MINER ENTERPRISES INC.

Perfecting Railcar Performance

INSTALLATION AND INSPECTION GUIDE

Side Bearings

Draft Gears

Brake Beams

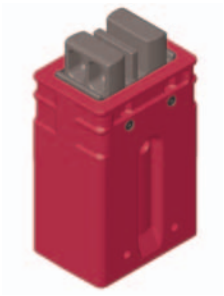
1-630-232-3000

VERSION 6 3/2012

DRAFT GEARS

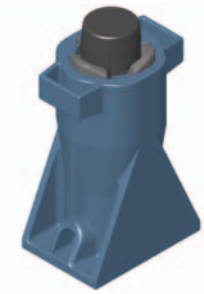
GENERAL DESCRIPTION

Miner offers a variety of draft gears to satisfy your car protection requirements.



Crown SG™ is Miner's all-steel draft gear that meets AAR Specification M-901G. Its robust spring package provides maximum protection for the industry's heaviest cars. The Crown SG can be used in any freight car including intermodal and stand-alone 125-ton cars.

Crown SE™ is a high capacity all-steel draft gear certified under AAR specification M-901E. The Crown SE is engineered to provide long service life in freight cars with minimum wear of draft gear pocket and attachments.



TF-880™ is the lightest weight high performance draft gear meeting AAR specification M-901E. The TF-880 incorporates Miner's proven friction clutch design in combination with the patented TecsPak® elastomer compression spring package to provide exceptional car protection. It is an ideal all-purpose gear, suitable for all freight cars up to and including 110-ton capacity.

SL-76™ is specifically designed to meet the most severe requirements of today's railcars. Miner's service proven friction clutch mechanism and natural rubber spring package provide extra heavy-duty car protection and less operating slack.

PROCEDURE FOR DETERMINING SERVICEABILITY OF MINER DRAFT GEARS

Crown SE™ and Crown SG™ (In-car Inspection)

Inspect for excessive draft slack, coupler horn/striker contact, and excessive wear on carrier plate and sill walls, indicating possible unsatisfactory draft gear performance. To remain in service, draft gear should be tight in pocket and free of loose or broken parts. Change out draft gear if protrusion of both shoes out of the housing averages 11/16" or more.

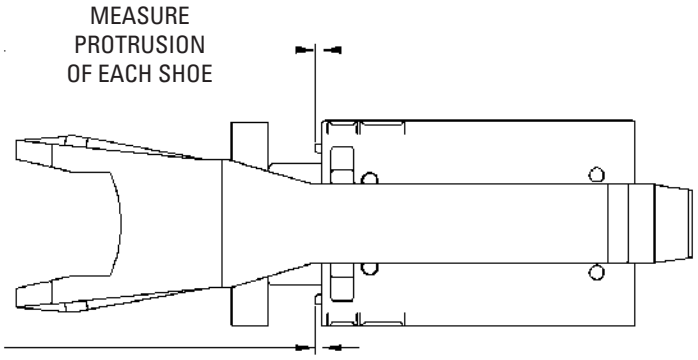


Fig. 31 Crown SE/SG In-Car Inspection

Crown SE™ and Crown SG™ (Out-of-car Inspection)

1. Tap friction plate in with hammer.
2. Bridge wedges and measure gap between wedges and friction plate.
3. If less than 1/8" gap, gear should be reconditioned (do not reapply).

Before applying any draft gear, inspect for conformance to AAR Rule 21, Sections A & B.

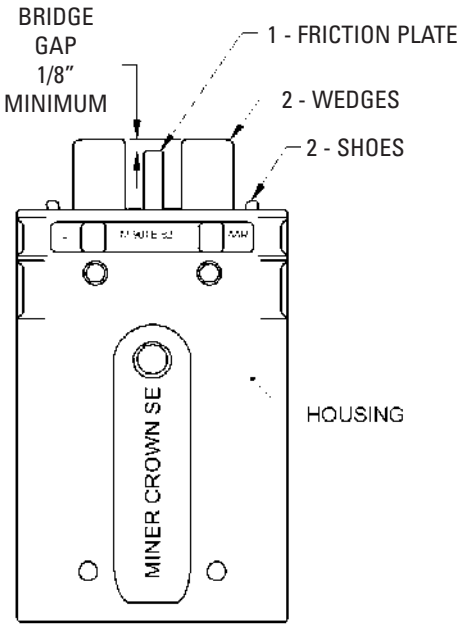


Fig. 32 Crown SE/SG Out-of-Car Inspection

TF-880™ (In-car Inspection)

Inspect for excessive draft slack, coupler horn/striker contact, and excessive wear on carrier plate and sill walls, indicating possible unsatisfactory draft gear performance. To remain in service, draft gear should be tight in pocket and free of loose or broken parts. Change out draft gear if protrusion of the three shoes out of the housing averages 1-1/8" or more.

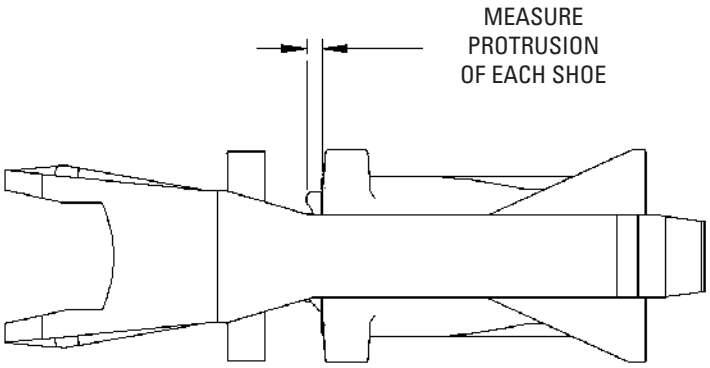


Fig. 33 TF-880 In-Car Inspection

TF-880™ (Out-of-car Inspection)

1. Wedge protrusion should measure approx. 3-5/16" (draft gear not preshortened).
2. If shoe protrusion averages 1-5/16" or more, gear should be reconditioned (Do not reapply).

Before applying any draft gear, inspect for conformance to AAR Rule 21, Sections A & B.

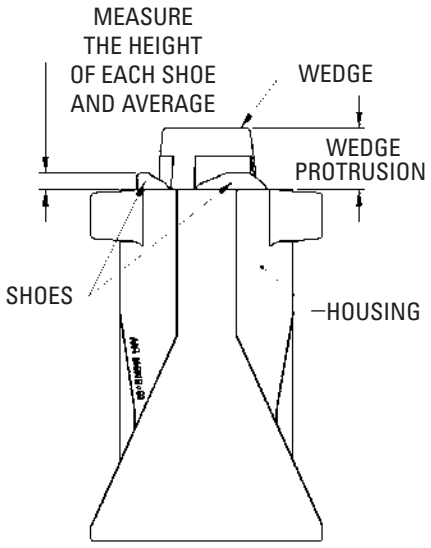


Fig. 34 TF-880 Out-of-Car Inspection

SL-76™ (In-car Inspection)

Inspect for excessive draft slack, coupler horn/striker contact, and excessive wear on carrier plate and sill walls, indicating possible unsatisfactory draft gear performance. To remain in service, draft gear should be tight in pocket and free of loose or broken parts. Change out draft gear if protrusion of the three shoes out of the housing averages 1-1/8" or more.

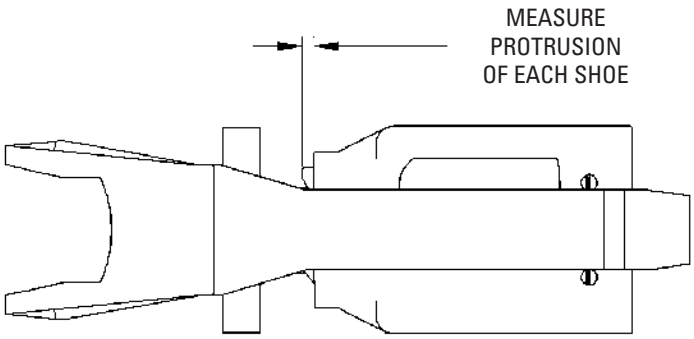


Fig. 35 SL-76 In-Car Inspection

SL-76™ (Out-of-car Inspection)

1. Wedge protrusion should measure approx. 3-5/16" (draft gear not preshortened).
2. If shoe protrusion averages 1-5/16" or more, gear should be reconditioned (Do not reapply).

Before applying any draft gear, inspect for conformance to AAR Rule 21, Sections A & B.

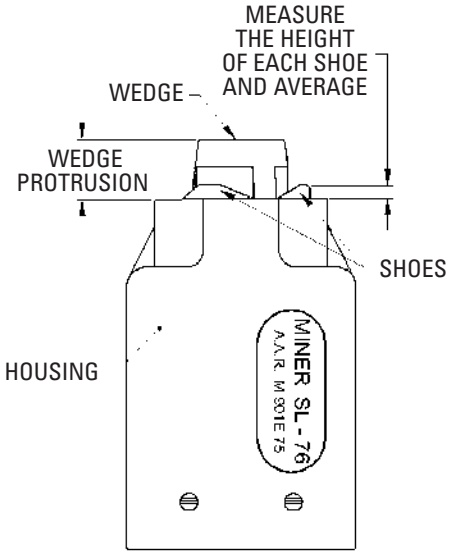


Fig. 36 SL-76 Out-of-Car Inspection