

The Direct Fired Impulse Actuator (DFIA) provides means to electrically or manually activate the Fike Clean Agent Containers with the Impulse Valve by providing the force required to extend a piston that will open the rupture disc, allowing the agent to be released from the container.

The DFIA can be activated electrically via a signal from a Fike control panel or manually by depressing red strike button.

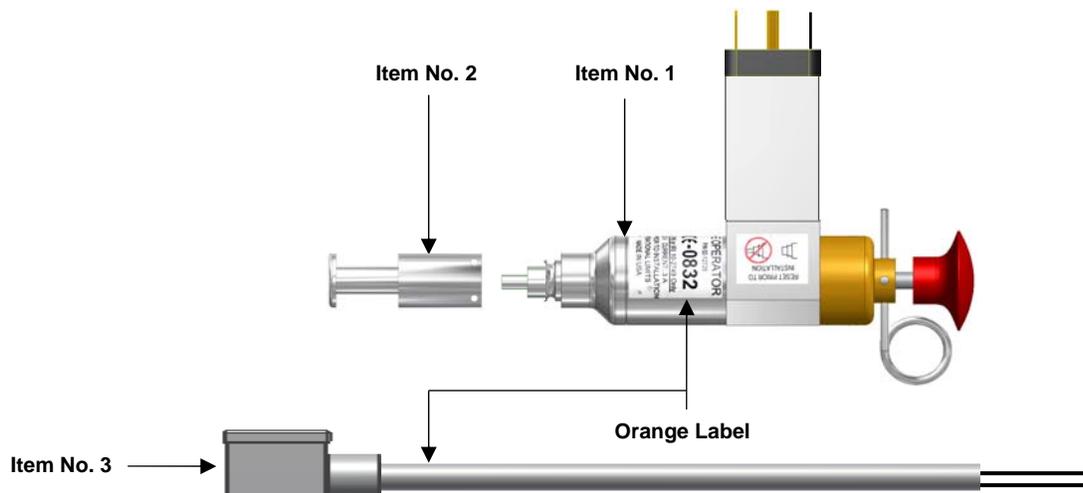
Fike Clean Agent Containers with Impulse Valve / DFIA can be connected directly to the solenoid circuit of SHP Pro & the solenoid output of the RCM on the Cheetah Xi & Cheetah Xi50 (without the use of a IRM), this wiring will be supervised (for open and ground fault conditions) from the container to the control panel.



SPECIFICATIONS – DIRECT FIRED IMPULSE ACTUATOR (DFIA) KIT (P/N 70-311)

NOTE: The following items are furnished with the DFIA Kit:

Item No.	Part Number	Description
1	02-13279	Direct Fired Impulse Actuator (DFIA)
2	70-286	Reset Tool
3	02-13280	DIN (4 pin) Connector w/ Cable (5' long / 20 gauge)
Normal Supply Voltage		24 VDC
Current Consumption (for Battery Calculation)		Alarm max. 912 mA / Supervision max. 33.4 mA – SHP Pro Alarm max. 930 mA / Supervision max. 25.4 mA – Cheetah Xi & Xi50
Electrical Connection		DIN Connector w/ Cable & ½" NPT for conduit connection
DFIA Material		Stainless Steel (Body) / Brass (End Cap)
Temperature Range		32°F to 130°F (0°C to 54.4°C) w/ HFC-227ea System 32°F to 120°F (0°C to 48.9°C) w/ ECARO-25 System
LISTINGS & APPROVALS		UL Listed / FM Approved

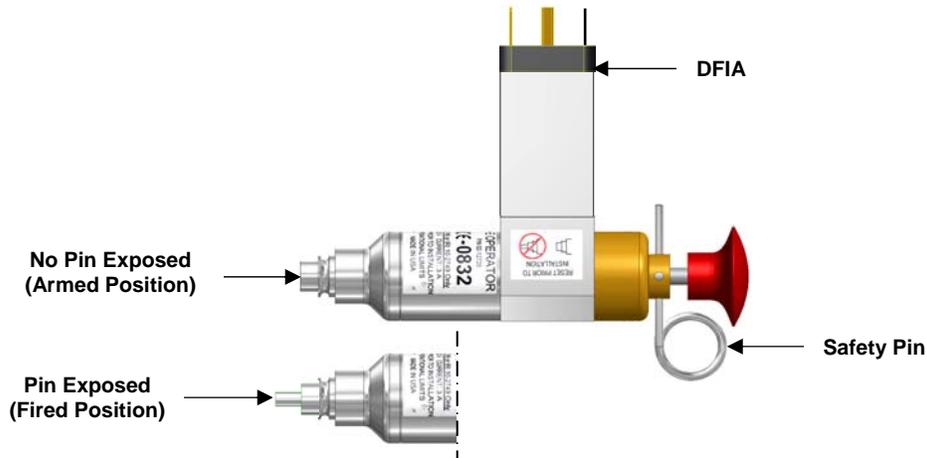


INSTALLATION

After the electrical / control system has been checked out and no trouble / ground faults are present; proceed with the Actuation System installation.

NOTE: This should be the last items completed before the system is placed into operation.

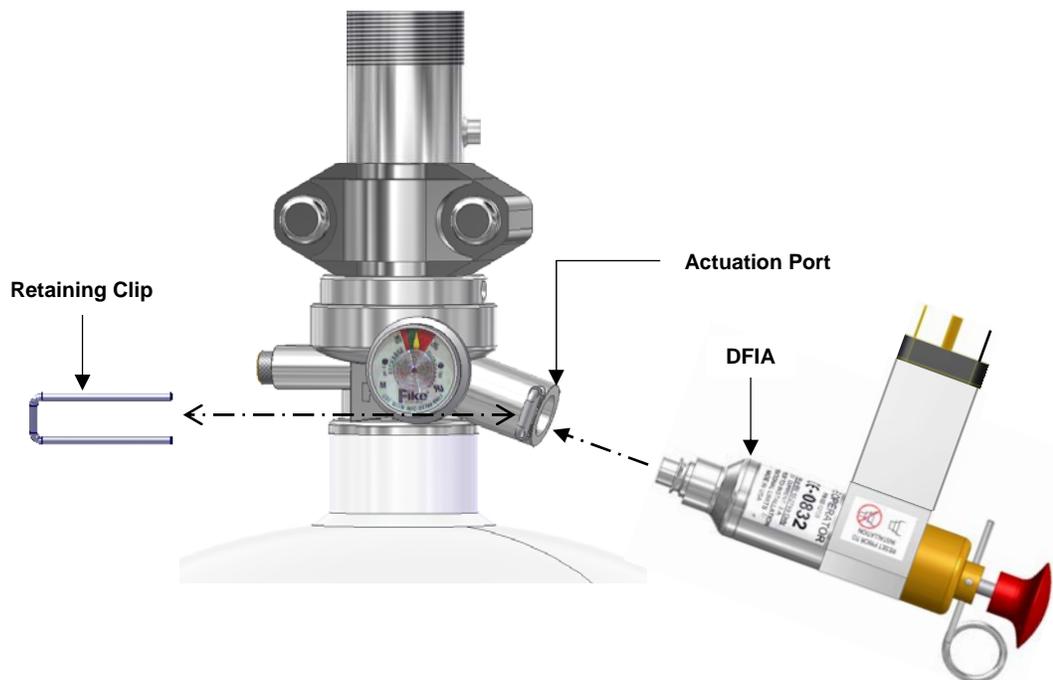
IMPORTANT NOTE: Check to ensure DFIA is armed (Firing Pin retracted) and Safety Pin is place before installing to the Impulse Valve on the container.



Install the wire lead w/ connector (Item no. 3) to the DFIA (Item no. 1) connector and secure with set screw.

Install DFIA; remove Retaining Clip and Plastic Plug from Impulse Valve Actuation Port.

Insert DFIA into Impulse Valve Actuation Port and re-insert Retaining Clip.



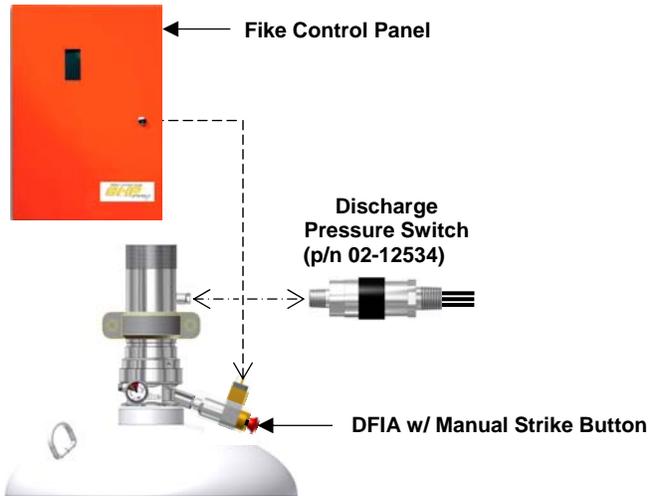
CAUTION: The container is “**NOW ARMED**”.

ELECTRIC ACTUATION – SINGLE CONTAINER SYSTEM W/ DFIA

For wiring installation details between Control Panel, and the DFIA, reference page 6.

At this point the DFIA can be installed to the Clean Agent Container Impulse Valve. The Discharge Pressure Switch (p/n 02-12534) is required and is wired to the manual release contact in SHP PRO or to a monitor module in Cheetah Xi or Xi50 installations.

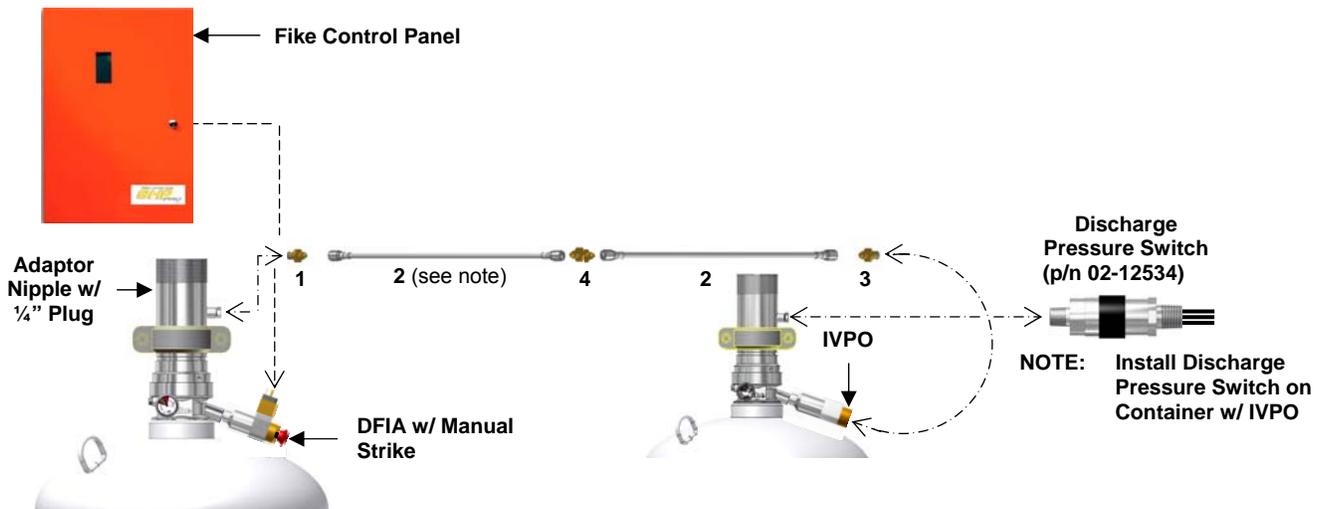
WARNING: Do not attempt to install the DFIA with the firing pin in the activated (extended) position.



ELECTRIC & PNEUMATIC ACTUATION – TWO CONTAINER SYSTEM W/ DFIA & IVPO

ITEM	PART NUMBER	DESCRIPTION
1	02-4530	1/4" NPT x 1/4" JIC Adaptor (must be ordered separately)
2	02-4977	1/4" JIC x 3.0' lg. Actuation Hose (supplied w/ IVPO) (see note)
3	02-4535	1/8" NPT x 1/4" JIC Adaptor (supplied w/ IVPO)
4	02-12926	1/4" JIC Male Adaptor (must be ordered separately)

NOTE: This actuation method requires 2 – 1/4" JIC x 3.0' lg. Actuation Hoses, 1 hose supplied w/ IVPO assembly, the 2nd Actuation Hose must be ordered separately.



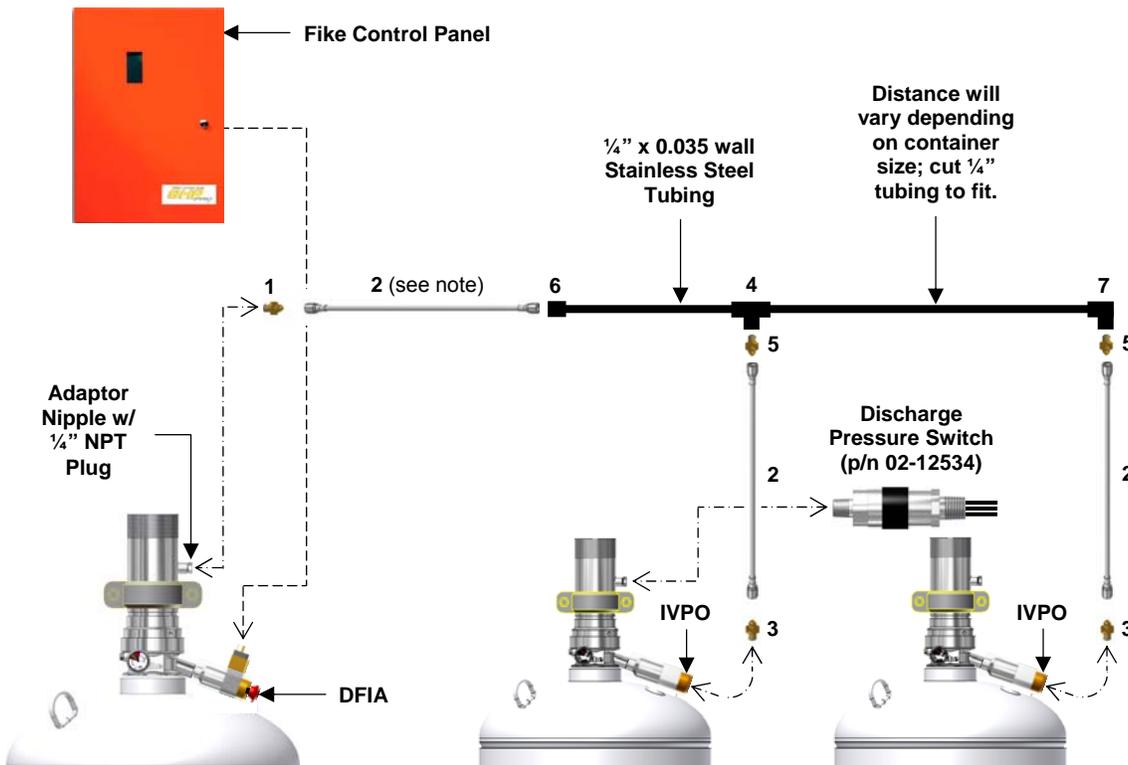
1st remove the 1/4" NPT Plug from Adaptor Nipple, then install Actuation System as shown above. Secure Actuation tubing to a solid surface. Anchoring into plaster, sheetrock wall or any other facing material is NOT acceptable. For additional information regarding the installation and resetting of the IVPO, refer to the IVPO Component Sheet (p/n 06-551).

The Discharge Pressure Switch (p/n 02-12534) is required and is wired to the manual release contact in the SHP Pro or to a monitor module in the Cheetah Xi or Xi50 installations.

ELECTRIC & PNEUMATIC ACTUATION – MULTI CONTAINER SYSTEM W/ DFIA & IVPO

ITEM	PART NUMBER	DESCRIPTION
1	02-4530	1/4" NPT x 1/4" JIC Adaptor (must be ordered separately)
2	02-4977	1/4" JIC x 3.0' lg. Actuation Hose (supplied w/ IVPO) (see note)
3	02-4535	1/8" NPT x 1/4" JIC Adaptor (supplied w/ IVPO)
4	C02-1359	1/4" Tube Tee (must be ordered separately)
5	C02-1356	1/4" Male JIC x 1/4" Male Tube Adaptor (must be ordered separately)
6	02-12695	1/4" Tube x 1/4" JIC Adaptor (must be ordered separately)
7	02-12696	1/4" Tube Elbow-90° (must be ordered separately)
8	02-12697	1/4" Tube Coupler (not shown) (must be ordered separately)

NOTE: The Actuation Hose required to connect the 1st container w/ DFIA to the Actuation Tubing must be ordered separately.



The illustration above shows the items required to make the proper connection between the Container equipped w/ an DFIA and the Container(s) equipped w/ an IVPO. The maximum length of pneumatic actuation line (including Hoses) can not exceed 50 ft. (15.2 m) and up to 6 containers equipped w/ an IVPO.

1st remove the 1/4" NPT Plug from Adaptor Nipple, then install Actuation System as shown above. Secure Actuation tubing to a solid surface. Anchoring into plaster, sheetrock wall or any other facing material is NOT acceptable.

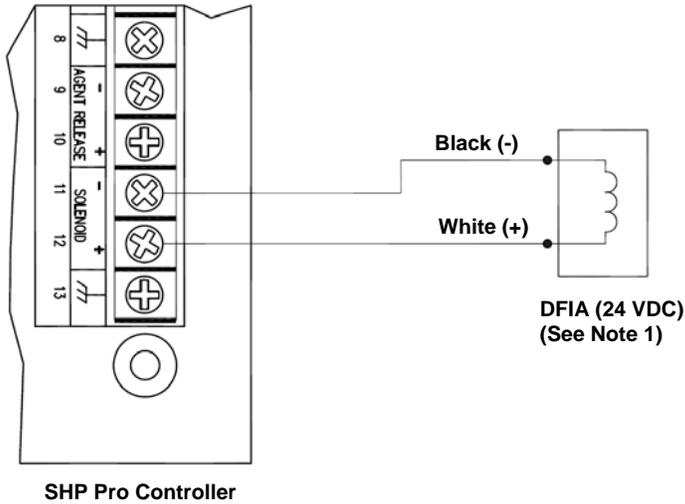
The Discharge Pressure Switch (p/n 02-12534) is required and is wired to the manual release contact in the SHP Pro or to a monitor module in the Cheetah Xi or Xi50 installations.

For additional information regarding the installation and resetting of the IVPO, refer to the IVPO Component Sheet (p/n06-551).

WIRING DETAIL FOR SHP PRO TO DFIA

For additional details refer to the SHP Pro manual (p/n 06-297)

NOTE 1: Maximum 1 DFIA per SHP Pro Controller

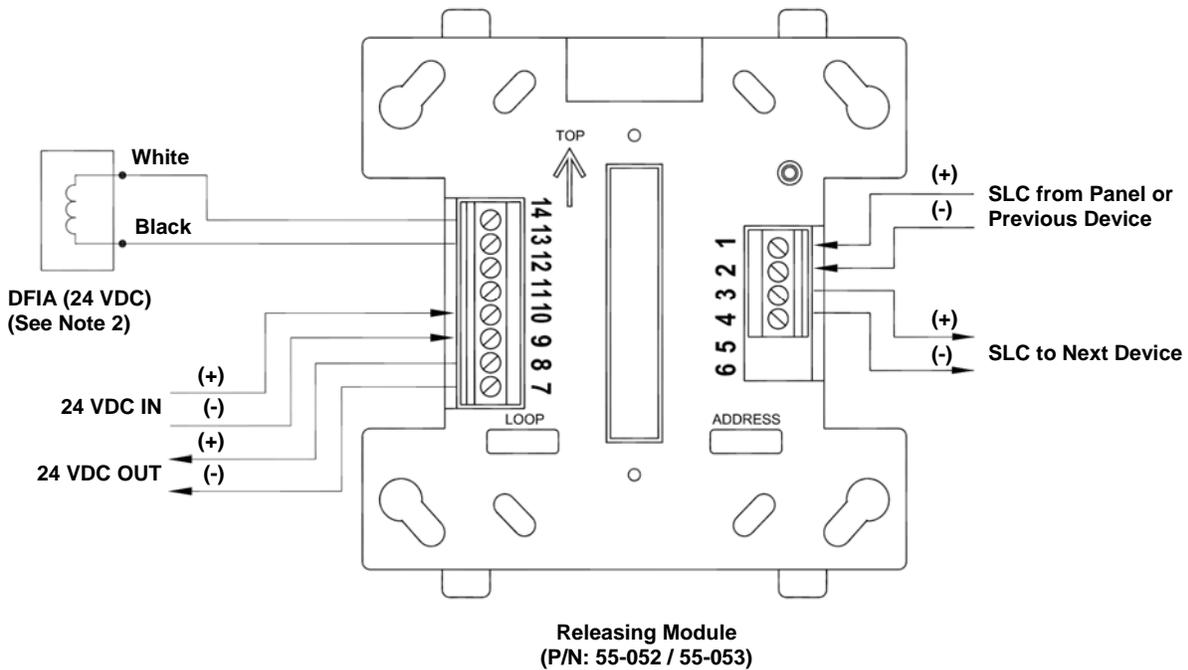


WIRING DETAIL FOR RCM MODULE TO DFIA

For additional details refer to the following product manuals:

- Cheetah Xi50 manual (p/n 06-369)
- Cheetah Xi manual (p/n 06-356)

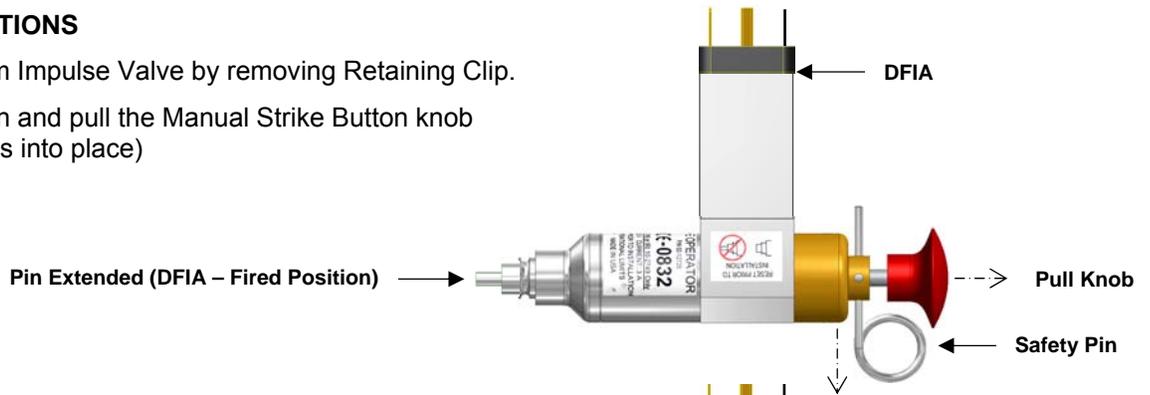
NOTE 2: Maximum 1 DFIA per Releasing Module



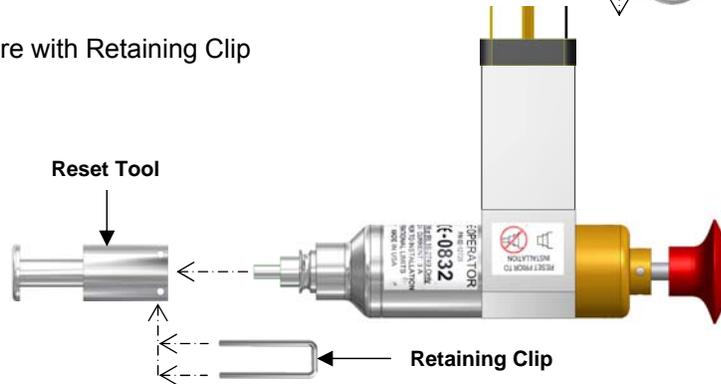
RESET INSTRUCTIONS

Remove DFIA from Impulse Valve by removing Retaining Clip.

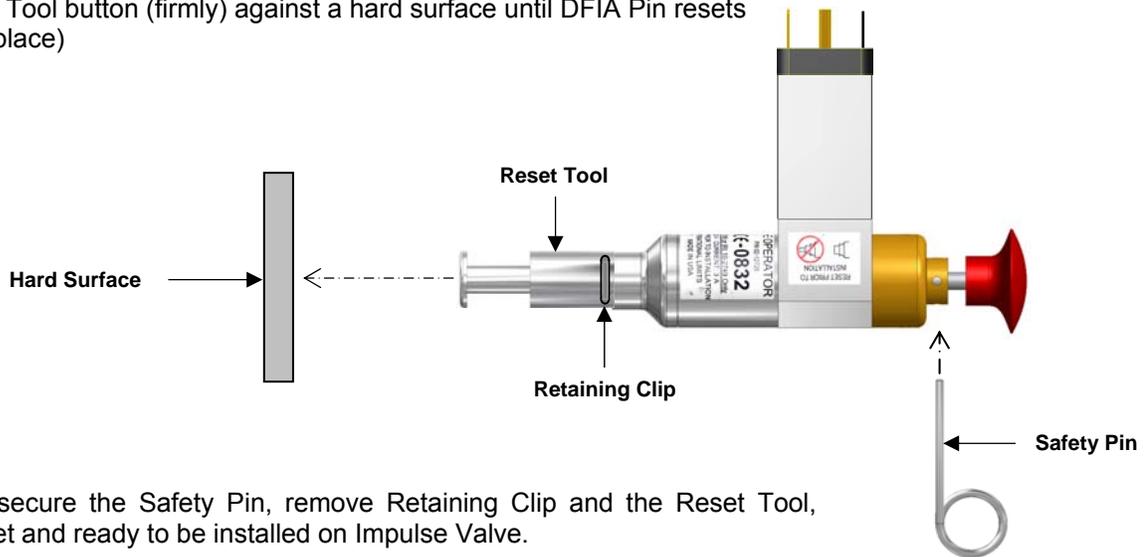
Remove Safety Pin and pull the Manual Strike Button knob until it resets (clicks into place)



Insert DFIA into Reset Tool and secure with Retaining Clip



Push Reset Tool button (firmly) against a hard surface until DFIA Pin resets (clicks into place)



Insert and secure the Safety Pin, remove Retaining Clip and the Reset Tool, DFIA is reset and ready to be installed on Impulse Valve.

IMPORTANT NOTE: Check DFIA to ensure device is armed before inserting on Impulse Valve.

