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.....

Centralise Cylinder Assembly A to the Actuator pocket.

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.
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.
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
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**

**SIX**

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

**SEVEN**

Pin adjustment is COMPLETE