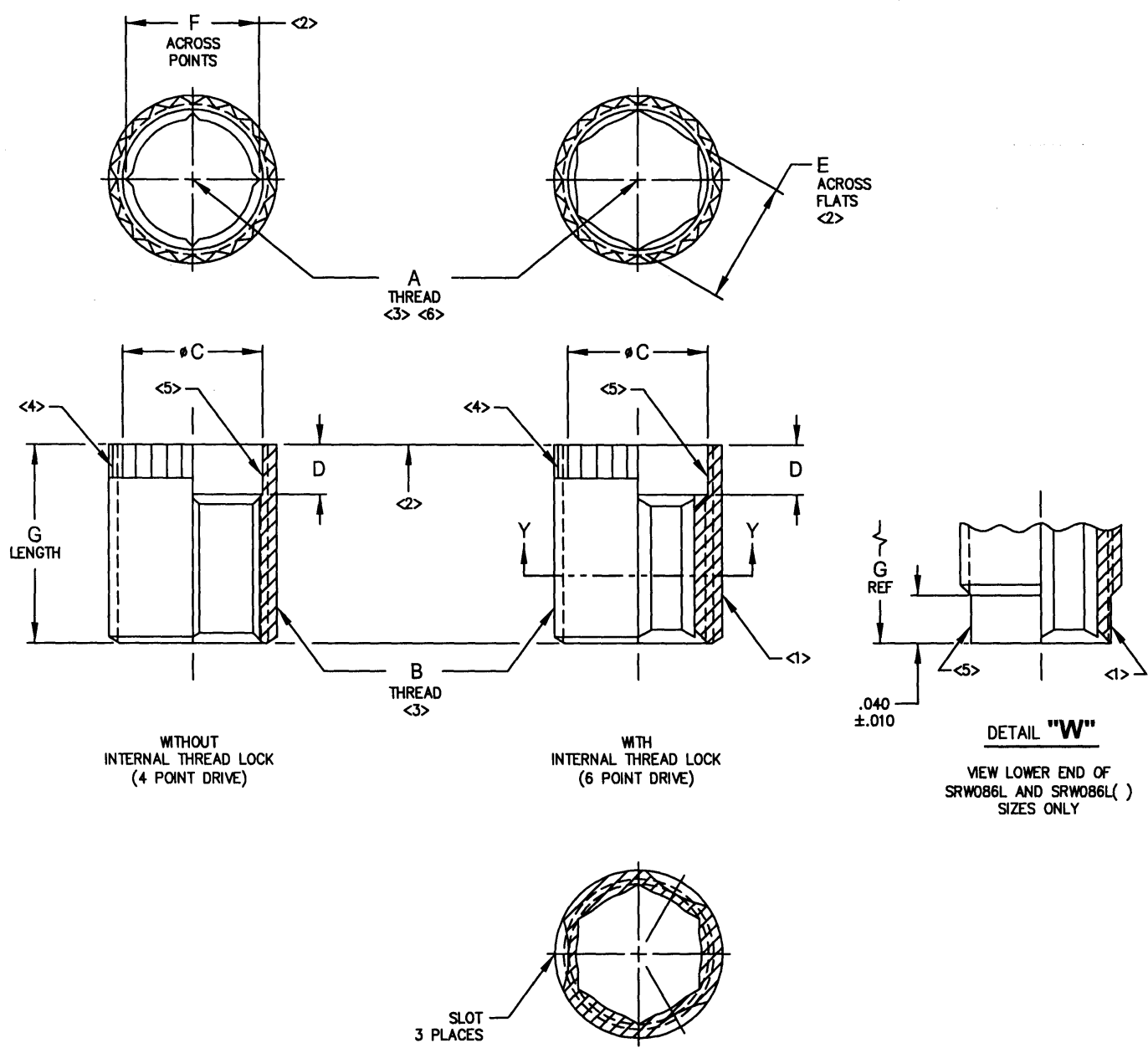


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SRW 194 L 0024

- MATERIAL CODE (SEE TABLE II, SHEET 4)
- INTERNAL THREAD LOCKING FEATURE (USE DASH FOR NON-LOCKED PARTS)
- INTERNAL THREAD SIZE AND PITCH COMBINATION
- SLIMSERT INSERT SERIES, OVERSIZE

INTERIM DOCUMENT REVISION		
Rev.	Date	DAF#
P1	10/8/2018	117431

APPROVED DATE 3/12/62 REV. LETTER AND DATE P 3/17/14 DAF NUMBER 109420	CURRENT DESIGN ACTIVITY: ARCONIC Arconic Fastening Systems Rosan Products 3018 W. Lamita Blvd. Torrance, California 90505-5103	TITLE: SLIMSERT INSERT, HIGH STRENGTH, OVERSIZE UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES: <div style="display: flex; justify-content: space-between; font-size: small;"> ANGLES = ±3° DECIMALS .XX = ±.02 XXX = ±.010 </div>	CURRENT DESIGN ACTIVITY: CAGE CODE: 83324 SALES DRAWING NO. <div style="text-align: center; font-weight: bold; font-size: 1.2em;">SRW () SERIES</div> <div style="text-align: right;">SHEET 1 OF 5</div>
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TABLE I

	BASIC PART NUMBER <7>	A INT THD CLASS-3B <3> <6>	B <3>		C + .008 - .002	D + .015 - .000	E REF	F REF	G ± .010
			EXT THD CLASS-3A	MAX MINOR DIA SPECIAL					
MINIATURE	SRW086L	.0860-56UNC	.1640-32UNC	.1380	.116	.042	.073	----	.170
	SRW086						----	.080	.130
	SRW110L	.1120-40UNC	.1900-32UNF	.1620	.142	.060	.092	----	.190
	SRW110						----	.100	
	SRW142L	.1380-32UNC	.2160-28UNF	.1758	.142	.080	.113	----	.210
	SRW142						----	.120	
	SRW162L	.1640-32UNC	.2500-28UNF	.2098	.169	.080	.138	----	.250
	SRW162						----	.150	
STRUCTURAL	SRW192L	.1900-32UNF	.2812-28NS	.2410	.214	.080	.157	----	.290
	SRW192						----	.180	
	SRW194L	.1900-24UNC	.2812-28NS	.2410	.214	.080	.157	----	.290
	SRW194						----	.180	
	SRW258L	.2500-28UNF	.3438-24NS	.2976	.264	.095	.210	----	.380
	SRW258						----	.240	
	SRW250L	.2500-20UNC	.3438-24NS	.2976	.264	.095	.210	----	.380
	SRW250						----	.240	
	SRW314L	.3125-24UNF	.4219-20NS	.3651	.336	.110	.266	----	.470
	SRW314						----	.310	
	SRW318L	.3125-18UNC	.4219-20NS	.3651	.336	.110	.266	----	.470
	SRW318						----	.310	
	SRW374L	.3750-24UNF	.4844-20NS	.4276	.393	.110	.322	----	.560
	SRW374						----	.370	
	SRW376L	.3750-16UNC	.4844-20NS	.4276	.393	.110	.322	----	.560
	SRW376						----	.370	
	SRW430L	.4375-20UNF	.5625-18UNF	.4993	.466	.135	.377	----	.660
	SRW430						----	.430	
	SRW434L	.4375-14UNC	.5625-18UNF	.4993	.466	.135	.377	----	.660
	SRW434						----	.430	
	SRW500L	.5000-20UNF	.6250-18UNF	.5618	.528	.135	.439	----	.750
	SRW500						----	.490	
	SRW503L	.5000-13UNC	.6250-18UNF	.5618	.528	.135	.439	----	.750
	SRW503						----	.490	
LARGE	SRW568L	.5625-18UNF	.7500-16UNF	.6860	.647	.145	.481	----	.843
	SRW568						----	.550	
	SRW562L	.5625-12UNC	.7500-16UNF	.6860	.647	.145	.481	----	.843
	SRW562						----	.550	
	SRW628L	.6250-18UNF	.8125-20UNJEF	.7547	.714	.145	.534	----	.937
	SRW628						----	.620	
	SRW621L	.6250-11UNC	.8125-20UNJEF	.7547	.714	.145	.534	----	.937
	SRW621						----	.620	
	SRW756L	.7500-16UNF	.9375-20UNJEF	.8797	.838	.170	.648	----	1.125
	SRW756						----	.750	
	SRW750L	.7500-10UNC	.9375-20UNJEF	.8797	.838	.170	.648	----	1.125
	SRW750						----	.750	

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APPROVED DATE

3/12/62

REV. LETTER AND DATE

P- 9/17/14 TH

DAF NUMBER

109420

CURRENT DESIGN ACTIVITY:

**ARCONIC**

Arconic Fastening Systems

Rosan Products
3018 W. Lomita Blvd.
Torrance, California 90505-5103

TITLE:

SLIMSERT INSERT,
HIGH STRENGTH, OVERSIZE

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES &
ASME Y14.5M TOLERANCES:

ANGLES = ±3°
DECIMALS .XX = ±.02
.XXX = ±.010

CURRENT DESIGN ACTIVITY:

CAGE CODE: 83324

SALES DRAWING NO.

SRW () SERIES

SHEET 2 OF 5

MANUFACTURE OF THE PROPRIETARY PARTS SHOWN HERE
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TABLE I: (CONTINUED)

BASIC PART NUMBER <7>	H THREAD CLASS-3B <10> <11>	J TAP DRILL <11> +.004 -.001	K +.004 -.001	L <e>	M MIN	TOOLING					
						STEP DRILL <14>	TAP	DRIVE WRENCH	SWAGE TOOL	REMOVAL TOOL <e>	REMOVAL DRILL <e>
SRW086L	.1640-32UNC	.140 (#28)	.164	.050 .045	.160	SRW08D	SRW08T	SR08WA	SRW08SA	SRW08R	.156 (5/32)
SRW086								SR08W4A			
SRW110L	.1900-32UNF	.166 (#19)	.187	.065	.220	SRW11D	SRW11T	SR11WA	SRW11SA	SRW11R	.173 (#17)
SRW110								SR11W4A			
SRW142L	.2160-28UNF	.182 (#14)	.216	.065	.240	SRW14D	SRW14T	SR14WA	SR14SA	SRW14R	.205 (#5)
SRW142								SR14W4A			
SRW162L	.2500-28UNF	.218 (7/32)	.250	.065	.280	SRW16D	SRW16T	SR16WA	SR16SA	SRW16R	.234 (15/64)
SRW162								SR16W4A			
SRW192L	.2812-28NS	.242 (C)	.281	.082	.325	SRW19D	SRW19T	SR19WA	SRW19SA	SRW19R	.266 (17/64)
SRW192								SR19W4A			
SRW194L								SR19WA			
SRW194								SR19W4A			
SRW258L	.3438-24NS	.302 (N)	.343	.082	.415	SRW25D	SRW25T	SR25WA	SRW25SA	SRW25R	.328 (21/64)
SRW258								SR25W4A			
SRW250L								SR25WA			
SRW250								SR25W4A			
SRW314L	.4219-20NS	.368 (U)	.422	.082	.505	SRW31D	SRW31T	SR31WA	SRW31SA	SRW31R	.406 (13/32)
SRW314								SR31W4A			
SRW318L								SR31WA			
SRW318								SR31W4A			
SRW374L	.4844-20NS	.437 (7/16)	.484	.113	.595	SRW37D	SRW37T	SR37WA	SRW37SA	SRW37R	.469 (15/32)
SRW374								SR37W4A			
SRW376L								SR37WA			
SRW376								SR37W4A			
SRW430L	.5625-18UNF	.515 (33/64)	.562	.113	.695	SRW43D	SRW43T	SR43WA	SRW43SA	SRW43R	.546 (35/64)
SRW430								SR43W4A			
SRW434L								SR43WA			
SRW434								SR43W4A			
SRW500L	.6250-18UNF	.578 (37/64)	.625	.113	.785	SRW50D	SRW50T	SR50WA	SRW50SA	SRW50R	.609 (39/64)
SRW500								SR50W4A			
SRW503L								SR50WA			
SRW503								SR50W4A			
SRW568L	.7500-16UNF	.703 (45/64)	.750	.150	.878	SRW56D	SRW56T	SR56WA	SRW56SA	SRW56R	.734 (47/64)
SRW568								SR56W4A			
SRW562L								SR56WA			
SRW562								SR56W4A			
SRW628L	.8125-20UNJEF	.766 (49/64)	.812	.156	.972	SRW62D	SRW62T	SR62WA	SRW62SA	SRW628R	.797 (51/64)
SRW628								SR62W4A		SRW621R	
SRW621L								SR62WA			
SRW621								SR62W4A			
SRW756L	.9375-20UNJEF	.891 (57/64)	.938	.156	1.160	SRW75D	SRW75T	SR75WA	SRW75SA	SRW756R	.922 (59/64)
SRW756								SR75W4A		SRW750R	
SRW750L								SR75WA			
SRW750								SR75W4A			

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CURRENT DESIGN ACTIVITY:

CAGE CODE: 83324

SALES DRAWING NO.

SRW () SERIES

SHEET 3 OF 5

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TABLE II

CODE	MATERIAL	MAGNETIC	HEAT TREAT	FINISH	TEMPERATURE RANGE
N/A	17-4PH (AMS5643)	YES	HRc 35-42	PASSIVATE PER AMS2700 PLUS SOLID FILM LUBE PER AS5272, TYPE I	-110°/+650°F
0001 <8>				PASSIVATE PER AMS2700	-110°/+900°F
0021 <8>	A286 <9> (AMS5731 OR AMS5734)	NO	HRc 32-40	PASSIVATE PER AMS2700	-400°/+1200°F
0024				PASSIVATE PER AMS2700 PLUS SILVER PLATE PER AMS2411, .0002 MIN THK	-400°/+1200°F
0025				PASSIVATE PER AMS2700 PLUS SOLID FILM LUBE PER AS5272, TYPE I	-400°/+650°F
0036	4130 (AMS6370) OR 8740 (AMS6322)	YES	HRc 25-34	CAD PLATE PER AMS-QQ-P-416, TY III, CL 3 PLUS SOLID FILM LUBE PER AS5272, TYPE I	UP TO +450°F

NOTES:

- <1> INTERNAL THREAD LOCKING FEATURE MEETS REQUIREMENT OF MIL-I-45932, LOCATED IN CENTER OF INTERNAL THREAD LENGTH APPROXIMATELY, EXCEPT FOR SIZES SRW086L AND SRW086L (), SEE DETAIL "W" SHEET 1.
- <2> "E" AND "F" DIMENSIONS APPLY THIS END ONLY.
- <3> THREADS PER FED-STD-H28/2 AND AS NOTED PRIOR TO THE ADDITION OF SOLID FILM LUBRICANT AND AFTER PLATING WHERE APPLICABLE. EXTERNAL THREAD IS SPECIAL FORM-BASIC UNIFIED WITH INCREASED MINOR DIAMETER PER TABLE I. MAJOR DIAMETER AND PITCH DIAMETER PER -3A TOLERANCES. INTERNAL THREAD MINOR DIAMETER WILL ACCEPT SCREWS AND BOLTS WITH AS8879 THREADS.
- <4> BURRS PERMISSIBLE IN SERRATION AREA.
- <5> THREAD MARKS PERMISSIBLE.
- <6> UNIFIED NATIONAL COARSE (UNC) THREADS HAVE A MODIFIED MINOR DIAMETER.
- <7> FOR PART NUMBER CODING, SEE SHEET 1.
- <8> FINISH CODES, "0001" AND "0021" ONLY AVAILABLE WITHOUT INTERNAL THREAD LOCKING FEATURE.
- <9> MAGNETIC PERMEABILITY FOR PARTS FABRICATED FROM A286 MATERIAL SHALL BE LESS THAN 2.000 (AIR 1.000) H = 200 OERSTEDS.
- <10> STANDARD TAPS, IN SIZES INDICATED, ARE USED TO TAP ALL HOLES.
- <11> THREAD IS MODIFIED BY OVERSIZE TAP DRILL.
- <12> SWAGE OPERATION REQUIRED TO ACHIEVE POSITIVE EXTERNAL LOCK.
13. FOR PROPER INSTALLATION, USAGE OF ROSAN DRIVE TOOL AND SWAGE TOOL IS MANDATORY.
- <14> STEP DRILLS ARE DESIGNED FOR THRU HOLE DRILLING. WHEN USED TO DRILL A BLIND HOLE, IT MAY BE NECESSARY TO GRIND THE DRILL TO SUIT DEPTH REQUIRED.
15. DIMENSIONS APPLY AFTER PLATING AND BEFORE THE ADDITION OF SOLID FILM LUBRICANT.

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REV. LETTER AND DATE P 3/17/14 TH			SALES DRAWING NO.
DAF NUMBER 109420	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES:		SRW () SERIES SHEET 4 OF 5

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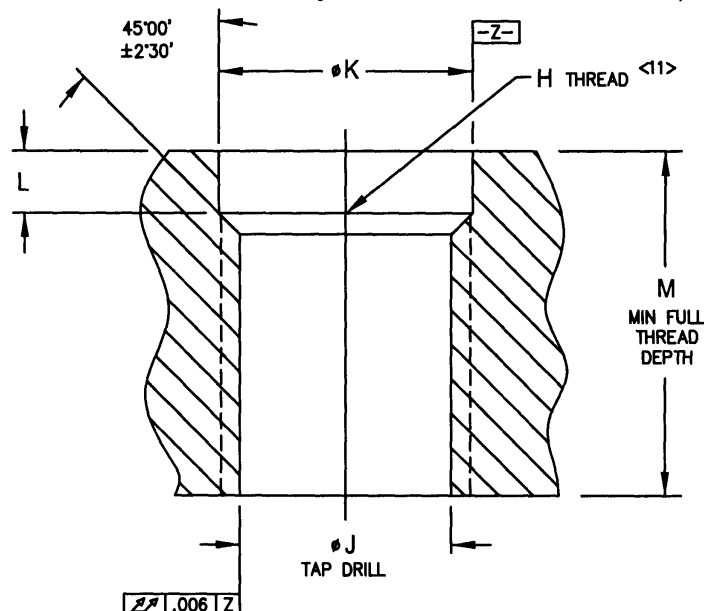
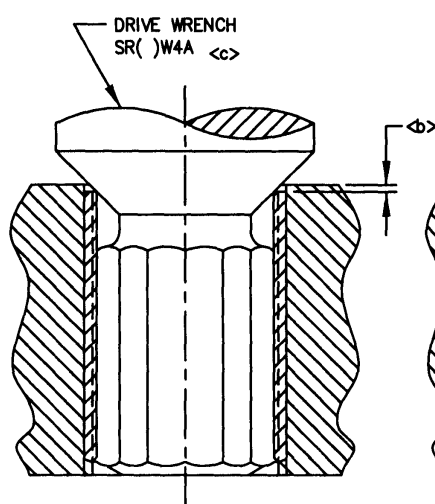
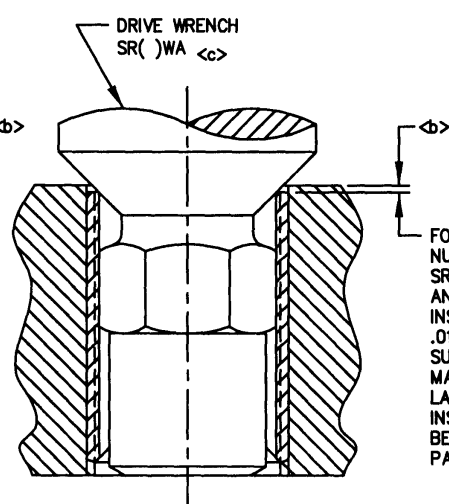
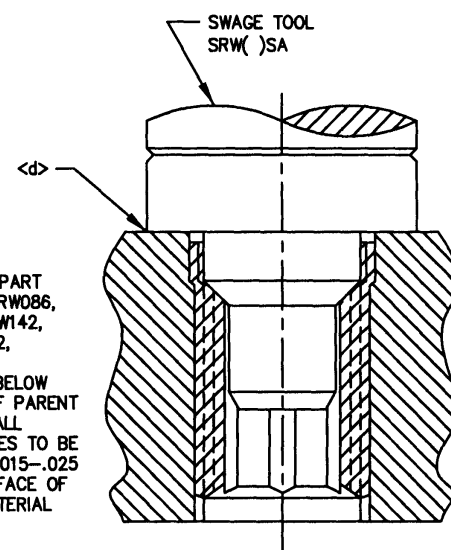


FIG 1: HOLE PREPARATION

FIG 2:
WRENCHING OPERATION
NO INTERNAL LOCK
(4 POINT DRIVE)FIG 3:
WRENCHING OPERATION
WITH INTERNAL LOCK
(6 POINT DRIVE)FIG 4:
SWAGING OPERATION
(SAME TOOL FOR BOTH LOCKED
AND NON-LOCKED PARTS)

FOR BASIC PART
NUMBERS SRW086,
SRW110, SRW142,
AND SRW162,
INSTALL
.010-.020 BELOW
SURFACE OF PARENT
MATERIAL. ALL
LARGER SIZES TO BE
INSTALLED .015-.025
BELOW SURFACE OF
PARENT MATERIAL


INSTALLATION PROCEDURE:

- THESE INSERTS ARE PRIMARILY FOR INSTALLATION INTO ALUMINUM AND MAGNESIUM, NOT EXCEEDING A HARDNESS OF BRINELL 187 (3000 Kg LOAD AND 10 mm BALL). FOR USE IN OTHER MATERIALS, CONSULT ALCOA ENGINEERING DEPARTMENT.
- THE SLIMSERT IS WRENCHED INTO THE PARENT MATERIAL TO DEPTH SHOWN IN FIG 3 WITH WRENCH PER TABLE I.
- USE DRIVE WRENCH AS INDICATED. OTHERWISE, ALL HOLE PREPARATIONS, OPERATIONS AND TOOLS ARE THE SAME FOR BOTH LOCKED AND NON-LOCKED PARTS.
- THE SLIMSERT IS INSTALLED WHEN THE SHOULDER OF THE SWAGE TOOL BOTTOMS ON THE SURFACE OF THE PARENT MATERIAL.
- METHOD OF REMOVAL:**
USING REMOVAL TOOL SRW()R, C'BORE TO DEPTH "L" DIMENSION. BACK OUT INSERT WITH DRIVE WRENCH, CLEAN OUT HOLE AND INSTALL NEW INSERT.

ALTERNATE METHOD:

USE REMOVAL DRILL SIZE INDICATED IN TABLE I. DRILL TO "L" DIMENSION PLUS .025. REMOVE REMAINING PORTION OF KNURL AND FOLLOW PROCEDURE AS STATED ABOVE.

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REV. LETTER AND DATE P 9/17/14	Rosan Products 3018 W. Lomita Blvd. Torrance, California 90505-5103	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES:	SALES DRAWING NO.
DAF NUMBER 109426 TH		ANGLES = ±3° DECIMALS .XX = ±.02 .XXX = ±.010	SRW () SERIES
			SHEET 5 OF 5