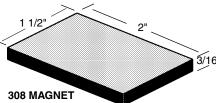
PERMANENT MAGNE-MATIC® UNDER THE TIE **DELAYED UNCOUPLER** 308

Contains: 1ea #308 Magnetic Uncoupler and 1ea Steel Intensifier Plate.

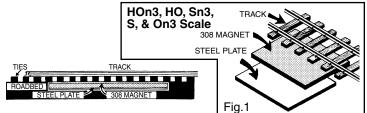
This Uncoupler with its strong magnetic force can be concealed under ties up to 1/16" thick, permitting a completely hidden uncoupling device. The magnet may be glued



or spiked into without damage and can be ballasted over as long as the ballast material is 3/16" more barrent in may be installed on a curve, but if you have body mounted couplers on cars with a long overhang, the couplers will not be centered over the Uncoupler

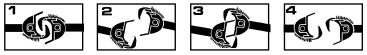
and may present problems. If your cars have truck mounted couplers, you should experience no difficulty.

The #308 magnet is 3/16" thick, by 1 1/2" wide, by 2" long. Place it under the track so that the 2" length is parallel to the rails. (fig. 1). No matter which gauge



or scale of track you are using, always center the magnet to the centerline between the rails. The steel intensifier plate is glued down first and the magnet is then glued to it. The top of the magnet should be the same height as the surrounding roadbed. Now lay your track over it, making sure that the magnet will be centered under it

3 RAIL HO DUAL GAGE TRACK: The #308 is not recommended for use with 3 rail HO dual gage track.



FOR DELAYED UNCOUPLING: 1) Stop with the couplers over an uncoupler and back up slightly with the couplers still over the uncoupler, allowing slack to occur between couplers. 2) Pull forward slightly. Couplers are now in the delayed position. 3) Back up, pushing the car(s) to the desired location. Do not permit slack to develop between couplers. 4) Pull forward, leaving the car(s) where desired. Couplers automatically return to normal coupling position.

TO COUPLE: Simply push cars together until knuckles bypass each other and lock into position

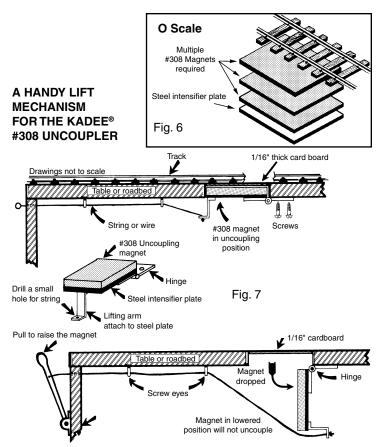
Remember: Uncoupling will only occur when there is slack between two couplers while over the uncoupling magnet. If you wish to pass over the Uncoupler without uncoupling, keep a steady pull on all cars so "no" slack will occur between the couplers.

Typically with all our permanent magnet Uncouplers and particularly with the powerful #308 Uncoupler, any car having steel axles on the trucks will want to be drawn in and held over the magnet. To test for steel axles or wheels, just place them on the track near the magnet and if they are steel, they will be drawn in by the magnet. All Kadee® trucks and wheelsets are "non-magnetic". FOR USE WITH O SCALE:

Because of the thicker ties and higher rail in O-scale, it will be necessary to use 2 or 3 magnets stacked together and one steel intensifier plate on the bottom of the stack (fig. 6). On some track you may need to trim the bottom of the ties to fit the magnet(s) closer to the rails. Be sure the magnets are centered under the rails.

Also, for two rail track between the rails uncoupling, use Kadee® #811 O-Scale Uncoupler and for three rail O-Scale use our #809 Uncoupler.

This lift mechanism can be installed anywhere in your layout and allows you to lower the magnetic Uncoupler, thus taking it out of operation when you stop



cars over the Uncoupler but do not wish uncoupling to occur. With a certain amount of modeling skills and innovation modelers can alter this design to work on various styles of layouts. TO BUILD:

Take the steel intensifier plate that goes under the magnet and by soldering or use small sheet metal screws, attach a small hinge the same width as the magnet 1 1/2". On the opposite end of the steel plate, attach a lift arm (fig. 7). This arm can be attached in the same manner as the hinge. Next , drill a small hole in the bottom lip of the lifting arm to attach a string or wire. The height of the arm should be about 1 inch when attached. The size and shape of the arm determines how far the Uncoupler will come up when you pull the wire. You might have to vary the height of the arm depending on the thickness of your table or roadbed. The magnet does not have to be glued to the steel plate as it will hold itself by the magnetic force. If screws were used to attach the hinge and arm and they protrude through the steel plate, you may file them off or screw them into the magnet.

TO MOUNT: Cut out a section of your table or road bed all the way through to the ties, make the hole a little larger over all then the #308 magnet itself. Next, glue a piece of cardboard no thicker than 1/16" (the thinner the better for HO track) to the under side of the ties to cover the hole. You may then paint or ballast over the cardboard. Remember, do not make this cover thicker than 1/16" or the magnet will not work. Attach the other end of the hinge to the edge of the hole shown in fig 7. If the road bed is thinner than the magnet & hinge combination, you may have to shim between the hinge and the bottom of the roadbed. You want the magnet to come up level and touch the cardboard when in the raised position. If the roadbed is thicker than the Uncoupler, you will have to recess the hinge where it attaches to the roadbed. After you have the magnet properly hinged and working then attach a string or pliable wire to the lifting arm (fishing line is good). Run the string through the screw eves or staples over the edge of your layout, make sure it pulls freely and releases when you let go of it. If you wish to add a lever or some other type of pull that will hold the magnet up, you will be able to set it and not have to hold onto the string. We show a simple lever type pull (fig 8). Just be sure that it raises the magnet completely up and drops it all the way down when released.



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