

FREIGHT CAR UNDERBODY DETAIL

widespread until the 1950s. Automatic slack adjusters since about the 1960s typically take the form shown in Figure 32. These types are usually placed in the center rod of the foundation brake gear but can be placed in one of the top rods. The slack adjuster shown in Figure 32 is a Universal Model 2300DJ but it so closely resembles other slack adjuster in appearance, application and function that it can be seen as a typical example. See Appendix A for more slack adjusters of the same type, general appearance and function.

Cars with sliding center sills as part of a cushion underframe present car designers and modelers with some special considerations. First, the angle cocks and the brake pipe in between must be fixed to the sliding center sill so that they move with the couplers. To do otherwise would mean that the air hoses would separate under some conditions and cause an emergency application of the air brakes. Second, since the trucks and the truck brakes are in a fixed position relative to the car but not the sliding center sill, the foundation brake gear and air brake cylinder must be fixed to the cars underframe, not the sliding center sill. Fixing the air brake control valve and reservoir to the car's body is the standard design. There must, therefore, be a flexible connection between the branch pipe tee and the control valve. See Figure 34 for the correct design of this flexible connection.

The photo at right show a car overturned at a wreck site. This provides an opportunity to see the entire air brake and foundation brake gear system on a car with a sliding center sill. Both top rods were torn loose from the trucks when they separated from the car. Otherwise, everything is pretty much intact here.

