

# CHERRY® 3/32" SPR®

## SELF PLUGGING RIVET

### REMOVAL PROCEDURE

The SPR fastener may be removed by following this procedure:

1. Using a .062" pin punch, knock out the stem
2. Using a #41 (.095") drill bit, centered on the stem hole, drill down no more than .030"
3. Use a 3/32" pin punch inserted into the hole to pry the head off
4. Remove the tail section with the 3/32" pin punch

### TOOLING

#### HAND TOOLS

G29 Pulling head included

#### POWER TOOLS

G746A H747-3NPR pulling head  
G747 H747-3NPR pulling head  
G702A H702-3NPR pulling head  
G902 H902-3NPR pulling head  
G902-15 H9015-3C pulling head

### 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.

Seller shall not be liable under any circumstances for incidental, special or consequential damages arising in whole or in part from any breach by Seller, AND SUCH INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES ARE HEREBY EXPRESSLY EXCLUDED.

Our policy is one of continuous development. Specifications shown in this document may be subject to changes introduced after publication.

CHERRY® and SPR® are trademarks of Cherry Aerospace.

### 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 rivets are not always a suitable substitute for solid rivets. 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."



**CHERRY®**  
**AEROSPACE**

*SPS Fastener Division, a PCC Company*

1224 East Warner Avenue, Santa Ana, CA 92705  
voice: 714-545-5511 • fax: 714-850-6093  
[www.cherryaerospace.com](http://www.cherryaerospace.com)

2007 Cherry Aerospace  
Suppliers Federal I.D. Code – 11815  
CA-1025, Date: January 22, 2008, DCR 08-0093

# CHERRY® 3/32" SPR®

SELF PLUGGING RIVETS



**CHERRY®**  
**AEROSPACE**  
*SPS Fastener Division, a PCC Company*

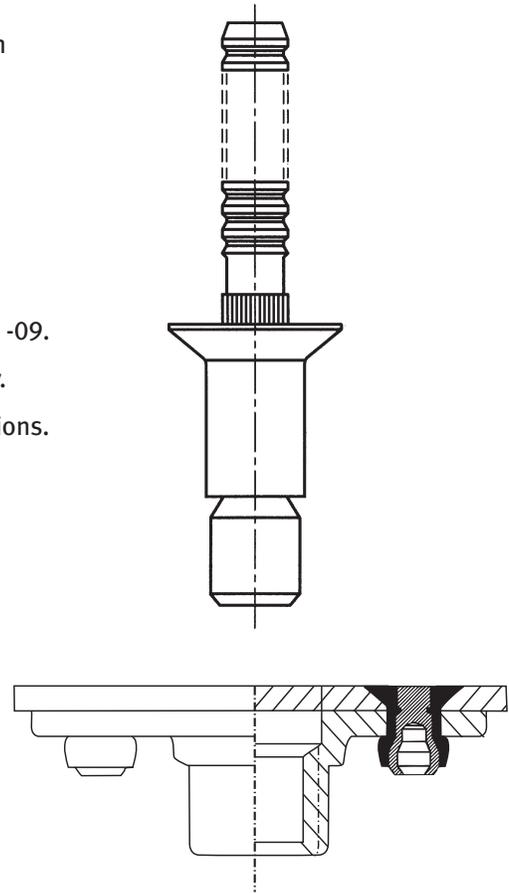
# CHERRY® 3/32" SPR®

## SELF PLUGGING RIVET

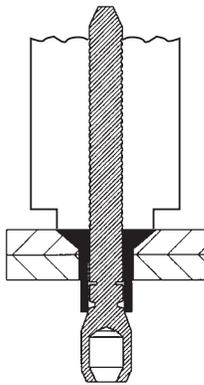
Cherry 3/32" Self Plugging, locking spindle blind rivets are designed for the attachment of nut plates and other applications requiring the use of a 3/32" diameter, aluminum sleeve, self plugging rivet. They meet and exceed strength requirements of NASM25027 for torque-out and push-out of nut plates.

### PRODUCT FEATURES AND BENEFITS

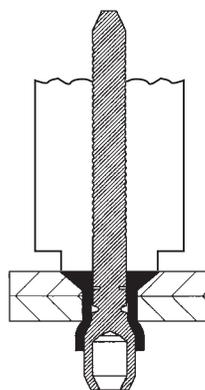
- Stem breaks off flush with top of rivet head.
- It is self plugging, which eliminates the need to fill hollow rivet holes.
- Available in 100° flush head, nominal 3/32" diameter, in grips -02.5 through -09.
- Aluminum sleeve provides rivet to aluminum structure material compatibility.
- Developed to replace solid and pull-through rivets in non-structural applications.
- Labor savings advantage over solids...only one person needed to install instead of two.
- SPR installation is much quieter than solid rivets and results in less operator fatigue.
- Higher strength than pull-through rivets.
- Magnetic permeability is less than 1.05 (Air = 1.0) for a field strength  $H = 200$  oersteds using a magnetic permeability indicator per MIL-I-17214.
- Uses single action CherryMAX® tools.
- SPR has been qualified as Boeing BACR15GR and meets BPS-R-192.



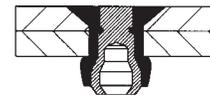
### INSTALLATION SEQUENCE 3/32" NUT PLATE ATTACHMENT



1. The Cherry 3/32" SPR Blind Rivet is inserted into the prepared hole. The pulling head (Installation Tool) is slipped over the stem. Applying firm pressure, which seats the rivet head, the installation tool is actuated.



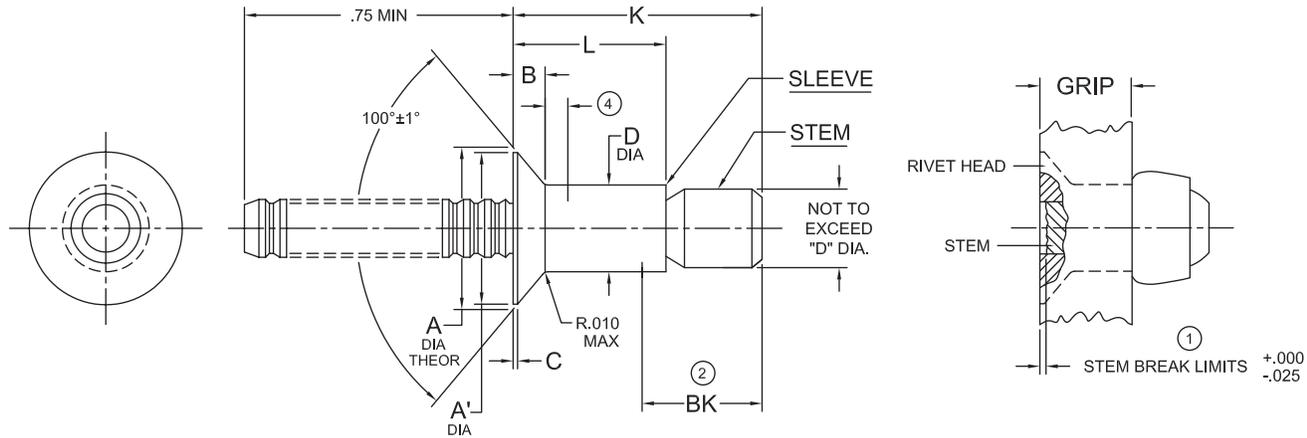
2. The pulling head holds the rivet in place as it begins to pull the rivet stem into the rivet sleeve. The rivet sleeve starts to expand on the blind side.



3. As the stem nears its breakoff point, the lock between the sleeve and the stem is formed. Continued pulling fractures the stem, providing a flush, burr-free installation.

# CHERRY® 3/32" SPR®

## SELF PLUGGING RIVET



Diameter Dash No	A ±.004	A' Actual Min	B Ref	C Max	D +.003 -.001	Recommended Hole Size		Shear Strength (lbs) Min	Tensile Strength (lbs) Min	Stem Retention (lbs) Min
						Min	Max			
-3	.179	.151	.036	.010	.094	.098	.101	255	125	40

National Stock No.	Cherry Part No.
NSN 5320-01-459-8511	CR1122-3-02.5
NSN 5320-01-459-8512	CR1122-3-03
NSN 5320-01-459-8514	CR1122-3-04

Grip Dash No.	Grip Range		-3 Diameter		
	Min	Max	L Max	K Max	BK <sup>②</sup> Ref
-02.5	.080	.125	.203	.338	.275
-03	.126	.187	.265	.430	.305
-04	.188	.250	.328	.493	.305
-05	.251	.312	.390	.555	.305
-06	.313	.375	.453	.618	.305
-07	.376	.437	.515	.680	.305
-08	.438	.500	.578	.743	.305
-09	.501	.562	.640	.805	.305

Basic Part No.	Material <sup>③</sup>		Finish		Lubricant	
	Sleeve	Stem	Sleeve	Stem	Sleeve	Stem
CR1122	2017 ALUMINUM ALLOY PER QQ-A-430	A286 CRES PER AMS 5731	CHEMICAL FILM PER MIL-DTL-5541 (GOLD COLOR)	PASSIVATE PER AMS 2700	AS REQUIRED FOR PERFORMANCE	AS REQUIRED FOR PERFORMANCE

Product	Installed Weight per 1000 pieces
CR1122-3-02.5	0.25 lbs.
CR1122-3-03	0.33 lbs.
CR1122-3-04	0.41 lbs.
CR1122-3-05	0.49 lbs.
CR1122-3-06	0.57 lbs.
CR1122-3-07	0.65 lbs.
CR1122-3-08	0.73 lbs.
CR1122-3-09	0.81 lbs.

Boeing Part No.	Cherry Part No.
BACR15GR3-2	CR1122-3-02.5
BACR15GR3-3	CR1122-3-03
BACR15GR3-4	CR1122-3-04
BACR15GR3-5	CR1122-3-05
BACR15GR3-6	CR1122-3-06
BACR15GR3-7	CR1122-3-07
BACR15GR3-8	CR1122-3-08
BACR15GR3-9	CR1122-3-09

### NUMBERING SYSTEM

CR1122 -3 -04

— Grip Dash Number (Maximum Grip Length in 16ths of an inch)

— Diameter Dash Number (Nominal Diameter in 1/32nds of an inch)

— Cherry Part Number (Material, Head Style, Series)

**NOTE:** All dimensions shown are in inches.

① Stem break off location measured to the highest point on the fracture surface with a .050" diameter stylus.

② Blind side clearance for satisfactory installation.

③ Material designation refers to chemical composition only.

④ An increase in "D" diameter of .001" is permissible within .100 of base of head.