

SUBJECT:
Compass Mini Trip Computer
Indicates Erroneous Average
Miles Per Gallon, Distance To
Empty, And/Or Trip Odometer

NO: 08-51-98
GROUP: Electrical
DATE: Nov. 27, 1998

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THIS REPAIR IS COMPATIBLE WITH CHRYSLER'S MOBILE SERVICE PROGRAM AND DOES NOT REQUIRE HOISTS OR OTHER FULL SERVICE FACILITY SPECIAL EQUIPMENT.

MODELS:

1999 (BR/BE) Ram Trucks

NOTE: THIS BULLETIN APPLIES TO VEHICLES EQUIPPED WITH THE COMPASS MINI TRIP COMPUTER (SALES CODE CUS).

SYMPTOM/CONDITION:

The compass mini trip computer indicates inaccurate Average Miles Per Gallon and Distance To Empty when the compass mini trip computer is allowed to calculate the average miles per gallon over an extended mileage period (approximately 1609 km (1000 miles)) without a reset.

The trip odometer and the elapsed time on the compass mini trip computer can display erroneous numbers in the third digit from the right. If the number 7 (seven) is displayed in the fourth digit from the right, the third digit will illuminate the lower horizontal bar segment. Example shown below (Figure 1).

NUMBER INDICATED	ACTUALLY DISPLAYED

FIGURE 1

- ① A DECIMAL WILL BE PLACED IN THIS LOCATION WHEN USING THE TRIP ODOMETER FEATURE
- ② A COLON WILL BE PLACED IN THIS LOCATION WHEN USING THE ELAPSED TIME FEATURE

DIAGNOSIS:

The requirements to duplicate the first Symptom/Condition requires the vehicle to be driven for approximately 1609 km (1000 miles) without resetting the Average Miles Per Gallon.

The requirements to duplicate the second Symptom/Condition requires that the trip odometer on the compass mini trip computer not be reset for a minimum of 710.0 km/miles.

If the customer indicates that their compass mini trip computer indicates inaccurate Average Miles Per Gallon and/or inaccurate Distance To Empty, or indicates that the trip odometer or the elapsed time feature on the compass mini trip computer displays the lower portion of the third segment when a 7 (seven) is displayed in the fourth digit, perform the Repair Procedure.

PARTS REQUIRED:

AR (1)	55350660AE	Computer, Compass Mini Trip, Without Vehicle Theft Alarm
AR (1)	55350003AE	Computer, Compass Mini Trip, With Vehicle Theft Alarm

REPAIR PROCEDURE:

This bulletin involves installing a revised compass mini trip computer.

1. Disconnect and isolate the battery negative cable. On diesel equipped vehicles, both negative cables must be disconnected and isolated.
2. Open the garage door opener storage bin door and locate the two overhead console latch tabs near the front of the bin (Figure 2).

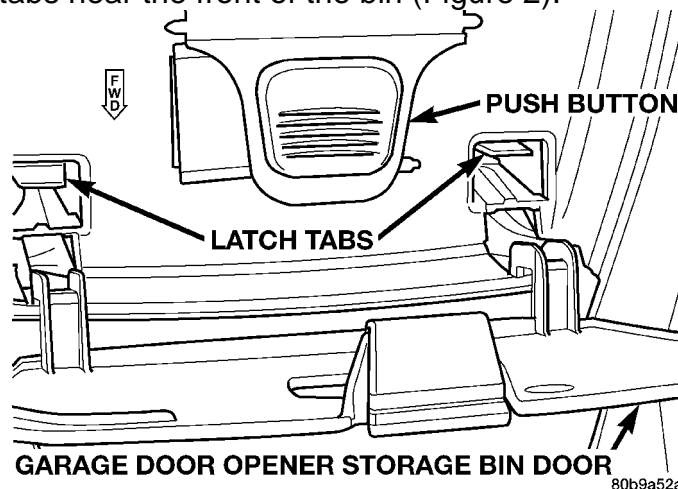


FIGURE 2 - Overhead Console Latch Tabs

3. While pulling gently downward on the front of the overhead console, push the latch tabs forward until each latch is disengaged from its receptacle in the inner roof panel.

NOTE: THE LATCH TABS MAY BE DIFFICULT TO DEPRESS COMPLETELY ENOUGH TO RELEASE THE OVERHEAD CONSOLE. ENSURE THAT THE LATCH TABS HAVE RELEASED THE OVERHEAD CONSOLE COMPLETELY BEFORE PULLING THE CONSOLE DOWNWARD AWAY FROM THE ROOF PANEL.

4. Slide the overhead console rearward far enough to disengage the two mounting hooks on the rear of the housing from the mounting holes in the inner roof panel.
5. Lower the overhead console from the headliner far enough to access the wire harness connector then, disconnect the connector and separate the overhead console from the vehicle.
6. Remove the three screws that secure the compass mini trip computer to the overhead console housing (Figure 3).

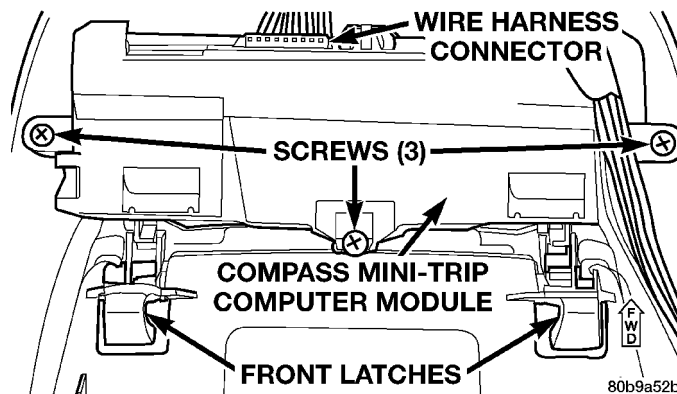


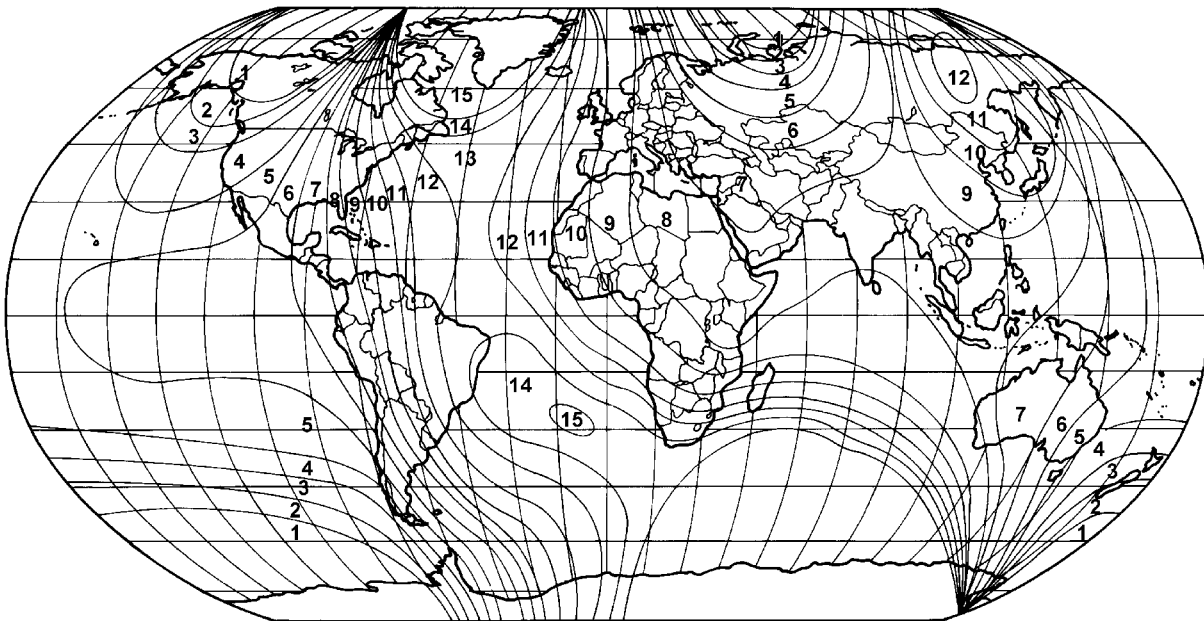
FIGURE 3 - Compass Mini Trip Computer

7. Pull the compass mini trip computer away from the overhead console far enough to access the wire harness connector then, disconnect the connector from the compass mini trip computer.
8. Separate the compass mini trip computer from the overhead console.
9. Position the new compass mini trip computer (see Parts Required section) onto the overhead console.
10. Connect the overhead console's wire harness connector to the compass mini trip computer.

11. Install and tighten the three screws that secure the compass mini trip computer to the overhead console. Tighten the screws to 2.2 N•m (20 in. lbs.).
12. Position the overhead console near the mounting location on the headliner in the vehicle.
13. Connect the roof wire harness connector to the overhead console's wire harness connector.
14. Engage the two mounting hooks on the rear of the overhead console housing in the mounting holes in the inner roof panel.
15. Slide the overhead console forward far enough to align the two latches on the front of the housing with their receptacles in the inner roof panel.
16. Push upward firmly and evenly on the front of the overhead console until each of the two latches are fully engaged in its receptacle in the inner roof panel.
17. Close the garage door opener storage bin door.
18. Connect the battery negative cable(s) and reset the clock on the radio.
19. Start the engine and momentarily depress and release the STEP button until the compass/temperature mode is displayed.
20. Drive the vehicle on a level surface, away from large metal objects and power lines, through three or more complete circles that are from 9 - 27 m. (30 - 90 ft.) in diameter. The compass mini trip computer may require the vehicle to be driven up to ten complete circles in both a clockwise and counterclockwise direction to be properly calibrated. The vehicle speed must be maintained between 8 - 17 kph (5 - 11 mph). Once the compass mini trip computer detects that a calibration is taking place, CAL will be displayed on the compass mini trip computer. When the calibration is successfully completed, CAL will disappear from the display and normal compass mini trip computer operation will resume.

NOTE: IF THE CAL MESSAGE REMAINS IN THE DISPLAY, THERE COULD BE EXCESSIVE MAGNETISM NEAR THE COMPASS. REPEAT THE CALIBRATION IN A DIFFERENT LOCATION THAT IS FREE FROM MAGNETISM. IF THE CAL IS STILL DISPLAYED, PERFORM THE COMPASS DEMAGNETIZING PROCEDURE. REFER TO THE 1999 RAM TRUCK SERVICE MANUAL (PUBLICATION NO. 81-370-9108), PAGES 8V-9 AND 8V-10 FOR INFORMATION REGARDING COMPASS DEMAGNETIZING.

- 21. Once the calibration setting is complete, the compass may need to have its variance set. Compass variance, also known as magnetic declination, is the difference in angle between true geographic north and magnetic north. In some locations, the difference between true geographic north and magnetic north is great enough to give false readings on the compass mini trip computer. If this occurs, the compass mini trip computer must have the variance set.
- 22. To set the variance, ensure that the compass/temperature information is displayed on the compass mini trip computer. Then, momentarily depress the U.S./Metric and the Step buttons simultaneously for at least 100 milliseconds but not more than one second. The compass mini trip computer will enter into the variation adjustment mode and display the current variance zone along with VAR.
- 23. Depress and release the Step button to step through the zone number until the zone number for your geographic location appears in the display. Refer to Figure 4 for geographic zone variance settings.



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FIGURE 4

- 24. After five seconds, the displayed zone will automatically be set into the compass mini trip computer module's memory and normal operation will resume.

POLICY: Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No: 08-50-20-92 0.5 Hrs.

FAILURE CODE: P8 - New Part