



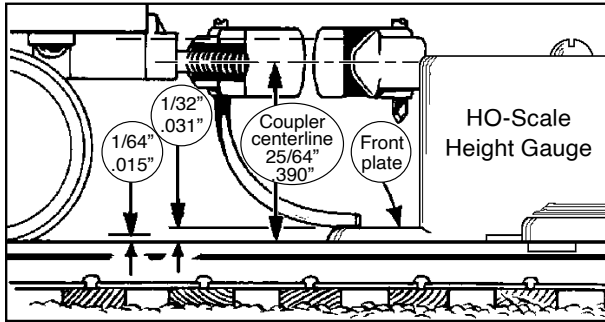
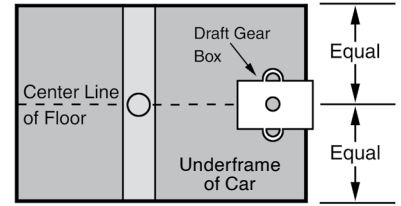
# HO Coupler Information

SCALE

**Kadee HO Gear Boxes using center hole** (except #9, #711 or 712 Coupler gear boxes)  
2-56 screws are the most commonly used screw for mounting using center hole.

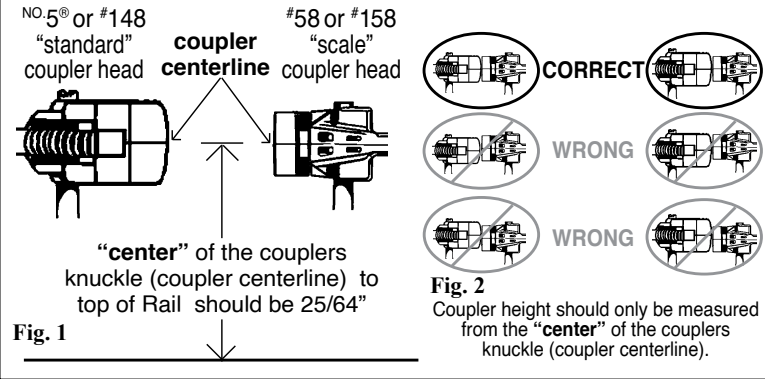
**Kadee HO Gear Boxes using side or rear mounting holes**  
0-48 or 0-80 screws are used for mounting with the side or rear hole.

**Kadee HO #9, #711 or 712 Couplers**  
0-48 or 0-80 screws are the most commonly used screws for mounting.



Kadee® HO-Scale Coupler Conversions  
<http://www.kadee.com/hocc.htm>

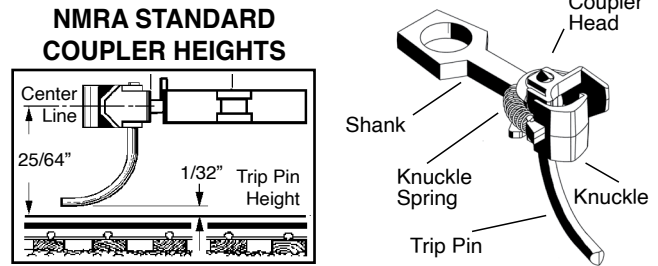
**Kadee® recommends "standard" coupler heads over "scale" coupler heads. This will help with rough track issues.**



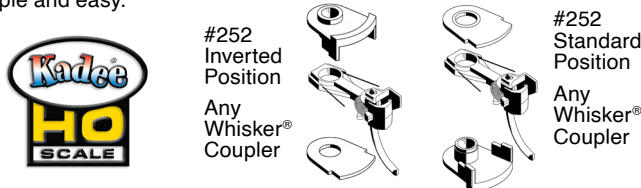
Use Kadee® #230 Insertion Pic. Set Adaptor crosswise into hole. Turn 90° and press down until it snaps into place.

**#212 Talgo Truck Adaptor**

Use with truck mounted "Talgo" type coupler pockets. Using the Kadee® #230 Insertion Pic, set Talgo-Truck Adaptor cross-wise into the spring and Coupler holes. Turn Insertion Pic and attached Adaptor 90° and press down, snapping Adaptor into position. Make sure the broad section of the Adaptor faces toward the Coupler Knuckle and pivot pin has entered hole.



**30 Series Coupler - Whisker® Coupler Equivalent Option:** Use the #252 Small Snap-together Gear Box & appropriate Whisker® Coupler to make an 30 Series Coupler equivalent coupler (see coupler offset chart). The advantages to using the #252 Gear Box and a Whisker® Couplers are; the Whisker® Metal Coupler is stronger & has a built in Whisker® centering spring, combined with the #252 Snap-together Gear box makes assembly simple and easy.



## MAGNE-MATIC®

- 1 Stop over a Magnetic uncoupler, allowing slack to occur between the couplers. Knuckles have opened.
- 2 Withdraw slightly to disengage couplers. Magnetic force of the uncoupler draws couplers apart, uncoupling them.
- 3 Enter over uncoupler again, couplers are in delayed position allowing pushing of car(s) without causing re-coupling.
- 4 Withdraw, leaving uncoupled car(s) on desired track. Couplers automatically return to normal coupling position.

**STANDARDS**  
We at Kadee® follow these **NMRA Standards and recommended practices** as closely as possible in all of our products. Our couplers are very close to prototype appearance, so they do require a different approach to adapting and mounting on your equipment. For this reason we included the illustrations for *standard* dimensions for HO<sub>n</sub>3, HO, S, On3, O, #1 and G couplers. **It is very important that you mount the couplers (in all scales) at the proper height and exactly centered on your equipment.** If the manufacturer of a particular car or locomotive has followed the **NMRA** standards for height of the coupler pocket or draft gear box on their model, you should be able to adapt the **Kadee® Coupler** and Draft Gear to their equipment without difficulty. If they have not, you may have to do some custom work to adapt Kadee® Couplers.

NMRA, Inc., 4121 Cromwell Rd., Chattanooga, TN 37421, web site [www.nmra.org](http://www.nmra.org), phone (423) 892-2846.

# Kadee® HO Coupler Offset Chart

SCALE

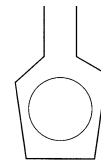
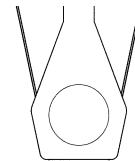
|   |  |  |                                      |
|---|--|--|--------------------------------------|
| 21, 31, 141*                                  |  | <b>"LU" Long Underset Shank</b><br>Raises knuckle height about .050"   | <p><b>Long Centerset Shank</b></p>   |
| 26, 36, 146*, 156*                            |  | <b>"LC" Long Centerset Shank</b><br>Knuckle is centered                |                                      |
| 29, 39, 149*                                  |  | <b>"LO" Long Overset Shank</b><br>Lowers knuckle height about .050"    |                                      |
| 27, 37, 147*                                  |  | <b>"MU" Medium Underset Shank</b><br>Raises knuckle height about .050" | <p><b>Medium Centerset Shank</b></p> |
| No. 5®, 9, 28, 38, 58, 118*, 119*, 148*, 158* |  | <b>"MC" Medium Centerset Shank</b><br>Knuckle is centered              |                                      |
| 22, 32, 142*                                  |  | <b>"MO" Medium Overset Shank</b><br>Lowers knuckle height about .050"  |                                      |
| 24, 34, 144*                                  |  | <b>"SU" Short Underset Shank</b><br>Raises knuckle height about .050"  | <p><b>Short Centerset Shank</b></p>  |
| 23, 33, 143*, 153*                            |  | <b>"SC" Short Centerset Shank</b><br>Knuckle is centered               |                                      |
| 25, 35, 145*                                  |  | <b>"SO" Short Overset Shank</b><br>Lowers knuckle height about .050"   |                                      |

This Chart Represents Kadee® Coupler Shank Variations.

\* Denotes couplers with the Whisker® Shank all other couplers use the Standard Shank. All couplers listed will function in each others draft gear boxes with exception of the 30-Series #233 gear box will not work with Whisker® Couplers. The #252 gear box is the Whisker® Coupler 30-Series equivalent gear box.

No. 5®, 9, 58, & all Whisker® Couplers are all metal.

20 & 30 Series Couplers have plastic insulated shanks and metal knuckles.



\* Whisker® Shank

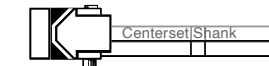
Standard Shank

Patent numbers 5,662,229

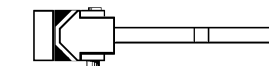
## Kadee® Shank Offsets

Raise or lower coupler head the thickness of the shank.

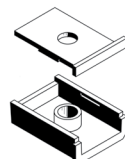
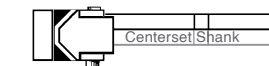
**Underset Shank**  
raises knuckle height about .050"



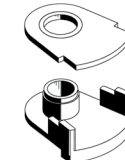
**Centerset Shank**  
knuckle is centered



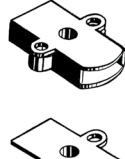
**Overset Shank**  
lowers knuckle height about .050"



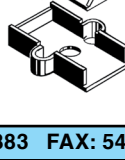
#242 Universal "Black Box" Snap-Together Draft Gear Box



#252 Small Whisker® Snap-Together Draft Gear Box



#234 Short Coupler Draft Gear Box



#232 No. 5 Style Draft Gear Box



#213 20-Series Draft Gear Box



#212 Talgo Truck Adaptor



#262 Narrow Low Profile Whisker® Snap-Together Draft Gear Box



#233 30 Series Draft Gear Box



Bronze Centering Spring



Torsion Spring



Coil Spring

#3, 118, 119, 140 Series, 150 Series Whisker® Coupler Shank

No. 5, 20, 30 Series & 58 Style Coupler Shank