

INSTALLATION INSTRUCTIONS FOR MODELS IVP100 AND IVP200

SAFETY MESSAGE TO INSTALLERS AND USERS

People's lives depend on your safe installation of our products. It is important to read, understand and follow all instructions shipped with the products. In addition, listed below are some other important safety instructions and precautions you should follow:

- To properly install this light: you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- In order for the light to function properly, a separate ground connection must be made. If practical, it should be connected to the negative battery terminal. At a minimum, it may be attached to a solid metal body or chassis part that will provide an effective ground path as long as the light system is to be used.
- Locate light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.
- Do not attempt to activate or deactivate light control while driving in a hazardous situation.
- You should frequently inspect the light to ensure that it is operating properly and that it is securely attached to the vehicle.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you or others.

I. UNPACKING.

After unpacking the unit, inspect it for damage that may have occurred in transit. If the unit has been damaged, file a claim immediately with the

carrier, stating the extent of damage. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts listed in the KIT CONTENTS LIST are contained in the package.

II. KIT CONTENTS LIST.

Qty.	Description	Part Number
4	Screw, #8 x 5/8"	7011A152-10
3	Nut, Elastic Stop	7058A010
6	Pad, Mounting	8422A033
1	Grommet	8108A014
1	Template	8572293
1	Bracket, Adapter	8572312

III. INSTALLATION.

Before proceeding with mounting, determine the mounting location. If the intended mounting location will allow the pod to hang over the edge of the mounting surface, perform the steps in paragraph III.A. Edge Mounting. If the intended mounting location will not allow the pod to hang over the edge of the mounting surface, perform the steps in paragraph III.B. Flat Surface Mounting.

A. Edge Mounting (see figure 1).

1. Place the unit in the desired mounting location. Be aware that the pod will hang over the edge of the mounting surface and should have no obstructions to prevent it from sitting flat.
2. Note the intended mounting position, and replace the unit with the included drilling template.

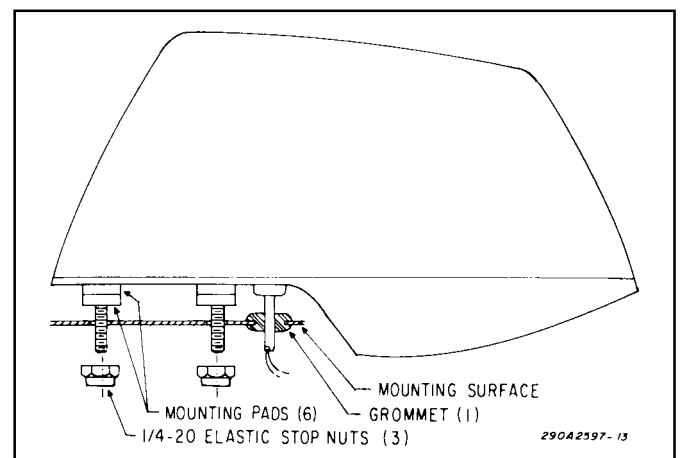


Figure 1.

Tape the template in place, positioning it as indicated on the template. Scribe four drill position marks on the mounting surface.

CAUTION

To avoid damage when drilling, ensure that both sides of mounting surface are clear of any parts or wires.

Also, when drilling any holes, ensure that holes are drilled only through sheet metal and not through upholstery (if applicable).

3. Drill one 3/8" hole (wire routing hole) at the previously scribed drill position mark that is closest to the edge of the mounting surface. Drill three 9/32" holes at the remaining drill position marks on the mounting surface.

4. Install the grommet in the 3/8" hole (wire routing hole).

5. Install two mounting pads over each of the three mounting studs as shown in figure 1.

6. Position the light over the mounting holes and route the cable through the grommet. To prevent water leakage if applicable, apply a silicone sealing compound around the cable and grommet where they pass through the mounting surface.

7. Secure the unit to the mounting surface with the three 1/4-20 elastic stop nuts. Pull down on the cable after the light is secured in position to ensure proper cable dressing inside the light.

8. Proceed to paragraph IV. WIRING.

B. Flat Surface Mounting (see figure 2).

1. Position the adapter bracket under the light assembly. Ensure that the bracket's orientation

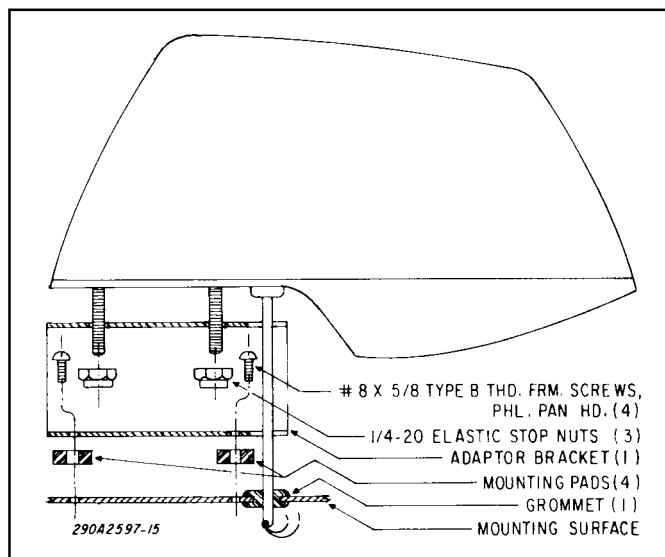


Figure 2.

will allow routing the light assembly's wire without interference.

2. Hold the bracket and light assembly together and place the unit on the mounting surface at the intended mounting location. Mark around the bracket's outer edge on the mounting surface.

3. Remove the unit from the mounting surface. Place the adapter bracket on the mounting surface aligned with the mark made in step 2 above. Scribe the four mounting hole positions on the mounting surface.

4. Scribe a drill position mark directly under the U-shaped slot for the wire routing hole.

CAUTION

To avoid damage when drilling, ensure that both sides of mounting surface are clear of any parts or wires.

Also, when drilling any holes, ensure that holes are drilled only through sheet metal and not through upholstery (if applicable).

5. Drill a 3/8" hole at the drill position mark (wire routing hole) located in step 4 above. Drill four 0.147" (No. 26 drill bit) at the four mounting hole position marks.

6. Install the grommet in the 3/8" hole.

7. Secure the adapter bracket to the mounting surface with the four #8 screws and four pads as shown in figure 2.

8. Position the light over the adapter bracket and route the cable through the grommet. To prevent water leakage if applicable, apply a silicone sealing compound around the cable and grommet where they pass through the mounting surface.

9. Secure the unit to the mounting surface with the three 1/4-20 elastic stop nuts. Pull down on the cable after the light is secured in position to ensure proper cable dressing inside the light.

10. Proceed to paragraph IV. WIRING.

IV. WIRING.

The light is completely wired at the factory and does not require any additional internal wiring. All the conductors necessary for control of all functions are contained in the cable.

The basic light functions of the unit must be controlled by a user-supplied control head.

Before proceeding, ensure that the light assembly has been installed on the vehicle roof in accordance with the instructions.

WARNING

Light system controls must be located so that VEHICLE and CONTROLS can be operated safely under all driving conditions.

A. Route the user-supplied control cable into the vehicle near the eventual location of the user-supplied control head.

WARNING

To prevent personal injury and/or damage to vehicle components, in the event of a short circuit in the power cable, install a fuse in each incoming cable conductor.

B. For proper light operation, the light assembly control cables must be properly terminated inside the user-supplied control head. Using figure 3 as a guide, make the appropriate electrical connections. Ensure that the lines are adequately fused as shown in figure 3.

CAUTION

If control lines are combined for activation, calculate the total current requirement using the values shown in the appropriate diagram in figure 3.

After determining the control line switching configuration, it is the installer's responsibility to use suitable fuses, wire, and switches/relays for the installation.

C. Connect the black lead to chassis ground.

D. Connect the other side of the fused wires to the +12VDC supply.

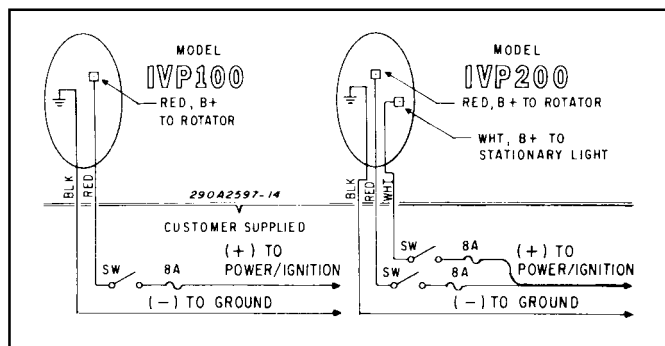


Figure 3.

NOTE

Any of the light assembly functions can be activated by applying 12VDC to the appropriate control line. The heavy black lead (-) must be connected to vehicle ground, to perform a function check.

V. BASIC MAINTENANCE.

A. *Cleaning the Plastic Domes.*

Ordinary cleaning of the plastic domes can be accomplished by using mild soap and a soft rag. Should fine scratches or a haze appear on the domes, they can ordinarily be removed with a non-abrasive, high quality, one-step automotive paste cleaner/wax and a soft cloth.

WARNING

The use of other materials such as strong detergents, solvents, petroleum products, etc. can cause crazing (cracking) of the plastic domes. If crazing of domes does occur, reliability of light for emergency purposes may be reduced until domes are replaced.

B. *Lamp Replacement.*

WARNING

A serious injury may result if lamp is touched when hot. Always allow lamp to cool before removing.

CAUTION

Service life of lamp will be shortened if glass portion is touched. If glass has been handled, clean carefully with a grease solvent.

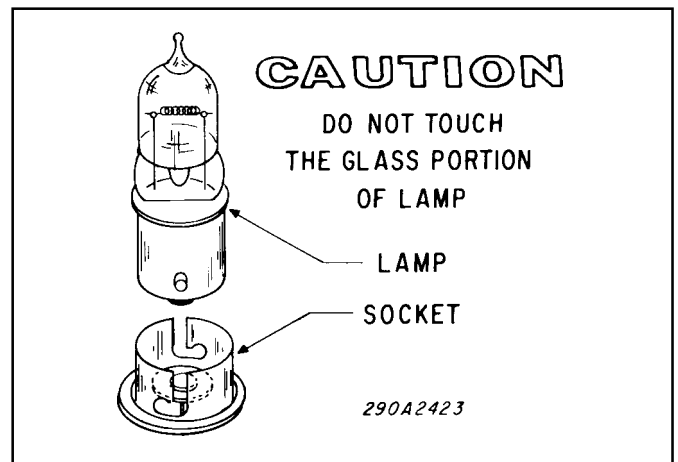


Figure 4.

1. Stationary Lamps.

See figure 4. To replace the lamp, Twist to unlock and then pull the defective lamp out of the socket. Install a new lamp of the same type in the socket.

2. Rotating or Oscillating Lamps.

CAUTION

Forced rotation of the light mechanism will cause damage to the worm gear. ALWAYS rotate the light mechanism by rotating the motor shaft.

a. Rotate the reflector until the C-clip (located at the base of the lamp) can be removed, and remove the C-clip by sliding it away from the reflector.

b. See figure 5. Note the lamp's orientation and replace the lamp (Federal Part No.

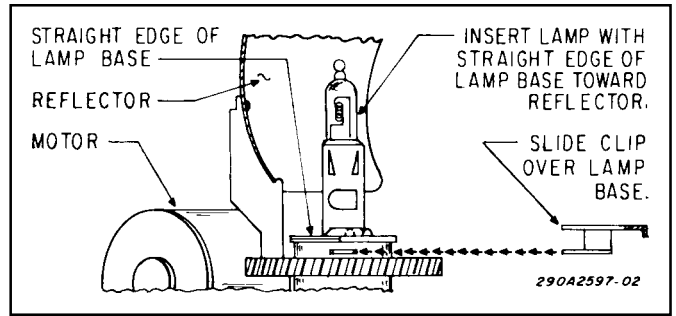


Figure 5.

8440A265) with the straight edge of the lamp's base toward the reflector.

c. Reassemble the light.

C. *Cleaning Reflectors and Mirrors.*

Use a soft tissue to clean the reflector and mirrors. Avoid heavy pressure and the use of caustic or petroleum base solvents which will scratch or dull the surface.