

Service Bulletin Maintenance of Way Equipment



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	ATPI-004-17	ATPI-005-17
	ATPI-006-17	ATPI-007-17

- **Summary:** Replace the Relief Valve Cartridge to provide added push force during center insert operation.
- Action: Replace the existing Relief Valve Cartridge with RRP Kit 793041 and follow the attached instructions.

Completion: Continue with normal machine operation after completing this procedure



Relief Valve Replacement



Before starting any service work that requires disconnection or removal of any valve part, all services should be made safe by lowering to the ground or other support. Failure to do so could result in injury.

Follow all Lockout – Tagout Procedures to make the machine safe to work on. Lockout / Tagout procedures are intended to release pressurized air and oil, disconnect electrical power and make the machine safe to begin repairs.

Failure to do so could result in injury.

- 1. Push the PARKING BRAKE button to apply the parking brakes.
- 2. Chock all four wheels to prevent accidental rolling of machine on grade.
- 3. Place the workhead and the turntable in their locked/travel positions.

If locking up of components is not feasible for maintenance, lower the component to rest on the ground prior to working on the equipment.

- 4. Push IN the FUNCTIONS DISABLE (START UP mode).
- 5. Turn the ignition switch to the OFF position.
- 6. Turn the battery disconnect switch to the OFF position.
- 7. Place a lockout/tagout device on the battery box and install a lock.
- 8. Bleed off the air pressure from the air tanks.



Some of the machine's hydraulic circuits have pilot operated check valves and there will be trapped pressurized oil after engine/hydraulic pump are turned off.

When working on hydraulic components, be aware that some components may move in/out, up/down or rotate during repairs and may create energy due to inertia / gravity.

- 9. Slowly and carefully loosen any hydraulic hose connection and or component, to bleed off any trapped pressurized oil.
- 10. Follow all of your company's lockout/tagout rules before proceeding.



General Information

- When replacing relief valve typical care for cleanliness should be taken.
- Note that the relief valves are not adjustable and must be replaced with a valve with the desired setting.
- While the pictures in this section are of a work section, replacing the inlet load sense relief is a similar process.

Tools and Supplies Required

- RRP Kit # 793041
- 20.5 mm (13/16") hex socket
- Torque wrench (sized for approximately 110-115 Nm [995 in-lb]







PORT RELIEF PLUG

DETAIL A SCALE 2 : 5



Replacement Procedure

- 1. Close the Hydraulic Oil Reservoir Valve
- 2. Disconnect all electrical wiring to each valve.
- 3. Using proper oil containment procedures, carefully remove the port relief plug, helical spring, and relief cartridge from the center insert section port A.
- 4. Allow the hydraulic oil to drain.
- 5. Discard the existing O-ring, helical spring and relief cartridge.



6. Carefully insert the supplied relief valve cartridge and do not disturb the setting of the relief valve.

Make sure the valve and spacer around the valve are properly seated.

7. Install the supplied O-ring on the spacer.

Make sure it is properly seated before installing the cap.

- 8. Reinstall the plug.
- 9. Reconnect the electrical wiring.







Contact: If you have any questions or we can be of any service, please contact the Racine Railroad Products service department at (262)-637-9681 or <u>custserv@racinerailroad.com</u>.

Safety Terms



DANGER indicates a hazardous operating procedure, practice, or condition. If the hazardous situation is not avoided death or serious injury will occur.



WARNING indicates a hazardous operating procedure, practice, or condition. If the hazardous situation is not avoided death or serious injury could occur.



CAUTION indicates a potentially hazardous operating procedure, practice, or condition. If the hazardous situation is not moderate or minor injury could occur.

Note: Indicates an essential operating procedure, practice, or condition. No personal injury is possible.