

When properly mounted on cars, the flex-brackets that are included in this packet will allow operation on shorter radius track. They are to be used with Kadee<sup>®</sup> #830 couplers and gear boxes. Please read instructions thoroughly before proceeding. The flex-bracket with coupler assembly must be centered on the car center line.

## This packet should include:

2 ea. Flex-Brackets 6 ea. 4-40 Screws 6 ea. 4-40 Nuts

## Assemble couplers as described in the general instructions:

After assembling the coupler in the gear box and are assured that it moves freely, you may wish to use a soldering iron on the sides of gear box and lid to fuse them together. This will make handling easier. Be sure to smooth any burrs. When working on cars, they must often be turned upside down or on their sides. Always lay down a protective mat and look for protruding parts which could be damaged.

## **MOUNTING:**

1. It is important to mount the flexbracket so that the coupler is at the correct height directly on the car center line (see Fig.7 of the No. 830 general instructions). The mounting surface height should be 1.300" (15/16") from the top of the rail.

2. Place the car on a section of track and check the mounting surface height. The Kadee<sup>®</sup> G-scale height gauge (#880) will make this easier and more accurate. If too high, a shim will be required to achieve the proper mounting surface height. If too low, a washer shim can be placed between the car body bolster and the truck bolster. This will raise the car body.





**3.** Turn the car over and position the coupler gear box assembly with the flex-bracket where it will be located (Fig.1). Check for clearances and decide which two of the four mounting holes on the flex-bracket are best suited for your application. You may need to cut off the two side tabs or rear tab for added clearance (Fig.2).



**4.** A flat mounting surface is required for the coupler gear box to pivot freely. If a plastic shim is needed it can be cut and filed to the proper size so that it will fit snugly between the center sills and end sills. It must be long enough for the flex-bracket to be mounted to it.

**5.** After you have established that your mounting surface is at the proper height, place the coupler gear box assembly with the flex-bracket back in position, exactly where it will be mounted and on the car center line. Using a drill that will just fit into the pivot hole (Fig.2), mark the screw hole location. Remove coupler and flex-bracket and drill and tap for a 4-40 screw. If a shim is being used, simply remove the shim, drill and tap and then replace the shim in the same location (Fig.3). All drilling and tapping should be as straight as possible.

**Note:** When using metal screws in plastic, tapping of the hole is not required. After carefully drilling a 3/32" hole, the screw will self tap. The metal screws can be cut to the required length with a fine saw. Before cutting, screw on a supplied nut. The nut will clean up the thread ends when removed. An uncut screw will give better tapping results.

**6.** The coupler with flex-bracket can now be secured to the car using a 4-40 screw cut to the proper length (Fig.4).



Making sure the flex-bracket is straight, mark the location of the two mounting holes that you have decided to use (Fig.5). Remove the coupler and flex-bracket, then drill and tap the two mounting holes for 4-40 screws. The coupler with flex-bracket can now be secured to the car. If a shim is used for mounting and it fits snugly, it can be glued into place. An alternative is to drill clearance holes through the underbody and use the supplied nuts. Note that the screw holes are a snug fit for the screws. This will help give a firm base when tightened.

**7.** The front pivot screw should be tightened until it just starts to interfere with the springs side to side centering action and then backed off slightly. If

it is left too loose the coupler may pull down over the magnet. If the pivot screw should loosen during operation, place a drop of glue on the threads and re-install when dry.

8. The flange on the gear box lid may have to be cut if it interferes. If still more side swing is needed the gear box may be cut as shown in Fig.12 of the No. 830 general instructions.



## Note:

When properly installed, the flexbracket spring action will re-center the gear box after being placed in the side position. Avoid leaving the flexbracket at the extended side position for a prolonged period of time or it may not immediately return to center. If this should occur, simply slide to the opposite side and hold briefly.

