

WELKER SHOT PIN MAINTENANCE

CONSTRUCTION

- 3 Configurations: In-Line, Integral Cylinder and Side-by-Side
- High strength aluminum alloy box bonded with Rulon bearing surface.
- Plated ram designed to accept standard NAAM's L-block and pin retainers.
- Welker pneumatic cylinder mounted with extended tie rods coupled in-line or parallel to the ram, using either a rap or rigid style coupler.
- Protection from contamination is provided by a dual system of urethane wiper and steel shroud.

LUBRICATION

Welker shot pins and cylinders are pre-lubricated. No subsequent lubrication is required.

MAINTENANCE

Welker recommends annual changing of urethane wiper. Wipers are maintenance items and are not covered under standard product warranty.

Steam cleaning or wiping contamination off during the course of normal machine maintenance is desirable.

If unit fails to perform its function properly it should be replaced entirely.

SAFETY CONSIDERATIONS

Avoid operating shot pins where workers may place hands or limbs and cause injury.

Make certain that a plastic insert is in place on mounting holes of shot pins with 3" stroke or longer to avoid pinch points.

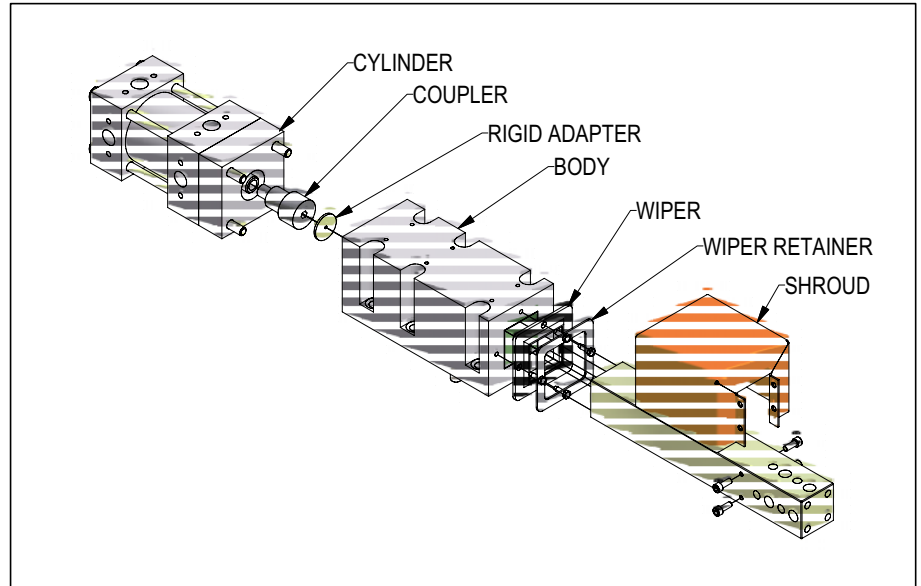
Model No.	Shot Pin Series	Type
WP2	24	In-Line
WP4	40	In-Line
WP6	60	In-Line
SB2	24	Side-by-side
SB4	40	Side-by-side
SB6	60	Side-by-side
UB4	40	Integral Cylinder

WELKER SHOT PIN MAINTENANCE VIDEO CAN BE VIEWED AT
www.welkerproducts.com

DIRECTIONS FOR REPLACING CYLINDER

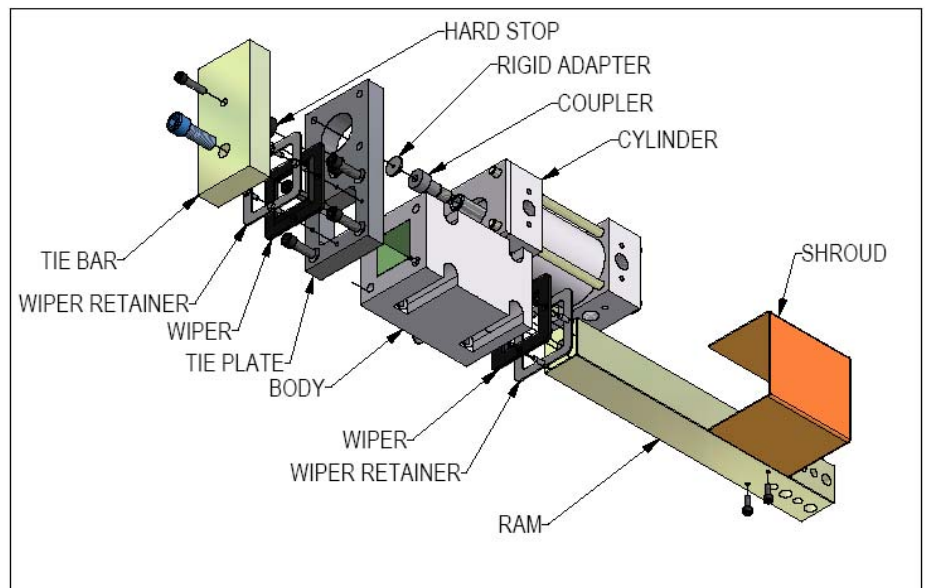
WP SERIES

1. Remove all tooling from ram.
2. Remove shroud.
3. Hold body in vise, dowels down.
4. Loosen cylinder tie rods completely.
5. Hold cylinder in one hand.
6. Push on ram with other hand approx. 1-2 inches until coupler is exposed.
7. Replace cylinder with new one. Ensure that the coupler has been installed with permanent thread locker.
8. Hold the cylinder and use it to push the ram back into position.
9. Secure tie rods evenly. Tighten in an "X" pattern to torque specifications.
10. Reinstall shroud.
11. Check for leaks.



SIDE-BY-SIDE SERIES

1. Remove screw securing ram to tie bar.
2. Pull ram out of pocket in tie bar.
3. Remove tie bar, sliding to side to disengage from coupler.
4. Loosen cylinder tie rods completely.
5. Hold cylinder in one hand.
6. Remove coupler and cylinder. **KEEP CYLINDER ASSEMBLED**
7. Replace cylinder with new one. Ensure that the coupler has been installed with permanent thread locker.
8. Secure tie rods evenly. Tighten in an "X" pattern to torque specifications.
8. Engage tie bar with coupler.
9. Insert ram into pocket in the tie bar and secure with screw.
10. Check for leaks.



UB4 SERIES

Integral cylinder cannot be replaced.

DIRECTIONS FOR ROTATING CYLINDER

PROCEDURE

1. Loosen cylinder tie rods completely.
2. Hold cylinder in one hand and rotate to desired orientation.
3. Secure tie rods evenly. Tighten in an “X” pattern to torque specifications.
4. Check for leaks.

DIRECTIONS FOR CHANGING CYLINDER POSITION

Side by Side only.

PROCEDURE

1. Remove screw securing ram to tie bar.
2. Pull ram out of pocket in tie bar.
3. Remove tie bar, sliding to side to disengage from coupler.
4. Remove 4 screws securing rear wiper to body.
5. Remove wiper retainer and wiper.
6. Remove 4 screws securing tie bar to body.
7. Remove tie bar and cylinder assembly.
8. Rotate tie bar and cylinder to desired position.
9. Reinstall 4 screws securing tie bar to body.
10. Replace wiper and wiper retainer.
11. Replace wiper screws.
12. Insert ram into pocket in the tie bar and secure with screw.

DIRECTIONS FOR ROTATING RAM

PROCEDURE

1. Remove shroud.
2. Inline shot pins, remove cylinder per instructions above. Side-by-side shot pins remove screw securing tie bar to ram..
3. Pull ram from body and rotate ram to desires position.
4. Reassemble, pushing from back of cylinder.
5. Secure tie rods evenly. Tighten in an “X” pattern to torque specifications.
6. Replace 24 series shroud with corresponding orientation shroud.
7. Check for leaks.

Tie Rod Torque Specifications				
Shot Pin Series	Thread	ft-lbf	in-ibf	N-m
24	1/4-28"	6.5	78	8.8
40	5/16-24"	12	144	16.3
60	3/8-24"	22	264	29.8

Series	Shroud	Stroke	Orientation
24	WPX24E70	All	0 - Vertical
24	WPX24E71	All	90 - Horizontal
40	WPA40E70	0-85mm	All
40	WPA40E71	86-110mm	All
40	WPA40E72	111-200mm	All
60	WPA60E07	0-100mm	All
60	WPA60E07X	101-200mm	All