

RS-3 INSTRUCTIONS

Published by **S Helper Service**, 2 Roberts Rd. New Brunswick, NJ 08901-9933 © July 1991

Thank you for purchasing our RS-3's. We feel that the **American Models** drive is the best diesel drive in any scale. If you have any questions about our RS-3s, please call us at **1-908-545-0303**.

1. In addition to the frame & body assembly, the RS-3 diesel should have the following parts; a sprue with handrails, a parts bag that includes couplers (either scale or hi-rail), coupler mounting screws (2), body mounting screws (4), horn (1) brake wheel (1), 3/64" drill bit (1), a set of windows (4) with lenses (2). If you are missing any of these parts, contact us.

2. Remove the body from the frame by spreading the side sill where the pin from the frame protrudes (check the drawings on page 2 & 3 of the instructions). Once both pins are free, lift body off the frame.

3. The hi-rail versions have the couplers already installed. For the scale version either the American Models or the Kadee #5 will use the 2-56 screw provided. These are self tap screws and tapping is not necessary, but would make it easier to thread.

For use of the Kadee #802 coupler, use the 0-80 screws provided with the Kadee couplers. First, clean the holes with the 3/64" drill that is provided. Once the coupler is assembled, slide a screw through the center hole and into the center hole of the coupler pad. this is used just to line up the two smaller holes for the 0-80 screw. Start one of the screws into the side hole of the coupler pad. Once you start to cut a thread, stop and start the screw on the opposite side of the coupler. Tighten this screw all the way, then tighten the screw on the other side. A third screw could be placed at the back of the coupler, but that may be unnecessary. Remove the center screw. The extra length of

0-80 screw that is past the coupler pad can be removed by grabbing all of it at the base and gently rocking it back and forth until it snaps off. Do not use a file but a sanding block or a small sharpening stone to smooth the ends of the screw.

4. For ease of assembly, use the 3/64" drill bit and while being careful not to scratch the body, clean any flash out of all holes for the long and short hood railings. **DO NOT CLEAN THE HOLES IN THE CAB OR BY THE STEPS!** These holes have been pre-cleaned by S Helper Service. They are smaller and are 1/32" (0.031"). If you use the drill provided the holes will be too big and on the steps you may drill through the side of the handrail hole.

5. Install the front and back cab windows first. They will pop in. Then do the side with 2 panes and last the side with 3 panes. The 3 pane window may need to be trimmed 1/32" where it meets the back windows. It is important to be careful to not scratch the window surface. Also, if you use glue or cement on the windows do not get

any on the portion that can be seen from the outside because it will chemically mar the windows. **DO NOT USE SUPER GLUE AS THE FUMES WILL FOG THE WINDOWS.**

6. The lenses can be pushed into the short and long hood opening for the headlight. A drop of cement applied from the inside should hold these in place. **DO NOT USE SUPER GLUE AS THE FUMES WILL FOG THE LENS.**

7. The handrails can be inserted into the appropriate holes. Check the drawings on page 2 & 3 of the instructions to be sure which is the Right and Left handrail. Use a small needle nose plier to carefully push the stanchion pins into the holes along the walkway (see fig #1). If too much force is used, the stanchion pins can be broken off. This is why it is important to clean the flash that may remain in the holes.

8. Once all the hand railing is in place, check to make sure that the stanchion are not twisted but square to the body. The best way to secure these to the body is to use a small soldering iron (25 watt pencil style)

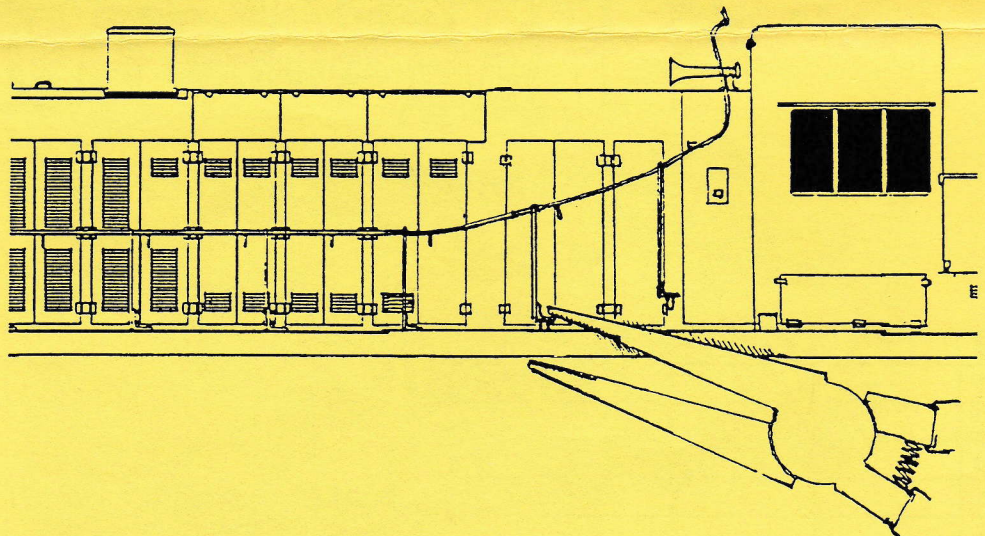
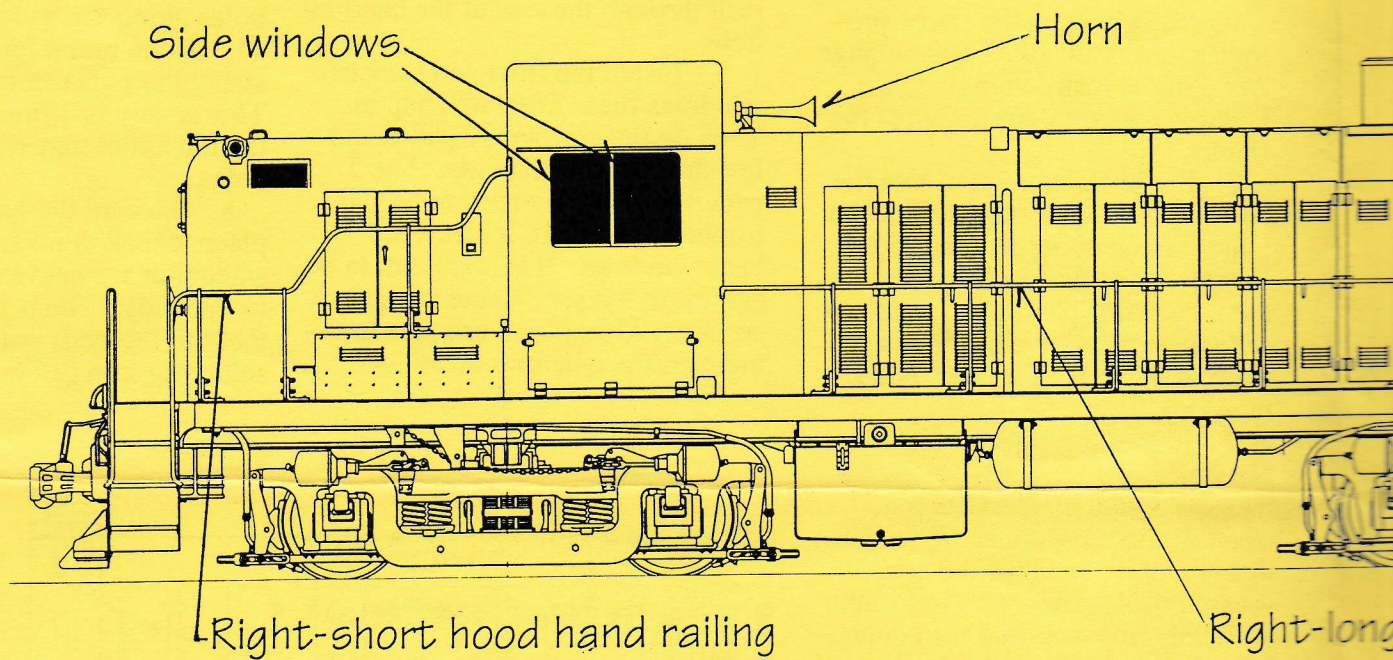
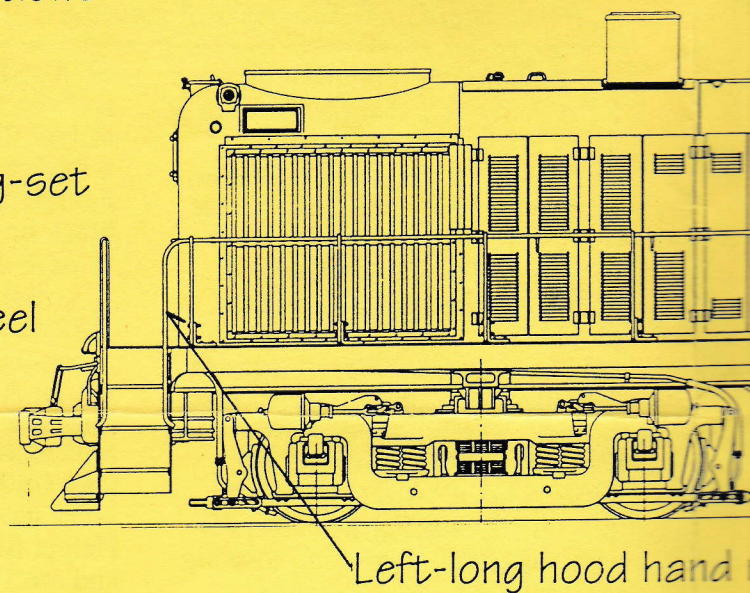
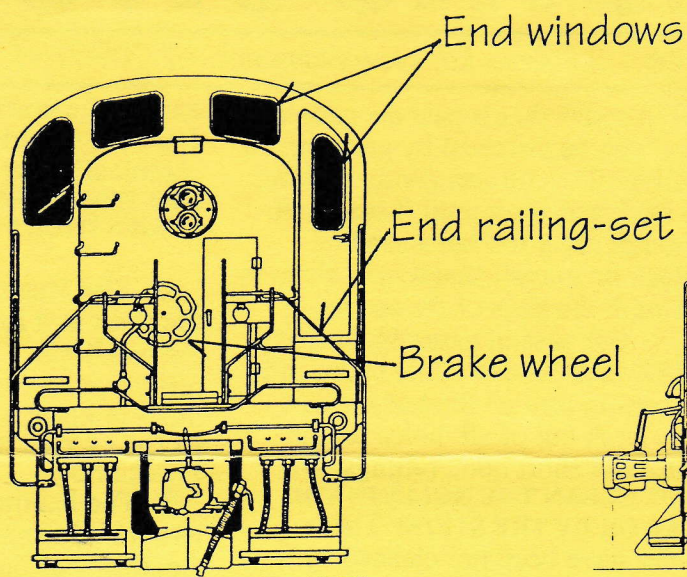
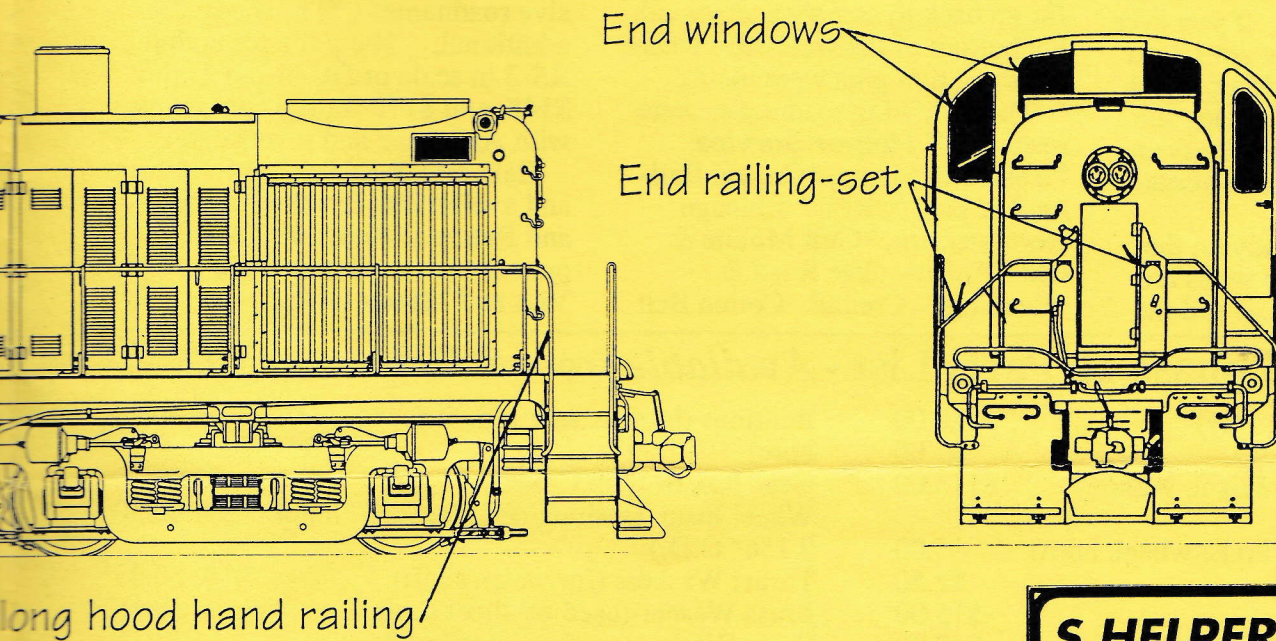
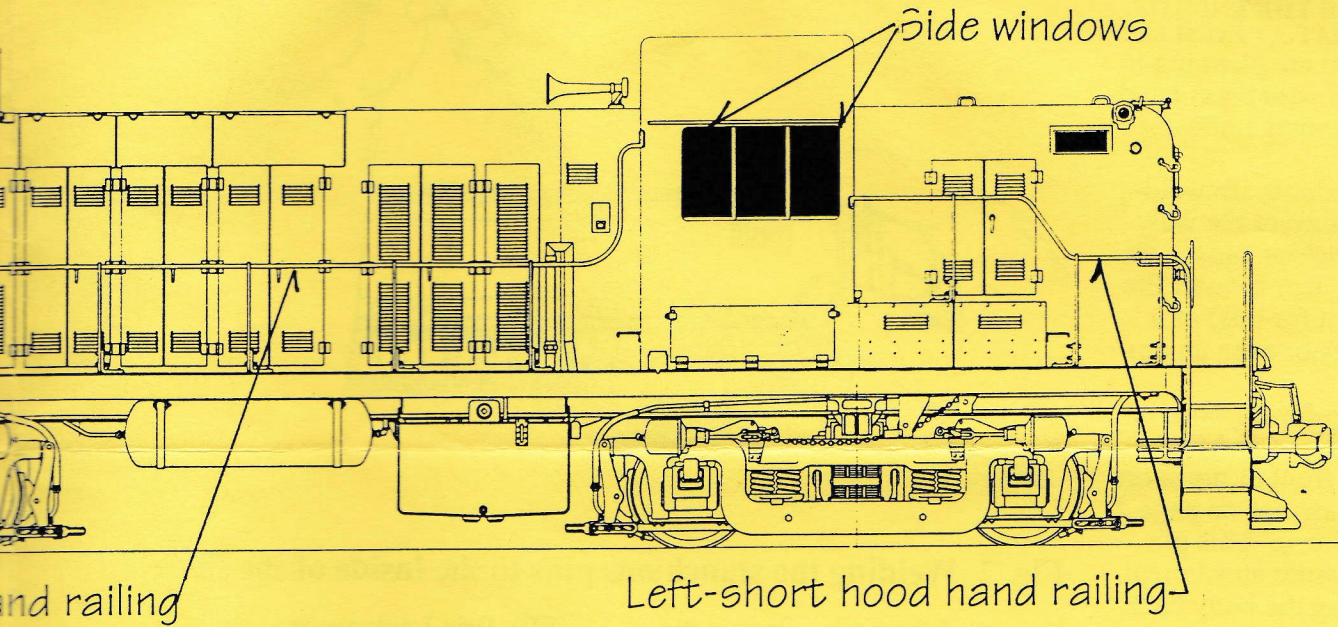


Fig. 1 Using a pair of needle nose plies to insert stanchions



#		COLOR	Scale Coat #
1			
2			
3			
4			
5			
6			

Note: Remove flash from all stachion pin holes on



on the walkway with the 3/64" drill provided.

S HELPER SERVICE

2 ROBERTS RD. NEW BRUNSWICK, NJ 08901

PAINTING & LETTERING

Instructions for

ALCO RS-3 phase 1b

Parts Location

DRAWING # RS-14-01

7-1-91

3/16" = 1'

and from the inside of the body, weld the stanchion pins that protrude through the body (see fig #2). Just touch the pins for a second. That should be long enough. **DO NOT TRY TO WELD THE ENDS OF THE RAILINGS THAT ATTACH BY THE STEPS!** If you are planning to upgrade this model with brass hand-rail stanchions, you may not want to weld them.

9. Once the handrails are welded, smooth the bottom of the walkway where the stanchion pins have been melted with either a small file (rifler files are great for this) or a small sanding block or even an emery board.

10. Insert the pin for the horn on the top of the long hood and the brakewheel on the front of the short hood (check the drawings on page 2 & 3 of the instructions). This pin can be welded to assure attachment.

11. Before putting the body back on the frame, make sure that the trucks are not too tight. They should be able to freely move front to back and side to side. If you ever have a problem with any American Models diesel truck tracking, check this. Usually you need to back the screw that attaches the truck assembly to the yolk on the frame about a 1/4 of a turn.

12. As you put the body on the frame, make sure that no wires are crushed between the frame and the

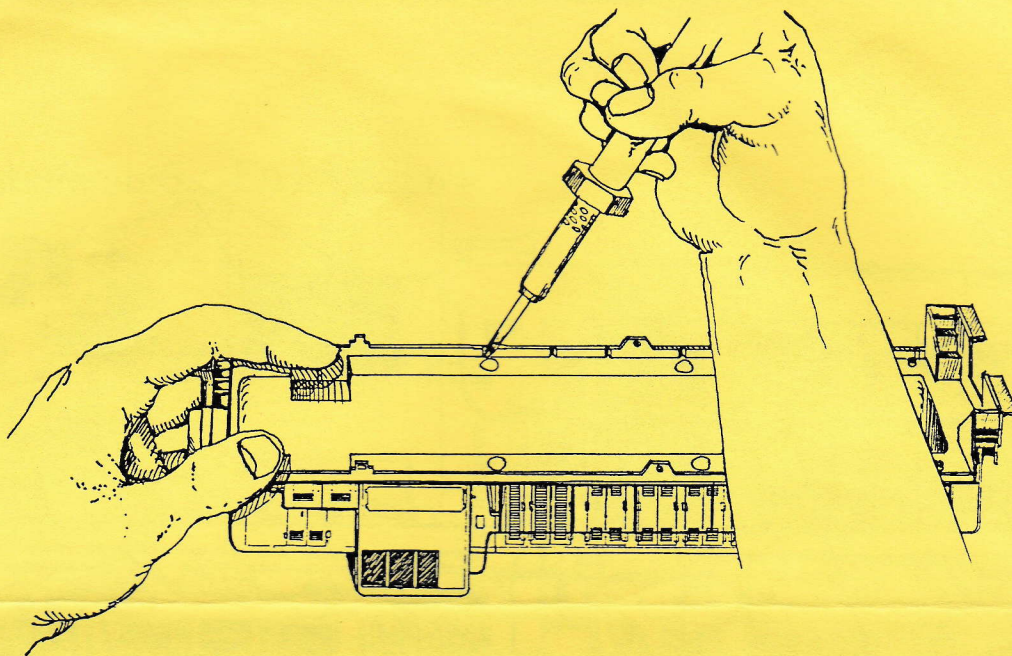


Fig. 2 Welding the stanchions pins to the inside of the side sill.

bottom of the body. Spread the side sill so that the pin is back into the side frame hole. If it will not fit, go back to step #9 and smooth the bottom of the walkways where the stanchion pins were melted.

The following roadnames were made for **S Helper Service**:

*Boston & Maine, *Central Railroad of N.J. (CRP), * Chicago Northwestern, *Gulf Mobile & Ohio, *Milwaukee Road & *Reading Conrail, Cotton Belt

(SP), Erie Lackawanna, Great Northern, New Haven, New York Central, PRR and undec. Exclusive roadnames (*) now cost **\$16** additional. The price for both the RS-3 in scale or DC hi-rail is now \$148, and \$179 for AF compatible with A/C drive and reverse unit.

Call **1-908-545-9306** for prices and availability of pre-assembled and Ready to Run units. Ask for our current newsletter. We accept Visa and Master Cards.

ALCO RS-3 phase 1b Parts List - Available from S Helper Service

Body (sold on exchange only)	\$20.00	Bearings (bronze, sintered, D shaped, 3/32" bore)	\$0.50
Cab	\$7.00	Gear Box Bottom Cover	\$3.00
Power Unit (complete w/ light, without body)	\$115.00	Wheel Insul. Bushing (Delrin, 3/32" hole, 0.156" O.D.)	\$0.50
Detail Parts (fuel tanks, brake wheel, horn)	\$5.00	Thrust Washers (for worm shaft)	\$0.25
Cab Windows (set)	\$2.50	Brass Washer (used on sheel shaft)	\$0.15
Hand Rails	\$15.00	Brass Washer (used on gear box top)	\$0.15
Gear Box (assy w/ sideframes)	\$40.00	Steel Washer (used on gear box top)	\$0.10
Frame	\$20.00	#4 screw (used on gear box top)	\$0.10
Flywheel	\$2.00	#2-56 screw (used on each side of gear box)	\$0.15
Light Socket	\$1.50	Wheel Pick Up Spring (phospor bronze)	\$0.40
Light Bulb (GE #74)	\$1.50	Nylon Screw	\$0.25
Alco side frames (set Of 4)	\$6.00	2-56 Sheet Metal Screw	\$0.05
Worm (steel)	\$3.50	Box	\$2.00
Worm Gear (30 tooth Delrin)	\$3.00	Foam Inserts	\$2.00
Idler Gear (30 tooth Delrin)	\$2.50	Hi-Rail Coupler (pair)	\$1.00
Axel Gear (20 tooth Delrin)	\$2.50	Hi-Rail Coupler Shoulder Screw (each)	\$1.00
Gear Box (tapped holes, no gears, 2 halves)	\$3.75	Wheel Sets (with gear, each)	\$4.00
Wheel (40" machined steel)	\$0.75	Instructions	\$1.00
Wheel axel or worm shaft	\$0.50		