

DESCRIPTION:

This tool is used to remove and install Locomotive Coupler Pins. It is designed to use in pits, and is adjustable to accommodate different pit depths. It has no other intended uses.

INSTRUCTIONS FOR USE:

LOCOMOTIVE COUPLER PIN REMOVAL:

WARNING: Ensure Blue Flag protection is set in accordance with current operating rules before fouling any track or performing any type of repair work.

WARNING: Be observant of the Red Zones within your work area.

WARNING: Ensure locomotive(s) is/are properly secured with hand brakes before attempting to perform coupler removal or installation.

- 1. The system is comprised on three components: The aluminum base; support column; and hydraulic jack assembly. Move the individual components into the pit under the locomotive (Figure 1).
- 2. Inspect the system for defects. Any hydraulic component leaking more than a few drops must be repair or replaced. Both of the detent locking pins and the column Height Adjustment pin must be in place and working properly.
- 3. The retaining sleeve must be in place and moving freely. Sleeve slide tension may be adjusted by turning the set screws located on both sides of the sleeve (Figure 1).

- 4. Slide the support column into the base, making sure the base detent pin fully engages (Figure 1).
- 5. Slide the hydraulic jack assembly into the support column, again making sure the column detent pin fully engages (Figure 1).
- 6. With the jack and retaining sleeve fully retracted, position the lifter directly under the locomotive coupler pin. Close the jack release valve by turning it clockwise (Figure 3).
- 7. Firmly grasp one of the handles provided on the support column, and release the column height adjustment pin by pushing the release button and removing the pin from the holes (Figure 4).
- 8. Raise or lower the column as necessary to accommodate the pit depth and replace the adjustment pin. The adjustment holes are placed at 3" increments. There should be approximately 15" of clearance between the top of the retaining sleeve and the locomotive draft arm (Figure 4).
- 9. Operate the jack handle, moving the pusher block upward until it contacts the coupler pin. The slot in the pusher block must be aligned with the coupler support bar so the bar rests in the slot (Figure 2).
- 10. Remove the cotter pin from the coupler pin retaining bar and remove the bar from the draft arm.
- 11. Slide the retaining sleeve upward on the jack shaft until it contacts the draft arm.
- 12. Slowly turn the jack release valve counter-clockwise to gradually release hydraulic pressure and lower the coupler pin (Figure 3). Stop lowering the jack if the pin does not release out of the coupler. Move the coupler as necessary to allow the pin to release. Continue lowering the pin until it is completely clear of the draft coupler and draft arm.

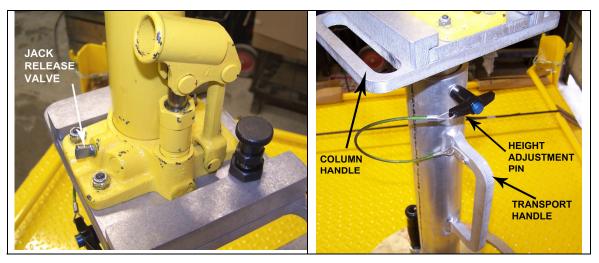




FIGURE 4

LOCOMOTIVE COUPLER PIN INSTALLATION:

- 1. Close the jack release valve by turning it clockwise (Figure 3). Operate the jack using the provided handle to move the coupler pin upward into the draft arm and coupler.
- 2. Stop jacking if the pin becomes stuck during insertion. Move the coupler as necessary to allow the pin to move freely.
- 3. Continue jacking until the coupler pin is fully seated. The retaining sleeve will automatically retract as the pin is moved into position. Make sure the slot on the

pusher block is aligned with the coupler retaining bar slot in the draft arm to allow for bar insertion.

- 4. Move the retaining sleeve as necessary to allow insertion of the retaining bar into the draft arm.
- 5. When the retaining bar has been inserted, open the jack release valve by turning it counter-clockwise (Figure 3). Fully retract the jack cylinder and retaining sleeve. It may be necessary to apply pressure to the pusher block to get the jack to fully retract.
- 6. Move the pin lifter out from under the coupler pin and install the cotter pin in the pin retaining bar.
- 7. Pull the column detent pin upward and slide the jacking system out of the support column.
- 8. Pull the base detent pin upward and slide the support column out of the aluminum base.
- 9. Inspect the system components, move them out of the pit, and place them back into their normal place of storage.

SAFETY PRECAUTIONS:

WARNINGS: Noncompliance could cause injury to employees.

CAUTIONS: Noncompliance could cause damage to equipment NOTES: Pertinent information

- 1. WARNING: Wear personal protective equipment in accordance with all Safety Requirements.
- 2. WARNING: Never place your hands or fingers near the coupler pin during removal or installation.
- 3. WARNING: Keep all parts of your body out from under the coupler pin during handling.
- 4. CAUTION: Never use the Coupler Pin Lifter for any purpose other than removing or installing coupler pins.
- 5. CAUTION: Move the coupler as necessary to free pins that are stuck during installation. Continued jacking on a stuck pin could cause fixture damage.