



#789



#1789

BODY MOUNTED COUPLER WITH EXTENDED GEAR BOX ASSEMBLY INSTRUCTIONS

Contains:

2 ea. Couplers, 2 ea. Draft Gear Boxes, 2 ea. Draft Gear Box Lids, Centering Springs, Knuckle Spring, #4 x 1/2" screws, #4 x 3/4" screws, #2 x 3/8" screws, and white plastic .010" shims.

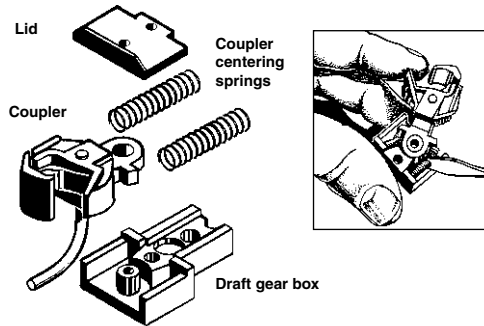
The Kadee® #830 (G) or #820 (#1) body mounted Coupler with standard Draft Gear Box are used when there is ample room and for tighter radius curves. The 789 or 1789 couplers do not swing as far as the #830 or #820 Couplers so they are most effectively operated on track with a larger radius.

For maximum performance, it is important that the Coupler be mounted at the correct height, directly on the cars' centerline. Note: If the car is going to be changed to metal wheels this should be done first since it may change the coupler height.

Please read through instructions carefully and completely before proceeding.

ASSEMBLY

IMPORTANT: Before assembling remove 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. Secure lid to the gearbox with the #2 x 3/8" screw. Add a "puff" of our #231 Greas-em into the draft gear box. Make sure the coupler flexes back and forth freely.

MOUNTING

Use the #829 #1-Scale or #880 G-Scale coupler height gauge to determine the coupler mounting height.

Having selected the Kadee® Coupler best suited for your application, turn car over and place Coupler with Draft Gear Box in position, directly on the car centerline. Look for obstacles which might prevent Gear Box from laying flat in position. (NOTE: The

protruding European style bumper cushion which some LGB™ cars have, must be removed for proper clearance. Pulling straight out and removing half may be enough or it should be cut off as close to the car as possible). It might be helpful to hold the Coupler Assembly in place & check distance from center of Coupler to top of rail using the appropriate coupler height gauge. Once you have established this measurement, you can determine if you must shim Gear Box down or cut the underbody to raise the Coupler Draft Gear Box.

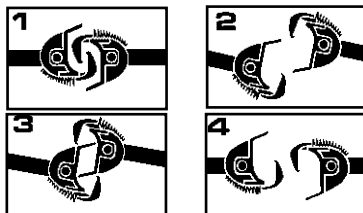
If Coupler mounting surface is uneven, or too high from the track, make one or more plastic shims to support the Coupler Assembly. In many cases, you can place shims on, or between, the center sills and end sills of the car underframe to provide a solid base for the Gear Box. Temporarily mount shims, then set Draft Gear Box assembly in place and mark location of mounting holes on shims. Remove shims and drill 3/32" hole for the #4 screws in the marked locations. Remount shims in their original position, this time using screws to hold them solid.

If Coupler mounting surface is too low, the underframe must be cut to raise the Coupler to the proper height. Carefully lay out the area to be cut so the Gear Box will be level, centered and at the correct height. It may be best to remove most of the material with a chisel or small saw, leaving finish material which can be carefully removed with a fine file until desired fit and depth is achieved. Placing shims between the truck bolster and the car body bolster to raise the car is an alternative to cutting the car body underframe for some cars. Drill 3/32" holes and secure the couple using the #4 screws.

COUPLER OPERATION

TO COUPLE -

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



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

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. Greas-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

MAGNE-MATIC®

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



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

Kadee®

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