778 / 1778 Ins.

COUPLER CONVERSION FOR USA Trains Ultimate Series Bi Level Auto Carriers

This double-swing coupler conversion allows the couplers to function on corners tighter than the car can normally navigate through.

Includes: 2 ea. couplers, 2 ea. draft gear boxes, 2 each coupler arms, 2 ea. #2x3/8" screws, 2 ea. #2x3/16" screws, 2 each coupler arm centering springs, 5 ea. coupler centering springs.

ASSEMBLY

IMPORTANT: Before assembling remove any burrs or flash (if any) from all parts. Burnish (Polish) all friction bearing surfaces with #231 Greas-em dry graphite lubricant. Add a "puff" of our #231 Greas-em into the draft gear box. Make sure the coupler flexes back and forth freely.

To assemble the coupler follow the illustrations shown in Fig. 1. Make sure the gear box lid is tightly secured with the #2x3/8" screw.

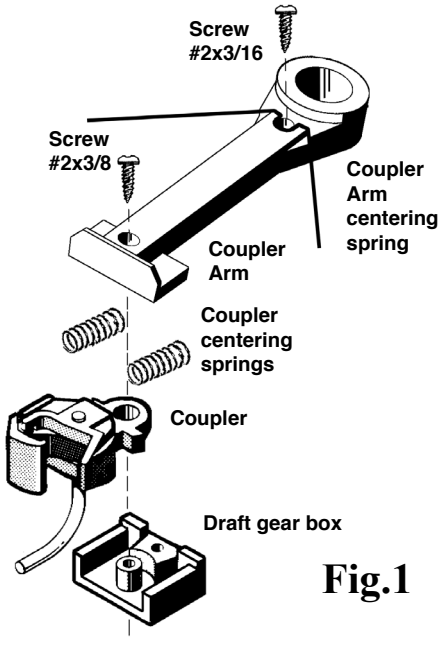


Fig.1

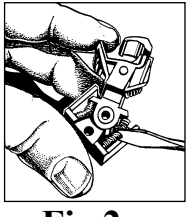


Fig.2

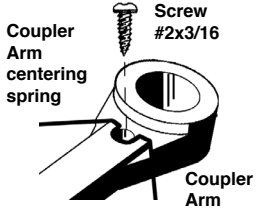


Fig.3

Refer to Fig. 2 for inserting coupler centering springs in the gearbox and Fig. 3 attaching the Coupler Arm Centering Spring to the Coupler Arm with the provided #2x3/16" screw.

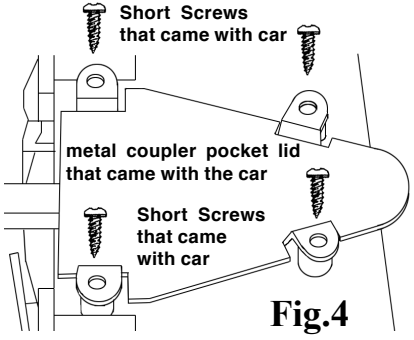


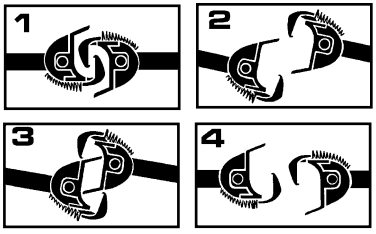
Fig.4

MOUNTING

1. Remove the USA Trains plastic coupler gearbox that is attached with 4 long screws, you will not be using this plastic coupler gearbox or long screws. Under the USA Trains plastic coupler box there is a cast on body mount height coupler pocket. You will use the cast on body mount height coupler pocket with the metal lid and the short gearbox screws that came with the car for mounting the Kadee coupler arm to the car. Place the Kadee coupler arm over the post in the body mount height coupler pocket making sure the coupler arm centering springs are nested in the coupler pocket, use the metal coupler pocket lid with the lid screw ears down (towards track) over cast on coupler pocket attaching with the 4 short screws that came with the car Fig. 4. Repeat on the other end of the car.

Please Note: This car is extremely long, make sure the test track is a perfectly flat piece of track to check coupler height with a Kadee Coupler Height Gauge, any slight wave/bump/dip in the test track will make checking the coupler height look to be off.

Use Kadee® Greas-em, the dry lubricant recommended for use with all Kadee® Magne-Matic® couplers. Grease-em will not attract the dirt and dust that gums up the inside of couplers like oil, grease or other lubricants will. Use our (#829 or 1929 #1-Scale) or (#880 or 980 G-Scale) Coupler Height Gauge to check for the correct coupler height and trip pin clearance. The N.M.R.A. standard for coupler height is the centerline of coupler is 1 1/16" (1.0625") for #1-Scale & 1 1/8" (1.125") G-Scale.



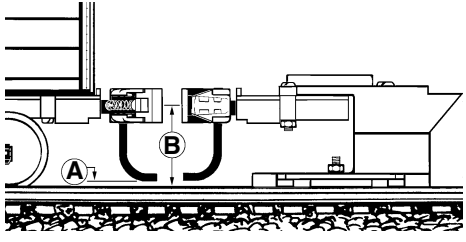
NOTE: If couplers swing open too far when uncoupling, lower magnet slightly to correct.

COUPLER OPERATION
TO COUPLE -
Simply push cars together until knuckles bypass each other and lock into position.

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.

For Delayed Action Uncoupling use our #842 Uncoupler or #844 Portable Uncoupler.

Kadee® coupler conversion list & coupler conversions are on the Kadee® web site for your connivance.
www.kadee.com/convpl



(A) Trip pin clearance always .125" (1/8").
(B) Railtop to coupler centerline always (#1 Scale 1.0625" (1 1/16")) (G Scale 1.125" (1 1/8")).

MAGNE-MATIC®

⚠ WARNING:
CHOKING HAZARD - Small Parts
Not for children under 14 years.

Made & Assembled Entirely in the U.S.A.

Kadee® Quality Products Co.
673 Avenue C,
White City, OR 97503-1078
083023