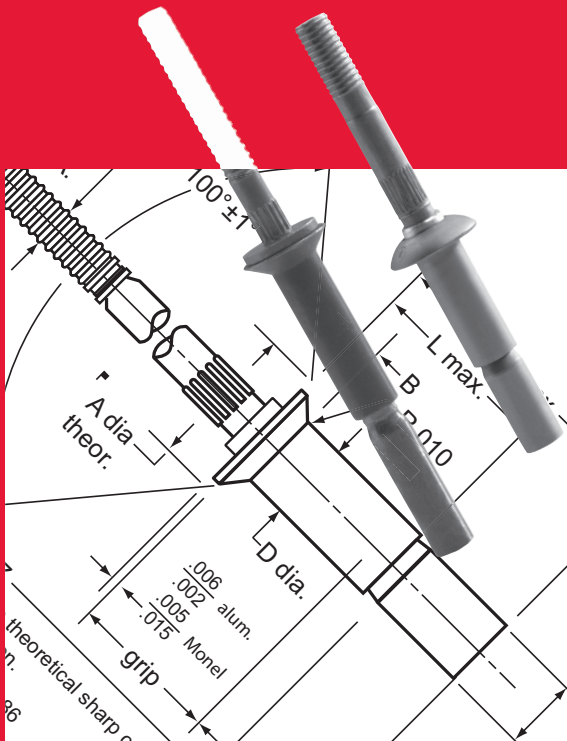


CHERRYLOCK® 'A' CHERRYMAX® 'AB' PROCESS MANUAL



CHERRY®
AEROSPACE

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ATTENTION: Blind fasteners are not always interchangeable with non-blind fasteners. Consult with the aircraft Original Equipment Manufacturer for proper application of this product.

CHERRYLOCK® 'A' RIVETS

CHERRYLOCK® 'A' CODE

Is a single action self-plugging blind rivet. They provide excellent hole-fill and sheet take-up capability. It is designed to provide the proper installation timing for optimal installation without the use of complex and expensive double action tools.

BENEFITS OVER THE STANDARD "DOUBLE ACTION" CHERRYLOCK

- Simpler, Single Action Tooling can be used, although each diameter needs a different pulling head.
- Limited access capability with commercially available Right Angle and Offset Pulling Heads

RIVET

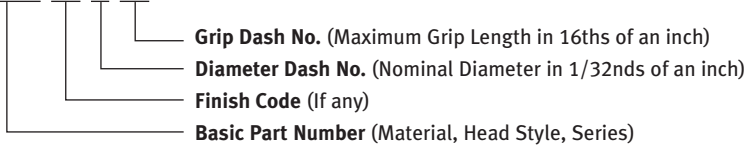
- Materials Available: Aluminum, Monel and Stainless Steel
- Diameters: -3,-4,-5,-6 & -8 (3/32", 1/8" 5/32", 3/16" & 1/4")
- Type: Wiredraw, Self-Plugging, Locked Spindle
- Inspectability: The locking collar and stem position are visible and inspectable from the tool side after installation
- Industry Standards: Meets NAS1400, NAS1398 and NAS1399 for the "A" type.
- Head Styles: 100° Flush head and Protruding (Universal) Head
- Grip Range: .020 through .562 in 1/16" increments; rivets 1/8 diameter and larger have grip marked on the fastener head



Typical Maximum Grip Application

NUMBERING SYSTEM

CR2672 CW -4 -02



NAS/Cherry® Part Number Cross Reference Guide

NAS1399C()A() / CR2672-()-()	NAS1398C()A() / CR2673-()-()
NAS1399CW()A() / CR2672CW-()-()	NAS1398CW()A() / CR2673CW-()-()
NAS1399D()A() / CR2172-()-()	NAS1398D()A() / CR2173-()-()
NAS1399M()A() / CR2572-()-()	NAS1398M()A() / CR2573-()-()
NAS1399MW()A() / CR2572P-()-()	NAS1398MW()A() / CR2573P-()-()

MATERIALS

CherryLOCK® 'A' rivets are manufactured in a wide variety of materials in order to give the user the widest possible choice for optimum design.

Rivet Material		Ultimate Shear Strength (at room temp)	Typical Max Temperature Use (in °F)
Sleeve	Stem		
2017 Aluminum	7075 Aluminum	38,000 psi	250
Monel	Monel	55,000 psi	900
A-286 CRES	A-286 CRES	75,000 psi	1200

CHERRYMAX® ‘AB’ WIREDRAW TYPE

DRIVING ANVIL TYPE

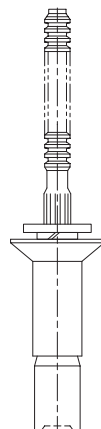
Like all the wiredraw type blind fasteners this type also provides excellent holefill and sheet take-up capability.

BENEFITS OVER THE “A” CHERRYLOCK

In addition to the benefits of Cherrylock “A”, the Driving Anvil “AB” type is equipped with a washer to interface with the locking ring, using the Cherrymax single tool concept. This washer simplifies tooling logistics, making it possible to use one tool for installing multiple fastener diameters; this also extends the tool life considerably. These fasteners install with the same tool system used for Cherrymax bulb type fasteners.

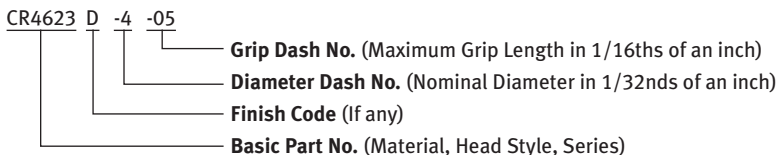
RIVET

- Materials Available: Aluminum, Monel and Stainless Steel
- Diameters: -4,-5,-6 & -8 (1/8” 5/32”, 3/16” & 1/4” nominal); some oversize part numbers are available—check availability in our catalog.
- Type: Wiredraw, Self-Plugging, Locked Spindle
- Inspectability: The locking collar and stem position are visible and inspectable from the tool side after installation
- Industry Standards: Meets NAS1400, NAS1398 and NAS1399 for the AB type
- Head Styles: 100° flush, Reduced 100° flush (similar to NAS1097) and Protruding (Universal)



Typical Maximum Grip Application

NUMBERING SYSTEM



NAS/Cherry® Part Number Cross Reference Guide

NAS1399C()AB() / CR4622-()-()	NAS1398C()AB() / CR4623-()-()
NAS1399CW()AB() / CR4622CW-()-()	NAS1398CW()AB() / CR4623CW-()-()
NAS1399D()AB() / CR4172-()-()	NAS1398D()AB() / CR4173-()-()
NAS1399M()AB() / CR4522-()-()	NAS1398M()AB() / CR4523-()-()
NAS1399MW()AB() / CR2522P-()-()	NAS1398MW()AB() / CR4523P-()-()

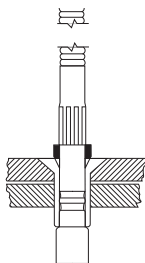
MATERIALS

CherryMAX® 'AB' rivets are manufactured in a wide variety of materials in order to give the user the widest possible choice for optimum design.

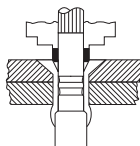
Rivet Material		Ultimate Shear Strength (at room temp)	Typical Max Temperature Use (in °F)
Sleeve	Stem		
2017 Aluminum	7075 Aluminum	38,000 psi	250
Monel	A-286 CRES	55,000 psi	900
A-286 CRES	A-286 CRES	75,000 psi	1200

INSTALLATION SEQUENCE

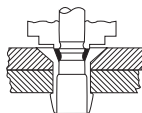
CHERRYLOCK® 'A'



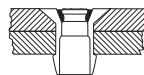
Initial State



Blind Side
Formation



Rivet Expands Into the
Hole and Stem Lock



Stem Breaks
Relatively Flush

CHERRYMAX® AB RIVET

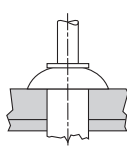
The “AB” version installs exactly following the same sequence, with the exception that the washer is used to lock the stem in place. At the end of the installation, both the stem and the washer are discarded.

SELECTING THE RIVET

HEAD STYLES

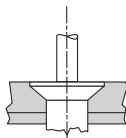
These rivets are made in several standard head styles as listed below.

UNIVERSAL NASM20470



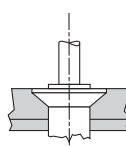
Available in both
CherryLOCK® 'A'
and
CherryMAX® 'AB'.

100° COUNTERSUNK NASM20426



For countersunk
applications.
Available in both
CherryLOCK® 'A'
and
CherryMAX® 'AB'.

REDUCED 100° COUNTERSUNK NAS1097



For thin top
sheet machine-
countersunk
applications.
Available in
CherryMAX® 'AB'
only.

SELECTING THE RIVET

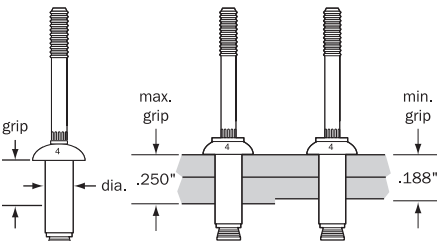
DIAMETERS

The shank diameter of CherryLOCK® 'A' and CherryMAX® 'AB' rivets is measured in 32nds of an inch and is identified by the first dash number; 3/32 dia = (-3), 1/8 dia = (-4), etc.

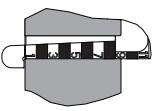
Dia. Code	CherryLOCK® 'A'	CherryMAX® 'AB'
-3	3/32"	—
-4	1/8"	1/8"
-5	5/32"	5/32"
-6	3/16"	3/16"
-6	1/4"	—

GRIP LENGTH SELECTION

Grip length refers to the maximum total sheet thickness to be riveted and is given in 1/16" of an inch increments. In the fastener part number, this is identified by the second dash number. In general, CherryLOCK® A and CherryMAX® AB rivets, have the grip length (max. grip) marked on the rivet head and have a total grip range of 1/16" of an inch (for example example: -04 grip rivet has a grip range of .188" to .250").



RIVET GRIP SELECTION



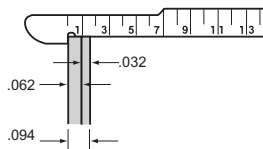
To determine the proper grip rivet to use, measure the material thickness with a 269C3 grip gage. To measure, insert the grip gage into the prepared hole, draw gage back until lip contacts backside of the structure and read where front side of structure coincides with numbers and lines on gage. Always read to the next higher number (if reading is directly on a line you may use either that grip or the next higher one).

Material Thickness Range		Rivet Grip No.
Min.	Max.	
See Stds. pages	1/16"	01
See Stds. pages	1/8"	02
1/8"	3/16"	03
3/16"	1/4"	04
1/4"	5/16"	05
5/16"	3/8"	06
3/8"	7/16"	07
7/16"	1/2"	08
1/2"	9/16"	09
9/16"	5/8"	10
5/8"	11/16"	11
11/16"	3/4"	12
3/4"	13/16"	13
13/16"	7/8"	14
7/8"	15/16"	15
15/16"	1"	16

Note: This fastener is not recommended for double dimpled sheets, but if it is used that way, add the countersunk rivet head height to the measured material thickness.

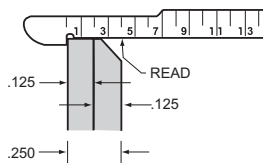
RIVET GRIP SELECTION

Always take the measurement to the top surface of the structure. If the “flush head” fasteners are installed underflush (the countersink in the structure is too large), measure the total thickness of the structure and then subtract the gap from the head of the fastener to the surface of the structure.



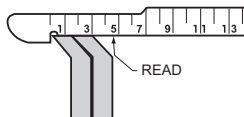
PROTRUDING HEAD

Correct rivet grip is a -.02, since grip range of a -.02 rivet is .062 to .125.



MACHINE COUNTERSUNK

Read correct rivet grip to top of sheet. Since this example is on the line use either -.04 or -.05 grip.



DOUBLE DIMPLE

Read correct rivet grip to top of sheet. Grip is sheet thickness plus rivet head height. This example would require a -.05 grip.

MINIMUM STRUCTURE MATERIAL PROPERTIES

Both of these wiredraw types are designed to give the best hole filling of any blind rivet and as such must be limited to applications where the blind side substructure has sufficient strength to withstand the forces developed during installation. When the blind side substructure is made up of materials that are too thin or too soft, then a bulb type rivet is the recommended instead.

Wiredrawing type rivets are not recommended for double dimple applications.

Listed are the recommended rivet selection material types and minimum blind side material thicknesses for use with the wiredraw type blind rivets.

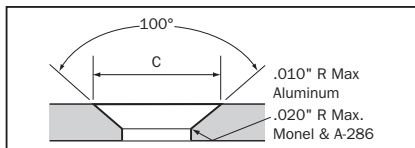
Rivet Material	Rivet Diameter	Blind Side Material Thickness (min)	Blind Side Material
Aluminum	-4	.030	2024 Aluminum or stronger
	-5	.040	
	-6	.050	
	-8	.060	
Monel & A-286 CRES	-4	.040	7075 Aluminum or stronger
	-5	.050	
	-6	.060	
	-8	.080	

HOLE PREPARATION

Proper hole preparation is very important in obtaining a strong, rigid, and reliable blind riveted joint.

HOLE SIZE

CherryLOCK® rivets are designed to function within a specified hole range. Drilling the hole smaller than our recommended limit will result in increased installation forces that may cause low stem breaks. Drilling the hole larger than the recommended limit will result in low structure resistance that may cause pull through or high stem breaks. This may also cause joint failure (not capable of holding the expected tension)



The hole size limits, along with suggested drill sizes, are listed here:

Rivet Dia.	CherryLOCK® 'A' and CherryMAX® 'AB' Nominal			CherryMAX® 'AB' Oversize			100° NASM20426 Head		100° NAS1097 Head	
	Drill Size	Min.	Max.	Drill Size	Min.	Max.	C Max.	C Min.	C Max.	C Min.
3/32"	#40	.097	.100	—	—	—	.182	.176	—	—
1/8"	#30	.129	.132	#27	.143	.146	.228	.222	.195	.189
5/32"	#20	.160	.164	#16	.176	.180	.289	.283	.246	.240
3/16"	#10	.192	.196	#5	.205	.209	.356	.350	.302	.296
1/4"	F	.256	.261	—	—	—	.479	.473	.395	.389

Holes should be checked with a Cherry® go no-go gage to assure drilling accuracy.



Rivet Diameter	Hole Gage Part Numbers	
	Standard	Bulbed
3/32"	T172-3	—
1/8"	T172-4	T172-400
5/32"	T172-5	T172-500
3/16"	T172-6	T172-600
1/4"	T172-8	—

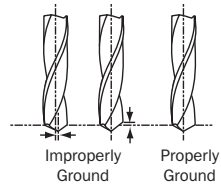
COUNTERSINK SIZE

Use the Theoretical Diameter of the flush head fastener (see Standards Page for the specific part number you are installing) as a guide. Matching the countersink to the theoretical head diameter of the fastener will result in a relatively flush installation. For installing slightly underflush, prepare the countersink a bit bigger than the theoretical head diameter.

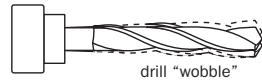
HOLE PREPARATION

DRILLING PROCEDURE

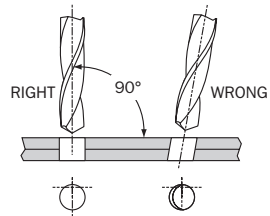
Use a clean, sharp, properly ground drill. Improperly ground drills will create oval or oversize holes.



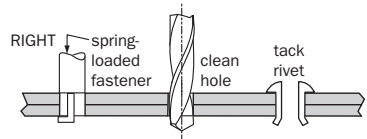
Center the drill in the chuck so that the drill will run true. A “wobble” in the drill will create an oversize hole.



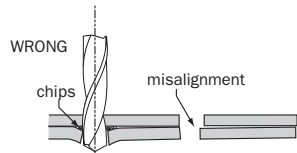
Hold the drill perpendicular to the surface being drilled. Do not force the drill through the material.



To insure proper hole alignment and to prevent burrs and chips from lodging between the sheets, the materials to be riveted should be clamped tightly together.



Tack rivets or clamps should be used to prevent material creep and hole misalignment during the drilling operation.



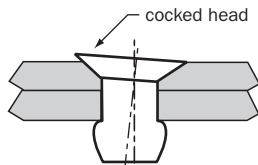
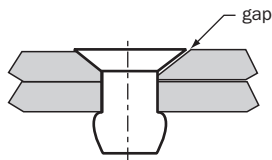
HOLE PREPARATION

COUNTERSINKING

Accurate countersinking is of primary importance to the structural integrity of a flush riveted joint. Standard countersinking procedures as used with solid rivets are also applicable to CherryLOCK® rivets. The following points, however, should be carefully noted:

The countersink pilot should be no more than .001" smaller than the hole diameter. A greatly undersized pilot will produce a countersink which is not concentric with the hole, creating head gap problems.

An countersink pilot which is too small also creates a countersink whose axis is not in line with the axis of the drilled hole. This will result in a "cocked" rivet head.

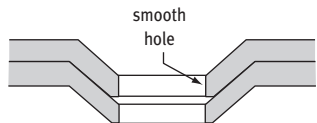
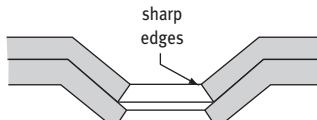


DIMPLING

Normal dimpling procedures stretch and enlarge the pilot holes in thin sheet applications. The sheets (as dimpled) provide only sharp edges within the hole.

To overcome the problems inherent in this type of application, the dimple should first be prepared with a hole size which will allow for subsequent reaming.

The hole should then be reamed to the dimensions specified for the size rivet being installed. For this type of application, selecting a bulbed type fastener is strongly recommended.

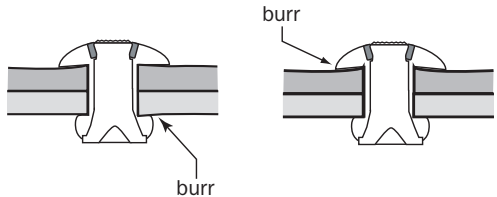
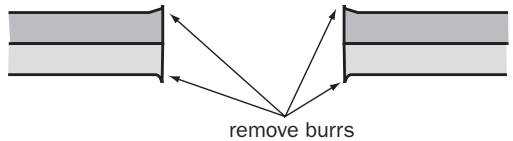
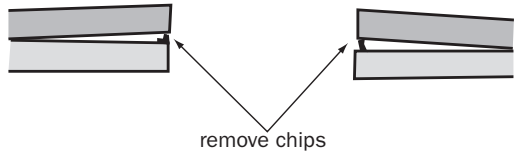


CHERRYLOCK® 'A' INSTALLATION

DE-BURRING

All drilling operations cause burrs to form on each end of the hole being drilled, as well as between the sheets. Whenever possible, all burrs should be removed.

When using a drill or center reamer to remove burrs, care must be taken to remove **ONLY** the burr. Do not chamfer the sheets, as this may materially affect the strength of the riveted joint, particularly with respect to the blind sheet.



Poor



Good

INSTALLATION

PLACING RIVET IN HOLE

Select the proper pulling head to conform to the type, diameter and head style of the rivet being installed. Make sure that the holes prepared in the structure are drilled correctly and aligned properly. Do not force the rivet into the hole; this is a clearance fit installation!

If there is an obstruction on the blind side, the manufactured head of the rivet does not need to fully seat on the structure (see the picture on the right); even in this case, the fastener will still install properly. However, there is a minimum blind clearance necessary beyond which the joint will not form properly; this is given as “BK” on the Standards Pages.

PLACING PULLING HEAD ON RIVET STEM

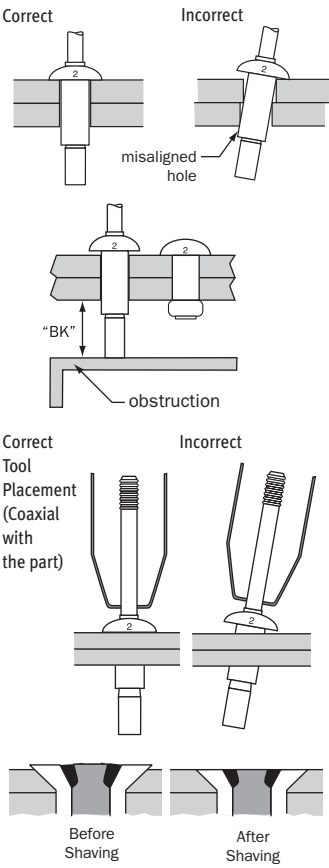
Hold the riveter and pulling head in line with the axis of the rivet, while holding the riveter in a light and flexible manner.

CAUTION: The longer the rivet grip size, the longer the tool stroke required to complete installation. Very long grip fasteners may require double stroking the tool.

RIVET SHAVING

Normal shop practice will result in countersunk rivets which are essentially flush with the aircraft skin. Further secondary operations are not normally necessary.

When perfect aerodynamic flushness is required, the sheet should be countersunk so that the rivet heads protrude and subsequent shaving will produce complete aerodynamic flushness. The table on the right shows the recommended countersink diameter to be used for shaving.



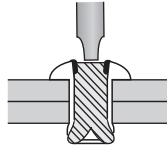
Rivet Dia.	Recommended Countersink Dia. $+.005$ $-.000$	Approx. Protrusion of Rivet Head Above Sheet
1/8"	.214"	.005"
5/32"	.274"	.005"
3/16"	.339"	.005"
1/4"	.461"	.005"

Values are for 100° NASM20426 head only.

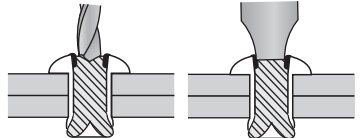
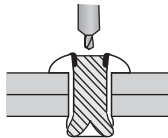
RIVET REMOVAL

Should it be necessary to remove an installed CherryLOCK® rivet, the following procedures are recommended:

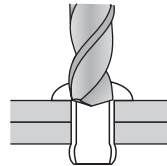
1. In thick material remove the lock by driving out the rivet stem, using a pin punch.



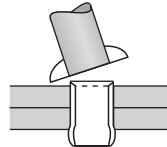
2. If the rivets have been installed in thin sheets, driving out the locked stem may damage the sheets. It is recommended that the stem be center punched first and a small center drill be used to provide a guide for a larger drill on top of the rivet stem. The larger drill can then be used to drill away the lock. Finally, use a pin punch to drive out the stem.



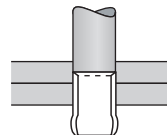
3. Drill nearly through the head of the rivet, using a drill the same size as the rivet shank. **Do not drill completely through rivet head.**



4. Break off rivet head, using a pin punch as a pry.



5. Drive out the remaining rivet shank with a pin punch having a diameter equal to the rivet shank.



CAUTION: Never drill completely through the rivet sleeve to remove a rivet as this will tend to enlarge the hole.

CHERRYLOCK® 'A' INSPECTION

Inspection for the proper installation of CherryLOCK® rivets can be made from the visible side of the work.

STEM AND COLLAR FLUSHNESS

If the rivet stem and collar are flush within the limits described it can be safely concluded that a satisfactory blind head and lock has been formed.

Rivet Size	-3 Dia.	-4 Dia.	-5 Dia.	-6 Dia.	-8 Dia.
A max.	.015	.015	.020	.025	.030
B max.	.010	.010	.010	.015	.020

Inspect installed rivet flushness to break-off limits of NAS1400 and NAS1740

A = Collar above breaknotch of stem

B = Collar above top of rivet head

A slight collar “flash” caused by the pressures necessary to drive the collar is acceptable within the limit shown.

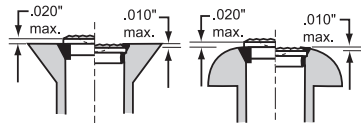
GRIP LENGTH

CherryLOCK® 'A' rivets have the grip length marked on the rivet head (except 3/32" and 1/8" diameter and 5/32" in NAS1097 head style) to provide positive inspection from the visible side to show that the rivets have been installed with the correct grip.

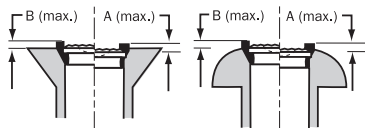
TYPICAL BLIND HEAD

If the grip marking indicates the rivet has been installed in the proper grip and the stem and collar are flush within prescribed limits, blind heads typical of those illustrated will be obtained.

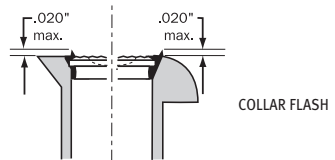
Superficial stretch marks which may appear in the rivet sleeve are not detrimental to rivet strength and are acceptable.



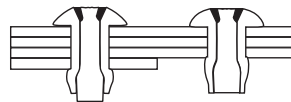
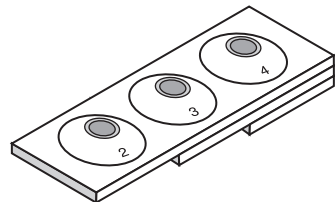
STEM PROTRUSION LIMITS



COLLAR PROTRUSION LIMITS



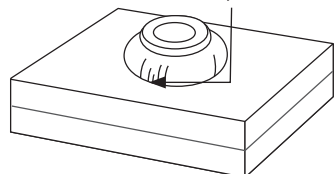
COLLAR FLASH



Max. Grip

Min. Grip

Stretch Marks
(acceptable)



TROUBLESHOOTING

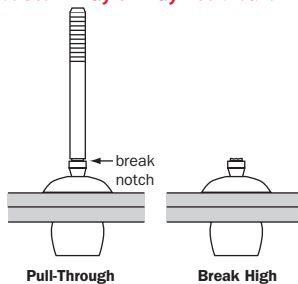
Make sure that all the recommendations in this manual regarding hole preparation, tools and installation technique are carefully followed. It is critical that the pulling heads are clean, free from chips, burrs and dry sealant and are in good working condition. The following troubleshooting guide will consider several sources of installation issues and their possible root causes.

RIVET STEM PULLS THROUGH OR BREAKS HIGH

Rivet stem break notch pulls to .030" or higher above rivet head. Stem may or may not break.

SOURCE OF PROBLEM

- A. For Cherrylock A, the nosepiece at the front of the installation tool may be worn out; to correct, replace this component with a new one. It is good practice to inspect this tool feature regularly.
- B. The installation hole is oversize -to correct, drill smaller holes or use larger diameter rivet.
- C. Rivet installed in under minimum grip—use shorter grip rivet.
- D. If installing wet, make sure that no sealant gets onto the plug end of the stem; this would reduce the installation friction causing the stem to overshoot.
- E. Wrong type of tools are used; make sure that the correct tools are used and they are in good working condition. It is strongly recommended not to use any substitute tools

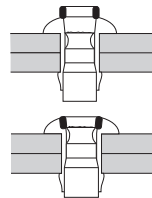


RIVET STEM BREAKS LOW

Symptom: The stem breaks well below rivet head inside the installed fastener.

SOURCE OF PROBLEM

- A. Rivet installed in undersize hole—drill out holes to proper size.
- B. Rivet installed in over maximum grip—use longer grip rivet.
- C. Holes are slanted or misaligned—drill carefully to make sure that the holes are properly aligned and their axis is normal to the sheets.
- D. Operator holds the tool off-axis (angled)—hold the tool as flexible as possible to allow the tool to self-align with the fastener to be installed.
- E. If installing wet, make sure that the hole size accommodated the amount of sealant that may get trapped during installation. Otherwise, the resulting tighter hole causes excessive friction leading to low stem breaks
- F. Wrong type of tools are used; make sure that the correct tools are used and they are in good working condition. It is strongly recommended not to use any substitute tools



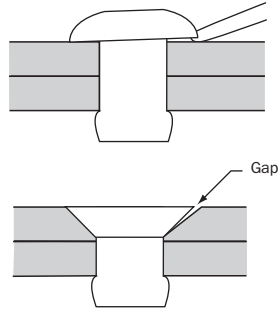
TROUBLESHOOTING

POOR HEAD SEATING

Rivet head does not seat properly against top sheet or in countersink.

SOURCE OF PROBLEM

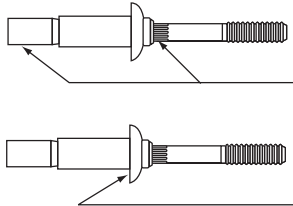
- A. Holes slanted or misaligned—use more care to obtain holes which are properly aligned and normal to the sheets.
- B. Countersink not concentric with hole—use countersink pilot which is close to hole size.
- C. Installer “cocks” pulling head and rivet head during installation. Installer should hold tool and pulling head in a flexible manner, so rivet can clamp head down properly.



PROPER SEALANT APPLICATION

Blind rivets depend on a balance of lubricity to friction, compression and radial expansion during installation. In the manufacturing process, lubricants are typically used to ensure the blind rivet installs correctly.

Sealant should be applied **ONLY** around the rivet sleeve (see illustration). It is critical that the sealant does not touch either the lock collar or the plug section of the fastener.



Do not apply sealant on these areas

Apply sealant here **only!**

When sealant is applied to the fastener incorrectly, two conditions may occur. Either the stem of the fastener will pull high or all the way through the rivet sleeve, or the stem will break prematurely and will be too deep in the rivet sleeve to be properly locked by the lock collar. In either case, the rivet must be removed and replaced. Initial care in the application of sealant will eliminate this replacement process.

DECIMAL EQUIVALENT CHART

Nom.	M/M	Dec.	Nom.	M/M	Dec.	Nom.	M/M	Dec.	Nom.	M/M	Dec.	Nom.	M/M	Dec.
—	.1	.0039	1/16	—	.0625	21	—	.1590	K	—	.2810	9/16	—	.5625
—	.2	.0079	52	—	.0635	20	—	.1610	9/32	—	.2812	37/64	—	.5781
—	.3	.0118	51	—	.0670	19	—	.1660	L	—	.2900	—	15.0	.5906
80	—	.0135	50	—	.0700	18	—	.1695	M	—	.2950	19/32	—	.5937
79	—	.0145	49	—	.0730	11/64	—	.1719	19/64	—	.2969	39/64	—	.6094
1/64	—	.0156	48	—	.0760	17	—	.1730	N	—	.3020	5/8	—	.6250
—	.4	.0157	5/64	—	.0781	16	—	.1770	5/16	—	.3125	—	16.0	.6299
78	—	.0160	47	—	.0785	15	—	.1800	—	8.0	.3150	41/64	—	.6406
77	—	.0180	—	2	.0787	14	—	.1820	O	—	.3160	21/32	—	.6562
—	.5	.0197	46	—	.0810	13	—	.1850	P	—	.3230	—	17.0	.6693
76	—	.0200	45	—	.0820	3/16	—	.1875	21/64	—	.3281	43/64	—	.6719
75	—	.0210	44	—	.0860	12	—	.1890	Q	—	.3320	11/16	—	.6875
74	—	.0225	43	—	.0890	11	—	.1910	R	—	.3390	14/84	—	.7031
—	.6	.0236	42	—	.0935	10	—	.1935	11/32	—	.3437	—	18.0	.7087
73	—	.0240	3/32	—	.0937	9	—	.1960	S	—	.3480	23/32	—	.7187
72	—	.0250	41	—	.0960	—	5.0	.1968	—	9.0	.3543	47/64	—	.7344
71	—	.0260	40	—	.0980	8	—	.1990	T	—	.3580	—	19.0	.7480
—	.7	.0276	39	—	.0995	7	—	.2010	23/64	—	.3594	3/4	—	.7500
70	—	.0280	38	—	.1015	13/64	—	.2031	U	—	.3680	49/54	—	.7656
69	—	.0292	37	—	.1040	6	—	.2040	3/8	—	.3750	25/32	—	.7812
68	—	.0310	36	—	.1065	5	—	.2055	V	—	.3770	—	20.0	.7874
1/32	—	.0312	7/64	—	.1094	4	—	.2090	W	—	.3860	51/64	—	.7969
—	.8	.0315	35	—	.1100	3	—	.2130	25/64	—	.3906	13/16	—	.8125
67	—	.0320	34	—	.1110	7/32	—	.2187	—	10.0	.3937	—	21.0	.8268
66	—	.0330	33	—	.1130	2	—	.2210	X	—	.3970	53/64	—	.8281
65	—	.0350	32	—	.1160	1	—	.2280	Y	—	.4040	27/32	—	.8437
—	.9	.0354	—	3.0	.1181	A	—	.2340	13/32	—	.4062	55/64	—	.8594
64	—	.0360	31	—	.1200	15/64	—	.2344	Z	—	.4130	—	22.0	.8661
63	—	.0370	1/8	—	.1250	—	6.0	.2362	27/64	—	.4219	7/8	—	.8750
62	—	.0380	30	—	.1285	B	—	.2380	—	11.0	.4331	57/64	—	.8906
61	—	.0390	29	—	.1360	C	—	.2420	7/16	—	.4375	—	23.0	.9055
—	1	.0394	28	—	.1405	D	—	.2460	29/64	—	.4531	29/32	—	.9062
60	—	.0400	9/64	—	.1406	1/4	—	.2500	15/32	—	.4687	59/64	—	.9219
59	—	.0410	27	—	.1440	E	—	.2500	—	12.0	.4724	15/16	—	.9375
58	—	.0420	26	—	.1470	F	—	.2570	31/64	—	.4844	—	24.0	.9449
57	—	.0430	25	—	.1495	G	—	.2610	1/2	—	.5000	61/64	—	.9531
56	—	.0465	24	—	.1520	17/64	—	.2656	—	13.0	.5118	31/32	—	.9687
3/64	—	.0469	23	—	.1540	H	—	.2660	33/64	—	.5156	—	25.0	.9842
55	—	.0520	5/32	—	.1562	I	—	.2720	17/32	—	.5312	63/64	—	.9844
54	—	.0550	22	—	.1570	—	7.0	.2756	35/64	—	.5469	1	25.4	1.000
53	—	.0595	—	4.0	.1575	J	—	.2770	—	14.0	.5512	—	—	—

SELECTING THE CORRECT TOOL

If unsure what tool to use for fastener installation, there is an online tool selection on the Cherry website at <http://www.cherryaerospace.com>

Welcome to Cherry



Cherry Aerospace is a global leader in the design and manufacture of fastening systems for the aerospace industry. The Cherry® name is synonymous with aerospace fasteners, and the CherryMax® line of rivets is the most widely-used in the industry. The Cherry® brand dates back to 1940 when the Cherry Rivet Company introduced easily-installed blind fasteners, which the aerospace industry quickly adopted as a standard. Cherry Aerospace

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Search Results

Search Part Number	NAS1399BFC4-5
Cherry Part Number	CR2262A-4-05
Description	CherryLOCK® Rivet, Wiredraw 100° Flush Head
Standards Drawing	CR2262
Product Catalog	CherryLock

Installation Information

Part Number Conversion

Cherry Aerospace Installation Tooling

Recommended Tooling

Tool Part Number	Pulling Head	Pulling Head Type	Also Needed	Comments
G700	H681-4C	Straight	-	
G784	H681-4C	Straight	-	

LIMITED WARRANTY

Seller warrants the goods conform to applicable specifications and drawings and will be manufactured and inspected according to generally accepted practices of companies manufacturing industrial or aerospace fasteners. In the event of any breach of the foregoing warranty, Buyer's sole remedy shall be to return defective goods (after receiving authorization from Seller) for replacement or refund of the purchase price, at the Seller's option. Seller agrees to any freight costs in connection with the return of any defective goods, but any costs relating to removal of the defective or nonconforming goods or installation of replacement goods shall be Buyer's responsibility. SELLER'S WARRANTY DOES NOT APPLY WHEN ANY PHYSICAL OR CHEMICAL CHANGE IN THE FORM OF THE PRODUCT IS MADE BY BUYER. THE FOREGOING EXPRESS WARRANTY AND REMEDY ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES; ANY IMPLIED WARRANTY AS TO QUALITY, FITNESS FOR PURPOSE, OR MERCHANTABILITY IS HEREBY SPECIFICALLY DISCLAIMED AND EXCLUDED BY SELLER. This warranty is void if seller is not notified in writing of any rejection of the goods within one (1) Year after initial use by buyer of any power Riveter or ninety (90) days after initial use of any other product.

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Note

The properties, strengths, dimensions, installed characteristics and all other information in this catalog is for guidance only to aid in the correct selection of the products described herein and is not intended or implied as part of the warranty. All applications should be evaluated for functional suitability and available samples of the described parts can be requested for installed tests, suitability and evaluations.

Attention

Blind fasteners are not always a suitable substitute for solid shank fasteners. Maintenance personnel are reminded that AC 43.13-1A chapter 2, section 3, stipulates: "Do not substitute hollow rivets for solid rivets in load carrying members without specific approval of the application by a representative of the Federal Aviation Administration. Blind rivets may be used in blind locations in accordance with the conditions listed in Chapter 5, provided the edge distances and spacings are not less than the minimum listed in paragraph 99d."



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