

Dealer Service Instructions for:

Safety Recall No. 970

Diesel Engine Throttle Cable and Linkage

Models

1994-1996 (BR) Dodge Ram Pickup Trucks

NOTE: This recall applies only to the above vehicles equipped with a 5.9L Cummins turbo diesel engine ("C" in the 8th VIN Position).

IMPORTANT: Some of the involved vehicles may be in dealer used vehicle inventory. **Dealers should complete this recall service on these vehicles before retail delivery.** Dealers should also perform this recall on vehicles in for service. Involved vehicles can be determined by using the DIAL VIP System.

Subject

The throttle control cable on about 157,000 of the above vehicles may fray and eventually break. A frayed throttle control cable may not allow the throttle to return to the idle position. In addition, the throttle control linkage joints may corrode and cause the throttle to bind or stick. Either of the above conditions could increase the truck's stopping distance and cause an accident without warning.

Repair

The throttle control cable, throttle linkage rod ends and linkage ball studs must be replaced.

Parts Information

<u>Part Number</u>	<u>Description</u>
CANZ9700	Throttle Control Cable & Linkage Package

Each package contains the following components:

<u>Quantity</u>	<u>Description</u>
1	Throttle control cable
2	Throttle rod ball studs
2	Throttle rod ball stud nuts
1	Throttle control cable ball stud
1	Throttle control cable ball stud nut
1	Short R/H threaded rod end
1	Short L/H threaded rod end
1	Long R/H threaded rod end
1	Throttle return spring

Each dealer to whom vehicles in the recall were invoiced (or the current dealer at the same street address) will receive enough Throttle Control Cable & Linkage Packages to service about 10% of those vehicles.

Service Procedure

1. Disconnect the negative battery cables from the right and left batteries.

NOTE: To enhance customer satisfaction, remember to record all radio settings before disconnecting the batteries and to reset all electronic memory (clock, radio settings, etc.) when you have completed the service procedure.

2. Loosen the band clamps from both sides of the tube that connects the air horn to the charge air cooler.
3. Remove the air horn-to-charge air cooler tube from the vehicle.
4. **For trucks equipped with an automatic transmission**, disconnect the Throttle Position Sensor (TPS) electrical connector, remove the two TPS attaching bolts and then remove the TPS (Figure 1).
5. Disconnect the oil pressure sending unit and fuel heater electrical connectors.
6. Disconnect the three clips that secure the engine wiring harness and temporarily reposition the wiring harness on top of the injector pump.

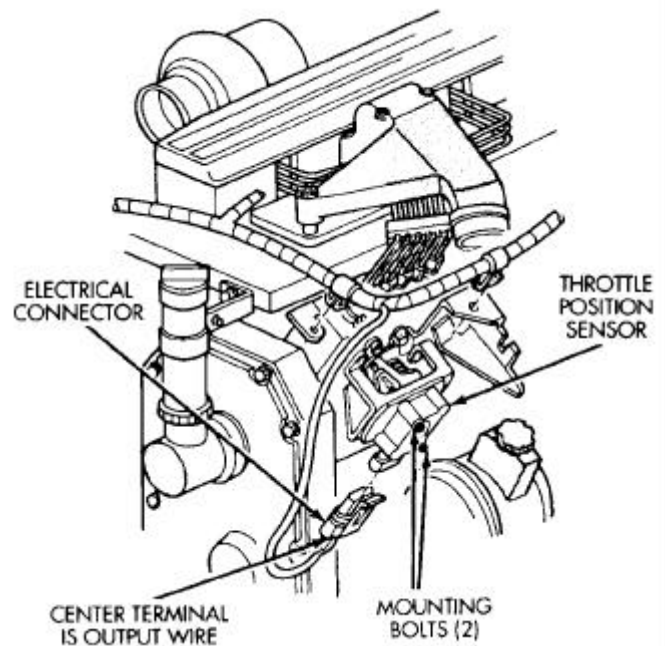


Figure 1

Service Procedure (Continued)

7. From the inside of the vehicle, lift the accelerator pedal and remove the plastic cable retainer and throttle cable core wire from the upper end of the pedal arm (Figure 2).
8. From inside the vehicle, pinch both sides of the throttle cable retainer tabs at the dash panel and disengage the cable body from the dash panel (Figure 2).
9. From the engine compartment, remove the cable housing from the dash panel.

CAUTION: Remember to note the throttle cable routing before removing the old cable.

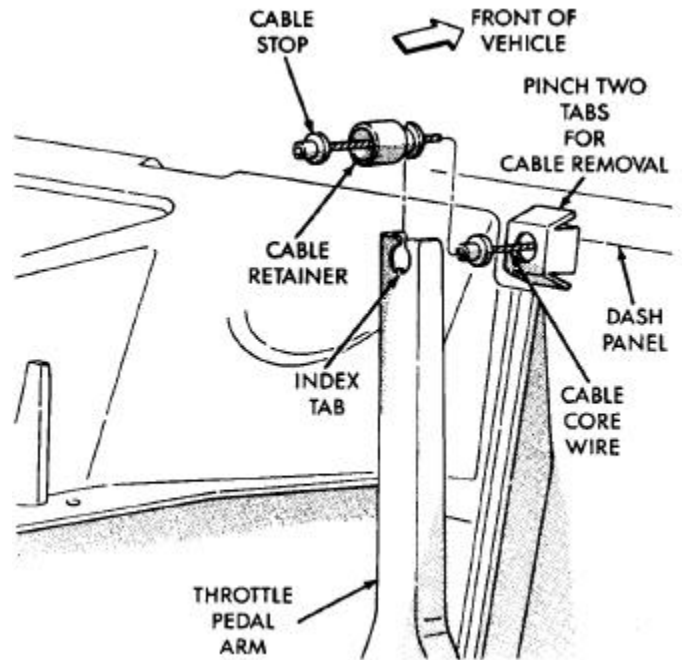


Figure 2

10. Disconnect the throttle cable from the primary bellcrank ball stud. To do this place a 3/8 inch open end wrench between the primary bellcrank arm and throttle cable socket and then pry the cable socket off the ball stud (Figure 3).
11. Apply a small amount of silicone spray lubricant to both sides of the throttle control cable rubber grommet (Figure 3).

NOTE: The throttle control cable rubber grommet is pressed into the cable mounting bracket.

12. Work the rubber grommet on the throttle control cable rearward through the mounting bracket with two small screwdrivers (Figure 3).
13. Remove the throttle control cable from the vehicle and discard the old cable.

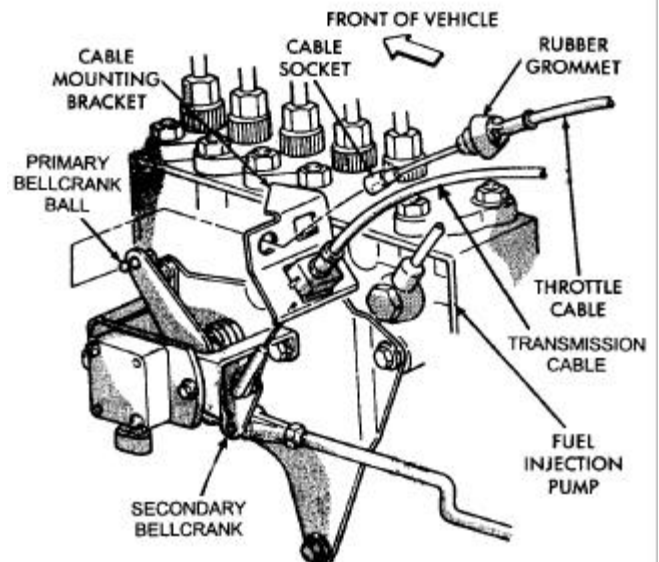


Figure 3

Service Procedure (Continued)

14. For trucks equipped with an automatic transmission, slide the plastic snap cap forward to disconnect the transmission throttle valve cable from the nail head on the secondary bellcrank.

15. For trucks equipped with an automatic transmission, remove the throttle valve cable from the cable mounting bracket.

16. For trucks equipped with speed control, slide the plastic snap cap forward to disconnect the speed control cable from the nail head on the primary bellcrank.

17. For trucks equipped with speed control, remove the speed control cable from the cable mounting bracket.

18. Disconnect the throttle lever return spring(s) from the throttle lever.

19. Remove the three cable mounting bracket bolts (Figure 4).

20. Remove the two throttle lever bolts (Figure 4).

21. Remove the cable mounting bracket, throttle lever and control rod as an assembly (Figure 4).

22. Support the secondary bellcrank by clamping the rod end in a vise (Figure 5).

23. Using a flat file, file the opposite side of the secondary bellcrank throttle rod ball stud (peened side) until it is flush with the bellcrank surface (Figure 5).

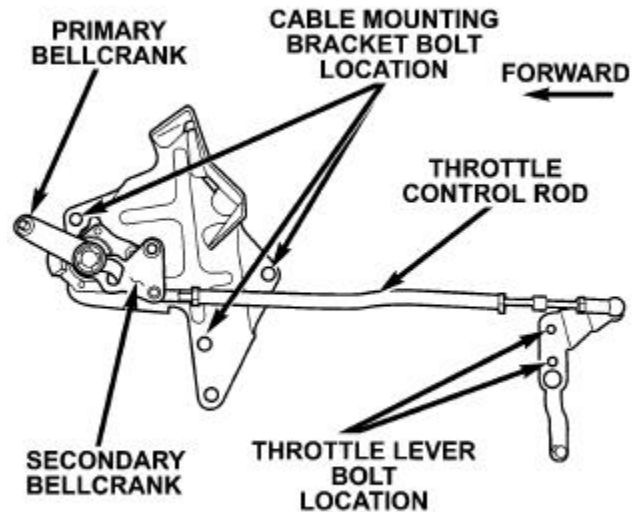


Figure 4

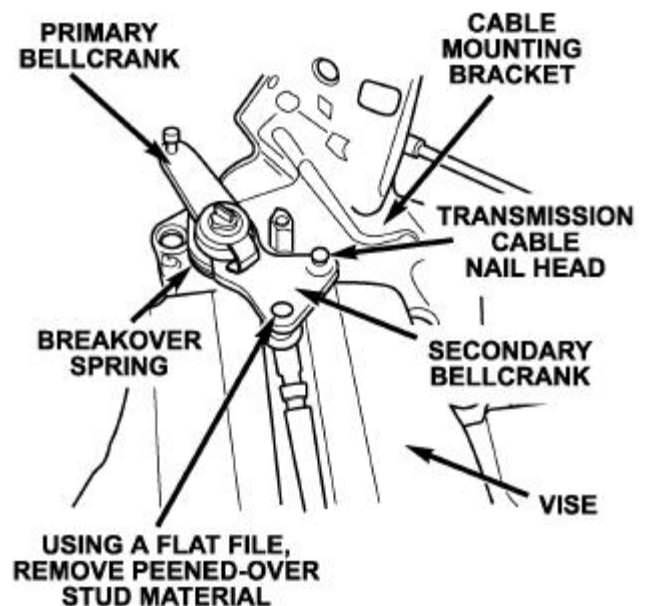


Figure 5

Service Procedure (Continued)

24. Using a ball peen hammer and a small punch, drive the throttle rod ball stud from the secondary bellcrank (Figure 6).

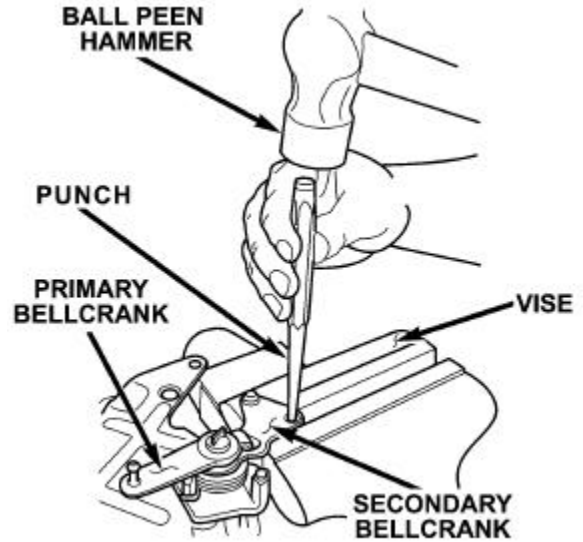


Figure 6

25. Install a new throttle rod ball stud as shown in Figure 7. Tighten ball stud nut to 80 in. lbs. (9 N·m)

CAUTION: The repair package contains three ball studs. Be sure to use the correct ball stud.

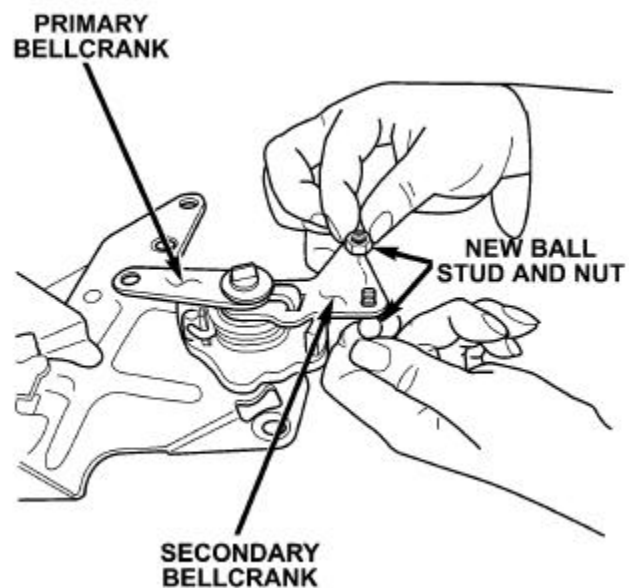


Figure 7

Service Procedure (Continued)

26. Place the primary bellcrank lever into a vise with the nail head side of the throttle cable ball stud inserted into a 1/2 inch (13 mm) deep well socket as shown in Figure 8. Using the vise, press the throttle cable ball stud out of the primary bellcrank.

27. Install the supplied screw-on combination nail head and throttle cable ball stud onto the primary bellcrank lever. Tighten ball stud nut to 80 in. lbs. (9 N·m).

28. **For trucks with a peened throttle lever ball stud (non-adjustable style lever):**

NOTE: There are four different styles of non-adjustable throttle levers.

- a. Clamp the throttle lever ball stud end in a vise.
- b. Using a flat file, file the opposite side of the ball stud (peened side) until it is flush with the throttle lever.
- c. Using a ball peen hammer and a small punch, drive the old ball stud from the throttle lever.

29. **For trucks with a screw on throttle lever ball stud (adjustable throttle lever),** unscrew and discard the old ball stud and retaining nut.

CAUTION: Do not loosen throttle lever adjustment lock-down screw.

30. Install a new ball stud onto the throttle lever as shown in Figure 9. Tighten the new ball stud nut to 80 in. lbs. (9 N·m).

CAUTION: The repair package contains three ball studs. Be sure to use the correct ball stud.

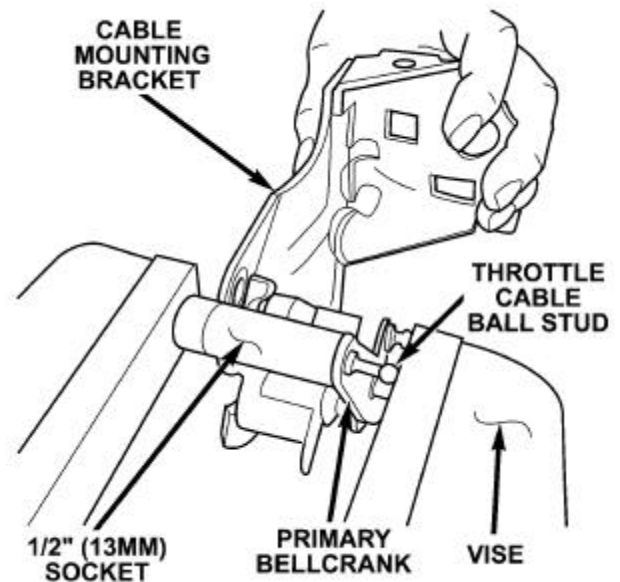


Figure 8

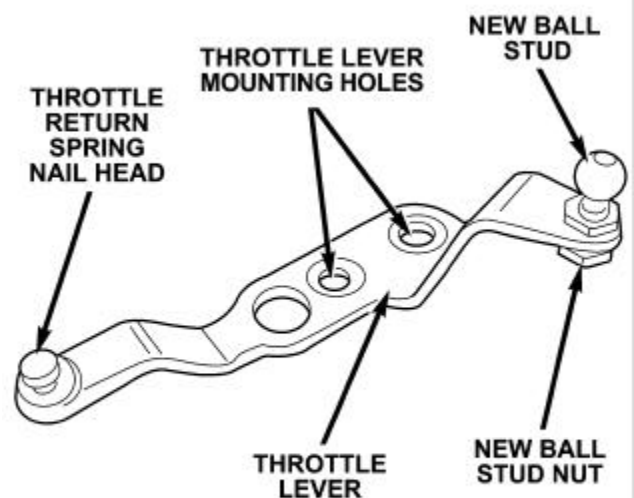


Figure 9 – 1994 1/2 Through Early 1996 Non-adjustable Throttle Lever Shown

Service Procedure (Continued)

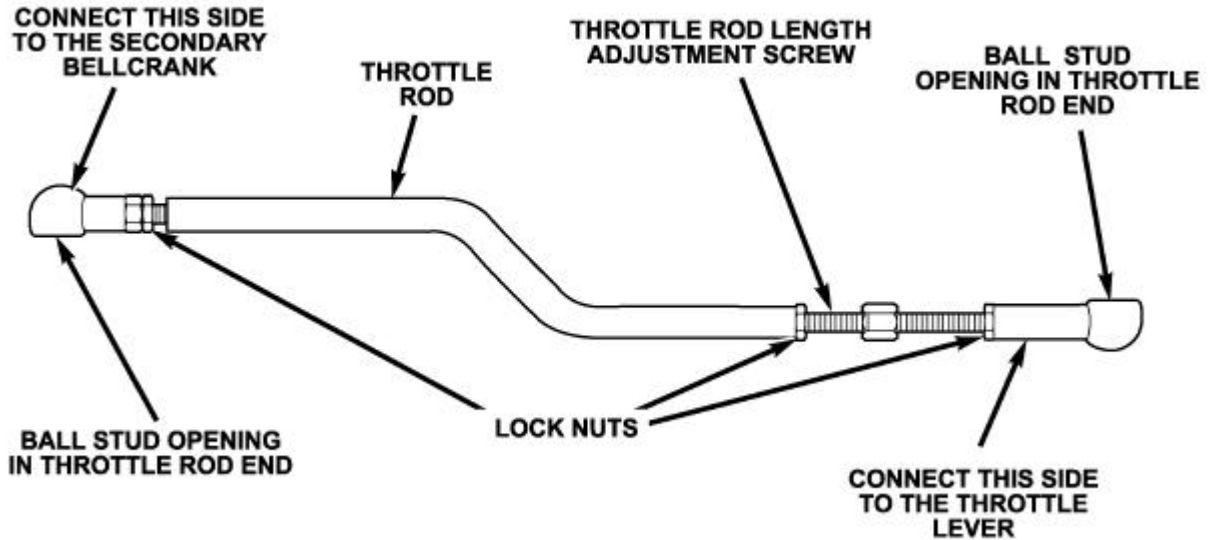


Figure 10

31. Remove the original throttle rod ends from the throttle rod (Figure 10).
32. Match the new throttle rod ends to the old throttle rod ends. Install the new throttle rod ends onto the original throttle rod. The rod end openings must be oriented as shown in Figure 10.

NOTE: The repair kit contains three throttle rod ends (short or long R/H thread and short L/H thread). Determine the correct two rod ends required for the truck being repaired and discard the extra throttle rod end.

33. Tighten the secondary bellcrank rod end lock nut to 80 in. lbs. (9 N·m) (Figure 10).
34. Install the throttle control rod end onto the secondary bellcrank ball stud.
35. Install the other end of the throttle rod onto the throttle lever ball stud.

NOTE: The throttle rod length adjustment screw must be on the throttle lever side of the throttle rod (rear of vehicle).

36. Install the throttle control bracket, throttle rod and throttle lever onto the engine as an assembly (Figure 4).
37. Tighten the three cable mounting bracket bolts to 18 ft. lbs. (24 N·m) (Figure 4).

Service Procedure (Continued)

38. Tighten the two throttle lever bolts to 80 in. lbs. (9 N·m) (Figure 4).
39. Install the supplied throttle lever return spring.

NOTE: If the truck has two individual return springs, reuse the two original springs. Do not install the spring that was supplied with the repair kit.

40. **For trucks equipped with speed control**, install the speed control cable into the cable mounting bracket.
41. **For trucks equipped with speed control**, attach the speed control cable by sliding the end of the cable onto the nail head on the primary bellcrank lever and snap it into place.
42. **For trucks equipped with an automatic transmission**, install the throttle valve cable into the cable mounting bracket (Figure 3).
43. **For trucks equipped with an automatic transmission**, slide the transmission throttle valve cable end onto the nail head stud on the secondary bellcrank lever and snap it into place.
44. Install the end of the new throttle control cable through the dash panel opening (Figure 2).

NOTE: The two plastic tabs must lock the cable housing to the dash panel.

45. From inside the vehicle, lift the accelerator pedal (Figure 2) and install the throttle cable core wire and plastic cable retainer through the upper end of the pedal arm (the plastic retainer is snapped into the pedal arm).

NOTE: When installing the plastic retainer to the accelerator pedal arm, align the index slot on the plastic cable retainer to the index tab (Figure 2).

46. Install the new throttle control cable through the cable mounting bracket until the rubber grommet locks into position (Figure 3).

Service Procedure (Continued)

47. Measure the distance between the center of the primary bellcrank ball stud and the rear face of the cable mounting bracket (Figure 11). If it is five (5) inches (126.5 mm) continue with step 48. If the throttle rod is out of specifications, adjust it as follows:

NOTE: To prevent damage to the ends of the linkage, attach locking-type pliers to the flat located on the linkage screw before loosening the lock nuts.

- a. Loosen the right-hand-threaded lock nut.
 - b. Loosen the left-hand-threaded lock nut.
 - c. Rotate the throttle rod length adjustment screw (lengthen or shorten as required) to achieve proper linkage measurement.
 - d. Tighten both lock nuts to 80 in. lbs. (9 N·m) after making the throttle rod adjustment.
48. Position the throttle cable end over the ball stud on the primary bellcrank lever and then snap it into place.
49. Check the throttle linkage for Wide Open Throttle (WOT) as follows:
- a. With the key in the OFF position, have an assistant push and hold the accelerator pedal to Wide Open Throttle (WOT).
 - b. While in the WOT position, pull forward on the throttle lever. There should be no movement of the throttle lever and it should be in its full forward position.
 - c. If the throttle lever is not in the full forward position, adjust the throttle rod length to achieve WOT.

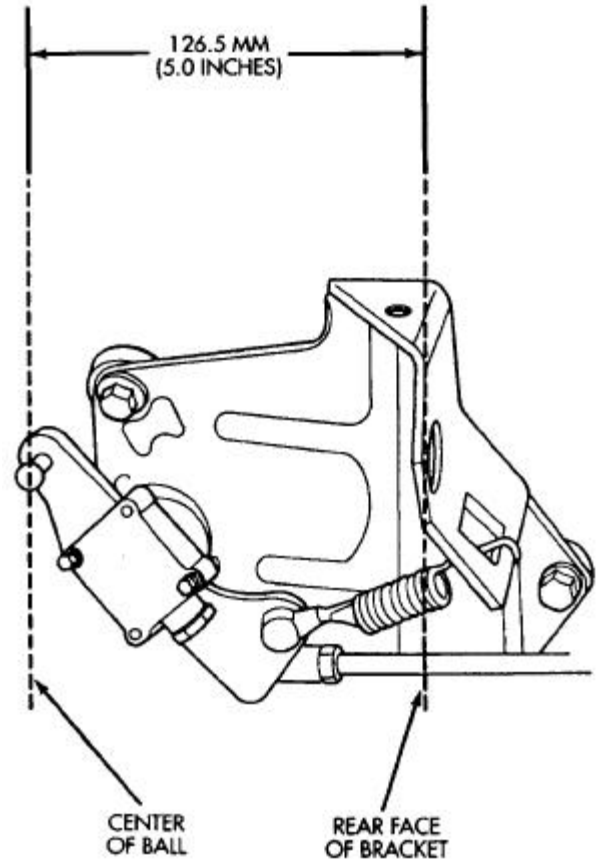


Figure 11

Service Procedure (Continued)

50. **For trucks equipped with an automatic transmission**, install the Throttle Position Sensor (TPS) and tighten the two mounting screws. Then connect the TPS electrical connector (Figure 1).

NOTE: The TPS is spring loaded. After positioning the TPS on the mounting bracket, rotate the TPS in a counterclockwise direction until both mounting holes align (Figure 1).

51. Place the engine wiring harness back on the engine and secure the harness by inserting the plastic fasteners into the three metal clips on the engine.
52. Connect the oil pressure sending unit and fuel heater electrical connectors.
53. Connect both right and left negative battery cables.
54. Adjust the TPS using the following procedure:
- Connect the DRB III to the diagnostic connector located under the instrument panel near the steering column.
 - Turn the ignition switch to the “**RUN**” position. Do not start the engine.
 - Select “**DRB STANDALONE**” and press enter.
 - Select “**FUNCTION SCREEN**” and press enter.
 - Select “**SENSOR DISPLAY**” and press enter.
 - The voltage at the TPS should be 1.0 volt (\pm 0.2 volts) with the linkage in the idle position.
 - At Wide Open Throttle (WOT), the output voltage of the TPS must be 2.2-to-2.9 volts **higher** than at idle speed. If voltage is not correct, recheck the linkage adjustment.

CAUTION: Do not lengthen or shorten the linkage rod more than 3/64 inch (1 mm) from the dimension shown in Figure 11. If voltage requirements cannot be achieved by linkage adjustment, replace the TPS.

55. Install the charge air cooler tube onto the air horn outlet. Position the band clamps and tighten to 95 in. lbs. (11 N·m).
56. Start the engine and verify proper throttle operation.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DIAL System. Claims submitted will be used by DaimlerChrysler to record recall service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

	<u>Labor Operation Number</u>	<u>Time Allowance</u>
Replace throttle control cable and throttle linkage (with automatic transmission)	14-97-01-82	1.1 hours
Replace throttle control cable and throttle linkage (with manual transmission)	14-97-01-83	1.0 hours

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Parts Return

Not required.

Dealer Notification and Vehicle List

All dealers will receive a copy of this dealer recall notification letter by first class mail. Two additional copies will be sent through the DCMMS, and the MDS2 will be updated to include this recall in the near future. **Each dealer to whom involved vehicles were invoiced** (or the current dealer at the same street address) **will receive a list of their involved vehicles.** The vehicle list is arranged in Vehicle Identification Number (VIN) sequence. Owners known to DaimlerChrysler are also listed. The lists are for dealer reference in arranging for service of involved vehicles.

DIAL System Functions 53 and VIP

All involved vehicles have been entered to DIAL System Functions 53 and VIP for dealer inquiry as needed.

Function 53 provides involved dealers with an updated VIN list of their incomplete vehicles. The customer name, address and phone number are listed if known. Completed vehicles are removed from Function 53 within several days of repair claim submission. To use this system, type “53” at the “ENTER FUNCTION” prompt, then type “ORD970”.

Owner Notification and Service Scheduling

All involved vehicle owners known to DaimlerChrysler are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification Form. The involved vehicle and recall are identified on the form for owner or dealer reference as needed.

Dealers are encouraged to consider alternative scheduling and servicing approaches for this recall. This repair does not require hoists or other full service facility special equipment and is a DaimlerChrysler Mobile Service approved repair.

Vehicle Not Available

If a vehicle is not available for service, let us know by filling out the pre-addressed Owner Notification Form or describe the reason on a postcard and mail to:

DaimlerChrysler Corporation
CIMS 482-00-85
800 Chrysler Drive East
Auburn Hills, Michigan 48326-2757

Additional Information

If you have any questions or need assistance in completing this action, please contact your Zone Service Office.

Customer Services Field Operations
DaimlerChrysler Corporation

SAFETY RECALL TO REPLACE YOUR TRUCK'S THROTTLE CABLE AND THROTTLE LINKAGE COMPONENTS

Dear Dodge Ram Diesel Truck Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

DaimlerChrysler Corporation has determined that a defect, which relates to motor vehicle safety, exists in some **1994 through 1996 model year Dodge Ram Pickup Trucks** equipped with a Cummins turbo diesel engine.

The problem is...

The throttle control cable on your Ram Pickup Truck (identified on the enclosed form) **may fray and eventually break. A frayed throttle control cable may not allow the throttle to return to the idle position. In addition, the throttle control linkage joints may corrode and cause the throttle to bind or stick. Either of the above conditions could increase the truck's stopping distance and cause an accident without warning.**

***What DaimlerChrysler
and your dealer will
do...***

DaimlerChrysler will repair your truck free of charge (parts and labor). To do this, your dealer will replace your truck's throttle control cable and certain throttle linkage components. The work will take about 1 1/2 hours to complete. However, additional time may be necessary depending on how dealer appointments are scheduled and processed.

***What you must do to
ensure your safety...***

- Simply **contact your dealer** right away to schedule a service appointment. Ask the dealer to hold the parts for your truck or to order them before your appointment.
- **Bring the enclosed form with you to your dealer.** It identifies the required service to the dealer.

If you need help...

If you have questions or concerns which the dealer is unable to resolve, please contact the DaimlerChrysler Customer Assistance Center at 1-800-853-1403. A representative will assist you.

If you have already experienced the problem described above and have paid to have it repaired, you may send your original receipts and/or other adequate proof of payment to the following address for reimbursement: DaimlerChrysler Customer Assistance Center, P.O. Box 1040, St. Charles, MO 63302-1040, Attention: Reimbursement.

If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC 20590, or call the toll-free Auto Safety Hotline at 1-888-327-4236.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

***Buckle up
for Safety***

Customer Services Field Operations
DaimlerChrysler Corporation
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