

AEGIS® SGR uKIT Installation (Solid and Split) for NEMA and IEC Frames

Patented Technology



AEGIS® SGR uKit Includes:

- (1) AEGIS® SGR Bearing Protection Ring (solid or split ring)
- (4) universal bracket sets of each size (16 total)
- (4) 6-32 x 3/8" socket head cap screws (IEC Kit: M4 x 10mm SHCS)
- (4) #6 split lock washers (IEC Kit: M4)
- (4) #6 flat washers (IEC Kit: M4)
- 5/64" allen wrench
- 7/64" allen wrench (IEC Kit: 3mm)

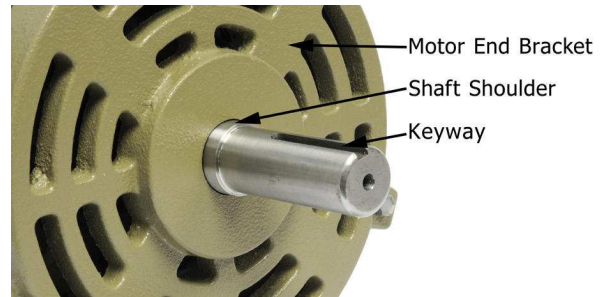
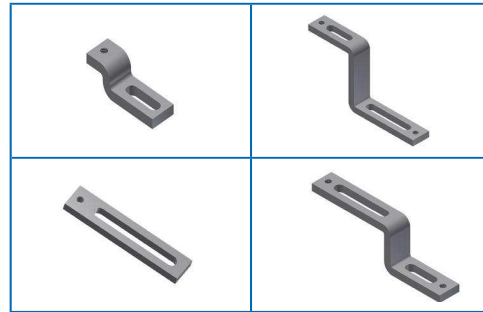
Tools required for installation:

- #36 drill (IEC Kit: 3.3mm or #30)
- #6-32 tap (IEC Kit: M4)
- Fine grit emery cloth/sand paper
- CS015 AEGIS® Colloidal Silver Shaft Coating (recommended)
- Loctite® Thread Locker (optional)

For easy AEGIS® Conductive Epoxy mounting:

- EP2400 AEGIS® Conductive Epoxy (sold separately)
- Dremel tool for removing paint on motor end bracket
- Heat gun to expedite curing time of conductive epoxy

Universal Bracket Styles all included in the uKIT



Installation Guide:

- Solid Ring Only:** Choose either a 3 hole or 4 hole bracket pattern based on the configuration of the motor end bracket. Use a minimum of 3 brackets to safely secure the uKIT.

3 hole bracket pattern

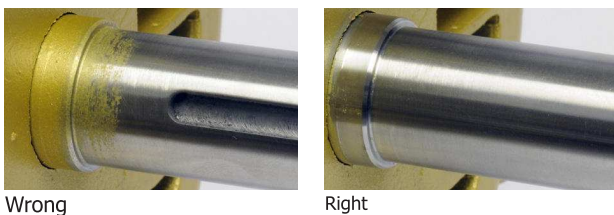
4 hole bracket pattern

- Select a bracket based on the clearance needed on the motor end bracket/slinger/shaft shoulder. For specifications of each bracket, visit www.est-aegis.com

- Using the 5/64" allen wrench, assemble the brackets to the AEGIS® ring using the 5-40 x 3/8" flat head screws. It is not necessary, but Loctite® can be used to secure the screws in this area only. Caution: do not apply Loctite® to the entire screw because this is a path to ground.

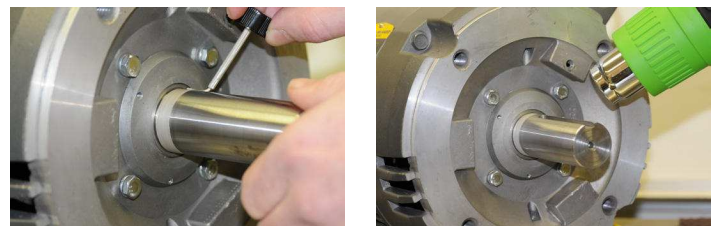


- Shaft preparation:** Shaft must be clean & free of any coatings, paint, or other nonconductive material. Use emery cloth and then wipe with alcohol for best results.

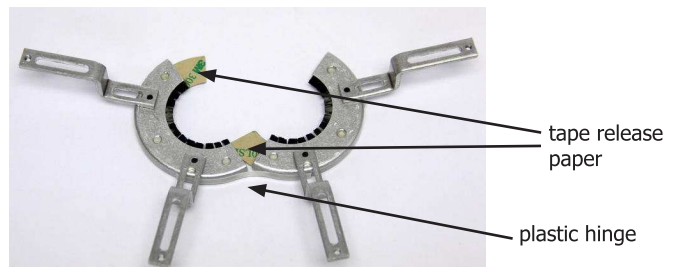


- AEGIS® SGR should not operate over a keyway. If SGR will operate over a keyway, fill keyway with a fast-curing epoxy putty (such as Devcon epoxy putty) in the area of contact. File epoxy smooth to shaft diameter.

- To increase the conductivity of the shaft we recommend applying a light coat of the AEGIS® Colloidal Silver Shaft Coating PN CS015 to the area where the AEGIS® microfibers are in contact with the motor shaft. Apply evenly all around the shaft. Use a heat gun for a faster drying process.

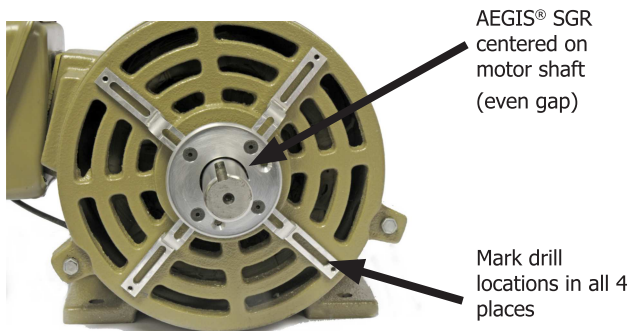


- Split Ring Only:** The plastic hinge is used as an installation aid to keep the two sections attached. Do not remove the tape release paper at this time.

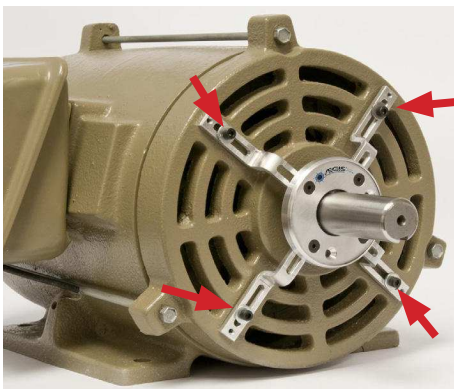


Drill and Tap Installation:

1. Install the AEGIS® SGR so that the aluminum ring maintains an even clearance around the shaft. Conductive MicroFibers™ must be in contact with the conductive metal surface of the shaft. Mark your bracket drill locations.



2. Prepare motor end bracket for installation with screws.
 - a. Drill (3 or 4) holes using a #36 drill (IEC Kit: 3.3mm or #30). Avoid drilling into bearing.
 - b. Depth of hole should be 1/4" (6mm)
 - c. Tap each hole with a #6-32 tap (IEC Kit: M4)
 - d. **Solid Ring:** Install the uKIT and secure to the motor using the 6-32 (IEC Kit: M4) cap screws, split lock washers and flat washers provided. The bolts provide the path to ground. Do not use Loctite© or any other non-conductive material to secure the screws. **Split Ring:** Remove the tape release paper from the 2 tabs and install the uKIT. Press the ring segments together to secure the tape. Mount brackets to the motor using the 6-32 (IEC Kit: M4) cap screws, split lock washers and flat washers provided. The bolts provide the path to ground. Do not use Loctite© or any other non-conductive material to secure the screws.
3. After installation, test for conductive path to ground using Ohm meter. One probe on metal frame of SGR and one probe on bare metal of motor frame. NOTE: Motor must be grounded to common earth ground according to applicable standards.



Do not use Loctite here.

Conductive Epoxy Installation:

1. AEGIS® Conductive Epoxy EP2400 sold separately
2. Install the AEGIS® SGR so that the aluminum ring maintains an even clearance around the shaft. Conductive MicroFibers™ must be in contact with the conductive metal surface of the shaft. Mark your epoxy locations.
3. Remove paint on the motor end bracket where the AEGIS® uKIT brackets will be attached. These areas must be clean & free of any coatings, paint, or other nonconductive material.
4. Prepare conductive epoxy per package directions
5. Apply the epoxy to the universal brackets (and for split ring - remove the two tape release papers).
6. **Solid Ring:** Install the uKIT. Hold the uKIT in place until epoxy is firmly holding. Allow epoxy to cure for 4 hrs at or above 75°F (24°C). For quickest curing time, use a heat gun to heat epoxy for 10 minutes, then allow to cool. **Split Ring:** Remove the tape release paper from the 2 tabs and install the uKIT around the shaft. Press the ring segments together to secure the tape. Place the uKIT against the motor end bell, ensure even clearance around the shaft and hold in place until epoxy is firmly holding. Allow epoxy to cure for 4 hrs at or above 75°F (24°C). For quickest curing time, use a heat gun to heat epoxy for 10 minutes, then allow to cool.
7. After installation, test for conductive path to ground using Ohm meter. One probe on metal frame of SGR and one probe on bare metal of motor frame. NOTE: Motor must be grounded to common earth ground according to applicable standards.



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