

LED Tow Mirror Installation Manual for Ram 1500 94-01 & Ram 2500/3500 94-02

Summary: This instruction will show you how to install the mirrors and route the LED extension wire from the mirror into the junction block underneath the steering column and to tap into either your turn signal or parking light circuit for a 1998 Ram. At your choice, you can use the LED signal as either turn signal or parking light (= side clearance lamp). For other model years, the procedure may not be identical, but will be similar.

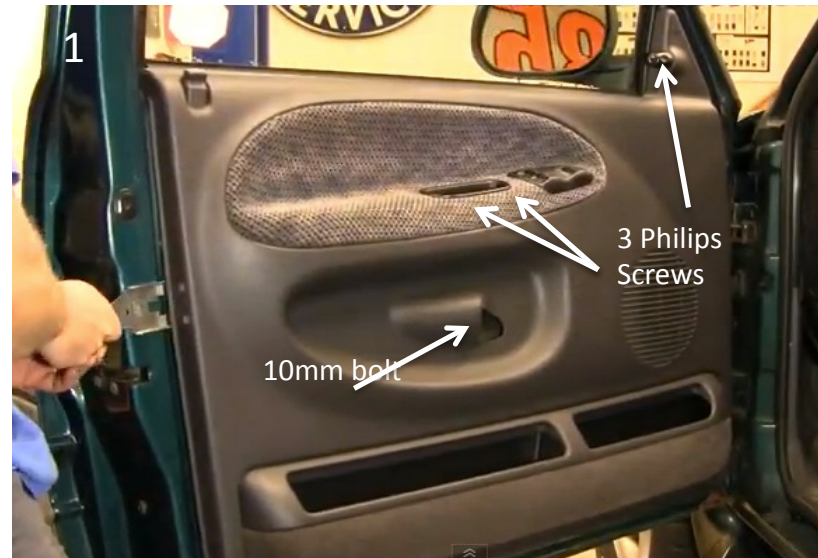
Items included in this bag:

2 sets of black/red LED extension wires
2 wire taps
2 ring connectors
This instruction manual

Required tools for this installation:

10mm socket with ratchet and extension
Flat screwdriver & Philips screwdriver
Putty knife and/or door panel clip removal tool
Electrical Tape / zip ties
Fish wire or coat hanger
Multimeter / wire tester / electrical probe
Needle Nose Pliers
Flashlight

- *We recommend to turn off interior dome light or unplug the negative car battery cable to prevent draining the battery due to extensive installation time with door open if you have a very old battery.*
1. Roll down window and remove 3 Philips screws shown in picture. Remove one 10mm bolt. With a putty knife / door panel clip tool (shown), pry the door panel open. There are around a dozen clips all around the door panel and they are fairly tight. After releasing all clips, pull the door panel up.
 2. Disconnect the window switch plug and the mirror switch plug behind the door panel with the help of a flat screwdriver and set the panel aside.



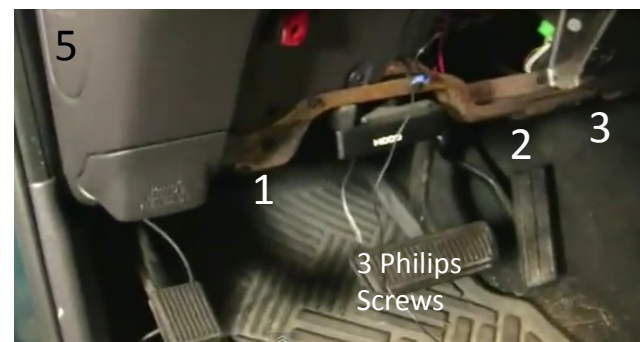
3. Disconnect the mirror plug and unbolt the 3 10mm nuts holding the mirror on to remove the mirror. Then, install the new mirror on carefully and be sure to use the included support bracket as this mirror is heavier. Connect the mirror plug and the LED extension wire.



4. After the new mirror is installed, you need to remove the door speaker held on by 4 screws. Disconnect the leads to your speaker. Pry the pin away that holds the wiring harness on and remove the speaker aside.

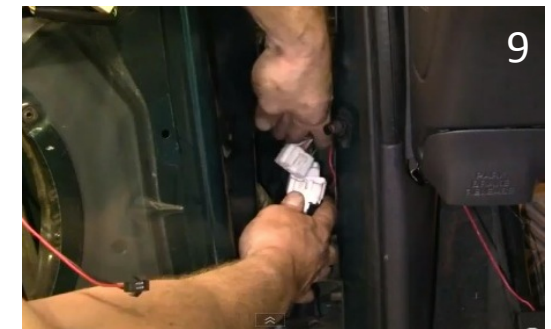


5. Now, remove the lower steering column panel for easy access to the junction block later on. Locate the 3 Philips screws underneath the panel and remove.



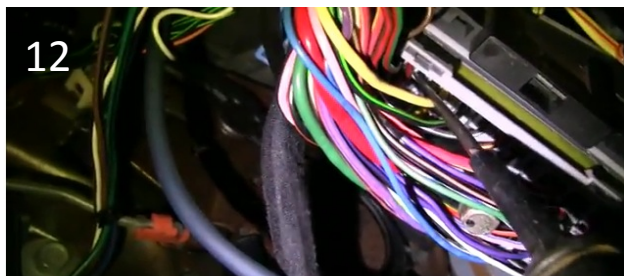
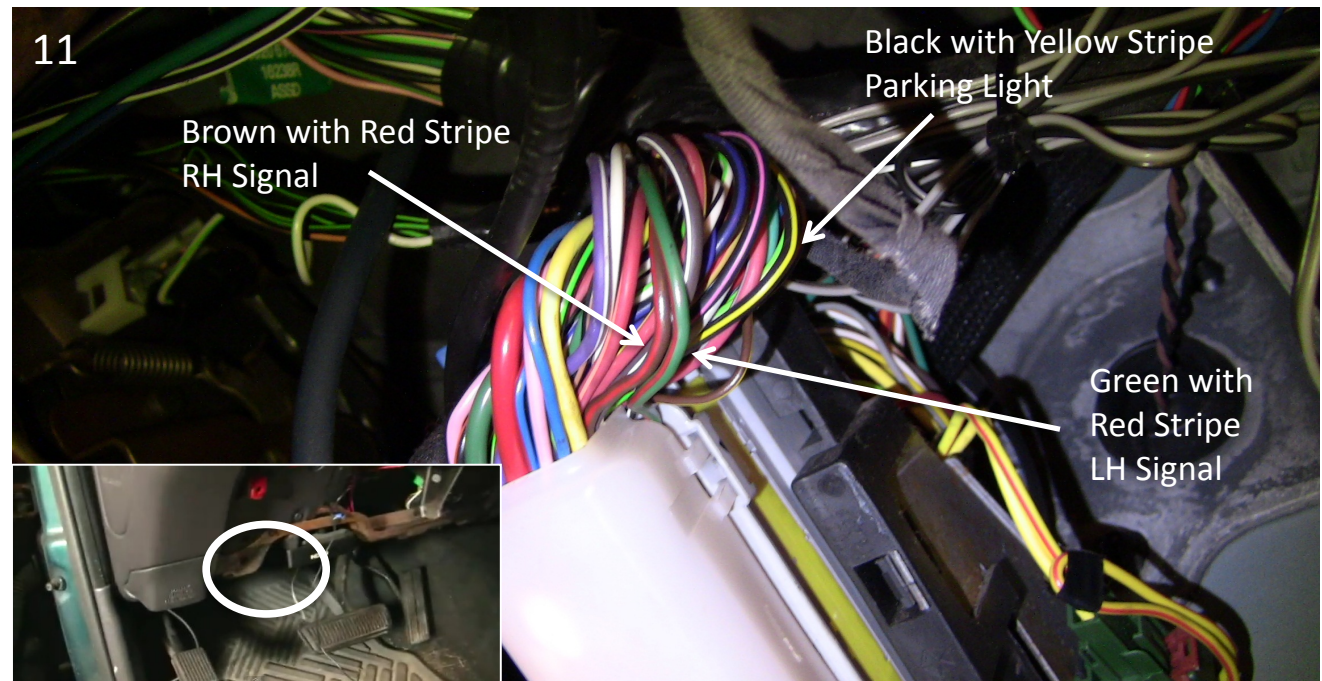
6. Unbolt emergency brake pedal lever (or kick plate covering the emergency brake on some models) to facilitate wire routing thru the rubber boot between the door and the body of the truck. To do this, remove the 3 bolts around the brake pedal lever. One is on the side (6.1) and the other two back on the firewall (6.2).

To have easy access to the bolt on the side, remove this rod.



7. To unplug rubber boot, on the door side you push the end into the door and push the rubber boot back out thru the speaker opening. On the body side, the boot has clips at each corner. You squeeze and pull it out to release the rubber boot. After done, run the LED wires down inside the door shell and thru the rubber boot opening on the door.
8. Take a piece of stiff wire and fish out the LED wires from the door thru the rubber boot in the direction of the arrow in the picture.
9. Feed LED wires into the truck body and reconnect the rubber boot plugs and reseal rubber boot. Pull the extra wires into the truck body and leave no slack in the door shell so it doesn't interfere with the movement of the window. (Use zip ties to secure wire if necessary. Zip ties are not included.)

10. With LED wires in the cabin, rebolt emergency brake pedal lever back onto the firewall. Be careful not to pinch the LED wires. Repeat the same procedure for the passenger side mirror.
11. After bringing both LH & RH LED wires underneath the steering column. Find the junction block under the steering column shown in circle. Use the diagram in picture 11 to locate the correct wires for either parking light or LH/RH turn signal in the junction block.
12. Open the white plastic covering to expose the junction block terminal for probing. Activate the turn signal/parking light separately, so the power is present. Then, probe these wires one by one with an electrical probe to verify they are correct for your truck. (†On some models, the wires may have different colors. In that case, you will need to probe other wires to find the correct turn signal/parking light wire.)



13. After verifying the turn signal / parking lamp wires in the junction block. Use the included wire taps, separate the LED red wire from the black wire. Trim the red LED wire to suitable length and splice into the correct vehicle wire following the 4 steps in the diagram below. The 2 blue wire taps shown in picture 13 are spliced into the black with yellow stripe, the parking lamp wire here. You may go with turn signal function here.

14. Finally, trim both black LED wires to suitable length. Strip the ends off and twist them together. Put the twisted wires into the supplied O-ring, making sure the wires are in the metal part of the O-ring and crimp them together tightly. A good place to ground the O-ring is shown in the circle. Unbolt the screw and secure the O-ring there.

15. Activate the turn signal / parking lamp to test the LED signals on the mirrors working correctly. Then, secure any loose wires with tape or zip ties. Put back lower steering column panel, reconnect plugs on door panel and replace door panels in the reverse order shown above to finish installation.

