

## INSTALLATION INSTRUCTIONS

**Models: 7105 & 7105TK Dodge Ram 1500 ('02 – Current)**

**Ram 2500 & 3500 '03 - Current with stock manual mirrors.**

**IF YOU DO NOT CURRENTLY HAVE MANUAL 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.

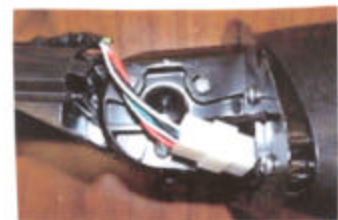
Tools required for the installation are: 10mm socket, trim panel remover, philips screwdriver, razor knife, and an inch pound torque wrench. Model 7105TK will also require a volt meter. If you have any questions after reading this installation manual, please call our service department at (800) 337-2557.

### 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 A 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 gaskets 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.)

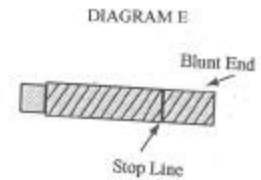


2. Plug the cord coming through the mount into the cord under the boot.

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

**YOU MUST HAVE STOCK MANUAL MIRRORS TO FOLLOW THE BELOW WIRING INSTRUCTION...IF YOU DO NOT HAVE MANUAL MIRRORS THE WRONG SET HAS BEEN ORDERED. THE INSTRUCTION TO INSTALL THE GLASS TILT SWITCH ARE ENCLOSED WITH THE SWITCH ITSELF.**

**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.***

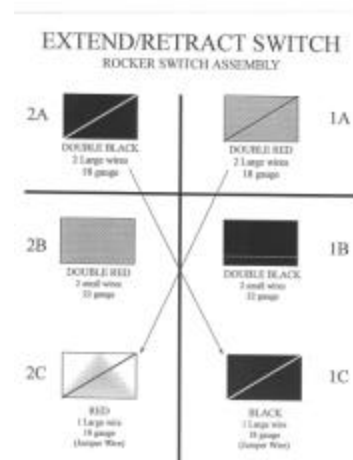
1. Run the two strand grey wire that is coming off the driver side mirror from inside the door, through the boot connecting to the cab, and into the cab to the driver side kick panel area. (Hint: if you have trouble running the wire into the cab, see step 3 of “mirror wiring”). Label the red wire “driver”.
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”.
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. The 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 (approximately 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 scotchlok 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 with red stripe wire (white w/ yellow stripe wire for the 2005 trucks).
7. Recover the wiring bundles you have uncovered for this process.

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

1. Using the measurements provided at the end of these instructions, cut a hole for the in/out switch. **(DO NOT POSITION THE IN/OUT SWITCH DIRECTLY BELOW THE LOCATION FOR THE STOCK TILT SWITCH, AS THERE IS NOT ENOUGH ROOM INSIDE THE DOOR TRIM PANEL)** We recommend placing the in/out switch on the driver's door trim panel (see diagram B, page 5). It is important to follow the measurements of diagram on page 5. If hole is cut to 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.
2. In the kick panel area, you will see an opening that leads from the vehicle in the rubber boot connecting the door to the vehicle, and into the inside of the door. Run a fish wire from the inside of the door, through the boot (it will necessary to pop off both ends of the boot), and out the opening inside the vehicle. When complete the ends of the boot can be put back into their original positions.
3. The main wiring harness has red and black wires attached. Remove the rubber band to uncoil the harness. Tape the ends of the red and black wires to the main harness so that they will stay together as they are pulled from the inside of the door into the vehicle. One end of the main harness has a 12 pin (large, white) connector and a 6 pin (small, white) connector...the only other end has only a 6 pin connector. The end that has only a 6 pin connector must be fed from the inside of the driver's door, through the boot, and into the inside of the vehicle. To fish the main harness through the boots between the door and cab, it will be necessary to unplug the door boots first. On the cab side of the boot there will be 2 white connector boxes, unplug these connectors to fish the main harness through. Once in the cab, the main harness is then run across the cab (under the dash) and into the passenger side door using a fish wire. You may choose to tie strap the main wiring harness to hardware under the dash for support after the mirror is wired on the passenger side.

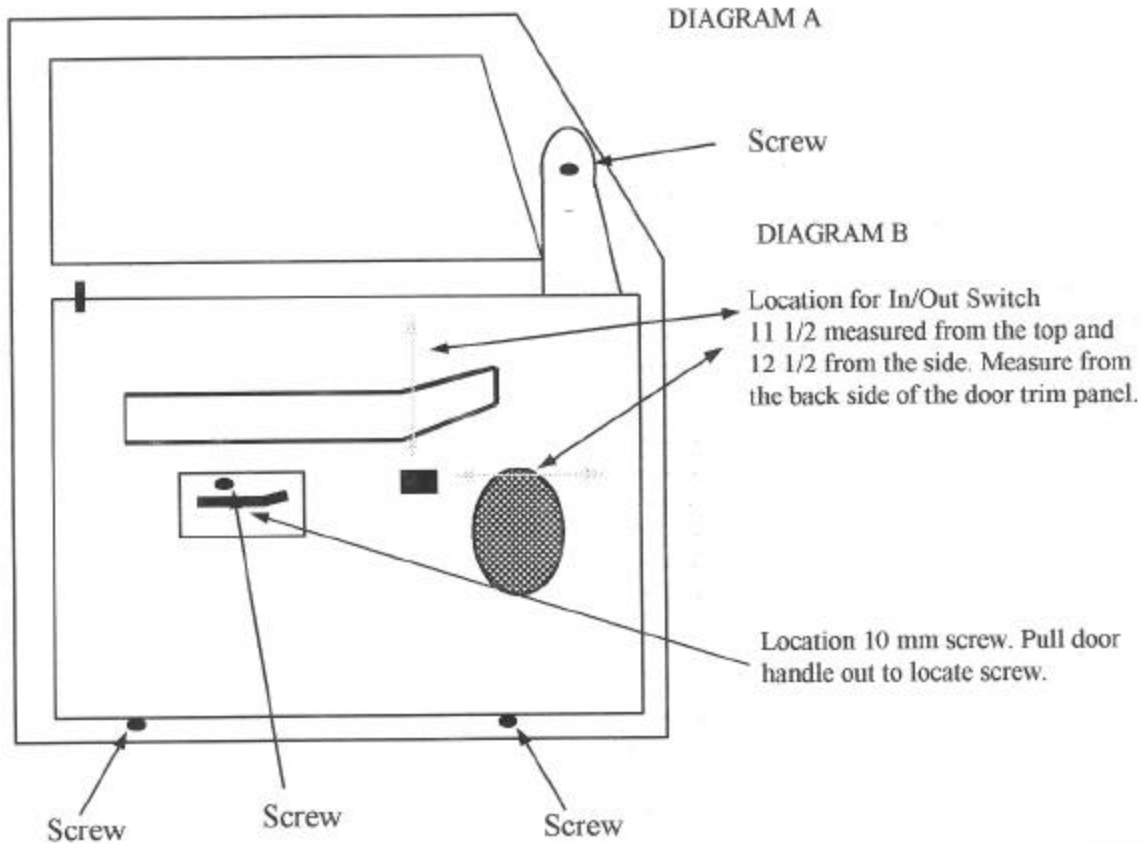
4. Snap the 6 pin (small, white) connector from the main wiring harness into the 6 in connector that comes from the Power Vision mirror in the door. Repeat this process on the passenger's door.
5. Push the in/out switch into the hole in the driver's door trim panel that was cut earlier. (See diagram to re-attach the in/out terminals into their proper position).
6. The red wire attached to the main harness is to be run to an accessory terminal (which is powered only when the ignition is on) or a 12 volt power supply. The black wire must be well grounded. Note that there is an in-line fuse holder in the wire, under no circumstances should this be by-passed on the system. The fuse in the holder is a 3 amp fuse which is in place to protect the electrical system of the vehicle and Power Vision mirrors.
7. Before putting the drivers and passenger trim panels back into place, it is recommended that the mirrors be run in and out and the 4 way tilt of the mirrors checked with the vehicle running to ensure that all the connections were made and the in/out switch was installed right side up).



### ADJUSTMENTS AND MAINTENANCE

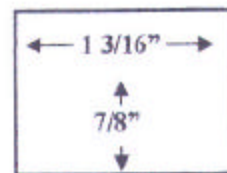
1. Mirror assembly can be swept closer or further from the vehicle door. This is accomplished by sliding the black rubber boot off of the mount to reveal the inner side of the mount. Three screws going into oval slots will be visible (see diagram). **WHILE SUPPORTING THE MIRROR ASSEMBLY**, loosen the three screws, you will feel notches as you slowly move the mirror assembly (in most cases move the mirror assembly on the passenger side all the way in towards the door). After adjusting the mirror to your satisfaction carefully tighten the screws back down. The torque for the three screws is 25 inch pounds. The rubber boot can then be replaced.
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.





### 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.