

### 942-104 MANUAL UNCOUPLER MOUNTING INSTRUCTIONS

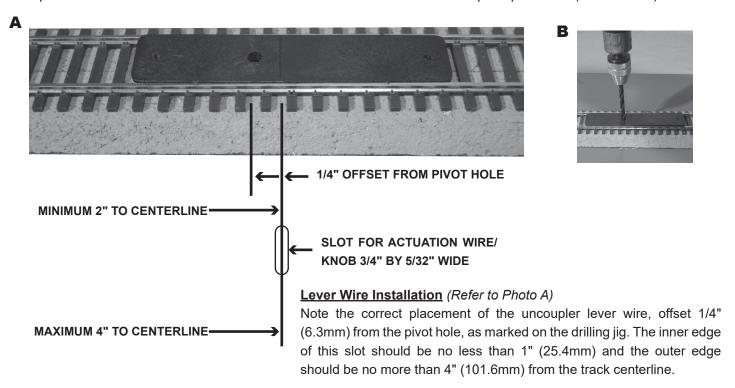
Thanks for purchasing this Walthers Layout Control System Manual Uncoupler. Please take a few minutes to read these instructions and study the drawings before starting your installation.

Tools Needed (sold separately): 5/32" (3.9mm) Drill Bit 1/16" (1.5mm) Drill Bit

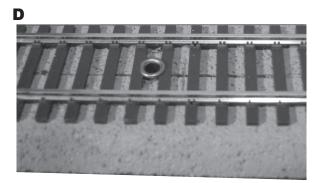
#### On Your Layout

Locate your uncoupler on a straight section of track, the same length as the longest cars you'll be operating. Allow at least 3" (7.6cm) to the centerline/s of any adjacent track/s to allow space for the actuation knob.

Place the included drilling jig between the rails, with the 5/32" (3.9mm) pivot hole between two ties. When drilling, be sure all holes are exactly vertical. Drill the 5/32" hole for the magnet holder pivot bearing. Drill two 1/16" (1.5mm) mounting holes for the uncoupler mechanism. PLEASE NOTE: If track and subroadbed are too thick for easy drilling, first drill the 5/32" hole all the way through. Place the jig underneath your benchwork, using the 5/32" hole to align it; make sure the two mechanism mounting holes are parallel with the track above; drill the two 1/16" holes. You may wish to partially open the pivot hole from underneath for easier installation of the mechanism and square pivot shaft (See Photo B).



Make a slot in your benchwork for the uncoupler wire as shown,  $3/4 \times 5/32$ " (19 x 3.9mm) - this can be done by first drilling a series of 5/32" holes, and removing the material between with a file or rotary tool.

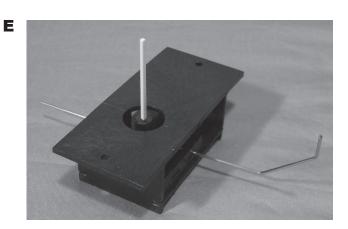


### Magnet Holder Bearings (See Photo D)

Test fit the magnet holder bearing into the 5/32" pivot hole; if the bearing doesn't fit easily, carefully ream the pivot hole and recheck the fit. Test fit the magnet holder in the bearing; the top should be flush with the top of the rails on Code 83 track. For Code 100, insert the Spacer Washer (#103-4) between the bearing and the magnet holder. If the magnet holder is above the rails, shave down the adjacent ties until it's flush.

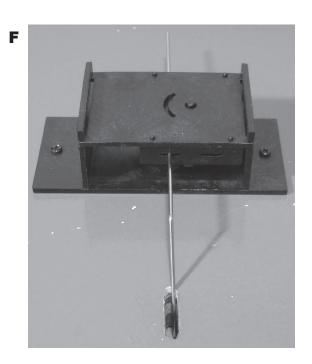


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#### Shaft (See Photo E)

Press fit the square shaft into the mechanism (leave at full length for now); it should be a light press fit, if not, carefully shave the sides/ corners of the shaft. Check that the magnet holder on the shaft slides easily on the shaft; this should be a light press fit with no "slop" as the magnet turns, and won't ride up the shaft as cars pass by

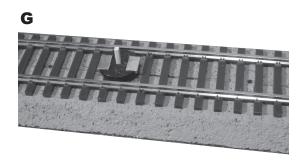


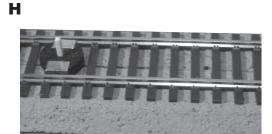
#### Mounting - See Photo F

The mechanism is now ready to mount underneath the pivot hole. Adjust the actuation wire shaft so the mechanism has a full range of motion - check that the coupling pin moves back and forth in the curved slot in the bottom of the mechanism. An extra coupling pin (#104-3) is included if it gets damaged while adjusting the actuation. Once satisfied with the operation of the mechanism, secure in place with the 2 supplied screws.

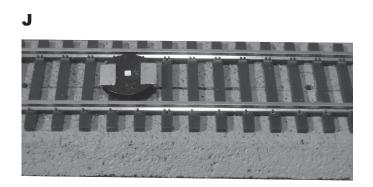


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From the track side, slide the magnet holder down on the square shaft - use the spacer washer for code 100 track. Check for easy operation, there shouldn't be any binding in the "on" (magnets next to track) or "off" (magnets in the middle of the track) positions. (See Photos H & G)



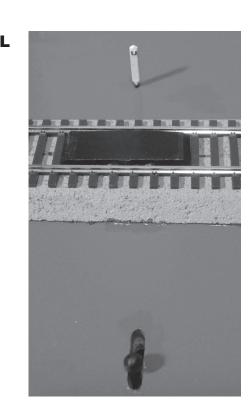
Once the assembly is working freely and the magnet holder is flush (or slightly below) the rails, the excess shaft material can be cut off. (See Photo J)



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#### Cover Spacers (See Photo K)

Choose the correct height cover spacers - part #103-5 for code 83 track or part #103-6 for code 100 track - and glue in place between the rails using a contact type adhesive. NOTE: The spacing may be different depending on the brand of track you're using; photo K shows Walthers Code 83 Track.



#### Final Installation (See Photo L)

Note the cut lines about 1/16" (1.5mm) from the inside ramped edges of the cover spacers; cut the magnet cover to fit on top of the two cover spacers. Be sure the cover isn't more than 1/32" (0.7mm) above the rails so it won't catch trip pins on your cars and locos. NOTE: The ramps are made from engineering plastic, so secure them in place with a contact-type adhesive.

Cut the steel actuation shaft to the desired height; wear safety glasses and keep your hands away from the work - with a cut-off disc in a rotary tool or hard steel cutting pliers. Glue knob (#104-4) to wire end. If desired, a marking post is provided you can place next to the uncoupler pivot point; paint if desired, and drill a 1/16" (1.5mm) mounting hole for the post.

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For assistance with missing or damaged parts, please visit trains.walthers.com/parts-warranty, call 1-800-4-TRAINS (1-800-487-2467) M-F from 8:00 AM to 4:30 PM CT, or write to us at Wm. K. Walthers, Inc. 5601 W. Florist Ave, Milwaukee, WI 53218. Please be aware all inquiries are handled in the order received.