



# HYDRAULIC RAILCAR MAINTENANCE EQUIPMENT

**Whiting**

**HYDRAULICS**

# WHITING HYDRAULIC RAILCAR MAINTENANCE EQUIPMENT

## RELIABLE. ROBUST. RUGGED.

From mobile, intermodal railcar jacks to complete integrated systems including railcar movers and locomotive drop tables, Whiting Corporation offers a complete line of custom designed hydraulic-focused locomotive and railcar repair equipment.

### HYDRAULIC REPAIR IN PLACE (RIP) JACKS

75-ton outside and 150-ton center jacks designed to accommodate different railcar types and lengths

### TRAVERSING JACKS

Hydraulically-powered jacks travel parallel and perpendicular to the rail up to 30 feet

### INTERMODAL CAR JACKS

Mobile Articulated Car Jack (MAC Jack) lifts railcars anywhere you need railcar lifting capability up to 50 tons

### PILOT PLATE STRAIGHTENER

Self-contained hydraulic ram system designed to safely reposition the pilot plate on a locomotive

### RAILCAR RETARDER SYSTEM

Electronically-controlled pneumatic retarders for use with car repair systems to locate railcar over lifting systems for routine maintenance

### SINGLE AXLE LOCOMOTIVE DROP TABLES

50-ton drop table with hydraulic-driven lift cylinders and transporters serving one or multiple tracks

### RAILCAR PULLERS

Electromechanical or hydraulic driven systems that operate between the rails and can handle up to 50 railcars

### HYDRAULIC MAINTENANCE + REPAIR SERVICES

Providing repair, maintenance, and modernizations for your hydraulic lifting equipment

# HYDRAULIC RIP (REPAIR IN PLACE) IN-FLOOR JACKS

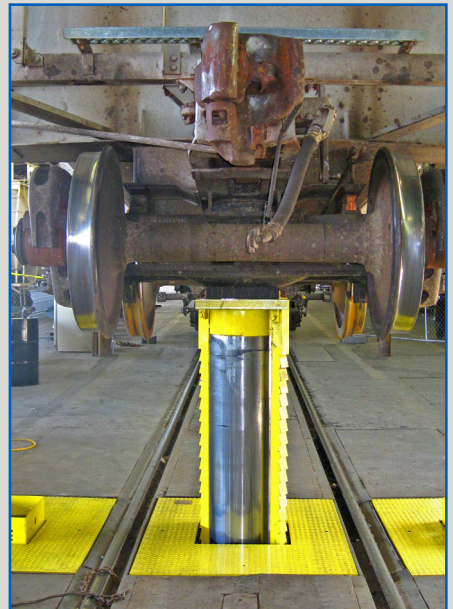


The Whiting Hydraulic RIP/One-Spot Lifting System can be engineered and arranged to maximize efficiency of the lifting application at your repair facility. The hydraulic jacks are equipped with ratchet-type safety devices in addition to standard hydraulic safeties. Installation can provide side jacks for lifting both ends of the railcar simultaneously resulting in faster throughput. Whiting RIP Jacks feature a remote console so the operator does not need to be close to the freight car while the lift is in operation.

Hydraulic jack installations include:

**75-ton Outside Jacks** at each side for lifting railcar, bolster, and side frame for repacking, removal of the truck, and repair of under car members.

**150-ton Center Jack** for jacking under the center sill of special railcars, which cannot be handled with outside jacks. This allows roller bearing, axle, and wheel assemblies to be removed, permitting repacking, spring replacement, etc.





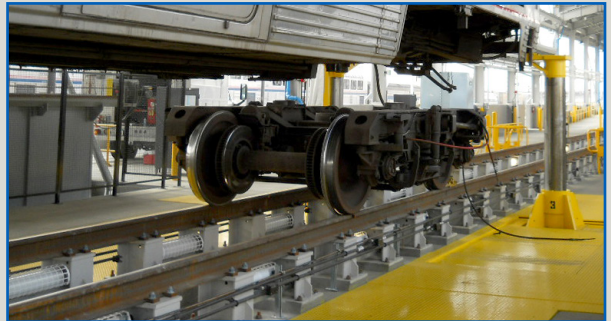
# TRAVERSING IN-FLOOR JACKS



Whiting's Traversing Jack system allows for the lifting of any mix of railcar lengths and widths. The hydraulically-powered Traversing Jacks travel parallel and perpendicular to the rail up to 30 feet, making it ideal for repair shops handling various lengths of railcars.

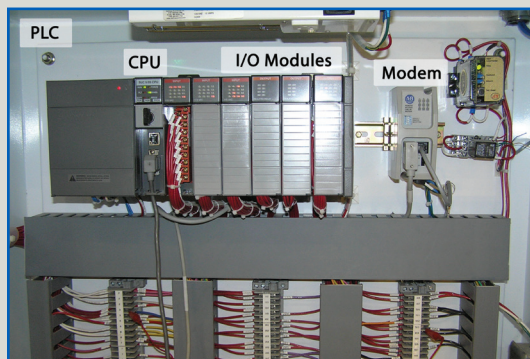
The Traversing Jacks allows the flexibility you need while providing dependable load-lifting capacity at any point within the lifting range. This system allows the user to lift cars with non-standard jack pads or under car clearance problems.

When paired with Whiting's Hydraulic Jack PLC, the combination provides an even greater degree of safety and reliability to protect your people and equipment.



# HYDRAULIC JACK PROGRAMMABLE LOGIC CONTROLLER (PLC) SAFETY

Existing in-floor jack systems can be upgraded to the Whiting PLC Safety System. This upgrade incorporates state-of-the-art electronics designed to provide a greater degree of safety and reliability to our already safe lifting system. Some of the standard features include:



- **Safety Dog Monitor** - Monitors the operations of the safety dog to assure proper operation
- **Automatic Pump Shut-off** - Saves energy and pump life
- **End Jack Synchronization** - Keeps jacks together under load
- **End Jack Drifting Down Under Load** - Detects any downward motion of jacks
- **Runaway Jack Condition** - Shuts off pump when detected
- **Automation** - Engages auto level, auto lower, and auto dog
- **Touch Screen Control Panel with Self Diagnostics** - Shows information in user-friendly manner
- **Proximity Switches** - Replaces mechanical limit switches
- **Wireless Pendant** - Replaces under floor push button station
- **Overhead Voice Messaging System** - Announces car movement
- **Alarm Management and Track Usage**
- **Remote Modem Access for Online Factory Support**

# WHITING MAC JACK

## INTERMODAL MOBILE CAR JACKS

Whiting's Mobile Articulated Car Jack (MAC Jack) enables wheel or truck change-outs to be performed in as quickly as 20 minutes. It's uniquely designed to lift unloaded well and center beam-type articulated railcars over 30 inches above the rails. It can handle railcars in the yard up to 50 tons.

The MAC Jack requires only a 6" rail clearance without an adapter plate (8 ½" with an adapter plate) between the top of the rails and the bottom of the car. This low

profile is made possible because one of its two hydraulic lifting cylinders pivots to a horizontal position for easy under car access. In the unlikely event of hydraulic system failure, a ratchet and pawl system provides a complete mechanical fail-safe condition.

The heavy-duty MAC Jack and its companion self-contained power unit is capable of servicing railcars in any location where it is possible to operate a fork truck. This versatility instantly makes your whole yard a repair shop.







## WHITING MAC JACK OPERATION

1. Move MAC Jack across yard quickly with a fork truck
2. Position MAC Jack under railcar with a minimum clearance of 6"
3. Slide MAC Jack under the railcar
4. Pivot lifting cylinder back to a vertical position
5. Activate MAC Jack to take weight off wheels
6. Disconnect wheels and lift railcar
7. Change out wheels

# LOCOMOTIVE PILOT PLATE STRAIGHTENER



The self-contained hydraulic ram system is designed to safely reposition and repair the pilot plate on a locomotive with up to 135 tons of force. You will save countless hours as this machine quickly and efficiently bends the pilot back into the correct position without cutting or removing any portion of the plate.

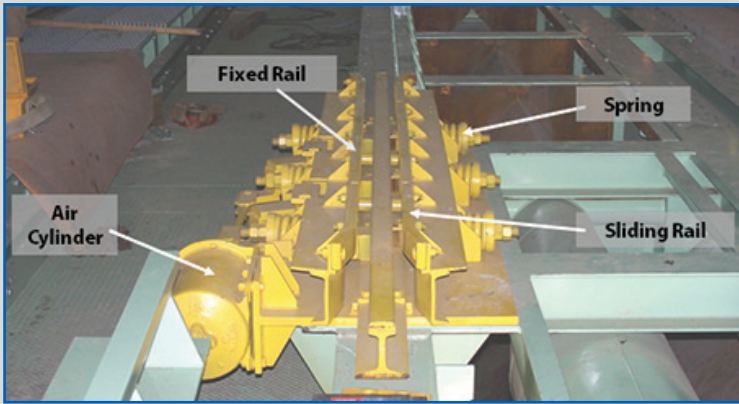


## Features

- Chain hoists provided for safe material handling
- Hard-wired pendant station for controls
- Designed to withstand outdoor applications
- 480 / 120 vac control panel
- 12" Bore Cylinder
- 170-Ton Rating
- Coupler Weldment
- Electric Hoist Package
- Electric/Lighting Package
- 20 HP Power Unit



# RAILCAR RETARDER SYSTEM



Whiting Railcar Retarders are used for accurately positioning railcars in spot repair systems. Operated from the central control panel, the retarders have spot, open, and closed positions. Electronically controlled, these pneumatic retarders have an effective spotting distance of 11 feet and develop a stopping force of 7,000 lbs. per foot.

## SINGLE AXLE DROP TABLES

The hydraulic Drop Table system with separate work table and transporter are powerful and effective tools for the reliable change out of locomotive wheel/ axle/traction-motor assemblies.

Crossover loads are never transmitted to the transporter, since the work table is supported by locking bars in pit walls. The table's tilt cylinder speeds traction motor change out.



Passenger and freight car wheel change out drop table designs are also available.

# RAILCAR PULLERS

Whiting can provide a variety of car-handling systems involving several combinations of remotely-controlled railcar movers, or “rabbits.” Railcars are moved by the rabbits from the inbound storage area and indexed one at a time through the repair shop and onto the outbound storage track. Installations normally include either of the following:

**Double Puller System** with inbound and outbound railcar pullers and rabbits. The inbound rabbit indexes railcars into an area near the inbound shop door. The outbound car puller indexes the railcar to the repair area and also discharges the railcar back into the yard.

**Single Puller System** with a single rabbit and puller moving railcars into the shop and also discharging them.

The mechanical rabbit includes a car puller unit with electric motor, fluid coupling, magnetic brake, and rotary cam limit switches. The rabbit is moved by a closed cable system, the wire rope being wound on a drum driven by the motor. Counterweight towers and other accessories are included with the system.

For mechanical rabbits, various sizes of electric railcar pullers are available with single, two, or variable-speed drives. Single drum units with magnetic brakes and rotary cam limit switches are



standard. For hydraulically-powered rabbits, it is pulled forward during the active stroke by a heavy-duty conveyor chain and is returned to the home position by a flexible wire rope.

# WHITING'S COMMITMENT TO OUR CUSTOMERS AND EQUIPMENT

## THE WHITING WAY

Whiting engineers spend the time asking the right questions to understand the unique application aspects for a custom solution that meets the needs of our clients. Whiting Corporation uses careful and thoughtful design to maximize equipment uptime. Whiting's line of railcar maintenance equipment offers time-tested designs with a focus on maintainability and reliability. Whiting offers specialized engineering and design services to suit all of your requirements, all from a single source. To reduce installation time and costs, all of our equipment is assembled and tested in our factory before it is installed.

## OEM REPLACEMENT PARTS

Whiting's state-of-the-art manufacturing capabilities, in-house technical support, warehouse, and distribution facilities as well as critical-mass purchasing power gives us the ability to provide you with a full range of OEM parts for all of your railcar maintenance equipment needs.

Whiting's full-time and full-service parts department, staffed with engineering and quality assurance personnel, is always available to get replacement parts into your hands quickly, with a guarantee that they will work with your equipment.

## RAILCAR MAINTENANCE EQUIPMENT SERVICES

Whiting Services will help keep your railcar maintenance equipment in a state of good repair with a variety of services. We offer round-the-clock national coverage, and have the experience and materials necessary to inspect and repair malfunctioning equipment to minimize your downtime.

From training to inspection and maintenance programs, Whiting Services can provide a comprehensive variety of services necessary to keep your equipment operating at maximum efficiency. Learn more at [WhitingServices.com](http://WhitingServices.com).





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