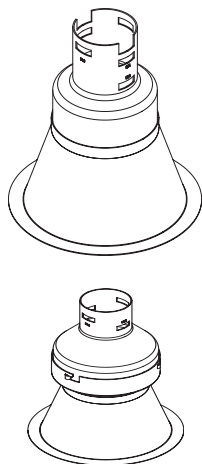


INSTALLATION INSTRUCTIONS

"APR" Reflector

Upon receipt, thoroughly inspect for any freight damage which should be brought to the attention of the delivery carrier. Compare the catalog description listed on the packing slip with the label on the carton to ensure you have received the correct merchandise.



IMPORTANT SAFETY INFORMATION

For Your Protection, Read Carefully

WARNING - Risk of fire. Do not install insulation within 3 inches of fixture sides or wiring compartment, nor above the fixture in such a manner as to entrap heat.

1. Electric current can cause painful shock or serious injury unless handled properly. For your safety, always remember the following:

- Turn off the power supply.
- Ground the fixture to avoid potential electrical shocks.
- Do not handle an energized fixture or energize any fixture with wet hands, when standing on a wet or damp surface, or in water.
- Double check all electrical connections to be sure they are tight and correct.

2. Specific safety information concerning lamps:

- Match wattage of fixture and lamp exactly.
- Do not remove or insert lamp when power is on.
- Do not scratch glass or subject lamp to undue pressure as either may cause lamp breakage.
- Protect operating lamp from sources of moisture.

Figure 1

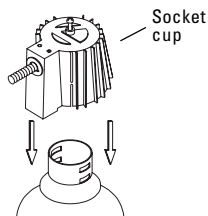


Figure 2

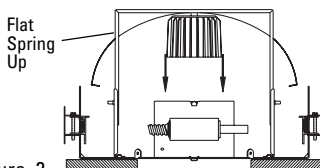


Figure 3

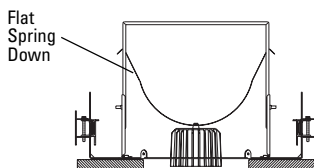


Figure 4

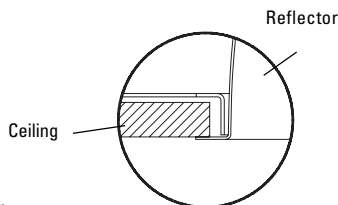
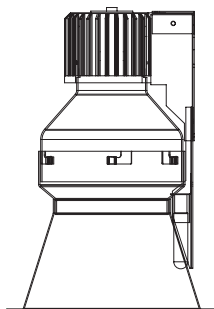


Figure 5



New Installation for APR Reflector

1. The GRS mounting frame utilizes an adjustable, flatspring, yoke assembly to retain the reflector into the ceiling as shown in Figure 2. The yoke assembly must be properly installed onto the mounting frame. Refer to the INSTALLATION INSTRUCTIONS included in the mounting frame for proper yoke installation.
2. The yoke assembly is preset at the factory for a ceiling thickness up to 1-5/8". For other ceiling thickness, adjust the yoke assembly by loosening the screws on the yoke and moving the yoke downward equal to the difference of the ceiling thickness minus 1-5/8" (ex. 3" ceiling thickness minus 1-5/8" = 1-3/8"). Refer to scale on the yoke assembly for ease of adjustment.
3. The socket cup is factory installed to the flat spring. Pull socket cup down into the ceiling opening until the flat spring is fully extended as shown in Figures 2 and 3.
4. Attach socket cup to top of reflector by aligning and engaging spring in socket cup with slots in top of reflector as shown in Figure 1. Lamp type markings are located near the slots in top of reflector for proper positioning of socket cup for optimum light distribution. **If QRS is included**, install socket cup and neck so that lamp bracket aligns with reflector slot as shown in Figure 5.
5. Install appropriate lamp as determined by position of the socket cup/lamp type marking on the reflector. For APR4 PAR30 and APR6 PAR38, remove reflector trim from trim neck by twisting reflector clockwise. Install lamp. Reverse procedure for re-assembly of reflector. Because reflector must be removed for re-lamping, a re-lamping pole cannot be used. **WARNING: Do not exceed the wattage restrictions.** If socket cup adjustment is required: reach inside of reflector, compress springs in socket cup and move to appropriate reflector slot.
6. Push reflector through the ceiling opening until the flat spring pulls it up to the ceiling as shown in Figure 4.
7. If reflector does not rest tightly against the ceiling, remove the reflector (See step 8), adjust the yoke assembly upward and re-attach reflector.
8. To remove the reflector: pull reflector downward until the flat spring is fully extended, remove lamp, reach inside of reflector, compress springs in socket cup and remove socket cup from reflector.

APR, Reflector Installation Instructions

TROUBLE SHOOTING CHART

Check for any visible damage to the lamp or frame-in module. If they seem in good condition, locate the problem in the following list for possible causes and corrective actions.

Symptom	Possible Cause	Corrective Action
Lamp will not start or starts slowly	<ul style="list-style-type: none"> •Incorrect or loose wiring •Lamp at or near end of life •Line or ballast output •Faulty ballast •Starter circuit failed •Ambient temperature too low 	<ul style="list-style-type: none"> •Incorrect lamp or ballast •Lamp is loose in socket •Power off, check for proper connections. Connect fixture lead marked for proper voltage to voltage supply lead. Connect white or lead marked COM to neutral supply. •Replace with new lamp. HPS lamp will cycle on and off as lamp reaches end of life. MH lamp will suffer severe color change as lamp nears end of life. •Check line voltage at fixture. Check open circuit voltage. •Check circuit continuity. •Replace lamp with known good lamp. •Check ballast rating against existing environmental conditions.
Cycling (lamp turns on and off)	<ul style="list-style-type: none"> •Ballast output voltage low •Incorrect lamp operating position (Metal Halide) •Line voltage variations 	<ul style="list-style-type: none"> •Lamp at end of life •Incorrect lamp or ballast •Check line voltage at the fixture. Check open circuit voltage. •Check lamp specifications for proper operating position. •Check incoming voltage with recording voltmeter (if this is the problem, check other equipment on same circuit).
Low Lamp Output	<ul style="list-style-type: none"> •Line voltage or ballast output voltage •Incorrect lamp or ballast 	<ul style="list-style-type: none"> •Lamp end of life •Check line voltage at fixture. Check open circuit voltage. •Compare fixture and lamp label for matching wattage and source. Compare fixture and system voltage rating.
Short Lamp Life	<ul style="list-style-type: none"> •Line voltage or ballast output voltage too low •Lamp operates less than 10 hrs. 	<ul style="list-style-type: none"> •Incorrect lamp or ballast •Check line voltage at the fixture. Check open circuit voltage •Rated lamp life is based on 10 hours of operation per start. General rule for expected lamp life is 50% reduction in burn time per start results in 25% reduction in lamp life.