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The Coupler People®

Cushion 50 Foot PS-1 Box Car Assembly Instructions

Coupler assembly:

Push the Hydrocushion coupler gearbox to one direction moving the gearbox clear of the underframe so there is enough room to assemble the coupler shown in fig1. (The functioning hydrocushion feature will try to pull coupler gearbox back, you will have to hold it clear of the underframe.) Place the coupler in the gearbox then using a spring pick insert the spring behind the coupler post, remove the spring pic holding the spring in place with your finger placing the lid on the gearbox and secure lid with screw. Repeat for both coupler gearbox.

Body assembly:

Place the retainer valve and line on the "B" end of the body. Start with the center pin on the valve line; press it in just part of the way. Then, while keeping the line straight, press in the other two pins just part way. Finish by pressing in the center pin and two other pins all the way.

Carefully cut the side ladders from their sprues. Place the ladder with the offset at the top. Press in the top pegs first until the curved end of the runner touches the body surface. Press directly on top of the pegs only. Now, press in the remaining pegs to match the top ones. Note: The pegs have a taper and should be pressed in until only the straight portion is showing. "Helpful Hint:" set all the pegs in place, then turn the body over on a flat surface. Press down gently to apply equal pressure to all the pins.

Carefully cut the end ladders from their sprues. Fit them into their holes and press in the top pegs until the curved tips of the runners touch the body surface. Press in the remaining pegs until they match the top. Be sure the runners are even and level, and press only on the top of the pegs.

Lay stirrups in place on underframe before attaching underframe to shell body.

Body to Chassis: Note the orientation of the brake wheel end of the body ("B" end) to the chassis. The two rods point to the B end and the air tank and AB valve are opposite. The cone shaped end of the piston points to the B end. Make sure the tabs of the airline are in their notches on the floor (they cannot be put in place after the body is attached). Slightly spread the body sides and fit the chassis in place. It should snap in place and be even with the bottom edge of the body. The small tabs on the sides of the floor will be recessed into slots on the inside of the body.

Slide the rod from the bell crank between the coupler box and the floor runner under the truck into the slot in the chassis bolster cross beam. Turn it over (which hooks the "L" end into the slot) to bring the square tab up to the slot in the floor. Hook the small lip of the tab up into the slot. The tab should fit flush with the bottom of the floor. Slightly twist the brake wheel rod to bring the gear housing up to the rectangular hole. Press in the housing until it snaps into the hole. Then press the pin at the center of the rod into its place.

Place the brake step into its mounting holes and press in the pins until the brackets touch the body surface. This captures the retainer valve line and the brake wheel rod and chain.

Make sure the rod on the side of the draft gearbox sets inside of the oval of the attached cut lever.

Turn the brake wheel end (the B end) of the body toward you. Place the roof walk along the top of the car body, orienting the notch in the pegs to your right. Starting at the B end, run your finger down the roof walk, pressing evenly so the roof walk does not get bumpy. The pegs should snap into place (the pegs will not "snap" in if they are not positioned correctly). Carefully fit the end bracket pins into their holes and press them in until the brackets are against the surface. Use a small flat tool or your finger nail to apply the pressure.

The sliding doors are installed by inserting them through the door openings at an angle of about 30 degrees. Hook the top guide bar behind the right side of the door opening. The clip on the bottom left corner of the door can now be fitted into the lower left corner of the opening. Rotate the door counterclockwise until it snaps into place. The door should slide easily without binding.

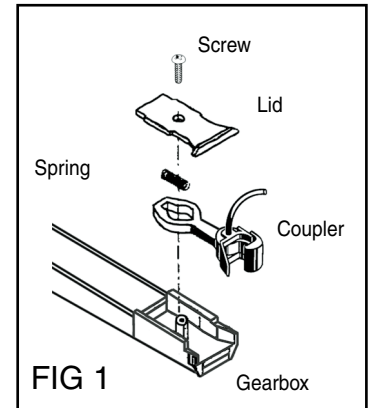
Test the car using our #205 or #206 coupler height gauges to check for the correct coupler height.

Contents

- 1 ea. Body (Shell)
- 1 ea. Die Cast Metal Floor Assembly: Plastic Underframe , Wheelsets, Bolster, Side frames, Coil Springs, Clipped on Brake Pads (Shoes)
- 2 ea. Couplers, centering spring, lid and screw.
- 1 ea. Roof Walk (running Board) If applicable.
- 2 ea. Doors
- 1 ea. Brake Wheel Assembly: Hand Wheel, Gear Housing-Bell Crank (Fulcrum)-Rod
- 1 ea. Brake Step (Platform)
- 1 ea. Brake Rigging (one piece): AB Valve, Cylinder, Slack adjuster, Levers, and Rods
- 2 ea. Left End Ladders
- 2 ea. Right End Ladders
- 2 ea. Left Side Ladders
- 2 ea. Right Side Ladders

Helpful Tools

- Kadee #1020 Tweezers
- Kadee #231 Grease-em Dry Graphite Lubricant
- Kadee #241 Dual Tool - Manual Uncoupling Tool & Built In Spring Pic
- Small Phillips Screwdriver
- Sharp Nippers
- Sharp Hobby Knife or New Single edge Razor Blade
- Common Tweezers (Your favorite Hobby Tweezers)
- Magnifying Glass, Optivisor, etc.



Hydrocushion PS-1

