

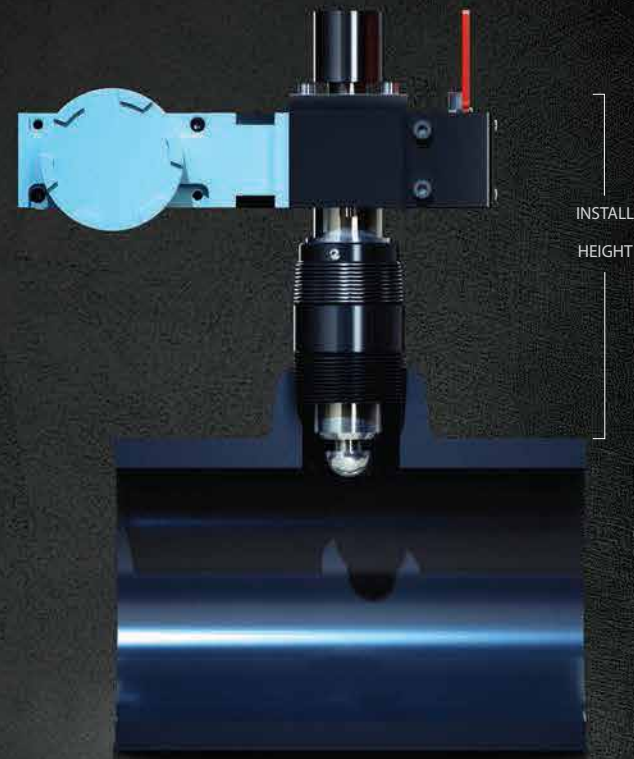
INSTALLATION - REASSEMBLY

1. Reinstall DUST SEAL to LOWER HOUSING (Figure 7).
2. Using (2) screws provided, install UPPER HOUSING ASSEMBLY to the LOWER HOUSING (Figure 7).
3. With the flag in the "UP" position, reinstall FLAG PUSH ROD and set RESET ROD back into place (Figure 7).
4. Set LOAD SPRING onto RESET ROD (Figure 7).
5. Install LID using two (2) screws provided (Figure 7).
6. Screw RESET BUTTON onto RESET ROD ensuring it turns freely (Figure 7).
7. Reinstall LIMIT SWITCH
8. Push down on RESET BUTTON to fully extend PLUNGER into pipe bore. Put FLAG into "DOWN" position (Figure 7).
9. Adjust MAIN ASSEMBLY by turning UPPER HOUSING clockwise or counter-clockwise to attain INSTALL HEIGHT marked on TAG located on UPPER HOUSING ASSEMBLY (Figure 8). LOCK SCREW may need to be loosened.

NOTE: See illustration for detailed drawing.

10. Tighten LOCK SCREW to secure MAIN ASSEMBLY and slide DUST SEAL on to 2" NPT ADAPTER (Figure 9).

Install Height Adjustment



IMPORTANT: Detection of pig's passage is dependent on proper INSTALL HEIGHT. Incorrect INSTALL HEIGHT could void the warranty.

TECHNICAL DATA

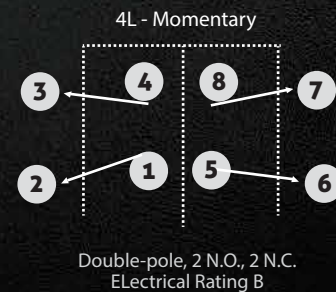
LSX Limit Switch - weather sealed, explosion proof enclosures meet NEMA standards: 1, 3, 4, 6, 9 and 13. UL listed and CSA certified: Class I, Div.1, Groups B,C and D. Class II, Div.1, Groups E, F and G.

Electrical Ratings

10 amps continuous carry. Circuits on any pole must be the same polarity.

AC Volts				DC Volts				
Pilot Duty: 600VAC, 720VA				Pilot Duty: 240VAC, 30 watts				
Electrical Rating	Circuitry	VAC	Amps at 0.35 Power Factor	Electrical Rating	Circuitry	VDC	Make and Break Amps Inductive Resistive	
			Make Break					
B	Double Pole	120	30	B	Double Pole	120	0.25 0.80	
	Double Throw	240	15 1.5		Double Pole	240	0.15 0.40	
		480	7.5 0.75					
		600	6 0.60					

Electrical Diagram



pigPRO™

INSTALLATION INSTRUCTIONS

Series 53 Visual/Electrical Indicator with Manual/Auto Reset



PRIOR TO INSTALLATION

Be sure to read the information in this manual carefully before you install the Apache pigPRO indicator

Use these precautions when installing and adjusting the Apache pigPRO indicator:

- ➔ Do not damage top threads of 2" NPT ADAPTER.
- ➔ Thread 316SS 2" NPT ADAPTER hand tight into thread-O-let before tightly securing with pipe wrench.
- ➔ Do not strike the RESET BUTTON.
- ➔ Do not tighten LOWER HOUSING to seal. LOWER HOUSING unit should be turned only for PLUNGER adjustment.

Prior to installing your Series 53 pigPRO Visual/Electrical Indicator:

- ➔ Cut/drill 1-1/4" coupon from the pipeline. ⚠
- ➔ Center 2" 3000lb. thread-O-let over the opening and weld to applicable codes.

⚠ Do not install or remove in a pressurized pipeline without first acquiring the services of a qualified hot tap specialist.

All Apache Pig Passage Indicators are shipped from the factory assembled and tested.

APACHE pigPRO SERIES 53 Visual/Electrical Indicator with Manual/Auto Reset

NON-PRESSURIZED LINE APPLICATION

No disassembly or internal adjustment required when mounting onto a non-pressurized line.

1. Apply thread sealant to bottom threads of 2" NPT ADAPTER and tighten clockwise the MAIN ASSEMBLY with 2" NPT ADAPTER into 2" 3000 lb thread-O-let (**Figure 1**). Use pipe wrench to securely tighten 2" NPT ADAPTER ensuring no damage to the threads occur.

2. Loosen LOCK SCREW on 2" NPT ADAPTER (**Figure 2**).

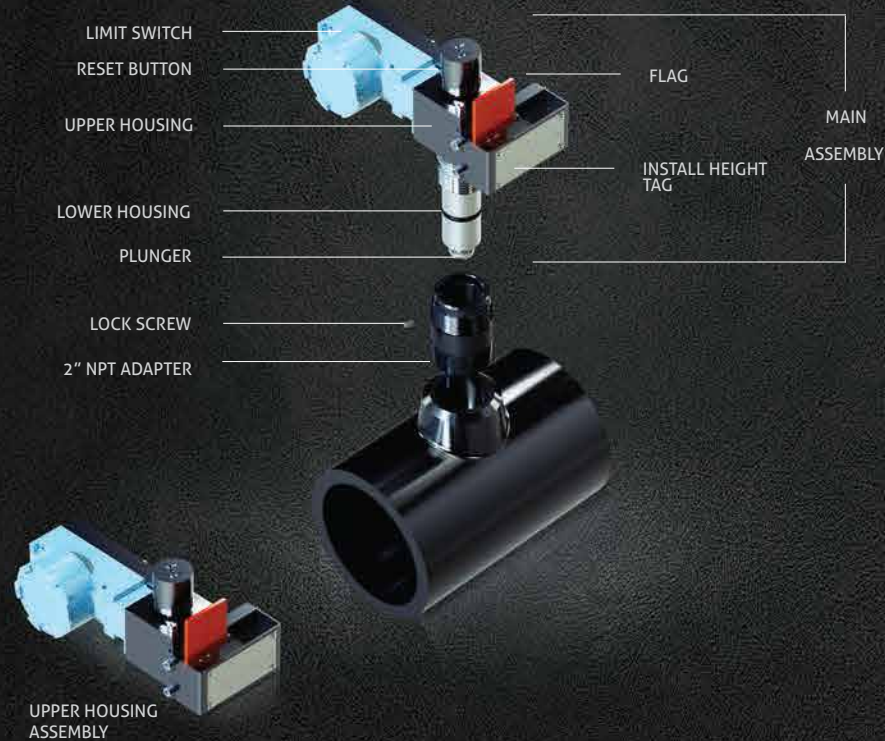
Note: There is no need to separate 2" NPT ADAPTER from the MAIN ASSEMBLY.

3. Adjust MAIN ASSEMBLY by turning UPPER HOUSING ASSEMBLY clockwise or counter clockwise to attain INSTALL HEIGHT (**Figure 3**) marked on TAG located on UPPER HOUSING ASSEMBLY.

Note: See back page for detailed drawing.

4. Tighten LOCK SCREW to secure MAIN ASSEMBLY and slide DUST SEAL onto 2" NPT ADAPTER (**Figure 4**).

APACHE pigPRO KEY COMPONENTS



PRESSURIZED LINE APPLICATION

On-stream installation requires portions of the pigPRO to be disassembled

PRIOR TO INSTALLATION - DISASSEMBLE

1. Remove RESET BUTTON by simultaneously applying upward pressure and turning counter clockwise (**Figure 5**).

2. Remove two (2) screws allowing removal of LID (**Figure 5**).

Note: DO NOT remove JAM NUT or LOAD SPRING ADJUSTER from LID.

3. Remove LOAD SPRING from RESET ROD (**Figure 5**).

4. Remove LIMIT SWITCH.

5. With FLAG in "UP" position, remove RESET ROD and FLAG PUSH ROD (**Figure 5**).

6. Remove two (2) screws and lift UPPER HOUSING ASSEMBLY and DUST SEAL from LOWER HOUSING (**Figure 6**).

7. Loosen LOCK SCREW and remove LOWER HOUSING from 2" NPT ADAPTER by turning counter clockwise, ensuring it is not exposed to dirt or other contaminants (**Figure 6**).

8. Apply thread sealant tape to the outside top and bottom threads of 2" NPT ADAPTER and tighten into existing thread-O-let.

Caution: Do not apply sealant tape to internal threads

HOT TAP PROCEDURE

1. Utilizing a trained hot tap technician, connect hot tap apparatus to 2" NPT ADAPTER and follow standard hot tapping procedures to drill and remove 1-1/4" coupon.

Caution: Careful not to scratch ID sealing surface upon removal of coupon.

2. Ensuring hot tap machine is depressurized above ball valve, disconnect and attach Apache HOT TAP ADAPTER to LOWER HOUSING fastening with the two (2) screws provided.

Note: The HOT TAP ADAPTER fits most industry hot tap machines.

3. Connect the LOWER HOUSING & HOT TAP ADAPTER to hot tap machine.

APACHE pigPRO KEY COMPONENTS



4. GENTLY engage the stainless steel thread of the LOWER HOUSING to the 2" NPT ADAPTER. Do not gall threads. Ensure the LOWER HOUSING is securely threaded & sealed to 2" NPT ADAPTER prior to removal of hot tap equipment

5. IMPORTANT to tighten LOCK SCREW to prevent removal of LOWER HOUSING prior to loosening screws to remove HOT TAP ADAPTER.



FIGURE 1



FIGURE 2



FIGURE 3

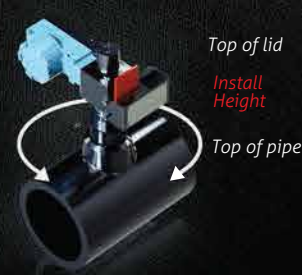


FIGURE 4



FIGURE 5



FIGURE 6

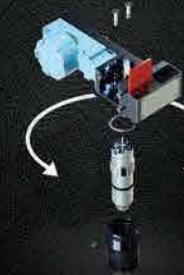


FIGURE 7



FIGURE 8



FIGURE 9

