Micro-Trains #2004 Underslung Short Shank Coupler

The #2004 coupler equals the #1015 as Micro-Trains' standard body-mount coupler only that the draft gear box on the #2004 is set lower. It is used ceartain cars as well as for adaption of certain Kato engines with body mount couplers.

Read all directions through at least once before you start. Study Fig. 1 to familiarize yourself with the name of each part.

CONTENTS: 2 pair #2001 short shank couplers (4 ea. short coupler knuckle shanks, 4 ea. short coupler lip shanks, 4 ea. draft gear boxes, 4 ea. draft gear lids, 6 ea. centering springs, 6 ea. trip pin, 6 ea. 00-90 x 1/4in screws).

ASSEMBLY:

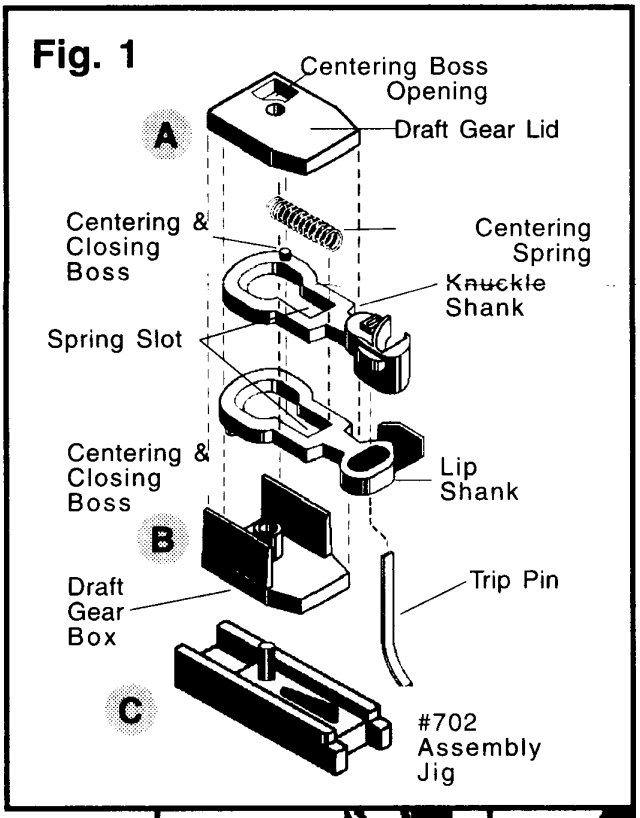
1) With a sharp hobby knife, carefully cut each part from sprue so no flash remains.

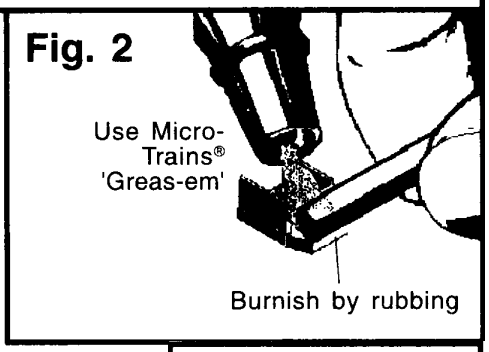
2) Burnish all working surfaces using round end of a small drill bit and Micro-Trains "Greas-em" **(Fig. 2).** Give special attention to areas "A" and "B" **(Fig. 1).**

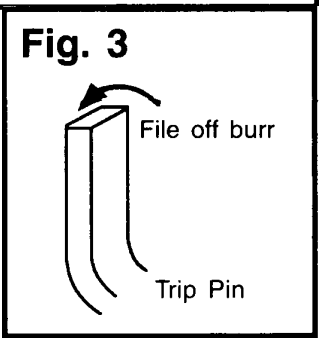
3) File off burr on end of trip pin **(Fig. 3)**, then insert longer end of trip pin into slot in underside of knuckle shank. Push pin in until it protrudes through the top of slot.

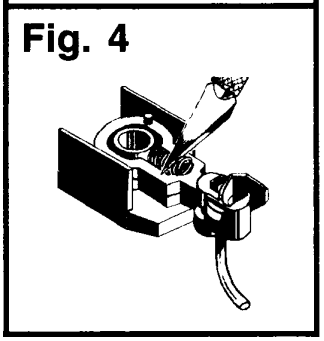
4) Assemble two (2) halves of the coupler. Insert trip pin through loop of the lip shank, then fit two halves together.

5) Using Micro-Trains #702 Assembly Jig "C", place draft gear box with pivot post hole over pivot post of jig **(Fig. 1).** Place assembled coupler over center pivot post of draft gear box with trip pin down and through trip pin slot of assembly jig.









6) Using a knife blade, pick up centering spring by inserting blade between coils near one end. Insert opposite end of spring into slot in front of center pivot post of coupler **(Fig. 4).**

7) Now carefully, so as not to dislodge spring, place draft gear lid on draft gear box. **MAKE SURE** small coupler centering bosses are correctly positioned in centering and closing openings of draft gear box and lid **(Fig. 5).**

8) Hold assembled draft gear box together and test coupler action. Coupler should pivot freely from side to side, and return to center position. If it doesn't, remove draft gear lid and reposition centering spring. With a small soldering iron, just hot enough to melt the plastic, carefully heat seal seams of lid to draft gear box.

9) Mount coupler assembly on exact center and at recommended NMRA coupler centerline height of .216in (5.5mm) above railtop **(Fig. 6).** Area on underbody where coupler mounts up should be .220in (5.6mm) from

the top of rails **(Fig. 11).** For easier, more accurate measuring of coupler centerline height, use Micro-Trains #1055 Coupler Height Gauge.

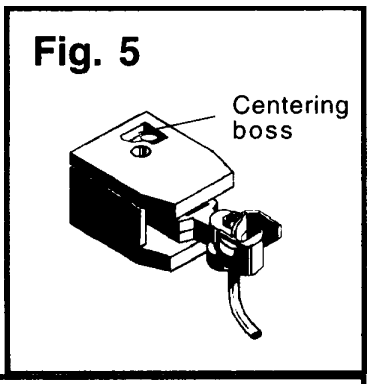
For alternate body mounting applications where mounting up platform is .220in (5.6mm), or mounting down platform is .118in (3.0mm) above the rails follow instructions 10 through 13.

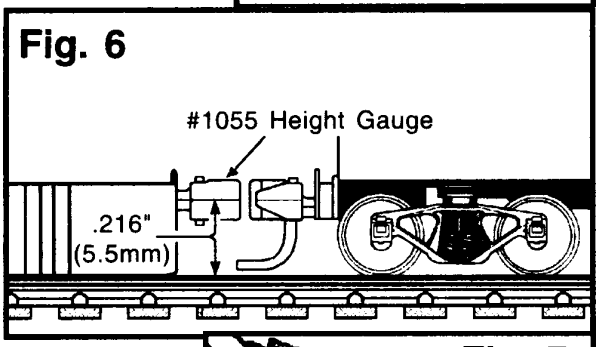
10) Locate and mark position for car body mounting hole on body centerline exactly 13/64in (.205in or 5.2mm) back from end of car for long shank couplers, or 9/64in (.141in or 3.6mm) for short shank couplers.

11) Drill a #62 hole (.038" or .97mm) and tap it for a 00-90 screw. For your convenience use Micro-Trains #1059 Tap and Drill Set.

12) Mount assembled coupler to underbody using the 00-90 screws provided in this kit.

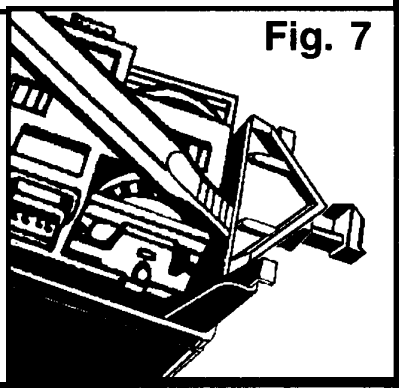
13) Now add a puff of Micro-Trains "Greas-em" into draft gear box, then work coupler back & forth to lubricate and burnish working parts.



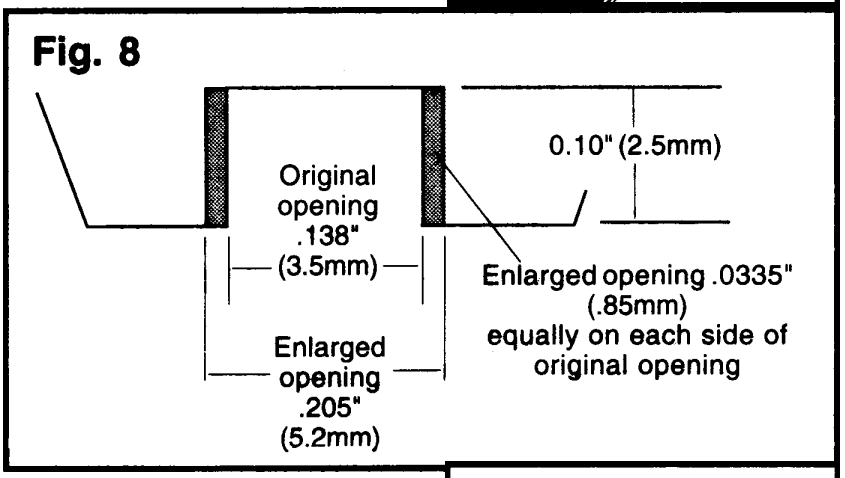


FOR KATO GE C44-9W LOCOMOTIVES WITH BODY MOUNTED PILOT, and SIMILARLY MOUNTED COUPLERS:

Dislodge coupler by prying up pilot draft gear clip with a small screwdriver wedged between plastic clip and power truck **(Fig. 9).** Remove coupler retaining spring and Rapido type coupler, and discard. Assemble #2001 coupler according to instructions, steps 1 thru 8, and insert into pilot opening so coupler mounting hole is even with the center hole which receives draft gear clip.



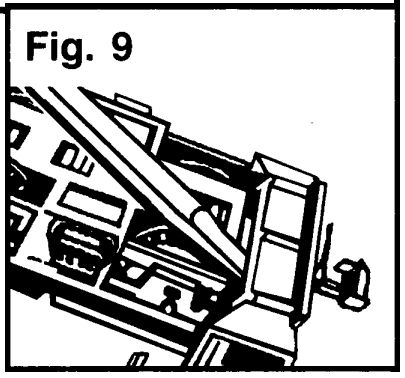
Reinstall plastic draft gear clip placing coupler center post through draft gear box and push down to snap into place **(Fig. 10).** Repeat this process on opposite end. *For new Kato locomotives, coupler will automatically be at correct NMRA centerline height of .216in (5.5mm).*



TESTING:

A) Test coupler for proper centering action. Coupler should move freely from side to side, in and out, always returning to center position. If it doesn't, disassemble and check spring for proper centering, damage, or improper seating. Correct and add a puff of Micro-Trains "Greas-em", and work couplers back and forth to lubricate and burnish parts. **DO NOT USE OIL.**

B) Place car on track and check coupler height using Micro-Trains #1055 Coupler Height Gauge **(Fig. 11).**



C) Check trip pin height with Micro-Trains #1056 Trip Pin Height Gauge **(Fig. 11).** Lay gauge across rails and roll trip pin up to it. Pin should just clear gauge, but not be so low it fouls on turnouts and crossover rails. If trip pin is too short or long, adjust by pulling or pushing up or down in coupler shank.

D) If couplers cross the wrong way over uncoupler, locking closed instead of open, adjust trip pin angle. Trip pin should line up with knuckle part of coupler **(Fig. 12).**

E) Remove trip pin by carefully pulling straight down while holding coupler knuckle.

F) Twist pin top so it angles outward slightly more, then re-install. **DO NOT bend or twist trip pin while in coupler.**

Fig. 10

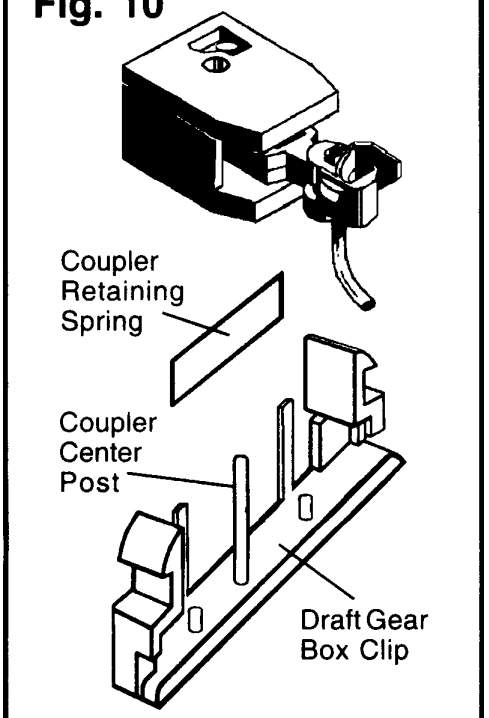


Fig. 11

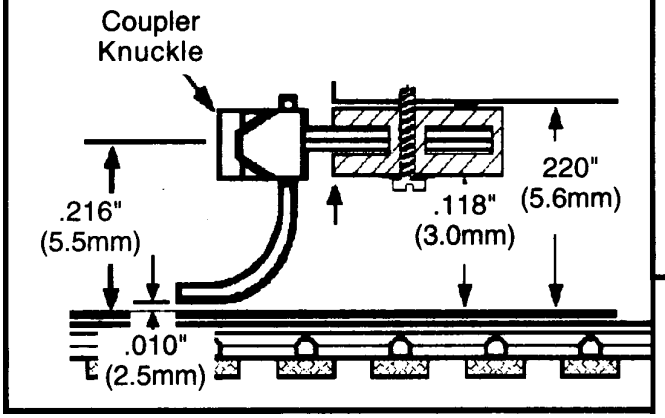


Fig. 12