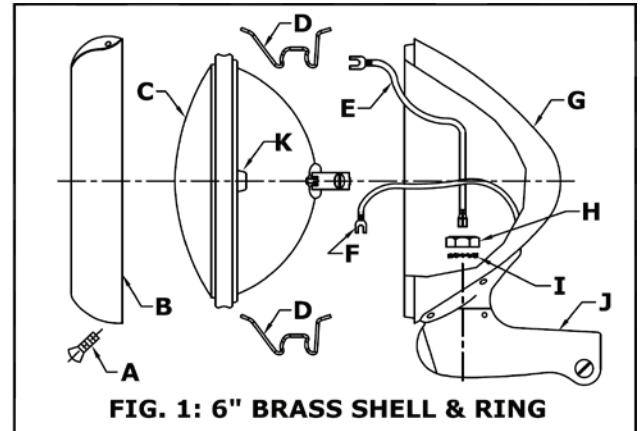
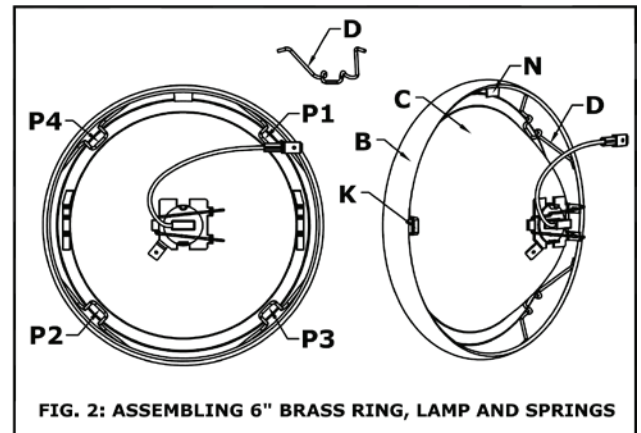
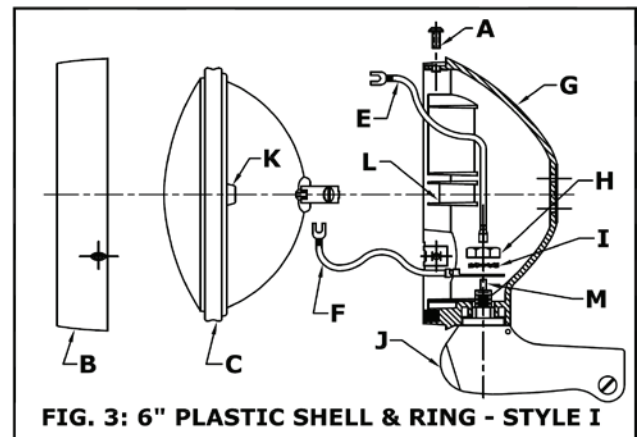


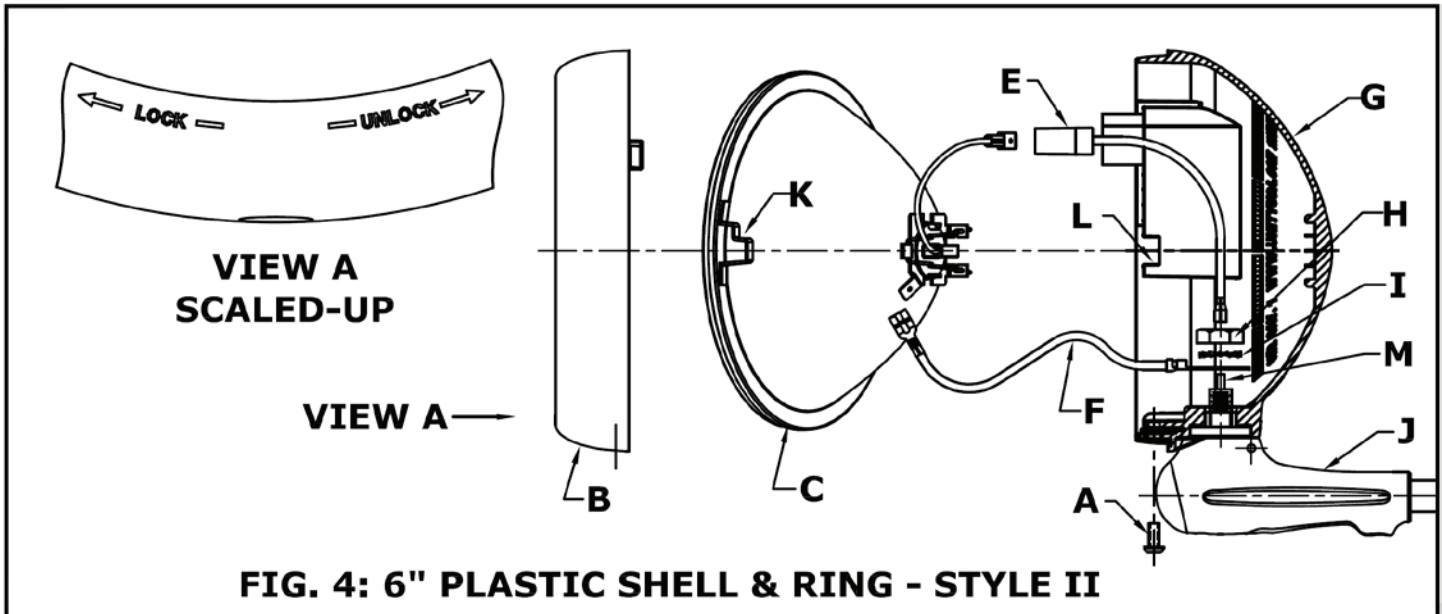
## 1. Scope

This instruction sheet presents the procedure for lamp replacement. Protect your eyes by wearing safety glasses approved by American National Standards Institute.

## 2. Brass Shell & Ring

- 1) Disconnect power source.
- 2) Remove ring and lamp assembly. Loosen screw **A** (Fig. 1), and disconnect wires **E** and **F** from lamp **C**. The wires for glass sealed-beam lamps are shown in Fig. 1, and wire **F** is riveted to shell **G**. Wires for composite lamps is shown in Fig. 4, and wire **F** is attached to shell **G** through nut **H** and washer **I**.
- 3) Remove lamp **C** from ring **B**. To release four springs **D**, hold ring and lamp assembly in place with your thumb over the spring to be released, and use a pair of long-nose pliers to firmly grab and hold one spring end to disengage it from the lip of ring **B** (Warning: spring becomes air-borne if not held firmly).
- 4) Place and orient new lamp **C** into ring **B** (composite lamp shown in Fig. 2) with ring tab **N** at 12 o'clock position, lamp locator **K** at 9 o'clock position.
- 5) Install the four new springs **D** at positions **P1**, **P2**, **P3**, and **P4** sequentially as shown. Holding ring and lamp in place with your thumb over the spring to be installed, slide one end of the spring underneath the ring lip, and use a pair of long-nose pliers to firmly grab and hold the other spring end to force it to engage with the ring lip (Warning: spring becomes air-borne if not held firmly). Spring **D** for glass sealed-beam lamps is shown in Fig. 1 and Spring **D** for composite lamps is shown in Fig. 2. Make sure correct springs are used.
- 6) If you are replacing glass sealed-beam lamps with composite lamps, you need to loosen and remove nut **H** and lock washer **I** to install wire **F** (Fig. 4), and then tighten nut **H** (a torque of  $90 \pm 5$  inch-pounds is recommended).
- 7) Connect wires **E** and **F** to lamp **C**.
- 8) Install ring **B** back to shell **G**, and tighten screw **A**.





### 3. Plastic Shell & Ring

- 1) Disconnect power source.
- 2) Remove ring **B**. For Style I (Fig. 3), loosen three screws **A**. For Style II (Fig. 4), loosen one screw **A** and rotate ring **B** counterclockwise to disengage it from shell **G**.
- 3) Disconnect wires **E** and **F** from old lamp **C**, and connect them to new lamp **C**. The wires for glass sealed-beam lamps are shown in Fig. 3, and wires for composite lamps are shown in Fig. 4.
- 4) Seat new lamp **C** into shell **G** and orient lamp **C** properly by aligning lamp locator **K** with shell locator **L**.  
*(Warning: Do not use lamp exceeding 100 watts in plastic shell & ring.)*
- 5) Orientate ring **B** and place it on shell **G**. For Style I (Fig. 3), push ring toward shell and install 3 screws. For Style II (Fig. 4), rotate ring clockwise to engage with shell while pushing lamp and ring toward shell. Secure ring **B** with one screw **A**.
- 6) Please note that the gaskets for sealed-beam lamps are different from the ones for composite lamps. For sealed-beam lamps, the three gaskets **R** (one shown in Fig. 5) are curved & are as long as the gasket pockets in the shell. For composite lamps, the three gaskets **Q** are square (Fig. 5). Make sure that they are installed as shown for shells/rings-Style II. Otherwise, they may not seat square inside shell after ring is rotated clockwise to engaged with shell.

