

# INSTALLATION & ADJUSTMENT PROCEDURES FOR KOR-LOK® SIDE-ACTION SYSTEMS

# INSTALLATION GUIDE

Read the following instructions carefully, paying close attention to the sections that pertain to the model you have purchased. If you have any questions or need technical assistance, please visit [www.pfa-inc.com](http://www.pfa-inc.com) or call our support staff at (262) 250-4410.

## ADJUSTMENT PROCEDURE FOR CURRENTLY INSTALLED UNIT



1. Retract cylinder and loosen Jam Nut.
2. Unscrew cylinder from flange a few turns (counter-clockwise) – allows slide to travel fully without touching stops or shutoff.
3. Connect hydraulics and power the cylinder forward to the extended/locked position – core should not seal off or hit stops at this time.
4. **Critical Step!!!** Disconnect hydraulics and **VENT the cylinder** to atmosphere by removing one (1) extend and one (1) retract port plug.
5. Thread the cylinder into the flange (clockwise), until the core seats and the cylinder physically stops turning.  
NOTE: you should not be able to turn the cylinder any further by hand – it should be solidly stopped.
6. Reinstall the port plugs, reconnect the hydraulics, and retract the cylinder.
7. **Critical Step!!!** Rotate the cylinder further into the flange (clockwise) the additional amount shown on the chart below to **set the preload**:

Series	Pre-load
75	1/6 turn
100	1/6 turn
112	1/6 turn
150	1/3 turn
200	1/4 turn
300	1/8 turn

8. Tighten the Jam Nut.
9. Setup is now complete. Unit will make good parts for most applications. If more output force is required (core is flashing slightly), rotate the cylinder into the flange further (clockwise) in small increments (approximately 1/16 turn) until the flash goes away.

## PROCEDURE FOR INSTALLING A NEW UNIT



### TIPS REGARDING ACCESSORIES

**ALIGNMENT SCREW (AS) AND COUPLER (AC)**  
If you require Alignment Screws and/or Couplers install these first. Install the Alignment Coupler (T slot) in the core and the Alignment Screw (knob) into the piston rod until fully seated. A thread locking compound may be utilized if desired.

**MOUNTING FLANGES (SFC OR RFC)**  
The Mounting Flange is provided without pre-drilled mounting holes. (See recommendations) Ensure threaded hole is centered relative to the core attachment point and torque flange bolts to appropriate specifications.

**JAM NUT (JN)**  
Install the Jam Nut onto the KOR-LOK® unit with the beveled edge toward mold. Thread the Jam Nut most of the way on.

**SPANNER WRENCH (SWJ)**  
A wrench can be purchased for easier tightening and loosening of the Jam Nut. Many customers use a brass rod and hammer, but this method typically causes damage to the Jam Nut slots over time.

**All PFA KOR-LOK®, DIE-LOK™ and SWITCHMAX® application and use recommendations are advisory only.** KL/DL preload force ratings are geometry dependent and based on PFA recommended sizing methods. Process variations may affect actual performance. **PFA recommends use of PFA's SWITCHMAX® cross connected sensor checking and independent 2nd pull sensor (redundant) "core pulled" sensing on molds where opening with cores set could damage the mold.** False readings in the event of single sensor failure, cylinder contamination, core to cylinder separation, attachment failure, etc. may occur. PFA is not responsible for situations arising from false sensor readings, product failure, misuse, or abuse - proper form, fit and function are the responsibility of the customer. PFA "Terms of Sale" apply.

## PREPARATION FOR INSTALLATION OF THE MAIN UNIT – ON THE BENCH

1. Remove port plugs from one extend and retract port. There are three options for the retract port (A, B and C) and two options for the extend port (D and E) as shown in Figure 1.

**CAUTION!**  
*Fluid may eject from retract port as rod extends.  
Observe proper safety precautions.*

2. Apply a pressure source (minimum of 80 psi pneumatic or hydraulic) to the open extend port (D or E) until the unit is fully extended/locked.

## INSTALLATION OF MAIN UNIT.

1. With the unit extended/locked, and vented (port plugs removed on one (1) extend and one (1) retract port), connect the core slide to the rod and thread unit into the flange a few turns.

**NOTE:**  
*For long term ease of adjustment, application of anti-seize or other thread lubricant may be desired.*

2. Thread unit inward (clockwise) until the core is fully seated and cannot be turned in by hand – solidly stopped.
3. Ensure proper thread engagement of the cylinder and flange - equivalent to the thickness of the flange.
4. Ensure that there is space beyond flange for unit to thread through for adjustment. See required flange thickness for your model size (refer to “Recommended Accessories” section of catalog).
5. Place mark on flange and unit body to mark position location for reference.
6. Reinstall the port plugs, reconnect the hydraulics, and retract the cylinder.

These procedures have been written in an effort to address as many configurations as possible. If your particular application requires set up procedures that are not covered in the preceding documentation, please contact PFA at (262) 250-4410 for assistance.

7. Thread the unit **Inward (clockwise)** the recommended pre-load amount in the chart below.

Series	Pre-load
75	1/6 turn
100	1/6 turn
112	1/6 turn
150	1/3 turn
200	1/4 turn
300	1/8 turn

8. Tighten Jam Nut.
9. Connect sensors using appropriate procedures for the style utilized in your application. Documentation is provided separately.
10. Extend unit HYDRAULICALLY (1500 psi minimum) and verify lock sensor activates (turns on) ensuring unit locks as expected. Failure to lock is one indication of an adjustment problem.
11. After extending and locking, the preload stretches the large threads which may cause loosening of the Jam Nut. Re-tighten the jam nut, if desired. (NOTE: If the jam nut is tightened while the unit is preloaded, future loosening of the jam nut will require extending and preloading the unit.)
12. Cycle unit hydraulically several times and verify complete operation.
13. Test Mold during injection and note part quality. If flash occurs, additional preload adjustments (1/16 turn increments clockwise) may be needed at normal operating temperature to achieve the desired final adjustment. If unit does not operate as intended, call PFA for assistance. Applications vary widely and this procedure may not exactly cover all geometries. 24/7 technical phone assistance is generally available.