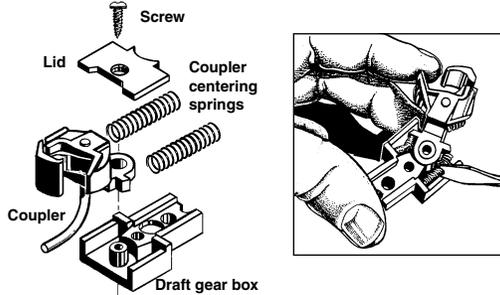


785 / 1785 Ins.

U.S.A. Trains® EMD GP7, GP9, GP38-2

### 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.

### MOUNTING

1. Invert the loco and place it on a padded surface to avoid scratching the finish or damaging detail parts.
2. Remove the screw holding the coupler and lift off of the wire spring.

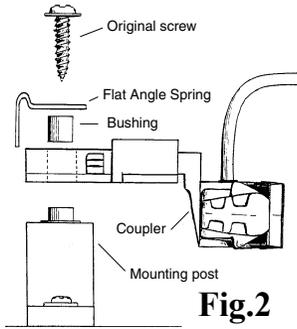


Fig. 2

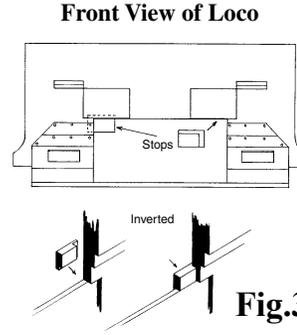
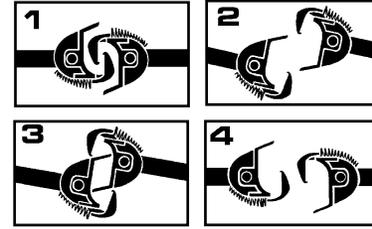


Fig. 3



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

Retain the original screw.

3. Place the new coupler gear box on loco mounting bracket as shown in fig. 2. After installing the bushing in the hole of the gear box shank, position the flat angle spring as shown and secure with the original screw making sure gear box is straight. Test centering action of gear box. If more spring tension is needed you can push forward on the spring while tightening the screw. The spring can also be bent slightly if required.

4. The plastic stops which are included must be installed or the gear box may pivot too far to the side. Position them as shown in Fig. 3 and glue into place.

### 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 or 1929 #1-Scale) or (#880 or 980 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 Springs used on Kadee® #1-Scale couplers are sold as the #875 (#820-828, 920 & 921 couplers) or #1875 (1700 & 1800 series couplers) Knuckle Springs. The Replacement Knuckle Springs used on Kadee® G-Scale couplers are sold as the #860 Knuckle Springs.

For Delayed Action Uncoupling use our #842 Uncoupler or #844 Portable Uncoupler.

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

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

# MAGNE-MATIC®

**WARNING:**  
CHOKING HAZARD - Small Parts  
Not for children under 14 years.



## Kadee®

Made & Assembled Entirely  
in the U.S.A.

Quality Products Co.

673 Avenue C,  
White City, OR 97503-1078  
092711

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