

INSTALLATION INSTRUCTIONS

**Models: 7110, 7110TK, 7120, 7120TK Dodge Ram 1500 '02 - Current
Ram 2500 & 3500 '03 - Current with stock power mirrors.
YOU MUST HAVE POWER MIRRORS . IF YOU DO NOT CURRENTLY
HAVE POWER MIRRORS, THE WRONG SET HAS BEEN ORDERED.**

Caution! - Do not attempt to manually extend or retract the mirrors. They should be moved under their own motor power only.

Tools required for the installation are: 10mm socket, trim panel remover, philips screwdriver, razor knife, and an inch pound torque wrench. Models 7110TK and 7120TK will also require a volt meter. If you have any questions after reading this installation manual, please call our service department at (800) 337-2557.

REMOVAL OF EXISTING MIRRORS

1. Have both windows in the down position. To remove the trim panel on both doors, first remove the panel around the door handle, using 10 mm socket remove the screw holding the door handle. Next remove the four screws that hold the door trim panels in place (See diagram B on page 5). Remove the door trim panel by lifting up and then out.
2. Unplug the electric cord that comes from the mirrors located at the rear of each mirror at the mirror mount area.
3. Support the stock mirror while removing the 3 mirror mount lug nuts using a 10 mm socket. Save the stock nuts for later in the install.
4. Remove the stock mirror (save the stock gasket as they will be re-used).

ASSEMBLY AND MOUNTING POWER VISION MIRRORS:

1. Attach the mirror door mount bracket ("mount") to the mirror using 3 of the #8 screws with yellow patch provided in the hardware bag. (Note: This is also where you can adjust the sweep of the mirror in relation to the door later on if necessary.)

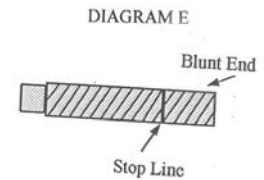


2. Plug the cord coming through the mount into the cord under the boot.

3. Place the open end of the boot around the lip on the mount to hold it in place.



4. Insert the studs provided (3 for each side) with the tapered end out (see diagram E). They should screw into the mount up to the stop line – approx. 1cm or 3/8 of an inch. Next line up the mount with the stock gasket and the outer trim gasket, apply the mount to the door, while supporting the mirror, and add the stock nuts. Tighten the stock nuts to 70 inch pounds. There must be adequate foam around the front and bottom edges to prevent the mount from making direct contact with the painted door (straighten out the outer gasket to keep it straight and in place). This gasket is necessary for sealing against moisture and wind noise and to keep from metal to metal contact. (Hint, taping the outer gasket to the edge of the mount will assist holding it in place.) After the mirror has been mounted simply cut the tape and peel it off of the mount.
5. Repeat this process for the passenger side.



WIRING:

TURN SIGNAL WIRING: *If you ordered a kit without the turn signal (TK) option, skip to the “mirror wiring” section below. We recommend removing the air bag fuse during installation.*

1. Run the two strand grey wire that is coming off the driver side mirror from inside the door, through the boot connecting to the cab, and into the cab to the driver side kick panel area. (Hint: if you have trouble running the wire into the cab, see step 3 of “mirror wiring”). Label the red wire “driver”.
2. Run the two strand grey wire that comes off the passenger mirror into the cab, across (underneath the dash) the cab and to the driver side kick panel area. Label the red wire “passenger”.

2002/2003 – 2005 trucks: (go to next page for 2006-up trucks)

3. Take the black wire from the driver side two-strand harness and the black wire from the passenger side and crimp them together in the ring terminal provided. They turn signal system can then be attached to the grounding bolt near the kick panel area.
4. Remove the floor board trim. Lift the carpet to reveal the parking brake grommet. Using an awl or other suitable tool, puncture two small holes through the rubber grommet. Route the two red turn signal wires along side the stock wiring down through the grommet holes. Seal holes with automotive sealant if desired.
5. Locate the wiring loom on the frame rail (approx. 12” from the rubber grommet). Open the loom to expose taped harness. Open a small section of the tape to reveal the trailer wires inside. Locate the turn/hazard wires. Locate the green w/red stripe wire (on 2005 trucks use the white w/dark green stripe wire). Turn the ignition on and activate the

driver side turn indicator. Probe the wire with a test light to verify that this is the active wire for your left turn signal. Using a scotchlock provided, connect the red wire you labeled “driver” to the active left turn wire.

6. Repeat this process for the passenger side using the brown w/red stripe wire (white w/yellow stripe for 2005 trucks).
7. Recover wiring bundles you have uncovered during this process.

2006-2008 trucks:

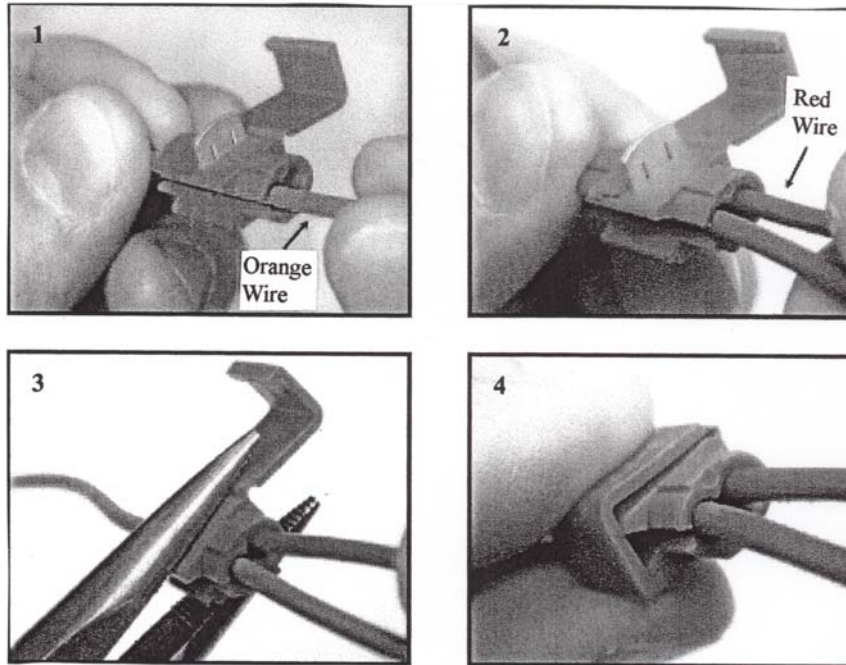
3. Remove the floor board trim. Lift the carpet to reveal the parking brake grommet. Using an awl or other suitable tool, puncture two small holes through the rubber grommet. Route the two turn signal wires (grey cables) along side the stock wiring down through the grommet holes. Seal holes with automotive sealant if desired.
4. Run the turn signal wires along the inner driver side fender to the main fuse block. Release the catches on the fuse block and tip it up to reveal the bottom side inside. Locate the turn/hazard wires. Locate the white w/light green stripe wire. Turn the ignition on and activate the driver side turn indicator. Probe the wire with a test light to verify that this is the active wire for your left turn signal. Using a scotchlok provided, connect the red wire you labeled “driver” to the active left turn wire.
5. Repeat this process for the passenger side using the white w/tan stripe wire. Close the fuse block.
6. Crimp the black turn signal wiring (from the grey cables) together in the ring terminal provided. These can be put to the ground bolt inside the fender by the main fuse block or any other sufficient ground point.

MIRROR WIRING *(BEFORE YOU START THE WIRING PROCESS, PLEASE DISCONNECT THE NEGATIVE CABLE FROM THE BATTERY)*

YOU MUST HAVE POWER MIRRORS TO USE THESE WIRING INSTRUCTIONS...IF YOU DO NOT CURRENTLY HAVE POWER MIRRORS, THE WRONG SET HAS BEEN ORDERED.

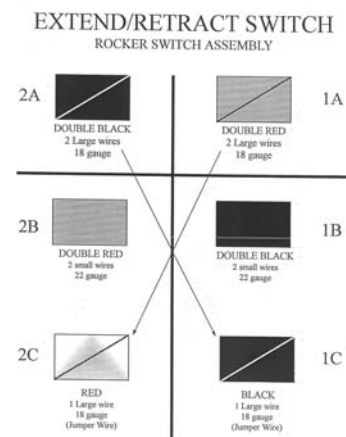
1. Using the measurements provided at the end of these instructions, cut a hole for the in/out rocker switch. We recommend placing the in/out switch on the driver's door trim panel (see diagram B on page 5). It is important to follow the measurements of diagram C on page 6. **If hole is cut too small it will cause the in/out switch to stick in a running position and burn the motors out.** The in/out switch will be snapped into place later in the installation.

- After the mirrors have been mounted, plug the Power Vision male connector into the stock female mirror connector on each door. For the power source (red wire on the Power Vision wiring harness), splice into the pink (or red) wire that comes off the back of the glass tilt switch using one of the scotchloks provided. Place the pink wire in the outer slot of the scotchlok (where the orange wire is in the picture) and the red wire in the right end of the inside slot, crimp and clamp as shown. Crimp the ring terminal provided onto the black wire and ground it using one of the studs on the mirror mount.



- Locate the rubber boot that runs from the door to the cab. Remove the cab end of the boot from the cab by pressing in on each corner of the plastic end with a small flat screwdriver. Unplug the two white connectors and release the two ends that are attached to the boot. This will give access to run a fish wire through the boot into the door. Attach the fish wire to the two-wire harness and pull it through the boot. (Hint: spraying silicone lubricant into the boot will make it easier to pull the harness through.) Run the harness through the hole above the kick panel and then reconnect the white wire connectors and reattach the rubber boot to the cab. Run the harness across the cab below the dash. Repeat process on passenger side and plug harness into two-wire connector on the mirror.

- Push the in/out switch into the hole in the driver's door trim panel that was cut earlier. (See diagram to re-attach the in/out terminals into their proper position).



- Reconnect the battery and test all of the mirror functions before replacing the trim panels.

ADJUSTMENTS AND MAINTENANCE

1. The mirror assemblies can be swept closer or further from vehicle door. This is accomplished by sliding the black rubber boot off of the mount (toward the mirror) to reveal the inner side of the mount. Three screws going into oval slots will be visible (see diagram). WHILE SUPPORTING THE MIRROR ASSEMBLY, loosen the three screws, you will feel the notches as you slowly move the mirror assembly. After adjusting the mirror to your satisfaction, carefully tighten the screws back down. The torque for the three screws is 25 inch pounds, DO NOT exceed this torque setting or damage to the knuckle may result. The rubber must then be put back in place. Repeat this process with passenger door.
2. For ease of break away, extend the mirrors approximately two inches prior to folding away. This gives the rubber boot room to fold up.
3. No lubricant should be applied to or sprayed on any of the integral parts of this mirror.

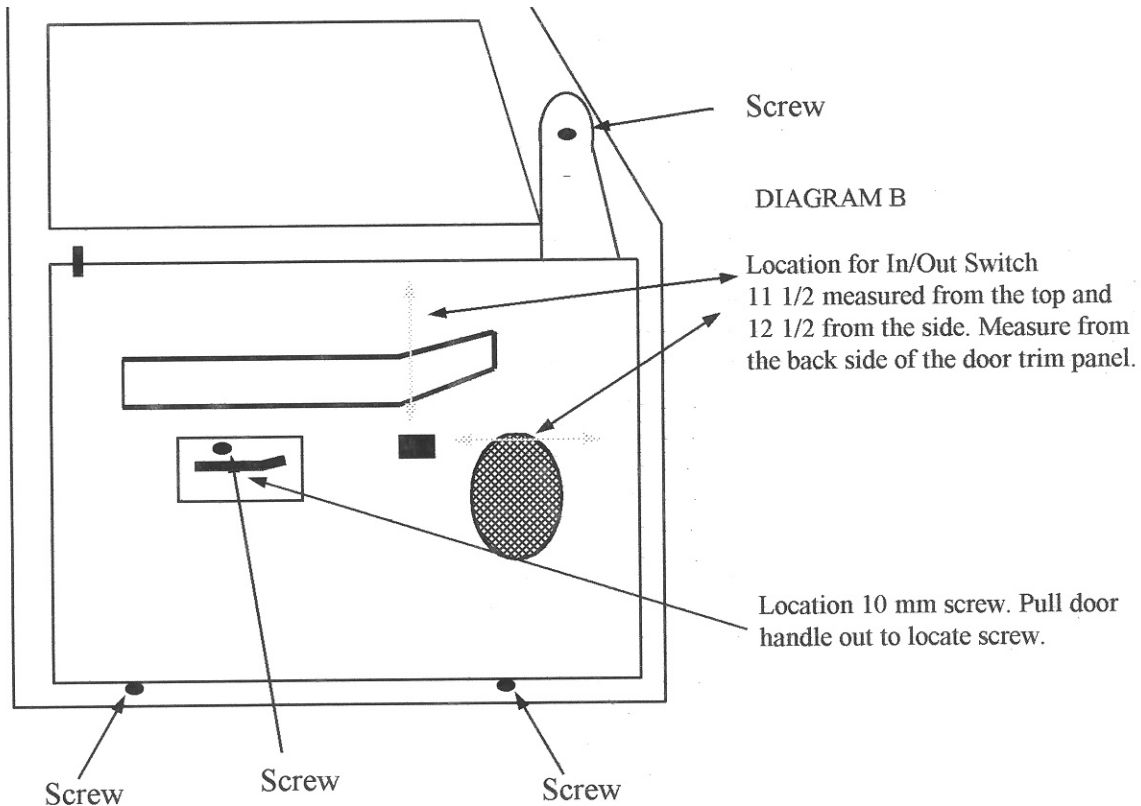
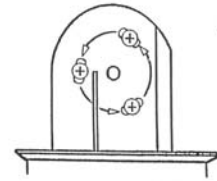
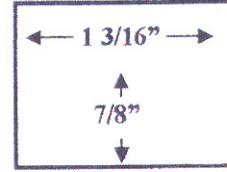


Diagram C:

CORRECT HOLE SIZE FOR IN/OUT SWITCH

Note: You must cut the hole to a maximum size of 1 3/16" x 7/8". There must be at least 1 1/2" depth for the switch.



Caution! Cutting the hole too small and forcing the switch into the undersized hole could cause the in/out switch to stick in an operational mode. This will cause the extension motors to have continuous power applied after they have reached their stop position either in or out. The result of this condition is motor failure due to overheating.

An improper installation of the in/out switch that results in motor failure or damage will void the product's warranty.