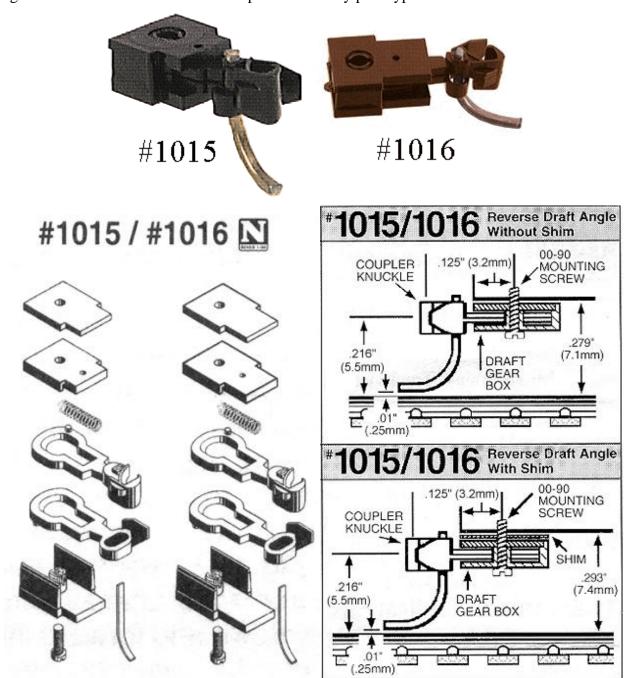
Micro-Trains #1015 short shank and #1016 medium shank couplers

The #1015 and #1016 are Micro-Trains' standard body-mount coupler as well as used for adaption of certain Atlas and Kato engines with body mount couplers. #1015 with short shank is used for large radius track curves as cars are coupled with nearly prototypical distance between them.



#1015 Short Shank Coupler, assembly instructions

THE 1015-10 KIT CONTAINS: 20 #1015 coupler knuckle shanks, 20 #1015 coupler lip shanks, 20 #1015 snap-together draft gear boxes and lids, 20 #1015 shims, 20 centering springs, 20 00-90 screws, and 20 trip pins (enough parts to make 10 pr. #1015 couplers).

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

PREPARATION: While the coupler parts remain on the sprue, burnish all working surfaces of draft gear box, lid, and coupler halves using round end of a small drill bit and Micro-Trains "Greasem" to lubricate them. **DO NOT USE OIL (Fig. 2).**

1) Determine coupler mounting platform height of model using Micro-Trains #1054 Adjustable Height Gauge.

- 2) Choose coupler option best suited for your application from Fig. 7 and 8 (with or without shim).
- **3**) If necessary, modify your model's mounting platform height to match that of the coupler chosen by shimming or removing material from mounting platform of model.
- 4) Remove any burrs on the long end of trip pin and align this end with slot in underside of knuckle shank (**Fig. 7**). Carefully push pin into slot until the pin is visible coming through the top side of slot.
- 5) Assemble two (2) halves of the coupler shank, by inserting the trip pin, now in knuckle shank, through elongated slot in lip shank. The two (2) halves then fit together (**Fig. 3**).
- 6) Using Micro-Trains #702 Assembly Jig, place draft gear box with pivot post hole over pin in jig. Using Micro-Trains #1020 Coupler Tweezers, place assembled coupler shanks over center pivot post of draft gear box with trip pin either facing down or up (coupler will assemble either way and be at the same height).
- 7) Using a sharp pointed hobby knife, pick up a coiled centering spring by inserting blade between coils at one end of spring. Insert into slot in front of center pivot post (**Fig. 4**).
- 8) Now carefully, so as not to dislodge spring, place draft gear lid over assembly (**Fig. 5**). Make sure the coupler's small centering bosses are correctly positioned in the centering and closing openings of draft gear box and lid and press lid down until it snaps into place.
- 9) Test coupler action. Coupler should pivot from side to side easily, and return to center position.

If the coupler fails to perform properly, remove draft gear lid and make certain the centering spring did not dislodge from position while assembling.

10) After assembling, add a puff of Micro-Trains "Greas-em" into the draft gear box and work coupler back and forth within the box to lubricate and burnish it.

SHIM Fig. 1 DRAFT **GEAR LID** CENTERING CENTERING: SPRING & CLOSING BOSS KNUCKLE SPRING SHANK SLOT CENTERING & CLOSING BOSS DRAFT SHANK **GEAR** BOX TRIP MOUNTING PIN SCREW ASSEMBLED BURNISH COUPLER SHANK BY RUBBING Fig. 5 Fia. 4 Fig. 6 LINE UP TRIP PIN

WITH COUPLER

KNUCKLE

MOUNTING PREPARATION: With equipment that has Rapido couplers mounted on the power trucks, remove the coupler mount, carefully, with a jewelers saw or sharp hobby knife (NOTE: Gut off only the draft gear mounting).

ASSEMBLY: For #1015 FLUSH END MOUNTING OF SHORT SHANK COUPLERS FOR LONG RADII TRACK CURVES.

- 1) Drill a #62 (.038in or 1.0mm) diameter coupler mounting hole on centerline of car or locomotive underframe exactly 1/8in (.125in or 3.2mm) back from end of car or locomotive (**Fig. 7 & 8**).
- **2**) Tap hole carefully with 00-90 tap. For your convenience, Micro-Trains offers the #1059 Tap & Drill Package.
- 3) Mount coupler with 00-90 screw provided. **DO NOT OVER TIGHTEN.**

4) If mounting onto covered hopper, use countersunk flathead 00-90 screw provided.

COUPLER ADAPTION FOR ATLAS, LIFE-LIKE, AND KATO LOCOMOTIVES WITH BODY MOUNTED PILOT, AND SIMILARLY MOUNTED COUPLERS.

- 1) To dislodge coupler, pry up pilot draft gear clip with a small screwdriver wedged between plastic clip and power truck (**Fig. 9**). Remove and discard bronze leaf spring and coupler.
- 2) Determine coupler mounting height using Micro-Trains #1054 Adjustable Height Gauge.
- 3) Assemble Standard #1015 coupler and use shim according to mounting height obtained from *Step 2* above. Insert assembled coupler into pilot opening and use shim.

Note: Since the overall thickness of the assembled draft gear box is less than the pilot opening, the shim will be needed to compensate for the extra space and so the draft gear clip will hold the coupler snugly in place. Shim maybe placed on top (as shown in Fig. 1) if mounting pad height is .293in (7.4mm), or on the bottom if mounting pad height is .279in (7.1mm) above rail top. For new Atlas, Kato, and Life-Like locomotives, coupler will automatically be at the correct NMRA centerline height of .216in or 5.5mm.

- **4**) Reinstall plastic clip with flat side against back side of pilot, and push down to snap in place.
- 5) Repeat this process on opposite end.

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. 7 & 8**).
- **C**) If coupler sets too low or high, adjust height by shimming adaptor either up or down.
- **D)** Check trip pin height with Micro-Trains #1056 Trip Pin Height Gauge (**Fig. 7 & 8**). 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.
- **E)** 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. 6**).
- F) Remove trip pin by carefully pulling straight down while holding coupler knuckle.
- G) Twist pin top so it angles outward slightly more, then reinstall. DO NOT bend or twist trip pin while in coupler.

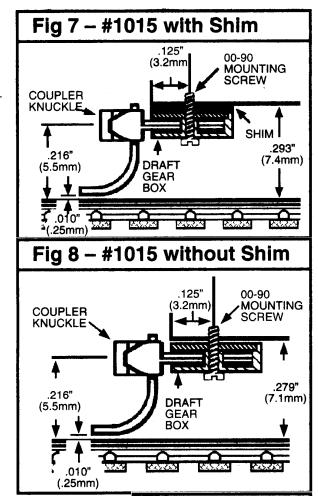


Fig. 9