

## INSTALLATION INSTRUCTIONS

**Model: 7010, 7010TK, 7020, 7020TK DODGE RAM 1500 94-01, Dodge Ram 2500 & 3500 94-02 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, a 10mm open end wrench, trim panel remover, philips screwdriver, razor knife, and an inch pound torque wrench. Models 7010TK and 7020TK will require a volt meter. Extra door trim panel clips may be necessary. If you have any questions after reading this installation manual, please call our service department at (800) 337-2557.

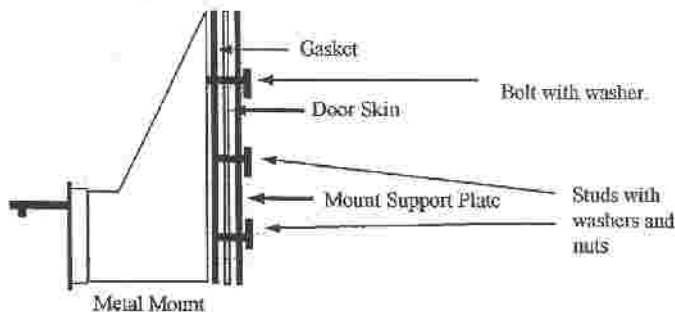
### REMOVAL OF EXISTING MIRRORS

1. Have both windows in the down position. Remove the trim panel on both doors.
2. Unplug the electric cord that comes from the mirrors located on each door.
3. Remove the foam insulation covering the stock mirror mounting nuts.
4. Support the stock mirror while removing the 3 mirror mount lug nuts.
5. Remove the stock mirror.

### MOUNTING POWER VISION MIRRORS:

1. To assemble the passenger mount assembly, first insert the 3 studs provided into the three tapt bosses on the back of the mount. Line up the gasket and slip it onto the studs. There must be adequate foam around the front and bottom edges to prevent the mount from making direct contact with the painted door. This foam is necessary for sealing against moisture and wind noise. Apply the mount on the door. After the studs are through the holes in the door, slip the metal support bracket onto the studs and install the washers and nuts on the studs tightening down to 70 torque inches.

To assemble the driver side mount assembly, follow the same steps except there will not be a stud for the top tapt boss on the back of the mount. After the mount is on the door, the provided 55mm bolt with washer are screwed into the top boss from inside the door (goes from inside of door, through support bracket, into the mount).



**WIRING:**

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

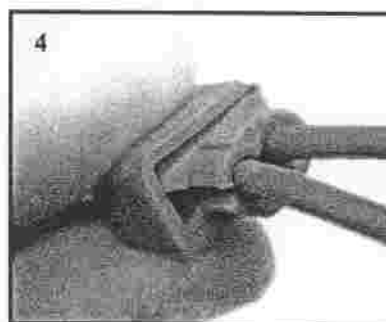
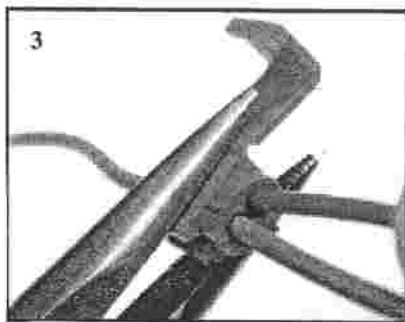
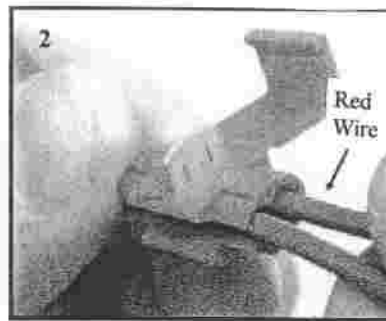
**TURN SIGNAL WIRING:** *If you ordered a kit without the turn signal (TK) option, skip to the “mirror wiring section below. We recommend removing the air bag fuse during installation.*

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 under the dash by the steering column. (Hint: if you have trouble running the wire into the cab, see step 3 of “mirror wiring” on page 3).
2. Locate the connector that holds the main wire looms next to the steering column and is next to the firewall. The wires are located on the lower right of the connector. Turn on your left (driver’s side) blinker. Probe the wires to identify which wire is the active left blinker wire (recommend trying the light green wire).
3. Using one of the scotchloks provided, connect the red wire inside the two-strand harness that you brought in from the driver’s side mirror to the active blinker wire identified in step 2. If you have questions on how to use the scotchlok, see the pictures on page 3. (Note-the orange wire labeled in the picture is used for illustration purposes only and does not mean that orange will be your active color for turn signals).
4. Repeat steps 1 through 3 for the passenger side identifying the right side active turn signal wire (recommend trying the light brown wire) and tapping the passenger mirror into it using a scotchlok. Small tie straps have been provided for your use in keeping the grey two-strand wire held neatly under the dash.
5. Take the black wire from inside the driver side two-strand harness that you have run into the cab and the black wire from the passenger side and crimp them together in the ring terminal provided. The turn signal system can then be grounded under the dash.
6. Test the turn signal system by turning on your turn signals and checking to see that the turn signal indicators in the mirror glass light up. If they do not, re-check to see that you have scotchlocked into the correct wires.

**MIRROR WIRING:** Disconnect the negative cable from the vehicle battery prior to starting the mirror wiring process.

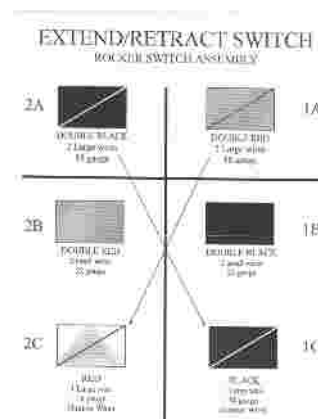
1. Using the measurements provided at the end of these instructions, cut a hole for the in/out switch. **(DO NOT POSITION THE IN/OUT SWITCH DIRECTLY BELOW THE STOCK TILT SWITCH, AS THERE IS NOT ENOUGH ROOM WITH THE SUPPORT BACKING PLATE)** We recommend placing the in/out switch on the driver's door trim panel (see diagram B on page 4). It is important to follow the measurements of diagram A on page 5. **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 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 to make the harness easier to pull 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 under the dash. Repeat process on passenger side to get the end of the harness into the passenger door and plug harness into two-wire connector on the mirror.

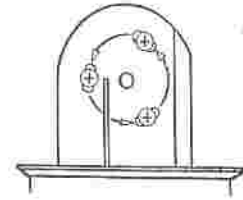
- Push the in/out switch into the hole in the driver's door trim panel that was cut earlier. See diagram to re-attach the in/out terminals into their proper position.



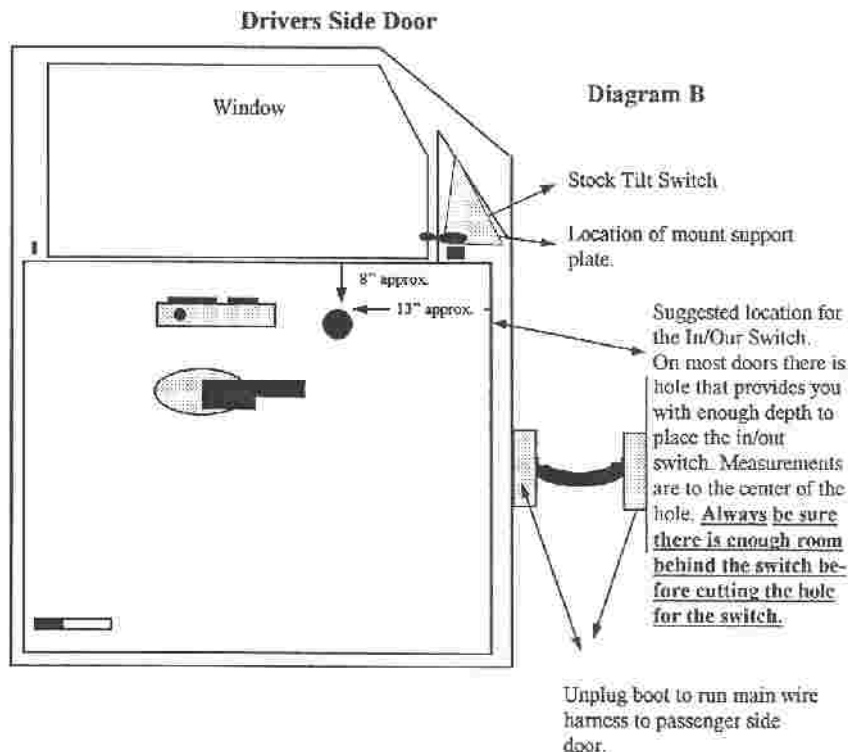
- Reconnect the battery and test all of the mirror functions before replacing the trim panels.

## 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.

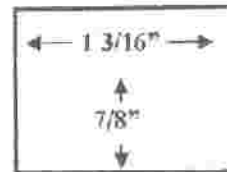


2. When installation is complete, we recommend running the mirrors in and out several times to ensure proper function. **DO NOT MANUALLY EXTEND OR RETRACT THE MIRRORS ... THEY MUST RUN UNDER THEIR OWN MOTOR POWER ONLY!!** For ease of break away, extend mirrors approximately two inches prior to breaking away. 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.