

! CAUTION

- All wiring should be done by a licensed electrician in accordance with state codes, local codes and National Electric Code (NEC) standards.
- Improper installation may result in serious injury and void warranty.
- When fixture is installed in a Class I, Division 2 Hazardous Location, strict compliance to the fixture warning label instructions must be met.
- Wiring connections must be made with metal conduit or flexible cord in compliance with Class I, Division 2 wiring methods defined in the National Electric Code.
- Operate lamps ONLY with proper ballast.
- In event of lamp failure, replace lamp or disconnect primary power to the ballast within two weeks at the very most. This will prevent damage to electrical components from dielectric stresses, which may result from the high voltage starting pulses unique to High Pressure Sodium and Pulse Start Metal Halide circuits.
- Use protective gloves and eye equipment when replacing lamps.
- If outerlamp glass is broken, turn off lamp and replace it promptly to avoid exposure to ultraviolet energy. Even with the outer lamp glass broken, the arc tube may continue to fire.
- The arc tubes contain mercury and/or sodium. Use appropriate care in disposal of failed or broken lamps.

Wiring

Maximum Operating Temperatures

C°	F°	Lamp	Type
325	617	400 watt type	S51 High Pressure Sodium, coated
350	662	400 watt type	M59 Metal Halide, clear/coated
450	842	400 watt type	S51 High Pressure Sodium, clear

Caution: use only with suitable certified ballast

MRSE 400 Series fixtures are furnished with a splice box supplied with a ½ inch NPT tapped hole for connecting the fixture to a suitable ballast. When installing cord grip, a minimum of four (4) turns is required. Thread sealing tape or paste is also required. The green conductor is grounded to the fixture and must be connected to physical earth. The other conductors are connected to the lamp holder and must be connected to the ballast according to the ballast wiring diagram.

Do not connect green (ground) wire to the power source.

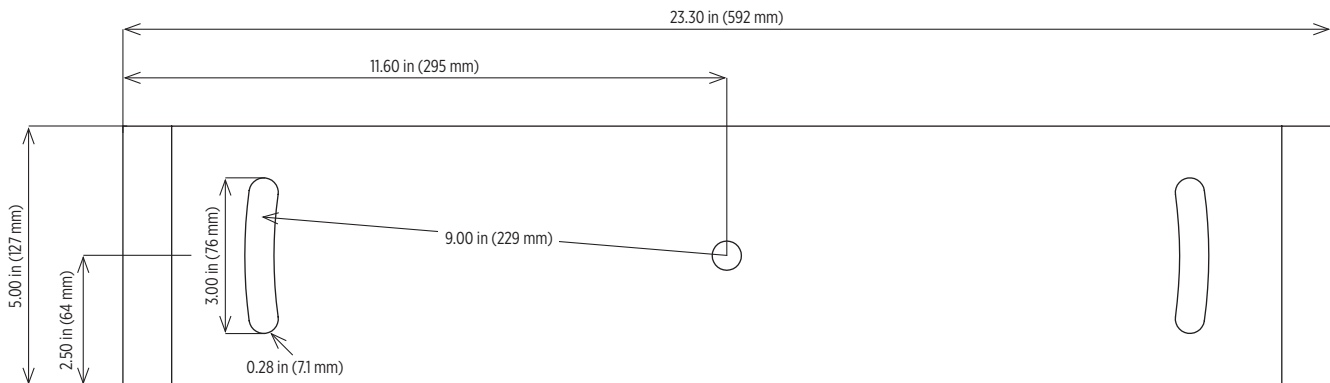


Mounting

Fasten fixture with three (3) or more ½ inch bolts through hole and slots in harp assembly using mounting dimensions shown in Figure 1. Do not mount on unsupported cab or house roof. Attach near corner supports or use adequate sub-base. Avoid boom mounting on lightweight cross members which will vibrate or flex excessively. In addition to normal mounting (base down), fixture may be attached in a pendant or cantilever manner.

Special HPS note: As a general rule, the maximum recommended distances for remote mounting High Pressure Sodium ballasts is 50 feet for voltage stabilized types and 5 feet for lag types. Refer to the specific ballast manufacturer's recommendation when installing ballasts.

Figure 1: Mounting Dimensions for MRSE 400 Harp



Lamping

These fixtures are designed for 400W BT-37 Pulse Start Metal Halide and 400W E-18 High Pressure Sodium lamps. Suitable remote mounted ballasts¹ are required for the various lamp types. Removal of the socket housing provides easy access to the lamp compartment.

The top end of the lamp must seat securely in the spring loaded retainer when the lamp base is screwed tightly into the socket. This is to prevent lamp breakage. When re-lamping, it is recommended that the cover glass and reflector be cleaned to maintain fixture efficiency (see Cleaning, below).

Lamp Recommendations

Description	Wattage	Lamp Type	ANSI Code ³
High Pressure Sodium	400	E-18	S51
Pulse Start/Metal Halide ²	400	BT-37	M155/E
Remote ballast required	Refer to BLST Spec Sheet		

1 Phoenix heavy duty voltage stabilized ballasts are recommended for optimum service and performance. Remote ballasts are sold separately.

2 Metal Halide is sometimes referred to as "Multi-Vapor."

3 The ANSI code of the lamp must match the ANSI code of the ballast.

Cleaning

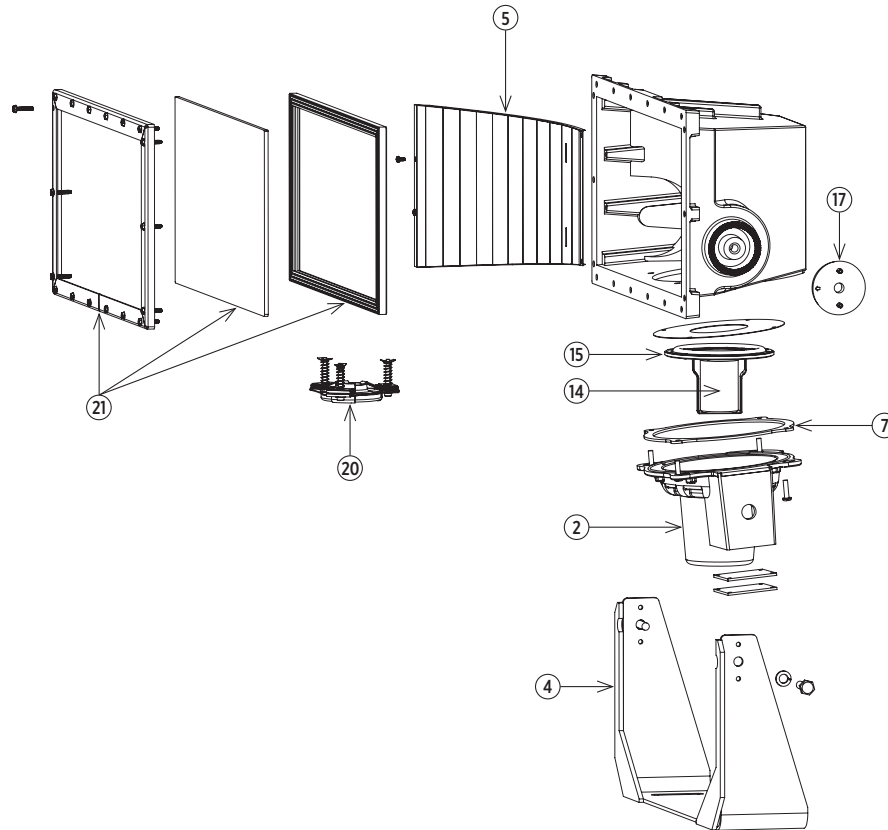
If the interior surface of the cover glass or reflector surface becomes dirty, it is recommended that they be cleaned to maintain maximum output. Remove the socket housing to gain access into the fixture. The glass may be cleaned with any non-abrasive conventional glass cleaner. The reflector should be cleaned with a soft cloth using soapy water or special reflector cleaners.

To prevent gaskets from sticking at sealing surfaces, lightly apply a liquid silicone release agent to gaskets when replacing any of the access covers. For best results, wipe first application until dry (to clean the gasket surface) and then apply a second application and allow to remain wet.

Aiming

Aiming adjustments are made by loosening the harp and base fastening bolts and rotating the fixture and harp to the desired aim point. The fixture may be adjusted 360° in elevation and 22° in azimuth. Mounting locations should be established to position the fixture close to the desired azimuth aiming angle at installation. A gauge is provided on the side of the harp to aid in setting the desired elevation.

Repair Parts



Repair Parts List

Item	Qty	Description	Part No.
2	1	socket housing assembly	contact factory
4	1	MRSE400 harp kit	1090800
5	2	MRSE400***A (narrow optic) reflector half MRSE400***B (wide optic) reflector half	2654601 2654602
7	1	port gasket	5003200
14	1	lamp socket	4502300
15	1	socket support assembly (including diaphragm)	1630700
17	2	aiming washer	2646000
20	1	lamp retainer assembly	1611100
21	1	lens replacement kit (includes lens, gasket, lens retainer and hardware)	contact factory

Product design and specifications are subject to change without notice.

