch below horizontal flange and 5/8-inch outboard of vertical flange (Fig. 2).

(3) Centerpunch and drill 1/2-inch diameter hole in each panel at marked locations.

(4) Shake Touch-N-Foam container and install nozzle and tubing on container.

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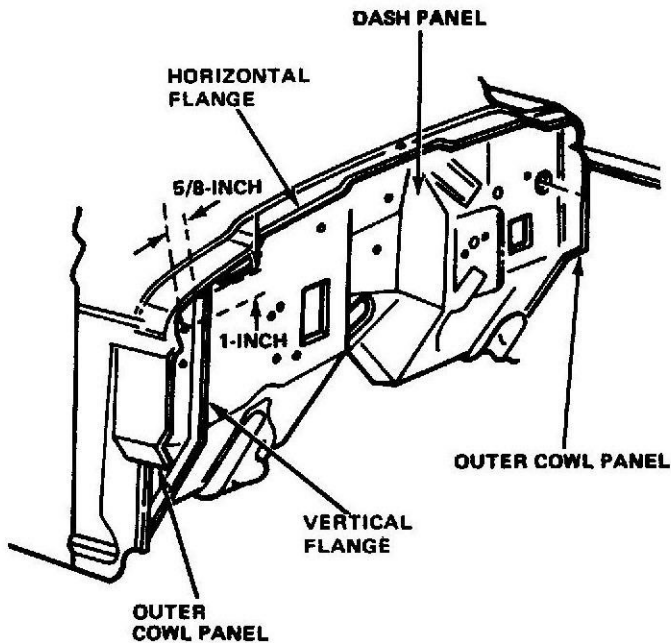


Fig. 2

(5) Turn Touch-N-Foam container upside down and make trial application of foam on section of cardboard or newspaper.

(6) Insert container tube into holes drilled in cowl panels until container tube contacts A-Pillar.

(7) Pull tubing out approximately 1-inch, aim for A-Pillar, and press and hold nozzle for 8 to 10 seconds.

(8) Release container nozzle. Allow few seconds for foam to stop flowing from container tube before removing tube.

(9) Repeat steps (6) through (8) on opposite outer cowl panel.

**NOTE:** *Uncured foam may be removed from painted surfaces by carefully wiping the area with lacquer thinner or an equivalent solvent.*

(10) Install button plugs in holes drilled in outer cowl panels.

(11) Close hood.

(12) Allow foam to cure for 1-1/2 hours; then road test vehicle to verify noise correction.

(13) Remove excess sealer that may appear in lower corner of windshield weatherstrip after foam has cured. Use razor blade or similar tool to remove excess sealer.

## Holes in Inner Cowl Panels

The inner cowl panel holes may produce a draft on the driver and passenger's legs rather than an actual wind noise. This condition can be detected by a visual inspection.

(1) Open driver's side door and view inner cowl panel through upper hinge pocket in area where instrument panel lower attaching bolt is located (Fig. 3).

(2) Locate weld nut hole in cowl panel that is approximately 3-inches above and 1/2-inch to rear of instrument panel lower attaching bolt (Fig. 3).

(3) Plug weld nut hole using 3M Strip-Caulk or equivalent.

(4) Plug 1/2-inch hole in inner cowl panel located above parking brake assembly. Plug hole using button plug (Fig. 3).

(5) Repeat steps (1) through (3) on passenger side inner cowl panel.

**NOTE:** *The passenger side inner cowl panel has only one hole in it.*

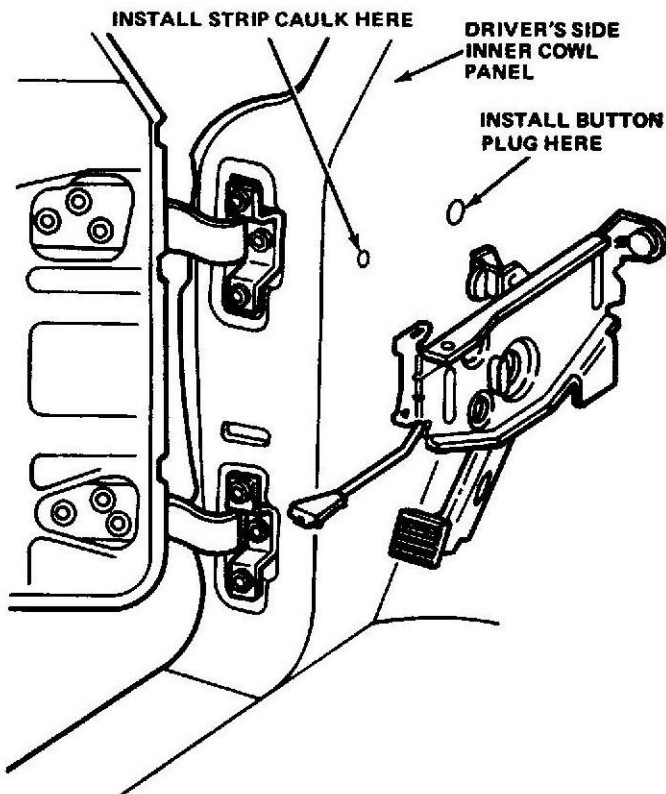


Fig. 3



The following standard servicing operations and work times will apply:

| OPERATION DESCRIPTION   | COST CODE | OPERATION NUMBER | MODEL | YEAR AND TIME |    |    | SKILL LEVEL |
|---|-----------|------------------|-------|---------------|----|----|-------------|
|   |           |                  |       | 80            | 81 | 82 |             |
| <b>CHANNEL, FRONT DOOR DIVISION — SEAL</b> .....                | 23.118    | 25011            | 10-20 | 0.2           |    |    | G           |
| Both .....  |           |                  |       |               |    |    |             |
| Material allowance is \$0.70                                    |           |                  |       |               |    |    |             |
| <b>PANELS, COWL SIDE — SEAL</b> .....                           | 20.155    | 20121            | 10-20 | 0.2           |    |    | G           |
| <b>COWL-A-PILLAR-INSTRUMENT PANEL INTERSECTION — SEAL</b> ..... | 20.195    | 20135            | 10-20 | 0.2           |    |    | G           |
| Material allowance is \$2.39                                    |           |                  |       |               |    |    |             |

80-149-BSJ

# Diagnosis and Repair Bulletin

**Subject: 1980 Phase-Out/1981 Phase-In Program Paint Information**

**Application: 1980 Jeep Vehicles**

**File: BODY  
Metal Repair-Painting-  
Water Leaks/Wind  
Noise**

**No. 80-2 July 31, 1980**

As part of the 1980 Phase-Out/1981 Phase-In Program, ten new 1981 colors may be used on 1980 models. They are:

| <u>1981 Paint Code</u> | <u>Color</u>            | <u>Replaces</u> |
|------------------------|-------------------------|-----------------|
| 1A                     | Montana Blue            | OH              |
| 1B                     | Moonlight Blue          | OJ              |
| 1C                     | Sherwood Green Metallic | OE              |
| 1D                     | Autumn Gold             | OR              |
| 1E                     | Copper Brown Metallic   | New Color       |
| 1H                     | Chestnut Brown Metallic | 9A              |
| 1J                     | Vintage Red Metallic    | 9C              |
| 1K                     | Deep Maroon Metallic    | 9P              |
| 1L                     | Steel Gray Metallic     | OB              |
| 1M                     | Oriental Red            | OP              |

**NOTE:** Some intermix formulas are marked N/A because they were not available at time of publication. Contact your local paint jobber for information not contained herein.

**MONTANA BLUE  
ENAMEL**

**MONTANA BLUE  
ENAMEL**

**MONTANA BLUE  
LACQUER**

**MONTANA BLUE  
LACQUER**

**DITZLER  
DAR3366**

**SHERWIN-WILLIAMS  
35-31503**

**DITZLER  
DDL3366**

**SHERWIN-WILLIAMS  
34-31503**

| Mixing Code | 1 Quart Setting |
|-------------|-----------------|
| DMR490      | 60              |
| DMR411      | 122             |
| DMR474      | 185             |
| DMR400      | 297             |
| DMR414      | 452             |
| DXR495      | 472             |
| DMR499      | 1052            |

| Mixing Code | 1 Quart Setting |
|-------------|-----------------|
| F5R-100     | 108.0           |
| F5L-70      | 222.0           |
| F5B-81      | 450.0           |
| V6V-175     | 495.0           |
| F5W-80      | 953.0           |

| Mixing Code | 1 Quart Setting |
|-------------|-----------------|
| DMA359      | 14              |
| DMA375      | 24              |
| DMA321      | 444             |
| DMA358      | 554             |
| DMA311      | 884             |
| DMA310      | 1044            |

| Mixing Code | 1 Quart Setting |
|-------------|-----------------|
| L4R-320     | 114.0           |
| L4L-309     | 230.0           |
| L4M-321     | 358.0           |
| L4W-301     | 922.0           |

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**MOONLIGHT BLUE  
ENAMEL**

| <b>DITZLER<br/>DAR3367</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMR486                     | 7               |
| DMR400                     | 17              |
| DMR490                     | 61              |
| DXR495                     | 81              |
| DMR413                     | 1081            |

**MOONLIGHT BLUE  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31504</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5P-92                               | 14.1            |
| F5W-80                               | 35.3            |
| F5Y-72                               | 56.5            |
| F5B-81                               | 162.0           |
| V6V-175                              | 207.0           |
| F5L-94                               | 913.0           |

**MOONLIGHT BLUE  
LACQUER**

| <b>DITZLER<br/>DDL3367</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMA311                     | 4               |
| DMA317                     | 132             |
| DMA320                     | 192             |
| DMA304                     | 672             |
| DMA310                     | 992             |

**MOONLIGHT BLUE  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31504</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4W-301                              | 20.7            |
| L4Y-334                              | 51.1            |
| L4B-320                              | 83.7            |
| L4L-313                              | 890.0           |

**SHERWOOD GREEN  
METALLIC  
ENAMEL**

| <b>DITZLER<br/>DAR3368</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMR435                     | 10              |
| DMR476                     | 18              |
| DMR490                     | 94              |
| DMR440                     | 248             |
| DXR495                     | 268             |
| DMR482                     | 1038            |

**SHERWOOD GREEN  
METALLIC  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31505</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5N-76                               | 56.0            |
| F5N-85                               | 112.0           |
| F5S-101                              | 180.0           |
| F5B-81                               | 264.0           |
| F5G-79                               | 384.0           |
| V6V-175                              | 429.0           |
| F5Y-72                               | 913.0           |

**SHERWOOD GREEN  
METALLIC  
LACQUER**

| <b>DITZLER</b> |                 |
|----------------|-----------------|
| Mixing Code    | 1 Quart Setting |
| N/A            |                 |

**SHERWOOD GREEN  
METALLIC  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31505</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4S-345                              | 6.5             |
| L4S-335                              | 23.4            |
| L4B-320                              | 43.0            |
| T1C-324                              | 69.0            |
| L4N-342                              | 226.0           |
| L4G-337                              | 434.0           |
| L4Y-334                              | 890.0           |

**AUTUMN GOLD  
ENAMEL**

| <b>DITZLER<br/>DAR3369</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMR491                     | 136             |
| DMR400                     | 326             |
| DMR487                     | 476             |
| DMR486                     | 836             |
| DXR495                     | 856             |
| DMR499                     | 1106            |

**AUTUMN GOLD  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31506</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5R-100                              | 6.7             |
| F5B-81                               | 35.5            |
| F5Y-93                               | 449.0           |
| V6V-175                              | 494.0           |
| F5W-80                               | 984.0           |

**AUTUMN GOLD  
LACQUER**

| <b>DITZLER<br/>DDL3369</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMA356                     | 6               |
| DMA313                     | 90              |
| DMA333                     | 110             |
| DMA311                     | 540             |
| DMA329                     | 1060            |

**AUTUMN GOLD  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31506</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4M-338                              | 4.8             |
| L4B-320                              | 19.1            |
| L4W-301                              | 448.0           |
| L4Y-303                              | 924.0           |

**COPPER BROWN  
METALLIC  
ENAMEL**

| <b>DITZLER</b> |                 |
|----------------|-----------------|
| Mixing Code    | 1 Quart Setting |
| N/A            |                 |

**COPPER BROWN  
METALLIC  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31507</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5M-71                               | 42.1            |
| F5N-76                               | 447.0           |
| V6V-175                              | 492.0           |
| F5S-74                               | 913.0           |

**COPPER BROWN  
METALLIC  
LACQUER**

| <b>DITZLER</b> |                 |
|----------------|-----------------|
| Mixing Code    | 1 Quart Setting |
| N/A            |                 |

**COPPER BROWN  
METALLIC  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31507</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4B-302                              | 8.5             |
| L4W-301                              | 22.2            |
| L4M-341                              | 56.4            |
| L4Y-334                              | 158.0           |
| L4S-343                              | 308.0           |
| T1C-324                              | 522.0           |
| L4N-342                              | 890.0           |

**CHESTNUT BROWN  
METALLIC  
ENAMEL**

| <b>DITZLER<br/>DAR3371</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMR435                     | 32              |
| DMR453                     | 358             |
| DMR490                     | 434             |
| DXR495                     | 454             |
| DMR476                     | 1034            |

**CHESTNUT BROWN  
METALLIC  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31508</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5S-69                               | 88.0            |
| F5B-81                               | 194.0           |
| F5M-78                               | 459.0           |
| V6V-175                              | 504.0           |
| F5N-85                               | 902.0           |

**CHESTNUT BROWN  
METALLIC  
LACQUER**

| <b>DITZLER<br/>DDL3371</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMA320                     | 26              |
| DMA309                     | 34              |
| DMA312                     | 62              |
| DMA360                     | 122             |
| DMA307                     | 982             |

**CHESTNUT BROWN  
METALLIC  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31508</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4S-345                              | 14.4            |
| L4S-343                              | 57.5            |
| T1C-324                              | 115.0           |
| L4B-320                              | 201.3           |
| L4M-338                              | 496.0           |
| L4N-342                              | 884.0           |

**VINTAGE RED  
METALLIC  
ENAMEL**

| <b>DITZLER<br/>DAR3372</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMR410                     | 10              |
| DMR451                     | 290             |
| DMR435                     | 336             |
| DMR452                     | 856             |
| DXR495                     | 876             |
| DMR499                     | 1036            |

**VINTAGE RED  
METALLIC  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31509</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5B-81                               | 25.8            |
| F5M-96                               | 103.0           |
| F5S-101                              | 348.0           |
| V6V-175                              | 393.0           |
| F5M-71                               | 908.0           |

**VINTAGE RED  
METALLIC  
LACQUER**

| <b>DITZLER</b> |                 |
|----------------|-----------------|
| Mixing Code    | 1 Quart Setting |
| N/A            |                 |

**VINTAGE RED  
METALLIC  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31509</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4B-320                              | 13.8            |
| L4S-345                              | 124.0           |
| L4M-318                              | 256.0           |
| T1C-324                              | 532.0           |
| L4M-341                              | 882.0           |

**DEEP MAROON  
METALLIC  
ENAMEL**

| <b>DITZLER</b> |                 |
|----------------|-----------------|
| Mixing Code    | 1 Quart Setting |
| N/A            |                 |

**DEEP MAROON  
METALLIC  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31510</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5S-74                               | 80.0            |
| F5P-92                               | 224.0           |
| F5B-81                               | 384.0           |
| V6V-175                              | 429.0           |
| F5M-71                               | 908.0           |

**DEEP MAROON  
METALLIC  
LACQUER**

| <b>DITZLER</b> |                 |
|----------------|-----------------|
| Mixing Code    | 1 Quart Setting |
| N/A            |                 |

**DEEP MAROON  
METALLIC  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31510</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4S-343                              | 22.7            |
| L4B-320                              | 107.7           |
| L4M-321                              | 312.0           |
| T1C-324                              | 538.0           |
| L4M-341                              | 878.0           |

**STEEL GRAY  
METALLIC  
ENAMEL**

| <b>DITZLER<br/>DAR3374</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMR482                     | 2               |
| DMR474                     | 5               |
| DMR414                     | 13              |
| DMR490                     | 129             |
| DMR435                     | 400             |
| DXR495                     | 420             |
| DMR499                     | 1030            |

**STEEL GRAY  
METALLIC  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31511</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5W-80                               | 7.0             |
| F5L-68                               | 15.4            |
| F5M-78                               | 28.0            |
| F5S-102                              | 70.1            |
| F5B-81                               | 182.0           |
| V2V-269                              | 434.0           |
| V6V-175                              | 479.0           |
| F5S-101                              | 899.0           |

**STEEL GRAY  
METALLIC  
LACQUER**

| <b>DITZLER</b> |                 |
|----------------|-----------------|
| Mixing Code    | 1 Quart Setting |
| N/A            |                 |

**STEEL GRAY  
METALLIC  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31511</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4L-339                              | 2.2             |
| L4M-321                              | 6.7             |
| L4N-342                              | 22.5            |
| L4S-345                              | 67.5            |
| L4B-302                              | 202.0           |
| L4S-343                              | 494.0           |
| T1C-324                              | 876.0           |

**ORIENTAL RED  
ENAMEL**

| <b>DITZLER</b> |                 |
|----------------|-----------------|
| Mixing Code    | 1 Quart Setting |
| N/A            |                 |

**ORIENTAL RED  
ENAMEL**

| <b>SHERWIN-WILLIAMS<br/>35-31512</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| F5W-80                               | 7.4             |
| F5B-81                               | 31.6            |
| F5P-92                               | 423.0           |
| V6V-175                              | 468.0           |
| F5E-86                               | 953.0           |

**ORIENTAL RED  
LACQUER**

| <b>DITZLER<br/>DDL3375</b> |                 |
|----------------------------|-----------------|
| Mixing Code                | 1 Quart Setting |
| DMA358                     | 4               |
| DMA333                     | 132             |
| DMA359                     | 506             |
| DMA362                     | 1058            |

**ORIENTAL RED  
LACQUER**

| <b>SHERWIN-WILLIAMS<br/>34-31512</b> |                 |
|--------------------------------------|-----------------|
| Mixing Code                          | 1 Quart Setting |
| L4W-301                              | 2.7             |
| L4B-302                              | 14.6            |
| L4M-321                              | 406.0           |
| L4E-317                              | 918.0           |



# Diagnosis and Repair Bulletin

**Subject: Paint Information —  
All Jeep Vehicles**

**Application: 1980 Jeep Vehicles**

**File: BODY  
Metal Repair-  
Painting-Water  
Leaks/Wind Noise**

**No. 80-1 Sept. 27, 1979**

Attached is the 1980 DuPont color chart. Color names and code numbers are included in each chart.

required, contact your Zone Service Manager, or Service Manager, or Service Representative.

This bulletin is being sent to all Jeep dealers in reduced quantities. If additional quantities are

80-006-21A/J

** American Motors Sales Corporation**

**Service Engineering Department • 14250 Plymouth Road • Detroit, Michigan 48232**

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# 1980 COLORS

## AMERICAN MOTORS CORPORATION

CONCORD • EAGLE • PACER  
SPIRIT • JEEP

AMERICAN MOTORS CORP.

### EXTERIOR COLORS

| Usage | Mfr. Code and Color    | LUCITE <sup>®</sup> CODE | CENTARI <sup>®</sup> CODE | DULUX <sup>®</sup> CODE | Usage   | Mfr. Code and Color | LUCITE <sup>®</sup> CODE | CENTARI <sup>®</sup> CODE | DULUX <sup>®</sup> CODE | Usage   | Mfr. Code and Color | LUCITE <sup>®</sup> CODE | CENTARI <sup>®</sup> CODE | DULUX <sup>®</sup> CODE |         |         |         |
|-------|------------------------|--------------------------|---------------------------|-------------------------|---------|---------------------|--------------------------|---------------------------|-------------------------|---------|---------------------|--------------------------|---------------------------|-------------------------|---------|---------|---------|
|       | <b>P1</b>              |                          |                           |                         |         | <b>OA</b>           |                          |                           |                         |         | <b>OJ</b>           |                          |                           |                         |         |         |         |
| S     | Black                  |                          | 99L                       | 99A                     | 93-005  | S                   | Silver Mist Met.         |                           | B8080L                  | B8080A  | B8080D              | J                        | Teal Blue                 |                         | B8091L  | B8091A  | B8091DH |
| E     | Black                  |                          |                           |                         |         | S                   | Silver Mist Met.         |                           |                         |         |                     | S                        | Cameo Tan                 |                         |         |         |         |
| P     | Black                  |                          |                           |                         |         | E                   | Silver Mist Met.         |                           |                         |         |                     | E                        | Cameo Tan                 |                         |         |         |         |
| C     | Black                  |                          |                           |                         |         | P                   | Silver Mist Met.         |                           |                         |         |                     | P                        | Cameo Tan                 |                         |         |         |         |
| J     | Black                  |                          |                           |                         |         | C                   | Silver Mist Met.         |                           |                         |         |                     | C                        | Cameo Tan                 |                         |         |         |         |
|       | <b>9A</b>              |                          |                           |                         |         | <b>OB</b>           |                          |                           |                         |         | <b>OK</b>           |                          |                           |                         |         |         |         |
| J     | Alpaca Brown Met.      |                          | 45700L                    | 45700AH                 | 45700DH | C                   | Smoke Gray Met.          |                           | B8081L                  | B8081A  | B8081D              | S                        | Cameo Tan                 |                         | B8086L  | B8086A  | B8086D  |
|       | <b>9B</b>              |                          |                           |                         |         |                     |                          |                           |                         |         |                     |                          |                           |                         |         |         |         |
| S     | Olympic White          |                          | 45701L                    | 45701A                  | 45701D  | S                   | Cameo Blue               |                           | B8082L                  | B8082A  | B8082D              | S                        | Medium Brown Met.         |                         | B8087LH | B8087AM | B8087DH |
| E     | Olympic White          |                          |                           |                         |         | E                   | Cameo Blue               |                           |                         |         |                     | E                        | Medium Brown Met.         |                         |         |         |         |
| P     | Olympic White          |                          |                           |                         |         | P                   | Cameo Blue               |                           |                         |         |                     | P                        | Medium Brown Met.         |                         |         |         |         |
| C     | Olympic White          |                          |                           |                         |         | C                   | Cameo Blue               |                           |                         |         |                     | C                        | Medium Brown Met.         |                         |         |         |         |
| J     | Olympic White          |                          |                           |                         |         | J                   | Cameo Blue               |                           |                         |         |                     | J                        | Medium Brown Met.         |                         |         |         |         |
|       | <b>9C</b>              |                          |                           |                         |         | <b>OD</b>           |                          |                           |                         |         | <b>OM</b>           |                          |                           |                         |         |         |         |
| S     | Russet Met.            |                          | 45702LM                   | 45702AW                 | 45702DM | S                   | Medium Blue Met.         |                           | B8083L                  | B8083A  | B8083D              | S                        | Dark Brown Met.           |                         | B8084LH | B8084AM | B8084DH |
| E     | Russet Met.            |                          |                           |                         |         | E                   | Medium Blue Met.         |                           |                         |         |                     | E                        | Dark Brown Met.           |                         |         |         |         |
| P     | Russet Met.            |                          |                           |                         |         | P                   | Medium Blue Met.         |                           |                         |         |                     | P                        | Dark Brown Met.           |                         |         |         |         |
| C     | Russet Met.            |                          |                           |                         |         | C                   | Medium Blue Met.         |                           |                         |         |                     | C                        | Dark Brown Met.           |                         |         |         |         |
| J     | Russet Met.            |                          |                           |                         |         | J                   | Medium Blue Met.         |                           |                         |         |                     | J                        | Dark Brown Met.           |                         |         |         |         |
|       | <b>9L</b>              |                          |                           |                         |         | <b>OE</b>           |                          |                           |                         |         | <b>OP</b>           |                          |                           |                         |         |         |         |
| S     | Saxon Yellow           |                          | 45708L                    | -                       | 45708DH | C                   | Dark Green Met.          |                           | B8084L                  | B8084AH | B8084DH             | S                        | Cardinal Red              |                         | B8089LK | B8089AK | B8089DH |
| E     | Saxon Yellow           |                          |                           |                         |         | J                   | Dark Green Met.          |                           |                         |         |                     | E                        | Cardinal Red              |                         |         |         |         |
| P     | Saxon Yellow           |                          |                           |                         |         |                     |                          |                           |                         |         |                     | P                        | Cardinal Red              |                         |         |         |         |
| C     | Saxon Yellow           |                          |                           |                         |         |                     |                          |                           |                         |         |                     | C                        | Cardinal Red              |                         |         |         |         |
| J     | Saxon Yellow           |                          |                           |                         |         |                     |                          |                           |                         |         |                     | J                        | Cardinal Red              |                         |         |         |         |
|       | <b>9P</b>              |                          |                           |                         |         | <b>OH</b>           |                          |                           |                         |         | <b>OR</b>           |                          |                           |                         |         |         |         |
| S     | Bordeaux Met.          |                          | 45711LM                   | 45711AW                 | 45711DM | S                   | Navy Blue                |                           | B8085L                  | B8085A  | B8085DH             | S                        | Caramel                   |                         | B8090L  | B8090A  | B8090D  |
| E     | Bordeaux Met.          |                          |                           |                         |         | E                   | Navy Blue                |                           |                         |         |                     | E                        | Caramel                   |                         |         |         |         |
| P     | Bordeaux Met.          |                          |                           |                         |         | P                   | Navy Blue                |                           |                         |         |                     | P                        | Caramel                   |                         |         |         |         |
| C     | Bordeaux Met.          |                          |                           |                         |         | C                   | Navy Blue                |                           |                         |         |                     | C                        | Caramel                   |                         |         |         |         |
| J     | Bordeaux Met.          |                          |                           |                         |         | J                   | Navy Blue                |                           |                         |         |                     | J                        | Caramel                   |                         |         |         |         |
|       | <b>9Z</b>              |                          |                           |                         |         |                     |                          |                           |                         |         |                     |                          |                           |                         |         |         |         |
| P     | Misty Beige Met. CC/CC |                          | 45850LN                   | 45850AM                 | -       |                     |                          |                           |                         |         |                     |                          |                           |                         |         |         |         |
|       |                        |                          |                           |                         |         |                     |                          |                           |                         |         |                     |                          |                           |                         |         |         |         |

KEY: S—Spirit, E—Eagle, P—Pacer, C—Concord, J—Jeep

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# AMERICAN MOTORS CORPORATION PRIOR YEARS COLOR INFORMATION

## 1977

| Mfr. Paint Code | Color             | Lucite® Code | Centari® Code | Dulux® Code | Mfr. Paint Code | Color              | Lucite® Code | Centari® Code | Dulux® Code |
|-----------------|-------------------|--------------|---------------|-------------|-----------------|--------------------|--------------|---------------|-------------|
| G7              | Alpine White      | 43499L       | 43499A        | 43499D      | 7D              | Powder Blue        | 44192LH      | 44192AH       | 44192DH     |
| J2              | Brandywine Met.   | 43510LM      | 43510AW       | 43510DM     | 7E              | Oak Leaf Brown     | 45101L       | 45101A        | -           |
| P1              | Black             | 99L          | 99A           | 93-005      | 7K              | Midnight Blue Met. | 44193LM      | 44193AH       | 44193DH     |
| 6D              | Sand Tan          | 44111L       | 44111A        | 44111D      | 7L              | Loden Green Met.   | 44194LH      | 44194AH       | 44194DH     |
| 6J              | Silver Frost Met. | 44113L       | 44113A        | 44113D      | 7M              | Golden Ginger Met. | 44195LH      | 44195AH       | 44195DM     |
| 6P              | Firecracker Red   | 44116LM      | 44116AW       | 44116DW     | 7P              | Lime Green         | 44196LM      | 44196AH       | 44196DH     |
| 6R              | Brilliant Blue    | 44117LH      | 44117AH       | 44117D      | 7W              | Captain Blue Met.  | 44197LH      | 44197AH       | 44197DH     |
| 6V              | Sunshine Yellow   | 44119LH      | 44119AH       | 44119D      | 7Y              | Tawny Orange       | 44198LH      | 44198A        | 44198DH     |
| 7A              | Misty Jade Met.   | 44190L       | 44190A        | 44190DH     | 7Z              | Sun Orange         | 44199LH      | 44199AH       | 44199DH     |
| 7B              | Mocha Brown Met.  | 44191LH      | 44191AM       | 44191DM     | 8D              | Claret Red Met.    | 45100LW      | 45100AM       | -           |
| 7C              | Autumn Red Met.   | 44793LW      | 44793AW       | 44793DM     |                 |                    |              |               |             |

## 1978

| Mfr. Paint Code | Color            | Lucite® Code | Centari® Code | Dulux® Code | Mfr. Paint Code | Color               | Lucite® Code | Centari® Code | Dulux® Code |
|-----------------|------------------|--------------|---------------|-------------|-----------------|---------------------|--------------|---------------|-------------|
| P1              | Black            | 99L          | 99A           | 93-005      | 7K              | Midnight Blue Met.  | 44193LM      | 44193AH       | 44193DH     |
| G7              | Alpine White     | 43499L       | 43499A        | 43499D      | 7L              | Loden Green Met.    | 44194LH      | 44194AH       | 44194DH     |
| 6D              | Sand Tan         | 44111L       | 44111A        | 44111D      | 7M              | Golden Ginger Met.  | 44195LH      | 44195AH       | 44195DM     |
| 6P              | Firecracker Red  | 44116LM      | 44116AW       | 44116DW     | 7W              | Captain Blue Met.   | 44197LH      | 44197AH       | 44197DH     |
| 6R              | Brilliant Blue   | 44117LH      | 44117AH       | 44117D      | 7Z              | Sun Orange          | 44199LH      | 44199AH       | 44199DH     |
| 6V              | Sunshine Yellow  | 44119LH      | 44119AH       | 44119D      | 8A              | Khaki               | 45103L       | 45103A        | 45103D      |
| 7B              | Mocha Brown Met. | 44191LH      | 44191AM       | 44191DM     | 8B              | British Bronze Met. | 45102L       | 45102AH       | 45102DH     |
| 7C              | Autumn Red Met.  | 44793LW      | 44793AW       | 44793DM     | 8C              | Quicksilver Met.    | 45104L       | 45104AH       | 45104DH     |
| 7D              | Powder Blue      | 44192LH      | 44192AH       | 44192DH     | 8D              | Claret Met.         | 45100LW      | 45100AM       | 45100DW     |

## 1979

| Mfr. Paint Code | Color                 | Usage   | Lucite® Code | Centari® Code | Dulux® Code | Mfr. Paint Code | Color                  | Usage   | Lucite® Code | Centari® Code | Dulux® Code |
|-----------------|-----------------------|---------|--------------|---------------|-------------|-----------------|------------------------|---------|--------------|---------------|-------------|
| P1              | Black                 | S-C-P-J | 99L          | 99A           | 93-005      | 9J              | Arrowhead Silver Met.  | J       | 45706L       | 45706A        | 45706D      |
| 6P              | Firecracker Red       | S-C-P-J | 44116LM      | 44116AW       | 44116DW     | 9K              | Sable Brown Met.       | S-C-P-J | 45707LH      | 45707AM       | 45707DH     |
| 8A              | Khaki                 | S-C-P   | 45103L       | 45103A        | 45103D      | 9L              | Saxon Yellow           | S-C-P-J | 45708L       | -             | 45708DH     |
| 8B              | British Bronze Met.   | S-C-P   | 45102L       | 45102AH       | 45102DH     | 9M              | Starboard Blue Met.    | S-C-P   | 45709L       | 45709A        | 45709DH     |
| 8C              | Quick Silver Met.     | S-C-P   | 45104L       | 45104AH       | 45104DH     | 9N              | Morocco Buff           | S-C-P-J | 45710L       | 45710A        | 45710D      |
| 9A              | Alpaca Brown Met.     | S-C-P-J | 45700L       | 45700AH       | 45700DH     | 9P              | Bordeaux Met.          | S-C-P-J | 45711LM      | 45711AW       | 45711DM     |
| 9B              | Olympic White         | S-C-P-J | 45701L       | 45701A        | 45701D      | 9T              | Ensign Blue            | J       | 45713L       | 45713A        | 45713D      |
| 9C              | Russet Met.           | S-C-P-J | 45702LM      | 45702AW       | 45702DM     | 9W              | Mandarin Orange        | J       | 45714LH      | 45714AH       | 45714DH     |
| 9E              | Wedgwood Blue         | S-C-P-J | 45704L       | 45704A        | 45704D      | 9Z              | Misty Beige Met. CC/CC | P       | 45850LH      | 45850AW       | -           |
| 9H              | Cumberland Green Met. | S-C-P-J | 45705L       | 45705A        | 45705DH     |                 |                        |         |              |               |             |

KEY S—Spirit, C—Concord, P—Pacer, J—Jeep

# INTERIOR COLORS

# 1980 AMERICAN MOTORS CORPORATION



**C8836LH** Brown P1 Flat



**C8837L** Beige P25 Flat



**45715LH** Blue R8 S.G.



**45113L** Flax R16 Flat

**C8840L** Beige P3 S.G.



**45110L** Desert Beige R6J Flat



**45111L** Dk. Desert Tan R14 Flat



**4428L** Black R27 Flat



**C8841LH** Brown P4 S.G.



**45716LH** Russet R7 S.G.

## 1980 AMERICAN MOTORS STRIPING COLORS

| MFR. PAINT CODE | COLOR    | STOCK NUMBER |
|-----------------|----------|--------------|
| P84             | Red Gold | B8095LM      |
| R40             | Black    | 99L          |
| R80             | Blue     | 43688LH      |
| R122            | Russet   | 45717LH      |

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AUTOMOTIVE REFINISH COLORS Page 2

# Service Technical Letter

**File: Service General**  
No. 81-10 March 20, 1981

| Subject  | Information  |
|--|--|
| <p>Revision to Part Number In DRB 81-1, Transfer Case Output Shaft Seal Leak Diagnosis, Dated February 23, 1981, and Filed Under CHASSIS - Transfer Case/Quadra-Trac</p> | <p>The part number for the front and rear output seal listed in the subject bulletin has been revised. The new part number for this seal is 8133432. Please note this change in your copies of the subject bulletin.</p>   |
| <p>Oil Return Channel Access Hole Plug Service - 1980-81 Jeep Model 219 Quadra-Trac Transfer Case</p>  | <p>A rear bearing oil return channel access hole has been added to the rear case on 1980-81 model 219 transfer cases as a running change. A rubber plug, part number 8131617, is used to seal the access hole.</p> <p>When servicing the rear case on a 1980-81 Model 219 transfer case, the rubber plug which is located in the upper side portion of the rear case should also be inspected. If the plug has become loose, damaged, or will not seal properly, a replacement plug should be installed. In addition, if the rear case is replaced, be sure to install a plug as the replacement case may not have a plug installed.</p> |

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# Service Technical Letter

**File: Service General**  
No. 81-8 Feb.19, 1981

| Subject  | Information   |
|--|---|
| <p>Windshield Wipers Inoperative On Low and Intermittent Speeds - 1980-81 Cherokee, Wagoneer and Truck Models - Addition to Windshield Wiper Service Diagnosis, Page 3T-11 In 1980-81 Jeep Technical Service Manuals</p> | <p>When checking for loose connections and ground circuit continuity, be sure to check for a poor ground between the windshield wiper switch and dash panel. To correct this condition, remove the switch and install a 7/16 I.D. star washer, G178551, between the switch and dash panel to improve the ground.</p>  |
| <p>Correction to Clutch Aligning Tool Number - 1980 Jeep Technical Service Manual Supplement and 1980-81 Jeep Technical Service Manuals</p>  | <p>The clutch aligning tool number for four-, six-, and eight-cylinder engines in the 1980 Jeep Technical Service Manual Supplement and 1980-81 Jeep Technical Service Manuals is incorrect.</p> <p>The correct number for this tool is J-5824-01. Please note this correction in Chapter 2A of the 1980 Jeep Technical Service Manual Supplement and 1980-81 Jeep Technical Service Manuals.</p> |

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# Service Technical Letter

**File: Service General**  
No. 81-6 Jan. 23, 1981

| Subject  | Information  |
|--|--|
| <p>Water Leaks Caused By Dealer Installed Radio Antenna - 1981 Jeep Vehicles</p>           | <p>Some 1981 Jeep vehicles may have water leaking into the passenger compartment through holes made for radio antenna installation. This is a result of water being routed along the antenna lead-in cable and entering the compartment through the dash panel which may not be sealed by grommets or other suitable sealers.</p> <p>When installing an antenna, be sure a grommet is used where the antenna cable goes through the dash panel and be sure the cable is properly seated in the grommet hole.</p> |
| <p>Power Steering Pressure Test Gauge Adapter Set Tool Number Revision</p>                 | <p>The pressure and return port fittings on 1980-81 Jeep power steering pumps and gears have metric threads. In order to connect the pressure test gauge J-21567 to these fittings, it will be necessary to use Adapter Set J-5176-20. Please note this information in Chapter 2L of your 1980 and 1981 Jeep Technical Service Manuals.</p>  |
| <p>Correction to 1980-81 Cherokee and Wagoneer Fuel Tank Capacity Specification Charts</p> | <p>The fuel tank capacity for all 1980-81 Cherokee and Wagoneer models is 20.5 gallons (77.6 liters). Please note this change in the Fuel Tank Specifications Charts on page 1J-10 of the 1980 Jeep Technical Service Manual, page 1J-11 of the 1981 Jeep Technical Service Manual, page 88 of the 1980 Jeep Service Specifications Handbook, and page 90 of the 1981 Jeep Service Specifications Handbook.</p>  |

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# Service Technical Letter (cont'd)

| Subject   | Information   |                              |                                      |                    |  |                              |                                      |                              |                                      |    |       |    |       |
|---|---|------------------------------|--------------------------------------|--------------------|--|------------------------------|--------------------------------------|------------------------------|--------------------------------------|----|-------|----|-------|
| <p>Correction to 1980 Jeep Four-Cylinder Engine Piston Fit Information</p>                    | <p>The following information should be used when fitting pistons in 1980 Jeep four cylinder engines:</p> <p>Measure the cylinder bore at a point 2-1/4 inches from the top of the bore.</p> <p>Measure the piston diameter at a point perpendicular to the piston pin and 1-13/16 inches from the top surface of the piston.</p> <p>Please note these corrections on pages 26 and 30 of the 1980 Jeep Technical Service Manual Supplement.</p>  |                              |                                      |                    |  |                              |                                      |                              |                                      |    |       |    |       |
| <p>Short Oil Pump Attaching Screw Torque Specification Revision - 1981 6-Cylinder Engines</p> | <p>The torque specification for the short oil pump attaching screw used on 1981 6-Cylinder engines has been revised as follows:</p> <table border="1" data-bbox="661 956 1399 1242"> <thead> <tr> <th colspan="2" data-bbox="661 956 972 997"><u>USA (Foot/Pounds)</u></th> <th colspan="2" data-bbox="1074 956 1399 997"><u>Metric (Nm)</u></th> </tr> <tr> <th data-bbox="661 1030 783 1173"><u>Service Set-To Torque</u></th> <th data-bbox="841 1030 972 1173"><u>Service In-Use Recheck Torque</u></th> <th data-bbox="1049 1064 1172 1173"><u>Service Set-To Torque</u></th> <th data-bbox="1253 1030 1384 1173"><u>Service In-Use Recheck Torque</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="695 1208 729 1242">17</td> <td data-bbox="864 1208 952 1242">12-20</td> <td data-bbox="1083 1208 1116 1242">23</td> <td data-bbox="1278 1208 1365 1242">16-27</td> </tr> </tbody> </table> <p>Please note this revision in your 1981 AMC Technical Service Manual and 1981 AMC Specifications Handbook.</p> | <u>USA (Foot/Pounds)</u>     |                                      | <u>Metric (Nm)</u> |  | <u>Service Set-To Torque</u> | <u>Service In-Use Recheck Torque</u> | <u>Service Set-To Torque</u> | <u>Service In-Use Recheck Torque</u> | 17 | 12-20 | 23 | 16-27 |
| <u>USA (Foot/Pounds)</u>  |   | <u>Metric (Nm)</u>           |                                      |                    |  |                              |                                      |                              |                                      |    |       |    |       |
| <u>Service Set-To Torque</u>  | <u>Service In-Use Recheck Torque</u>  | <u>Service Set-To Torque</u> | <u>Service In-Use Recheck Torque</u> |                    |  |                              |                                      |                              |                                      |    |       |    |       |
| 17  | 12-20   | 23                           | 16-27                                |                    |  |                              |                                      |                              |                                      |    |       |    |       |



# Service Technical Letter

**File: Service General**  
No. 81-4 Nov. 10, 1980

## Subject

## Information

1981 6-cylinder Main Bearing  
Capscrew Torque Specification  
Revision

The 1981 6-cylinder main bearing capscrew torque specification has been revised as follows:

| <u>U.S.A. (Foot-pounds)</u>  |                                      | <u>Metric (N·m)</u>          |                                      |
|------------------------------|--------------------------------------|------------------------------|--------------------------------------|
| <u>Service Set-To Torque</u> | <u>Service In-Use Recheck Torque</u> | <u>Service Set-To Torque</u> | <u>Service In-Use Recheck Torque</u> |
| 65                           | 65-70                                | 88                           | 88-95                                |

Please note this revision in your 1981 Jeep Technical Service Manual and 1981 Jeep Specifications handbook.

Reverse Gear Selector Pivot Pin  
Service - 1980-81 SR4 Four-Speed  
Manual Transmission

If it is necessary to service a 1980-81 SR4 four-speed manual transmission for a gear jump-out or damaged gear condition, the reverse gear selector pivot pin should be replaced in addition to any other damaged components. The pin, which is threaded into the transmission case and serves as the reverse lever pivot, may have become bent or damaged by the conditions described and should be replaced to ensure proper shifting.

Fuel Feedback Modules Damaged  
By Incorrect Battery Cable  
Connection - 1980-81 Jeep Vehicles  
Equipped With Fuel Feedback  
System

It is important that the battery cables are connected to the battery positive-to-positive and negative-to-negative to prevent damaging the fuel feedback module. Reverse polarity may damage the alternator diodes and radios also.

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# Service Technical Letter

**File: Service General**  
No. 80-19 Nov. 21, 1980

| Subject   | Information   |
|---|---|
| <p>Revision to Diagnosis and Repair Bulletin No. 80-6 Exhaust Gas Recirculation (EGR) System Revision, Dated October 27, 1980, Filed Under POWER PLANT - Fuel and Exhaust Systems</p> | <p>The service procedure in the subject D&amp;RB is correct. However, the second paragraph in the text should read as follows: Service revision involves replacing the EGR valve restrictor plate and forward delay valve, and adding a non-linear valve to the spark advance system.</p> |

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# Service Technical Letter

**File: Service General**  
 No. 80-18 Sept. 25, 1980

| Subject  | Information   |
|--|---|
| <p>Sun Roof Sealer - 1980 Jeep Vehicles</p>  | <p>On some late production Jeep vehicles equipped with a manually operated sun roof, a black butyl sealer was used to seal the area between the sun roof frame and roof panel.</p> <p>Whenever the sun roof frame has been removed, a butyl or silicone sealer may be used to seal the area between the sun roof frame and roof panel. Apply an even bead of sealer to the roof panel surface approximately 1/8 inch from the edge of the roof opening.</p> |
| <p>Standard Oil Filter Damaged During Severe Off-Road Operation - 1974-80 Jeep Cherokee-Wagoneer-Truck Models With Six-Cylinder Engine</p> | <p>A new oil filter, part number 3240511, has been released for use on 1974-80 Cherokee, Wagoneer, and Truck models. The filter is longer in length and has a smaller diameter for additional filter-to-engine mount area clearance during severe off-road operation.</p>   |

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# Service Technical Letter

File: Service General

No. 80-17 Sept. 1, 1980

| Subject  | Information   |                    |              |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
|--|---|--------------------|--------------|-----------------|--------------|----------------------------|---|---------|--------|----------------------|---|---------|--------|------------------------|--|--|--|-----------------------------|--|--|--|-----------------------|--|--|--|----------------------|---|---------|--------|---------------------|--|--|--|--|---|---------|--------|
| <p data-bbox="148 314 686 377">SR4 Four-Speed Manual Transmission Changed for 1980 Models</p> <p data-bbox="148 1058 686 1245">Revision to Diagnosis and Repair Bulletin No. 80-1, Transfer Case Shift Lever and Shaft Replacement, Dated January 9, 1980, Filed Under CHASSIS - Transfer Case/Quadra-Trac</p> | <p data-bbox="715 314 1495 416">The SR4 transmission has been changed for the 1980 models. The components and part numbers affected by the change are as follows:</p> <ul data-bbox="715 439 1495 665" style="list-style-type: none"><li>• A new design transmission case, part number 8132594;</li><li>• A new shorter length reverse idler gear, part number 8132882;</li><li>• A new reverse idler shaft with modified angle, part number 8133524.</li></ul> <p data-bbox="715 679 1495 739">The new shorter length reverse idler gear can be used in either the new or old transmission case.</p> <p data-bbox="715 768 1495 893">The new reverse idler shaft can be used in either the new or old transmission case and can also be used with either the new or old reverse idler gear.</p> <p data-bbox="715 928 1495 988">The old design length reverse idler gear can be used in the old transmission case only.</p> <p data-bbox="715 1058 1495 1176">The service procedure in the subject DRB is correct. However, new part numbers have been assigned to the parts outlined in the bulletin. The new numbers are:</p> <table data-bbox="715 1197 1495 1576"><thead><tr><th><u>Description</u></th><th><u>Qty.</u></th><th><u>Part No.</u></th><th><u>Group</u></th></tr></thead><tbody><tr><td>SHAFT, Transfer Case Shift</td><td>1</td><td>5362034</td><td>18.180</td></tr><tr><td>LEVER, Transfer Case</td><td>1</td><td>5362033</td><td>18.125</td></tr><tr><td>83-93 - 4-cyl. and SR4</td><td></td><td></td><td></td></tr><tr><td>83 - 6- or 8-cyl. and T-176</td><td></td><td></td><td></td></tr><tr><td>93 - 8-cyl. and T-176</td><td></td><td></td><td></td></tr><tr><td>LEVER, Transfer Case</td><td>1</td><td>5362036</td><td>18.125</td></tr><tr><td>93 - 6-cyl. and SR4</td><td></td><td></td><td></td></tr><tr><td>NUT, Transfer Case Shift Shaft Retaining</td><td>1</td><td>4004837</td><td>18.180</td></tr></tbody></table> <p data-bbox="715 1597 1495 1848">NOTE: The threaded end of transfer case shift shaft, part number 5362034, is larger in diameter than the previous design shaft. This shaft can only be used with the above listed transfer case levers and shift shaft retaining nut. In addition, the transfer case shift shaft retaining nut should be tightened to 40-45 foot-pounds (54-61 N·m) torque.</p> | <u>Description</u> | <u>Qty.</u>  | <u>Part No.</u> | <u>Group</u> | SHAFT, Transfer Case Shift | 1 | 5362034 | 18.180 | LEVER, Transfer Case | 1 | 5362033 | 18.125 | 83-93 - 4-cyl. and SR4 |  |  |  | 83 - 6- or 8-cyl. and T-176 |  |  |  | 93 - 8-cyl. and T-176 |  |  |  | LEVER, Transfer Case | 1 | 5362036 | 18.125 | 93 - 6-cyl. and SR4 |  |  |  | NUT, Transfer Case Shift Shaft Retaining | 1 | 4004837 | 18.180 |
| <u>Description</u>   | <u>Qty.</u>   | <u>Part No.</u>    | <u>Group</u> |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
| SHAFT, Transfer Case Shift   | 1   | 5362034            | 18.180       |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
| LEVER, Transfer Case   | 1   | 5362033            | 18.125       |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
| 83-93 - 4-cyl. and SR4   |   |                    |              |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
| 83 - 6- or 8-cyl. and T-176  |   |                    |              |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
| 93 - 8-cyl. and T-176  |   |                    |              |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
| LEVER, Transfer Case   | 1   | 5362036            | 18.125       |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
| 93 - 6-cyl. and SR4  |   |                    |              |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |
| NUT, Transfer Case Shift Shaft Retaining   | 1   | 4004837            | 18.180       |                 |              |                            |   |         |        |                      |   |         |        |                        |  |  |  |                             |  |  |  |                       |  |  |  |                      |   |         |        |                     |  |  |  |  |   |         |        |

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# Service Technical Letter

**File: Service General**  
No.80-16 July 28, 1980

| Subject   | Information  |
|---|--|
| <p>Two-Stage Power Valve - Carburetor<br/>Models 2100 and 2150 - 1978-80<br/>Jeep Vehicles</p>  | <p>Some of the two-stage power valves used in subject model carburetors have been replaced for what appears to be a leakage problem. Although a small amount of fuel may enter the power valve cover via the carburetor manifold vacuum chamber, it does not constitute a leak problem. This condition is normal and will not effect performance or economy.</p>                             |
| <p>Tire Vibration - 1979-80 131-Inch<br/>Wheelbase J-10 Truck Models<br/>Equipped With H78-15, Load Range B,<br/>Firestone Town and Country Tires</p> | <p>The subject tires may be the cause of unexplained vibration problems on 1979-80, long wheelbase J-10 trucks. If diagnosis and test procedures do not reveal any type of runout or imbalance condition, install a set of test tires other than Firestone on the vehicle and road test again. If the vibration is now corrected, contact the nearest Firestone regional service center.</p> |

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# PRODUCT RECALL CAMPAIGN

## Diagnosis and Repair Bulletin No. 80-15

Subject:

Cracked Coupler Nut on Tow Bar (Part No. SE2127000)  
 Ordered from Jeep PDC between January 1, 1980 through  
 May 31, 1980

# SAFETY

Date: July 21, 1980

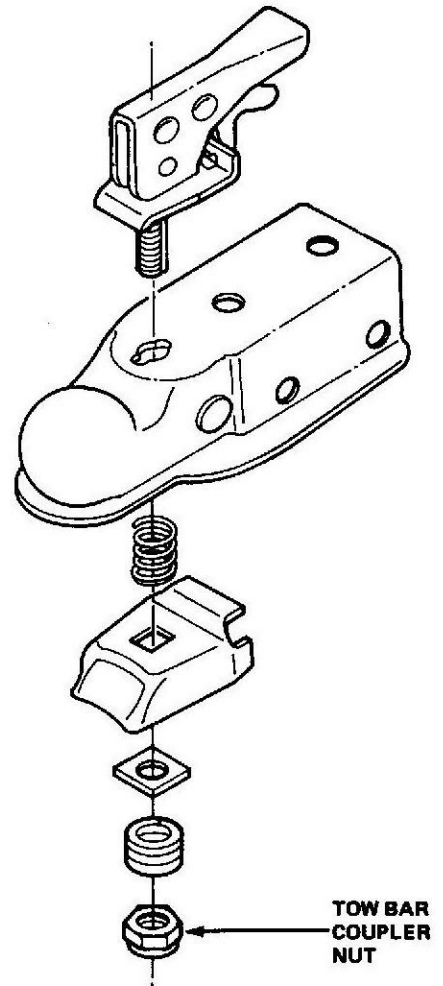
Application: Tow Bar  
 SE2127000 for CJ Models  
 File: Service General

Some Jeep accessory tow bars, part number SE2127000, manufactured by the Dualmatic Manufacturing Company, may have a cracked coupler nut. This nut must be replaced on all affected tow bars in dealer inventory or sold after January 1, 1980.

Each Jeep dealer will receive a coupler nut for every tow bar ordered from the local Jeep PDC between January 1, 1980 and May 31, 1980. Additional nuts are available from the Zone Field Service Manager. Dealers are responsible for notifying customers that may have purchased one of the affected tow bars from their dealership. These customers must be instructed to return their tow bar to the dealership to have the coupler nut replaced.

### PROCEDURE

- (1) Remove and discard original coupler nut (see illustration).
- (2) Install replacement coupler nut. Tighten nut until coupler threads extend 1/8 to 1/4 inch beyond shoulder of nut.



The following operation and standard work time will apply:

| <u>Operation Description</u> | <u>Cost Code</u> | <u>Operation Number</u> | <u>Model</u> | <u>Year &amp; Time 80 and Prior</u> | <u>Skill Level</u> |
|------------------------------|------------------|-------------------------|--------------|-------------------------------------|--------------------|
| NUT, TOW BAR COUPLER-REPLACE | 35.215           | 15401                   | 83-93        | 0.2                                 | G                  |

# Service Technical Letter

**File: Service General**  
 No. 80-14 July 1, 1980

| Subject  | Information   |
|--|---|
| <p>Fiberglass Hardtop Interior Appearance - 1980 CJ-7 Models</p> | <p>Some fiberglass hardtops on 1980 CJ-7 models may develop what appears to be a crack in the portion of the hardtop that parallels the windshield frame. However, this crack is not in the hardtop but in the joint material applied to the area where the hardtop side-panel and top-panel overlap. If necessary, this condition can be corrected by removing the joint material and painting the overlap area.</p> |

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# Service Technical Letter

**File: Service General**  
 No. 80-13 June 16, 1980

| Subject   | Information  |
|---|--|
| <p>Correction to Quadra-Trac Differential End Cap Attaching Screw Torque - 1976 Jeep Technical Service Manual</p> | <p>The Quadra-Trac differential end cap attaching screw torque in step (22) on page 8-27 in the 1976 Jeep Technical Service Manual is incorrect. Please change this step to read as follows: "Tighten end cap attaching screws to 27 foot-pounds (36 N·m) torque."</p>   |
| <p>Engine Oil Capacity - 1980 Jeep Four-Cylinder Engines</p>  | <p>1980 Jeep four-cylinder engines have an oil capacity of three quarts (2.84 liters) with or without an oil filter change.</p> <p>Overfilling the crankcase on these engines will result in oil aeration (foaming), tappet noise, and possible engine damage.</p> <p>To ensure an accurate dipstick reading on 1980 four-cylinder engines, check engine oil level after the engine has been shut down and the oil has drained back into the pan.</p> <p>Please note the four-cylinder engine oil capacity on page B-14 of the 1980 Jeep Technical Service Manual and page 22 of the 1980 Jeep Service Specifications Booklet.</p> |

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# Service Technical Letter

**File: Service General**  
No. 80-12 June 9, 1980

| Subject  | Information   |                              |                                      |                             |                                |                             |   |         |       |
|--|---|------------------------------|--------------------------------------|-----------------------------|--------------------------------|-----------------------------|---|---------|-------|
| <p>Radiator Hose Clamp Torque Specifications - 1980 Jeep Automobiles</p>   | <p>Radiator hose clamps should be tightened to the following torque specification.</p> <table border="0" data-bbox="623 425 1335 588"> <tr> <td style="text-align: center;"><u>Service Set-To Torque</u></td> <td style="text-align: center;"><u>Service In-Use Recheck Torque</u></td> </tr> <tr> <td style="text-align: center;">22 inch-pounds<br/>(2.5 N·m)</td> <td style="text-align: center;">18-26 inch-pounds<br/>(2-3 N·m)</td> </tr> </table> <p>Please note these torque specifications in your 1980 Jeep Technical Service Manual.</p>   | <u>Service Set-To Torque</u> | <u>Service In-Use Recheck Torque</u> | 22 inch-pounds<br>(2.5 N·m) | 18-26 inch-pounds<br>(2-3 N·m) |                             |   |         |       |
| <u>Service Set-To Torque</u>   | <u>Service In-Use Recheck Torque</u>  |                              |                                      |                             |                                |                             |   |         |       |
| 22 inch-pounds<br>(2.5 N·m)  | 18-26 inch-pounds<br>(2-3 N·m)  |                              |                                      |                             |                                |                             |   |         |       |
| <p>Speedometer Adapter O-Ring Seal - 1980 Cherokee, Wagoneer, and Truck Models With Transfer Case Model 208 or 219</p> | <p>The speedometer adapter O-ring seal used in production of the subject models is black in color and is reusable. If an adapter equipped with a black O-ring seal is removed for service, the adapter can be installed using the original black color O-ring seal.</p> <p>The service parts replacement speedometer adapter O-ring seal is orange in color and can be used once only. This seal is designed to swell in service to improve its sealing qualities and could become damaged during adapter removal, or during installation if reuse is attempted.</p> <p>The part number for the orange color service parts replacement seal is as follows:</p> <table border="0" data-bbox="638 1569 1409 1706"> <thead> <tr> <th style="text-align: left;"><u>Description</u></th> <th style="text-align: center;"><u>Quantity</u></th> <th style="text-align: center;"><u>Part No.</u></th> <th style="text-align: center;"><u>Group</u></th> </tr> </thead> <tbody> <tr> <td>O-Ring, Speedometer Adapter</td> <td style="text-align: center;">1</td> <td style="text-align: center;">4006574</td> <td style="text-align: center;">3.591</td> </tr> </tbody> </table> | <u>Description</u>           | <u>Quantity</u>                      | <u>Part No.</u>             | <u>Group</u>                   | O-Ring, Speedometer Adapter | 1 | 4006574 | 3.591 |
| <u>Description</u>   | <u>Quantity</u>   | <u>Part No.</u>              | <u>Group</u>                         |                             |                                |                             |   |         |       |
| O-Ring, Speedometer Adapter  | 1   | 4006574                      | 3.591                                |                             |                                |                             |   |         |       |

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# Service Technical Letter

**File: Service General**  
No. 80-11 May 23, 1980

| Subject   | Information   |
|---|---|
| <p>Revised Crankshaft Main Bearing Clearance Specifications for 1980 Six-Cylinder Engines</p>       | <p>The crankshaft main bearing clearance specifications for 1980 six-cylinder engines have been revised as follows:</p> <p><u>Number 1 Main Bearing</u></p> <p>Main Bearing Clearance: 0.001 to 0.0025 inch<br/>Preferred Clearance : 0.0015 inch</p> <p><u>Number 2 Through 7 Main Bearings</u></p> <p>Main Bearing Clearance: 0.001 to 0.003 inch<br/>Preferred Clearance : 0.0015 to 0.002 inch</p> <p>Please note these revised specifications in your 1980 Technical Service Manual and Service Specifications Handbook.</p>   |
| <p>Revised Exhaust Pipe-to-Manifold Fastener Torque Specifications - 1980 Four-Cylinder Engines</p> | <p>The exhaust pipe-to-manifold bolts on 1980 49-State four-cylinder engines with a dual outlet pipe should be tightened to 35 foot-pounds (50 N·m) torque. In-use recheck torque is 30-40 foot-pounds (40-60 N·m) for these bolts.</p> <p>Exhaust pipe-to-manifold nuts on 1980 California four-cylinder engines with a single outlet pipe should be tightened to 35 foot-pounds torque (50 N·m). In-use recheck torque is 30-40 foot-pounds (40-60 N·m) torque for these nuts.</p> <p>Please note these specifications in your 1980 Technical Service Manual and Service Specifications Handbook.</p> |

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# Service Technical Letter

**File: Service General**  
No. 80-10 May 14, 1980

| Subject  | Information  |
|--|--|
| <p>AM-FM Radio Right to Left Balance Control Adjustment - 1980 Jeep Vehicles</p> | <p>Some of the AM-FM radios in 1980 Jeep vehicles are not equipped with a slide switch above the station dial for right to left balance control adjustment. On these radios, balance adjustment is accomplished by gently pulling the volume control knob outward and turning it right or left to adjust balance as described in the 1980 Technical Service Manual. Before removing one of these radios to correct a suspected balance problem, be sure the balance control has been adjusted properly and that the owner is aware of this adjustment procedure.</p> |
| <p>Chrome Wheel Discoloration - 1980 Jeep Models Equipped With Chrome Wheels</p> | <p>Discoloration or surface rust may appear just inboard of the wheel spokes on 1980 Jeep chrome wheels. If this condition occurs, it is possible to improve wheel appearance by cleaning the inside of the wheel and applying a silver or aluminum colored enamel paint to the discolored area. However, if the wheel is exposed to salt or stone chips, this condition may reoccur.</p>  |

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# Service Technical Letter

**File: Service General**  
No. 80-9 April 15, 1980

| Subject                                       | Information  |     |    |    |    |      |    |    |    |
|---|--|-----|----|----|----|------|----|----|----|
| <p>1980 CJ Oil Pressure Gauge</p>             | <p>The specifications for oil pressure gauge sending unit resistance on page 1L-40 of the 1980 Jeep Technical Service Manual are incorrect.</p> <p>The correct resistance values should read as follows:</p> <p style="text-align: center;">Oil Pressure Gauge<br/>Sending Unit Resistance (Ohms)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>PSI</td> <td>0</td> <td>40</td> <td>80</td> </tr> <tr> <td>Ohms</td> <td>73</td> <td>20</td> <td>10</td> </tr> </table> | PSI | 0  | 40 | 80 | Ohms | 73 | 20 | 10 |
| PSI   | 0  | 40  | 80 |    |    |      |    |    |    |
| Ohms  | 73   | 20  | 10 |    |    |      |    |    |    |
| <p>1980 Cherokee and Wagoneer Bumper Jack</p> | <p>The bumper jack in 1980 Cherokee and Wagoneer models built after March of this year will be secured with a plastic tie-down strap. This strap is for transportation use only and should be removed before delivering each vehicle.</p>  |     |    |    |    |      |    |    |    |

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# Service Technical Letter

**File: Service General**  
**No. 80-8 March 31, 1980**

| Subject   | Information  |
|---|--|
| <p>Correction to Diagnosis and Repair Bulletin No. 80-4, Stereo Radio Rear Speakers Missing, dated February 14, 1980, filed under BODY— Body Electrical</p> | <p>If the stereo radio rear speakers do not function properly after performing procedural step (8), under Vehicles With Power Tailgate, the vehicle may have an incorrect rear speaker wire harness. Remove the glove box from the dash panel and check the wire harness part number. If the harness number is not 5751957, replace the harness.</p> |

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# Service Technical Letter

**File: Service General**  
No. 80-7 March 27, 1980

| Subject  | Information   |
|--|---|
| <p>Camshaft Spring Pin Correction —<br/>Six-Cylinder Camshaft Pin Breakage<br/>on 1977-80 Jeep Vehicles —<br/>DRB 80-3 dated February 4, 1980,<br/>Filed Under POWER PLANT-Engines</p> | <p>When performing the camshaft pin replacement procedure, order spring pin G456384. Do not order pin GM456384.</p> |

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# Service Technical Letter

**File: Service General**  
No. 80-6 March 19, 1980

| Subject   | Information  |
|---|--|
| Assembling Piston and Connecting Rod — 1980 Four-Cylinder Engines | When assembling the piston and connecting rod on a four-cylinder engine, the notch in the top of the piston must be 180° opposite the raised notch in the large end of the connecting rod. |

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# Service Technical Letter

**File: Service General**  
 No. 80-5 Feb. 4, 1980

| Subject  | Information   |                    |                 |                 |              |  |    |         |       |
|--|---|--------------------|-----------------|-----------------|--------------|--|----|---------|-------|
| <p>New Propeller Shaft-to-Yoke Attaching Bolt— all 1980 Jeep Vehicles</p>                                | <p>A new propeller shaft-to-yoke attaching bolt has been released for service. The bolt features a 12-point head and increased length for improved thread engagement. This bolt has already been installed in some Jeep rear axle yokes to ensure thread engagement in yokes with damaged threads. The new bolts can be used to salvage other yokes having damaged threads by tapping the yoke and installing the new, longer bolt.</p> <p>The tightening torque specification for the new bolt remains at 15 foot-pounds (20 N·m) torque plus or minus 1 foot-pound (1 N·m) torque.</p> <p>The new bolts will be available the week of February 18, 1980. Do not order bolts until this date.</p> <table border="1" data-bbox="687 848 1429 993"> <thead> <tr> <th><u>Description</u></th> <th><u>Quantity</u></th> <th><u>Part No.</u></th> <th><u>Group</u></th> </tr> </thead> <tbody> <tr> <td>BOLT, Propeller Shaft-to-Yoke (1/4-28 x 7/8)</td> <td>AR</td> <td>4006698</td> <td>9.100</td> </tr> </tbody> </table> | <u>Description</u> | <u>Quantity</u> | <u>Part No.</u> | <u>Group</u> | BOLT, Propeller Shaft-to-Yoke (1/4-28 x 7/8) | AR | 4006698 | 9.100 |
| <u>Description</u>   | <u>Quantity</u>   | <u>Part No.</u>    | <u>Group</u>    |                 |              |  |    |         |       |
| BOLT, Propeller Shaft-to-Yoke (1/4-28 x 7/8)   | AR  | 4006698            | 9.100           |                 |              |  |    |         |       |
| <p>Revised Fuse Rating for Cigar Lighter Circuit— 1980 Jeep CJ Models With 4 and 6-Cylinder Engines.</p> | <p>The originally specified 10 amp fuse in the cigar lighter circuit has been changed to a 20 amp fuse.</p>   |                    |                 |                 |              |  |    |         |       |

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# Service Technical Letter

**File: Service General**  
No. 80-4 Jan. 30, 1980

| Subject  | Information  |    |  |                              |                                   |
|--|--|----|--|------------------------------|-----------------------------------|
| <p>Correction to In-Vehicle Torque Bias Check - 1980 Cherokee, Wagoneer, and Truck Models With Model 219 Quadra-Trac Transfer Case</p> | <p>Steps (2) and (3) of the In-Vehicle Torque Bias Check on page 147, Chapter 2D, of the 1980 Technical Service Manual Supplement have been revised.</p> <p>Step (2) should read: "Place transmission shift lever in NEUTRAL and transfer case shift lever in 4-HIGH position."</p> <p>Step (3) should read: "Raise one FRONT wheel off floor."</p>  |    |  |                              |                                   |
| <p>Correction to Camber Specifications - 1980 Cherokee, Wagoneer and Truck Models</p>  | <p>Front wheel camber specifications for 1980 Cherokee, Wagoneer and Truck models have been changed. The camber specifications for CJ models remains the same.</p> <p>The second sentence under Camber on page 2M-4 of the 1980 Technical Service Manual should read: "Correct wheel camber of <math>0^{\circ}</math> (<math>\pm 1/2^{\circ}</math>) for Cherokee, Wagoneer and Truck models and <math>+1-1/2^{\circ}</math> (<math>\pm 1/2^{\circ}</math>) for CJ models is preset at time of manufacture and cannot be altered by adjustment."</p> <p>The camber specifications in the Front Wheel Alignment Specifications Chart on page 2M-6 should read:</p> <table data-bbox="640 1308 1383 1389"> <tr> <td>CJ</td> <td><math>+1-1/2^{\circ}</math> (<math>\pm 1/2^{\circ}</math>)</td> </tr> <tr> <td>Cherokee, Wagoneer and Truck</td> <td><math>0^{\circ}</math> (<math>\pm 1/2^{\circ}</math>)</td> </tr> </table> | CJ | $+1-1/2^{\circ}$ ( $\pm 1/2^{\circ}$ ) | Cherokee, Wagoneer and Truck | $0^{\circ}$ ( $\pm 1/2^{\circ}$ ) |
| CJ   | $+1-1/2^{\circ}$ ( $\pm 1/2^{\circ}$ )   |    |  |                              |                                   |
| Cherokee, Wagoneer and Truck   | $0^{\circ}$ ( $\pm 1/2^{\circ}$ )  |    |  |                              |                                   |

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# Service Technical Letter

**File: Service General**  
 No. 80-2      Nov. 10, 1979

| Subject  | Information  |
|--|--|
| <p>Four Wheel Drive Indicator Lamp Operation and Switch Usage - 1980 Jeep Cherokee, Wagoneer and Truck Models with Model 208 or 219 Transfer Case</p>  | <p>1980 Jeep vehicles equipped with a model 219 or 208 transfer case have an indicator lamp which lights in certain four-wheel drive ranges. The model 208 and 219 require different switches to operate the lamp. Although the two switches look very similar, they operate differently. Refer to the following descriptions to verify correct operation and switch usage.</p> <p>On vehicles with a model 219, the indicator lamp should light when the lever is in the 4H LOCK position only. If the lamp lights in any other shift mode, remove the indicator switch and check switch continuity. The switch is normally in a closed position. If incorrect, install a model 219 lock mode indicator switch, part number 8132843.</p> <p>A correction should be made to the description of the model 208 transfer case on page 2D-4 of the 1980 Technical Service Manual under Four-Wheel Drive Indicator Lamp. On vehicles with a model 208, the indicator lamp is illuminated in four wheel high range and four wheel low position, <u>not</u> in high range only as was published. If the light is on in any other position, remove the indicator switch on the transfer case and check continuity. The switch is normally open. The correct model 208 lock mode indicator switch part number is 8130826.</p> |
| <p>Model T-176 4-Speed Manual Transmission Released as a Production Option to Model SR-4 4-Speed Manual Transmission - 1980 CJ-7 Models Built With 6-Cylinder Engine and Manual Transmission</p> | <p>The model T-176 4-speed manual transmission will be used as an option in production to the model SR-4 4-speed manual transmission on 1980 CJ-7 models built with a 6-cylinder engine.</p> <p>The model T-176 transmission can be distinguished from the SR-4 transmission by checking the shifter location. The model T-176 transmission shifter is located on top of the transmission case while the model SR-4 transmission shifter is located in the adapter housing attached to the rear of the transmission case.</p>  |

**American Motors Sales Corporation**

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# Service Technical Letter (cont'd)

| Subject   | Information  |
|---|--|
| <p>Revised Clutch Overcenter Spring Removal Procedures - 1979 CJ Models Built After Mid-April</p> | <p>Related components such as propeller shafts, transfer case torque reaction bracket, clutch housing and shift knob also differ when a model T-176 is used.</p> <p>Note this change on the Power Train Combinations - 1980 CJ Models chart on page A-12 of the General Information section in the 1980 Jeep Technical Service Manual.</p> <p>A revised procedure has been developed for removal of the heavier gauge clutch overcenter spring. This spring was phased into production during mid-April along with other clutch related components as described in STL 9-12, dated August 23, 1979.</p> <p>Revise DRB 9-02, dated July 18, 1979, and filed under Chassis, Clutch-Manual Transmission (Group 6.000) as follows. After step (4) of Clutch Overcenter Spring and after step (7) of Clutch Pedal Replacement add: Clamp vise grips on lower end of clutch pedal support bracket. Bend bracket downward to provide access to end of overcenter spring that is attached to bracket.</p> <p>NOTE: Refer to the 1980 Jeep Technical Service Manual for procedures on 1980 CJ models.</p> <p>The Standard Servicing Operations and work times as published are not affected by this revision.</p> |

# Service Technical Letter

**File: Service General**  
 No. 80-1      Sept. 19, 1979

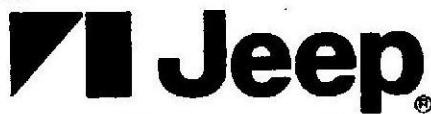
| Subject  | Information   |
|--|---|
| <p>Tape Player Inoperative Caused By Transit Screw - 1980 Jeep Models AM/FM/Cassette Radio</p> | <p>The AM/FM/Cassette radio has a transit screw installed at time of manufacture to ensure that the tape transport mechanism is not damaged during shipment. If this screw is not removed, the cassette tape player will not operate. The tape cartridge will only engage part way.</p> <p>This screw must be removed before the radio is installed. The screw is located on the top of the radio and is identified by a label that states:</p> <p>"Warning--This screw must be removed before installation".</p> |
| <p>Relocation of Safety Certification and Emission Control Labels - 1980 Jeep CJ Models</p>    | <p>The Safety Certification and Emission Control labels on 1980 Jeep CJ models have been relocated from the instrument panel to the inside of the left lower body panel just below the door opening.</p> <p>The Emission Control Maintenance Information Label remains under the hood in front of the radiator.</p>   |

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FILE: Engines-Fuel Systems  
Engine Electrical-Cooling  
(POWER PLANT-Engines)

No. 1-10-82 Sept. 8, 1982

## TECHNICAL BULLETIN

**PROBLEM AND  
APPLICATION:**

The pushrods in some 1981-82 Jeep 258 CID six-cylinder engines built prior to May 1982, may disengage from the rocker arms causing noise, backfire, or a miss.

**CORRECTION:**

Install the following replacement 0.070 inch longer pushrods as outlined in the appropriate Jeep Technical Service Manual if any of the original pushrods become disengaged or bent. The original pushrods are 9.640 to 9.660-inches long. The replacement pushrods, part number 3242395, are 9.710 to 9.730-inches long.

NOTE: The original (shorter) pushrods, part number 3227329, are still recommended for use in 1980 and prior Jeep 258 CID six-cylinder engines.

**PARTS:**

| <u>Description</u> | <u>Quantity</u> | <u>Part Number</u> | <u>Group</u> |
|--------------------|-----------------|--------------------|--------------|
| ROD, Valve Push    | 12              | 3242395            | 1.095        |

**S.R.T.  
INFORMATION:**

Consult the T.I.C. manual and appropriate S.R.T. manual.

**DEALER  
REIMBURSEMENT:**

Reimbursable within the provisions of the applicable warranty.

**American Motors Sales Corporation**

Service Engineering Department • 14250 Plymouth Road • Detroit, Michigan 48232 82-070-A/J

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