LED Tow Mirror Installation Manual for Ram 1500 02-08 & Ram 2500/3500 03-09

Hint: At your choice, you can use the LED signal as either turn signal or side clearance lamp (= parking light).

The instruction below shows you how to tap into the parking light circuit. For functioning as turn signal, it will be the same procedure, but you will need to find the turn signal power circuit instead.

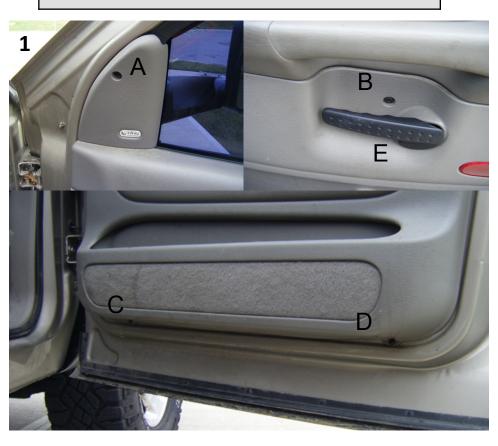
Items included in this bag:

2 reels of black/red LED extension wires

2 red wire taps

2 ring connectors

This instruction manual



Required tools for this installation:

10mm Socket with ratchet and extension

Flat screwdriver & Philips screwdriver

Electrical Tape

Fish wire

Multimeter or wire tester or electrical probe

Needle Nose Pliers

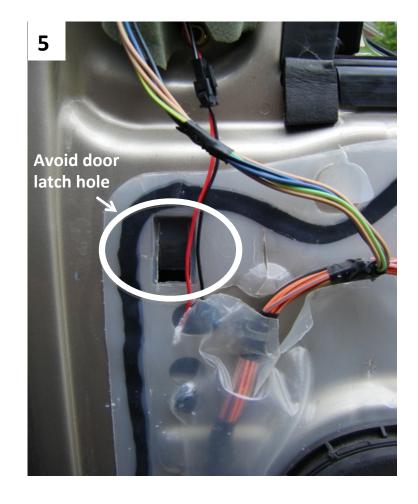
- 1. Open the front side door, lower the window, and use a Philips screwdriver to remove screws in location A, B, C, and D. Pull door handle lever and use a 10mm socket to remove the bolt behind door handle if necessary in location E.
- 2. With a small flat screwdriver, push open the locking pin cover and remove it.





- 5. Install the new mirrors. Run the standalone signal wires pass thru either one of the round holes in the lower area. **DO NOT run the** wires thru the rectangular opening as that is where the door latch sits on.
- 6 B

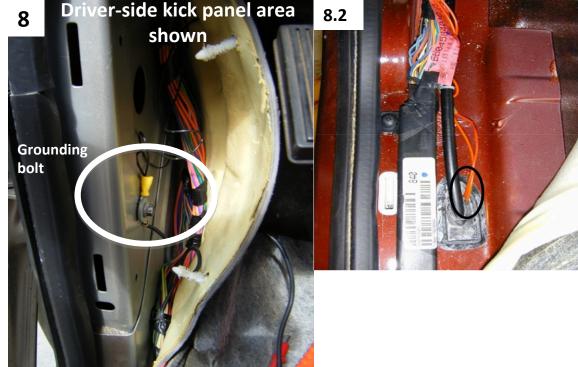
- 3. Lift the door panel off and disconnect the mirror and any other connectors behind door panel. Set the door panel aside.
- 4. Loosen the 3 mirror mounting bolts and any connecting plugs to remove the mirror assembly. Hold the mirror assembly while removing the very last bolt to prevent the mirror from dropping on the ground.

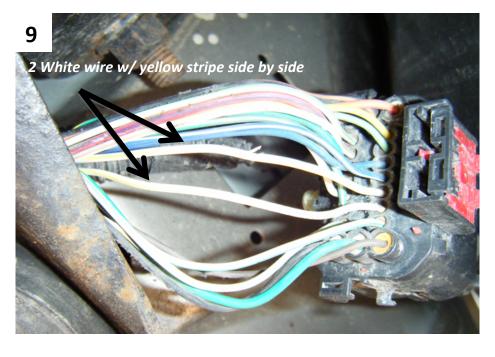


- 6. Remove the kick panel in location A and lift carpet slightly.
 Disconnect rubber boot from both ends in location B. Reach inside door frame and fish out signal wires. Using a fish wire, guide the signal wires thru the rubber boot.
- 7. Pass the signal wires thru the inside of a plastic grommet in black color. There would be sufficient room to pass the wires in between the plastic grommet and the plugs. Route the wires into vehicle and reseat rubber boot into place.



8. Repeat the above steps for the driver door mirror. With both sets of signal wires brought into the cabin near the driver side kick panel area. Separate the red wire from the black wire on both ends of the signal wires. Trim the 2 black ground wires to length so they have just enough slack to be bolted on the preferred grounding location shown in the circled area. It is recommended to remove the kick panels to make running wires easier. Strip and twist the black wires together and crimp them to the supplied ring connector. Then, bolt to the circled location shown in photo. (Carefully hide any excess wires under the carpet or below the steering column. Secure them with tape or zip ties, so they don't interfere with driving.) Then, route the red leads under the carpet and pull leads through emergency cable grommet leading to the wiring harness under the vehicle as in 8.2. Driver's side attached to the frame rail.

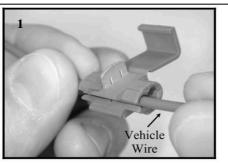


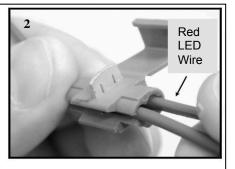


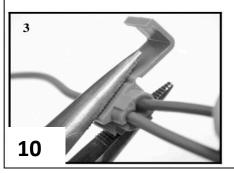
9. With your multimeter, ground the black needle/clip(-) to a metal surface. (Tip: Search "How to use a multimeter?" on YouTube if you don't already know how to test for DC 12V on your car.)

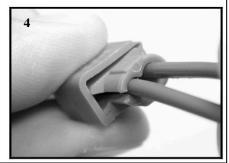
Using the picture shown in Step 9, locate the white wire with the yellow stripe, there are 2 of them side by side. Turn the ignition on, and turn on your parking lights. The parking light wire will show 12v when probed, while the other wire will show 0v. The white/yellow wire with 12v is your parking light power, tap both LH/RH parking light wires into this wire to activate your tow mirror clearance lights when the parking lights are on.

† On some models, the parking light wire may have different colors. In that case, you will need to probe other wires to find the correct parking light wire.









10. After the desired wires are found, trim the mirror's red wire to suitable length. Use the supplied wire tap and follow the 4 steps on the left to splice mirror's RED LED wire into the vehicle wire.

Secure loose wires throughout the cabin so they don't interfere with driving with zip ties. Secure loose wires in the door shell with zip ties, so they don't get caught when moving windows up and down. Replace any door accessories, door panels, plastic moldings, and trim pieces in reverse order to finish installation.