



RECTANGULAR SLIDE RETAINERS

COMPONENT GUYS INC.



U.S. Patent No. 4,961,702

- Three sizes with slide ratings for 22, 44 and 88 lbs.
- Small in size yet strong holding capacity
- provides a compact and economical means of slide retention
- suitable for new tooling design or retrofitting existing molds
- can be used in single or multiple configuration for heavier slides

RECTANGULAR Slide Retainer – RSR

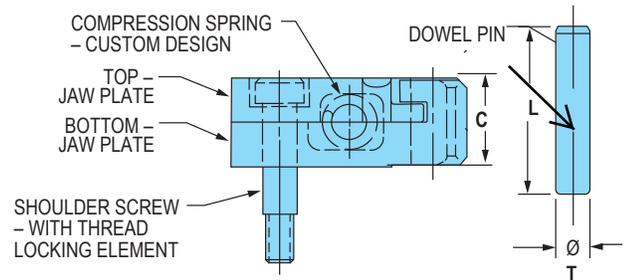
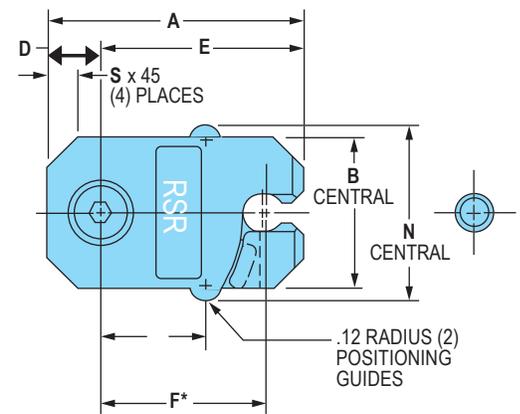
Material: Investment Cast steel
Hardness: Case-Hardened 58-62 HRC

ITEM NUMBER	A	B	C	D	E	F*	N	P	S	T	L
RSR-01	1.50	.76	.63	.27	1.23	.980	.94	.61	.14	.250	1.25
RSR-02	2.13	1.26	.79	.44	1.69	1.375	1.44	.88	.25	.312	1.50
RSR-03	3.38	1.76	1.18	.75	2.63	2.125	1.94	1.57	.38	.375	2.25

ITEM† NUMBER	MAXIMUM RECOMMENDED SLIDE HOLD WEIGHT
RSR-01	22 POUNDS
RSR-02	44 POUNDS
RSR-03	88 POUNDS

* Dimension F, the distance from dowel pin centerline at end of slide travel and centerline of shoulder screw, is important. Overtravel of dowel pin beyond clearance provided at back of jaw area could result in damage to retainer.

† Includes compression spring, shoulder screw and dowel pin



RECTANGULAR Slide Retainer – RSR Application

ANGLE PIN → X → X = SLIDE TRAVEL CAUSED BY ANGLE PIN

Y = X PLUS .005 TO .010 FOR STOP BLOCK LOCATION

Z = X PLUS .010 TO .015 FOR SLIDE RETAINER LOCATION

Note: To prevent the dowel pin from contacting and applying pressure against the back of the retainer jaw (which could cause shearing of the dowel pin or shoulder screw) the installation dimensions shown on these pages are recommended.

DOWEL PIN PRESSED INTO SLIDE AND LOCKED IN PLACE WITH SET SCREWS AS REQUIRED

The RSR is designed to be mounted behind and below the slide (see drawing left), and is a compact unit that can be entirely contained within the mold. Interference with tie bars or safety gates is no longer a problem. (It can even be installed completely underneath the slide if space is limited.)

As the mold opens, the dowel pin installed in the slide positively locks into the RSR until disengaged by the mold's closing action. The spring placed crossway in the retainer maintains the force required to keep the dowel pin in the jaws when the mold is open.

The RSR is designed with a lead-in at the jaw opening so the dowel pin will enter the jaws even if there is a slight misalignment between the retainer and the pin.



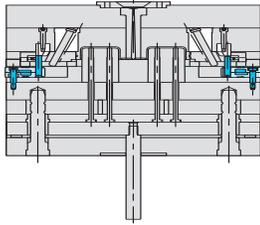
RECTANGULAR SLIDE RETAINERS

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Rectangular Slide Retainer Initiation Sequence

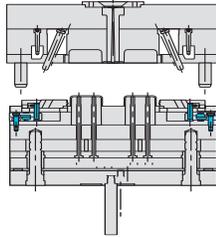
Mold Closed

Step 1: Mold is closed, Sliding cores are in position for molding parts



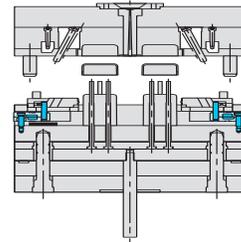
Mold Open

Step 2: Mold is fully open. Movement of the B-side of molds causes A-side angle pins to push sliding cores away from stationary cores. Sliding cores must lock in position via slide retainers to ensure proper mate with angle pins when mold closes.



Ejection

Step 3: Molded part ejects. After ejection the mold may close. Angle pins will mate up with angle pin holes in sliding cores, pushing sliding cores towards the stationary cores.



Installation Guidelines/Pocket Dimensions

(Retaining Application Shown)

Section A-A

Section B-B

NOTES:

- Dimension F, the distance from dowel pin centerline at end of slide travel and centerline of shoulder screw, is important. Overtravel of dowel pin beyond clearance provided at back of jaw area could result in damage to retainer.
- Lubricate all metal-to-metal contact areas before first use and every 100,000 cycles (or more frequently as required). Use a good grade of moldmakers' non-melting type grease rated for the operating temperature to be encountered.
- Do not operate at temperatures exceeding 225°F.**
- If two or more retainers are used, mount them uniformly to provide a balanced operation. RSR sizes should not be mixed in a multiple retainer application.
- Surface to which retainer is mounted should not prevent retainer from pivoting freely. Replace RSR assembly and/or dowel pin when total wear in jaw area or on dowel pin exceeds .010.
- Replace compression spring every 1,000,000 cycles or as required, following procedures packaged with retainer.

ITEM NUMBER	F	P	G	H	J	R RAD	K TAPPED HOLE AND TAP DEPTH BELOW C'BORE	L C'BORE	M C'BORE DEPTH
RSR-01	.980	.61	1.35	.39	1.00	.31	#10-24 x .50 DEEP	.249	⁴ .310
RSR-02	1.375	.88	1.81	.56	1.50	.37	1/4-20 x .56 DEEP	.3115	⁵ 6.430
RSR-03	2.125	1.57	2.75	.88	2.00	.50	5/16-18 x .62 DEEP	.374	⁷ .580