



40 Cedar Street -- Tillsonburg Ontario -- 1(800)265-2656

Tamperproof Relief Valves

Customer Unmet Need:

Refuse front loaders and rear loaders use telescopic cylinders for the pack and eject functions. This component is typically the lowest pressure rated (2000 PSI) component on the truck and the most expensive. In an attempt to increase the "work capacity" of these trucks, the end users would often times increase the settings of the main and/or port relief valves. Therefore, this resulted in premature component and structure damage to the trucks.



Solution:

Parker Hydraulic Valve Division modified their relief valves, so that a crimped tamperproof wire could be routed through the adjusting screw and the casting. Then the wire could be crimped with (or without) a special die with the OEM's logo. This enables the OEM to make the final pressure adjustments to their trucks and then "lock them down".

Success Factors:

- * Allows for factory/dealer adjustments.
- * Unique adjusting screw with added material to accommodate the locking wire.
- * Crimping tools that are readily available for MRO supply houses.
- * Custom crimping dies for additional deterrence and security.
- * In addition, this concept is available in the V20 series valves; however, it is accomplished with a crimped cap



Customer Values:

- * Avoid premature failure of telescopic cylinder; saving ~\$4000.
- * Avoid premature pump failure; saving ~\$750-\$1000.
- * Avoid structure damage of cylinder mounts; saving ~\$2500.
- * Avoid downtime of at least 2-7 days.
- * Reduce warranty claims.



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Thinking of Safety? Think Parker!

Dynamic Fluid Products provides a wide range of safety-based products for the industrial market.

Parker's IPS profile system offers flexible solutions for your machine guarding needs. We can make both perimeter and on machine guards in safety yellow, safety orange or clear anodized aluminum. We can also offer a wide variety of safety accessories including panels, mesh and safety switches.

Parker offers many other safety products to help enhance your pneumatic system including soft start/emergency dump valves, two-hand control units and FRL mounted lockout valves.

Parker's 3MA/4MA and P1D cylinders can all be ordered with rod locks to stop the rod from moving when air pressure is accidentally lost!

Parker blocking valves are mounted directly in the cylinder port and will allow no air to pass through the cylinder ports without a signal from the control circuit.



Cylinder Storage

1. Always store fully retracted.
2. Store indoors in a clean, dry area.
3. Smear the internal surfaces of eye/clevis bushes or bearings with grease - particularly if they're steel.
4. Protect any exposed chrome on the rod. Oil-impregnated tape such as Denso tape can be used for this purpose. Before applying, make sure the rod is fully retracted. If a product like Denso tape is applied to the rod when the rod is not fully retracted, subsequent retraction of the rod can result in damage to the rod seal.
5. Plug the service ports with steel - not plastic, plugs or blanking plates.
6. Consider filling the cylinder with clean hydraulic oil through its rod-end service port. Particularly if it's an expensive, large diameter or high pressure cylinder.