



# 711, 712, 713 & 714 Coupler Instructions



Remove any flash and rough spots & burnish the surfaces shown in Fig. 1 & 2 with Kadee® #231 Greas-em to ensure trouble-free coupler performance.

File off any burrs of flattened end of the tip pin. (Fig. 3). Insert trip pin in knuckle. Thread trip pin through top of elongated slot at the lip end of lip shank so both shanks nest together (Fig. 4).

Fig.1

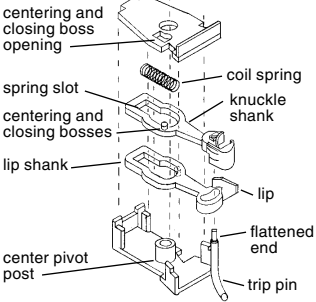


Fig.2

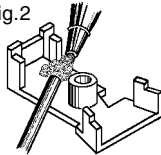


Fig.3

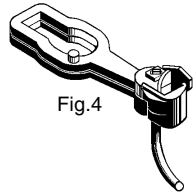
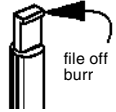


Fig.4

## OPTIONAL BOX MODIFICATIONS:

See Figs. 5, 6, 7 & 8. Be careful not to cut too much of the coupler box front or coupler may droop when assembled. Be careful not to cut too much of the coupler box back or this will expose the spring and cause it to fall out. Be careful not to destroy the side slot or coupler may not center properly.

Fig.5

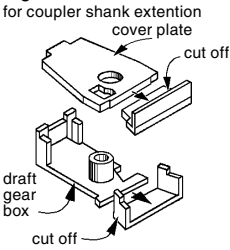


Fig.6

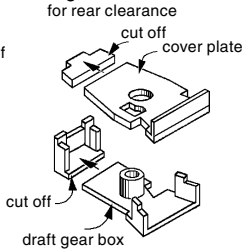
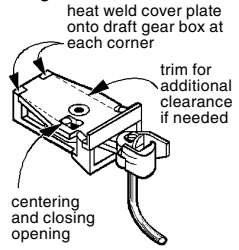


Fig.7



## ASSEMBLY:

Place coupler parts over the center post of draft gear box. Use the #241 dual tool or a pen knife blade between end coils of centering spring, inserting it in spring slot of both coupler shanks so coil ends rest against spring slot end and center pivot post of draft gear (Fig. 9 & 10). Place cover plate over assembly (Fig. 7) making certain small coupler centering bosses are freely positioned in centering and closing openings of draft gear and cover plate. Test couplers to see if they easily pivot from side to side and return to a closed center position. If couplers fail to do this, reassemble.

A - 5/32" normal mounting position also for modification shown in Fig.6

B - .065" mounting for modified extended shank coupler shown in Fig.5

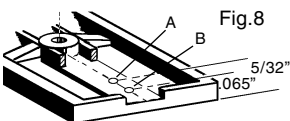


Fig.8

Fig.9

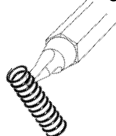
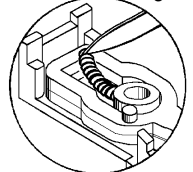


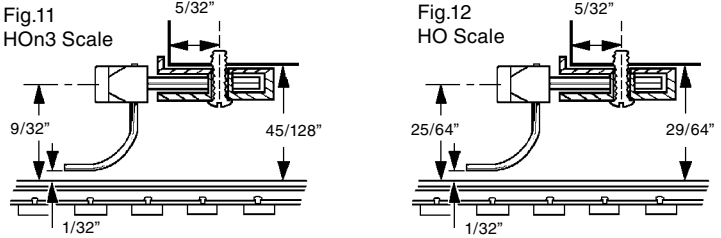
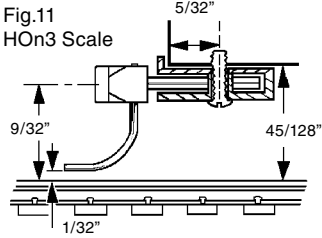
Fig.10



At this point, if you wish, a small electric soldering iron with pointed tip can be used to touch corners where the cover plate rests on the draft gear box (Fig. 7). Trim off any rough spots with a sharp knife blade.

**MOUNTING:**

On the centerline and back from the edge as shown in (Fig. 8), locate use the #780 tap & drill and drill No. 55 drill hole and mount coupler/draft gear assembly with a No. 0 self-tapping screw, or for 0-80 machine screw use & a 0-80 tap. 0-80 screw can be trimmed to length. You may want to use 0-80 screw for mounting to loco pilots. After mounting, add a puff of Greas-em to inside of coupler assembly and work coupler from side to side.



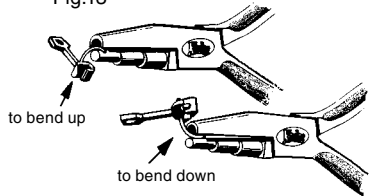
**Coupler Height:**

HO3 Scale use the #704 Coupler Height Gauge, NMRA centerline height is 9/32" (.281") above the railtop (Fig. 11).

HO Scale use the #205 or #206 Coupler Height Gauge, NMRA centerline height is 25/64" (.390") above the railtop (Fig. 12).

Be sure the trip pin is pushed in tight, should clear the rail by 1/32" (Fig. 11 or 12) if necessary Use the #237 trip pin pliers to adjust the trip pin (Fig. 13).

Fig.13



**UNCOUPLING:**

HO3 Scale use the #308 under-the-track, #708 Electric Uncoupler or #709 Delayed Uncoupler. Note: #308 uncoupler not suitable for use under 3-rail dual gauge track for HO3 uncoupling narrow gauge. HO Scale use the #308 under-the-track, #309 Electric Uncoupler, #312 Non-delayed Uncoupler, #321 Delayed Uncoupler or #322 Delayed Uncoupler.