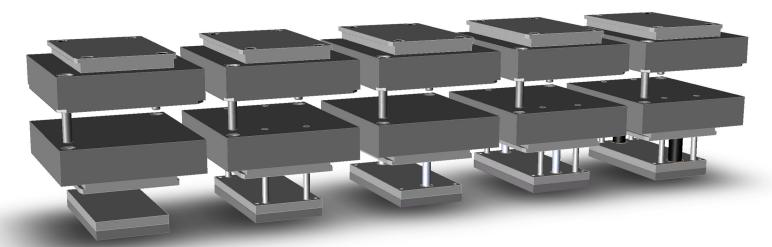


Cross Tool & Manufacturing, Incorporated

Providing Quality Products, Competitive Pricing, and Exceptional Service Since 1980



C-SERIES CATALOG New for 2019: More sizes added Now includes: 08/09, 08/10, 84/90, 10/12, 10/14 and 11/11

C-Series inserts introduced in 2017

New products, New options, More choices.

- * Bolted ears plates with tubular dowels.
- * 2 choices of guided ejection (Simple or Guided Support pillars).
- * Return pins, no return pins, or just basic blank ejector plates.
- * Standardized Stripper and 3-Plate Mold Inserts.

See our main catalog or go on-line crosstool.com to see our standard Frames and Molding Inserts up to the 14/16 U-FRAME and H-STYLE INSERTS



TABLE OF CONTENTS

Index for "C-STYLE" Inserts that fit our "U" Series Mold Base Frames	3
Interchangeable Molding Insert Descriptions	58
Index for "U" Series Mold Base Frames	59
Components Index	
Credit Application	
Terms & Policies	

Made in the USA

Cross Tool and Manufacturing has been building Plastic Injection Molding Inserts and Frames since the mid-1980's. Over the last several years we have been continually improving our processes, quality, and capacity. This makes possible the addition of the (C-SERIES INSERTS) to our product line. We still make all of our products in the USA with local labor and suppliers.

More standard options

C-SERIES:

Cross Tool: We are known for our high quality and great prices.

Comparable: Compares with other companies offering complete assemblies. No need to change your lay-out. We are now offering our 08/09 and 08/10 with 1/2" leader pins . The Pin locations have moved on the 08/09 and 08/10, but stayed the same on our 84/90, 10/12, 10/14 and 11/11 Inserts. We have also added the slotted full width sides to Standard solid (C-XSU Series) inserts.

Choices: Off the shelf availability of 5 standard options for return pins and guided ejection. We also offer standardized three plate, and stripper plate inserts.

Competitive: Better pricing and more options.

Cost effective: Let us save you time and money by combining pockets, waterlines, bolted ear-plates, guided ejector plates, and return pins as options during the manufacturing of your inserts.

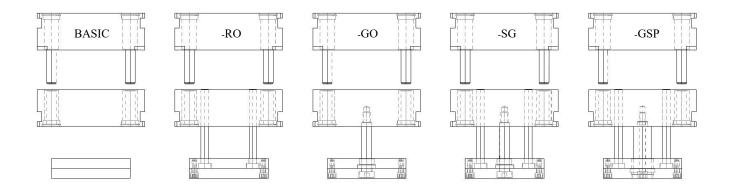
Yes, We still build all of our standard Products. U-Frames and inserts through 14/16 size, and H-Frame inserts. We do not build H-Frames.

C-SERIES INTERCHANGEABLE MOLDING INSERTS

08/09 C-XSU (5.0x8.0) SOLID INSERT	4-5
08/09 C-SLU (5.0x8.0) LAMINATED INSERT	6-7
08/09 C-TLU (5.0x8.0) (7.85x9.0) T-LAMINATED INSERT	
08/09 C-XSU (5.0x8.0) STRIPPER PLATE INSERT and 3-PLATE INSERT	
08/10 C-XSU (5.0x8.0) SOLID INSERT	
08/10 C-SLU (5.0x8.0) LAMINATED INSERT	14-15
08/10 C-TLU (5.0x8.0) (7.85x9.0) T-LAMINATED INSERT	16-17
08/10 C-XSU (5.0x8.0) STRIPPER PLATE INSERT and 3-PLATE INSERT	
84/90 C-XSU (6.5x8.0) SOLID INSERT	
84/90 C-SLU (6.5x8.0) LAMINATED INSERT	
84/90 C-TLU (6.5x8.0) (8.4x9.0) T-LAMINATED INSERT	
84/90 C-XSU (6.5x8.0) STRIPPER PLATE INSERT and 3-PLATE INSERT	
10/12 C-XSU (7.0x10.9)	
10/12 C-SLU (7.0x10.9)	
10/12 C-TLU (7.0x10.9) (9.9x10.9) T-LAMINATED INSERT	
10/12 C-XSU-S (7.0x10.9) STRIPPER PLATE INSERT and 3-PLATE INSERT	
10/14 C-XSU (7.0x10.9)	
10/14 C-SLU (7.0x10.9)	
10/14 C-TLU (7.0x10.9) (9.9x10.9) T-LAMINATED INSERT	
10/14 C-XSU-S (7.0x10.9) STRIPPER PLATE INSERT and 3-PLATE INSERT	
11/11 C-XSU (7.0x10.9)	
11/11 C-SLU (7.0x10.9)	
11/11 C-TLU (7.0x10.9) (9.9x10.9) T-LAMINATED INSERT	
11/11 C-XSU-S (7.0x10.9) STRIPPER PLATE INSERT and 3-PLATE INSERT	
POCKET INFORMATION	
WATERLINE INFORMATION	55-57
U-FRAMES 08/09, 08/10, 84/90, 10/12, 10/14, 11/11	
C-SERIES COMPONENTS	

08/09 C-XSU SOLID INSERT

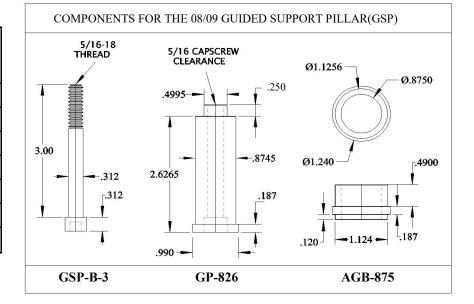
DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM



ORDERING EXAMPLES: 08/09 C-XSU-224-RO 08/09 C-XSU-227-GSP 08/09 C-XSU-230-SG

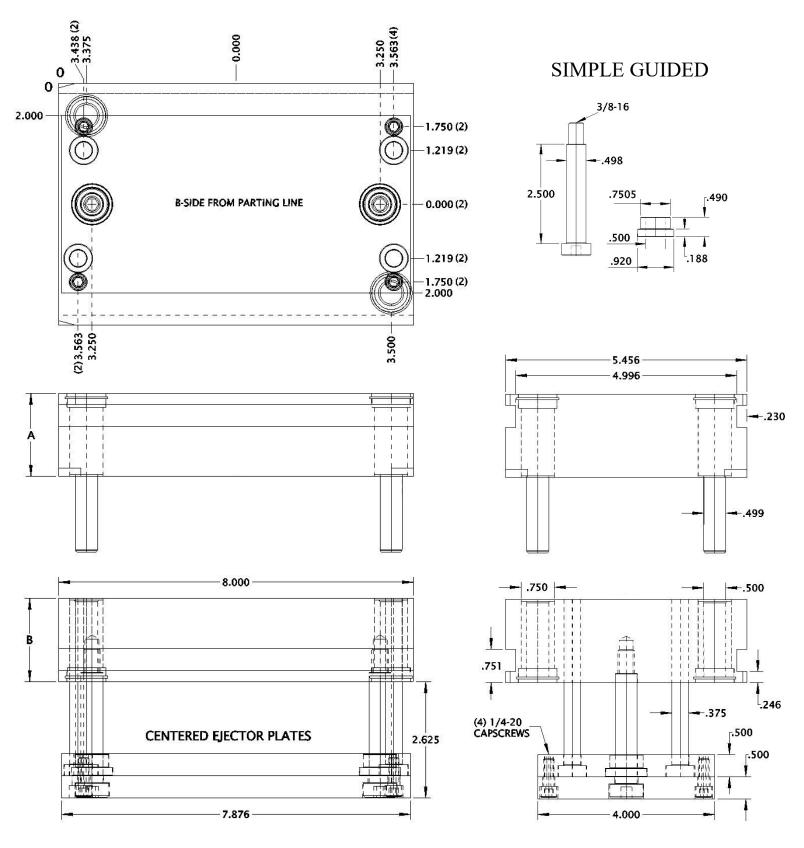
THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE

CATALOG NUMBER	А	В
BASIC		
08/09 C-XSU-224	1.877	1.877
08/09 C-XSU-225	1.877	2.377
08/09 C-XSU-226	2.377	1.877
08/09 C-XSU-227	2.377	2.377
08/09 C-XSU-228	2.377	2.877
08/09 C-XSU-229	2.877	2.377
08/09 C-XSU-230	2.877	2.877



- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALI-TY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUAL-ITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

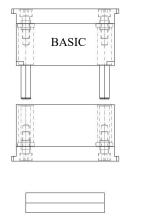
$08/09\ C\text{-}XSU\ 5.0\ x\ 8.0\ \text{Fits}\ 08/09\ \text{U-frame}$

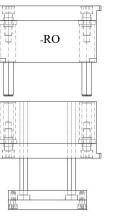


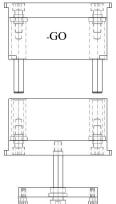
Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

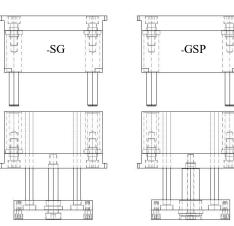
$08/09\ C\text{-}SLU$ laminated insert

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM





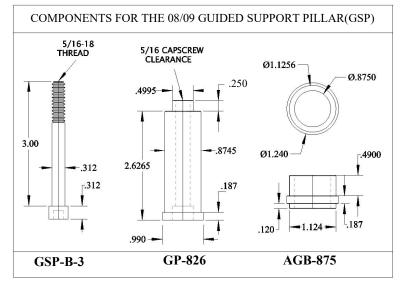




THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE

ORDERING EXAMPLES: 08/09 C-SLU-284-RO 08/09 C-SLU-287-GSP

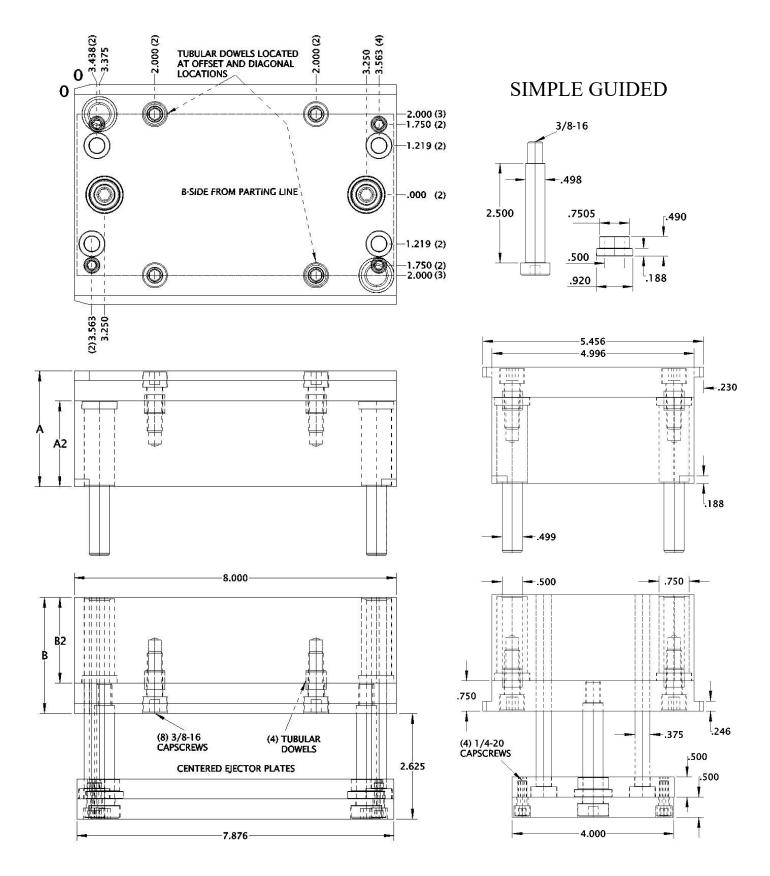
CATALOG NUMBER BASIC	A	A2	B2	В
08/09 C-SLU-284	1.877	1.127	1.127	1.877
08/09 C-SLU-285	1.877	1.127	1.627	2.377
08/09 C-SLU-286	2.377	1.627	1.127	1.877
08/09 C-SLU-287	2.377	1.627	1.627	2.377
08/09 C-SLU-288	2.377	1.627	2.127	2.877
08/09 C-SLU-289	2.877	2.127	1.627	2.377
08/09 C-SLU-290	2.877	2.127	2.127	2.877



NOTE: THE C-SLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

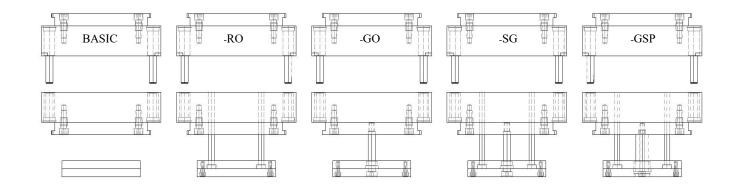
$08/09\ C\text{-}SLU$ 5.0 x 8.0 Fits 08/09 U-frame



Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

08/09 C-TLU laminated t-style

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM

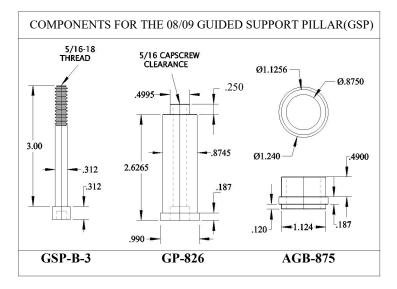


ORDERING EXAMPLES:

08/09 C-TLU-002-RO 08/09 C-TLU-006-SG 08/09 C-TLU-004-GSP 08/09 C-TLU-001-GO

CATALOG NUMBER BASIC	A	A2	B2	В
08/09 C-TLU-001	2.127	1.377	1.377	2.127
08/09 C-TLU-002	2.127	1.377	1.877	2.627
08/09 C-TLU-003	2.627	1.877	1.377	2.127
08/09 C-TLU-004 (TLU 206)	2.627	1.877	1.877	2.627
08/09 C-TLU-005	2.627	1.877	2.377	3.127
08/09 C-TLU-006	3.127	2.377	2.377	3.127
NOTE: NEW SIZES				

THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE \rightarrow



NOTE: THE C-TLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
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08/09 C-TLU

.500(1) .438(2)

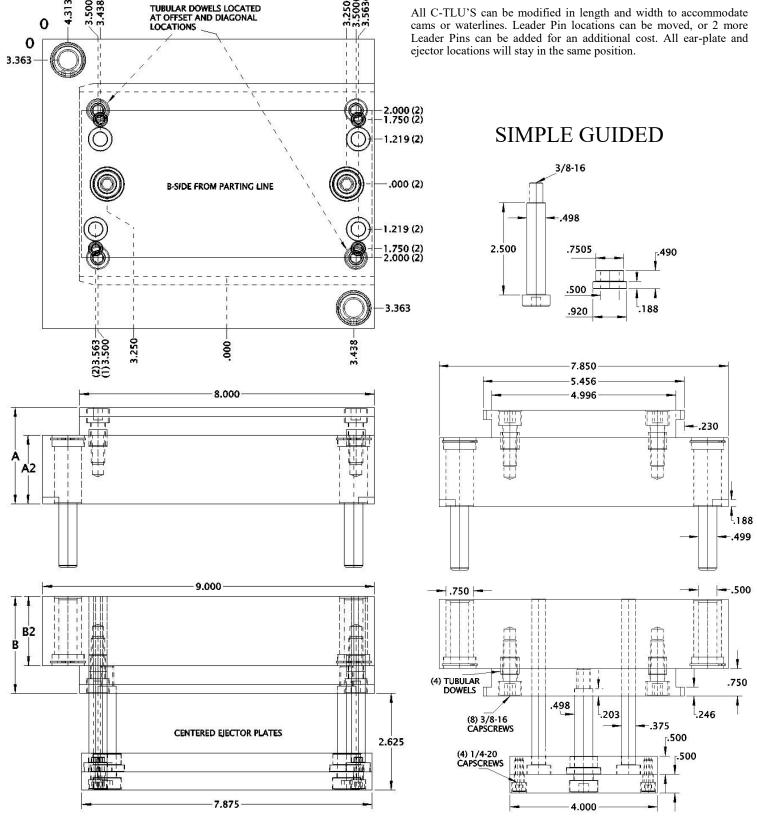
4.313

0

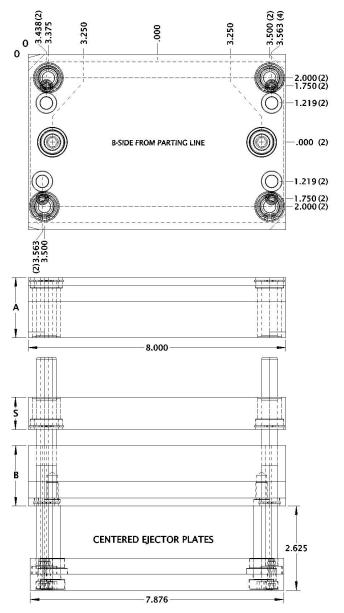
5.0 X 8.0 EAR PLATE 7.85 X 9.0 T-PLATE

13

All C-TLU'S can be modified in length and width to accommodate cams or waterlines. Leader Pin locations can be moved, or 2 more Leader Pins can be added for an additional cost. All ear-plate and ejector locations will stay in the same position.



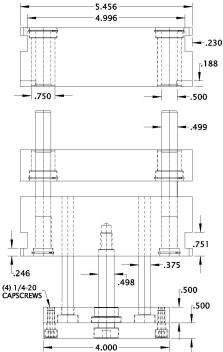
Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com



SHOWN AS SIMPLE GUIDED WITH 4 STRAIGHT LEADER PINS.

YOUR CHOICES INCLUDE:

- * 2 STANDARD LOCATED LEADER PINS (OPTIONAL)
- * ALL THE OPTIONS FOR RETURN PINS, GUIDED EJECTORS OR BLANK EJECTOR PLATES (SEE C-XSU PAGE 6)
- * ALSO AVAILABLE WITH A LAMINATED A-SIDE OR B-SIDE



ORDERING EXAMPLES:

CUSTOM ORDER EXAMPLES:

08/09 C-XSU-S-005-1 08/09 C-XSU-S-001-1 08/09 C-XSU-S-003-1 08/09 C-SLU-S 0 A 1.877 A A2 1.125 S S 1.000 E B2 1.627 B 2.377

U-S 08/09 C-XSU-S-2HOLE A 1.877 S 0.750 B 2.377

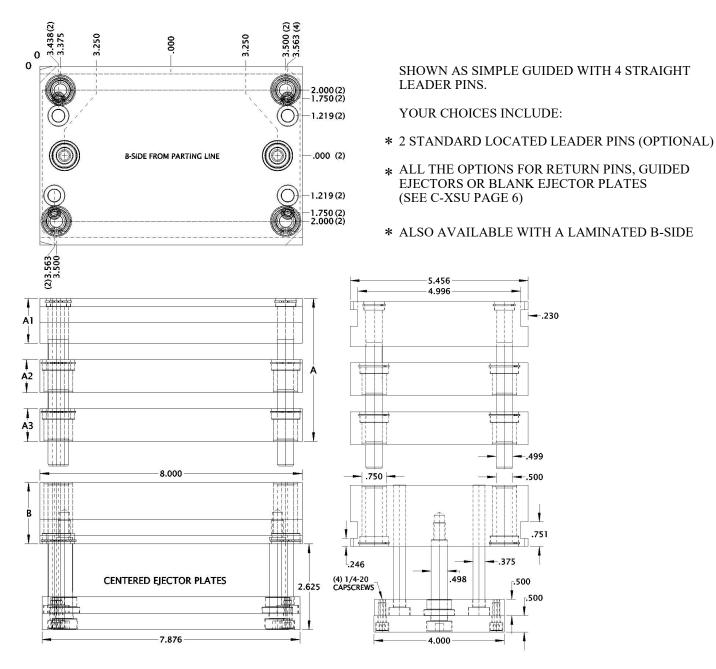
A-PLATES AND B-PLATES CAN BE ORDERED IN ANY COMBINATION OF 1.377,1.877, 2.377, OR 2.877.

OTHER STRIPPER THICKNESSES ARE ALSO AVAILABLE

CATALOG NUMBER	А	В	S
08/09 C-XSU-S-001	1.877	1.377	1.000
08/09 C-XSU-S-002	1.877	1.877	1.000
08/09 C-XSU-S-003	1.877	2.377	1.000
08/09 C-XSU-S-004	2.377	1.877	1.000
08/09 C-XSU-S-005	2.377	2.377	1.000
08/09 C-XSU-S-006	2.877	2.377	1.000

Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

08/09 C-XSU-3P 3 PLATE INSERT 5.0 X 8.0 FITS 08/09 U-FRAME



CATALOG NUMBER	A1	A2	A3	В
EXAMPLES ONLY				
08/09 C-XSU-3P-001	1.000	1.000	1.000	1.877
08/09 C-XSU-3P-002	1.000	1.000	1.000	2.377
08/09 C-XSU-3P-003	1.000	1.000	1.000	2.877
08/09 C-XSU-3P-004	1.377	1.000	1.000	1.877
08/09 C-XSU-3P-005	1.377	1.000	1.000	2.377
08/09 C-XSU-3P-006	1.377	1.000	1.000	2.877
	1.077			

CAN BE ORDERED IN ANY COMBINATION OF 1.00, 1.377,1.877, 2.377, OR 2.877.

ORDERING EXAMPLES:

08/09 C-XSU-3P-005 08/09 C-XSU-3P-001 08/09 C-XSU-3P-003

CUSTOM ORDER EXAMPLES:

08/09 C-XSU-3P	08/09 C-XSU-3P
A1 1.877	A1 1.377
A2 1.250	A2 1.877
A3 1.377	A3 1.000
B2 1.627	B 2.377
В 2.377	

15

08/10 C-XSU solid insert

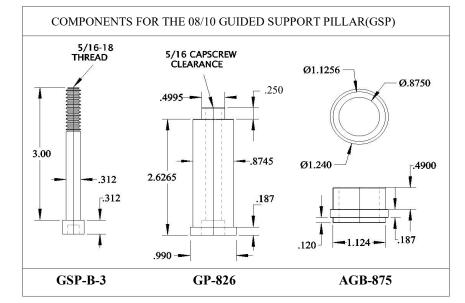
DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM

BASIC	-RO	-GO	-SG	-GSP

ORDERING EXAMPLES: 08/10 C-XSU-224-RO 08/10 C-XSU-227-GSP 08/10 C-XSU-230-SG

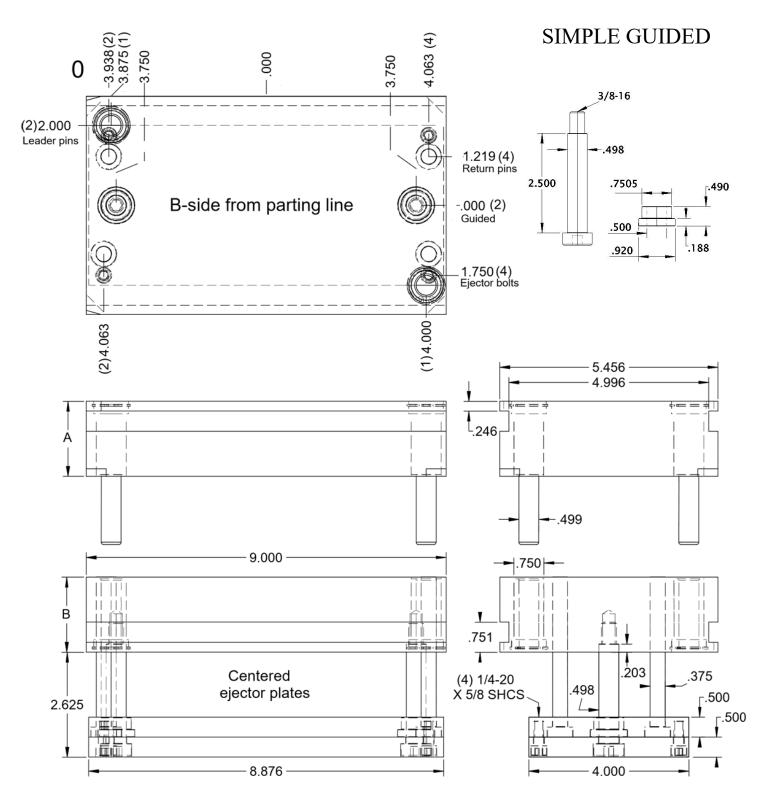
THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE

		-
CATALOG NUMBER	А	В
BASIC		
08/10 C-XSU-224	1.877	1.877
08/10 C-XSU-225	1.877	2.377
08/10 C-XSU-226	2.377	1.877
08/10 C-XSU-227	2.377	2.377
08/10 C-XSU-228	2.377	2.877
08/10 C-XSU-229	2.877	2.377
08/10 C-XSU-230	2.877	2.877



- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALI-TY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
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$08/10\ C\text{-}XSU$ 5.0 x 9.0 Fits 08/10 U-frame

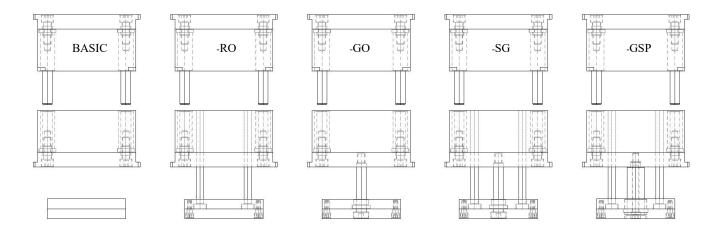


17

$08/10 \ C\text{-}SLU$ laminated insert

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM

COMPONENTS FOR THE 08/10 GUIDED SUPPORT PILLAR(GSP)



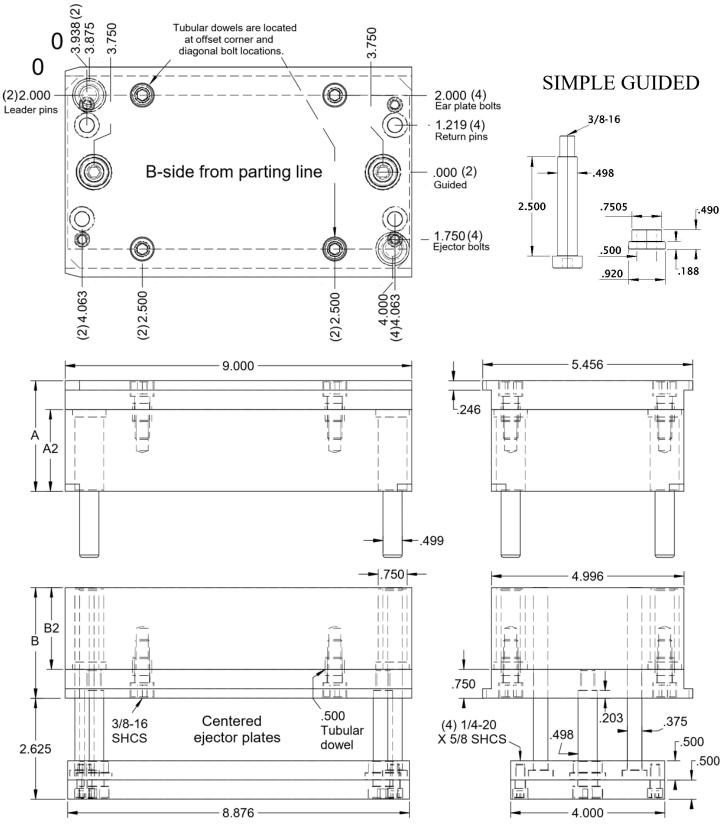
ORDERING EXAMPLES: 08/10 C-SLU-284-RO 08/10 C-SLU-287-GSP

							· · · · · ·
CATALOG NUMBER	A	A2	B2	В	5/16-18 THREAD	5/16 CAPSCREW CLEARANCE	Ø1.1256 Ø.8750
08/10 C-SLU-284	1.877	1.127	1.127	1.877		.4995	
08/10 C-SLU-285	1.877	1.127	1.627	2.377	3.00		
08/10 C-SLU-286	2.377	1.627	1.127	1.877		2.6265	Ø1.240 —/
08/10 C-SLU-287	2.377	1.627	1.627	2.377	.312	.187	
08/10 C-SLU-288	2.377	1.627	2.127	2.877			
08/10 C-SLU-289	2.877	2.127	1.627	2.377		.990	.120 - 1.124 - 5.187
08/10 C-SLU-290	2.877	2.127	2.127	2.877	GSP-B-3	GP-826	AGB-875

NOTE: THE C-SLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

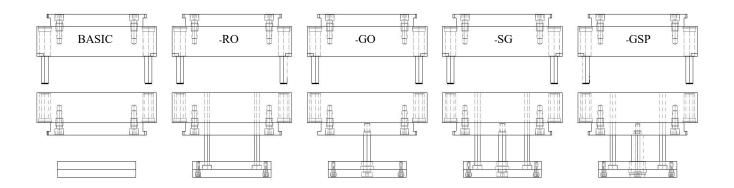
- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
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$08/10\ C\text{-}SLU$ 5.0 x 9.0 Fits 08/10 U-frame



08/10 C-TLU laminated t-style

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM

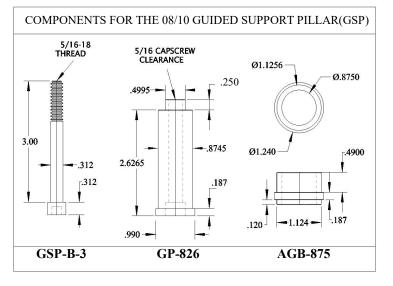


ORDERING EXAMPLES:

08/10 C-TLU-002-RO 08/10 C-TLU-006-SG 08/10 C-TLU-004-GSP 08/10 C-TLU-001-GO

THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCAT	IONS
AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE	→

CATALOG NUMBER BASIC	А	A2	B2	В
08/10 C-TLU-001	2.127	1.377	1.377	2.127
08/10 C-TLU-002	2.127	1.377	1.877	2.627
08/10 C-TLU-003	2.627	1.877	1.377	2.127
08/10 C-TLU-004 (TLU 206)	2.627	1.877	1.877	2.627
08/10 C-TLU-005	2.627	1.877	2.377	3.127
08/10 C-TLU-006	3.127	2.377	2.377	3.127



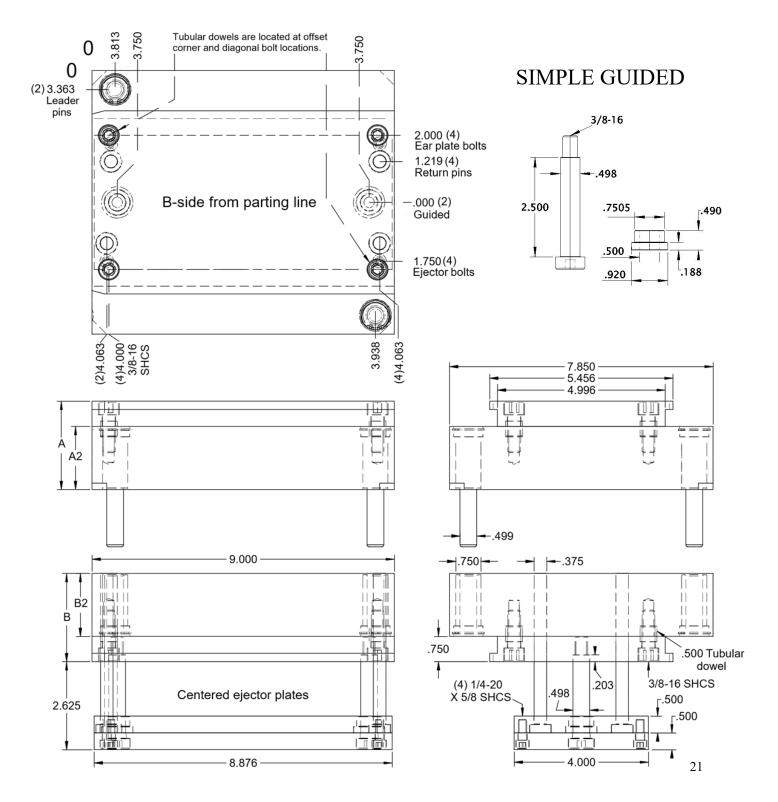
NOTE: NEW SIZES

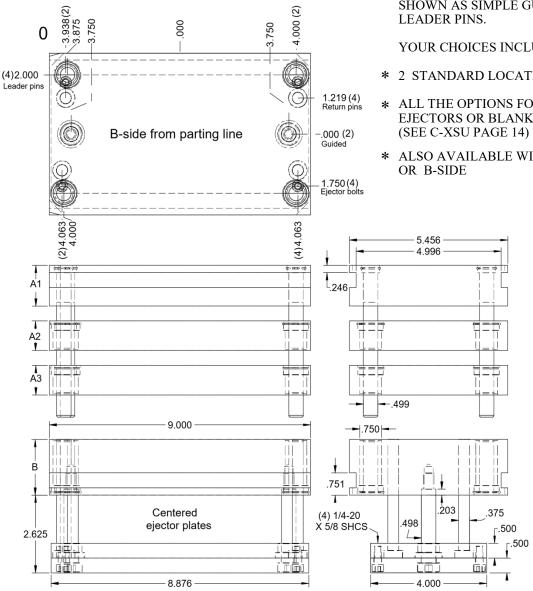
NOTE: THE C-TLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
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08/10 C-TLU 5.0 X 9.0 EAR PLATE FITS 08/10 U-FRAME 7.85 X 9.0 T-PLATE

All C-TLU'S can be modified in length and width to accommodate cams or waterlines. Leader Pin locations can be moved, or 2 more Leader Pins can be added for an additional cost. All ear-plate and ejector locations will stay in the same position.





SHOWN AS SIMPLE GUIDED WITH 4 STRAIGHT

YOUR CHOICES INCLUDE:

- 2 STANDARD LOCATED LEADER PINS (OPTIONAL)
- ALL THE OPTIONS FOR RETURN PINS, GUIDED EJECTORS OR BLANK EJECTOR PLATES
- ALSO AVAILABLE WITH A LAMINATED A-SIDE

ORDERING EXAMPLES:

CUSTOM ORDER EXAMPLES:

08/10 C-XSU-S-005-1 08/10 C-XSU-S-001-1 08/10 C-XSU-S-003-1

22

08/10 C-SLU-S A 1.877 A2 1.125 S 1.000 B2 1.627 B 2.377

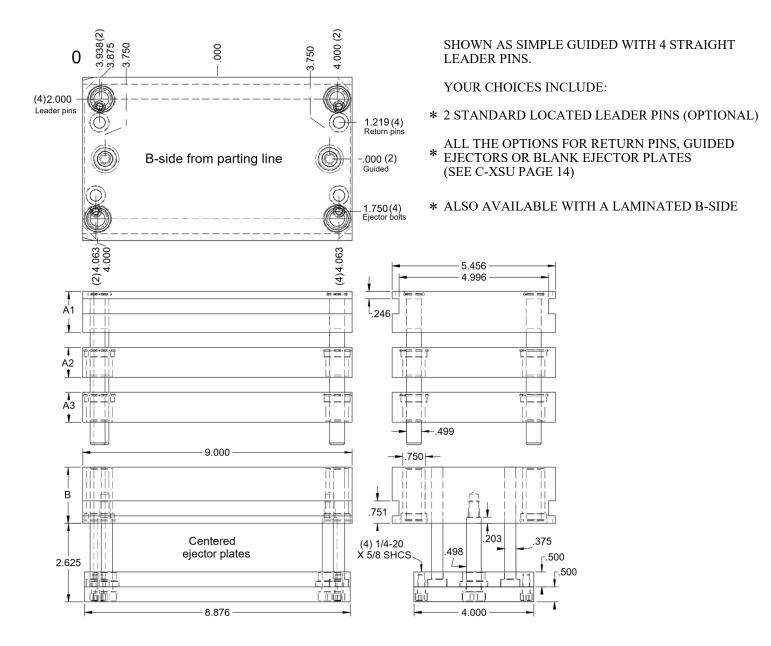
08/10 C-XSU-S-2HOLE A 1.877 S 0.750 B 2.377

A-PLATES AND B-PLATES CAN BE ORDERED IN ANY COMBINATION OF 1.377, 1.877, 2.377, OR 2.877.

OTHER STRIPPER THICKNESSES ARE ALSO AVAILABLE

CATALOG NUMBER	А	В	S
08/10 C-XSU-S-001	1.877	1.377	1.000
08/10 C-XSU-S-002	1.877	1.877	1.000
08/10 C-XSU-S-003	1.877	2.377	1.000
08/10 C-XSU-S-004	2.377	1.877	1.000
08/10 C-XSU-S-005	2.377	2.377	1.000
08/10 C-XSU-S-006	2.877	2.377	1.000

Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com



CATALOG NUMBER	A1	A2	A3	В
EXAMPLES ONLY				
08/10 C-XSU-3P-001	1.000	1.000	1.000	1.877
08/10 C-XSU-3P-002	1.000	1.000	1.000	2.377
08/10 C-XSU-3P-003	1.000	1.000	1.000	2.877
08/10 C-XSU-3P-004	1.377	1.000	1.000	1.877
08/10 C-XSU-3P-005	1.377	1.000	1.000	2.377
08/10 C-XSU-3P-006	1.377	1.000	1.000	2.877

CAN BE ORDERED IN ANY COMBINATION OF 1.00, 1.377,1.877, 2.377, OR 2.877.

ORDERING EXAMPLES:

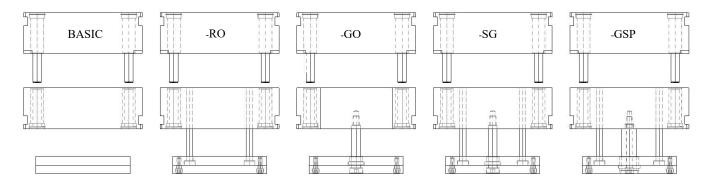
08/10 C-XSU-3P-005 08/10 C-XSU-3P-001 08/10 C-XSU-3P-003

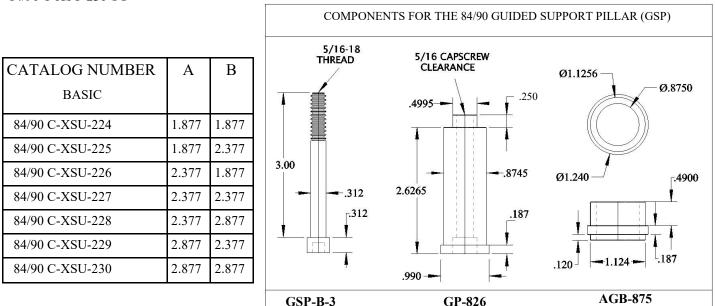
CUSTOM ORDER EXAMPLES:

08/10 C-XSU-3P	08/10 C-XSU-3P
A1 1.877	A1 1.377
A2 1.250	A2 1.877
A3 1.377	A3 1.000
B2 1.627	B 2.377
В 2.377	

84/90 C-XSU solid insert

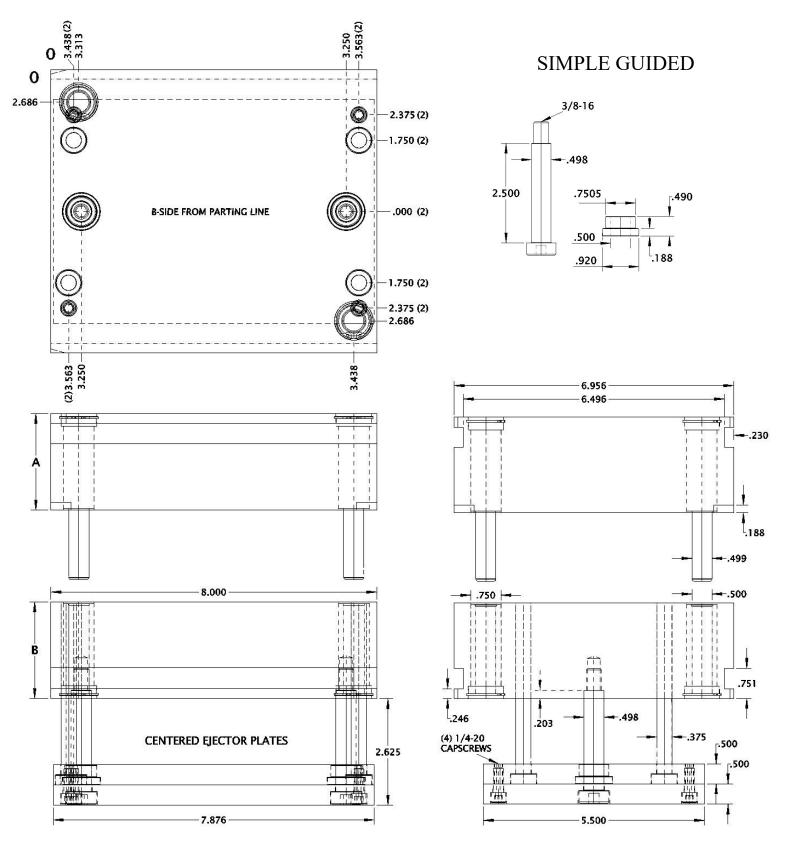
DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM



ORDERING EXAMPLES: 84/90 C-XSU 224-RO 84/90 C-XSU-227-GSP 84/90 C-XSU-230-SG 

- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALI-TY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUAL-ITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

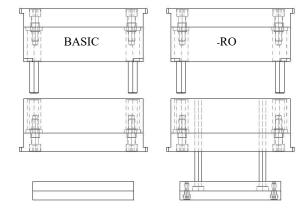
$84/90\ C\text{-}XSU \quad \text{6.5 x 8.0 fits 84/90 u-frame}$

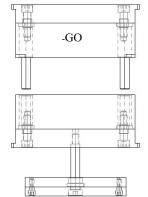


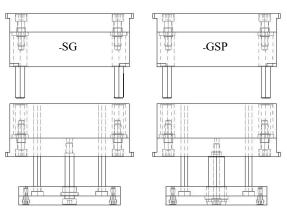
Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

84/90 C-SLU laminated insert

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM





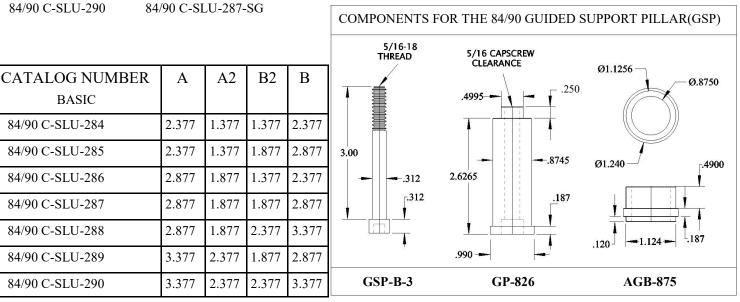


 ORDERING EXAMPLES:

 84/90 C-SLU-284-RO
 84/90 C-SLU-287-GSP

 84/90 C-SLU-290
 84/90 C-SLU-287-SG

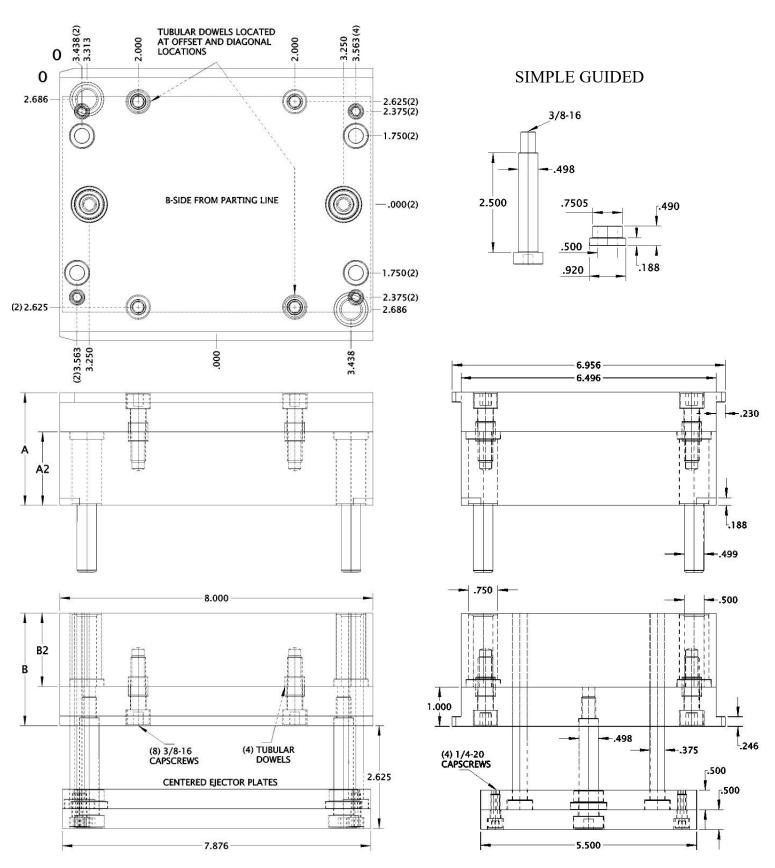
THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE \longrightarrow



NOTE: THE C-SLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

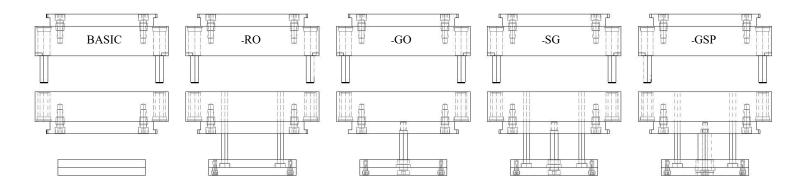
84/90 C-SLU 6.5 X 8.0 FITS 84/90 U-FRAME



Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

$84/90\ C\text{-}TLU$ laminated t-style

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM

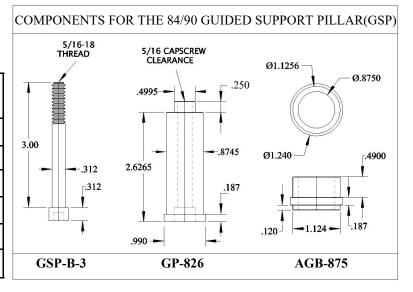


ORDERING EXAMPLES:

84/90 C-TLU-002-RO 84/90 C-TLU-004-SG 84/90 C-TLU-003 84/90 C-TLU-004-GSP 84/90 C-TLU-006-GO

NOTE: NEW SIZES

А	A2	B2	В
2.127	1.377	1.377	2.127
2.127	1.377	1.877	2.627
2.627	1.877	1.877	2.627
2.627	1.877	2.377	3.127
3.127	2.377	1.877	2.627
3.127	2.377	2.377	3.127
	2.127 2.127 2.627 2.627 3.127	11 112 2.127 1.377 2.127 1.377 2.627 1.877 2.627 1.877 3.127 2.377	2.127 1.377 1.377 2.127 1.377 1.877 2.627 1.877 1.877 2.627 1.877 2.377 3.127 2.377 1.877



NOTE: THE C-TLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

84/90 C-TLU 6.5 X 8.0 EAR PLATE

TUBULAR DOWELS LOCATED AT OFFSET AND DIAGONAL LOCATIONS

-3.500(2) 3.438(2)

4.313

0

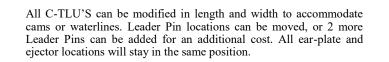
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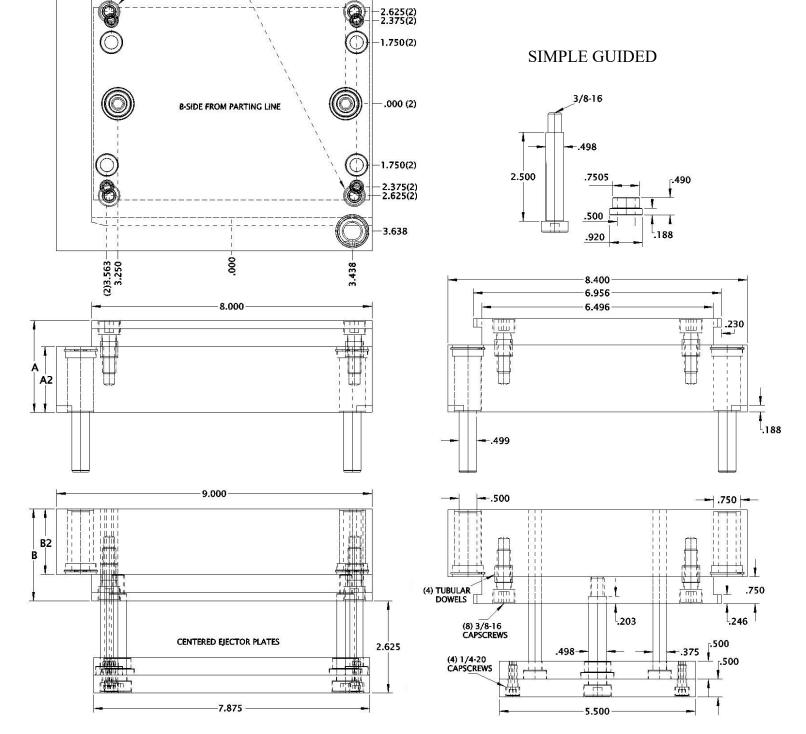
3.638

8.4 X 9.0 T-PLATE

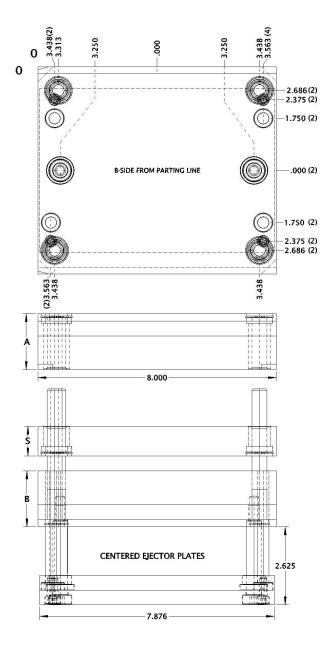
563

FITS 84/90 U-FRAME





Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com



ORDERING EXAMPLES:

CUSTOM ORDER EXAMPLES:

0.750

84/90 C-XSU-S-005-1 84/90 C-XSU-S-001-1 84/90 C-XSU-S-003-1

84/90 C-SLU-S 84/90 C-XSU-S-2HOLE A 1.877 A 1.877 S A2 1.125 B 2.377 S 1.000 B2 1.627 B 2.377

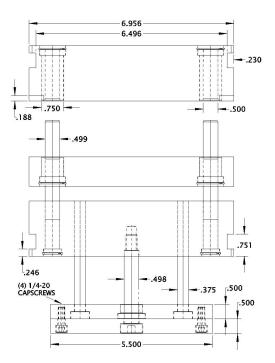
A-PLATES AND B-PLATES CAN BE ORDERED IN ANY COMBINATION OF 1.377, 1.877, 2.377, OR 2.877.

OTHER STRIPPER THICKNESSES ARE ALSO AVAILABLE

SHOWN AS SIMPLE GUIDED WITH 4 STRAIGHT LEADER PINS.

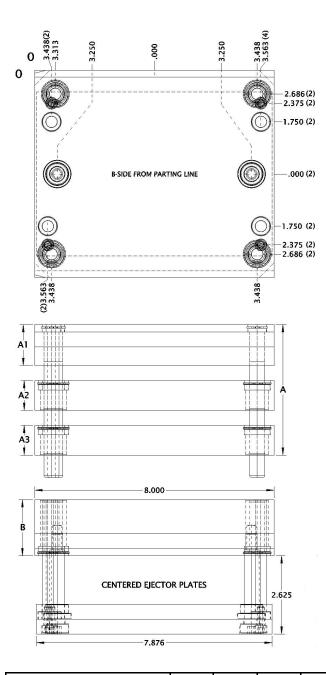
YOUR CHOICES INCLUDE:

- 2 STANDARD LOCATED LEADER PINS (OPTIONAL) *
- ALL THE OPTIONS FOR RETURN PINS, GUIDED * EJECTORS OR BLANK EJECTOR PLATES (SEE C-XSU PAGE 22)
- * ALSO AVAILABLE WITH A LAMINATED A-SIDE OR B-SIDE



CATALOG NUMBER	А	В	S
84/90 C-XSU-S-001	1.877	1.377	1.000
84/90 C-XSU-S-002	1.877	1.877	1.000
84/90 C-XSU-S-003	1.877	2.377	1.000
84/90 C-XSU-S-004	2.377	1.877	1.000
84/90 C-XSU-S-005	2.377	2.377	1.000
84/90 C-XSU-S-006	2.877	2.377	1.000

84/90 C-XSU-3P 3 plate insert 6.5 x 8.0 fits 84/90 U-frame



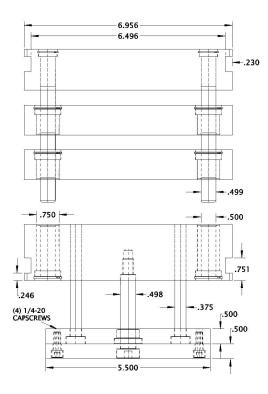
CATALOG NUMBER	A1	A2	A3	В
*CUSTOMIZABLE				
84/90 C-XSU-3P-001	1.000	1.000	1.000	1.877
84/90 C-XSU-3P-002	1.000	1.000	1.000	2.377
84/90 C-XSU-3P-003	1.000	1.000	1.000	2.877
84/90 C-XSU-3P-004	1.377	1.000	1.000	1.877
84/90 C-XSU-3P-005	1.377	1.000	1.000	2.377
84/90 C-XSU-3P-006	1.377	1.000	1.000	2.877

*CAN BE ORDERED IN ANY COMBINATION OF 1.00, 1.377,1.877, 2.377, OR 2.877.

SHOWN AS SIMPLE GUIDED WITH 4 STRAIGHT LEADER PINS.

YOUR CHOICES INCLUDE:

- * 2 STANDARD LOCATED LEADER PINS (OPTIONAL)
- ALL THE OPTIONS FOR RETURN PINS, GUIDED * EJECTORS OR BLANK EJECTOR PLATES (SEE C-XSU PAGE 22)
- * ALSO AVAILABLE WITH A LAMINATED B-SIDE



ORDERING EXAMPLES:

84/90 C-XSU-3P-005 84/90 C-XSU-3P-001 84/90 C-XSU-3P-003

CUSTOM ORDER EXAMPLES:

84/90 C-XSU-3P	84/90 C-XSU-3P
A1 1.877	A1 1.377
A2 1.250	A2 1.877
A3 1.377	A3 1.000
B2 1.627	В 2.377
B 2.377	

10/12 C-XSU SOLID INSERT

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM

(OUR BEST)

GUÌDED SUPPORT

PILLAR (GSP)

-1.490

GB-1.125

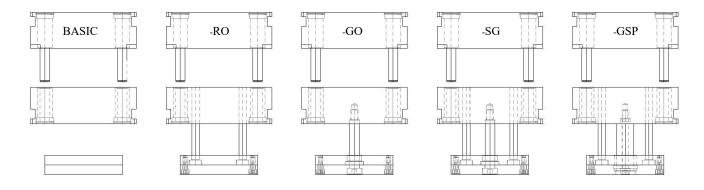
490

305

Ø1.125-

.795 1

Ø 1.3756 -

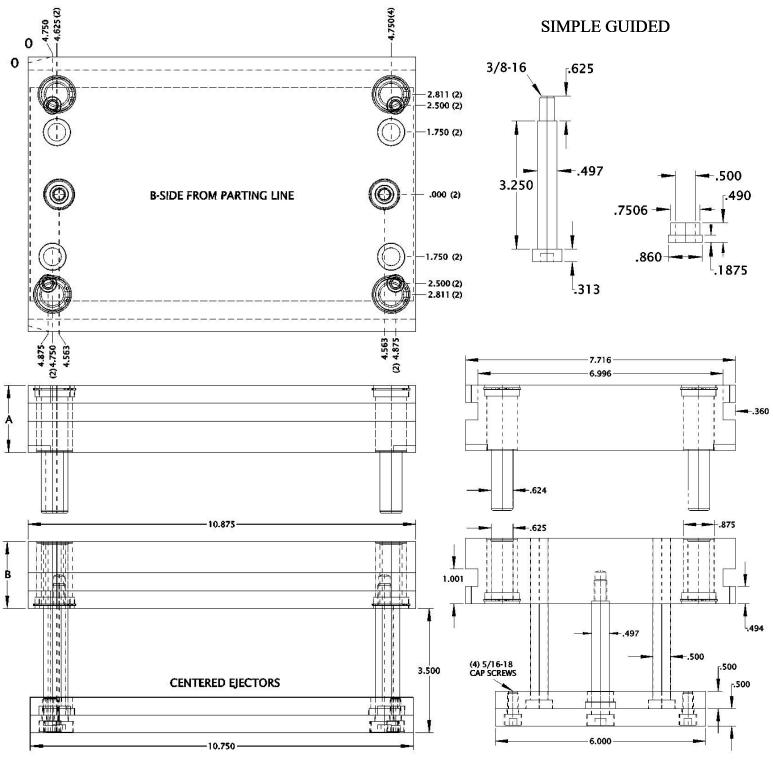


THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ÓN THE OPPOSITE PAGE

ORDERING EXAMPLES: 10/12 C-XSU-225-RO 10/12 C-XSU-229-GSP COMPONENTS FOR THE 10/12 GUIDED SUPPORT PILLAR(GSP) 3/8-16 THREAD CLEARANCE FOR 3/8 CAPSCREW .250 CATALOG NUMBER В А -.6245 BASIC 10/12 C-XSU-224 1.877 1.877 -1.1243 4 000 10/12 C-XSU-225 1.877 2.377 3.5015 10/12 C-XSU-226 2.377 1.877 .375 10/12 C-XSU-227 2.377 2.377 10/12 C-XSU-228 2.377 2.877 -1 240-10/12 C-XSU-229 2.877 2.377 .187 GSP-B-4 GP-1.125-35 10/12 C-XSU-230 2.877 2.877

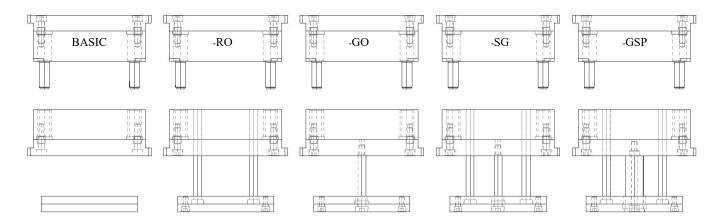
- (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND -RO BOLTED EJECTÓR PLATES.
- (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALI--GO TY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUAL--SG ITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE -GSP BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

$10/12 \ C\text{-}XSU \quad \text{7.0 x 10.9 fits 10/12 U-Frame}$

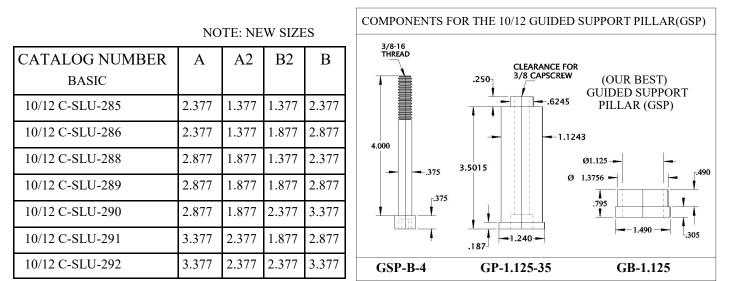


$10/12 \ C\text{-}SLU$ laminated insert

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM



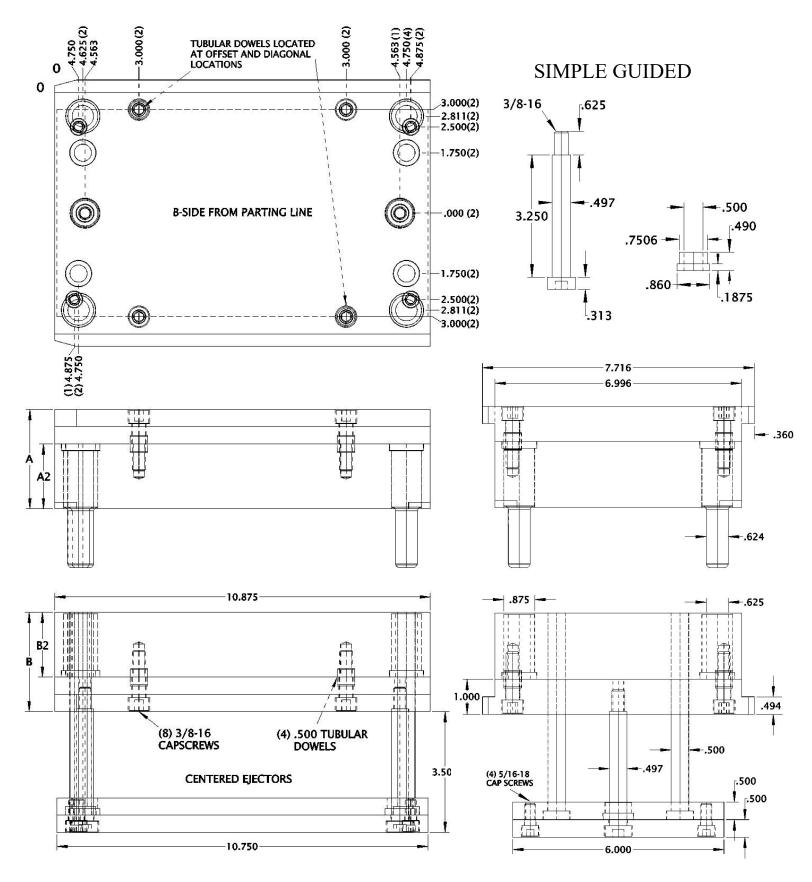
ORDERING EXAMPLES: 10/12 C-SLU-286-RO 10/12 C-SLU-287-GSP THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE \longrightarrow



NOTE: THE C-SLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

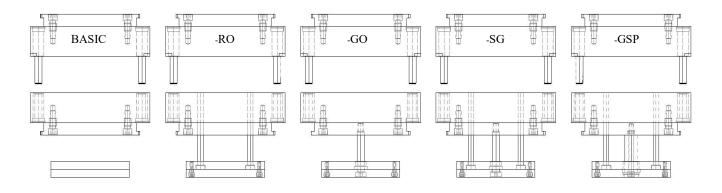
- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

$10/12\ C\text{-}SLU\$ 7.0 x 10.9 Fits 10/12 U-frame



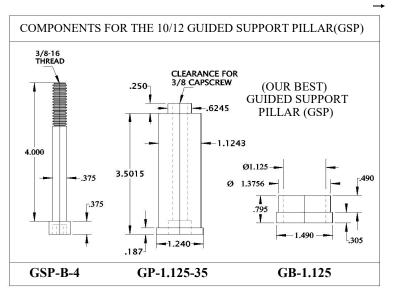
10/12 C-TLU LAMINATED T-STYLE

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM



ORDERING EXAMPLES: 10/12 C-TLU 207-RO 10/12 C-TLU-210-SG 10/12 C-TLU-206-GO

CATALOG NUMBER А A2 **B2** B BASIC 10/12 C-TLU-204 2.377 1.377 1.377 2.377 2.377 10/12 C-TLU-205 1.377 1.877 2.877 2.877 10/12 C-TLU-206 1.877 1.377 2.377 2.877 10/12 C-TLU-207 1.877 1.877 2.877 10/12 C-TLU-208 2.877 2.377 3.377 1.877 10/12 C-TLU-209 3.377 2.377 1.877 2.877 10/12 C-TLU-210 2.377 3.377 2.377 3.377 THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE



NOTE: THE C-TLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

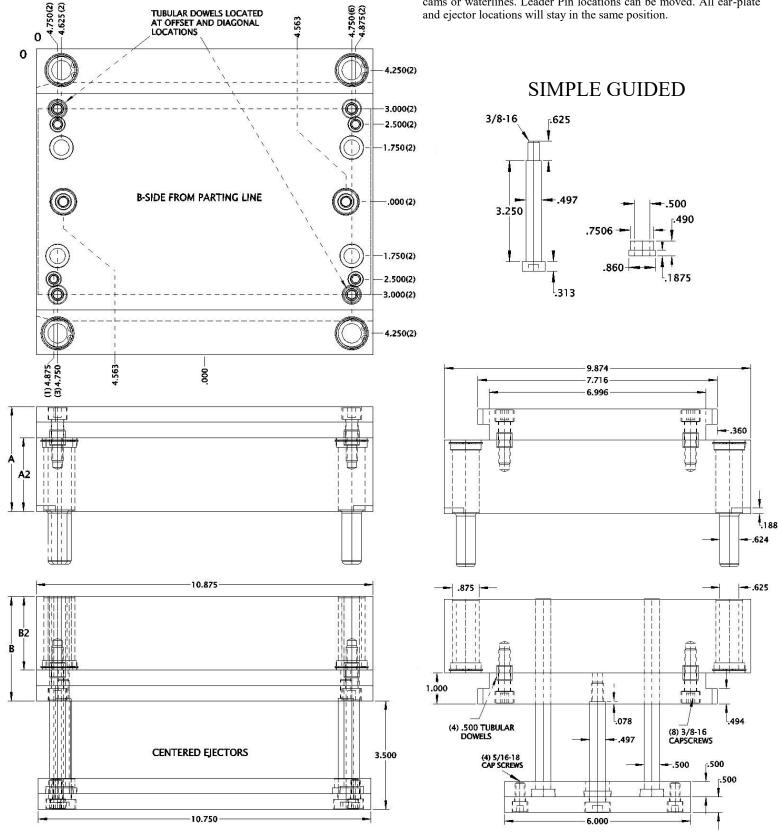
10/12 C-TLU 7.0 X 10.9 EAR PLATE

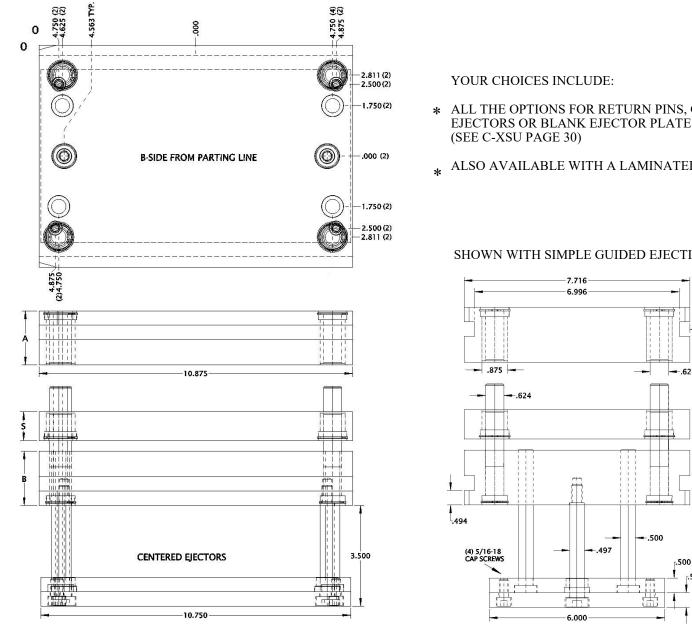
9.9 X 10.9 T-PLATE

FITS 10/12 U-FRAME

All C-TLU'S can be modified in length and width to accommodate cams or waterlines. Leader Pin locations can be moved. All ear-plate and ejector locations will stay in the same position.

37





ORDERING EXAMPLES:

CUSTOM ORDER EXAMPLES:

10/12 C-XSU-S-005-1	
10/12 C-XSU-S-001-1	
10/12 C-XSU-S-003-1	

10/12 C-SLU-S A 1.877 A2 1.125 S 1.000 B2 1.627 B 2.377

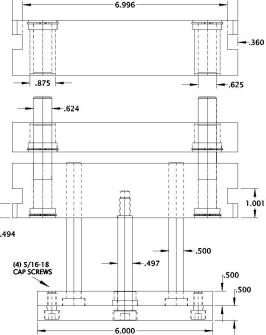
10/12 C-XSU-S-2HOLE A 1.877 S 0.750 B 2.377

A-PLATES AND B-PLATES CAN BE ORDERED IN ANY COMBINATION OF 1.377, 1.877, 2.377, OR 2.877.

OTHER STRIPPER THICKNESSES ARE ALSO AVAILABLE

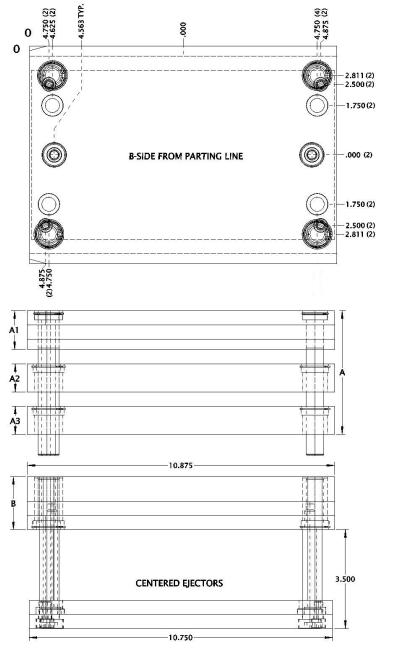
- * ALL THE OPTIONS FOR RETURN PINS, GUIDED EJECTORS OR BLANK EJECTOR PLATES
- ALSO AVAILABLE WITH A LAMINATED B-SIDE

SHOWN WITH SIMPLE GUIDED EJECTION



CATALOG NUMBER	А	В	S
10/12 C-XSU-S-001	1.877	1.377	1.000
10/12 C-XSU-S-002	1.877	1.877	1.000
10/12 C-XSU-S-003	1.877	2.377	1.000
10/12 C-XSU-S-004	2.377	1.877	1.000
10/12 C-XSU-S-005	2.377	2.377	1.000
10/12 C-XSU-S-006	2.877	2.377	1.000

10/12 C-XSU-3P 3 plate insert 7.0 x 10.9 fits 10/12 U-frame



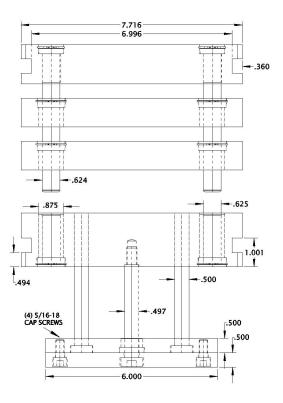
CATALOG NUMBER	A1	A2	A3	В
*CUSTOMIZABLE				
10/12 C-XSU-3P-001	1.000	1.000	1.000	1.877
10/12 C-XSU-3P-002	1.000	1.000	1.000	2.377
10/12 C-XSU-3P-003	1.000	1.000	1.000	2.877
10/12 C-XSU-3P-004	1.377	1.000	1.000	1.877
10/12 C-XSU-3P-005	1.377	1.000	1.000	2.377
10/12 C-XSU-3P-006	1.377	1.000	1.000	2.877

*CAN BE ORDERED IN ANY COMBINATION OF 1.00. 1.377, 1.877, 2.377, OR 2.877.

YOUR CHOICES INCLUDE:

- ALL THE OPTIONS FOR RETURN PINS, GUIDED * EJECTORS OR BLANK EJECTOR PLATES (SEE C-XSU PAGE 30)
- ALSO AVAILABLE WITH A LAMINATED B-SIDE

SHOWN WITH SIMPLE GUIDED EJECTION



ORDERING EXAMPLES:

10/12 C-XSU-3P-005
10/12 C-XSU-3P-001
10/12 C-XSU-3P-003

CUSTOM ORDER EXAMPLES:

10/12 C-XSU-3P	10/12 C-XSU-3P
A1 1.877	A1 1.377
A2 1.250	A2 1.877
A3 1.377	A3 1.000
B2 1.627	В 2.377
B 2.377	

10/14 C-XSU SOLID INSERT

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM

(OUR BEST)

GUÌDED SUPPORT

PILLAR (GSP)

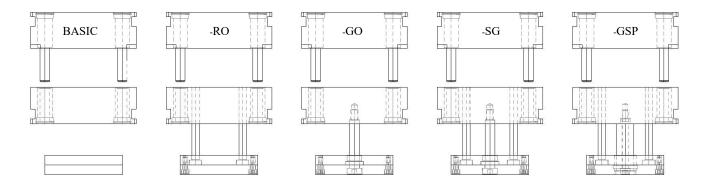
-1.490

GB-1.125

1

490

305

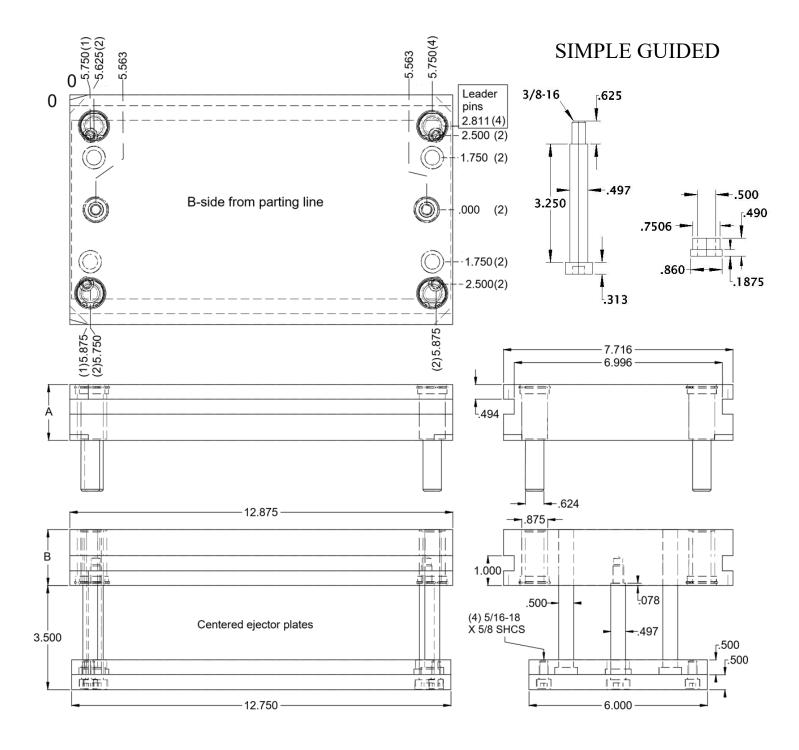


THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ÓN THE OPPOSITE PAGE

ORDERING EXAMPLES: 10/14 C-XSU-225-RO 10/14 C-XSU-229-GSP COMPONENTS FOR THE 10/14 GUIDED SUPPORT PILLAR(GSP) 3/8-16 THREAD CLEARANCE FOR 3/8 CAPSCREW .250 CATALOG NUMBER В А -.6245 BASIC 10/14 C-XSU-224 1.877 1.877 -1.1243 4 000 10/14 C-XSU-225 1.877 2.377 Ø1.125-3.5015 Ø 1.3756 -10/14 C-XSU-226 2.377 1.877 .375 10/14 C-XSU-227 2.377 2.377 .795 10/14 C-XSU-228 2.377 2.877 -1 240-10/14 C-XSU-229 2.877 2.377 .187 GSP-B-4 GP-1.125-35 10/14 C-XSU-230 2.877 2.877

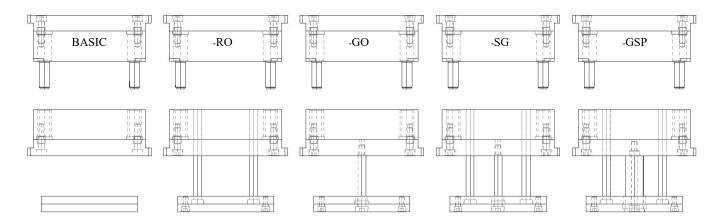
ADDITIONAL OPTIONS:

- (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND -RO BOLTED EJECTÓR PLATES.
- (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALI--GO TY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUAL--SG ITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE -GSP BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

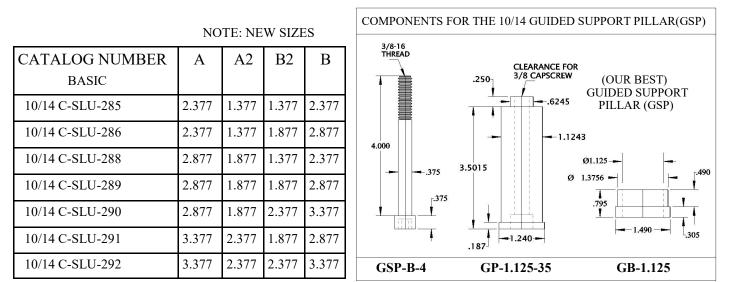


$10/14 \ C\text{-}SLU$ laminated insert

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM



ORDERING EXAMPLES: 10/14 C-SLU-286-RO 10/14 C-SLU-287-GSP THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE \longrightarrow

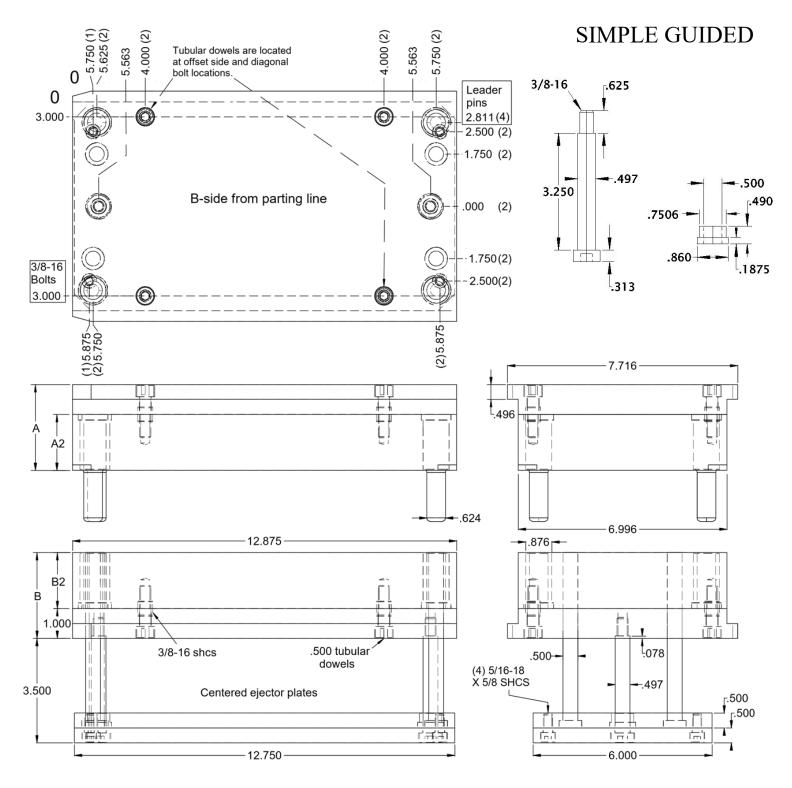


NOTE: THE C-SLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

ADDITIONAL OPTIONS:

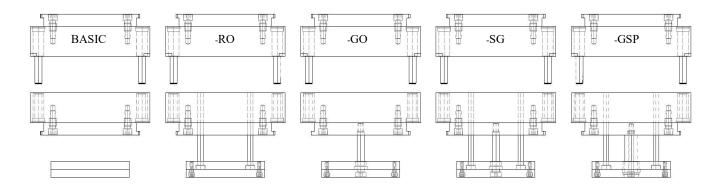
- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

$10/14\ C\text{-}SLU$ 7.0 x 12.9 Fits 10/14 U-frame



10/14 C-TLU laminated t-style

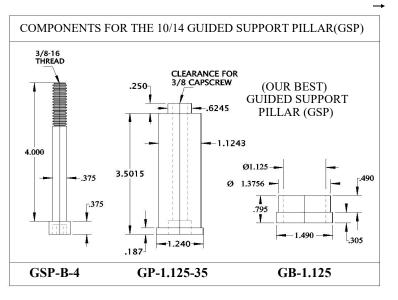
DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM



ORDERING EXAMPLES: 10/14 C-TLU 207-RO 10/14 C-TLU-210-SG 10/14 C-TLU-206-GO

CATALOG NUMBER BASIC	А	A2	B2	В
10/14 C-TLU-204	2.377	1.377	1.377	2.377
10/14 C-TLU-205	2.377	1.377	1.877	2.877
10/14 C-TLU-206	2.877	1.877	1.377	2.377
10/14 C-TLU-207	2.877	1.877	1.877	2.877
10/14 C-TLU-208	2.877	1.877	2.377	3.377
10/14 C-TLU-209	3.377	2.377	1.877	2.877
10/14 C-TLU-210	3.377	2.377	2.377	3.377

THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE



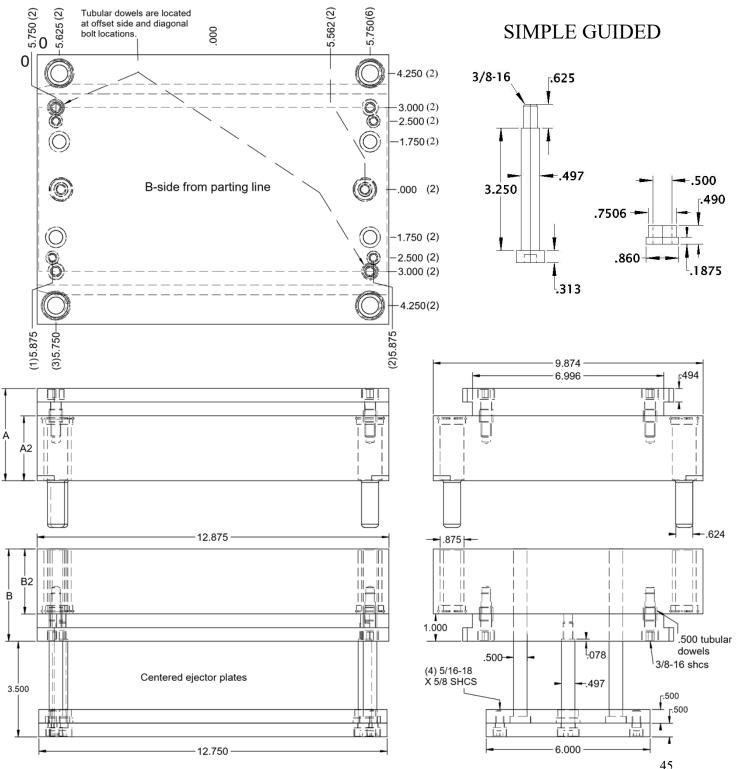
NOTE: THE C-TLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

ADDITIONAL OPTIONS:

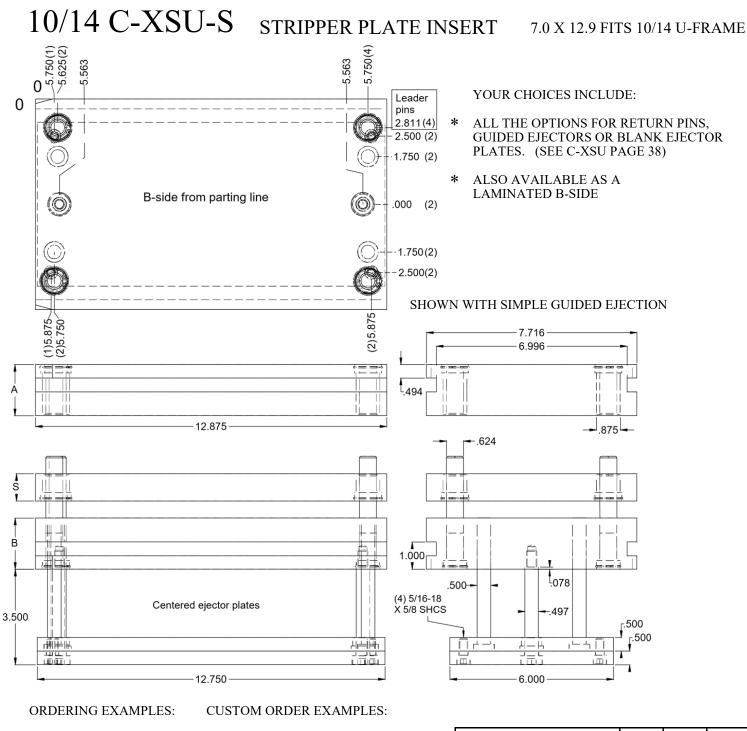
- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

10/14 C-TLU 7.0 X 12.9 EAR PLATE FITS 10/14U-FRAME 9.9 X 12.9 T-PLATE

All C-TLU'S can be modified in length and width to accommodate cams or waterlines. Leader pin locations can be moved. All ear-plate and ejector locations will stay in the same position.



45



10/14 C-XSU-S-005-1
10/14 C-XSU-S-001-1
10/14 C-XSU-S-003-1

10/14 C-SLU-S A 1.877 A2 1.125 S 1.000 B2 1.627 B 2.377

U-S 10/14 C-XSU-S-2HOLE A 1.877 S 0.750 B 2.377

В 2.377 В 2.377

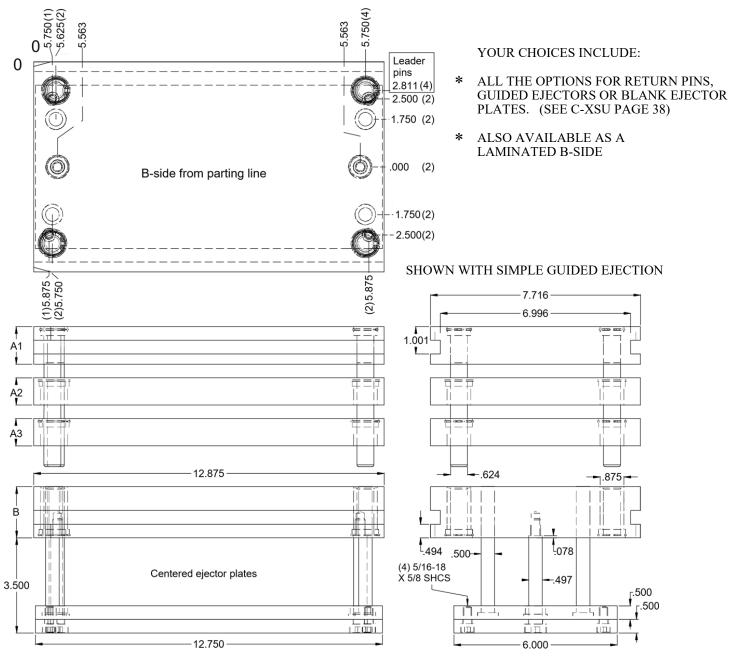
A-PLATES AND B-PLATES CAN BE ORDERED IN ANY COMBINATION OF 1.377,1.877, 2.377, OR 2.877.

OTHER STRIPPER THICKNESSES ARE ALSO AVAILABLE

CATALOG NUMBER	А	В	S
10/14 C-XSU-S-001	1.877	1.377	1.000
10/14 C-XSU-S-002	1.877	1.877	1.000
10/14 C-XSU-S-003	1.877	2.377	1.000
10/14 C-XSU-S-004	2.377	1.877	1.000
10/14 C-XSU-S-005	2.377	2.377	1.000
10/14 C-XSU-S-006	2.877	2.377	1.000

Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

10/14 C-XSU-3P 3 plate insert



CATALOG NUMBER	A1	A2	A3	В
*CUSTOMIZABLE				
10/14 C-XSU-3P-001	1.000	1.000	1.000	1.877
10/14 C-XSU-3P-002	1.000	1.000	1.000	2.377
10/14 C-XSU-3P-003	1.000	1.000	1.000	2.877
10/14 C-XSU-3P-004	1.377	1.000	1.000	1.877
10/14 C-XSU-3P-005	1.377	1.000	1.000	2.377
10/14 C-XSU-3P-006	1.377	1.000	1.000	2.877

*CAN BE ORDERED IN ANY COMBINATION OF 1.00, 1.377,1.877, 2.377, OR 2.877.

ORDERING EXAMPLES:

10/14 C-XSU-3P-005	,
10/14 C-XSU-3P-001	
10/14 C-XSU-3P-003)

CUSTOM ORDER EXAMPLES:

10/14 C-XSU-3P	10/14 C-XSU-3P
A1 1.877	A1 1.377
A2 1.250	A2 1.877
A3 1.377	A3 1.000
B2 1.627	B 2.377
B 2.377	

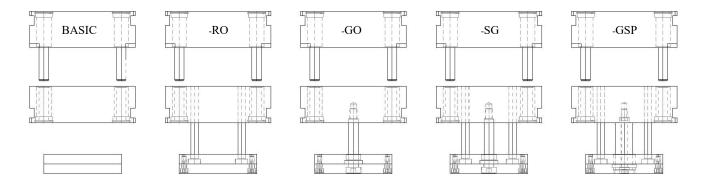
47

11/11 C-XSU SOLID INSERT

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM

490

305



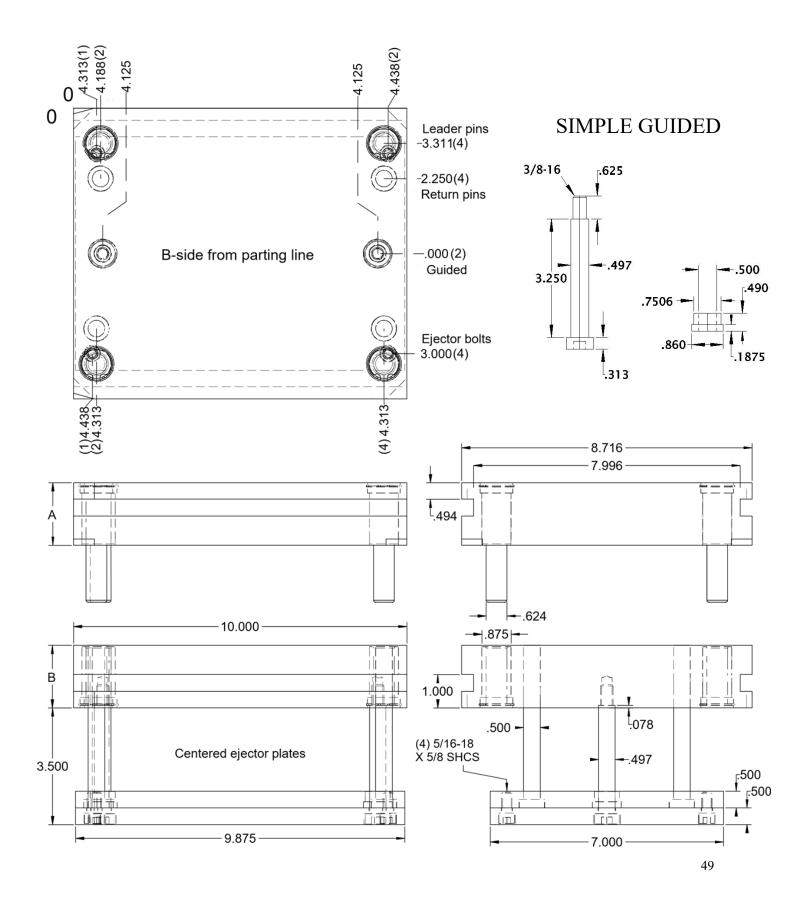
THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ÓN THE OPPOSITE PAGE

ORDERING EXAMPLES: 11/11 C-XSU-225-RO 11/11 C-XSU-229-GSP COMPONENTS FOR THE 11/11 GUIDED SUPPORT PILLAR(GSP) 3/8-16 THREAD CLEARANCE FOR 3/8 CAPSCREW (OUR BEST) .250 CATALOG NUMBER А В **GUÌDED SUPPORT** -.6245 PILLAR (GSP) BASIC 11/11 C-XSU-224 1.877 1.877 -1.1243 4 000 11/11 C-XSU-225 1.877 2.377 Ø1.125-3.5015 Ø 1.3756 -11/11 C-XSU-226 2.377 1.877 .375 11/11 C-XSU-227 2.377 2.377 .795 1 11/11 C-XSU-228 2.377 2.877 -1.490 -1 240-11/11 C-XSU-229 2.877 2.377 .187 GSP-B-4 GP-1.125-35 **GB-1.125** 11/11 C-XSU-230 2.877 2.877

ADDITIONAL OPTIONS:

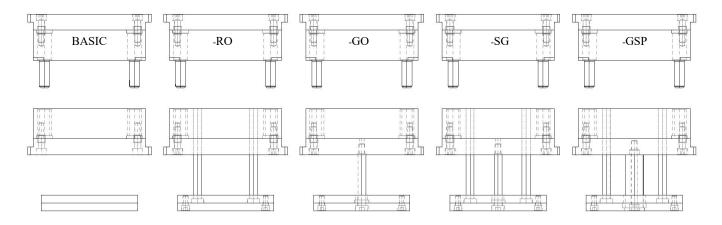
- (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND -RO BOLTED EJECTÓR PLATES.
- (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALI--GO TY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUAL--SG ITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE -GSP BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

$11/11 \ C\text{-}XSU \quad \text{8.0 x 10.0 fits 11/11 u-frame}$

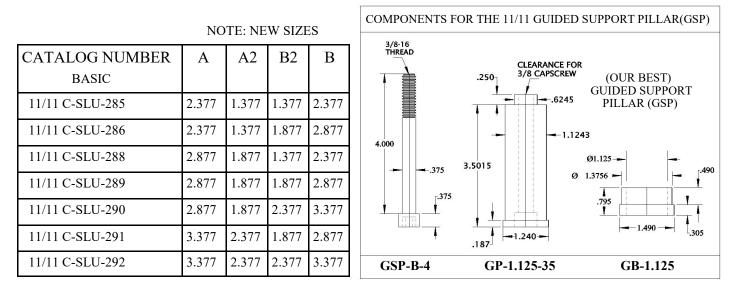


$11/11 \ C\text{-}SLU$ laminated insert

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM



ORDERING EXAMPLES: 11/11 C-SLU-286-RO 11/11 C-SLU-287-GSP

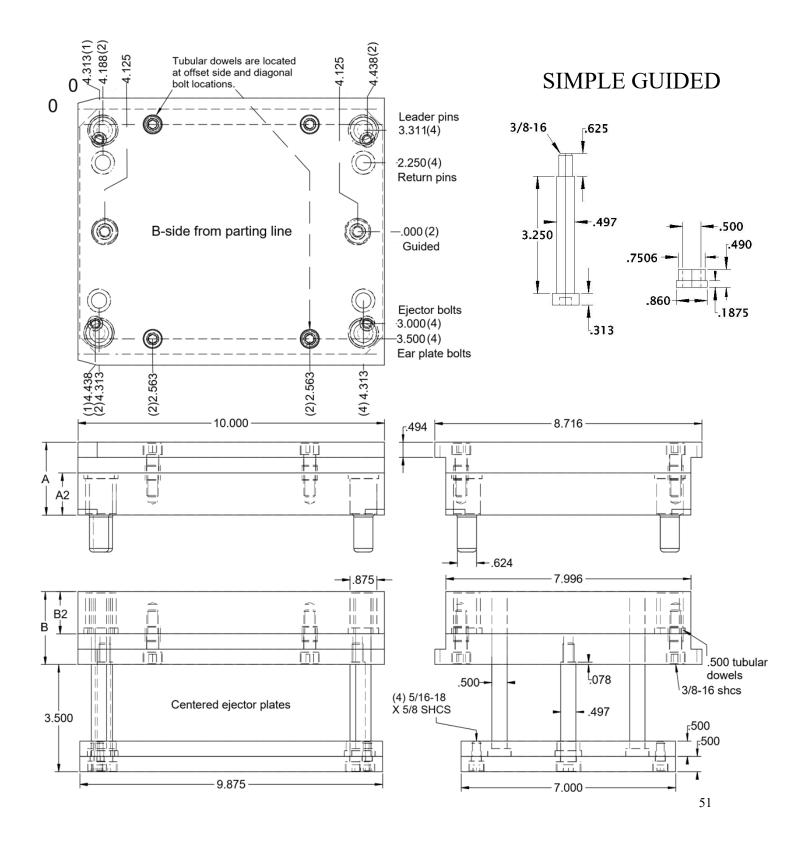


NOTE: THE C-SLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

ADDITIONAL OPTIONS:

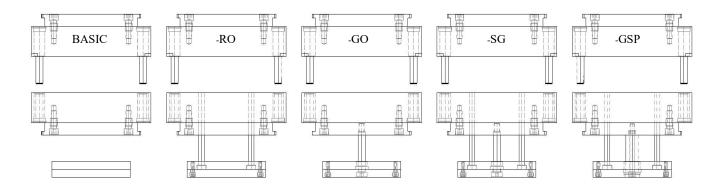
- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

$11/11\ C\text{-}SLU\ \text{8.0 x 10.0 Fits 11/11 U-Frame}$



11/11 C-TLU LAMINATED T-STYLE

DRAWINGS AVAILABLE ONLINE IN .STEP OR .XT FORMATS AT CROSSTOOL.COM



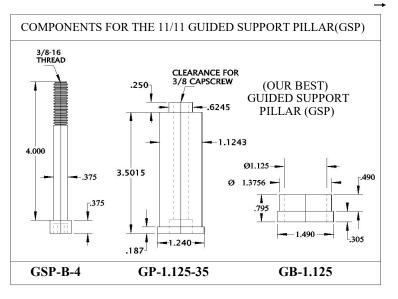
ORDERING EXAMPLES: 11/11 C-TLU 207-RO 11/1

11/11 C-TLU-210-SG

RO 11/11C-TLU-204-GSP SG 11/11 C-TLU-206-GO

CATALOG NUMBER BASIC	А	A2	B2	В
11/11 C-TLU-204	2.377	1.377	1.377	2.377
11/11 C-TLU-205	2.377	1.377	1.877	2.877
11/11 C-TLU-206	2.877	1.877	1.377	2.377
11/11 C-TLU-207	2.877	1.877	1.877	2.877
11/11 C-TLU-208	2.877	1.877	2.377	3.377
11/11 C-TLU-209	3.377	2.377	1.877	2.877
11/11 C-TLU-210	3.377	2.377	2.377	3.377

THE (GUIDED SUPPORT PILLAR) OPTION USES THE SAME LOCATIONS AS THE (SIMPLE GUIDED), AS DRAWN ON THE OPPOSITE PAGE



NOTE: THE C-TLU SERIES INCLUDES BOLTED EAR PLATES WITH TUBULAR ALIGNMENT DOWELS.

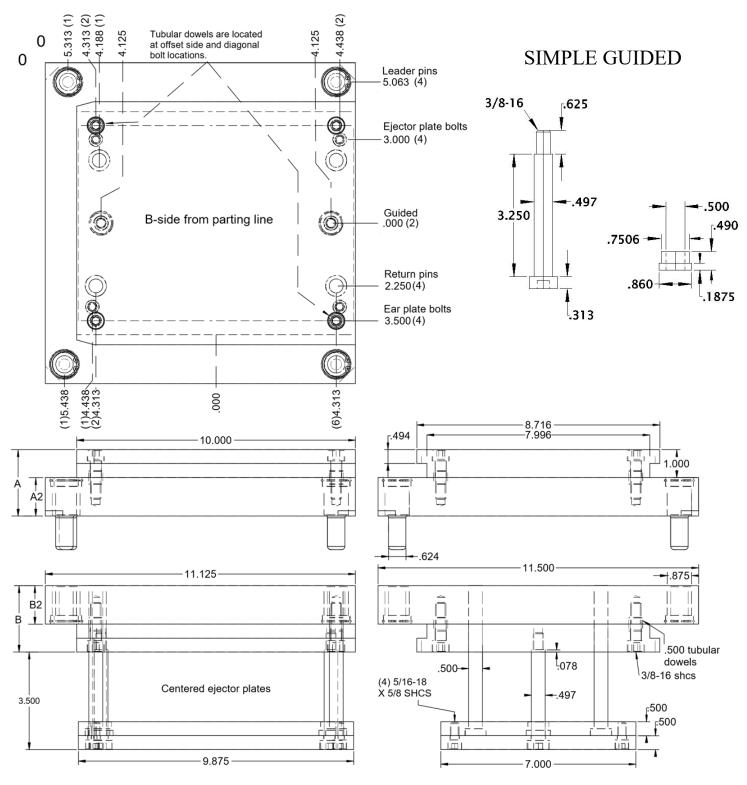
ADDITIONAL OPTIONS:

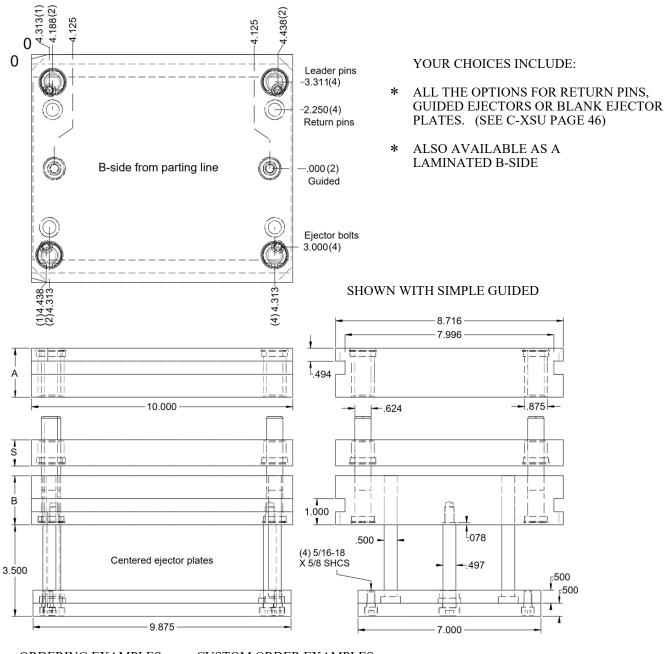
- -RO (RETURN ONLY) INCLUDES ALL RETURN PIN MACHINING, WITH CUT TO SIZE RETURN PINS AND BOLTED EJECTOR PLATES.
- -GO (GUIDED ONLY) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES BOLTED EJECTOR PLATES, BUT NO RETURN PINS.
- -SG (SIMPLE GUIDED) USES SHOULDER BOLTS AND ALUMINUM BRONZE BUSHINGS. A GOOD QUALITY GUIDED SYSTEM, THAT INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN PIN ONLY.
- -GSP (GUIDED SUPPORT PILLAR) USES HIGH PRECISION SUPPORT PILLARS AND ALUMINUM BRONZE BUSHINGS TO PROVIDE A SUPERIOR QUALITY GUIDED EJECTOR SYSTEM. INCORPORATES AN EJECTOR PLATE RETENSION SYSTEM. INCLUDES ALL THE FEATURES OF THE RETURN ONLY.

11/11 C-TLU 8.0 X 10.0 EAR PLATE 11.5 X 11.125 T-PLATE

FITS 11/11 U-FRAME

All C-TLU'S can be modified in length and width to accommodate cams or waterlines. Leader pin locations can be moved. All ear-plate and ejector locations will stay in the same position.





ORDERING EXAMPLES:

CUSTOM ORDER EXAMPLES:

11/11	C-XSU-S-005-1	
11/11	C-XSU-S-001-1	
11/11	C-XSU-S-003-1	

11/11 C-SLU-S A 1.877 A2 1.125 S 1.000 B2 1.627 B 2.377

S 11/11 C-XSU-S-2HOLE A 1.877 S 0.750 B 2.377

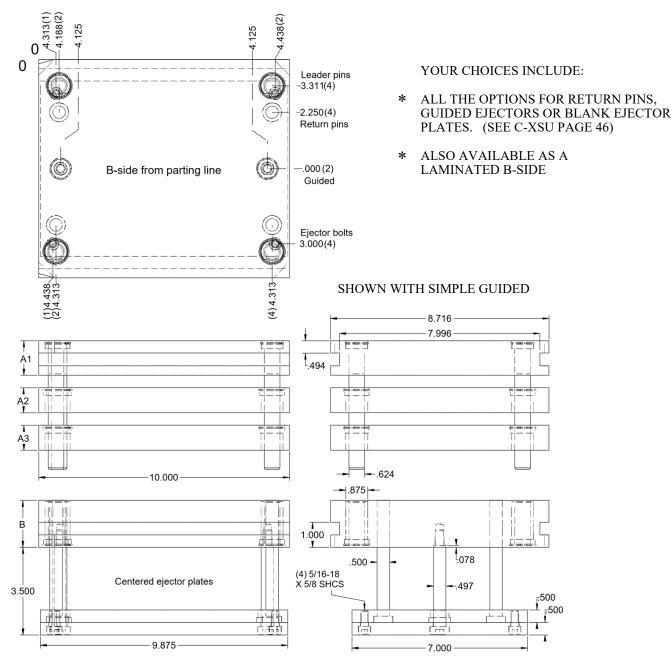
A-PLATES AND B-PLATES CAN BE ORDERED IN ANY COMBINATION OF 1.377,1.877, 2.377, OR 2.877.

OTHER STRIPPER THICKNESSES ARE ALSO AVAILABLE

CATALOG NUMBER	А	В	S
11/11 C-XSU-S-001	1.877	1.377	1.000
11/11 C-XSU-S-002	1.877	1.877	1.000
11/11 C-XSU-S-003	1.877	2.377	1.000
11/11 C-XSU-S-004	2.377	1.877	1.000
11/11 C-XSU-S-005	2.377	2.377	1.000
11/11 C-XSU-S-006	2.877	2.377	1.000

Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

$11/11 \ C-XSU-3P \ \ \text{3 plate insert} \quad \text{8.0 x 10.0 fits 11/11 u-frame}$



CATALOG NUMBER	A1	A2	A3	В
*CUSTOMIZABLE				
11/11 C-XSU-3P-001	1.000	1.000	1.000	1.877
11/11 C-XSU-3P-002	1.000	1.000	1.000	2.377
11/11 C-XSU-3P-003	1.000	1.000	1.000	2.877
11/11 C-XSU-3P-004	1.377	1.000	1.000	1.877
11/11 C-XSU-3P-005	1.377	1.000	1.000	2.377
11/11 C-XSU-3P-006	1.377	1.000	1.000	2.877

*CAN BE ORDERED IN ANY COMBINATION OF 1.00, 1.377,1.877, 2.377, OR 2.877.

ORDERING EXAMPLES:

11/11	C-XSU-3P-005
11/11	C-XSU-3P-001
11/11	C-XSU-3P-003

CUSTOM ORDER EXAMPLES:

11/11 C-XSU-3P	11/11 C-XSU-3P
A1 1.877	A1 1.377
A2 1.250	A2 1.877
A3 1.377	A3 1.000
B2 1.627	В 2.377
B 2.377	

C-08/09 POCKETS

REQUIRED INFORMATION

Single Pocket:

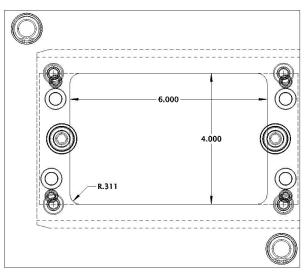
-Width of pocket inside the 4.996 width on C-XSU and C-SLU, or 7.85 inch T-plate dimension. -Length of pocket inside 8 inch ear-plate dimension -Depth of pocket

-Corner radius (.3115 standard to 1 inch deep) -Corner radius (.375 standard from 1 to 2 inch deep) -Center of pocket from middle of ear-plate towards or away from offset leader pin.

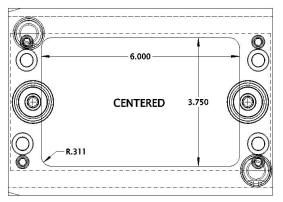
Multiple Pocket: -Width of pockets -Length of pockets -Depth of Pockets

-Corner radius (.3115 standard to 1 inch deep)

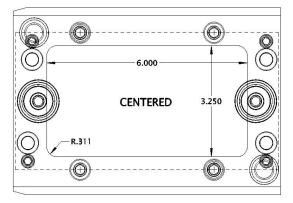
-Corner radius (.375 standard from 1 to 2 inch deep) -Location of pocket centers from middle of ear-plate towards or away from offset leader pin.



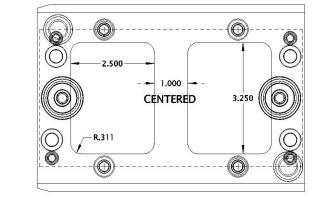
08/09 CTLU laminated pockets maximum through size



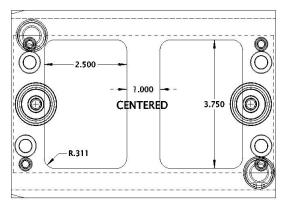
08/09 CXSU solid pockets maximum size



08/09 CSLU laminated pockets maximum size



08/09 CSLU laminated pockets maximum size



08/09 CXSU solid pockets maximum size

Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

C-84/90 POCKETS

REQUIRED INFORMATION

Single Pocket:

-Width of pocket inside the 6.956 width on C-XSU and C-SLU, or 8.400 inch T-plate dimension. -Length of pocket inside 8 inch ear-plate dimension -Depth of pocket

-Corner radius (.3115 standard to 1 inch deep)

-Corner radius (.375 standard from 1 to 2 inch deep) -Center of pocket from middle of ear-plate towards or away from offset leader pin.

Multiple Pocket:

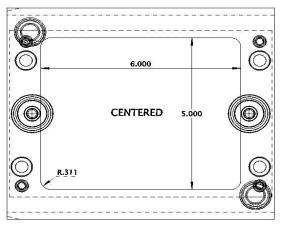
-Width of pockets

-Length of pockets

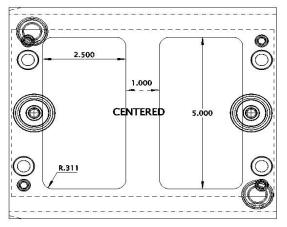
-Depth of Pockets

-Corner radius (.3115 standard to 1 inch deep)

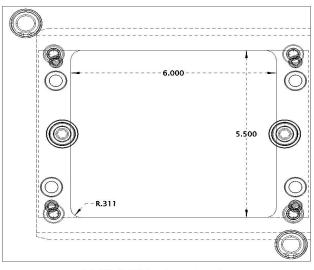
-Corner radius (.375 standard from 1 to 2 inch deep) -Location of pocket centers from middle of ear-plate towards or away from offset leader pin.



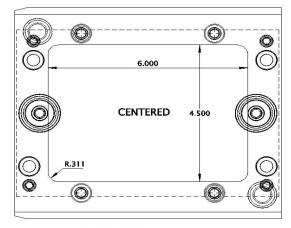
84/90 CXSU solid pockets maximum size



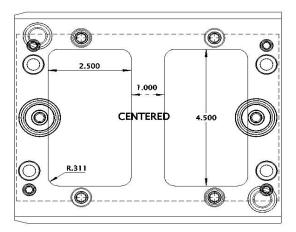
84/90 CXSU solid pockets maximum size



84/90 CTLU laminated pockets maximum through size



84/90 CSLU laminated pockets maximum size



84/90 CSLU laminated pockets maximum size

C-10/12 POCKETS

REQUIRED INFORMATION

Single Pocket:

-Width of pocket inside the 6.996 dimension on C-XSU and C-SLU, or 9.875 inch T-plate dimension. -Length of pocket inside 8 inch ear-plate dimension -Depth of pocket

-Corner radius (.3115 standard to 1 inch deep) -Corner radius (.374 standard from 1 to 2 inch deep) -Center of pocket from middle of ear-plate towards or away from offset leader pin.

Multiple Pocket:

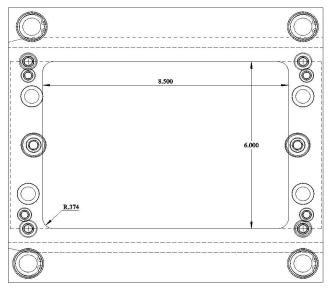
-Width of pockets

-Length of pockets

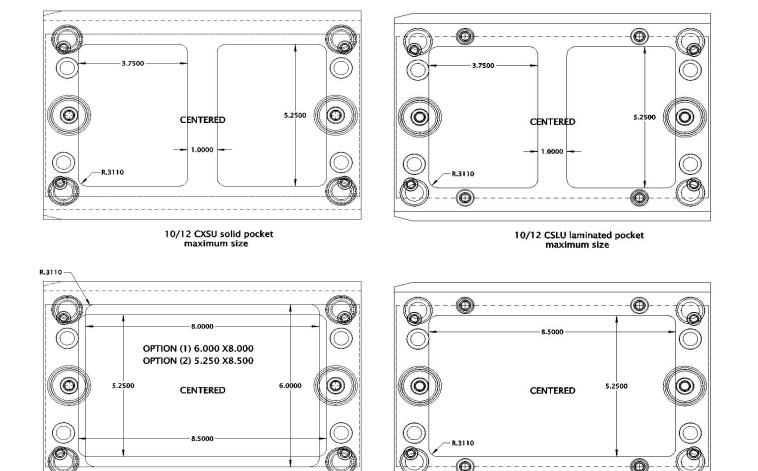
-Depth of Pockets

-Corner radius (.3115 standard to 1 inch deep)

-Corner radius (.375 standard from 1 to 2 inch deep) -Location of pocket centers from middle of ear-plate towards or away from offset leader pin.



10/12 CTLU laminated pockets maximum through size



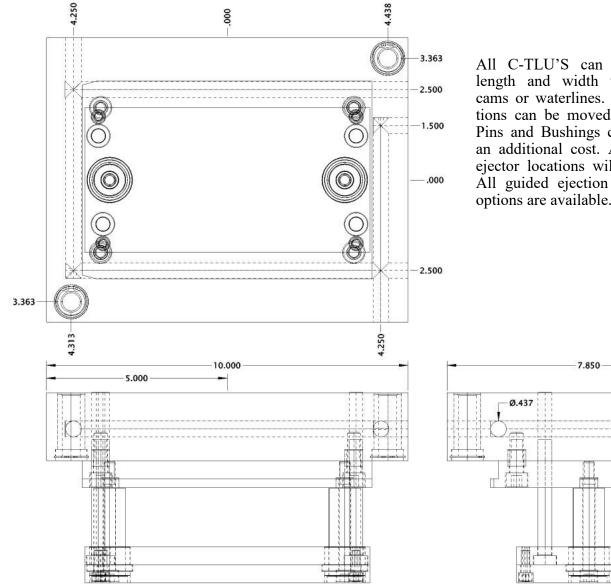
10/12 CXSU solid pocket maximum size

10/12 CSLU laminated pocket maximum size

Cross Tool & Manufacturing, Inc. 1-800-832-3993 crosstool.com

C-08/09 WATERLINES Shown in a (modified) C-TLU

Cross Tool incorporates waterlines into the manufacturing process saving you time and money. Your choices include gun-drilled holes for waterlines, or cartridge heating elements. With a simple layout drawing or sketch we can provide a competitive quote. Threaded holes can be added for a nominal extra fee.

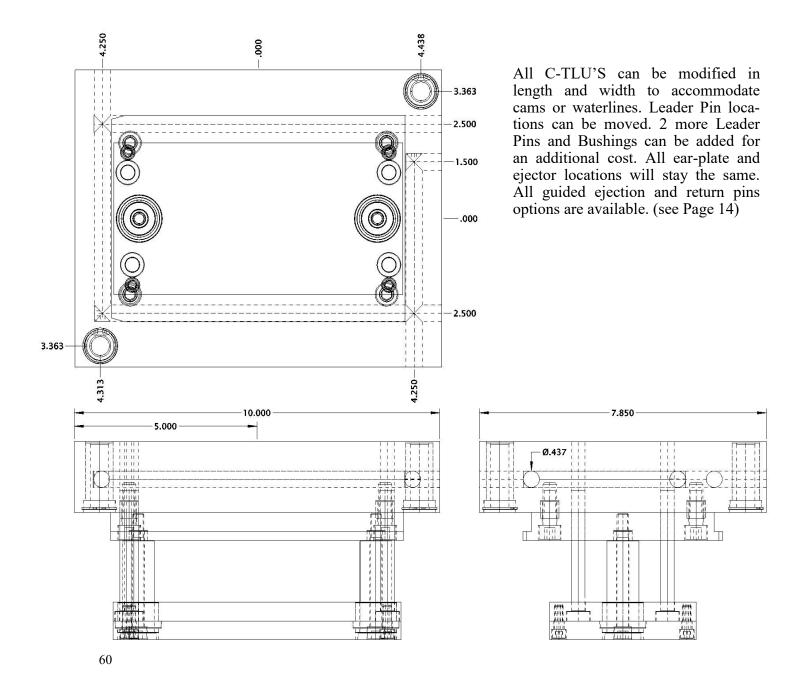


All C-TLU'S can be modified in length and width to accommodate cams or waterlines. Leader Pin locations can be moved. 2 more Leader Pins and Bushings can be added for an additional cost. All ear-plate and ejector locations will stay the same. All guided ejection and return pins options are available. (see Page 6)

1

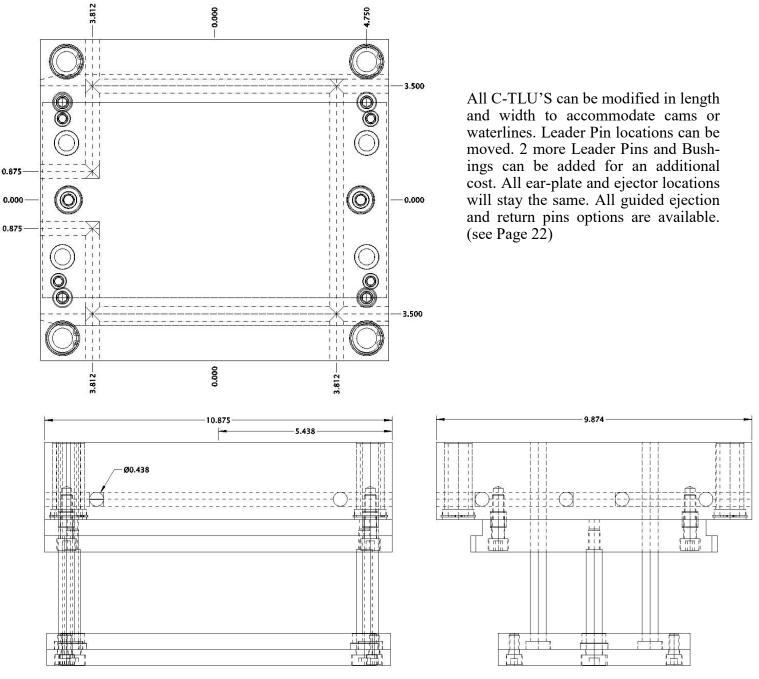
C-84/90 WATERLINES Shown in a (modified) C-TLU

Cross Tool incorporates waterlines into the manufacturing process saving you time and money. Your choices include gun-drilled holes for waterlines, or cartridge heating elements. With a simple layout drawing or sketch we can provide a competitive quote. Threaded holes can be added for a nominal extra fee.



C-10/12 WATERLINES Shown in a standard C-TLU

Cross Tool incorporates waterlines into the manufacturing process saving you time and money. Your choices include gun-drilled holes for waterlines, or cartridge heating elements. With a simple layout drawing or sketch we can provide a competitive quote. Threaded holes can be added for a nominal extra fee.



INTERCHANGEABLE MOLDING INSERTS

"A" & "B" dimensions are supplied .000" to .001" oversize at parting line unless otherwise specified.

STANDARD SOLID INSERT C-XSU

Standard Solid Inserts are designed to fit into "U" Series Mold Base Frames. A SSU is made up of a two plate design, which consists of a solid "A" plate and a solid "B" plate.

STANDARD LAMINATED INSERT C-SLU

Standard Laminated Inserts are designed to fit into "U" Series Mold Base Frames. A SLU is made up of a four plate design. The SLU Molding Insert is made up of both "A" and "B" ear plates that clamp into the U-Frame, and "A2" and "B2" plates that can be separated allowing for Core Pin and through pocket machining.

T-STYLE LAMINATED INSERT C-TLU

T-Style Laminated Inserts are designed to fit into "U" Series Mold Base Frames. A TLU is made up of a four plate design. The TLU Molding Insert is made up of both "A" and "B" ear plates that clamp into the U-Frame, and "A2" and "B2" plates that can be separated allowing for Core Pin and through pocket machining. The T-Style Insert overhangs the U-Frame, this allows additional Mold Base area for maximum molding capacity. TLU's are shipped with loose ear plates.

STEEL GRADES AVAILABLE:

- Standard materials for inserts are P-20 Prehard, Holder Block (#2). Other grades available: H-13 Standard or Premium, 420 Stainless Prehard, S-7 and ALUMOLD®¹ (comparable to QC7®²)
- Standard material for Frames is Holder Block (#2).
- OTHER MATERIALS FOR FRAMES/INSERTS ARE AVAILABLE UPON REQUEST.

(NOTE: Shoulder Leader Pins & Bushings are retained with Snap Rings.)

Yes, We still build all of our standard Products. U-Frames and inserts through 14/16 size, and H-Frame inserts. We do not build H-Frames.



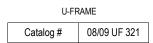
"U" SERIES MOLD BASE FRAMES

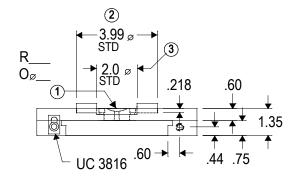
The U-Frame is a "U" shaped Mold Base Frame designed to hold a SSU, SLU, or TLU Molding Insert of the same series. U-Frames are designed to run millions of cycles and allow for fast changeovers. All of our larger U-Frames include SEPU Slots in standard pricing. Our 84/90 Series includes mounting holes and clamping plates which overhang ½" per side.

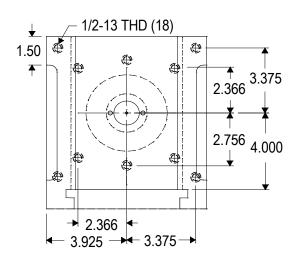
U-FRAME INDEX

08/09 Mold Base U-Frame	60
08/10 Mold Base U-Frame	61
84/90 Mold Base U-Frame	
10/12 Mold Base U-Frame	63
10/14 Mold Base U-Frame	64
11/11 Mold Base U-Frame	65

08/09 U-Frame





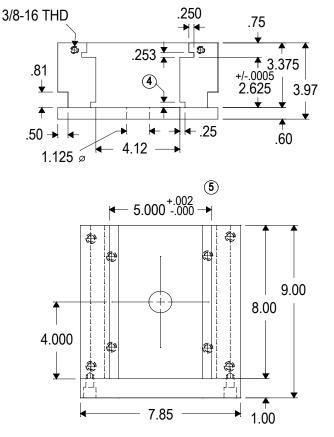


① Sprue Bushing information:

O=Small Dia. of Sprue Bushing Orifice: 5/32",7/32",9/32"

R=Spherical Radius of Sprue Bushing: 1/2" or 3/4"

② Optional Locating Rings are available (Industry Standard)



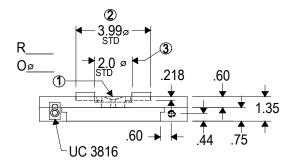
- 3 2" or 21/2" clearance through hole is available (No Sprue Bushing)
- ④ Tapered Slot at .25 Degree to accommodate Sleeve Ejector Plate (SEPU)
- (5) 3/8 X 5 Degree Lead-in

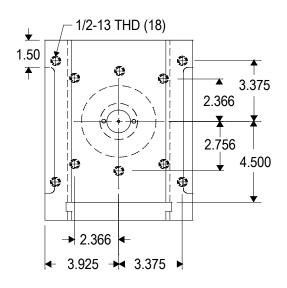
ORDERING INFORMATION

- <u>FRAMES</u> Please specify Quantity & Catalog # Specify Locating Ring Diameter & Sprue Bushing R & O sizes
 - Standard Material for Frames is Holder Block (#2)

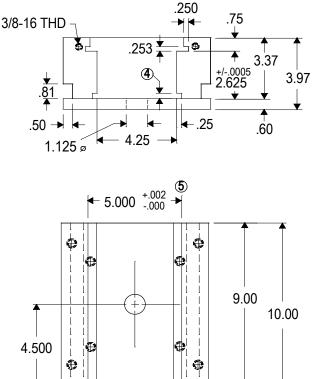
08/10 U-Frame

U-FRAME				
Catalog #	08/10 UF 321			





- Sprue Bushing information:
 O=Small Dia. of Sprue Bushing Orifice: 5/32",7/32",9/32"
 - R=Spherical Radius of Sprue Bushing: 1/2" or 3/4"
- ② Optional Locating Rings are available (Industry Standard)



③ 2" or 2½" clearance through hole is available (No Sprue Bushing)

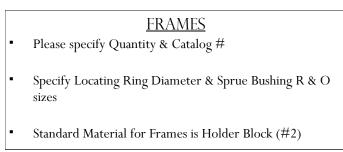
7.85

L

1.00

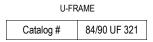
- Tapered Slot at .25 Degree to accommodate Sleeve Ejector Plate (SEPU)
- ⑤ 3/8 X 5 Degree Lead-in

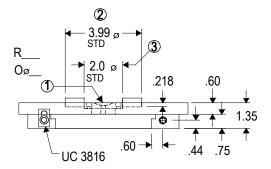
ORDERING INFORMATION

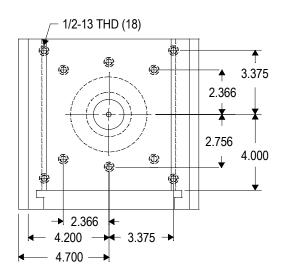


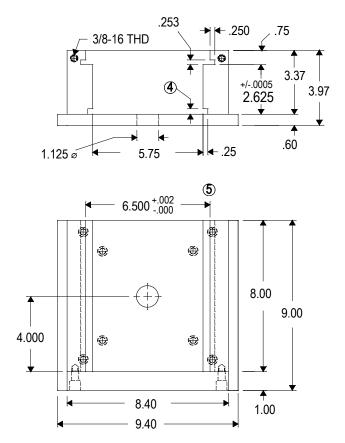
84/90 U-Frame

Note: This size includes Mounting Holes & Extended Clamp Plates in standard pricing









- ① Sprue Bushing information:
 O=Small Dia. of Sprue Bushing Orifice: 5/32",7/32",9/32"
 R=Spherical Radius of Sprue Bushing: 1/2" or 3/4"
- 2 Optional Locating Rings are available (Industry Standard)
- ③ 2" or 2½" clearance through hole is available (No Sprue Bushing)
- ④ Tapered Slot at .25 Degree to accommodate Sleeve Ejector Plate (SEPU)
- (5) 3/8 X 5 Degree Lead-in

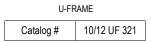
ORDERING INFORMATION

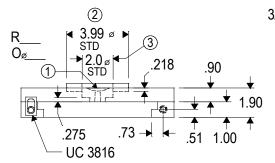
<u>FRAMES</u>

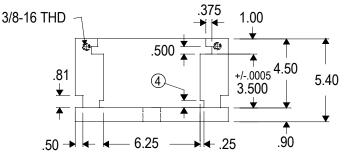
- Please specify Quantity & Catalog #
- Specify Locating Ring Diameter & Sprue Bushing R & O sizes
- Standard Material for Frames is Holder Block (#2)

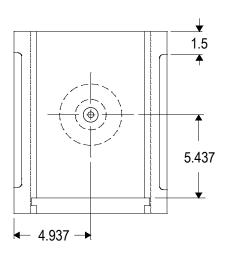
10/12 U-Frame

Note: This size includes SEPU Slots in standard pricing







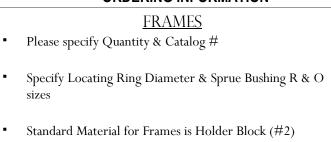


① Sprue Bushing information:

O=Small Dia. of Sprue Bushing Orifice: 5/32",7/32",9/32" R=Spherical Radius of Sprue Bushing: 1/2" or 3/4"

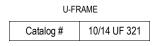
- ② Optional Locating Rings are available (Industry Standard)
- 3 2" or 2½" clearance through hole is available (No Sprue Bushing)
- ④ Tapered Slot at .25 Degree to accommodate Sleeve Ejector Plate (SEPU)
- ⑤ 3/8 X 5 Degree Lead-in

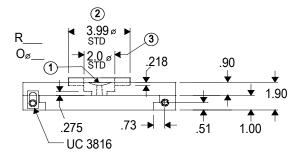
ORDERING INFORMATION

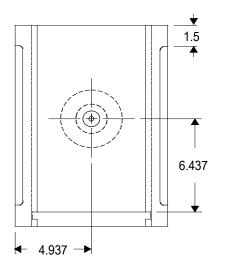


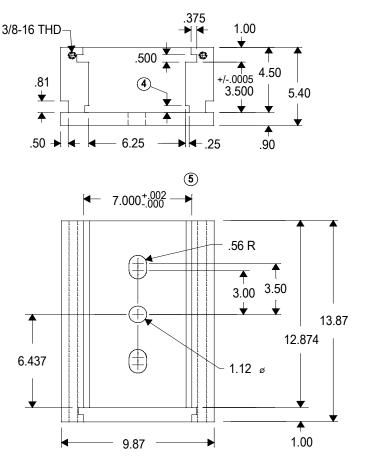
10/14 U-Frame

Note: This size includes SEPU Slots in standard pricing









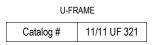
- ① Sprue Bushing information:
 O=Small Dia. of Sprue Bushing Orifice: 5/32",7/32",9/32"
 R=Spherical Radius of Sprue Bushing: 1/2" or 3/4"
- 2 Optional Locating Rings are available (Industry Standard)
- ③ 2" or 2½" clearance through hole is available (No Sprue Bushing)
- Tapered Slot at .25 Degree to accommodate Sleeve Ejector Plate (SEPU)
- ⑤ 3/8 X 5 Degree Lead-in

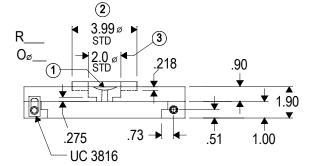
ORDERING INFORMATION

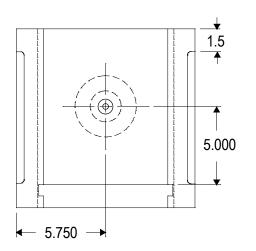
<u>FRAMES</u>
Please specify Quantity & Catalog #
Specify Locating Ring Diameter & Sprue Bushing R & O sizes
Standard Material for Frames is Holder Block (#2)

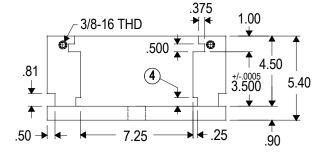
11/11 U-Frame

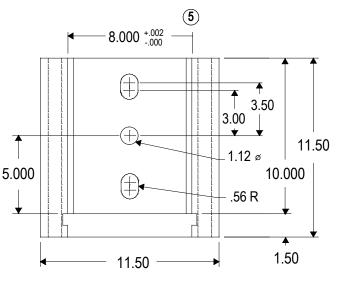
Note: This size includes SEPU Slots in standard pricing











- ① Sprue Bushing information:
 O=Small Dia. of Sprue Bushing Orifice: 5/32",7/32",9/32"
 R=Spherical Radius of Sprue Bushing: 1/2" or 3/4"
- 2 Optional Locating Rings are available (Industry Standard)
- 3 2" or 2½" clearance through hole is available (No Sprue Bushing)
- ④ Tapered Slot at .25 Degree to accommodate Sleeve Ejector Plate (SEPU)
- ⑤ 3/8 X 5 Degree Lead-in

ORDERING INFORMATION

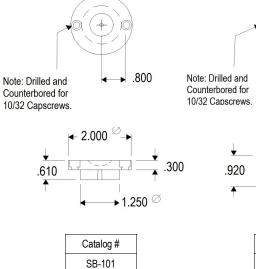
<u>FRAMES</u>
Please specify Quantity & Catalog #
Specify Locating Ring Diameter & Sprue Bushing R & O sizes
Standard Material for Frames is Holder Block (#2)

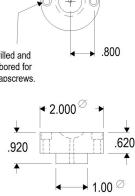


COMPONENT INDEX

Frame Components	67
C-SERIES Leader Pins and Bushings	.68-69
C-08/09,08/10 and C-84/90 Components	70
C-10/12, 10/14 and 11/11 Components	71
C-SERIES: Ear Plate, Ejector Plates, and Sleeve Ejector Plates	72

FRAME COMPONENTS







Note: The SB-101 is designed for the following frames: 07/07 UF 321, 08/09 UF 321 ,84/90 UF 321 & 08/10 UF 321

Note: The SB-102 is designed for the 10/12 UF 321 and larger U-Frames

SPRUE BUSHING ORDERING INFORMATION

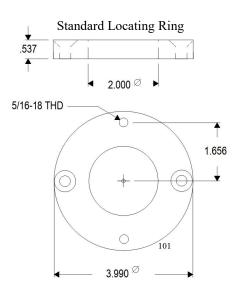
Please specify R & O Sizes:

R = Spherical Radius of Sprue Bushing: 1/2" or 3/4"

O = Small Diameter of Sprue Bushing Orifice: 5/32",7/32", 9/32"

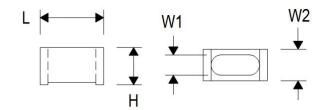
Locating Rings

Catalog #	INSIDE DIA.	THICK- NESS
LR-3990-2	2.000	.531
LR-3990-2.5	2.500	.531
LR-3990-2-1.12	2.000	1.125
LR-3990-2.5-1.12	2.500	1.125

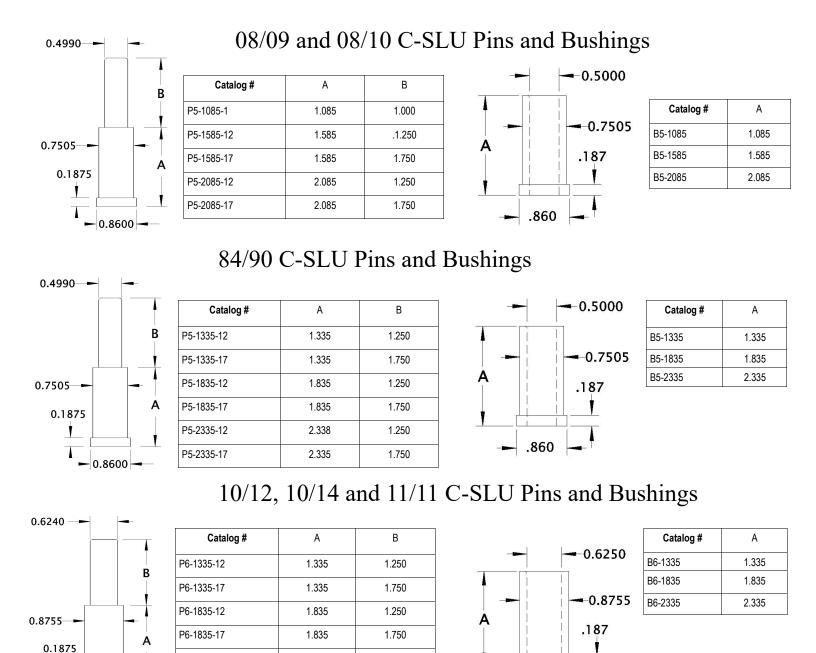


*Other size Locating Rings available upon request.

Frame Holding Clamps							
Catalog # L H W1 W2							
UC-2520	1.00	.50	0.27	0.50			
UC-3816	1.25	.75	0.40	0.62			



C-SERIES LEADER PINS AND BUSHINGS



1.250

1.750

.985

0.9850 🛥

1

P6-2335-12

P6-2335-17

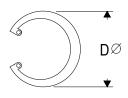
2.335

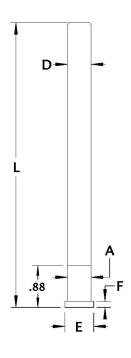
2.335

Straight Leader Pin

Snap Rings					
Catalog #	Pin Ø	D			
SR-62	SP-5	.625			
SR-88	0.500 Ø	0.88			
SR-100	0.625 Ø	1.00			

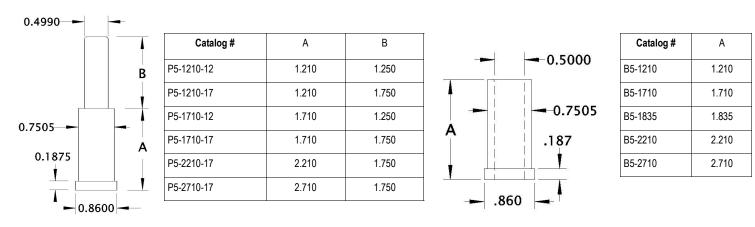
Snap Ring



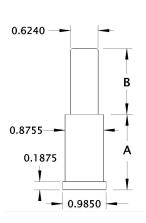


Catalog #	А	D	L	Е	F
SP 5-4.0	0.5005	0.499	4.0	0.610	0.125
SP 5-4.5	0.5005	0.499	4.5	0.610	0.125
SP 5-5.0	0.5005	0.499	5.0	0.610	0.125
SP 5-5.5	0.5005	0.499	5.5	0.610	0.125
SP 5-6.0	0.5005	0.499	6.0	0.610	0.125
SP 5-6.5	0.5005	0.499	6.0	0.610	0.125
SP 5-7.0	0.5005	0.499	6.0	0.610	0.125
Catalog #	А	D	L	Е	F
SP 6-4.0	0.6255	0.624	4.0	0.860	0.187
SP 6-4.5	0.6255	0.624	4.5	0.860	0.187
SP 6-5.0	0.6255	0.624	5.0	0.860	0.187
SP 6-5.5	0.6255	0.624	5.5	0.860	0.187
SP 6-6.0	0.6255	0.624	6.0	0.860	0.187
SP 6-6.5	0.6255	0.624	6.5	0.860	0.187
SP 6-7.0	0.6255	0.624	7.0	0.860	0.187

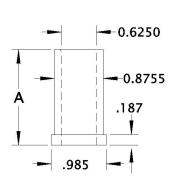
08/09, 08/10 & 84/90 C-XSU And C-TLU Pins and Bushings



10/12, 10/14 and 11/11 C-XSU And C-TLU Pins and Bushings

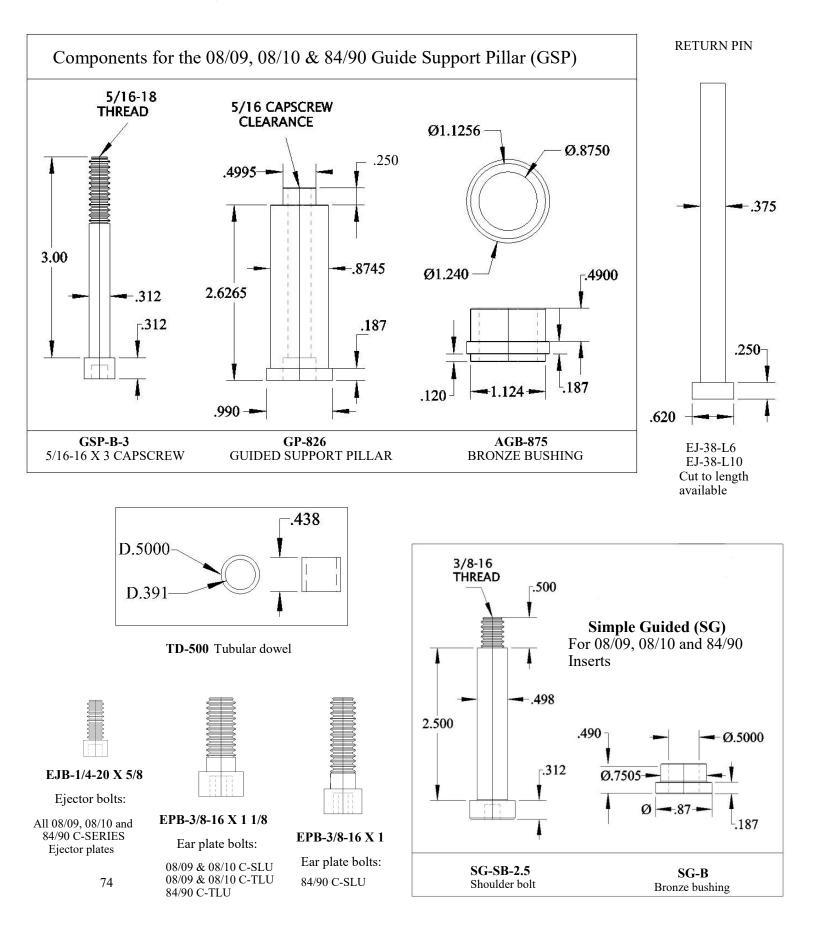


Catalog #	A	В
P6-1210-12	1.210	1.250
P6-1710-12	1.710	1.250
P6-1710-17	1.710	1.750
P6-2210-12	2.210	1.250
P6-2210-17	2.210	1.750
P6-2710-12	2.710	1.250
P6-2710-17	2.710	1.750
P6-3210-17	3.210	1.750
P6-3710-17	3.710	1.750

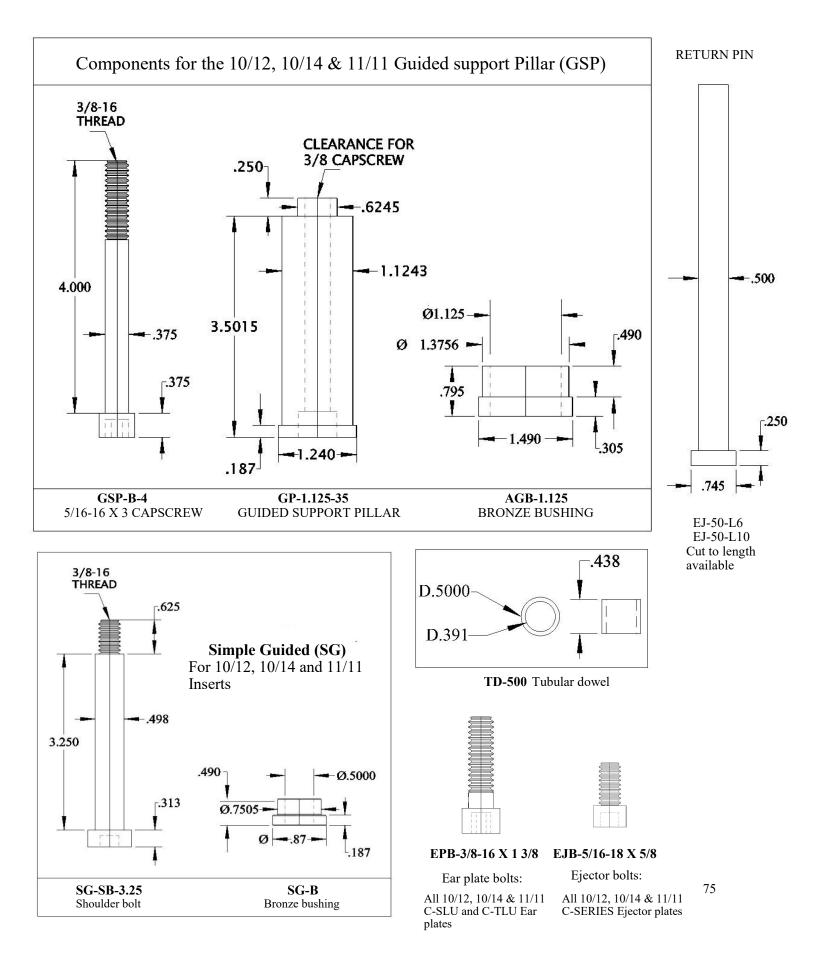


Catalog #	А
B6-835	0.835
B6-1210	1.210
B6-1710	1.710
B6-2210	2.210
B6-2710	2.710
B6-3210	3.210
B6-3710	3.210

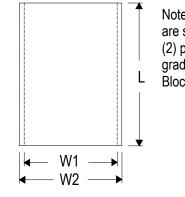
C-08/09, C-08/10 & C-84/90 COMPONENTS



C-10/12, C-10/12 and C-11/11 COMPONENTS

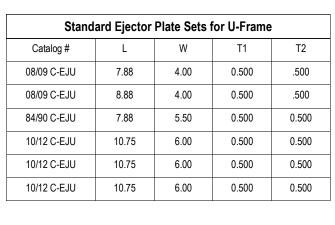


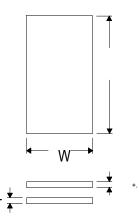
Ear Plates



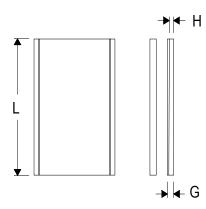
	Ear Plates for T-Style Molding Inserts							
Catalog #	L	W1	W2	D	E	Т		
08/09 EPU	8.000	4.996	5.456	.230	.246	0.750		
08/10 EPU	9.000	4.996	5.456	.230	.246	0.750		
84/90 EPU	8.000	6.496	6.956	.230	.246	0.750		
10/12 EPU	10.874	6.996	7.716	.360	.494	1.000		
10/14 EPU	12.874	6.996	7.716	.360	.494	1.000		
11/11 EPU	10.000	7.996	8.716	.360	.494	1.000		

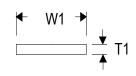
Standard Ejector Plates

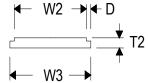




Sleeve Ejector Plates







76

	Sleeve Ejector Plate Assemblies								
Catalog #	L	Н	G	W1	W2	W3	D	T1	T2
08/09 SEPU	7.88	0.247	0.283	4.00	4.00	4.50	.25	0.360	0.360
08/10 SEPU	8.88	0.248	0.287	4.00	4.00	4.50	.25	0.360	0.360
84/90 SEPU	7.88	0.247	0.283	5.50	5.62	6.12	.25	0.360	0.360
10/12 SEPU	10.75	0.429	0.477	6.00	6.12	6.62	.25	0.480	0.480
10/14 SEPU	12.75	0.420	0.477	6.00	6.12	6.62	.25	0.480	0.480
11/11 SEPU	9.88	0.287	0.331	7.00	7.12	6.62	.25	0.360	0.360

ORDERING INFORMATION

EAR PLATES

- Please specify Quantity & Catalog # (Catalog # is for a set of (2) plates)
- Material grade is Holder Block (#2)
- First four digits of catalog # must match those of Molding Insert

EJECTOR PLATES: STANDARD OR SLEEVE

- Please specify Quantity & Catalog # (Catalog # is for a set of (2) plates)
- Material grade is 1018 Steel
- First four digits of catalog # must match those of Molding Insert





Date:

(Note: Failure to complete forms IN FULL AND LEGIBLY WILL RESULT IN A DELAY IN PROCESSING)

BUSINESS INFORMATION					
Business Name:	Phone:				
D.B.A.:	Fax:	Fax:			
Address:	Shipping A	Shipping Address:			
City:	City:				
State: Zip:	State:	Zip:			
Initial Amount of Credit Requested 1\$500	۶1000 ^î \$2000	Ó Other			
(Please include a completed Resale Exemption Cert	ificate with Credit Appl	ication if applicable.)			
Fed. Tax I.D. #:		Resale Tax #:			
Date Established:		Number of Employees:			
Type of Business:					
Principal (Printed Name, Title):		Please check one:			
Principal (Signature, Date):		□ Sole Owner □ Corporation			
Accounts Payable Contact:		□ Partnership □ LLC			
BANI	K REFERENCE	S			
Account #:	Type of Account:				
Bank:	Checking	🗆 Loan			
Street:	□ Other				
City/State/Zip:	Phone:	Fax:			
		· · · · · · · · · · · · · · · · · · ·			

TRADE REFERENCES

Company Name:	Address :	City, State, Zip:	Phone and Fax #'s:
			Phone:
Contact:			Fax:
			Phone
Contact:			Fax:
			Phone:
Contact:			Fax:

Terms: 2%10/Net 30. Applicant agrees to adhere to the "Terms and Conditions of Sale" and to pay any collection costs incurred to collect the amount balance, including reasonable attorney's fees.

The undersigned warrants that the information submitted is true and correct. Cross Tool & Manufacturing, Inc. is authorized to review the credit references listed.



TERMS & POLICIES CROSS TOOL & MANUFACTURING, INC.

SALES POLICY:

SALES TAX:

Cross Tool and Manufacturing, Incorporated is required to charge applicable State and local sales tax on every item for which a sales tax exemption certificate has not been provided. When ordering, please indicate clearly which items are or are not taxable.

RETURNED GOODS:

Our authorization to return materials is required. To expedite the issuance of credit, please furnish our invoice number and date of invoice. Materials returned due to our error will be promptly credited in full provided they are returned within 30 days and are received in original saleable condition. All other returns are subject to charges for inspection or restocking. We cannot accept materials which have been in any way damaged or altered.

SPECIAL GOODS:

Orders for nonstandard material/design, special order, or altered at your request cannot be cancelled or returned unless production has not yet begun. If cancelled, customer will be charged for any work done before production is stopped.

CANCELLATIONS:

Our permission in writing is required to cancel orders placed with us and are subject to a cancellation charge. Such permission can only be granted on the merit of each case.

FREIGHT POLICY:

F.O.B. POINT: All orders and quotations are F.O.B. our warehouse unless otherwise noted.

SHIPPING:

In the absence of explicit customer shipping instructions, we shall determine and select the most satisfactory routing. All merchandise shipped, except Parcel Post shipments, becomes the property of the purchaser upon delivery in good order. Claims for loss, damage, or delay must be made in writing to the carrier and notation made on the receipt at the time of delivery.

WARRANTY POLICY:

LIMITATION OF REMEDY:

Any liability for consequential and incidental damages is expressly disclaimed. The liability of Cross Tool & Manufacturing, Inc. in all events is limited to, and shall not exceed, the purchase price paid.

DELAYS BEYOND SELLER'S CONTROL:

Seller shall not be responsible for delays in performance caused by delays in manufacturing, transportation or due to strikes, fires, floods, storms, war, insurrections, riots, any governmental regulation, order, act or instruction, or any circumstances beyond the Seller's reasonable control. Buyer's acceptance of goods and/or services shall constitute a waiver of any claims for damages due to delay. Under no circumstances shall the Seller be liable for any loss or use by Buyer or for any indirect or consequential damages arising from such delays.

ERRORS:

Clerical and Statistical errors are subject to correction.

CONDITIONS:

GENERAL:

Prices & Discounts are subject to change without notice.

TERMS:

2% discount if paid within 10 days of invoice date - NET 30 days. Terms valid on approved credit only.

SHIPPING INFORMATION:

USPS is used whenever possible. Inserts are split when needed and shipped best way (USPS, FedEx, UPS, Freight). Ground, 3rd Day, 2nd Day, and Next Day shipping options are available. Please specify when placing your order if you have a preference.

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