

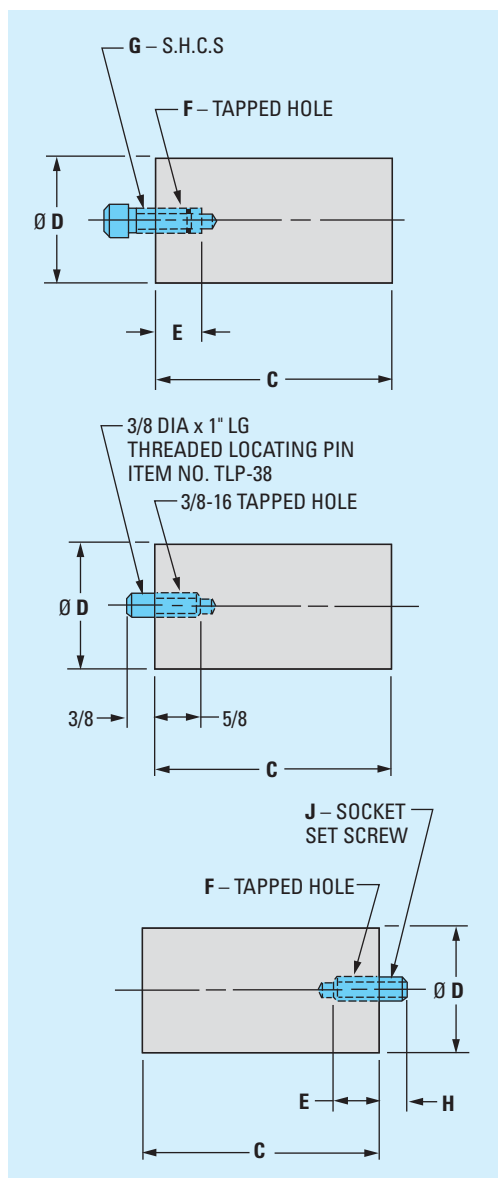
# Support Pillars and Stop Pins

## Support Pillars

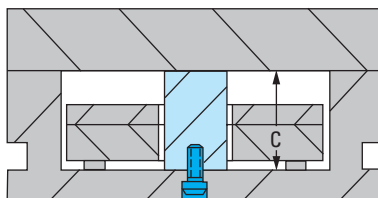
### S.A.E. 1040 Steel

Pillar height (C dimension) is finished flat and parallel.

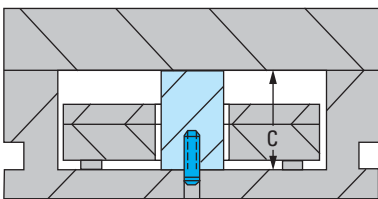
Support pillars should be used liberally since they greatly increase the capacity of the mold to support the projected area of the cavities, runner and sprue. By providing additional support, they prevent deflection of the mold. The absolute necessity of using support pillars is demonstrated by using standard strength of materials formulas. For example, an 11<sup>7</sup>/<sub>8</sub> x 15" mold base without support pillars and with a maximum permissible load on the support plate, will permit 14 square inches of cavity area without deflecting enough to cause flash. The use of one row of support pillars on center will quadruple this permissible cavity area to 56 square inches. Two rows will give nine times the area or 126 square inches. Please refer to the drawings below.



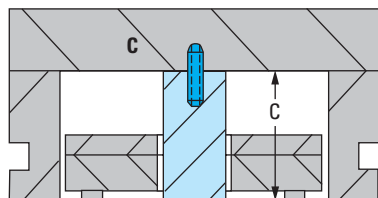
### Cap Screw Application



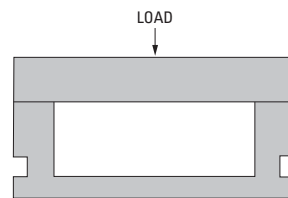
### Threaded Locating Pin Application



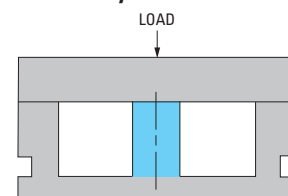
### Socket Set Screw Application



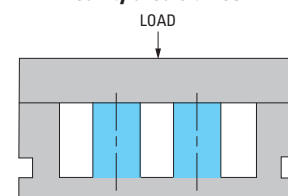
### No support pillars



### One row of support pillars increases the permissible cavity area 4 times



### Two rows of support pillars increase the permissible cavity area 9 times

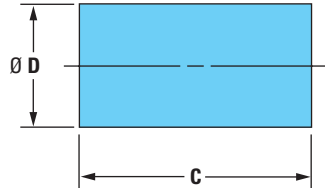


Material: S.A.E. 1040 Steel

| Ø D  | E                             | F        | H (APPROX) | J SOCKET SET SCREW |
|--|-------------------------------|----------|------------|--------------------|
| 1", 1 <sup>1</sup> / <sub>4</sub> ", 1 <sup>1</sup> / <sub>2</sub> " | 5/8                           | 3/8 - 16 | 1/2        | ITEM NO. SSS-38114 |
| 3", 4"   | 1 <sup>1</sup> / <sub>4</sub> | 5/8 - 11 | 3/8        | ITEM NO. SSS-582   |

**NOTES:** Order S.H.C.S. separately.  
Please reference page 292 for Socket Head Cap Screw information.

# Support Pillars and Stop Pins



## Support Pillars

Support pillars are universally adaptable for cap screw, threaded locating pin, or socket set screw applications.

Order pillars from chart at left and required "fasteners" as listed below.

## Cap Screw (S.H.C.S.) Applications

3/8-16 or 5/8-11 socket head cap screws can be ordered in length required. Please reference page 292 for Socket Head Cap Screw information.

## Threaded Locating Pin Applications

Locating pins unavailable for 3" and 4" diameter pillars.

| Ø D<br>PILLAR | ITEM<br>NUMBER |
|---------------|----------------|
| 1" to 2"      | TLP-38         |

## Socket Set Screw Applications

Order pins and screws in package lots only.

| Ø D<br>PILLAR | ITEM<br>NUMBER | QTY PER<br>PACKAGE |
|---------------|----------------|--------------------|
| 1" to 2"      | SSS-38114      | 10                 |
| 3" and 4"     | SSS-582        | 5                  |

Material: S.A.E. 1040 Steel

| Ø D<br>DIAMETER<br>+ .000<br>- .060 | C<br>HEIGHT<br>+ .001<br>- .000 | ITEM<br>NUMBER |
|-------------------------------------|---------------------------------|----------------|
| 1"                                  | 2.500                           | 6090           |
|                                     | 3.000                           | 6091           |
|                                     | 3.500                           | 6092           |
|                                     | 4.000                           | 6093           |
|                                     | 4.500                           | 6094           |
| 1 1/4"                              | 2.500                           | 6130           |
|                                     | 3.000                           | 6131           |
|                                     | 3.500                           | 6132           |
|                                     | 4.000                           | 6133           |
|                                     | 4.500                           | 6134           |
|                                     | 5.000                           | 6135           |
| 1 1/2"                              | 6.000                           | 6136           |
|                                     | 2.500                           | 6140           |
|                                     | 3.000                           | 6141           |
|                                     | 3.500                           | 6142           |
|                                     | 4.000                           | 6143           |
|                                     | 4.500                           | 6144           |
| 2"                                  | 5.000                           | 6145           |
|                                     | 6.000                           | 6146           |
|                                     | 2.500                           | 6150           |
|                                     | 3.000                           | 6151           |
|                                     | 3.500                           | 6152           |
|                                     | 4.000                           | 6153           |
| 3"                                  | 4.500                           | 6154           |
|                                     | 5.000                           | 6155           |
|                                     | 6.000                           | 6156           |
|                                     | 5.000                           | 6235           |
| 4"                                  | 6.000                           | 6236           |
|                                     | 8.000                           | 6238           |
|                                     | 5.000                           | 6245           |
| 4"                                  | 6.000                           | 6246           |
|                                     | 8.000                           | 6248           |

## Stop Pins

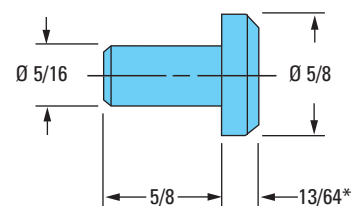
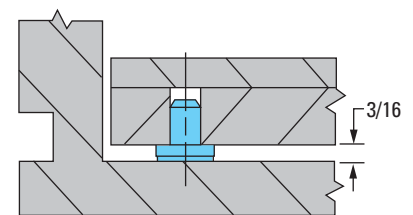
Although every D-M-E Mold Base assembly has flat stop pins welded to the underside of the ejector plate, many moldmakers require these dowel-type Stop Pins for special assemblies.



Order pins in package lots only.

| ITEM<br>NUMBER | QTY PER<br>PACKAGE |
|----------------|--------------------|
| 7100           | 50                 |

## Typical Installation



\*Head thickness .020 oversize to permit fitting at assembly.