

Installation and Pin Adjustment Guide

PRE INSTALLATION

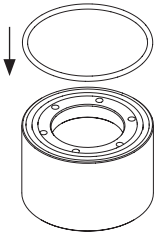
1. Verify the actuator pockets and air circuits are machined in the back plate as shown in figure 5.
2. Ensure there are no sharp edges or burrs in the actuator pockets.
3. Ensure the actuator pocket and air circuits are clean.
4. Cut pins to length and profile end to shut off angle (refer nozzle drawing ex-Mastip)
5. Assemble the fixed half of the mould including hot runner nozzles and manifold excluding backplate.
→ Refer to the Technical Specifications section of the Technical Guide

INSTALLATION

ONE

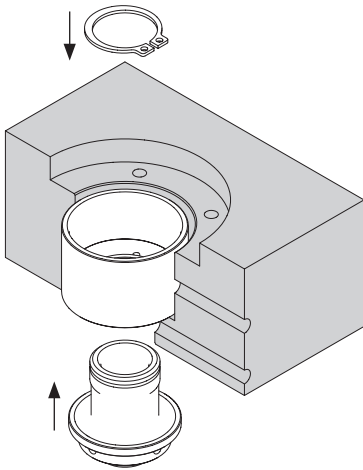
Ensure all components are clean

TWO



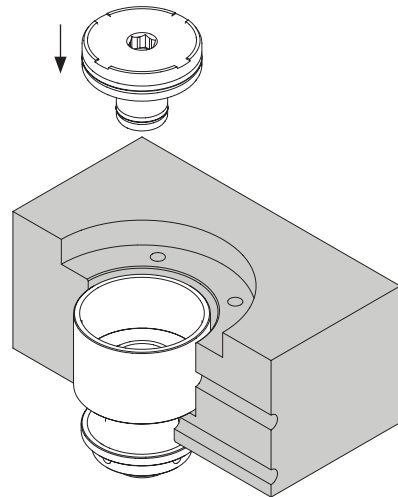
Fit the **Cylinder End Seal 11** to the **Cylinder 10**
Apply grease* to **Cylinder End Seal 11**

THREE



Fit the **Cylinder 10** and **Location Spacer 12**
to the mould backplate and retain using the
Circlip 9

FOUR



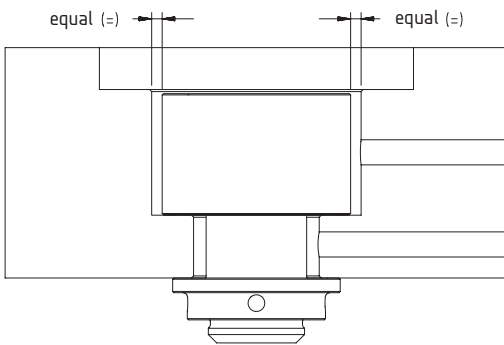
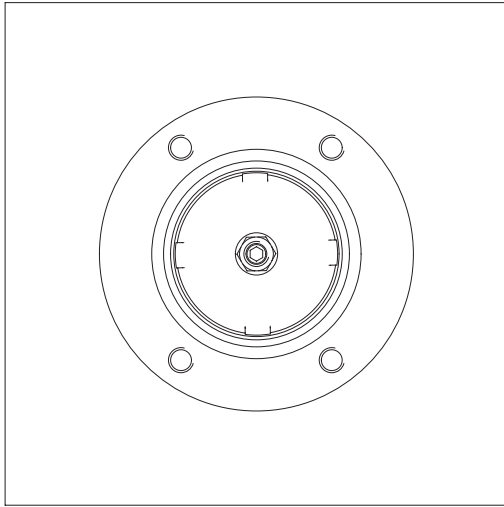
Apply grease* to the sealing bores of the
Location Spacer 12 and **Cylinder 10** and to
the pre fitted **Piston Seals 6 & 8**
Fit **Piston 7** to the **Cylinder 10**

Note

* Mastip recommends using high temperature silicon grease

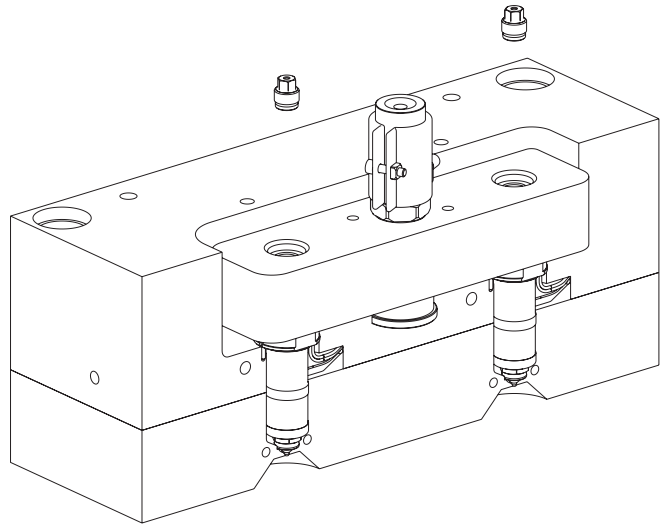
INSTALLATION CONT.....

FIVE



Centralise **Cylinder Assembly** A
to the Actuator pocket.

SIX

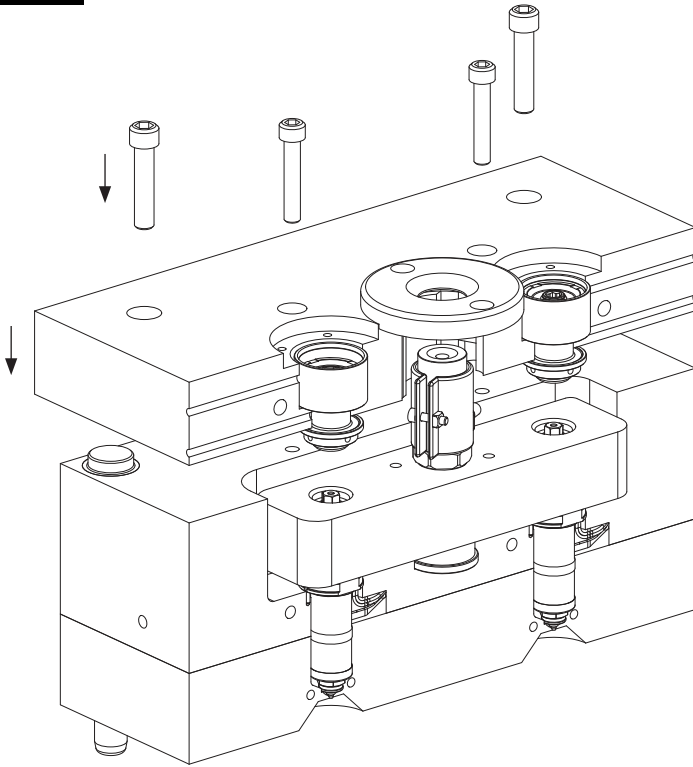


Clean any residue material from the pin seal pocket and thread in the manifold.

Apply heat resistant copper based anti-seize to the thread of the new pin seal and screw into the manifold and tighten to 20Nm.

Ensure pins slide smoothly through the pin seal after tightening.

SEVEN

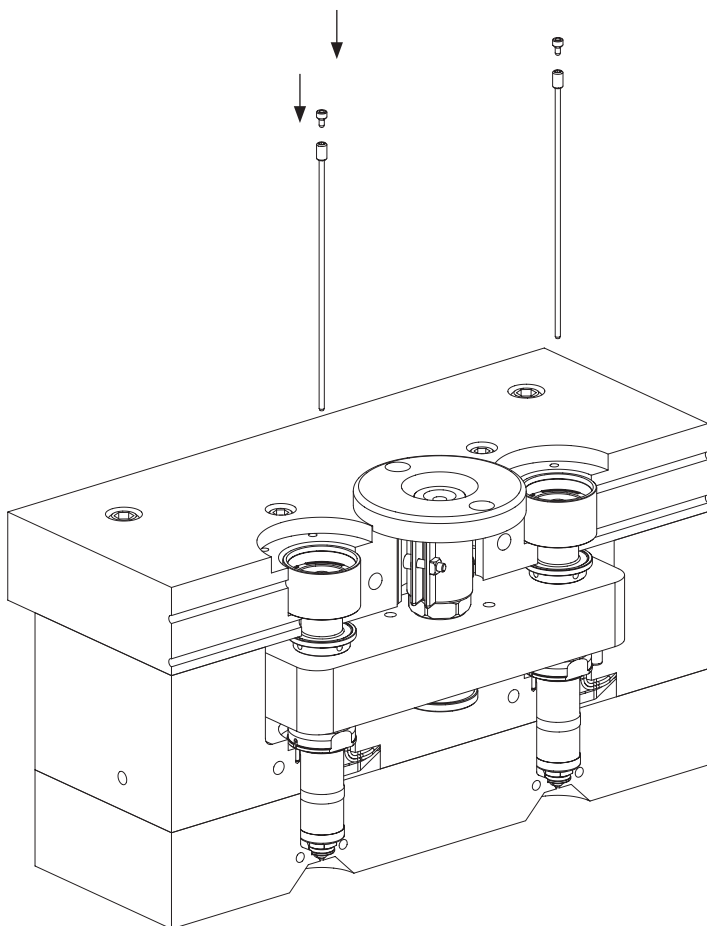


Fit mould backplate to mould and fasten.

Note: If backplate location guides start to locate first, then the cylinder assembly should self locate to the manifold. However in some cases it may be necessary to move the cylinder assemblies in the actuator pocket to locate them with the manifold.

INSTALLATION CONT.....

EIGHT



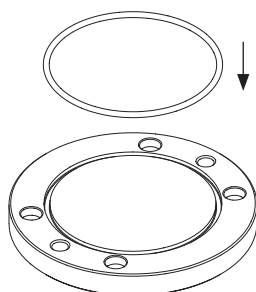
Fit the **Valve Pin** ⑤ to **Piston** ⑦

To adjust the pin length:
→ Go to step FOUR in the
PIN ADJUSTMENT section.

or

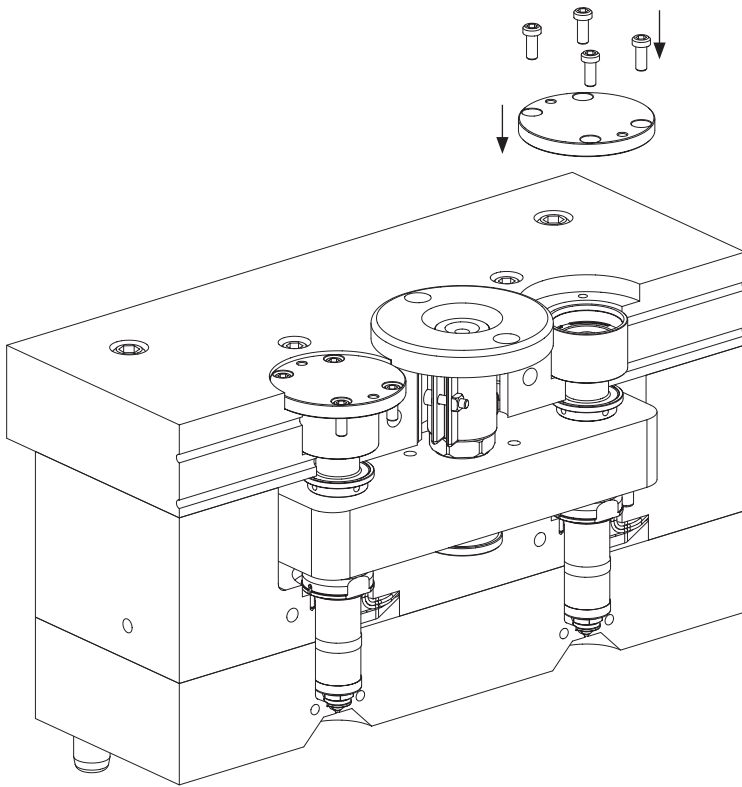
fit the **Locking Screw** ④ and
continue to step NINE.

NINE



Fit **Blanking Plate Seal** ③ to **Blanking Plate** ②

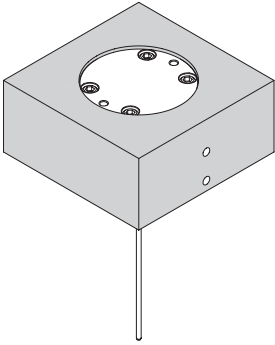
TEN



Fit **Blanking Plate 2** to the
mould backplate and fasten using
Blanking Plate Screws 1

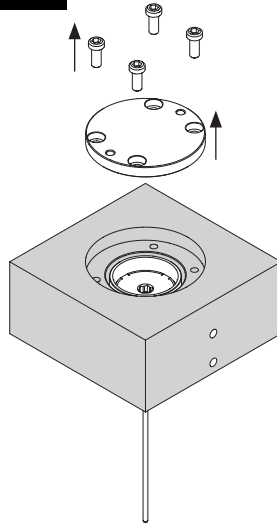
PIN ADJUSTMENT

ONE



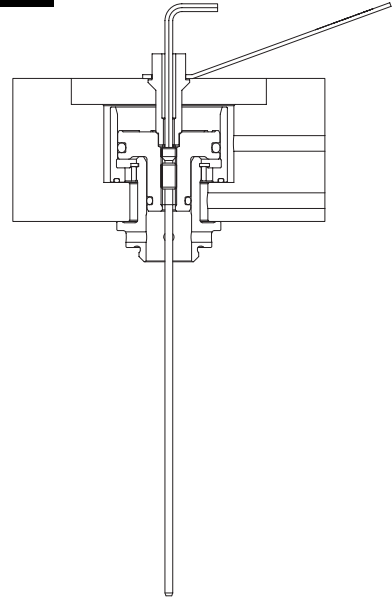
Make sure piston is fully forward and ensure no air is connected to the system

TWO



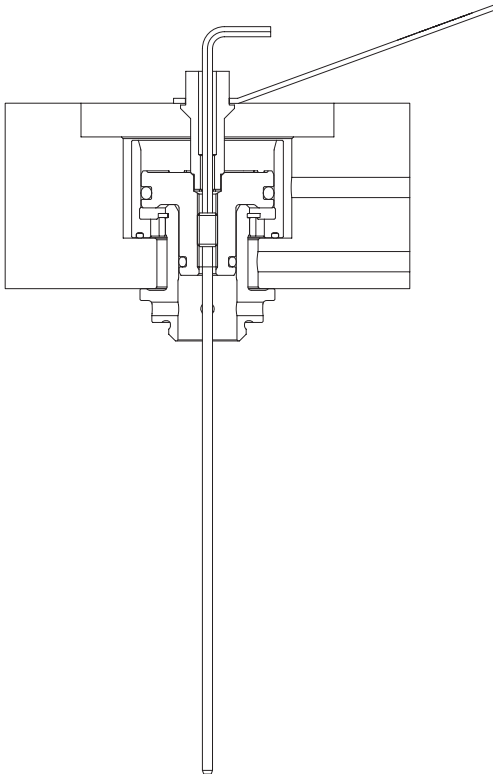
Remove **Blanking Plate Screws ①** and remove **Blanking Plate ②** from the mould backplate

THREE



Insert tube spanner into the piston
Insert a 3.0mm hex key into the **Locking Screw ④** and remove

FOUR



Re-insert the hex key to adjust pin to correct position.

a. For adjusting a new installation:

- i. The pin length can be set cold by measuring from the front with a depth micrometer calculating the allowance for expansion.

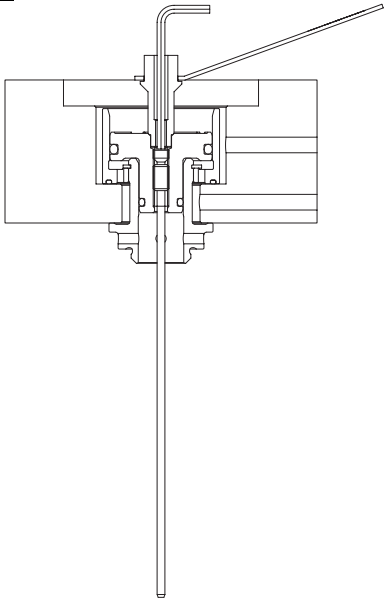
→ Refer to page MVG40-6 for pin expansion calculation

b. For adjusting an existing installation:

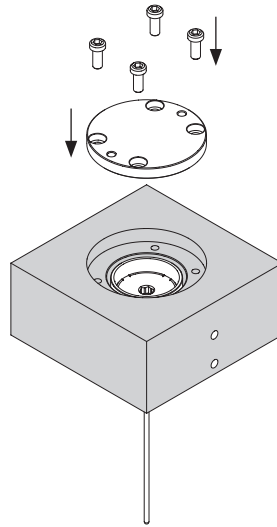
- i. The nozzle to be adjusted will be heated to the minimum melt temperature of the plastic material
- ii. While pushing the piston forward from the rear adjust the valve pin forward until the piston just begins to move and then back off 1/8 of a turn.

PIN ADJUSTMENT CONT...

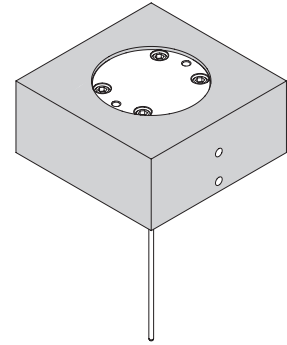
FIVE

Insert and tighten **Locking Screw** ④

SIX

Fit **Blanking Plate** ②
and fasten with **Blanking
Plate Screws** ①

SEVEN



Pin adjustment is COMPLETE