



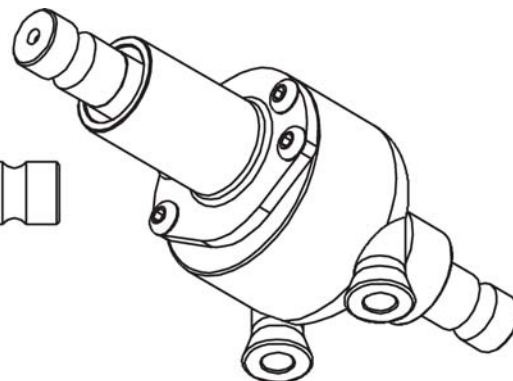
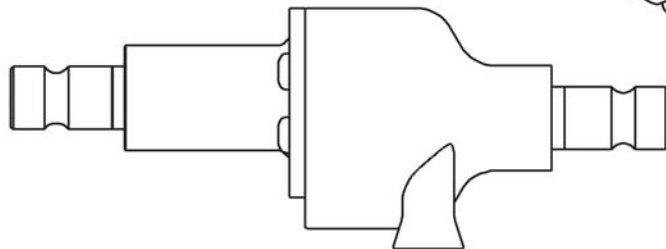
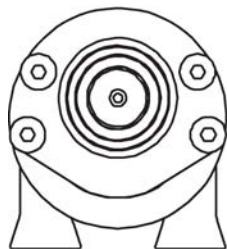
PHONE: (989) 435-7080

3195 LYLE ROAD • BEAVERTON, MI 48612
www.howeracing.com

FAX TOLL FREE: (888) 484-3946

HOWE P.N. 5224 & 5225 BASIC STEERING QUICKENER INSTRUCTIONS

P.N. 5224 2.0 to 1 Ratio Quickener
P.N. 5225 1.5 to 1 Ratio Quickener



Installation

- 1) Attach a mounting bracket (P.N. 5223 or other) with two 2"x3/8"-16 bolts & lock washers. Torque to 16-18 ft/lbs. If using a bracket other than the 5223 check the bolt depths by hand before installing to see if you will need to add any washers so the bolts do not bottom out in the mounting holes.
- 2) Locate and mark an 8" straight section of the steering shaft where the unit can be installed and the mounting bracket can be welded to the frame. The quickener should be located away from the headers in an area where it is less than 250° F. The unit may be mounted in any position.
- 3) Remove the section of the shaft where the unit is to be installed.
- 4) Install a splined coupler P.N. 5221 on each end of the unit and tighten the set screw.
- 5) Place the unit and coupler assembly in the shaft where you removed the 8" section with end that turns faster towards the steering box.
- 6) Tack weld the mounting bracket to the frame and the couplers to the steering shaft. Remove the quickener before finishing the welds.
- 7) Turn the steering wheel to check for any binding or misalignment. If necessary break the tacks and realign.
- 8) When properly aligned weld the bracket to the chassis and the couplers to the shaft.

IMPORTANT! When installing the quickener remember that the unit should rest relaxed against the mount with no bolts installed. Due to the reduced size the distance from the center to mounting boss is less than other quickeners. **If you are mounting the unit into an existing mount you will have to add a flat spacer or remove and replace the mount.**

Maintenance

Your new Howe Basic Steering Quickener should require very little maintenance under normal use. If you feel it has been damaged, or it is having any other problem contact Howe Racing for authorization to return the unit for inspection or service. If you choose to disassemble and inspect the unit you can do so by following the instructions below. You should inspect your quickener every 2,000 laps or annually?

Disassembly

- 1) Remove the unit from the car.
- 2) Using a 5/32 allen wrench remove the four bolts from the side of the quickener.
- 3) With the quickener separated you may inspect and clean all the parts with lacquer thinner.

Assembly

- 1) Install the pinion into the cover and the ring gear into the housing.
- 2) Apply a small amount of grease to the ring gear.
- 2) Slide the cover assembly into the housing.
- 3) Install the four 5/32 allen head bolts tightening them evenly and torque them to 100-120 in/lbs.
- 4) Reinstall the assembled unit back into the car.