## **BACHMANN SPECTRUM**

PASSENGER AND OBSERVATION CARS

## **#27 FRONT AND REAR COUPLER CONVERSION**

1. Remove the existing screw, cover and coupler, discard coupler.

2. For the front coupler to be mounted in the Bachmann swing coupler box, install a #27 Coupler with the Centering Spring on top and secure with Bachmann lid and screw. See Fig. 3.

3. For the rear coupler you will have to file the existing coupler mounting pad down until it is 1/16" from the underfloor. The pad should be smooth and flat. See Fig.1.

4. Modify the <sup>No</sup>5<sup>®</sup> Draft Gear Box Lid by cutting off the top front lip flush with the top of the Lid surface. Assemble and install the #27 Coupler in the No.5® Box with the Centering Spring on top and the Coupler on bottom. Secure coupler assembly with Bachmann screw. See Fig. 2.

Special Note:

1. The Bachmann Spectrum swing coupler box on passenger cars pivots freely. Bachmann lid However, this allows for considerable play up and down and sideways and may cause coupling misalignment and drooping or cause the coupler trip pins to hang up. Kadee® Quality Products Co. cannot guarantee reliable and consistent performance of its Couplers installed in Bachmann Spectrum swing coupler boxes used on passenger cars.

2. Kadee<sup>®</sup> has designed a #454 Swing Bracket that can be installed on Bachmann Spectrum passenger cars. This will allow negotiation of 18" radius S curves and #4 switches by Bachmann passenger cars.

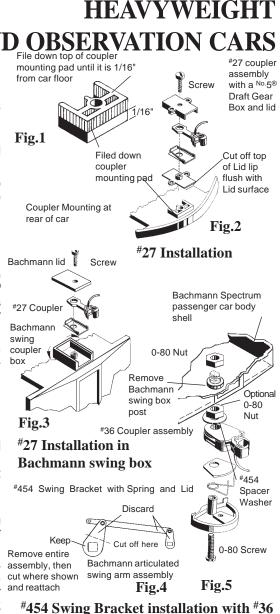
## #454 SWING BRACKET WITH #36 COUPLER

1. Disassemble passenger car by removing roof-window section from car body.

2. Cut off top of Bachmann swing coupler box post to allow box to drop out. Then remove entire articulated swing arm assembly by removing screw holding truck and arm in place. You will need to retain a "keeper" and the screw to hold truck in place. We suggest cutting off the truck end of the swing arm pivot with the square hole in it about half way and reinstalling this piece with the screw to hold truck in place. See Fig. 4.

3. Assemble the #36 Coupler (not included with the #454 Kit) per instructions with coupler on top and Torsion Spring on bottom. You may wish to hold the coupler assembly together with tiny drops of glue placed at seams.

4. Assemble the #454 Swing Bracket, see Fig. 5. Slip 0-80 screw through the #454 Swing Bracket, spring, cover plate, #36 Coupler and .015" thick round spacer from the bottom. Align this assembly over the coupler box post hole (Note: If hole has a counter sunk depression add an 0-80 nut over washer to fill in and seat in countersunk depression. Tighten nut against washer), push assembly into hole and secure with 0-80 nut. See Fig. 5.



Coupler