

U.S. Department of Labor Mine Safety and Health Administration

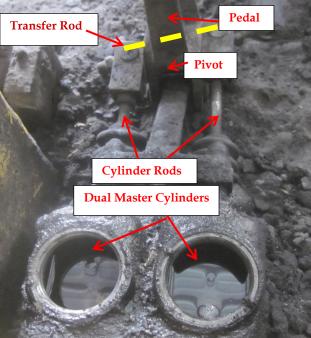


Protecting Miners' Safety and Health Since 1978

Damascus MAC-12 Safety Alert

On April 1, 2014 a non-fatal accident occurred involving 10 miners riding a Damascus MAC-12 mantrip. The mantrip travelled down a 12½% slope when it lost braking capacity, struck an I-beam, and ejected several of the miners. The slope was 2,140 feet long with an elevation change of 265 feet. It was determined that there was a design flaw with the dual circuit service brake system. The brakes on the rear of this personnel carrier were worn to the point they were ineffective. This caused fluid leakage that resulted in the brake actuating mechanism to apply insufficient pressure to the front brakes because of the design deficiency of the brake actuating pedal and rods. Damascus is developing a retrofit to update the brake system design.





Best Practices

- Consult the manufacturer about grade limitations for grades or slopes until the braking systems have been retrofitted.
- Properly maintain the braking system according to the manufacturer's instructions. Keep brake and tram pedals free of extraneous material.
- Perform an inspection and functional test of the braking system before operating the mantrip.
- Train personnel in the proper operation of this mantrip according to the manufacturer's instruction manual.