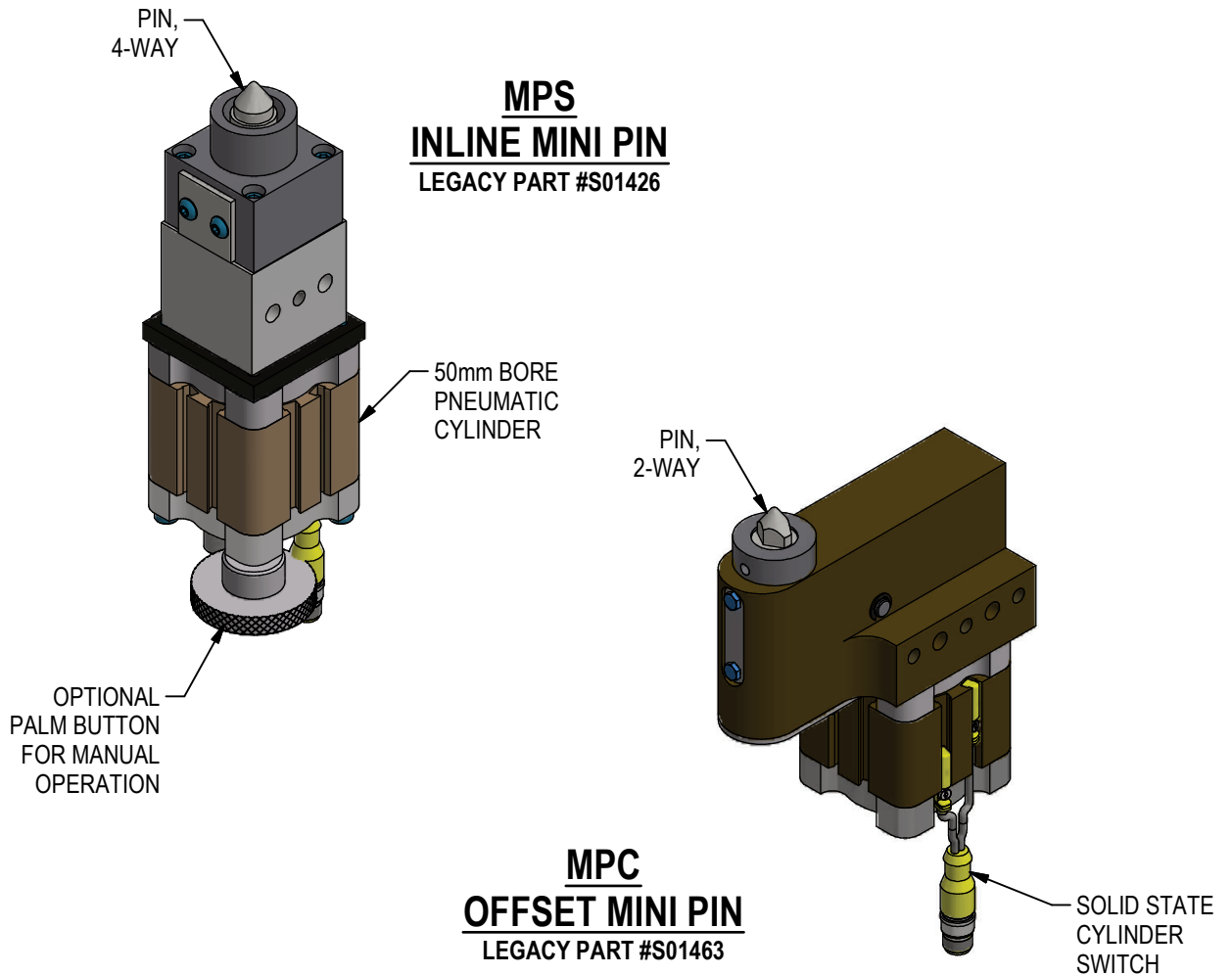


MAINTENANCE MANUAL INLINE & OFFSET MINI PINS



MAINTENANCE

SAFETY FIRST!

MAINTENANCE SHOULD ONLY BE PERFORMED BY QUALIFIED PERSONNEL. PROPER SAFETY GEAR AND PROCEDURES MUST BE USED AT ALL TIMES.

BEFORE PERFORMING MAINTENANCE, CUT OFF AIR SUPPLY TO THE UNIT, ENSURE THAT ALL AIR IS REMOVED AND THAT THERE ARE NO "TRAPPED AIR" CONDITIONS.

PREVENTATIVE MAINTENANCE: Regularly inspect unit to verify proper operation. Check for debris build up and clean as needed. Inspect all pneumatic, electrical, and mounting connections, making sure all connections are tight and secure. Routine replacement of cylinder seals is recommended.

CYLINDER: Welker pneumatic cylinders are lube free and require very little maintenance. Check for abnormal wear or damage. Plant air supply to the cylinder should be free of contaminants, filtered to a minimum of 50micron and have a water separator. Be sure fittings are in good condition. Seals are subject to wear under normal operating conditions. It is recommended to keep a spare cylinder seal kit or repair kit on hand.

PINS: Pins are subject to wear under normal operating conditions and should be replaced when worn.

BACKUPS: Replace when damaged or worn.

SWITCH: Switches may fail and need replacement; it is recommended to keep a spare switch on hand.

TROUBLESHOOTING

FAILURE	POSSIBLE CAUSE	SOLUTION
Pin does not extend or fully extend.	Cylinder failure Switch failure	Inspect unit for dirt/debris. Check plant air supply for proper pressure; too little will result in lack of cylinder movement. Seals may be worn, damaged or deteriorating. Replace as needed. If cylinder has been serviced, be sure tie rod nuts have been tightened to torque specifications. Check switch for proper operation. Replace as needed.

RECOMMENDED OPERATING PRESSURE: 60 to 100 PSI

REPLACEMENT PARTS

NOTE A: When ordering replacement cylinder and switches, please have the unit's Welker Job Number available and/or the cylinder model & serial number.

QTY	STOCK*	DESCRIPTION	PART NUMBER
1		PNEUMATIC CYLINDER	CALL WELKER
1	1	CYLINDER SWITCH	SEE CHART BELOW
1		PIN	SEE CHART BELOW

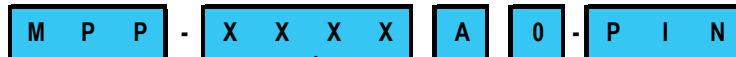
* RECOMMENDED SPARE PARTS TO KEEP IN STOCK

	Reorder #	Mfr. Part Number	Manufacturer	Description
Cylinder Switches	SWITCH L3	SWITCH L3 L3 switch is weld field immune*, comparable to World Switches	Welker	4-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect
	SWITCH L5	MK5113	ifm Efector	3-Wire, 4-Pin, DC M12 X 1 (NPN) Quick Disconnect

Standard Switch Option - All other options may affect price and delivery

*Note that some mid and low frequency DC resistance applications (i.e. aluminum resistance welding applications) may cause a fault. In these applications, it is recommended that the sensor be ignored/bypassed during the welding cycle.

TO ORDER REPLACEMENT PINS:



Pin Diameter _____

Pin Style & Orientation _____

- A** 4-Way Round
- B** 2-Way Diamond
- C** 2-Way Diamond (Rotated 90 degrees)
- 0** Pin Blank (Machined by Customer)

Backup Size _____

- S** Small 30mm Diameter Backup, Inline Mini Pin (Ø4.85 - 19.00mm)
- L** Large 35mm Diameter Backup, Inline Mini Pin (Ø4.85 - 25.00mm)
- 0** Offset Mini Pins

TO ORDER REPLACEMENT CUSTOM PINS:



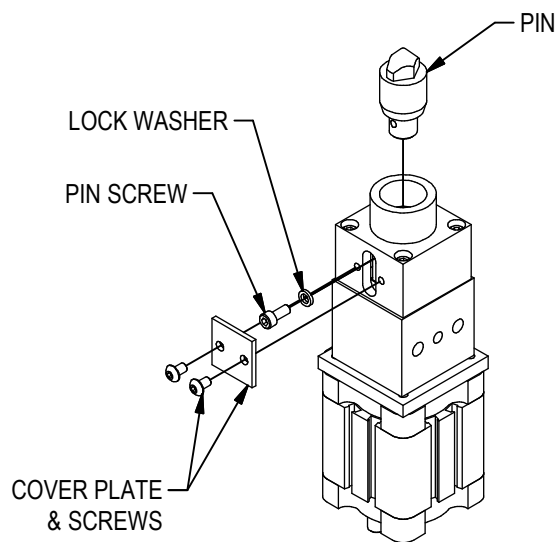
Custom Pin (For Custom Only) _____

P0001, P0002, etc.
(P#'s Req Customer Signoff Drawing)

TO REPLACE PIN

1. Remove air lines from the cylinder.
2. Remove cover plate screws (2).
3. Remove cover plate.
4. Remove pin screw and lock washer.
5. Replace pin.
6. Reinstall lock washer and pin screw.
7. Reinstall cover plate with screws (2).
8. Reinstall air lines, making sure they are free of contaminants.

INLINE MINI PIN



OFFSET MINI PIN

