



KNOWLEDGE BASE

Article Type: Instructions

### Safety Beam Stops for, Models 22HF, 16HF, 1600 machines

#### Description:

Safety Beam Stop kit for models 22HF, 16HF, and 1600 machines. The installation and use of the new compression beam stops is to maintain compression beam up during mold changes or other repairs.

The beam stops are a positive stop between compression beam a stripper beam.

#### WARNING

Never work on, clean or service this unit, control panel or any machine or open or remove any protective cover, guard, grate, door, or maintenance panel until the power or energy sources has been turned off, locked out / tagged out, and all moving parts have come to a complete stop and or blocked to prevent movement. Machinery is dangerous – avoid personal injury and or death by following manufacture, Local, and OHSA safety procedures. Contact Columbia Machine for safety decals, guards, horns and beacons.





### SAFETY BEAM STOPS

#### COMPRESSION BEAM STOPS FOR FLOOR LEVEL MACHINES, MODEL 22, 16 AND 1600

# **Safety First:** Always follow your safety guidelines for system lockout/tagout of electrical panels, pneumatic and the hydraulic system.

The installation and use of the new compression beam stops is to maintain compression beam up during mold change, feed drawer strike off plate adjustment or additional repairs or adjustments that require plant personnel to be working in and around the machine with the beam in the up position. The hydraulic circuit for the compression beam on some machines has a P.O. check valve and on others you have a P.O. counterbalance valve. Both these style check valves hold pressure on the base end of the compression cylinder until the valve is energized down which uses pilot pressure to open the check valve or counterbalance valve. In the event that one or both compression cylinders are allowing hydraulic oil to bypass the piston seals the beam will drift down slowly or fast depending on the condition of the seals. Other hydraulic failures can cause the beam to not stay up which could include failure to the P.O. Check valve or P.O. counterbalance valve.

The beam stops are a positive stop between the compression beam and stripper beam which in the event that either loss of hydraulics, failure to the compression cylinder or P.O. check valve, P.O. counterbalance valve the beam stops will maintain beam in up position.



The following pictures below show the installation of these new positive beam stops:











# LOWER STRIPPER BEAM STOPS FOR FLOOR LEVEL MACHINES MODEL 22, 16 AND 1600

In addition for mold installation, adjustments or repairs use your lower stripper beam stops to aid in holding the stripper beam in the up position install additional stops as required. The stripper hydraulic circuit also has either a P.O. check Valve or P.O. counterbalance valve that maintains hydraulic oil to the base of the cylinders. The same failures can occur on the stripper circuit as with the compression beam. The mechanical stops are an added safety for maintaining the beam in the up position during mold changes, cylinder replacements, vibrator & shaker shaft repairs or replacement where you will be required to have your hands in and under the beams.

Please see pictured below stripper beam stops:







Use additional stops as required during mold changes, adjustments

For more information or to order a set of beam stops please contact Columbia Machine, Inc. parts department 1-800-628-4065.