

Jiffy-Jector Benefits and Ordering Information

U.S. Patent No. 4,162,886



Each Jiffy-Jector Package Includes:

- Actuator Housing Assembly
- Actuator Pin Assembly
- Air Logic Manifold Assembly
- Manifold Bracket
- Thrust Insert
- Dual Air Filtration System
- Polyurethane Tubing (1/8 I.D. x 9 feet long)
- Installation Instructions

Runner hang-ups in 3-plate molds are both costly and time consuming. When a runner hangs up, the machine stops, disrupting the cycle. Mold damage may also occur. The D-M-E Jiffy-Jector prevents runner hang-up problems.

The pneumatically controlled and operated Jiffy-Jector is compact and powerful. It moves the runner system away from the X-1 Plate and then, by means of a short positive stroke and a blast of compressed air, ejects the runner system down and out of the mold – putting an end to costly hang-up problems.

The basic requirement for proper operation of the Jiffy-Jector is a clear, unobstructed path out of the mold for the runner system.

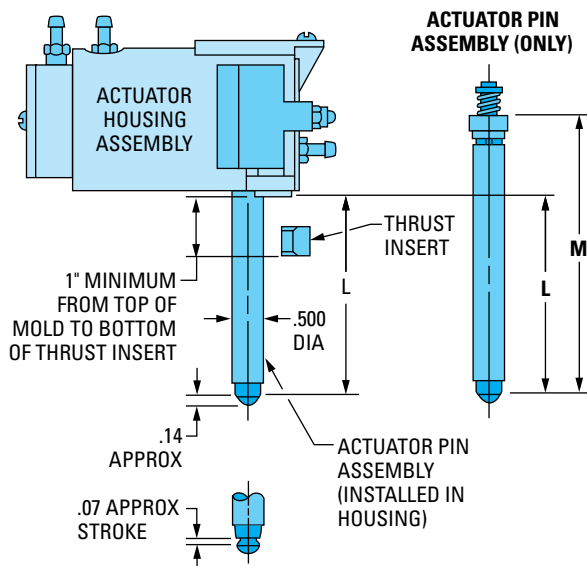
The Jiffy-Jector is adaptable to most 3-plate molds. It can be designed into new molds or retrofitted to existing molds.

The Jiffy-Jector increases the production efficiency of the mold, and helps boost your profits by cutting downtime.

Prevent runner hang-ups in your 3-plate molds. Use the D-M-E Jiffy-Jector.

Jiffy-Jector Benefits:

- Prevents hang-ups in 3-plate molds
- Increases production efficiency
- Adaptable to most 3-plate molds
- Works well in new molds and can be retrofitted to existing molds



Jiffy-Jector Packages

| ITEM NUMBER | L |
|-------------|------|
| JJ-102 | 2.00 |
| JJ-103 | 3.00 |
| JJ-104 | 4.00 |
| JJ-105 | 5.00 |

Actuator Pin Assembly (only)

| ITEM NUMBER | L | M |
|-------------|------|------|
| AP-332 | 2.00 | 3.32 |
| AP-432 | 3.00 | 4.32 |
| AP-532 | 4.00 | 5.32 |
| AP-632 | 5.00 | 6.32 |

NOTES:

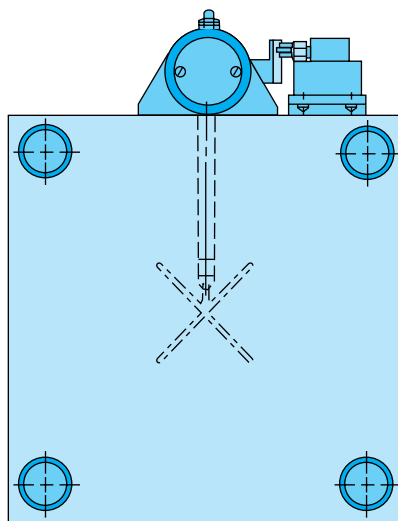
Actuator Pin Assemblies are interchangeable for replacement purposes or for subsequent applications where a longer or shorter pin is required.

For best results, it is recommended that the end of the actuator pin be located as close to the sprue as possible, especially when molding flexible resins. (Select actuator pin length accordingly.)

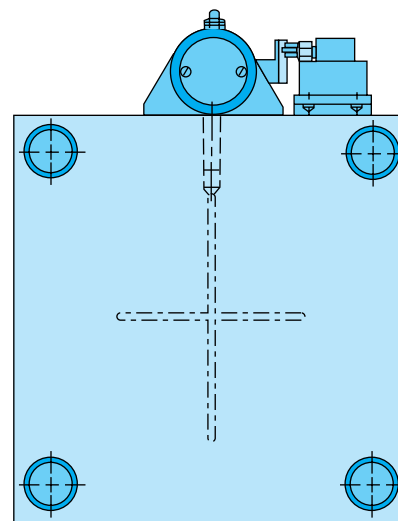
For complete design and application guidelines, contact D-M-E.

Jiffy-Jector Design and Application Guidelines

- For best results, locate the actuator pin as close to the sprue as possible, especially when molding flexible resins (see Typical Application 1). Mold, runner or part design may require a longer distance between the actuator pin and sprue (see Application 2).
- Design actuator pin shutoff into the split line between the X-1 and X-2 Plates. The bored or reamed hole is usually located on the centerline of the mold.
- Locate two 5/16-18 tapped holes in the X-1 Plate for mounting the actuator housing (see assembly drawing).
- Locate two 5/16-18 tapped holes in the "A" clamping plate (A.C.P.) for manifold bracket (see assembly drawing).
- Provide 1" additional mold opening between the X-1 and X-2 Plates (1st parting line). This allows the actuator pin to move 1" away from the X-1 Plate and still have adequate clearance for runner ejection.
- When retrofitting a mold with the Jiffy-Jector:
 - Provide 1" longer stripper bolts between the X-1 and X-2 Plates.
 - Be sure the leader pins are long enough to allow 1" additional movement of the X-2 Plate – use longer leader pins if necessary.
 - Provide clearance for the longer stripper bolts and leader pins (without interfering with water lines or other mold components).
- The Jiffy-Jector does not eliminate the need for sucker pins or normal 3-plate mold components or sequences.
- Allow sufficient stroke between the X-1 Plate and the A.C.P. (3rd parting line) to strip the runners from the sucker pins and break the sprue from the nozzle.
- To minimize clearance required for runner system ejection, sprueless design is recommended – such as the D-M-E T-Series Straight-Shot Hot Sprue Bushing.
- It is important the runner system have a clear path out of the mold. Leader pins, water hoses, fittings and other mold components must not obstruct the ejection path.
- An air pressure range of 55 psi minimum, to 100 psi maximum, is required.
- Be sure the mounting holes and the bored or reamed hole for the actuator pin assembly do not interfere with leader pins, water lines or other mold components.
- The manifold bracket is supplied with elongated slots for adjustment. Adjust the position of the Jiffy-Jector manifold assembly on this bracket so the pneumatic limit switch will be actuated near the end of the X-1 Plate travel (refer to assembly drawing).
- If a standard actuator pin is too long, mount the actuator housing and manifold bracket on spacers to reduce the distance the pin extends into the mold (refer to assembly drawing and actuator pin assembly chart).



**D-M-E Jiffy-Jector
Typical Application 1
(Preferred)**



**D-M-E Jiffy-Jector
Application 2**

Jiffy-Jector Operating Sequence | Installation Dimensions for "T" Series Mold Bases

D-M-E Jiffy-Jector Operating Sequence

STEP 1

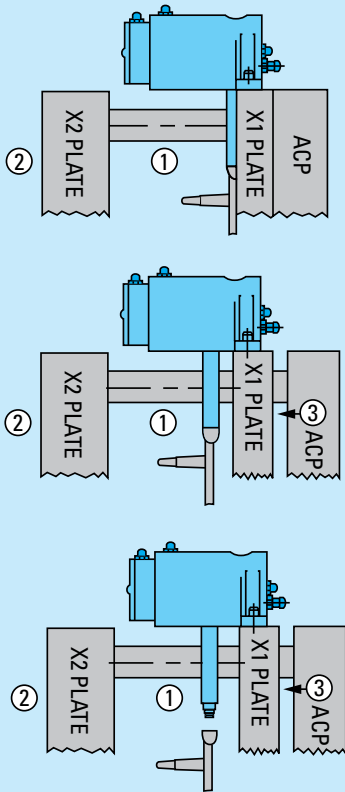
- Parting lines 1 and 2 open.

STEP 2

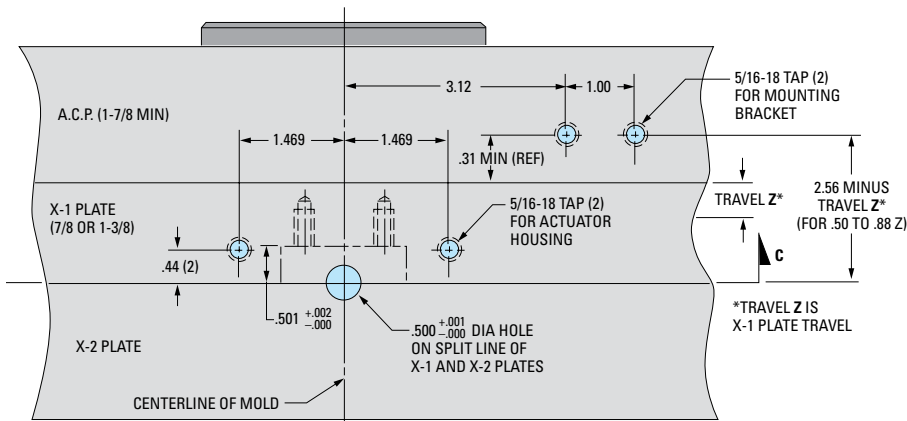
- Parting line 3 opens and actuates the pneumatic limit switch.
- Air cylinder moves actuator pin assembly and runner system away from the X-1 Plate.

STEP 3

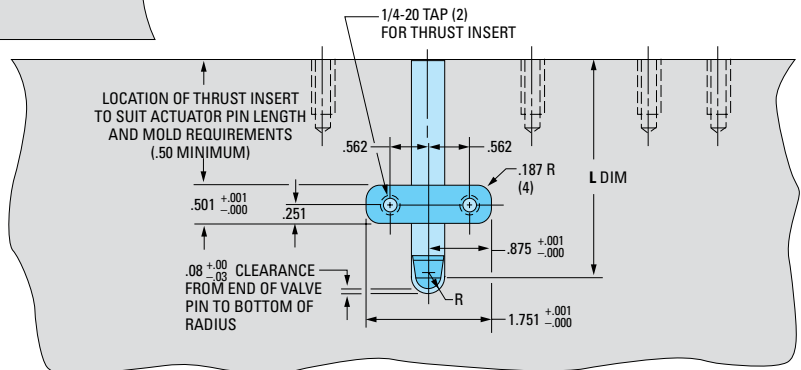
- Near the end of the 1" air cylinder stroke, the depressed ball gives the valve a short positive stroke, loosening the runner system from the actuating pin. Simultaneously, a blast of compressed air is released, ejecting the runner system down and out of the mold.
- After the adjustable time delay valve times out, the air cylinder returns the actuator pin assembly to the X-1 Plate.
- The mold begins the normal mold close sequence.



Installation Dimensions for "T" Series Mold Bases



TOP VIEW OF MOLD



VIEW C-C

| TOLERANCES UNLESS NOTED | |
|-------------------------|-------|
| FRACTIONS | ±.015 |
| .00 | ±.010 |
| .000 | ±.005 |
| ANGLES | ±1° |

FOR JJ-102 THRU JJ-105
(CONTACT D-M-E FOR JJ-101
INSTALLATION INSTRUCTIONS)