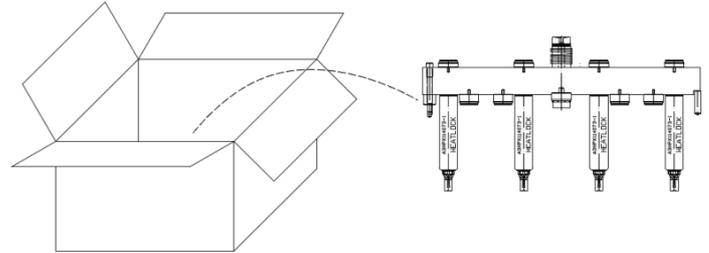


Step 1: Unpack

Take out of the system from box with care.



(pic1)

Step 2: Be familiar with all components

Make sure all the components on the list are provided.(refer to pic 2)

HEATLOCK		Customer name:xxxxx Customer Ref No:xxxxx HEATLOCK Ref No:HE1015-xxxx	
No.	Item Code	Component Description	Qty/Kit
1	MANFOLD04	Complete manifold for pressed in heaters	1
2	MHC00000	Tubular heater 1200° 600W 230V	2
3	MHC00001	Ceramic connectors for tubular heaters	4
4	MHR00000	Wires for heaters L=1M 1.5sqmm RH4	4
5	DISP00000	Manifold heater air 3000mm 100mm-40	1
7	HEAD00000	Ceramic centre location spacer 40x100mm	1
10	HEAD00010	Ceramic back spacer 40x100mm	2
14	TC0004000	Thermocouple L=10mm	1
15	DW000130	Downer for center line location	1
20	A3M000001-1	A3 Inlet/Heater L=60mm 200W	2
21	MHC-000-000	Spacer Metal	2
22	DISP0000000	Feed back heater 40x 60x2 350W	1
24	DISP010074	Titanium bottom spacer 40x140mm	2
25	HEAD00014	Ceramic back spacer 40x140mm	2
27	MHR00000	Wires for heaters L=1M 1.5sqmm RH4	1
28	MHC-000-000	Spacer Metal	1

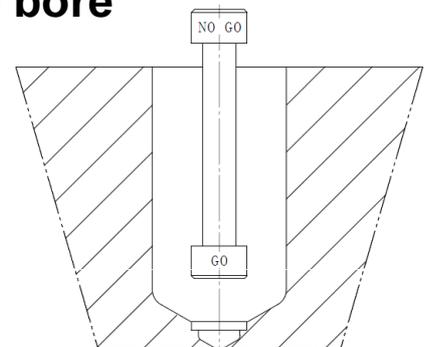
(pic2)

Step 3: Check dimensions

Measure mold plate thickness .Compare the measurements with those dimensions on the GA drawing ,make sure they match requirements on HEATLOCK GA drawing.

Step 4: Check sealing dimension of nozzle bore

Use GO and NO GO gauge to measure the sealing dimension of nozzle bore ,make sure nozzle fit into the bore.(refer to pic 3)



(pic3)

Step 5: Check TB dimension

Use digital micrometer to measure TB dimension, compare with the TB dimension on the drawing, and make a record. (refer to pic 4)



(pic4)

Step 6: Adjust the height of center location spacer

To ensure the gate match the tip position. Adjust the height of center location spacer following:

- 1).If measure TB larger than TB in drawing ,grind the spacer of measure TB-TB in drawing .Thickness control measure TB-TB in drawing within the tolerance of $\pm 0.02\text{mm}$;
- 2).If measure TB smaller than TB in drawing ,re-machine the bore depth to reach the same result of tolerance.(refer to pic 5)



(pic5)



(pic6)

Step 7: Adjust the height of manifold support

Adjust the height of manifold support to make sure with the height of center location spacer in -0.01mm .(refer to pic 6)

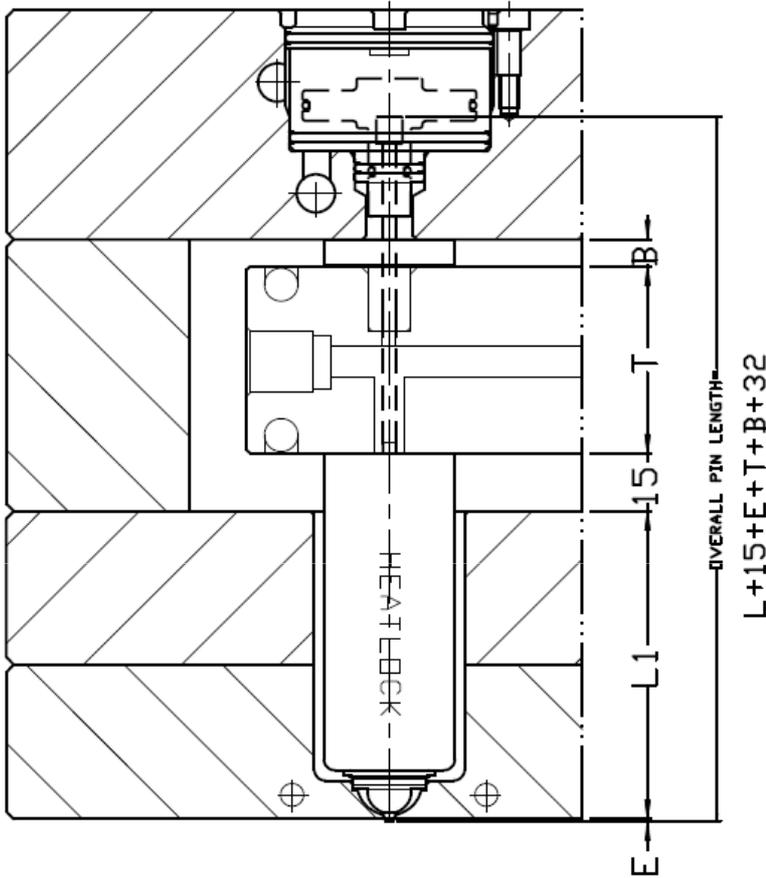
**Step 8: Install the system**

Put the system into the mold .

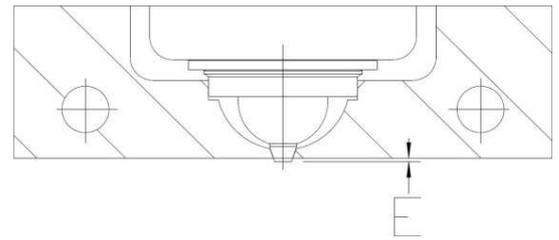
Step 9: Calculate the valve pin length

1.Valve pin provided is over length and without chamfer.
Use formula :

OVERALL PIN LENGTH=L1+14+E+T+B+32 to calculate the necessary valve pin Length(refer to Pic7)

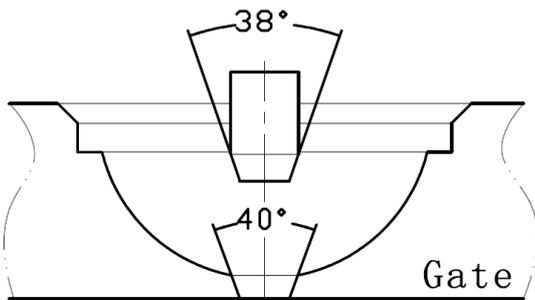


*E is the pin length out of parting line decided by customer.

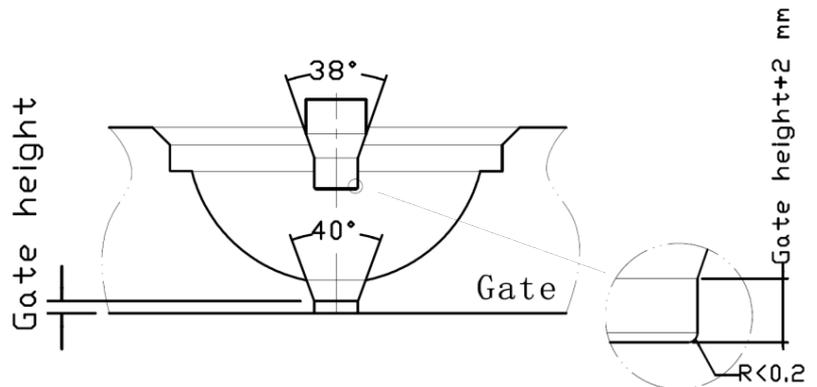


(pic7)

2. Grind valve pin. There are two options, one is to grind a 38 degrees chamfer at the bottom directly (refer to Pic8); the other one is to grind a straight section first, then grind a transition chamfer 38 degrees. (refer to Pic9). After that, applying grinding oil at the front of pin and put it into nozzle, further grind together with gate well to make sure valve pin chamfer suits gate well perfectly.



(pic8)

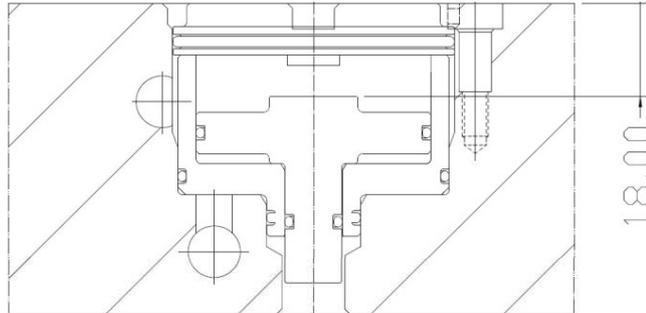


(pic9)

* Gate well no sharp corner.

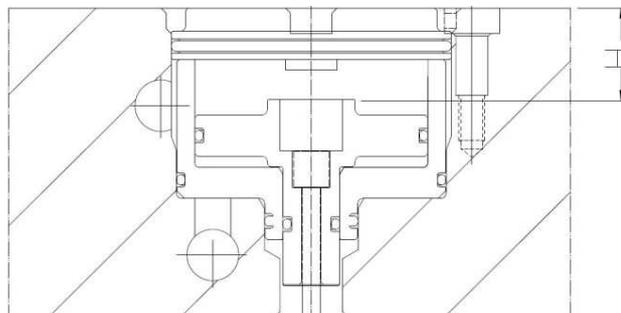
3. Check up length of valve pin

Step 1. Install piston in cylinder without valve pin, press the piston and measure the distance between cylinder and piston, our standard distance is 18.00mm. (refer to Pic10)



(pic10)

Step 2. Take out piston. Install valve pin in it. Then install piston in cylinder again. Measure the distance between Clamp and cylinder H, refer to Pic 11. Adjust to $18.00 - H = 0.1 \sim 0.2 \text{ mm}$.



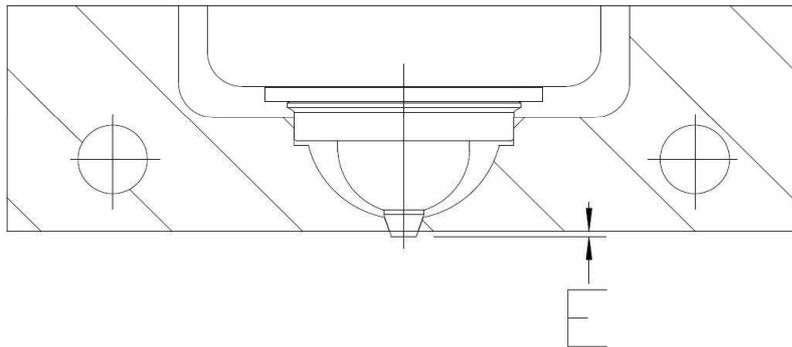
(pic11)

Step 10: Install clamp plate and valve nozzle components

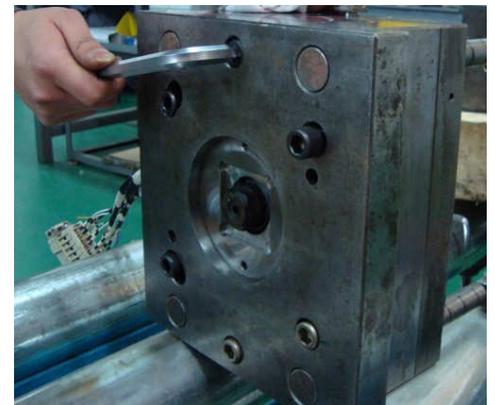
1. Install valve gate viton o-ring, use grease on o-ring during assembly.
2. Put piston inside cylinder, next fix the assembled cylinder on the clamp plate, after that locate clamp plate.
3. Put the well examined valve pin inside piston, then use grub screw to fasten pin.
4. Put cylinder lid on the top of cylinder and fasten it with screws.

Step 11: Test valve pin

Pump low pressure air into cylinder, move pin to the end. Measure the distance between the top of pin and gate well and adjust this length to make it equal to E which is decided by customer (refer to pic 12)

**Step 12: Tighten the claim plate screws**

(refer to pic 13)



(pic13)

Hot Runner Valve Gate maintenance

When you use valve gate systems do you have mechanical movements in your hot runner system. These parts, valve pin and valve seal must like all other mechanical moving parts in your mould be regularly checked and included in scheduled preventive maintenance.

How frequent this maintenance should be depends on moulding parameters and resin used.

Valve pin is located by the valve seal. These have a very tightly controlled clearance, to allow movement and prevent resin leaking thru.

Your process might create gases or other deposits that can over time make the pin to get stuck.

Remedy is normally to take pin out and clean the back end, removing deposits. Cleaning have to be done with care not using and sharp to in order not to damage the surfaces. The valve seals might also need to be clean with care, any damage to the ID surface might cause leakage.

Like all mechanical moving parts will they wear and needs to be replaced once wear causes problems. These spare parts is stock items. When re-order please always state our project No which is engraved in the plaque placed on the side or your mould or on the top surface of the manifold.

Remark: When starting up injection, use low pressure to fully fill runner to protect valve pin from being bent due to high pressure.