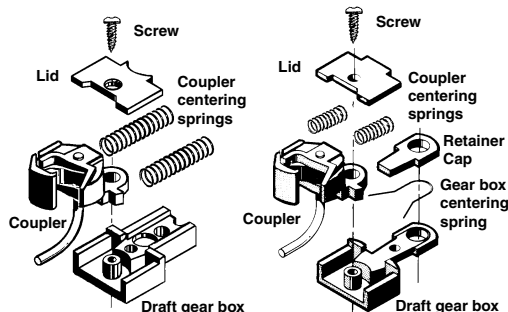


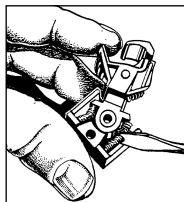
796 / 1796 Ins.

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. 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

LGB locomotive No. 20151

Front:

A black and white buffer protrudes from the front of the loco. This must be removed by pulling straight out. Take the Kadée® coupler gear box assembly (swinging) and install a gear box centering spring in groove as shown in Fig. 1. Once the spring is secure in groove, snap retainer cap in place and burnish areas marked by an arrow with Greas-em. Now by turning the smokestack, a nut under the locomotive can be removed. Pulling the smokestack out about one inch will allow the old coupler to be removed and the new Kadée® coupler gear box assembly can be inserted. If the fit is too snug, lightly file the retainer cap and reburnish with Greas-em to allow free movement. Push the smokestack back in and retighten the nut. Do not overtighten or gear box may not swing freely. Test gear box centering action for freedom of movement by swinging it to one side or the other and releasing it. If gear box centering action seems sluggish or favors one side which is not caused by a burr or overtightened mounting screw, one or both spring

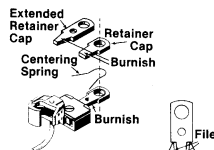


Fig. 1

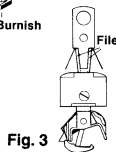


Fig. 3

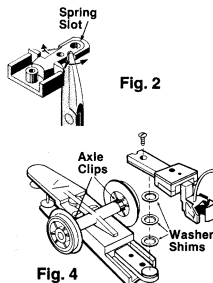


Fig. 2

Fig. 4

legs can be bent a little more as shown in Fig. 2.

Rear:

Remove the old coupler. Place the new Kadée® coupler in position and mark the new screw hole location. Remove and drill a 3/32" hole. Mount the new Kadée® coupler gear box assembly (fixed) with a "4 x 3/8" screw. Now place the loco on track to check the coupler height. If too low take a white .010" shim and place it under rear of the draft gear box.

LGB locomotive No. 20171

Rear:

Installation is similar to rear mounting of "2015D loco above. A black and white buffer protrudes from the rear of the tender. This must be removed by pulling straight out.

LGB locomotive No. 20711, 20731

Front:

Installation is similar to front mounting of "2015D loco above. However, an extended spring retainer cap must be used. After mounting, if more side movement is required of the gear box, file the sides of the shank to match the retainer cap (Fig. 3).

Rear:

A black or black and white buffer protrudes from the rear of the loco. This must be removed by pulling straight out. Remove the old coupler. Place the new Kadée® coupler in position and mark the new screw hole location. Remove the coupler and drill a 3/32" hole. Install the Kadée® coupler using a "4 x 3/8" screw. The point of the screw can be filed or ground off for a more finished appearance. (Optional method is to cut the tab off of the coupler mount and install using the original screw hole). After mounting the Kadée® coupler place loco on track and check the coupler height. If the coupler is too high, remove the coupler and place several .015" plastic washers on the boss of the coupler mount (Fig. 4). This will lower the coupler when reinstalled. There is also excessive slack in the truck axles on these locomotives which will prevent proper coupler operation. This is corrected by installing the supplied axle clips on the axles just inside the wheels to limit wheel side movement (Fig. 4).

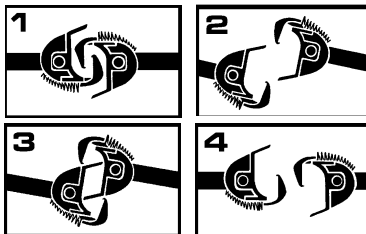
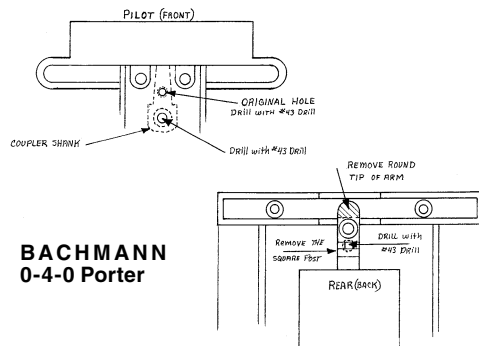
MOUNTING

BACHMANN 0-4-0 Porter

Remove the original couplers and retain the front screw.

Front:

To achieve the correct coupler height the coupler needs to be assembled up side down in the swinging gear box. The bottom of the gear box needs to be notched to match the lid for the coupler swing clearance. Place the lid evenly on the bottom of the box and carefully file a matching notch in the bottom. Test fit the coupler and check the swing, file more at the corners if needed. Assemble the coupler into the draft gear box with the coupler up side down. "Do not" assemble the wire gear box centering spring or retaining cap. Drill a #4 clearance hole through the small hole of the shank that was for the retaining cap. Slip the assembly into the front pocket, you'll need to turn it side ways a bit. Push it in until the back of the box is against the front sill plate (opening). Hold it firmly in place and mark the floor, along the centerline, through the small hole and where a screw can go into the floor and be against the top edge of the large hole (see illustration). Use a #43 drill and drill the two holes through the floor. Secure the coupler assembly with a #4x3/8" screw (included in the coupler pkg.) through the small hole and use the original screw at the top edge of the large hole. Note, if you are using the #832 coupler it has a bushing in the pkg. that fits in the large hole, so use this if you wish and adjust the hole in the floor for the center of the bushing.



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

Rear:

Remove the bottom plate exposing the coupler pocket. Assembled the fixed shanked coupler (#831) according to its instructions. Trim off the round tip of the arm flush to inside edge (as illustrated) of the sill. Trim off the square post behind the hole in the arm. It will be a challenge to get to the post with nippers or a hobby knife, trim it as flush as possible. Slide the coupler onto the arm and against the back of the gear housing. Hold the coupler in place and make sure that it fits level. Mark the arm through the hole in the gear box shank. Use a #43 drill and drill a hole along the center line through the arm. Secure the coupler with a #4x3/8" screw. The box should be recessed into the pocket.

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 Kadée® Greas-em, the dry lubricant recommended for use with all Kadée® 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 Kadée® #1-Scale couplers are sold as the #875 (#820-828 couplers) or #1875 (1700 & 1800 series couplers) Knuckle Spring. The Knuckle Spring used on Kadée® 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.

Kadée® coupler conversion list & coupler conversions are on the Kadée® web site for your convenience.
www.kadee.com/conv/convpl.htm

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