



— MODEL — X47A Ejector



DESCRIPTION

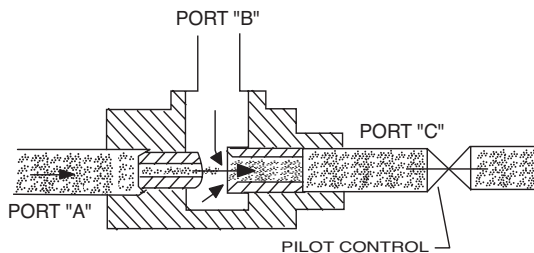
The Cla-Val Model X47A Ejector is a compact, precision fitting, incorporating a primary and a secondary jet, designed to create a low-pressure area at the suction port.

OPERATION

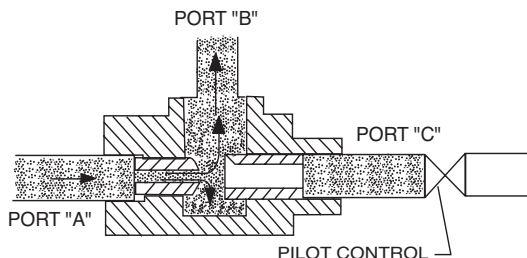
The X47A Ejector is designed for use in a pilot control system on a Cla-Val Main Valve. Pressure is applied to the inlet port (A). As the fluid passes through the center portion of the X47A Ejector, the high velocity entrains particles of fluid from suction port (B), which results in a reduced pressure at this port.

In actual operation, the pressure port (A) is connected to the upstream side of the Main Valve; the discharge port (C) is connected to the Pilot Control; and the suction port (B) is connected to the cover chamber of the Main Valve.

Fluid line pressure enters at the inlet port (A). When the Pilot Control is closed, no flow occurs through the X47A Ejector, and full line pressure is directed into the Main Valve cover chamber, closing the Main Valve tight. As the Pilot Control opens, and flow through the X47A Ejector begins, pressure at the suction port (B) decreases until the Main Valve is permitted to open. Further changes in the flow rate resulting from opening and closing of the Pilot Control produce corresponding changes in the flow through the Main Valve.



PILOT CONTROL OPEN



PILOT CONTROL CLOSED

DISASSEMBLY

Do not attempt to remove primary or secondary jets from X47A Ejector housing.

INSPECTION

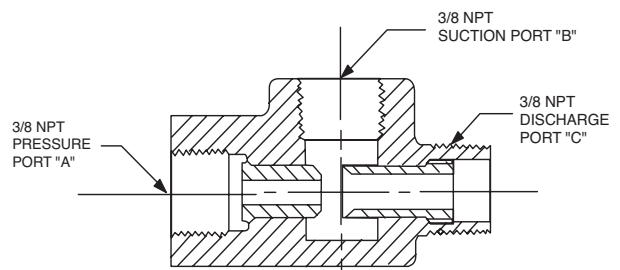
Inspect port threads for damage or evidence of cross-threading. Check primary and secondary jets for clogging or embedded foreign particles. Check for breaks, cracks, fatigue, and other signs of damage.

CLEANING

After inspection, cleaning of the X47A can begin. Water service usually will produce mineral or lime deposits on metal parts in contact with water. These deposits can be cleaned by dipping the X47A in a 5-percent muriatic acid solution just long enough for deposits to dissolve. This will remove most of the common types of deposits. **Caution: use extreme care when handling acid.** If the deposit is not removed by acid, then a fine grit (400) or dry sandpaper can be used with water. Rinse parts in water before handling. An appropriate solvent can clean parts used in fueling service. Dry with compressed air or a clean, lint-free cloth. Protect from damage and dust until reassembled.

REPLACEMENT

If there is any sign of damage, or if there is the slightest doubt that the X47A Ejector may not afford completely satisfactory operation, replace it. Use Inspection steps as a guide. Neither the primary jet, secondary jet, or bare housing is furnished as a replacement part. Replace X47A Ejector as a complete unit.

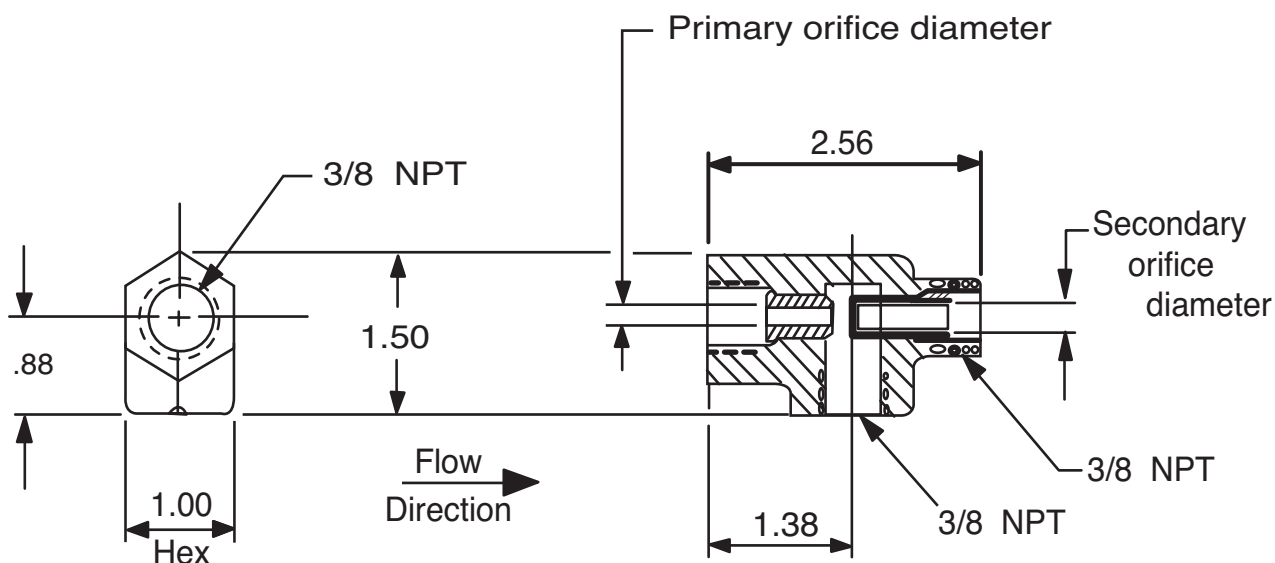


NOTE: OBTAIN AS COMPLETE ASSEMBLY ONLY. SPECIFY NUMBER STAMPED ON SIDE OF EJECTOR WHEN RE-ORDERING.



X47A

3/8" Ejector



NOTE: Sold as complete assembly. No replacement parts available.

When ordering parts, please specify:

- Number Stamped on Side
- Description (X47A 3/8"Ejector)
- Orifice Dimensions
- Materials

BRONZE HOUSING - 303 S.S. INSERTS

| CLA-VAL X47A STK. NO. | ORIFICE DIAMETER | |
|-----------------------------|------------------|-----------|
| | PRIMARY | SECONDARY |
| C4311B | 1/16 | 3/32 |
| C4312K | 1/8 | 3/16 |
| C4089D | 3/16 | 9/32 |

303 S.S. HOUSING - 303 S.S. INSERTS

| CLA-VAL X47A STK. NO. | ORIFICE DIAMETER | |
|-----------------------------|------------------|-----------|
| | PRIMARY | SECONDARY |
| 32899H | 1/16 | 3/32 |
| C6168D | 3/16 | 9/32 |
| 65274D | 5/32 | 9/32 |