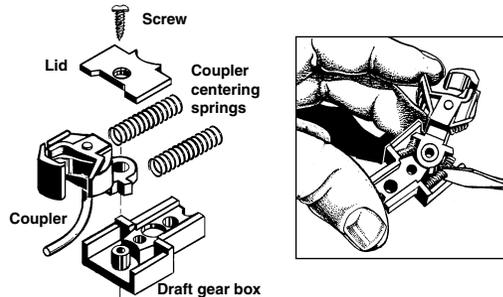


## 793 / 1793 Ins.

### ASSEMBLY

**IMPORTANT:** Before assembling remove any burrs or flash (if any) from all parts. Burnish (Polish) all friction bearing surfaces with #231 Greas-em dry graphite lubricant.



To assemble the coupler follow the illustrations in these instructions. Make sure the gear box lid is tightly secured with the screw. Add a "puff" of our #231 Greas-em into the draft gear box. Make sure the coupler flexes back and forth freely.

Note: One of the gear boxes has a large hole in the shank and the other has been machined at an angle on the shank. The coupler with the medium offset is used with the draft gear box that has the large hole located in its shank and will be mounted at the front of the locomotive. See Fig.1. The coupler with the large offset is used with the draft gear box that has been machined and is to be mounted at the rear of the locomotive. See Fig.2. When working on locomotives or cars they must often be turned upside down or on their sides. Always place a protective mat underneath them, and protect any protruding detail parts which could be damaged. Remove any flash or burrs from parts with a file or an X-acto® knife.

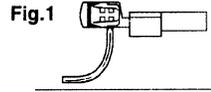


Fig.1

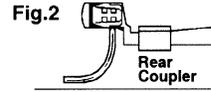


Fig.2

### MOUNTING

#### Front coupler:

1. Remove the old existing coupler.
2. Refer to the exploded view in Fig.3 to familiarize yourself with coupler mounting parts and installation positions. There are two large diameter washers in this packet, one (1) thick and one (1) thin. Place the thin washer onto the locomotive's coupler mounting post and slide it down until it rests on top of the three gussets located on the post. If the washer does not slip onto the coupler mounting post there may be excessive paint on the post. This paint can be removed by scraping the post with an X-acto® knife. The washer should not fit too loosely.

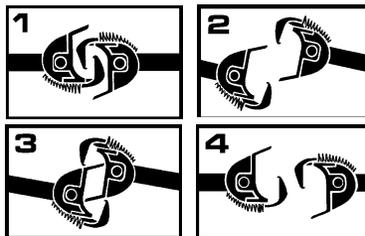
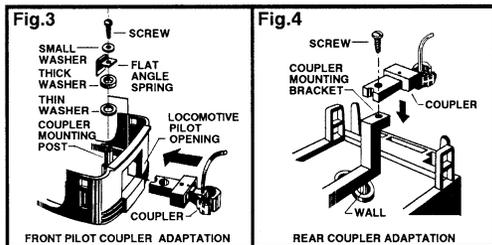
3. Slip the assembled coupler unit through the opening of the locomotive pilot and tilt the coupler unit at a slight angle to position the large hole in the draft gear box shank over the mounting post. Slide the shank down the post to rest on the thin washer and then level coupler unit.

4. The thick washer can now be placed on the post and over the previously installed draft gear box shank.

5. Position the flat angle spring over the thick washer, centering the hole in the spring leg over the original coupler mounting screw hole in the post. Make certain that the other spring leg is pointing down behind the end of the draft gear box shank.

6. Place the small washer on top of the flat angle spring and secure with the original coupler mounting screw that was removed previously, Make certain that the draft gear box is centered in the locomotive pilot opening while tightening the mounting screw.

7. Test the centering action of the draft gear box; it should move freely from side to side and re-center itself. If the coupler unit does not center properly, it may be helpful to loosen the mounting screw and push slightly forward on the back leg of the flat angle spring while retightening the screw. If the flat angle spring does not tighten down properly, remove and file one or both of the large washers until it will do so. If more side swing of the coupler is desired, the sides of the draft gear box or pilot opening at the front of the locomotive can be modified by carefully cutting or filing away the excessive material that interferes with the desired swing. Caution must be exercised against removing too much material. This would impair the performance of the coupler.



NOTE: If couplers swing open too far when uncoupling, lower magnet slightly to correct.

### Rear Coupler:

1. Remove the old existing coupler.
2. Place the new Kadee® coupler unit with the large offset in the same position as the old coupler. Secure with the previously remove 1 original mounting screw or use the supplied No.4 x 3/8" screw.
3. If coupler drawbar does not re-center properly, you may find excess paint on the coupler mounting bracket guide wall as shown in Fig.4. This can be scraped off with an X-acto® knife.

### COUPLER OPERATION TO COUPLE -

Simply push cars together until knuckles bypass each other and lock into position.

### FOR DELAYED UNCOUPLING -

- 1) Stop with the couplers over an uncoupler and back up slightly with the couplers still over the uncoupler, allowing slack to occur between couplers.
- 2) Pull forward slightly. Couplers are now in the delayed position.
- 3) Back up, pushing the car(s) to the desired location. Do not permit slack to develop between couplers.
- 4) Pull forward, leaving the car(s) where desired. Couplers automatically return to normal coupling position.

Use Kadee® Greas-em, the dry lubricant recommended for use with all Kadee® Magne-Matic® couplers. Grease-em will not attract the dirt and dust that

gums up the inside of couplers like oil, grease or other lubricants will. Use our #829 #1-Scale or #880 G-Scale Height Gauge to check for the correct coupler height and trip pin clearance. The N.M.R.A. standard for coupler height is the centerline of coupler is 1 1/16" (1.0625")for #1-Scale & 1 1/8" (1.125") G-Scale.

Note: We include extra knuckle springs. The Replacement Knuckle Spring used on Kadee® #1-Scale couplers are sold as the #875 (#820-828 couplers) or #1875 (1700 & 1800 series couplers) Knuckle Spring. The Knuckle Spring used on Kadee® G-Scale couplers are sold as the #860 Knuckle Spring.

For Delayed Action Uncoupling use our #842 Uncoupler, #844 Portable Uncoupler, or our #840 Uncoupler mounted in LGB track.

Kadee® coupler conversion list & coupler conversions are on the Kadee® web site for your convenience.

[www.kadee.com/conv/convpl.htm](http://www.kadee.com/conv/convpl.htm)

# MAGNE-MATIC®

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Made in the U.S.A.