

**"There's a  
Big Difference  
in a Little Rivet"™**

**ALLFAST** *New  
Generation*

***Blind & Solid Rivets and Installation Tooling  
for the Aerospace Industry***



# ALLFAST

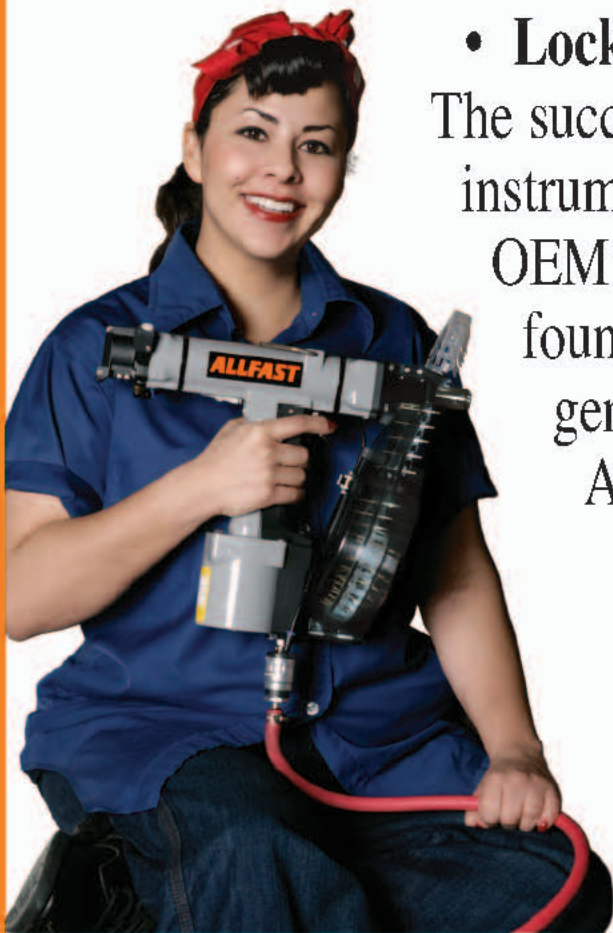
Allfast is the only company in the world that manufactures solid and blind rivets, and automated installation tools in one facility. Our continued commitment to SPC and Lean Manufacturing has earned us numerous awards:

- Boeing President's Award for Supplier of the Year
- EADS-Airbus Industries Strategic Partnership
- Bombardier Certified Supplier Award
- Embraer Supplier of the Year Award
- Lockheed's Star Supplier Award

The success of our min/max programs has been instrumental in reducing inventory at major OEM's and distributors. With a solid foundation, Allfast is leading the new generation of aerospace riveting. Allfast means 100% satisfaction.

***"There's a  
Big Difference  
in a Little Rivet"***™

Certified AS9100 Rev. B



# New Generation

**We Provide Solutions for All Your Riveting Needs.**

**The Only Automated Hand-Held Tool  
for Installing Structural and  
Temporary Blind Rivets**

## **RV3000 Maxmatic®**

- Lightweight ergonomic design
- 50-100 Rivet magazine capacity
- Cycle time reduction
- Can install NAS9300 Series and NAS1398/99AB
- Temporary fasteners and any blind rivet



**Allfast Manufactures Over 25,000 Different Rivets Styles  
Quality Products, On-Time, at Competitive Prices**



### **ALLMAX®**

- Workhorse of the aerospace industry
- Various material combinations to suit your needs
- Available in nominal and oversize
- NAS9300 Series / M7885 / BACR15FR and FP / ASNA 0077 and 0078



### **AB Code**

- Wiredraw rivet allows excellent hole filling capability
- Drive anvil ensures flush installation
- Single tool installs all diameters
- ABS 0546 and 0547 / NAS1398/99 Series



### **SUPERMAX®**

- Excellent sheet take-up capacity
- User friendly and low installed cost
- Exceeds BACR15GJ and GK requirements



### **FASTACK®**

- No spinners
- Temporary fastener to facilitate automated fastening
- Excellent clamp up capability
- Extensive cycle time reduction



### **TACKBOLT®**

- Automated riveting assembly for heavy duty tacking applications
- Generous sheet take-up capacity
- Grip range 3/8" - 1 1/2"
- Simple lightweight tooling
- Temporary high strength fastener for automated fastening



### **BACR15GF**

- Improved flushness
- Elimination of halos/eyebrows
- No shaving required
- SPC controlled head and protrusion



### **BACR15FV**

- Improved fatigue life
- Best results in thin sheet applications
- Self sealing design
- The best fuselage rivets
- No shaving required



### **Hi-Kote® Solid Rivet**

- Eliminates wet sealant
- Improved fatigue life
- Improved cycle time
- Eliminates costly disposal of sealant
- Huge cost savings



### **BACR15GH**

- Wing rivet
- Fluid tight
- High fatigue life



### **Titanium Csk Rivet**

- Lightweight fastener
- Composite compatible
- Low installation pressure

## THE ALLFAST CULTURE

Allfast's culture is founded on a strong commitment to **100% Customer Satisfaction** which means getting the customer the right part, on time, for a competitive price. This commitment to **100% Customer Satisfaction** has earned Allfast recognition as the preferred supplier of rivets around the world.



Through the implementation of our ISO9001:2000 and AS9100 Revision B quality system, statistical process control, lean manufacturing and continuous improvement initiatives, Allfast has achieved a quality and delivery rating with all customers nearing 100%.

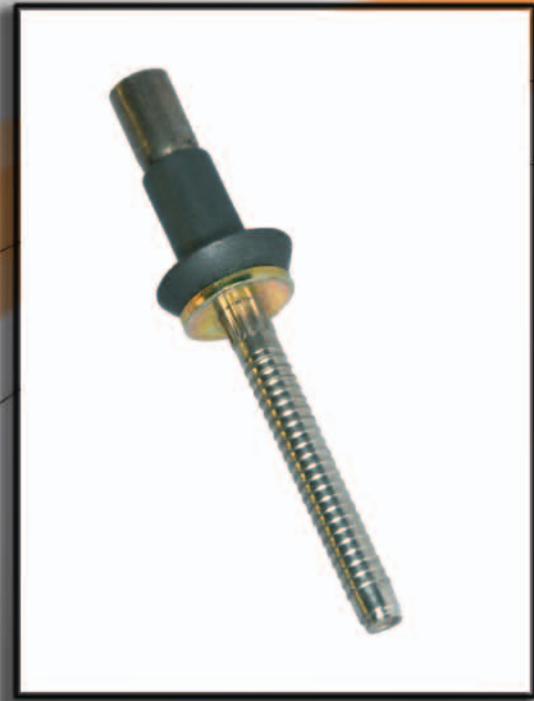


Allfast's dedication to **100% Customer Satisfaction** has earned us many prestigious awards and contributes to the success and profitability of Allfast customers.

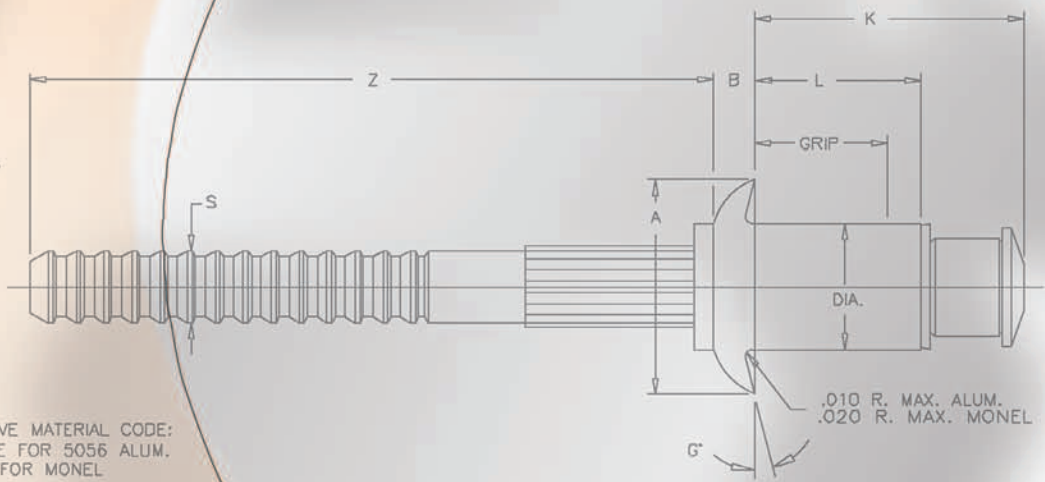
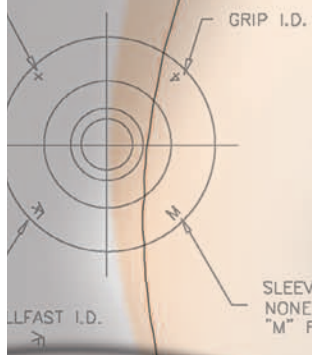


# BLIND RIVETS

BLIND RIVETS



STEM MATERIAL CODE:  
"+ " FOR ALUM./15-7 CRES.



# ALLFAST

# BLIND RIVETS



## Allfast's Blind Rivets - A Design for Every Job

### ALLMAX® RIVET

- Shear ring type fastener
- Mechanical lock
- Available in nominal and oversize
- Uses simplified and existing tooling
- Inspectable CRES lock

### SUPERMAX® RIVET

- Excellent sheet take-up capacity
- User friendly
- Low installed cost
- Available in nominal and oversize
- Uses existing installation tools

### “A” CODE RIVET

- Good sheet take-up
- Excellent hole fill characteristics
- Various material combinations
- Available in nominal and oversize

### BULB RIVET

- Good for thin sheets
- Mechanical lock
- Various material combinations
- Available in oversize only
- Smaller F-max for better blind side clearance

### FASTACK® RIVET

- Good hole fill
- Extended grip and hole range
- Excellent clamp-up ability
- Extensive cycle time reduction
- Temporary fastener to facilitate automated riveting

### TACKBOLT® RIVET

- Automated riveting assembly for heavy duty tacking applications
- Generous sheet take-up capacity
- Grip range 3/8" - 1-1/2"
- Lightweight tooling
- Temporary high strength fastener for automated tooling

### “AB” CODE RIVET

- Good sheet take-up
- Excellent hole fill characteristics
- Various material combinations
- Inspectable CRES lock
- Simplified tooling

**ALLFAST**  
FASTENING SYSTEMS, INC.

## LOCKED SPINDLE BLIND RIVETS • NON SHIFT TOOLING

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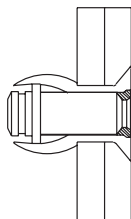
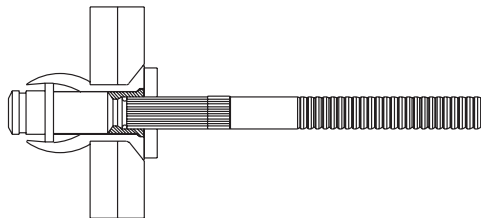
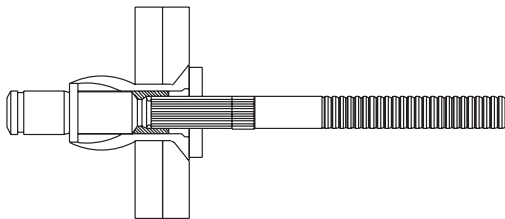
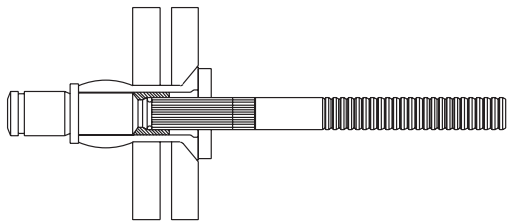
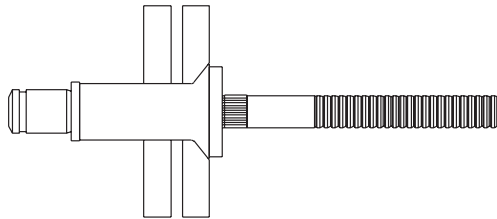
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# ALLMAX® BULB BLIND RIVETS

## NAS9300 SERIES, BACR15FP/FR & ASNA0077/78



### NAS9300 SERIES Available in Nominal & Oversize Series

Insert rivet into prepared hole. Some sheet gap is permissible; however, the use of temporary clamping fasteners is recommended.

Initial pulling of stem exerts axial compressive force on rivet sleeve to initiate sheet take-up, hole fill, and blind head formation.

Clamp-up action now complete as bulbed head formation continues. Bulbed blind head forms against blind sheet regardless of grip conditions.

Blind head formation and hole fill action are complete. The stem shear ring will now shear to accommodate 1/16" variation of material thickness.

Continued pulling buckles lock collar against driving anvil, securely locking the stem and sleeve. Further pulling causes the stem to fracture flush with the rivet head completing the installation.

*Completed Installation*

### ALLMAX® BULB RIVET FEATURES:

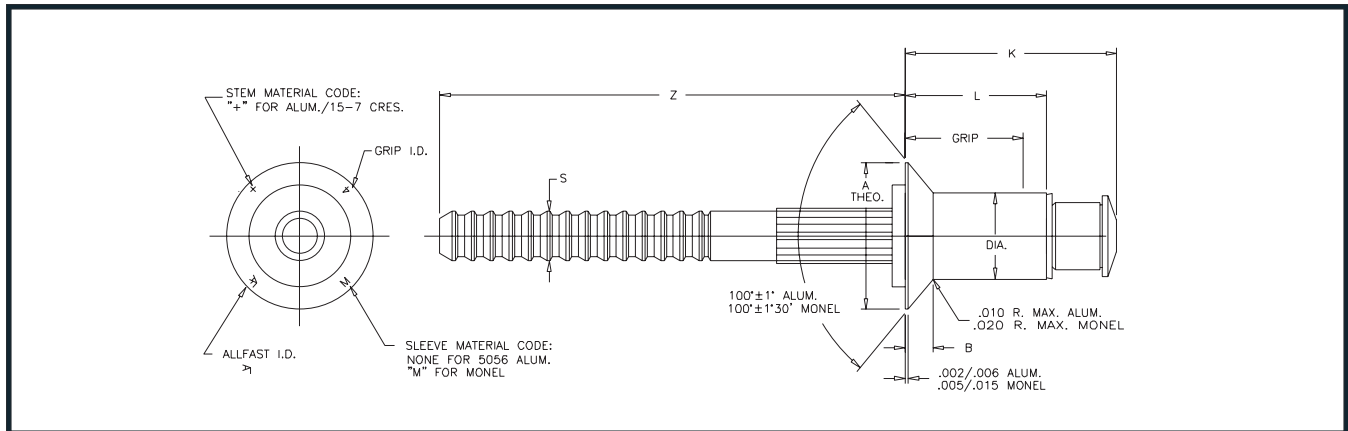
- Large Blind Side Head
- Excellent Clamp Up
- Flush Fracturing Mechanically Locked Stem
- Simplified Tooling System
- Visually Inspectable Lock





# ALLMAX® BULB RIVETS

## 100° FLUSH HEAD, LOCKED SPINDLE - NOMINAL DIAMETER



DIA. DASH NO.	DIA. + .003 - .001	A DIA. +/- .004	B REF.	S DIA. REF.	Z MIN.	HOLE LIMITS	DRILL SIZE NO.
-4	0.126	0.225	0.042	0.071	0.87	.129 - .132	30
-5	0.157	0.286	0.055	0.089	0.94	.160 - .164	20
-6	0.189	0.353	0.070	0.108	0.94	.192 - .196	10

GRIP LIMITS MIN.	GRIP MAX.	GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.		
			L +.000	-.030	K MAX.	L +.000	-.030	K MAX.	L +.000
NOTE1	0.125	-02	0.224		0.45	0.230	0.47	0.262	0.51
0.126	0.187	-03	0.287		0.51	0.293	0.53	0.325	0.57
0.188	0.250	-04	0.349		0.57	0.355	0.59	0.387	0.64
0.251	0.312	-05	0.412		0.63	0.418	0.65	0.450	0.70
0.313	0.375	-06	0.474		0.70	0.480	0.72	0.512	0.76
0.376	0.437	-07	0.537		0.76	0.543	0.77	0.575	0.82
0.438	0.500	-08	0.599		0.82	0.605	0.84	0.637	0.88
0.501	0.562	-09	0.662		0.88	0.668	0.90	0.700	0.95
0.563	0.625	-10				0.730	0.96	0.762	1.01
0.626	0.687	-11				0.793	1.02	0.825	1.07
0.688	0.750	-12						0.887	1.13

RIVET NO.	SLEEVE	MATERIAL STEM	LOCK RING	SLEEVE	FINISH STEM	LOCK RING
AF3212 NAS9302B	5056 ALUM. ALLOY QQ-A-430	8740 ALLOY STEEL AMS 6322	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	CAD PLATE QQ-P-416 TYPE II CLASS II	PASSIVATE AMS 2700
AF3222 NAS9302E	5056 ALUM. ALLOY QQ-A-430	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	AMS 2700	PASSIVATE AMS 2700
AF3522 NAS9308M	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3522R	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3522P NAS9308MN	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	ALUM. COAT NAS 4006	AMS 2700	PASSIVATE AMS 2700
AF3522F NAS9308ML	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-83488 ALUM. COAT	AMS 2700	PASSIVATE AMS 2700

NOTES: 1

DIA. DASH NO.	MIN. GRIP
-4	0.063
-5	0.065
-6	0.080

Part Number Example:

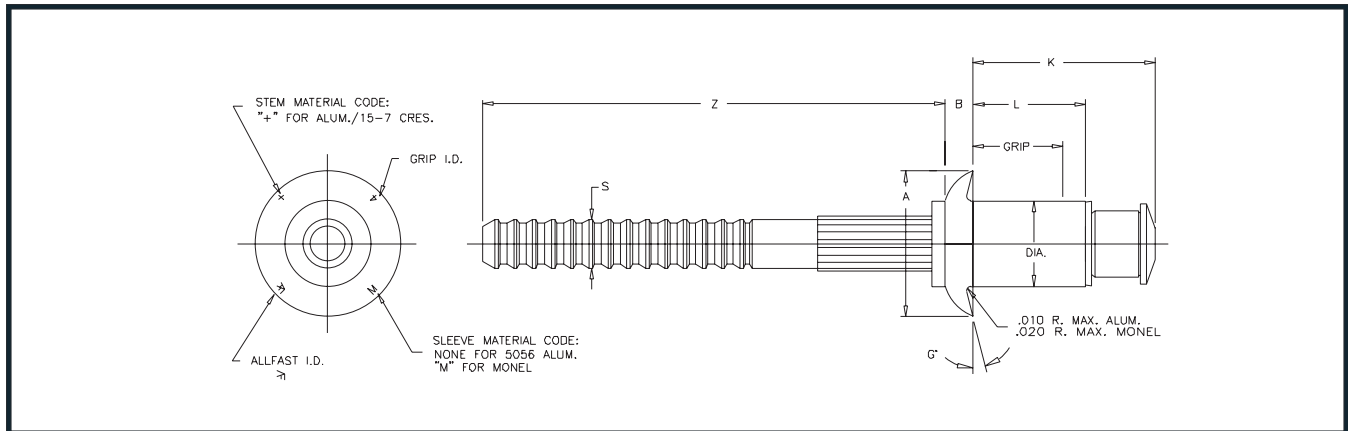
AF3212 (X) X -X S

Basic Part Number \_\_\_\_\_  
 Finish Code \_\_\_\_\_  
 Nom. Diameter (1/32") \_\_\_\_\_  
 Grip Length (1/16") \_\_\_\_\_  
 Indicates Strip Load \_\_\_\_\_

ALLMAX® NOMINAL DIAMETERS

# ALLMAX® BULB RIVETS

## UNIVERSAL HEAD, LOCKED SPINDLE - NOMINAL DIAMETER



DIA. DASH NO.	DIA. + .003 - .001	A DIA. +/- .004	B REF.	S DIA. REF.	Z MIN.	HOLE LIMITS	DRILL SIZE NO.	G MAX. DEGREES
-4	0.126	0.250	0.059	0.071	0.87	.129 - .132	30	8
-5	0.157	0.312	0.072	0.089	0.94	.160 - .164	20	8
-6	0.189	0.375	0.085	0.108	0.94	.192 - .196	10	8

GRIP LIMITS MIN.	GRIP MAX.	GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.		
			L +.000	-.030	K MAX.	L +.000	-.030	K MAX.	L +.000
NOTE 1	0.062	-01	.161		0.38	0.187	0.41	0.219	0.47
0.063	0.125	-02	.224		0.45	0.230	0.47	0.262	0.51
0.126	0.187	-03	.287		0.51	0.293	0.53	0.325	0.57
0.188	0.250	-04	.349		0.57	0.355	0.59	0.387	0.64
0.251	0.312	-05	.412		0.63	0.418	0.65	0.450	0.70
0.313	0.375	-06	.474		0.70	0.480	0.72	0.512	0.76
0.376	0.437	-07	.537		0.76	0.543	0.77	0.575	0.82
0.438	0.500	-08	.599		0.82	0.605	0.84	0.637	0.88
0.501	0.562	-09	.662		0.88	0.668	0.90	0.700	0.95
0.563	0.625	-10				0.730	0.96	0.762	1.01
0.626	0.687	-11				0.793	1.02	0.825	1.07
0.688	0.750	-12						0.887	1.13

RIVET NO.	SLEEVE	MATERIAL STEM	LOCK RING	SLEEVE	FINISH STEM	LOCK RING
AF3213 NAS9301B	5056 ALUM. ALLOY QQ-A-430	8740 ALLOY STEEL AMS 6322	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	CAD PLATE QQ-P-416 TYPE II CLASS II	PASSIVATE AMS 2700
AF3223 NAS9301E	5056 ALUM. ALLOY QQ-A-430	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	AMS 2700	PASSIVATE AMS 2700
AF3523 NAS9307M	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3523R	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3523P NAS9307MN	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	ALUM. COAT NAS 4006	AMS 2700	PASSIVATE AMS 2700
AF3523F NAS9307ML	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-83488 ALUM. COAT	AMS 2700	PASSIVATE AMS 2700

NOTES: 1

DIA. DASH NO.	MIN. GRIP
-4	0.025
-5	0.031
-6	0.037

Part Number Example:

AF3213 (X) X -X S

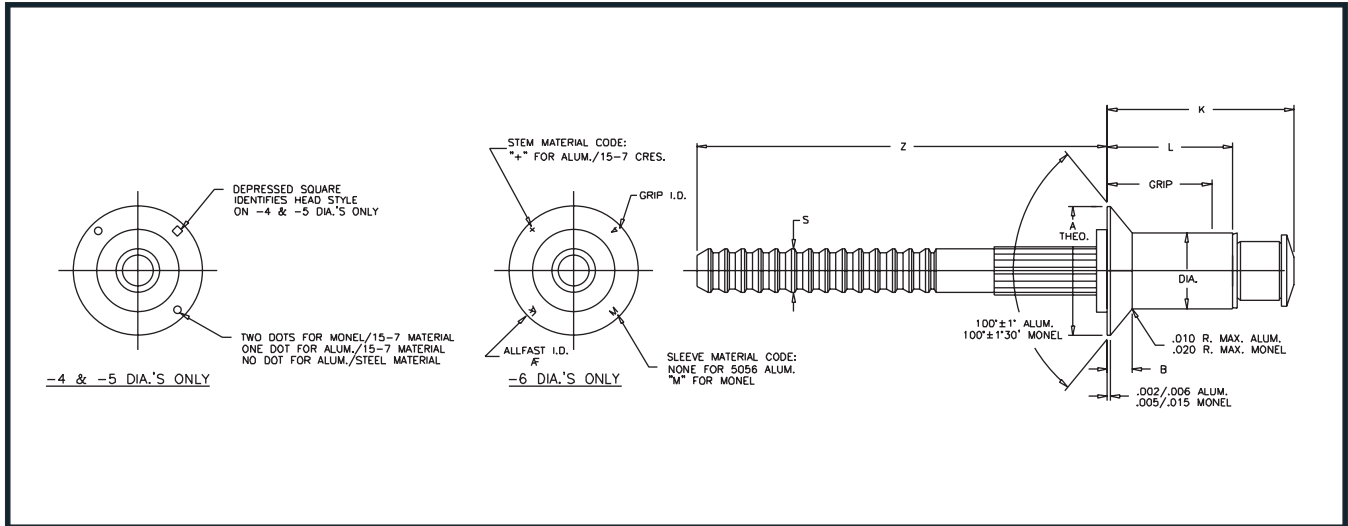
Basic Part Number \_\_\_\_\_  
 Finish Code \_\_\_\_\_  
 Nom. Diameter (1/32") \_\_\_\_\_  
 Grip Length (1/16") \_\_\_\_\_  
 Indicates Strip Load \_\_\_\_\_

ALLMAX® NOMINAL DIAMETERS



# ALLMAX® BULB RIVETS

## 100° FLUSH SHEAR HEAD, LOCKED SPINDLE - NOMINAL DIAMETER



DIA. DASH NO.	DIA. +.003 -.001	A DIA. +/- .004	B REF.	S DIA. REF.	Z MIN.	HOLE LIMITS	DRILL SIZE NO.
-4	0.126	0.192	0.028	0.071	0.87	.129 - .132	30
-5	0.157	0.243	0.037	0.089	0.94	.160 - .164	20
-6	0.189	0.299	0.046	0.108	0.94	.192 - .196	10

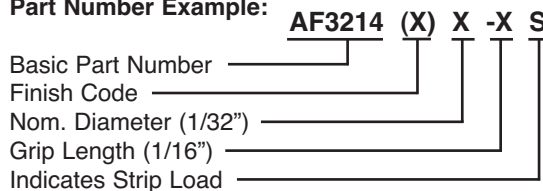
GRIP LIMITS		GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.		
MIN.	MAX.		L +.000	-.030	K MAX.	L +.000	-.030	K MAX.	
NOTE1	0.125	-02	0.224		0.45	0.230	0.47	0.262	0.51
	0.126	-03	0.287		0.51	0.293	0.53	0.325	0.57
	0.188	-04	0.349		0.57	0.355	0.59	0.387	0.64
	0.251	-05	0.412		0.63	0.418	0.65	0.450	0.70
	0.313	-06	0.474		0.70	0.480	0.72	0.512	0.76
	0.376	-07	0.537		0.76	0.543	0.77	0.575	0.82
	0.438	-08	0.599		0.82	0.605	0.84	0.637	0.88
	0.501	-09	0.662		0.88	0.668	0.90	0.700	0.95
	0.563	-10				0.730	0.96	0.762	1.01
	0.626	-11				0.793	1.02	0.825	1.07
	0.688	-12						0.887	1.13

RIVET NO.	SLEEVE	MATERIAL STEM	LOCK RING	SLEEVE	FINISH STEM	LOCK RING
AF3214 NAS9303B	5056 ALUM. ALLOY QQ-A-430	8740 ALLOY STEEL AMS 6322	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	CAD PLATE QQ-P-416 TYPE II CLASS II	PASSIVATE AMS 2700
AF3224 NAS9303E	5056 ALUM. ALLOY QQ-A-430	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	AMS 2700	PASSIVATE AMS 2700
AF3524 NAS9309M	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3524R	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3524P NAS9309MN	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	ALUM. COAT NAS 4006	AMS 2700	PASSIVATE AMS 2700
AF3524F NAS9309ML	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	ALUM. COAT MIL-C-83488	AMS 2700	PASSIVATE AMS 2700

NOTES: 1

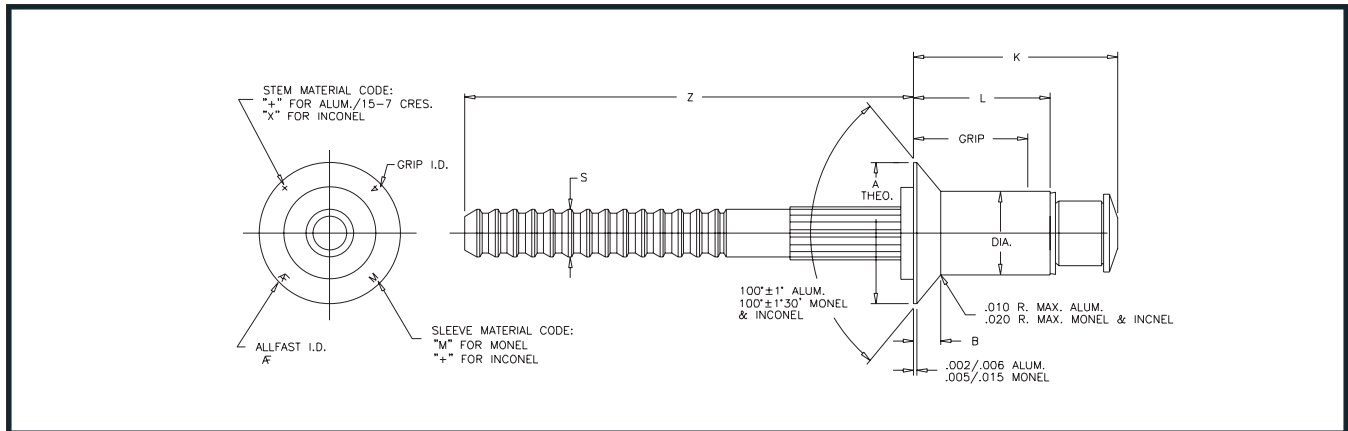
DIA. DASH NO.	MIN. GRIP
-4	0.063
-5	0.065
-6	0.080

Part Number Example:



# ALLMAX® BULB RIVETS

## 100° FLUSH HEAD, LOCKED SPINDLE - OVERSIZE DIAMETER



DIA. DASH NO.	DIA. + .003 - .001	A DIA. +/- .004	B REF.	S DIA. REF.	Z MIN.	HOLE LIMITS	DRILL SIZE NO.
-4	0.140	0.225	0.035	0.081	0.87	.143 - .146	27
-5	0.173	0.286	0.047	0.100	0.94	.176 - .180	16
-6	0.201	0.353	0.063	0.117	0.94	.205 - .209	5

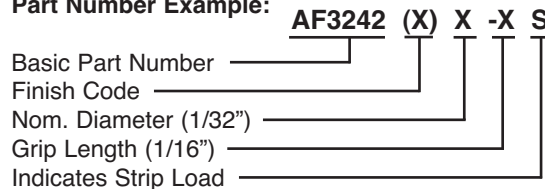
GRIP LIMITS MIN.	GRIP MAX.	GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.	
			L +.000	-.030	K MAX.	L +.000	-.030	K MAX.
NOTE1	0.125	-02	0.238	0.45	0.266	0.47	0.265	0.48
	0.126	-03	0.301	0.52	0.309	0.53	0.328	0.55
	0.188	-04	0.363	0.58	0.371	0.60	0.390	0.62
	0.251	-05	0.426	0.65	0.434	0.66	0.453	0.68
	0.313	-06	0.488	0.77	0.496	0.72	0.515	0.74
	0.376	-07	0.551	0.78	0.559	0.79	0.578	0.82
	0.438	-08	0.613	0.84	0.621	0.85	0.640	0.89
	0.501	-09	0.676	0.90	0.684	0.91	0.703	0.95
	0.563	-10			0.746	0.98	0.765	1.01
	0.626	-11			0.809	1.04	0.828	1.07
	0.688	-12					0.890	1.14

RIVET NO.	SLEEVE	MATERIAL STEM	LOCK RING	SLEEVE	FINISH STEM	LOCK RING
AF3242 NAS9305B	5056 ALUM. ALLOY QQ-A-430	8740 ALLOY STEEL AMS 6322	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	CAD PLATE QQ-P-416 TYPE II CLASS II	PASSIVATE AMS 2700
AF3252 NAS9305E	5056 ALUM. ALLOY QQ-A-430	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	AMS 2700	PASSIVATE AMS 2700
AF3552 NAS9311M	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3552R	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3552P NAS9311MN	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	ALUM. COAT NAS 4006	AMS 2700	PASSIVATE AMS 2700
AF3552F NAS9311ML	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-83488 ALUM. COAT	AMS 2700	PASSIVATE AMS 2700
AF3852 NAS9311C	INCONEL 600 AMS5687	INCONEL X-750 AMS5698	A-286 CRES AMS 5731	NONE	NONE	PASSIVATE AMS 2700

NOTES: 1

DIA. DASH NO.	MIN. GRIP
-4	0.045
-5	0.063
-6	0.073

Part Number Example:

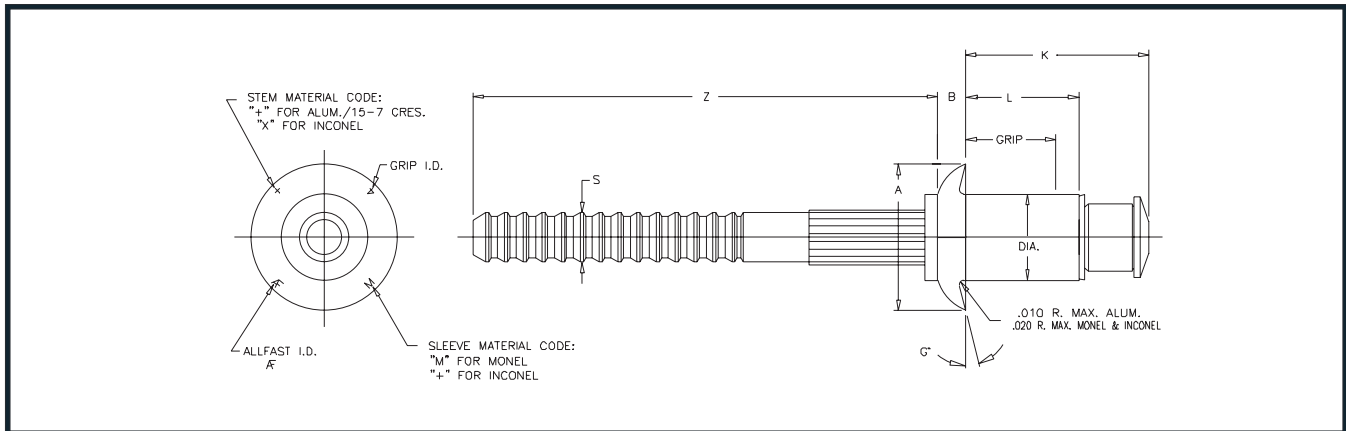


ALLMAX® OVERSIZE DIAMETERS



# ALLMAX® BULB RIVETS

## UNIVERSAL HEAD, LOCKED SPINDLE - OVERSIZE DIAMETER



DIA. DASH NO.	DIA. + .003 - .001	A DIA. +/- .004	B REF.	S DIA. REF.	Z MIN.	HOLE LIMITS	DRILL SIZE NO.	G MAX. DEGREES
-4	0.140	0.250	0.059	0.081	0.87	.143 - .146	27	8
-5	0.173	0.312	0.072	0.100	0.94	.176 - .180	16	8
-6	0.201	0.375	0.085	0.117	0.94	.205 - .209	5	8

GRIP LIMITS MIN.	GRIP MAX.	GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.		
			L +.000	-.030	K MAX.	L +.000	-.030	K MAX.	L +.000
NOTE 1	0.062	-01	.175		0.37	0.203	0.43	0.242	0.45
0.063	0.125	-02	.238		0.46	0.246	0.47	0.265	0.50
0.126	0.187	-03	.301		0.52	0.309	0.53	0.328	0.55
0.188	0.250	-04	.363		0.58	0.371	0.60	0.390	0.62
0.251	0.312	-05	.426		0.65	0.434	0.66	0.453	0.68
0.313	0.375	-06	.488		0.71	0.496	0.72	0.515	0.74
0.376	0.437	-07	.551		0.78	0.559	0.79	0.578	0.82
0.438	0.500	-08	.613		0.84	0.621	0.85	0.640	0.89
0.501	0.562	-09	.676		0.90	0.684	0.91	0.703	0.95
0.563	0.625	-10				0.746	0.98	0.765	1.01
0.626	0.687	-11				0.809	1.04	0.828	1.07
0.688	0.750	-12						0.890	1.14

RIVET NO.	SLEEVE	MATERIAL STEM	LOCK RING	SLEEVE	FINISH STEM	LOCK RING
AF3243 NAS9304B	5056 ALUM. ALLOY QQ-A-430	8740 ALLOY STEEL AMS 6322	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	CAD PLATE QQ-P-416 TYPE II CLASS II	PASSIVATE AMS 2700
AF3253 NAS9304E	5056 ALUM. ALLOY QQ-A-430	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	AMS 2700	PASSIVATE AMS 2700
AF3553 NAS9310M	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3553R NOTE 7	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3553P NAS9310MN	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	ALUM. COAT NAS 4006	AMS 2700	PASSIVATE AMS 2700
AF3553F NAS9310ML	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-83488 ALUM. COAT	AMS 2700	PASSIVATE AMS 2700
AF3852 NAS9310C	INCONEL 600 AMS5687	INCONEL X-750 AMS5698	A-286 CRES AMS 5731	NONE	NONE	PASSIVATE AMS 2700

NOTES: 1

DIA. DASH NO.	MIN. GRIP
-4	0.025
-5	0.031
-6	0.037

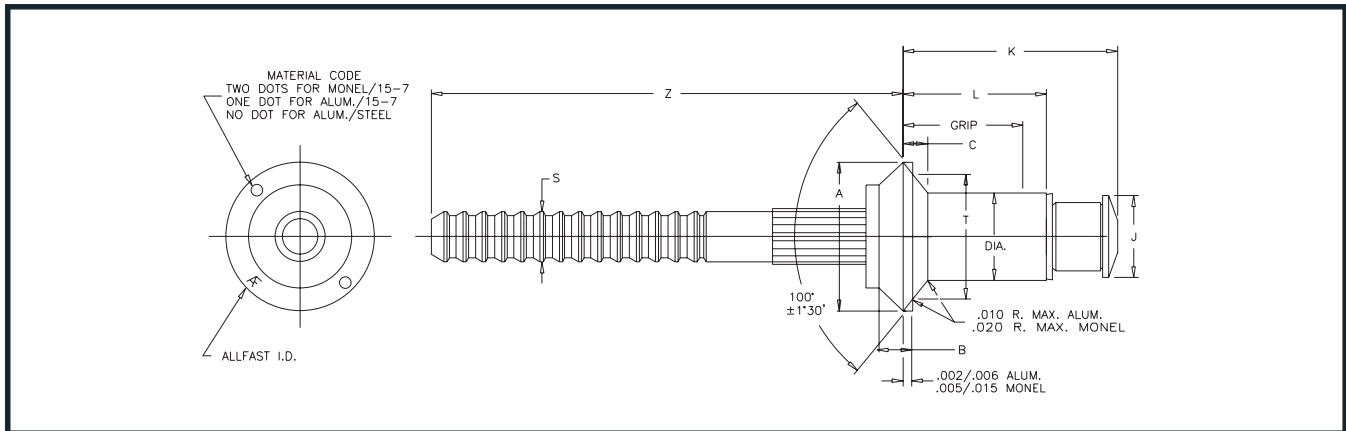
Part Number Example:

**AF3243 (X) X -X S**

Basic Part Number \_\_\_\_\_  
 Finish Code \_\_\_\_\_  
 Nom. Diameter (1/32") \_\_\_\_\_  
 Grip Length (1/16") \_\_\_\_\_  
 Indicates Strip Load \_\_\_\_\_

# ALLMAX® BULB RIVETS

**FLANGED DOME HEAD, LOCKED SPINDLE - OVERSIZE DIAMETER**



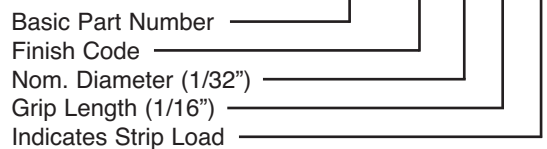
DIA. DASH NO.	DIA. +.003 -.001	A DIA. +/- .010	B +.010 -.000	C REF.	J MIN.	S REF.	T +.005	Z MIN.	HOLE LIMITS	DRILL SIZE NO.
-4	0.140	0.220	0.022	0.011	0.115	0.081	0.87	0.165	.143 - .146	27
-5	0.173	0.286	0.030	0.015	0.140	0.100	0.94	0.208	.176 - .180	16
-6	0.201	0.353	0.040	0.023	0.160	0.177	0.94	0.225	.205 - .209	5

GRIP LIMITS		GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.				
MIN.	MAX.		L +.000	-.030	K MAX.	L +.000	-.030	K MAX.	L +.000	-.030	K MAX.
0.033	0.062	-01	0.170		0.39						
0.063	0.125	-02	0.213		0.43	0.246		0.265		0.50	
0.126	0.187	-03	0.276		0.50	0.309	0.46	0.328		0.56	
0.188	0.250	-04	0.338		0.56	0.371	0.52	0.390		0.62	
0.251	0.312	-05	0.401		0.62	0.434	0.59	0.453		0.68	
0.313	0.375	-06				0.496	0.65	0.515		0.75	
0.376	0.437	-07					0.71	0.578		0.81	
0.438	0.500	-08						0.640		0.87	

RIVET NO.	SLEEVE	MATERIAL STEM	LOCK RING	SLEEVE	FINISH STEM	LOCK RING
AF3245 9306B	5056 ALUM. ALLOY QQ-A-430	8740 ALLOY STEEL AMS 6322	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	CAD PLATE QQ-P-416 TYPE II CLASS II	PASSIVATE AMS 2700
AF3255 9306E	5056 ALUM. ALLOY QQ-A-430	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-5541 PLAIN COLOR	AMS 2700	PASSIVATE AMS 2700
AF3555 9310M	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700
AF3555P 9312MN	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	ALUM. COAT NAS 4006	AMS 2700	PASSIVATE AMS 2700
AF3555F 9312ML	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	MIL-C-83488 ALUM. COAT	AMS 2700	PASSIVATE AMS 2700
AF3855R NOTE 7	MONEL QQ-N-281	PH 15-7 MO CRES AMS 5657	A-286 CRES AMS 5731	NONE	AMS 2700	PASSIVATE AMS 2700

Part Number Example:

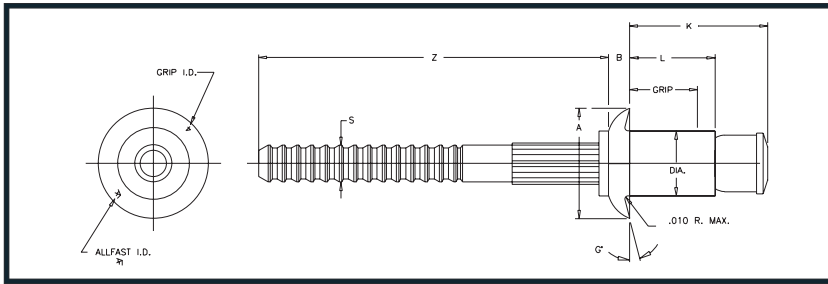
**AF3245 (X) X -X S**



**ALLMAX® OVERSIZE DIAMETERS**



# SUPERMAX® RIVETS - NOMINAL DIAMETER



Part Number Example:

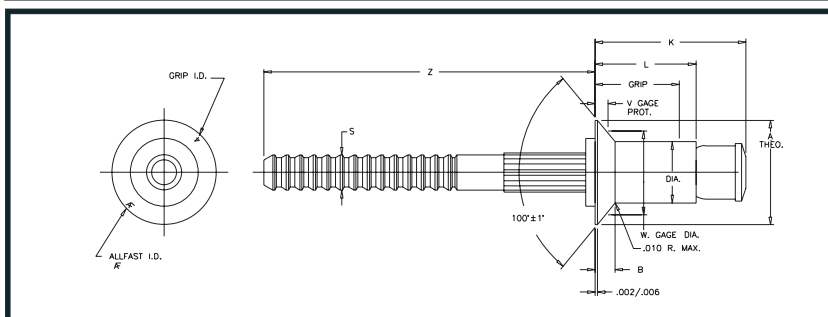
**AF9223 04 -02**

Basic Part Number  
Nom. Diameter (1/32")  
Maximum Grip (1/16")

GRIP LIMITS MIN.	GRIP LIMITS MAX.	GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.	
			L REF.	K MAX.	L REF.	K MAX.	L REF.	K MAX.
NOTE1	0.062	-01	0.140	0.38	0.187	0.41	0.219	0.47
0.063	0.125	-02	0.200	0.45	0.230	0.47	0.262	0.51
0.126	0.187	-03	0.263	0.51	0.293	0.53	0.325	0.57
0.188	0.250	-04	0.325	0.57	0.355	0.59	0.387	0.64
0.251	0.312	-05	0.388	0.63	0.418	0.65	0.450	0.70
0.313	0.375	-06	0.450	0.70	0.480	0.72	0.512	0.76
0.376	0.437	-07	0.513	0.76	0.543	0.77	0.575	0.82
0.438	0.500	-08	0.575	0.82	0.605	0.84	0.637	0.88
0.501	0.562	-09	0.638	0.88	0.668	0.90	0.700	0.95
0.563	0.625	-10			0.730	0.96	0.762	1.01
0.626	0.687	-11			0.793	1.02	0.825	1.07
0.688	0.750	-12					0.887	1.13

DIA. DASH NO.	DIA. + .003 - .001	A DIA. +/- .010	B +/- .005	S DIA. REF.	Z MIN.	HOLE LIMITS	DRILL SIZE NO.	G MAX. DEGREES
-4	0.126	0.250	0.059	0.071	0.87	.129 - .132	30	8
-5	0.157	0.312	0.072	0.089	0.94	.160 - .164	20	8
-6	0.189	0.375	0.085	0.108	0.94	.192 - .196	10	8

RIVET NO.	MATERIAL				FINISH			
	SLEEVE	STEM	LOCK RING	BULB FORMER	SLEEVE	STEM	LOCK RING	BULB FORMER
AF9223	5056 ALUM ALLOY QQ-A-430	15-7PH CRES AMS 5657	A-286 CRES AMS 5731	7050 ALUM ALLOY QQ-A-430	MIL-C-5541 PLAIN COLOR	PASSIVATE AMS 2700	PASSIVATE AMS 2700	MIL-C-5541



NOTES: 1

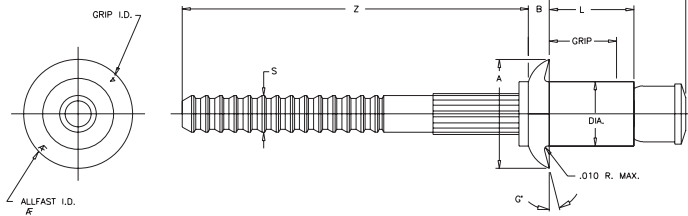
DIA. DASH NO.	MIN. GRIP	
	CSK	UNIV
-4	0.063	0.025
-5	0.065	0.031
-6	0.080	0.037

GRIP LIMITS MIN.	GRIP LIMITS MAX.	GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.	
			L REF.	K MAX.	L REF.	K MAX.	L REF.	K MAX.
NOTE1	0.125	-02	0.200	0.45	0.230	0.47	0.262	0.51
0.126	0.187	-03	0.263	0.51	0.293	0.53	0.325	0.57
0.188	0.250	-04	0.325	0.57	0.355	0.59	0.387	0.64
0.251	0.312	-05	0.388	0.63	0.418	0.65	0.450	0.70
0.313	0.375	-06	0.450	0.70	0.480	0.72	0.512	0.76
0.376	0.437	-07	0.513	0.76	0.543	0.77	0.575	0.82
0.438	0.500	-08	0.575	0.82	0.605	0.84	0.637	0.88
0.501	0.562	-09	0.638	0.88	0.668	0.90	0.700	0.95
0.563	0.625	-10			0.730	0.96	0.762	1.01
0.626	0.687	-11			0.793	1.02	0.825	1.07

DIA. DASH NO.	DIA. + .003 - .001	A DIA. +/- .004	B REF.	S DIA. REF.	Z MIN.	HOLE LIMITS	V +/- .0015	W +/- .0001
-4	0.126	0.225	0.042	0.071	0.87	.129 - .132	.0170	0.1840
-5	0.157	0.286	0.055	0.089	0.94	.160 - .164	.0215	0.2340
-6	0.189	0.353	0.070	0.108	0.94	.192 - .196	.0285	0.2840

RIVET NO.	MATERIAL				FINISH			
	SLEEVE	STEM	LOCK RING	BULB FORMER	SLEEVE	STEM	LOCK RING	BULB FORMER
AF9222	5056 ALUM ALLOY QQ-A-430	15-7PH CRES AMS 5657	A-286 CRES AMS 5731	7050 ALUM ALLOY QQ-A-430	MIL-C-5541 PLAIN COLOR	PASSIVATE AMS 2700	PASSIVATE AMS 2700	MIL-C-5541

# SUPERMAX® RIVETS - OVERSIZE DIAMETER



Part Number Example:

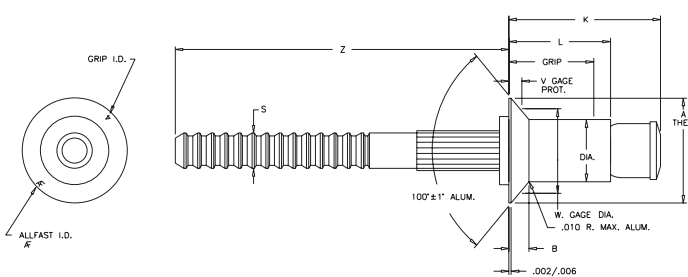
**AF9253 04 -02**

Basic Part Number  
Nom. Diameter (1/32")  
Maximum Grip (1/16")

GRIP LIMITS MIN.	GRIP LIMITS MAX.	GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.	
			L REF.	K MAX.	L REF.	K MAX.	L REF.	K MAX.
NOTE1	0.062	-01	0.161	0.37	0.192	0.40	0.219	0.45
0.063	0.125	-02	0.223	0.49	0.254	0.52	0.281	0.56
0.126	0.187	-03	0.286	0.54	0.317	0.56	0.344	0.60
0.188	0.250	-04	0.348	0.60	0.379	0.63	0.406	0.65
0.251	0.312	-05	0.411	0.66	0.442	0.69	0.469	0.72
0.313	0.375	-06	0.473	0.72	0.504	0.75	0.531	0.79
0.376	0.437	-07	0.536	0.79	0.567	0.81	0.594	0.85
0.438	0.500	-08	0.598	0.85	0.629	0.88	0.656	0.91
0.501	0.562	-09	0.661	0.91	0.692	0.94	0.719	0.97
0.563	0.625	-10			0.754	1.00	0.781	1.04
0.626	0.687	-11					0.844	1.10
0.688	0.750	-12					0.906	1.16

DIA. DASH NO.	DIA. + .003 - .001	A DIA. +/- .010	B +/- .005	S DIA. REF.	Z MIN.	HOLE LIMITS	DRILL SIZE NO.	G MAX. DEGREES
-4	0.140	0.250	0.059	0.081	0.87	.143 - .146	27	8
-5	0.173	0.312	0.072	0.100	0.94	.176 - .180	16	8
-6	0.201	0.375	0.085	0.117	0.94	.205 - .209	5	8

RIVET NO.	MATERIAL				FINISH			
	SLEEVE	STEM	LOCK RING	BULB FORMER	SLEEVE	STEM	LOCK RING	BULB FORMER
AF9253 BACR15GK	5056 ALUM ALLOY QQ-A-430	15-7PH CRES AMS 5657	A-286 CRES AMS 5731	7050 ALUM ALLOY QQ-A-430	MIL-C-5541 PLAIN COLOR	PASSIVATE AMS 2700	PASSIVATE AMS 2700	MIL-C-5541



NOTES: 1

DIA. DASH NO.	MIN. GRIP	
	CSK	UNIV
-4	0.063	0.025
-5	0.063	0.031
-6	0.073	0.037

GRIP LIMITS MIN.	GRIP LIMITS MAX.	GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.	
			L REF.	K MAX.	L REF.	K MAX.	L REF.	K MAX.
NOTE1	0.125	-02	0.223	0.43	0.254	0.46	0.281	0.48
0.126	0.187	-03	0.286	0.55	0.317	0.58	0.344	0.60
0.188	0.250	-04	0.348	0.59	0.379	0.62	0.406	0.65
0.251	0.312	-05	0.411	0.65	0.442	0.68	0.469	0.71
0.313	0.375	-06	0.473	0.71	0.504	0.74	0.531	0.78
0.376	0.437	-07	0.536	0.78	0.567	0.80	0.594	0.84
0.438	0.500	-08	0.598	0.84	0.629	0.87	0.656	0.90
0.501	0.562	-09	0.661	0.90	0.692	0.93	0.719	0.96
0.563	0.625	-10			0.754	0.99	0.781	1.03
0.626	0.687	-11					0.844	1.09
0.688	0.750	-12					0.906	1.15

DIA. DASH NO.	DIA. + .003 - .001	A DIA. +/- .004	B REF.	S DIA. REF.	Z MIN.	HOLE LIMITS	V +/- .0015	W +/- .0001
-4	0.140	0.225	0.035	0.081	0.87	.143 - .146	.0170	0.1840
-5	0.173	0.286	0.047	0.100	0.94	.176 - .180	.0215	0.2340
-6	0.201	0.353	0.063	0.117	0.94	.205 - .209	.0285	0.2840

RIVET NO.	MATERIAL				FINISH			
	SLEEVE	STEM	LOCK RING	BULB FORMER	SLEEVE	STEM	LOCK RING	BULB FORMER
AF9252 BACR15GJ	5056 ALUM ALLOY QQ-A-430	15-7PH CRES AMS 5657	A-286 CRES AMS 5731	7050 ALUM ALLOY QQ-A-430	MIL-C-5541 PLAIN COLOR	PASSIVATE AMS 2700	PASSIVATE AMS 2700	MIL-C-5541

SUPERMAX® OVERSIZE DIAMETERS



# BLIND RIVETS

## OLYMPIC-LOK<sup>®</sup> BLIND RIVETS

NAS 1400 Procurement Specification  
NAS 1398 & NAS 1399 "A" Coded Parts

## OLYMPIC BULB-LOK<sup>®</sup> BLIND RIVETS

NAS 1740 Procurement Specification  
NAS 1768 & 1769 Parts

### BENEFITS

- COST-EFFECTIVE** - Lowest installed cost due to fast cycling, versatile Tooling System... Limited access is no longer a problem.
- EXCELLENT CLAMP-UP** - Sheet take-up capability is excellent, minimizing the need for temporary fasteners.
- HIGH STRENGTH** - Positive hole-fill capability provides highest joint yield strength.
- VIBRATION-RESISTANT** - Locking collar provides secure mechanical lock permitting usage in areas of FOD concern, such as Engine Inlet Ducts.

### LOCK RING INTEGRITY

The OLYMPIC Tooling System incorporates a special insert in the nose-piece which drives the locking collar to fully pack the cavity.

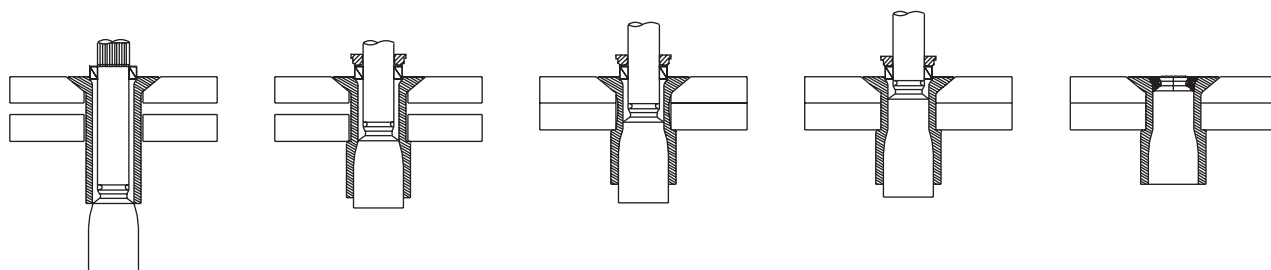
Shaving of the rivet head achieves aerodynamic smoothness.



### NON-SHIFT TOOLING SYSTEM

Single stroke action tools, no adjustments, one pulling head for all head configurations, light weight, compact, and sturdy.

## TYPICAL OLYMPIC-LOK<sup>®</sup> & BULB-LOK<sup>®</sup> INSTALLATION SEQUENCE



OLYMPIC-LOK<sup>®</sup> blind rivet is inserted into a prepared hole. Note the clearance between the rivet and the sides of the hole and the gap between the sheets.

Tool jaws grip the stem and pull it into the sleeve, closing the sheet gap, expanding the sleeve to fill the hole, and forming a consistently larger blind-side bearing area.

When the stem travel is completed, the stem locking groove is aligned with the sleeve cavity. The locking collar is then driven, securely locking sleeve and stem components together.

Continued pulling breaks the stem flush to the fastener head. Flushness is assured by the positioning of the break-groove.

# BLIND RIVETS

## NAS 1400 NOMINAL DIAMETER RIVETS ("A" CODE)

### OLYMPIC-LOK®

NAS1398D6A4

RV 1200 -6 -4

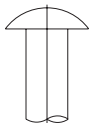
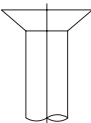
Part Number Example:

Basic Part Number  
(See table below)

Shank Diameter (in 1/32")

Maximum Grip in 1/16" increments  
Minimum Grip is 1/16" less than max.  
Example is 1/4" max., 3/16" min.

### MATERIAL COMBINATIONS

HEAD STYLE	RIVET MATERIAL SLEEVE	STEM	ALLFAST P/N	NAS P/N	MAX TEMP. LIMIT °F	ULTIMATE SHEAR STRENGTH (KSI)
 UNIVERSAL HEAD	5056	7075	RV1250	NAS1398B	250	30
	2017-T4	ALUMINUM	RV1200	NAS1398D		38
	MONEL/CAD		RV1290	NAS1398MW	450	
	MONEL	MONEL	RV1290M	NAS1398M	900	55
	MONEL/SILVER		RV1290MS	NAS1398MS	900	
	A-286	A-286	RV1240	NAS1398C	1200	75
	A-286/CAD		RV1240W	NAS1398CW	450	
 CSK HEAD	5056	7075	RV1251	NAS1399B	250	30
	2017-T4	ALUMINUM	RV1201	NAS1399D		38
	MONEL/CAD		RV1291	NAS1399MW	450	
	MONEL	MONEL	RV1291M	NAS1399M	900	55
	MONEL/SILVER		RV1291MS	NAS1399MS	900	
	A-286	A-286	RV1241	NAS1399C	1200	75
	A-286/CAD		RV1241W	NAS1399CW	450	

## NAS 1740 OVERSIZE DIAMETER RIVETS

### OLYMPIC BULB-LOK®

NAS1768D6-4

RV 1100 -6 -4

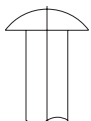
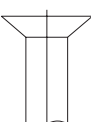
Part Number Example:

Basic Part Number  
(See table below)

Shank Diameter (in 1/32")

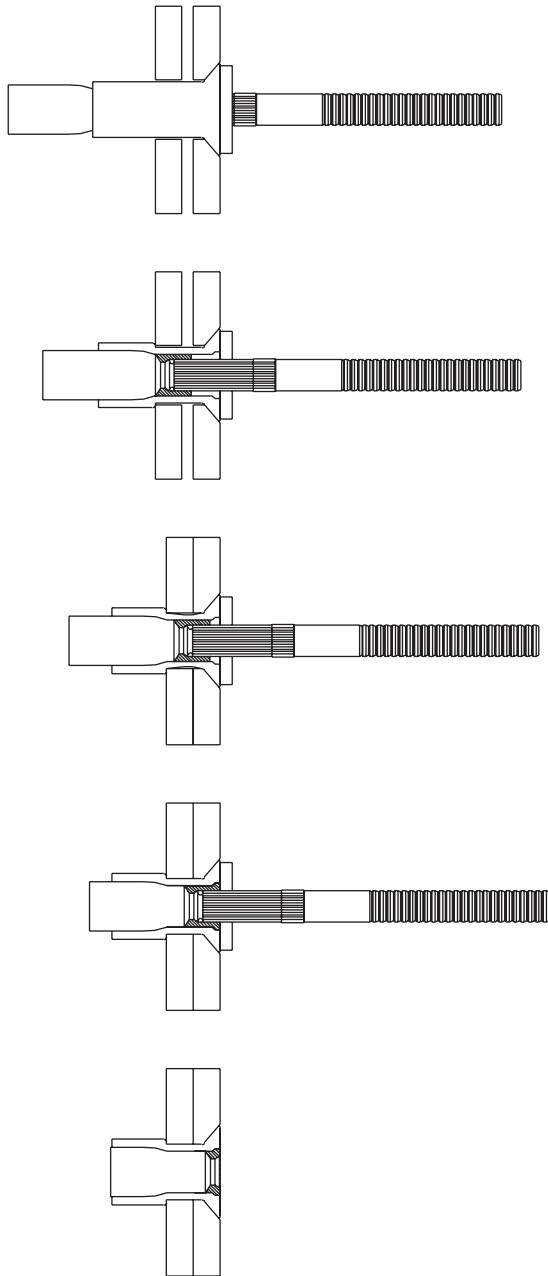
Maximum Grip in 1/16" increments  
Minimum Grip is 1/16" less than max.  
Example is 1/4" max., 3/16" min.

### MATERIAL COMBINATIONS

HEAD STYLE	RIVET MATERIAL SLEEVE	STEM	ALLFAST P/N	NAS P/N	MAX TEMP. LIMIT °F	ULTIMATE SHEAR STRENGTH (KSI)
 UNIVERSAL HEAD	5056	7075	RV1150	-	250	30
	2017-T4	ALUMINUM	RV1100	NAS1768D		38
	MONEL/CAD		RV1190	NAS1768MW	450	
	MONEL	MONEL	RV1190M	NAS1768M	900	55
	MONEL/SILVER		RV1190MS	NAS1768MS	900	
	A-286	A-286	RV1140	NAS1768C	1200	75
	A-286/CAD	A-286	RV1140W	NAS1768CW	450	
	A-286/SILVER		RV1140MS	NAS1768CS	1200	
 CSK HEAD	5056	7075	RV1151	-	250	30
	2017-T4	ALUMINUM	RV1101	NAS1769D		38
	MONEL/CAD		RV1191	NAS1769MW	450	
	MONEL	MONEL	RV1191M	NAS1769M	900	55
	MONEL/SILVER		RV1191MS	NAS1769MS	900	
	A-286	A-286	RV1141	NAS1769C	1200	75
	A-286/CAD		RV1141W	NAS1769CW	450	
	A-286/SILVER		RV1141S	NAS1769CS	1200	

# “AB” CODE RIVETS

## NAS1398/1399



### NAS1398/1399 SERIES

Insert rivet into prepared hole. Some sheet gap is permissible; however, the use of temporary clamping fasteners is recommended.

Initial pulling of stem exerts axial compressive force on rivet sleeve to initiate sheet take-up, hole fill, and blind head formation.

Clamp-up action now complete as bulbed head formation continues. Blind head forms against blind sheet regardless of grip conditions. The stem will accommodate 1/16" variation of material thickness. As stem travels forward fastener will continue to hole fill.

Continued pulling buckles lock collar against driving anvil, securely locking the stem and sleeve.

Further pulling causes the stem to fracture flush with the rivet head completing the installation.

*Completed Installation*

### “AB” CODE RIVET FEATURES:

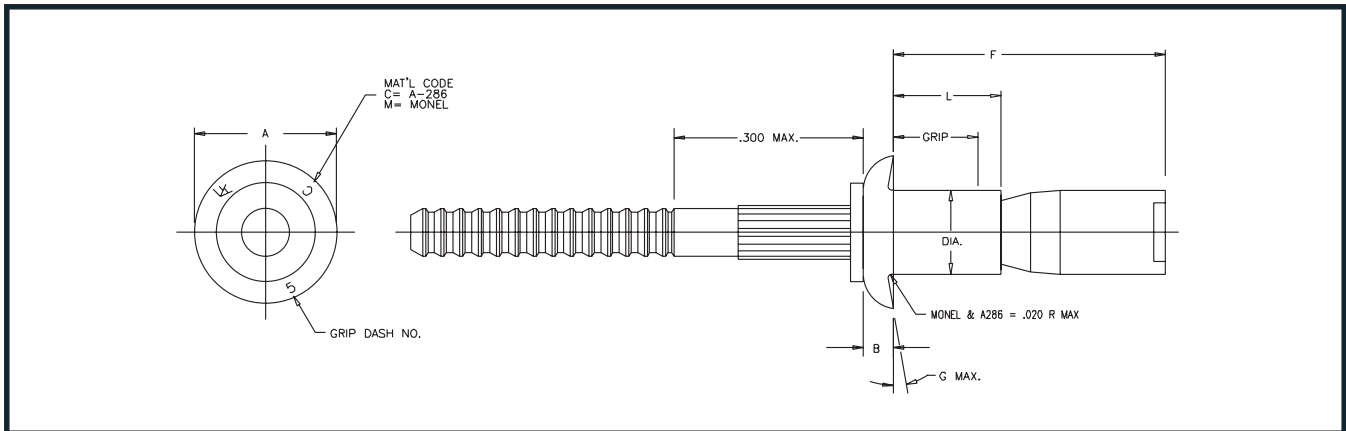
- Excellent Clamp Up
- Flush Fracturing Stem
- Mechanically Locked Stem
- Meets or Exceeds NAS1400 Requirements





# "AB" CODE RIVETS

## NAS1398AB - UNIVERSAL HEAD, LOCKED SPINDLE



DIA. DASH NO.	DIA. +.003 - .001	A DIA. +/- .010	B DIA. +.010 -.000	G MAX. DEGREES	DRILL SIZE NO.
-4	0.125	0.250	0.054	12	30
-5	0.156	0.312	0.067	10	20
-6	0.187	0.375	0.080	8	10

GRIP LIMITS		GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.	
MIN.	MAX.		L MAX.	F MAX.	L MAX.	F MAX.	L MAX.	F MAX.
	0.062	-01	.198	0.390	0.201	0.380	0.225	0.440
0.063	0.125	-02	.250	0.510	0.263	0.490	0.287	0.550
0.126	0.187	-03	.323	0.630	0.326	0.810	0.350	0.670
0.188	0.250	-04	.385	0.750	0.388	0.730	0.412	0.790
0.251	0.312	-05	.448	0.870	0.451	0.850	0.475	0.910
0.313	0.375	-06	.510	0.980	0.513	0.970	0.537	1.03
0.376	0.437	-07	.573	1.11	0.576	1.09	0.600	1.15
0.438	0.500	-08	.635	1.25	0.638	1.20	0.662	1.27
0.501	0.562	-09	.698	1.35	0.701	1.38	0.725	1.44
0.563	0.625	-10			0.763	1.50	0.787	1.56
0.626	0.687	-11					0.850	1.68
0.688	0.750	-12					0.912	1.81

RIVET NO.	SLEEVE	MATERIAL STEM	LOCK RING	SLEEVE	FINISH STEM	LOCK RING
AF4523P (-)(-)	MONEL	A-286	MONEL	CADMIUM PLATE	PASSIVATE	NONE
NAS1398MW ( )AB ( )	QQ-N-281	AMS5731	QQ-N-281	QQ-P-416	AMS 2700	
AF4523MS (-)(-)	MONEL	A-286	MONEL	SILVER PLATE	PASSIVATE	NONE
NAS1398MS ( )AB ( )	QQ-N-281	AMS5731	QQ-N-281	QQ-S-365	AMS 2700	
AF4523 (-)(-)	MONEL	A-286	MONEL	DRY FILM LUBE	PASSIVATE	NONE
NAS1398M ( )AB ( )	QQ-N-281	AMS5731	QQ-N-281		AMS 2700	
AF4523F (-)(-)	MONEL	A-286	MONEL	ALUM. COAT	PASSIVATE	NONE
	QQ-N-281	AMS5731	QQ-N-281	MIL-C-83488	AMS 2700	
AF4623CW (-)(-)	A-286	A-286	MONEL	CADMIUM PLATE	PASSIVATE	NONE
NAS1398CW ( )AB ( )	AMS5731	AMS5731	QQ-N-281	QQ-S-416	AMS 2700	
AF4623S (-)(-)	A-286	A-286	MONEL	SILVER PLATE	PASSIVATE	NONE
NAS1398CS ( )AB ( )	AMS5731	AMS5731	QQ-N-281	QQ-S-365	AMS 2700	
AF4623 (-)(-)	A-286	A-286	MONEL	DRY FILM LUBE	PASSIVATE	NONE
NAS1398C ( )AB ( )	AMS5731	AMS5731	QQ-N-281		AMS 2700	
AF4623F (-)(-)	A-286	A-286	MONEL	ALUM. COAT	PASSIVATE	NONE
	AMS5731	AMS5731	QQ-N-281	MIL-C-83488	AMS 2700	

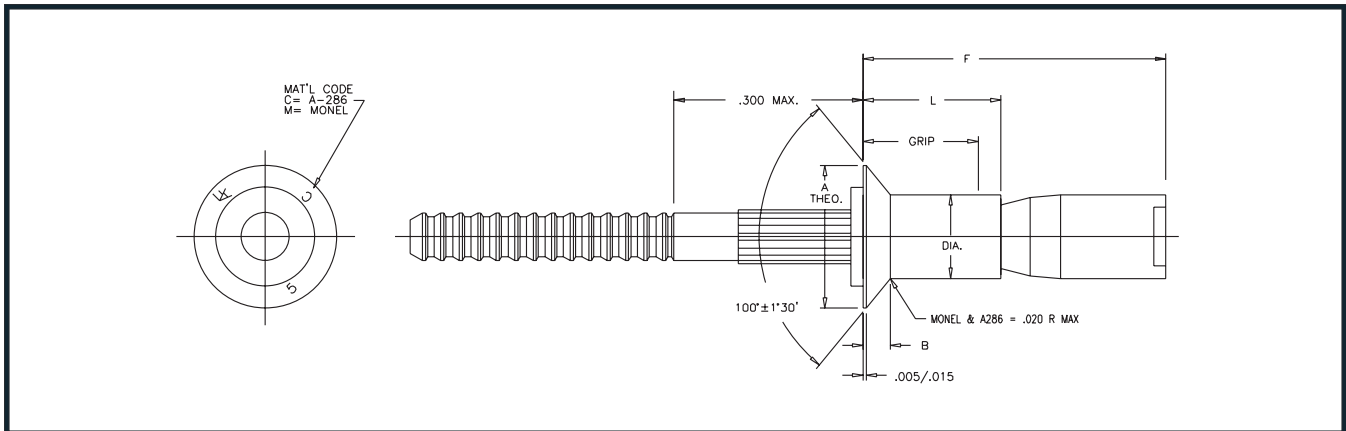
NOTES: 1. MIN GRIP -4 IS .025, -5 IS .031, AND -6 IS .037

Part Number Example: **AF4623 S 6 - 4**

Basic Part Number \_\_\_\_\_  
 Finish Code \_\_\_\_\_  
 Nom. Diameter (1/32") \_\_\_\_\_  
 Grip Length (1/16") \_\_\_\_\_

# "AB" CODE RIVETS

## NAS1399AB - 100° COUNTERSUNK HEAD, LOCKED SPINDLE

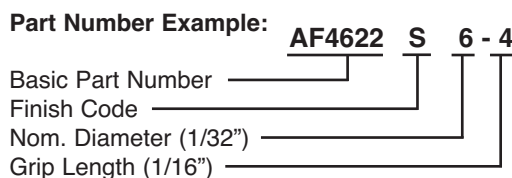


DIA. DASH NO.	DIA. +.003 - .001	A DIA. +/- .010	B DIA. +.010 - .000	HOLE LIMITS	DRILL SIZE NO.
-4	0.125	0.225	0.042	.129 - .132	30
-5	0.156	0.286	0.055	.160 - .164	20
-6	0.187	0.353	0.070	.192 - .196	10

GRIP LIMITS		GRIP DASH NO.	-4 DIA.		-5 DIA.		-6 DIA.	
MIN.	MAX.		L MAX.	F MAX.	L MAX.	F MAX.	L MAX.	F MAX.
0.063	0.125	-02	.250	0.450	0.263	0.44	0.287	0.48
0.126	0.187	-03	.323	0.570	0.326	0.56	0.350	0.50
0.188	0.250	-04	.385	0.690	0.388	0.67	0.412	0.72
0.251	0.312	-05	.448	0.810	0.451	0.79	0.475	0.83
0.313	0.375	-06	.510	0.930	0.513	0.91	0.537	0.95
0.376	0.437	-07	.573	1.05	0.576	1.03	0.600	1.07
0.438	0.500	-08	.635	1.17	0.638	1.15	0.662	1.19
0.501	0.562	-09	.698	1.29	0.701	1.27	0.725	1.31
0.563	0.625	-10			0.763	1.44	0.787	1.48
0.626	0.687	-11					0.850	1.60
0.688	0.750	-12					0.912	1.72

RIVET NO.	SLEEVE	MATERIAL NOTE 1 STEM	LOCK RING	SLEEVE	FINISH STEM	LOCK RING
AF4522P(-)(-)	MONEL	A-286	MONEL	CADMIUM PLATE	PASSIVATE	NONE
NAS1399MW( )AB( )	QQ-N-281	AMS5731	QQ-N-281	QQ-P-416	AMS 2700	
AF4522MS(-)(-)	MONEL	A-286	MONEL	SILVER PLATE	PASSIVATE	NONE
NAS1399MS( )AB( )	QQ-N-281	AMS5731	QQ-N-281	QQ-S-365	AMS 2700	
AF4522(-)(-)	MONEL	A-286	MONEL	DRY FILM LUBE	PASSIVATE	NONE
NAS1399M( )AB( )	QQ-N-281	AMS5731	QQ-N-281		AMS 2700	
AF4522F(-)(-)	MONEL	A-286	MONEL	ALUM. COAT	PASSIVATE	NONE
	QQ-N-281	AMS5731	QQ-N-281	MIL-C-83488	AMS 2700	
AF4622CW(-)(-)	A-286	A-286	MONEL	CADMIUM PLATE	PASSIVATE	NONE
NAS1399CW( )AB( )	AMS5731	AMS5731	QQ-N-281	QQ-S-416	AMS 2700	
AF4622S(-)(-)	A-286	A-286	MONEL	SILVER PLATE	PASSIVATE	NONE
NAS1399CS( )AB( )	AMS5731	AMS5731	QQ-N-281	QQ-S-365	AMS 2700	
AF4622(-)(-)	A-286	A-286	MONEL	DRY FILM LUBE	PASSIVATE	NONE
NAS1399C( )AB( )	AMS5731	AMS5731	QQ-N-281		AMS 2700	
AF4622F(-)(-)	A-286	A-286	MONEL	ALUM. COAT	PASSIVATE	NONE
	AMS5731	AMS5731	QQ-N-281	MIL-C-83488	AMS 2700	

NOTES: 1. MIN GRIP -5 IS .065, AND -6 IS .080

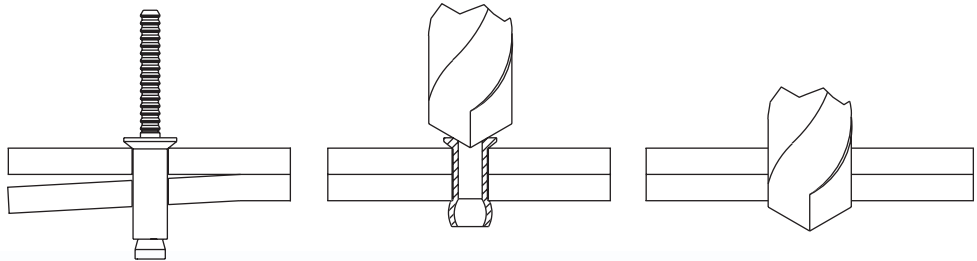


# FASTACK® RIVETS

## FASTACK® BLIND RIVETS When it Absolutely, Positively has to be TIGHT!

### BENEFITS

- Clamps Sheets Securely
- Excellent Sheet Take-Up
- Large Hole Size Tolerance
- Wide Grip Range
- Easily Removed



**The FASTACK®  
Temporary fastener to  
facilitate automated  
riveting assembly**

AF50XX Series



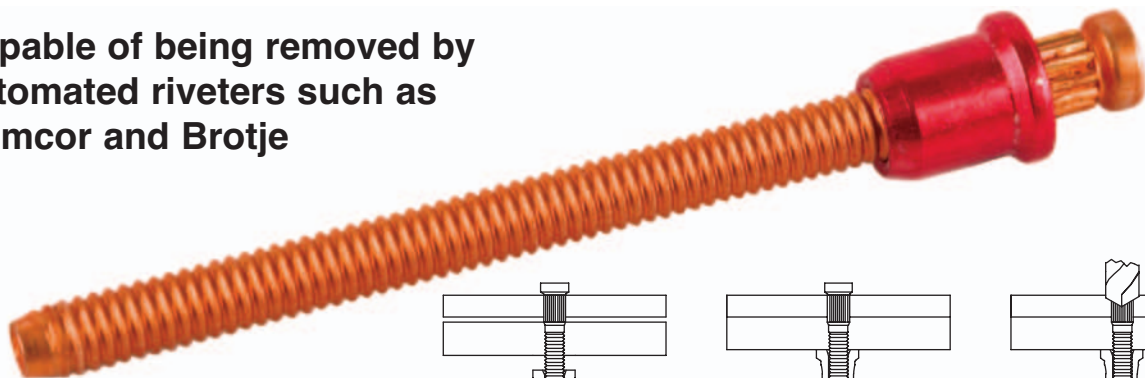
**Airbus & Boeing  
Approved  
S149A020**

Patent #Re 38,664

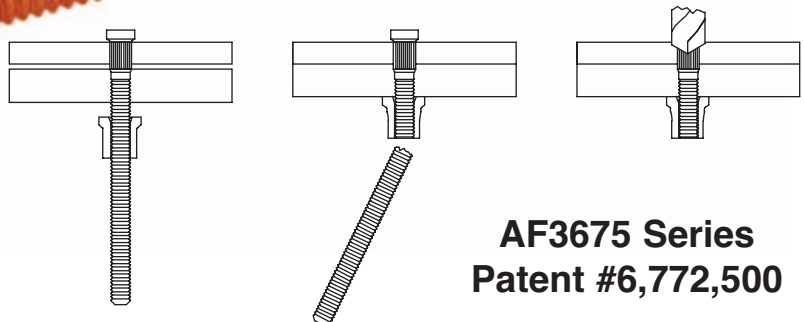
*For more information - see Solid Rivets Section, Page 6.*

## THE TACKBOLT® Temporary Structural Fastener for Automated Assembly

Capable of being removed by  
automated riveters such as  
Gemcor and Brotje



**One Size covers  
a grip of  
.375" to 1.250"**



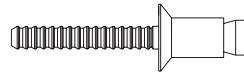
AF3675 Series  
Patent #6,772,500



# NUT PLATE RIVETS

## PULL-THRU & SELF PLUGGING LOCKED SPINDLE

### BASIC PART NO. INTERCHANGEABILITY



#### 100°CSK

#### PULL-THRU

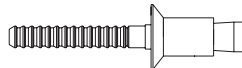
MATERIAL SLEEVE	F STEM	ALLFAST	MS	AIRBUS	BOEING	BELL	CHERRY	MDC	NORTHROP GRUMMAN
A-286	CRES	AF5141	-	ABS0112	BACR15 DR-A	110-195P	CCR264CS	3M949 3D0142	03A081C GR501AC-C
A-286	CRES	AF5141R	MS20605R	-	-	-	-	-	-
DRY FILM LUBE									
A-286	-	-	-	-	BACR15 DR-AC	110-195C	CCR264CS-IPR	-	03A081CW
CAD PLATE (GREEN DYE)	CRES	AF5141-( )C	-	-	-	-	-	-	-
A-286	CRES	AF5141H	MS20605H	-	-	-	-	-	-
CAD PLATE									
A-286	CRES	AF5142	-	-	-	-	CCR244CS	-	-
SHEAR HD.									
STEEL	STEEL	AF5171	-	-	BACR15 DR	-	CCR264SS	-	GR501AC
CAD PLATE									
STEEL	STEEL	AF5171S	MS20605S	-	BACR15 DR	-	-	-	-
CAD PLATE									
STEEL	STEEL	AF5172	-	-	-	-	CCR244SS	-	-
SHEAR HD. CAD PLATE									



#### UNIVERSAL HEAD

#### PULL-THRU

MATERIAL SLEEVE	F STEM	ALLFAST	MS	AIRBUS	BOEING	BELL	CHERRY	MDC	NORTHROP GRUMMAN
A-286	CRES	AF5140	-	-	BACR15 DR-PA	-	CCR274CS	-	03A080C
A-286	CRES	AF5140R	MS20604R	-	-	-	-	-	-
DRY FILM LUBE									
A-286	-	-	-	-	BACR15 DR-PAC	-	CCR274CS-IPR	-	03A080CW
CAD PLATE (GREEN DYE)	CRES	AF5140-( )C	-	-	-	-	-	-	-
A-286	CRES	AF5140H	MS20604H	-	-	-	-	-	-
CAD PLATE									
STEEL	STEEL	AF5170	-	-	BACR15 DR-P	-	CCR274SS	-	-
CAD PLATE									
STEEL	STEEL	AF5170S	MS20604S	-	BACR15 DR-P	-	-	-	-
CAD PLATE CAD PLATE									

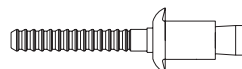


#### 100° CSK SELF PLUGGING

#### NON-SHIFTING TOOLING SYSTEM

#### LOCKED SPINDLE

MATERIAL SLEEVE	STEM	ALLFAST	NAS	BOEING	BELL	CHERRY	LOCKHEED MARTIN	MDC	NORTHROP GRUMMAN	MDH
A-286	CRES	RV1241	NAS1399 C( )A( )	BACR15 GE	-	CR2672	-	ST3M793	-	HS5435



#### UNIVERSAL HEAD SELF PLUGGING

#### NON-SHIFTING TOOLING SYSTEM

#### LOCKED SPINDLE

MATERIAL SLEEVE	STEM	ALLFAST	NAS	BOEING	BELL	CHERRY	LOCKHEED MARTIN	MDC	NORTHROP GRUMMAN	MDH
A-286	A-286	RV1240	NAS1398 C( )A( )	-	-	CR2673	-	-	03A059	-

Other Special Purpose Blind Rivets are available, including oversize diameter and special finishes for improved paint adhesion, and are quoted upon request.

# BLIND RIVET

## INTERCHANGEABILITY LISTING

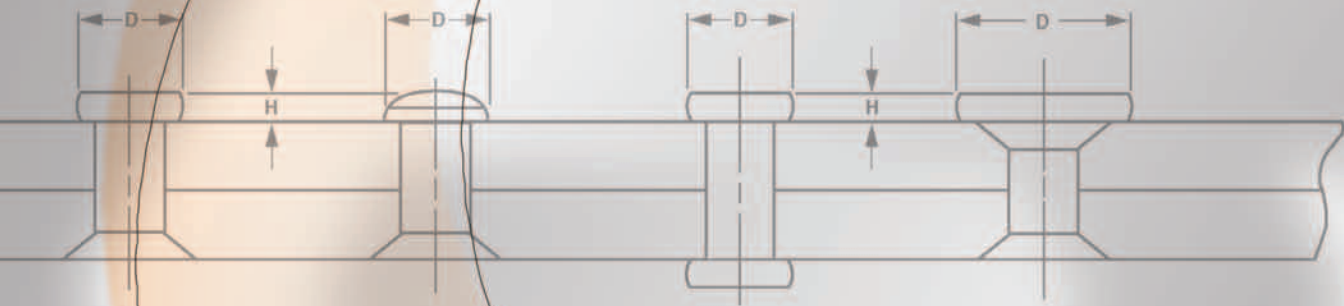
ALLFAST PART NO.	BOEING PART STANDARDS	DESCRIPTION
AF9222	BACR15GM	"SUPERMAX Al/Cres, Nom., Csk Hd"
AF9223	BACR15GL	"SUPERMAX Al/Cres, Nom., Univ Hd"
AF9252	BACR15GK	"SUPERMAX Al/Cres, O/S, Csk Hd"
AF9253	BACR15GJ	"SUPERMAX Al/Cres, O/S, Univ Hd"
AF1241-3	BACR15GE	"Nut Plate Rivet, Locked Stem, Cres"
AF3553P( )B	BACR15FR( )MP( )R	"ALLMAX Monel,Al Coat,O/S,Univ"
AF3553( )B	BACR15FR( )M( )R	"ALLMAX Monel, O/S, Univ Hd"
AF3253( )B	BACR15FR( )E( )R	"ALLMAX Al/Cres, O/S, Univ Hd"
AF3243( )B	BACR15FR( )B( )R	"ALLMAX Al/Stl, O/S, Univ Hd"
AF3552P( )B	BACR15FP( )MP( )R	"ALLMAX Monel,Al Coat,O/S,Csk"
AF3552( )B	BACR15FP( )M( )R	"ALLMAX Monel, O/S, Csk Hd"
AF3252( )B	BACR15FP( )E( )R	"ALLMAX Al/Cres, O/S, Csk Hd"
AF3242( )B	BACR15FP( )B( )R	"ALLMAX Al/Stl, O/S, Csk Hd"
AF5140	BACR15DR( )PA( )	"Pull-thru Nut-Plate Rivet, Cres, Prot Hd"
AF5170	BACR15DR( )P( )	"Pull-thru Nut-Plate Rivet, Stl/Cad, Prot Hd"
AF5141	BACR15DR( )A( )	"Pull-thru Nut-Plate Rivet, Cres, Csk Hd"
AF5171	BACR15DR( )-( )	"Pull-thru Nut-Plate Rivet, Stl/Cad, Csk Hd"
RV651	BACR15DA( )C	Non-structural Blind
RV650	BACR15DA	Non-structural Blind
RV5X	BACR15CF	Blind Spacer Rivet
RV5033	BACR15CD	Blind Spacer Rivet
RV554	BACR15CC	Blind Spacer Rivet

ALLFAST PART NO.	CHERRY P/N	NAS P/N	MILITARY P/N	1/	ALLFAST PART NO.	CHERRY P/N	NAS P/N	MILITARY P/N
AF5142	CCR244CS	-	-		RV1240	CR2673	NAS1398C( )A	-
AF5172	CCR244SS	-	-		RV1240W	CR2673CW	NAS1398CW( )A	-
AF5141	CCR264CS	-	-	2/	AF2481	CR2838	NAS1739C	-
AF5171	CCR264SS	-	-	2/	AF2481W	CR2838CW	NAS1739CW	-
AF5140	CCR274CS	-	-	2/	AF2480	CR2839	NAS1738C	-
AF5170	CCR274SS	-	-	2/	AF2480W	CR2839CW	NAS1738CW	-
AFM5141	CMR264CS	-	-		AF2495	CR2845	-	-
AFM5171	CMR264SS	-	-		AF3212	CR3212	NAS9302B	M7885/3
AFM5140	CMR274CS	-	-		AF3213	CR3213	NAS9301B	M7885/2
AFM5170	CMR274SS	-	-		AF3214	CR3214	NAS9303B	M7885/27
AF2001	CR2162	NAS1399D	-		AF3222	CR3222	NAS9302E	M7885/12
AF2000	CR2163	NAS1398D	-		AF3223	CR3223	NAS9301E	M7885/11
AF2004	CR2164	-	-		AF3224	CR3224	NAS9303E	M7885/13
RV1201	CR2172	NAS1399D( )A	-		AF3242	CR3242	NAS9305B	M7885/7
RV1200	CR2173	NAS1398D( )A	-		AF3243	CR3243	NAS9304B	M7885/6
AF2555	CR2235	-	-		AF3245	CR3245	NAS9306B	M7885/28
AF2551	CR2238	NAS1739E	-		AF3252	CR3252	NAS9305E	M7885/15
AF2550	CR2239	NAS1738E	-		AF3253	CR3253	NAS9304E	M7885/14
AF2255	CR2245	-	-		AF3255	CR3255	NAS9306E	M7885/16
AF2251	CR2248	NAS1739B	-		AF3522	CR3522	NAS9308M	M7885/5
AF2250	CR2249	NAS1738B	-		AF3522F		NAS9308ML	
AF2051	CR2262	NAS1399B	-		AF3522P	CR3522P	NAS9308MN	M7885/18
AF2050	CR2263	NAS1398B	-		AF3523	CR3523	NAS9307M	M7885/4
AF2291	CR2538	NAS1739M	-		AF3523F		NAS9307ML	
AF2291W	CR2538P	NAS1739MW	-		AF3523P	CR3523P	NAS9307MN	M7885/17
AF2290	CR2539	NAS1738M	-		AF3524	CR3524	NAS9309M	M7885/19
AF2290W	CR2539P	NAS1738MW	-		AF3524F		NAS9309ML	
AF2295	CR2545	-	-		AF3524P	CR3524P	NAS9309MN	M7885/20
AF2091W	CR2562	NAS1399MW	-		AF3552	CR3552	NAS9311M	M7885/9
AF2091	CR2562M	NAS1399M	-		AF3552F		NAS9311ML	
AF2091S	CR2562S	NAS1399MS	-		AF3552P	CR3552P	NAS9311MN	M7885/23
AF2090W	CR2563	NAS1398MW	-		AF3553	CR3553	NAS9310M	M7885/8
AF2090	CR2563M	NAS1398M	-		AF3553F		NAS9310ML	
AF2090S	CR2563S	NAS1398MS	-		AF3553P	CR3553P	NAS9310MN	M7885/21
AF2094W	CR2564	-	-		AF3555	CR3555	NAS9312M	M7885/25
AF2094	CR2564M	-	-		AF3522F		NAS9312ML	
RV1291M	CR2572	NAS1399M( )A	-		AF3555P	CR3555P	NAS9312MN	M7885/26
RV1291	CR2572P	NAS1399MW( )A	-		AF4523	CR4523	NAS1398M( )AB( )	-
RV1291MS	CR2572S	NAS1399MS( )A	-		AF4523P	CR4523P	NAS1398MW( )AB( )	-
RV1290M	CR2573	NAS1398M( )A	-		AF4623	CR4623	NAS1398C( )AB( )	-
RV1290	CR2573P	NAS1398MW( )A	-		AF4623CW	CR4623CW	NAS1398CW( )AB( )	-
RV1290MS	CR2573S	NAS1398MS( )A	-		AF4522	CR4522	NAS1399M( )AB( )	-
AF2641	CR2642	-	-		AF4522PV	CR4522P	NAS1399MW( )AB( )	-
AF2640	CR2643	-	-		AF4622	CR4622	NAS1399C( )AB( )	-
AF2041	CR2662	NAS1399C	-		AF4622CW	CR4622CW	NAS1399CW( )AB( )	-
AF2041W	CR2662CW	NAS1399CW	-		AF9252	CR6252	-	-
AF2040	CR2663	NAS1398C	-		AF9253	CR6253	-	-
AF2040W	CR2663CW	NAS1398CW	-					
AF2044	CR2664	-	-					
AF2044W	CR2664CW	-	-					
RV1241	CR2672	NAS1399C( )A	-					
RV1241W	CR2672CW	NAS1399CW( )A	-					

NOTES:

1. Rivets are identical in form, fit and function including tooling.
2. ALLFAST nut plate rivets are covered by MS20604 & MS20605 standards

# SOLID RIVETS



# ALLFAST

# SOLID RIVETS



**Allfast offers a variety of solid rivets  
for a wide range of applications**

## COMPOSITE RIVET

- Titanium semi tubular rivets
- Provides double flushness on trailing edges

## SKIN RIVET

- Improved flushness
- Elimination of halos/eyebrows
- No shaving required
- SPC controlled head and protrusion

## WING RIVET

- Wing rivet
- Fluid tight
- High fatigue life

## BRILES RIVET®

- Improved fatigue life
- Best results in thin sheet applications  
self sealing design
- The best fuselage rivets
- No shaving required

## COATED SOLID RIVET

- Eliminates wet sealant
- Improved fatigue life
- Improved cycle time
- Eliminates costly disposal of sealant
- Huge cost savings

## UNIVERSAL HEAD RIVET

- Structural rivet
- Used in non-air flow areas

**ALLFAST**  
FASTENING SYSTEMS, INC.



**SOLID RIVET SELECTIONS**

PAGE

**Popular Configurations & Materials**

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Specialty, Protruding & Fuel Sealing Styles .....	3

**“PREMIUM” SOLID RIVETS****Benefits of Using “Premium” Solid Rivets**

Configuration & Ductility Controls .....	4
Industry Standards Critique .....	5

**AUTOMATED RIVETING WITH FASTACK®****Cost Savings Opportunities for Automated Solid Riveting**

ALLFAST FASTACK® Blind Rivet System Features & Benefits .....	6 & 7
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**SOLID RIVET WEIGHT TABLES - Pieces per Pound****Flush 100° Countersunk Head**

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**Flush Shear Head Types**

MS14218, MS14219, NAS1097 & Similar Head Styles .....	9
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**Protruding Head & Fuel Sealing Rivets**

MS20470, BACR15FT. BACR15FH/GH & NAS1321 .....	10
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


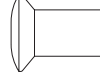
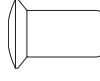








**SOLID RIVETS**

Finishes & Shear Strength .....	11
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Installation Recommendations .....	12
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# SOLID RIVETS

## POPULAR CONFIGURATIONS & MATERIALS

MATERIAL CODE & IDENTIFICATION MARKING	1 ALLOY & DRIVEN SHEAR STRENGTH (MINIMUM)	Flush Head Rivets				
					2 Crown Flush Rivets	
		100° CSK	100° SHEAR CSK	DOMED 100° CSK		
A NO MARK	1100 NO MINIMUM 11 KSI TYPICAL	132370A BACR15BA( )A MS20426A	AF148( )A	AF1063A B0205017A	-	-
B  RAISED CROSS	5056-H32 3/ 28 KSI	132370B BACR15BA( )B MS20426B NAS9313B	132368B BACR15CE( )B NAS1097B NAS9314B	-	AF139B S4579429B	AF138B S4579428B
AD  DIMPLE	2117-T3 30 KSI	132370AD BACR15BA( )AD MS20426AD NAS9313AD ASNA2051AD	132368AD B0205018AD BACR15CE( )AD NAS1097AD NAS9314AD	AF1063AD B0205017AD	AF139AD S4579429AD	AF138AD S4579428AD
D  RAISED DOT	2017-T31 4/ 34 KSI 3/ 2017-T3 38 KSI 3/	132370D BACR15BA( )D MS20426D NAS9313D ASNA2051D	132368D B0205018D BACR15CE( )D BACR15GF( )D NAS1097D NAS9314D	AF1063D B0205017D	AF139D S4579429D	AF138D S4579428D
DD  RAISED DASHES	2024-T31 41 KSI 3/	132370DD BACR15BA( )DD MS20426DD NAS9313DD	132368DD B0205018DD BACR15CE( )DD NAS1097DD NAS9314DD	AF1063DD B0205017DD	AF139DD S4579429DD	AF138DD S4579428DD
KE or E  RAISED CIRCLE or DEPRESSED	7050-T73 41 KSI 3/	132370E BACR15BA( )KE GAR501E MS20426E NAS9313KE ASNA2051KE	132368KE B0205018KE BACR15CE( )KE GAR501D NAS1097KE NAS9314KE	AF1063KE B0205017KE	AF190 S00448	AF189 S00447
M  2 RAISED DOTS	MONEL 49 KSI	AF1064M MS20427M MS9318	BACR15CE( )M AF1066M NAS1200M	-	AF184 S4579431M	AF183 S4579430M
T or U  RECESSED DIAMOND	TITANIUM COLUMBIUM 53 KSI	ABS0214 MS20426T NAS9313T	ABS0218 NAS1097U NAS9314T	AF1063T B0205017T	-	-
(-)  RAISED DOT	A-286 Cres 90 KSI	AF1064C NAS1199	AF1066C NAS1200	-	-	-

1. DESIGN INFORMATION. FOR RIVET INSPECTION VALUES (UNDRIVEN) SEE APPLICABLE PROCUREMENT SPECIFICATION.

2. PATENT NO. 4,004,484



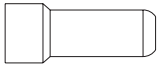
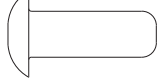
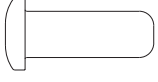








3. MIL-HDBK-5 TABLE 8.1.2(b) VALUE.

4. 2017-T31 IS ACHIEVED BY DRIVING IN SOLUTION TREATED CONDITION WITH SUBSEQUENT NATURAL AGING.

CONTACT ALLFAST FOR OTHER MATERIALS, STYLES, OR COMPANY STANDARDS NOT SHOWN.

# SOLID RIVETS

## POPULAR CONFIGURATIONS & MATERIALS

MATERIAL CODE & IDENTIFICATION MARKING	1 ALLOY & DRIVEN SHEAR STRENGTH (MINIMUM)	Shear 2,5	Tension 2,5	Protruding		
		 120° CSK W/ C'BORE	 120° W/ C'BORE	 INDEX HEAD	 UNIVERSAL	 MODIFIED UNIVERSAL
A NO MARK	1100 NO MINIMUM 11 KSI TYPICAL	-	-	-	132369A BACR15BB( )A MS20470A	BACR15FT( )A
B  RAISED CROSS	5056-H32 3/ 28 KSI	MS14218B BRFZB PE26118B	MS14219B BRFRB PE26119B	- - -	132369B BACR15BB( )B MS20470B 3D0272B	-
AD  DIMPLE	2117-T3 30 KSI	MS14218AD BRFZAD PE23118AD	MS14219AD BRFZAD PE23119AD	B0205021AD BACR15FH( )AD	132369AD AF2034AD B0205016AD BACR15BB( )AD 3D0272AD MS20470AD	BACR15FT( )AD
D  RAISED DOT	2017-T31 4/ 34 KSI 3/ 2017-T3 38 KSI 3/	MS14218D BRFZD PE26118D	MS14219D BRFZD PE26119D	-	132369D AF2034D BACR15BB( )D MS20470D ASNA2050D	BACR15FT( )D
DD  RAISED DASHES	2024-T31 41 KSI 3/	-	-	B0205021DD BACR15FH( )DD	132369DD AF2034DD B0205016DD BACR15BB( )DD MS20470DD	BACR15FT( )DD
KE or E  RAISED CIRCLE or DEPRESSED	7050-T73 41 KSI 3/	PE26118E BACR15FV( )KE MS14218E BRFZE 3D0274E	PE26119E MS14219E BRFRE 3D0275E	B0205021KE BACR15FH( )KE BACR15GH( )KE	ASNA2050E 132369E AF2034KE B0205016KE GAR501F MS20470E 3D0272E	BACR15FT( )KE
M  2 RAISED DOTS	MONEL 49 KSI	-	-	-	AF2034M MS20615( )M	-
T or U  RECESSED DIAMOND	TITANIUM COLUMBIUM 53 KSI	MS14218T BRFZT	MS14219T BRFRT	-	AF2034T MS20470T ABS0326	-
(-)  RAISED DOT	A-286 Cres 90 KSI	-	-	-	AF2034C NAS1198	-

- DESIGN INFORMATION. FOR RIVET INSPECTION VALUES (UNDRIVEN) SEE APPLICABLE PROCUREMENT SPECIFICATION.
- PATENT NO. 5,671,521 AND 5,680,690
- MIL-HDBK-5 TABLE 8.1.2(b) VALUE.
- 2017-T31 IS ACHIEVED BY DRIVING IN SOLUTION TREATED CONDITION WITH SUBSEQUENT NATURAL AGING.
- AVAILABLE IN OVERSIZE DIAMETERS UPON REQUEST.

CONTACT ALLFAST FOR OTHER MATERIALS, STYLES, OR COMPANY STANDARDS NOT SHOWN.

# PREMIUM RIVETS

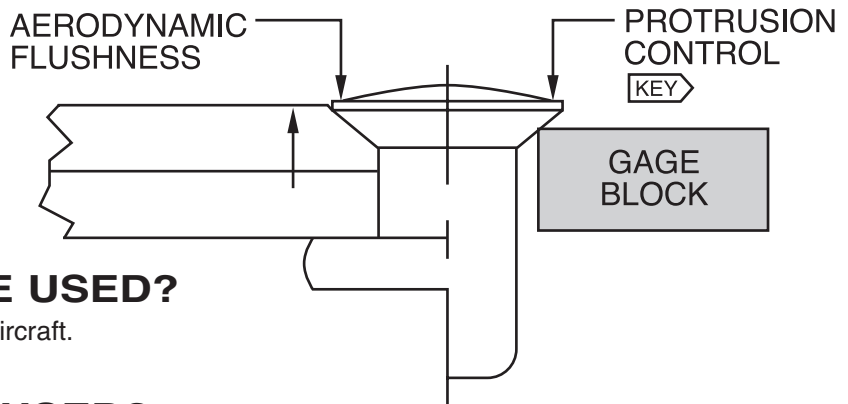
## The 5 commonly asked questions about our ALLFAST Premium Rivets

### WHAT IS A PREMIUM RIVET?

- Minimum variation of protrusion from lot to lot.
- Minimum variation of head diameter.
- "Crack-free" driving.
- Uniform heat treatment and upset diameter.
- Trouble free automatic riveter feeding.

### WHY USE IT?

- Cost savings.
- Reduced rework.
- Reduced flow time.
- Improved quality.
- Cosmetic appearance.



### WHERE SHOULD IT BE USED?

- Critical aerodynamic surfaces of aircraft.

### WHEN SHOULD IT BE USED?

- To improve quality, reduce cost and increase production.

### HOW DID YOU DO IT?

- Through a commitment to defect prevention due to in-process controls rather than end product defect detection.

## Hidden Cost of Rework

### Cost Savings Case Study • Aircraft Fuselage Panel Application Automated Rivet Installation - per 1,000 Rivets

COST	STANDARD RIVETS	ALLFAST PREMIUM RIVETS
LABOR	\$ 166.67 @10 per MIN - \$100 RATE	\$ 166.67 @10 per MIN - \$100 RATE
FASTENERS	\$ 4.75 1,000 PCS @ \$7.38/POUND NAS1097AD5-5 1548 PCS PER POUND	\$ 8.13 1,000 PCS @ \$12.59/POUND NAS9314AD5-5 1548 PCS PER POUND
INSPECTION	\$ 166.67 @10 per MIN - \$100 RATE	\$ 111.11 @15 per MIN - \$100 RATE
REWORK	\$ 115.00 @6% REWORK @1.15 MINUTES / RIVET	\$ 19.17 @1% REWORK @1.15 MINUTES / RIVET
<b>TOTALS</b>	<b>\$ 453.09</b>	<b>\$ 305.08</b>

**COST SAVINGS = 33%**

#### FLOW TIME

ASSEMBLY	1.7 HOURS	1.7 HOURS
INSPECTION	1.6 HOURS	1.1 HOURS
REWORK	1.2 HOURS	.3 HOURS
<b>TOTALS</b>	<b>4.5 HOURS</b>	<b>3.1 HOURS</b>

**CYCLE TIME REDUCTION = 31%**



# PREMIUM RIVETS

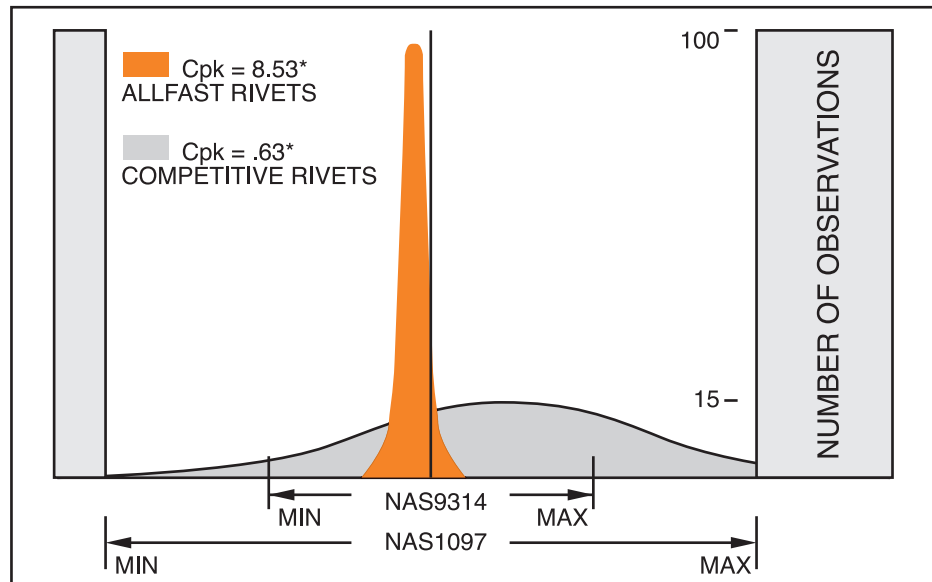
## How ALLFAST made a Mountain out of a Molehill

*"Allfast took the initiative, and with the cooperation of Bombardier de Havilland, set another industry standard by seeing a need and filling it with the NAS9313 and the NAS9314."*

- James Randall  
CEO and President,  
ALLFAST FASTENING SYSTEMS

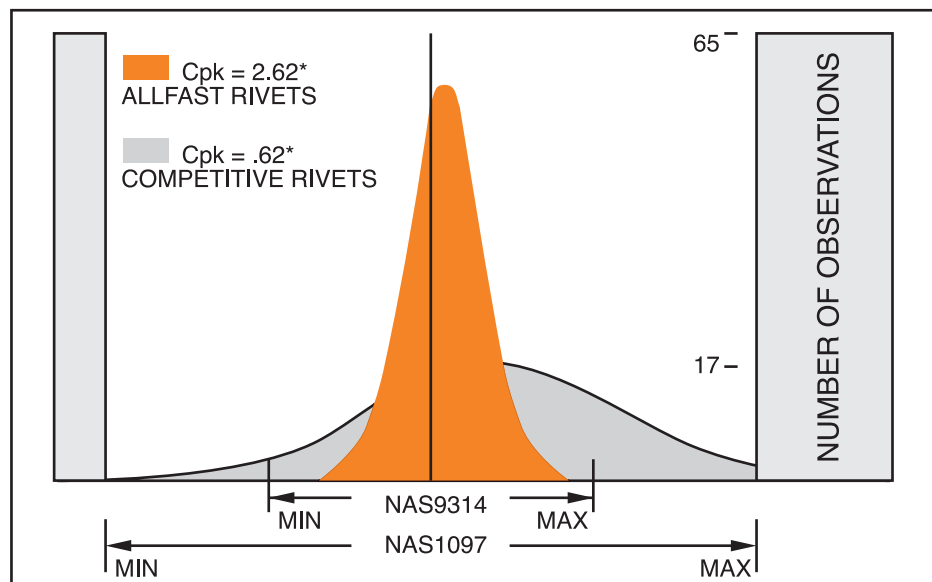
**Allfast  
is the  
Leader  
in  
Premium  
Rivets**

### Head Protrusion NAS 1097AD5-X



Typical aerodynamics flushness: + 0.002 to 0.005 = 0.003" range  
 NAS1097-5 allowable variation: ± 0.0018 = 0.0036" range\*  
 NAS9314-5 allowable variation: ± 0.0009 = 0.0018" range  
 SPC requirement assures high Cpk due to centered manufacturing process and the use of Trulok Gage System.

### Actual Head Diameter NAS 1097AD5-X



Notes.  
 Composite histogram consisting of six lots: NAS1097AD5-(X) from three competitive manufacturers. (Total 180 tests)  
 Composite histogram consisting of six lots: ALLFAST NAS9314AD5-(X) rivets. (Total 180 tests)

# FASTACK® RIVETS

## **FASTACK® the Temporary Fastener to Facilitate AUTOMATED Fastening Assembly**

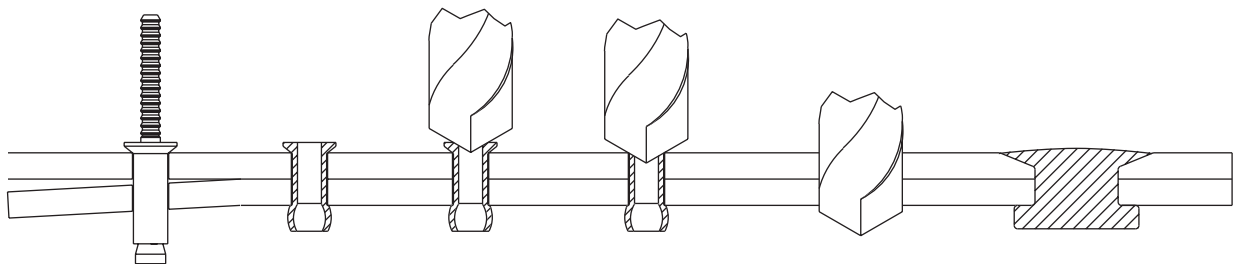
When it needs to be tacked securely, drilled out with confidence and installed with permanent fasteners, you need the **ALLFAST FASTACK® AF50XX**

**APPROVED BY:**  
**AIRBUS - BOEING**  
**BOMBARDIER - CANADAIR**  
**EMBRAER - KAWASAKI**  
**MITSUBISHI - NORTHROP GRUMMAN**

## **No Rework...**

The **ALLFAST FASTACK®** eliminates the need for cutting collars, punching out, opening holes and installing manually.

### **Installation Sequence**

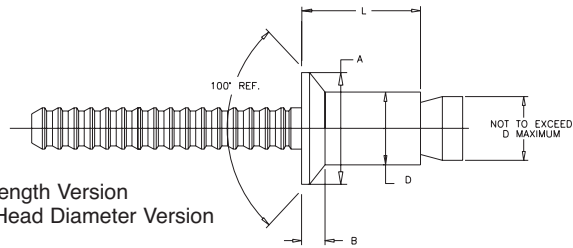
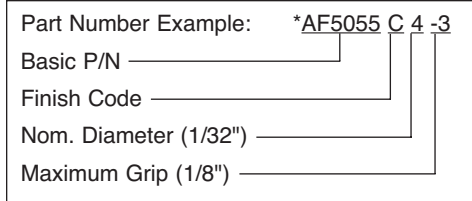


**Best of All, NO SPINNERS!**

# FASTACK® RIVETS

## THE CHALLENGE: Cost & Cycle Time Reduction

Get the competitive edge, the **ALLFAST FASTACK®** meets and exceeds this challenge.



\*AF5075 Higher Strength Version  
\*AF5022 Reduced Head Diameter Version

DIA. DASH NO.	5055/5075		AF5022		D SHANK DIA.	5055 MIN. STRENGTH		5075/5022 MIN. STRENGTH			INSTALLATION HOLE SIZE	PERMANENT FASTENER DIA.	
	A HEAD DIA.	A HEAD DIA.	B HEAD HEIGHT	(LBS.)		(LBS.)	(LBS.)	5075	5022	(LBS.)		MIN	SIZE
-3	.123/.133	-	.032/.040	.092/.097	63	87	-	-	-	.098/.114	5/32	0.1640	
-4	.165/.175	.155/.145	.038/.046	.123/.128	113	150	290	390	275	.1285/.1436	3/16	0.1900	
-5	.207/.217	.185/.175	.051/.059	.154/.159	186	230	455	560	385	.161/.175	1/4	0.2500	
-6	.251/.261	.215/.205	.066/.074	.185/.190	250	375	655	805	610	.191/.205	9/32	0.2810	
-8	.335/.345	-	.091/.099	.249/.254	450	650	1335	1585	-	.257/.272	3/8	0.3750	

GRIP LIMITS		GRIP DASH NO.	L MAX -3 DIA.	L MAX -4 DIA.	L MAX -5 DIA.	L MAX -6 DIA.	L MAX -8 DIA.
MIN	MAX						
1/	0.125	-1	0.226	0.261	0.297	0.327	0.393
0.126	0.250	-2	0.351	0.386	0.422	0.452	0.518
0.251	0.375	-3	0.476	0.511	0.547	0.577	0.643
0.376	0.500	-4	0.601	0.636	0.672	0.702	0.768
0.501	0.625	-5	0.726	0.761	0.797	0.827	0.893
0.626	0.750	-6	-	0.886	0.922	0.952	1.018
0.751	0.875	-7	-	-	1.047	1.077	1.143
0.876	1.000	-8	-	-	-	1.202	1.268
1.001	1.125	-9	-	-	-	-	1.393
1.126	1.250	-10	-	-	-	-	1.518

1/ min grip: -3 (.030), -4 (0.31), -5 & larger (.063)

**Material:** Sleeve - Aluminum, Stem - Mild Steel or Stainless Steel

**Finish:**  
Code C: Sleeve - Clear Chem Film, Stem - Rust Preventative or Passivated  
No Code: Sleeve - Dyed Red, Stem - Rust Preventative or Passivated

### Cost Savings Case Study - Aircraft Wing Application Automated Solid Rivet Installation - Lockbolt Temporary Fasteners

COST	CURRENT METHOD	ALLFAST FASTACK®
LABOR	\$ 1,600 16 HOURS @ \$100	\$ 1,600 16 HOURS @ \$100
FASTENERS	\$ 1,250 1,000 @ \$1.25	\$ 250 1,000 @ \$.25
REWORK	\$ 400 4 HOURS @ \$100	
<b>TOTALS</b>	<b>\$ 3,250</b>	<b>\$ 1850</b>

COST SAVINGS = 43%

FLOW TIME	CURRENT METHOD	ALLFAST FASTACK®
ASSEMBLY	16 HOURS	16 HOURS
REWORK	4 HOURS	
<b>TOTALS</b>	<b>20 HOURS</b>	<b>16 HOURS</b>

CYCLE TIME REDUCTION = 25%

**FASTACK® Rivet installed with light weight RV51GA Allfast/Olympic Riveter.**

# SOLID RIVETS

## SOLID RIVET WEIGHT TABLES - PIECES PER POUND

### MS20426 STYLE 100° COUNTERSUNK HEAD RIVETS

DENSITY CORRECTION FACTORS				All Tables based on AD Aluminum alloy (multiply table value by correction factor)											
ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR
NAS	MS			NAS	MS			NAS	MS			NAS	MS		
A	A	1100 ALUM	1.010	B	B	5056 ALUM	1.042	M	M	MONEL	0.319	U	T	TI-COLUMBIUM	0.467
D	D	2017 ALUM	0.980	KE	E	7050 ALUM	0.971	-	F	300 SERIES CRES	0.341	-	-	-	-
DD	DD	2024 ALUM	0.980	-	-	-	-	-	-	-	-	-	-	-	-
AD	AD	2117 ALUM	1.000	C	C	A-286 CRES	0.346	-	-	-	-	-	-	-	-

#### 100° CSK FLAT HEAD

#### MS20426, BACR15BA, MS20427, NAS1199, NAS9313

(USE APPROPRIATE DENSITY CORRECTION FACTOR)

132370, 3M1292/4, ABS0214, GAR501E

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36	
	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	2.250	
2	1/16	22230	15633	12055	9810	8270	7148	6294	5622	5080	4633	4259	3666	3218	2868	2586	-	-	-	-	-
3	3/32	8722	6353	4996	4116	3500	3045	2694	2416	2190	2002	1844	1593	1402	1252	1131	1031	948	-	-	-
4	1/8	-	-	2813	2318	1971	1715	1517	1360	1233	1127	1039	897	790	705	637	581	534	459	403	359
5	5/32	-	-	1713	1424	1219	1065	946	851	773	708	654	566	499	447	404	369	339	292	257	229
6	3/16	-	-	1113	936	807	710	634	572	521	479	443	385	340	305	276	253	233	201	177	158
7	7/32	-	-	-	656	569	502	450	407	372	342	317	276	245	220	199	182	168	145	128	114
8	1/4	-	-	-	-	423	375	336	305	279	257	239	209	185	166	151	138	128	111	97	87
10	5/16	-	-	-	-	273	242	217	197	180	166	154	134	119	107	97	89	82	71	63	56
12	3/8	-	-	-	-	175	157	142	129	119	110	102	90	80	72	65	60	56	48	43	38
14	7/16	-	-	-	-	-	110	100	91	84	78	73	64	57	52	47	43	40	35	31	28

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT

Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

#### 100° CSK CROWNED HEAD

#### AF1063, and B020517

(USE APPROPRIATE DENSITY CORRECTION FACTOR)

US Patent # 5,580,202

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36	
	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	2.250	
2	1/16	21747	15393	11912	9715	8202	7097	6255	5591	5054	4612	4241	3653	3208	2859	-	-	-	-	-	-
3	3/32	8554	6263	4940	4079	3473	3024	2678	2403	2179	1993	1837	1587	1398	1248	1128	1029	946	-	-	-
4	1/8	-	-	2781	2296	1955	1703	1508	1353	1227	1122	1034	894	787	703	635	579	532	458	402	359
5	5/32	-	-	1689	1408	1207	1056	939	845	768	704	650	564	497	445	403	368	338	292	256	229
6	3/16	-	-	1099	926	800	704	629	568	518	476	441	383	339	304	276	252	232	200	176	158
7	7/32	-	-	-	649	564	498	446	404	370	340	315	275	244	219	189	182	168	145	128	114
8	1/4	-	-	-	-	419	372	334	303	278	256	238	208	184	166	151	138	127	110	97	87
10	5/16	-	-	-	-	270	240	215	195	179	165	153	134	119	107	97	89	82	71	63	56
12	3/8	-	-	-	-	155	140	128	118	109	101	89	79	72	65	60	55	48	43	38	38

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT

Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

#### 100° CSK CROWN SHEAR HEAD

#### NAS1097, NAS9314, BACR15CE, BACR15DS, BACR15GF

(USE APPROPRIATE DENSITY CORRECTION FACTOR)

ABS0218, 132368, B0205018, GAR501D

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36	
	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	2.250	
3	3/32	10440	8208	5505	4452	3738	3221	2829	2523	2276	2074	1904	1,636	1,435	1,277	1,151	1,048	961	-	-	-
4	1/8	-	3951	3028	2455	2064	1780	1565	1397	1261	1149	1055	908	796	709	639	582	534	-	-	-
5	5/32	-	-	1900	1548	1306	1129	995	889	803	733	674	580	509	454	409	373	342	-	-	-
6	3/16	-	-	1297	1061	897	778	686	614	555	507	466	402	353	315	284	259	238	204	179	160
7	7/32	-	-	956	780	658	569	501	448	405	369	340	292	257	229	206	188	173	148	130	116
8	1/4	-	-	-	578	491	427	378	338	307	280	258	223	196	175	158	144	132	114	100	89
9	9/32	-	-	-	-	389	337	298	267	241	221	203	175	154	137	124	113	104	89	78	70
10	3/8	-	-	-	-	310	270	240	215	195	178	164	142	125	112	101	92	85	73	64	57

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT

Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

#### 100° CSK CROWN FLUSH HEAD

#### AF139, AF184, AF190, S4579429, S4579431, S00448

(USE APPROPRIATE DENSITY CORRECTION FACTOR)

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36	
	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	2.250	
3	3/32	9451	6764	5267	4312	3651	3165	2793	2500	2262	2066	1901	1639	1440	1285	-	-	-	-	-	-
4	1/8	-	3720	2901	2377	2014	1747	1542	1380	1249	1141	1050	906	796	710	641	584	537	461	405	-
5	5/32	-	-	1769	1463	1247	1087	963	865	784	718	662	572	504	450	407	371	341	294	258	230
6	3/16	-	-	827	963	827	725	646	582	530	486	449	389	344	308	279	255	234	202	178	159
7	7/32	-	-	-	757	645	561	497	446	404	370	340	294	259	231	209	191	175	151	132	118
8	1/4	-	-	-	-	433	383	343	310	284	261	242	211	187	168	152	139	129	111	98	88

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT

Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

SOLID RIVET WEIGHT TABLES



# SOLID RIVETS

## SOLID RIVET WEIGHT TABLES - PIECES PER POUND

### FLUSH SHEAR HEAD RIVETS

DENSITY CORRECTION FACTORS				All Tables based on AD Aluminum alloy (multiply table value by correction factor)											
ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR
NAS	MS			NAS	MS			NAS	MS			NAS	MS		
A	A	1100 ALUM	1.010	B	B	5056 ALUM	1.042	M	M	MONEL	0.319	U	T	TI-COLUMBIUM	0.467
D	D	2017 ALUM	0.980	KE	E	7050 ALUM	0.971								
DD	DD	2024 ALUM	0.980	-	F	300 SERIES CRES	0.341								
AD	AD	2117 ALUM	1.000	C	C	A-286 CRES	0.346								

### 100° CSK FLAT SHEAR HEAD

### NAS1200, NAS1200M

(USE APPROPRIATE DENSITY CORRECTION FACTOR)

All Cres rivets per NAS1200 are square ended.

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36	
	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	2.250	
3	3/32	10626	7321	5584	4513	3787	3262	2865	2554	2304	2099	1927	1656	1452	1292	1164	1060	972	834	731	650
4	1/8	-	4038	3097	2511	2112	1822	1602	1429	1290	1176	1080	929	815	726	654	596	547	469	411	356
5	5/32	-	-	1940	1580	1333	1152	1015	907	819	747	687	592	519	463	417	380	349	300	263	234
6	3/16	-	-	1305	1069	905	785	693	621	562	513	472	407	358	319	288	263	241	207	182	162
8	1/4	-	-	-	585	497	432	382	342	310	284	261	226	198	177	160	146	134	115	101	90

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT

Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

### 100° CSK CROWN FLUSH SHEAR HEAD

### AF138, AF183, AF189, S4579428, S4579430, S00447

(USE APPROPRIATE DENSITY CORRECTION FACTOR)

US Patent # 4,004,484 - McDonnell Douglas

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36	
	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	2.250	
3	3/32	10459	7217	5510	4456	3740	3223	2831	2524	2277	2074	1905	1637	1435	1278	1151	1048	961	825	723	643
4	1/8	-	4063	3105	2513	2110	1819	1598	1425	1286	1172	1076	925	811	722	651	592	543	466	408	363
5	5/32	-	-	1951	1585	1335	1153	1015	906	818	746	686	590	518	461	416	379	347	298	262	233
6	3/16	-	-	1317	1076	910	788	695	622	562	513	472	407	357	319	288	262	241	207	181	161
7	7/32	-	-	1004	814	684	590	519	463	418	381	350	301	264	235	212	193	177	152	133	118
8	1/4	-	-	-	589	500	434	383	343	311	284	261	226	198	177	160	146	134	115	101	90

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT

Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

### 120° CSK / SHEAR HEAD

### BRFZ, BACR15FV and MS14218

(USE APPROPRIATE DENSITY CORRECTION FACTOR)

\*BACR15FV not available in 3 diameter

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	26	28	30	32	
	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000	
3*	3/32	7233	5519	4462	3744	3226	2833	2526	2279	2076	1906	1638	1436	1278	1152	1048	962	888	825	771	723
4	1/8	4024	3082	2498	2100	1811	1592	1420	1282	1168	1073	923	809	721	650	591	543	501	466	435	408
5	5/32	2493	1926	1568	1323	1144	1008	900	814	742	682	588	516	460	415	378	347	320	298	298	261
6	3/16	-	1302	1066	903	783	691	618	559	511	470	405	356	318	287	261	240	222	206	193	181
7	7/32	-	891	734	624	543	481	431	391	357	329	284	250	223	202	184	169	156	146	136	126
8	1/4	-	-	563	481	420	372	334	304	278	256	222	195	175	158	144	133	123	114	107	100
9	9/32	-	-	-	370	324	287	259	235	215	199	172	152	136	123	112	103	95	89	83	78
10	5/16	-	-	-	299	263	234	211	192	176	163	141	125	112	101	92	85	79	73	69	65

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT

Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

### 120° TENSION HEAD

### BRFR and MS14219

(USE APPROPRIATE DENSITY CORRECTION FACTOR)

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	26	28	30	32	
	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000	
3	3/32	5977	4757	3952	3378	2949	2617	2353	2138	1858	1806	1563	1378	1232	1115	1017	935	865	806	754	708
4	1/8	3210	2580	2158	1854	1625	1592	1303	1186	1088	1005	872	770	690	624	570	525	485	452	423	397
5	5/32	1972	1600	1345	1160	1020	911	821	749	688	636	554	489	438	397	363	334	309	288	270	254
6	3/16	-	1039	844	768	680	609	552	504	465	430	375	333	299	272	248	229	213	198	186	175
7	7/32	-	730	621	540	478	430	389	356	328	304	265	235	211	192	176	162	150	143	132	122
8	1/4	-	-	432	382	342	310	283	261	242	225	198	176	160	145	134	124	115	107	101	95
9	9/32	-	-	-	307	275	248	227	208	192	179	157	140	126	115	105	97	90	85	79	75
10	5/16	-	-	-	254	227	205	187	172	159	148	130	116	105	95	87	81	75	70	66	63

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT

Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

# SOLID RIVETS

## SOLID RIVET WEIGHT TABLES - PIECES PER POUND

### PROTRUDING, INDEX HEAD & SLUG RIVETS

DENSITY CORRECTION FACTORS				All Tables based on AD Aluminum alloy (multiply table value by correction factor)											
ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR	ALLOY CODE		MATERIAL	FACTOR
NAS	MS			NAS	MS			NAS	MS			NAS	MS		
A	A	1100 ALUM	1.010	B	B	5056 ALUM	1.042	M	M	MONEL	0.319	U	T	TI-COLUMBIUM	0.467
D	D	2017 ALUM	0.980	KE	E	7050 ALUM	0.971	-	-	-	-	-	-	-	-
DD	DD	2024 ALUM	0.980	-	F	300 SERIES CRES	0.341	-	-	-	-	-	-	-	-
AD	AD	2117 ALUM	1.000	C	C	A-286 CRES	0.346	-	-	-	-	-	-	-	-

**UNIVERSAL HEAD** **ASNA2050, MS20470, MS20615, BACR15BB, NAS1198**  
**(USE APPROPRIATE DENSITY CORRECTION FACTOR)** **ABS0326, 132369, AF2034, GAR501F**

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36	
	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	2.250	
2	1/16	14790	11447	9336	7883	6821	6011	5373	4858	4432	4076	3772	3283	2906	2607	2363	-	-	-	-	-
3	3/32	5634	4517	3769	3234	2832	2519	2268	2063	1891	1746	1622	1420	1262	1136	1033	947	875	758	669	-
4	1/8	2724	2249	1915	1668	1477	1325	1202	1100	1013	940	876	771	689	622	568	522	483	420	372	333
5	5/32	1548	1306	1129	994	888	802	732	673	622	579	541	479	430	389	356	328	304	265	235	211
6	3/16	967	829	726	645	580	528	484	447	415	387	363	323	290	264	242	223	207	181	161	145
7	7/32	-	-	510	445	411	375	345	319	297	277	260	232	209	190	175	161	150	131	117	105
8	1/4	-	-	350	316	288	264	244	227	212	199	188	168	152	139	128	119	111	97	87	78
10	5/16	-	-	199	182	167	155	144	135	127	120	113	102	93	85	79	73	69	61	54	49
12	3/8	-	-	-	105	98	92	86	81	77	73	66	61	56	52	49	46	41	36	33	33
14	7/8	-	-	-	71	66	62	59	56	53	51	46	43	39	37	34	32	29	26	24	24

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

**MODIFIED UNIVERSAL HEAD** **BACR15FT**  
**(USE APPROPRIATE DENSITY CORRECTION FACTOR)**

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36	
	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	2.250	
5	5/32	2056	1648	1376	1181	1034	920	828	753	691	638	592	519	461	415	377	346	319	277	244	219
6	3/16	1316	1073	906	783	690	617	558	509	468	433	403	354	315	284	259	238	220	191	169	151
7	7/32	-	-	627	546	484	434	394	361	332	308	287	253	226	204	186	171	158	138	122	109
8	1/4	-	-	456	400	356	321	292	268	248	230	215	190	170	154	141	130	120	105	93	83
9	9/32	-	-	344	303	272	246	224	206	191	178	167	148	132	120	110	101	94	82	73	65
10	5/16	-	-	266	236	212	193	177	163	151	141	132	117	106	96	88	81	75	66	58	53
11	11/32	-	-	186	168	153	140	130	121	113	106	94	85	77	71	66	61	53	48	43	43
12	3/8	-	-	-	136	125	115	106	99	93	87	78	70	64	59	55	51	45	40	36	36
14	7/8	-	-	-	93	86	80	74	69	65	61	55	50	46	42	39	36	32	29	26	26

PARTS IN SHADED AREA TOO SHORT TO ROLL SORT Where permitted by drawing, shaded lengths are square ends unless otherwise specified.

**INDEX HEAD** **BACR15FH & BACR15GH**  
**(USE APPROPRIATE DENSITY CORRECTION FACTOR)** **Ground Finish - Fuel Sealing Rivets**

APPROXIMATE PIECES PER POUND • LENGTH DASH NUMBERS (and inches) • Check drawing for allowable dash numbers																					
DIAMETER (DASH#) (INCHES)	6	7	8	9	10	11	12	14	16	17	18	19	20	21	22	23	24	25	26	28	
	0.375	0.438	0.500	0.563	0.625	0.688	0.750	0.875	1.000	1.063	1.125	1.188	1.250	1.313	1.375	1.438	1.500	1.563	1.625	1.750	
5	5/32	1157	1018	908	820	748	687	635	552	489	462	438	416	397	379	363	348	334	321	310	289
6	3/16	764	676	607	550	503	463	430	375	332	315	299	284	271	259	248	238	229	220	212	198
7	7/32	-	506	454	411	376	346	321	280	248	235	223	212	202	193	185	177	170	164	158	147
8	1/4	-	-	332	301	276	255	236	207	184	174	165	157	150	144	138	132	127	122	118	110
9	9/32	-	-	271	245	224	207	192	167	148	140	133	127	121	116	111	106	102	98	95	88
10	5/16	-	-	195	179	165	153	134	119	112	107	102	97	93	89	85	82	79	76	71	71
11	11/32	-	-	167	152	140	130	113	100	95	90	86	82	78	75	72	69	66	64	60	60
12	3/8	TOO SHORT TO GRIND-			128	118	109	95	84	79	75	72	68	65	62	60	57	55	53	50	50
13	13/32	-	-	-	-	102	94	82	72	68	65	62	59	56	54	52	50	48	46	43	43
14	7/8	-	-	-	-	87	80	70	62	59	56	53	50	48	46	44	42	41	39	37	37

**SLUG RIVETS** **NAS1321, BACR15BD, BACR15GG**  
**(USE APPROPRIATE DENSITY CORRECTION FACTOR)** **ASNA2047, 112T1257**

APPROXIMATE PIECES PER POUND												
DIAMETER	3	4	5	6	7	8	9	10	11	12	13	14
	22921	12961	8322	5791	4261	3266	2583	2094	1731	1456	1241	1070
INSTRUCTIONS: Select diameter factor and divide by length dash number, then multiply by density correction factor. EXAMPLE: NAS1321DD8E10 (LENGTH DASH NO.) X 0.98 (DD - DENSITY FACTOR) TO OBTAIN 321 PIECES per POUND.												

SOLID RIVET WEIGHT TABLES

# SOLID RIVETS

## FINISHES & SHEAR STRENGTHS

ALUMINUM RIVETS			
FINISH	ALLFAST CODE	DESCRIPTION	APPLICATION
CHEM. FILM (PER MIL-C-5541)	202	ORANGE	GOOD CORROSION PROTECTION EXCELLENT PAINT BASE AND MATERIAL I.D.
	206	GOLD	
	207	SILVER	
	243	BLUE	
	250	GREEN	
CHEM FILM & SOL GEL Patent #6,733,837	216	CLEAR	BEST FOR PAINT ADHESION AND AND ELIMINATES "RIVET RASH"
ANODIZE (PER MIL-A-8625)	204	CLEAR (TYPE II, CLASS I)	BEST CORROSION PROTECTION; COLOR FOR MATERIAL IDENTIFICATION
	205	DICHROMATE SEAL (TYPE II, CLASS I)	
	208	ORANGE (TYPE II, CLASS II)	
	209	GREEN (TYPE II, CLASS II)	
	210	BLACK (TYPE II, CLASS II)	
	211	BLUE (TYPE II, CLASS II)	
	212	BROWN (TYPE II, CLASS II)	
	213	VIOLET (TYPE II, CLASS II)	
3M COATING CHROMIC ANODIZE & HI-KOTE	246	RED (TYPE II, CLASS II)	BEST CORROSION PROTECTION ELIMINATES THE USE OF WET SEALANT
	255	GOLD (TYPE II, CLASS II)	
	400	-	

STEEL, MONEL & A-286 STAINLESS RIVETS			
FINISH	ALLFAST CODE	DESCRIPTION	APPLICATION
CADMIUM PLATE (QQ-P-416)	-	GOLD DICHROMATE (TYPE II, CLASS II)	CORROSION PROTECTION
TITANIUM ANODIZE (ISO8080)	-	NATURAL (SILVER) (TYPE I, CLASS II)	CORROSION PROTECTION
ALUMINUM COAT (NAS4006)	P	BLUE ANODIC COATING	CORROSION PROTECTION
ALUMINUM COAT (MIL-C-83488)	F	ALUMINUM PIGMENT IN RESIN BINDER	CORROSION PROTECTION
		ION VAPOR DEPOSITION	CORROSION PROTECTION

**NOTES:** MONEL RIVETS INSTALLED IN ALUMINUM STRUCTURE REQUIRE CADMIUM PLATING FOR DISSIMILAR METAL PROTECTION. SOLID RIVETS ARE FURNISHED WITH A VARIETY OF FINISHES FOR CORROSION PROTECTION, IDENTIFICATION, AND IMPROVED APPEARANCE. LISTED ABOVE ARE A FEW OF THE STANDARD FINISHES AVAILABLE. FOR SPECIAL FINISHES NOT LISTED, CONTACT ALLFAST SALES DEPARTMENT.

DRIVEN SHEAR STRENGTH OF SOLID RIVETS <sup>1</sup>									
RIVET MATERIAL		SHEAR STRENGTH, LBS. <sup>2</sup>							
		DIAMETER OF RIVET, INCHES							
		1/16	3/32	1/8	5/32	3/16	1/4	5/16	3/8
1100	FS <sub>U</sub> =11 KSI TYPICAL	39	80	144	218	315	571	901	1290
5056-H32	FS <sub>U</sub> =28 KSI	99	203	363	556	802	1450	2290	3280
2117-T3	FS <sub>U</sub> =30 KSI	106	217	388	596	862	1550	2460	3510
2017-T31 <sup>3</sup>	FS <sub>U</sub> =34 KSI	120	247	442	675	977	1760	2790	3970
2219-T62	FS <sub>U</sub> =32 KSI	113	231	419	635	917	1660	2690	3740
2219-T81	FS <sub>U</sub> =36 KSI	127	261	468	715	1033	1865	2950	4210
2017-T3	FS <sub>U</sub> =38 KSI	135	275	494	755	1090	1970	3110	4450
2024-T31 <sup>3</sup>	FS <sub>U</sub> =41 KSI	145	296	531	815	1180	2120	3360	4800
7050-T73	FS <sub>U</sub> =41 KSI	145	296	531	815	1180	2120	3360	4800
MONEL	FS <sub>U</sub> =49 KSI	173	355	635	973	1400	2540	4020	5730
TITANIUM COLUMBIUM	FS <sub>U</sub> =53 KSI	187	384	687	1050	1520	2750	4340	6200
INCONEL 600	FS <sub>U</sub> =51 KSI	180	369	668	1015	1460	2650	4180	5970
CRES	FS <sub>U</sub> =65 KSI	229	470	851	1290	1860	3370	5330	7610
A-286	FS <sub>U</sub> =90 KSI	317	651	1170	1790	2580	4670	7370	10500

**NOTES:** 1 VALUES ARE FOR FULL SHEAR LOADING. REDUCTIONS MAY APPLY FOR THIN SHEET CONDITIONS. CONSULT MIL-HDBK-5 PARAGRAPH 8.1.2. FOR JOINT ALLOWABLE LOADS.

2 VALUES ARE FOR THE DRIVEN CONDITION AND BASED ON NOMINAL HOLE SIZE PER PAGE 12.

3 VALUES ARE FOR RIVETS DRIVEN IN THE SOLUTION TREATED CONDITION AND SUBSEQUENTLY AGED AT ROOM TEMPERATURE.

# SOLID RIVETS

## INSTALLATION RECOMMENDATIONS

### STANDARD RIVET-HOLE DRILL SIZES & NOMINAL HOLE DIAMETERS

RIVET SIZE, INCHES	1/16	3/32	1/8	5/32	3/16	1/4	5/16	3/8
DRILL NUMBER	51	41	30	21	11	F	P	W
NOMINAL HOLE DIAMETER, INCHES <sup>1</sup>	0.067	0.096	0.1285	0.159	0.191	0.257	0.323	0.386

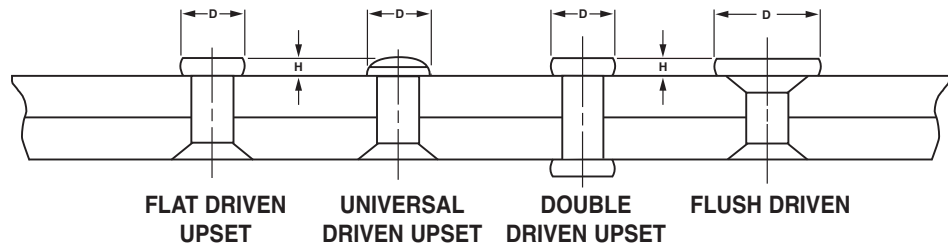
NOTES: 1 HOLE TOLERANCE TO BE ESTABLISHED BY USER COMPANY.  
2 FATIGUE CRITICAL AND FUEL SEALING APPLICATIONS MAY REQUIRE CLOSER TOLERANCE HOLES.

### RECOMMENDED GRIP RANGE<sup>1</sup>

RIVET LENGTH L (16TH)	GRIP T											
	1/8 DIA.		5/32 DIA.		3/16 DIA.		1/4 DIA.		5/16 DIA.		3/8 DIA.	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
-2.5	0.015	0.057										
-3	0.058	0.094	0.020	0.071								
-4	0.095	0.130	0.072	0.124	0.064	0.120						
-5	0.131	0.178	0.125	0.187	0.121	0.175	0.091	0.103				
-6	0.179	0.230	0.188	0.249	0.176	0.219	0.104	0.175				
-7	0.231	0.295	0.250	0.314	0.220	0.276	0.176	0.216				
-8	0.296	0.350	0.315	0.375	0.277	0.335	0.217	0.265	0.242	0.298		
-9	0.351	0.410	0.376	0.428	0.336	0.394	0.266	0.339	0.299	0.355		
-10	0.411	0.468	0.429	0.481	0.395	0.453	0.340	0.385	0.356	0.410	0.188	0.250
-11	0.469	0.525	0.482	0.530	0.454	0.513	0.386	0.445	0.411	0.467	0.251	0.313
-12	0.526	0.597	0.531	0.587	0.514	0.569	0.446	0.491	0.468	0.524	0.314	0.375
-13	0.598	0.648	0.588	0.638	0.570	0.625	0.492	0.548	0.525	0.581	0.376	0.437
-14	0.649	0.715	0.639	0.702	0.626	0.680	0.549	0.602	0.582	0.630	0.438	0.500
-15	0.716	0.772	0.703	0.758	0.681	0.736	0.603	0.675	0.631	0.687	0.501	0.563
-16	0.773	0.840	0.759	0.810	0.737	0.791	0.676	0.728	0.688	0.744	0.564	0.625

NOTES: 1 FOR RIVETS REQUIRING 1.4X DIAMETER BUCKED HEAD, THE NEXT HALF-SIZED LENGTH MAY BE REQUIRED. FOR RIVETS REQUIRING 1.5X DIAMETER BUCKED HEAD, THE NEXT DASH NUMBER MAY BE NECESSARY.

**EXAMPLE: 5-6 RIVET  
RECOMMENDED FOR USE  
IN 0.188/0.249 GRIP RANGE**



NOMINAL RIVET DIAMETER	MINIMUM UPSET DIAMETER (D)			MINIMUM UPSET HEIGHT (H)		MAXIMUM UPSET HEIGHT (H)
	1.3D <sup>1</sup>	1.4D <sup>2</sup>	1.5D <sup>3</sup>	.4D	.3D <sup>4</sup>	
1/16	.081	-	-	.025	-	.040
3/32	.122	-	-	.038	.028	.056
1/8	.163	.175	.188	.050	.038	.075
5/32	.203	.219	.234	.063	.047	.094
3/16	.244	.263	.281	.075	.056	.113
7/32	.284	.306	.328	.088	.066	.131
1/4	.325	.350	.375	.100	.075	.150
9/32	.366	.394	.422	.113	.084	.169
5/16	.406	.438	.469	.125	.094	.188
11/32	.447	.481	.516	.138	-	.206
3/8	.488	.525	.563	.150	-	.225

NOTES: 1 ABSOLUTE MINIMUM DIAMETER.  
2 RECOMMENDED FOR HAND DRIVEN 7050 ALLOY RIVETS.  
3 RECOMMENDED FOR MACHINE DRIVEN 7050 ALLOY RIVETS.  
4 RECOMMENDED MINIMUM FOR SHEAR HEAD RIVETS.

IN CASE OF CONFLICT, USER COMPANY PROCESS SPECIFICATION WILL PREVAIL.





# INSTALLATION TOOLING



**Allfast has all the Installation Tooling to help you be more productive**

## RV3000 AUTOMATED INSTALLATION TOOL

- Lightweight, ergonomic design
- 50-100 rivet magazine capacity
- Can install NAS9300, NAS1398/99AB fasteners



## RV15G MAX RIVETER

- Lightweight tool
- Can install NAS9300, NAS1398/99 and NAS1738/39
- Pull capacity 3,250 lbs.



## RV30G HEAVY DUTY RIVETER

- Used for fasteners with high breakloads
- Pull capacity 2,800 lbs.



## RV14 MEDIUM DUTY RIVETER

- Can install various types of fasteners
- Pull capacity 1,800 lbs.

## RV50G LIGHT DUTY PNEUMATIC RIVETER

- Extremely lightweight riveter - only 26 lbs.
- Used for MS20604/05 and 3 Dia. NAS1398/99



## RV53 PNEUMATIC RIVETER WITH STEM COLLECTION

- Small versatile thru-feed riveter
- Can install Allfast TACKBOLT®

## RV12E CORDLESS ELECTRIC RIVETER

- Versatile cordless riveter
- Can install NAS9300, NAS1398/99 and various pull-thru type rivets

## ACCESSORIES

- Pulling Heads, Adapters, Hand Tools and Accessories

**ALLFAST**  
FASTENING SYSTEMS, INC.

**INSTALLATION TOOLING**

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# RV3000 - AUTOMATIC HAND RIVETER

RV3000 AUTOMATIC HAND RIVETER



## RV3000 Self Feeding Riveter

Increase productivity with the use of the RV3000 MaxMatic<sup>®</sup> self-feeding riveter. The MaxMatic<sup>®</sup> riveter holds 40 to 100 rivets (depending on rivet diameter) on a strip in its magazine. After a rivet is installed, the nose retracts, the next rivet is inserted in the nose and it returns to the ready position. The operator simply has to point and shoot. This tool economizes operator motion by eliminating manual rivet loading and travel between part bins and the work piece. The MaxMatic<sup>®</sup> is lightweight and ergonomic to reduce operator fatigue.

Size . . . . . 10 1/2" high

Weight . . . . . 5 lbs.

Pull Capacity . . 1,300 lbs. min.

Stroke . . . . . 71 in.

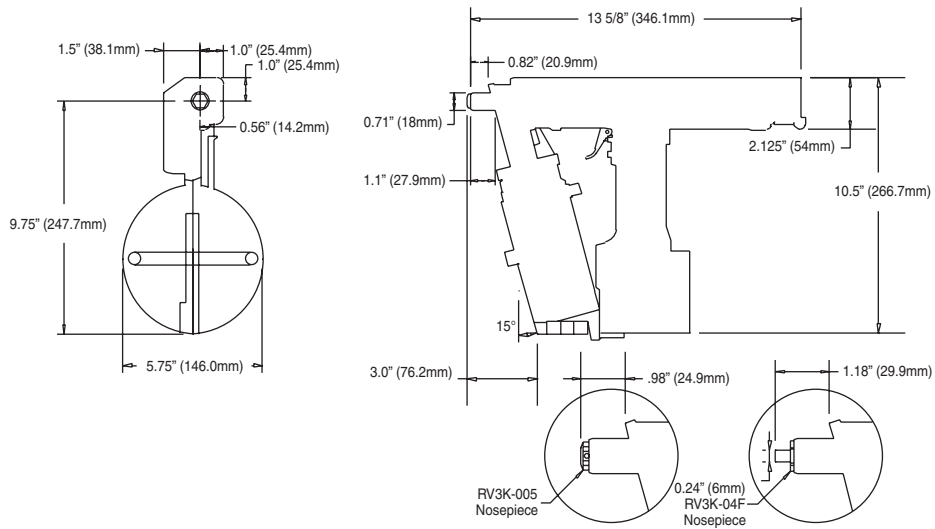
Air Supply . . . . . 85 - 100 PSI

Max. Capacity . . . . . 50 Rivets

NSN 5130-01-395-1347

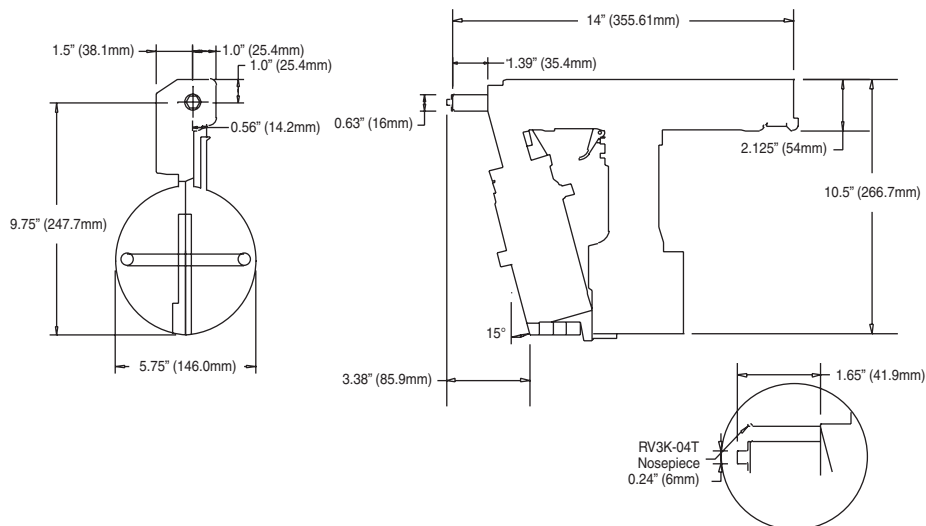
RIVET SERIES All Rivet Series & Basic Part Numbers apply to the following:	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	MAX. GRIP LENGTH	NOSEPIECE
FASTACK <sup>®</sup>	AF5075-4	4	ALUM.	-3	RV3K-04F
ALLMAX <sup>®</sup>	M7885, NAS9301-9312 BACR15FR & FP	4 & 5	ALL	-6	RV3K-006

## RV3000 Automatic Hand Riveter



RIVET SERIES All Rivet Series & Basic Part Numbers apply to the following:	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	MAX. GRIP LENGTH	NOSEPIECE
FASTACK®	AF5075-4	4	ALUM.	-3	RV3K-04F
ALLMAX®	M7885, NAS9301-9312 BACR15FR & FP	4 & 5	ALL	-6	RV3K-006
AB CODE	NAS1398/99 AB ABSO546/547S	4 & 5	ALL	-5	RV3K-006

## RV3000T Automatic Hand Riveter



RIVET SERIES All Rivet Series & Basic Part Numbers apply to the following:	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	MAX. GRIP LENGTH	NOSEPIECE
FASTACK®	AF5075 / AF5022	4	ALUM.	-3	RV3K-04T



# RV15GA



## RV15GA “MAX” Riveter

Size . . . . . 11" high

Weight. . . . . 4 lbs. 4 ozs.

Pull Capacity . . 3,250 lbs. min.

Stroke . . . . . .518 in.

Air Supply. . . . . 80 - 110 PSI

NSN 5130-01-395-1347

RV15GA

RIVET SERIES	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	REDUCED DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
ALLMAX® SUPERMAX® ALLMAX® AB	M7885, NAS9301-9312 BACR15GJ & GK BACR15FR & FP NAS1398AB&1399AB	4,5 & 6	ALL	NONE	NONE	RV819	RV818	RV817
OLYMPIC LOK	NAS1398A CODE NAS1399A CODE	3 4	ALL ALL	RVA704 RVA704	RV832-3 RV832-4	RV812-3 RV812-4	RV872-3 RV872-4	RV882-3 RV882-4
BULB LOK	NAS1768 & NAS1769	5 6	ALL ALL	RVA704 RVA704	RV832-5 ---	RV812-5 RV812-6	RV872-5 RV872-6	RV882-5 RV882-6
MS PULL THRU NUT PLATE SPECIALS	MS20604 & MS20605 BACR15DR BACR15CC, CF & DA	3 4 5 6	ALL ALL ALL ALL	RVA704 RVA704 RVA704 RVA704	RV336-3 RV336-4 --- ---	RV355-3 RV355-4 RV355-5 RV355-6	RV375-3 RV375-4 RV375-5 RV375-6	RV380-3 RV380-4 RV380-5 RV380-6
SHAVE LOK	RV800 THRU RV891	3 4 5 6	ALL ALL ALL ALL	RVA704 RVA704 RVA704 RVA704	RV836-3 RV836-4 --- ---	RV855-3 RV855-4 RV855-5 RV855-6	RV875-3 RV875-4 RV875-5 RV875-6	RV880-3 RV880-4 RV880-5 RV880-6

PULLING HEADS SOLD SEPARATELY. REFER TO PAGE 11

# RV30GE

## RV30GE Versatile Heavy Duty Riveter

Size . . . . . 11 3/4" high

Weight. . . . . 5 lbs. 2 ozs.

Pull Capacity . . 2,800 lbs. min.

Stroke . . . . . 1.125 in.

Air Supply. . . . . 80 - 110 PSI

NSN 5130-01-395-1353



RV30GE

RIVET SERIES	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	SMALL DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
All Rivet Series & Basic Part Numbers apply to the following:								
OLYMPIC LOK	NAS1398A CODE	3	ALL	NONE	RV832-3	RV812-3	RV872-3	RV882-3
	NAS1399A CODE	4	ALL	NONE	RV832-4	RV812-4*	RV872-4*	RV882-4*
BULB LOK	NAS1768 & NAS1769	5	ALL	NONE	RV832-5	RV812-5*	RV872-5*	RV882-5*
		6	ALL	NONE	---	RV812-6*	RV872-6*	RV882-6*
		8	ALL	RVA30	---	RV8812-8	RV8872-8	RV8882-8
ALLMAX SUPERMAX ALLMAX AB	M7885, NAS9301-9312 BACR15GJ & GK BACR15FR & FP NAS1398AB & 1399AB	4, 5 & 6	ALL	RVA H-701L	NONE	RV819	RV818	RV817
MS PULL THRU NUT PLATE SPECIALS	MS20604 & MS20605 BACR15DR BACR15CC, CF & DA	3	ALL	NONE	RV336-3	RV355-3	RV375-3	RV380-3
		4	ALL	NONE	RV336-4	RV355-4*	RV375-4*	RV380-4*
		5	ALL	NONE	---	RV355-5*	RV375-5*	RV380-5*
		6	ALL	NONE	---	RV355-6*	RV375-6*	RV380-6*
		8	ALL	RVA30	---	RV3355-8	RV3375-8	RV3380-8
SHAVE LOK	RV800 THRU RV891	3	ALL	NONE	RV836-3	RV855-3	RV875-3	RV880-3
		4	ALL	NONE	RV836-4	RV855-4*	RV875-4*	RV880-4*
		5	ALL	NONE	---	RV855-5*	RV875-5*	RV880-5*
		6	ALL	NONE	---	RV855-6*	RV875-6*	RV880-6*
		8	ALL	RVA30	---	RV8855-8	RV8875-8	RV8880-8
DUAL NUT PLATE RIVET PULLING HEAD		DIA.	MATERIAL	ADAPTER REQUIRED	.500" SPACING		.688" SPACING	
NUT PLATE RIVETS	MS20605	3	ALL	NONE	RV3353-500 RV3354-500		RV3353-688 RV3354-688	
	BACR15DR							
	AF5141							
	AF5171	4	ALL	NONE				

\*HEAVY DUTY HEADS AVAILABLE  
PULLING HEADS SOLD SEPARATELY. REFER TO PAGE 11  
RVA30 ADAPTER REQUIRED FOR STRAIGHT HEAVY DUTY PULLING HEADS.

# RV14GE



## RV14GE Versatile Medium Duty Riveter

Size . . . . . 11" high

Weight . . . . . 4 lbs.

Pull Capacity . . 1,800 lbs. min.

Stroke . . . . . 1.125 in.

Air Supply . . . . . 80 - 110 PSI

NSN 5130-01-395-1352

RV14GE

RIVET SERIES	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	REDUCED DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
All Rivet Series & Basic Part Numbers apply to the following:								
OLYMPIC LOK	NAS1398A CODE	3	ALL	NONE	RV832-3	RV812-3	RV872-3	RV882-3
	NAS1399A CODE	4	ALL	NONE	RV832-4	RV812-4	RV872-4	RV882-4
BULB LOK	NAS1768 & NAS1769	5	ALL	NONE	RV832-5	RV812-5	RV872-5	RV882-5
		6	ALUM ONLY	NONE	--	RV812-6	RV872-6	RV882-6
MS PULL THRU	MS20604 & MS20605	3	ALL	NONE	RV336-3	RV355-3	RV375-3	RV380-3
NUT PLATE	BACR15DR	4	ALL	NONE	RV336-4	RV355-4	RV375-4	RV380-4
SPECIALS	BACR15CC, CF & DA	5	ALL	NONE	--	RV355-5	RV375-5	RV380-5
		6	ALL	NONE	--	RV355-6	RV375-6	RV380-6
SHAVE LOK	RV800 THRU RV891	3	ALL	NONE	RV836-3	RV855-3	RV875-3	RV880-3
		4	ALL	NONE	RV836-4	RV855-4	RV875-4	RV880-4
		5	ALL	NONE	--	RV855-5	RV875-5	RV880-5
		6	ALUM ONLY	NONE	--	RV855-6	RV875-6	RV880-6
DUAL NUT PLATE RIVET PULLING HEAD		DIA.	MATERIAL	ADAPTER REQUIRED	.500" SPACING		.688" SPACING	
NUT PLATE RIVETS	MS20605	3	ALL	NONE	RV3353-500		RV3353-688	
	BACR15DR	4	ALL	NONE	RV3354-500		RV3354-688	
	AF5141							
	AF5171							

PULLING HEADS SOLD SEPARATELY. REFER TO PAGE 11

# RV50GB

## RV50GB Light Duty Pneumatic Riveter



Size . . . . . 7" high

Weight . . . . . 2 lbs.

Pull Capacity. . . . 600 lbs. min.

Stroke . . . . . 0.625 in.

Air Supply. . . . . 80 - 110 PSI

RV50GB

RIVET SERIES	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	REDUCED DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
All Rivet Series & Basic Part Numbers apply to the following:								
OLYMPIC LOK	NAS1398A CODE	3	ALL	NONE	RV832-3	RV812-3	RV872-3	RV882-3
	NAS1399A CODE	4	ALL	NONE	RV832-4	RV812-4	RV872-4	RV882-4
BULB LOK	NAS1768 & 1769	5	ALUM ONLY	NONE	RV832-5	RV812-5	RV872-5	RV882-5
		3	ALL	NONE	RV336-3	RV355-3	RV375-3	RV380-3
MS PULL THRU	MS20604 & MS20605	4	ALL	NONE	RV336-4	RV355-4	RV375-4	RV380-4
NUT PLATE	BACR15DR	5	ALUM ONLY	NONE	---	RV355-5	RV375-5	RV380-5
		3	ALL	NONE	RV836-3	RV855-3	RV875-3	RV880-3
SHAVE LOK	RV800 THRU RV891	4	ALL	NONE	RV836-4	RV855-4	RV875-4	RV880-4
		5	ALUM ONLY	NONE	---	RV855-5	RV875-5	RV880-5

FASTACK® TEMPORARY RIVETS	PART NUMBER	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	REDUCED DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
AF5055		-3 3/32	ALL	NONE	RV336-3	RV355-3	RV375-3	RV380-3
AF5075*	S149A020	-4 1/8	ALL	NONE	RV336-4	RV355-4	RV375-4	RV380-4
		-5 5/32	ALL	NONE	---	RV355-5	RV375-5	RV380-5

DUAL NUT PLATE RIVET PULLING HEAD	DIA.	MATERIAL	ADAPTER REQUIRED	.500" SPACING	.688" SPACING
NUT PLATE RIVETS	MS20605	3	ALL	RV3353-500	RV3353-688
	BACR15DR	4	ALL	RV3354-500	RV3354-688
	AF5141				
	AF5171				

PULLING HEADS SOLD SEPARATELY. REFER TO PAGE 11  
\*AF5075 RIVETS USE NEXT DIAMETER LOWER TOOLING. (I.E. AF5075-4 USE RV355-3)

# RV51GA



## RV51GA Medium Duty Pneumatic Riveter

Size . . . . . 7" high

Weight. . . . . 2 lbs. 8 ozs.

Pull Capacity. . . . 910 lbs. min.

Stroke . . . . . 0.625 in.

Air Supply. . . . . 80 - 110 PSI

RV51GA

RIVET SERIES	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	REDUCED DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
All Rivet Series & Basic Part Numbers apply to the following:								
OLYMPIC LOK	NAS1398A CODE	3	ALL	NONE	RV832-3	RV812-3	RV872-3	RV882-3
	NAS1399A CODE	4	ALL	NONE	RV832-4	RV812-4	RV872-4	RV882-4
BULB LOK	NAS1768 & NAS1769	5	ALL	NONE	RV832-5	RV812-5	RV872-5	RV882-5
		6	ALUM ONLY	NONE	---	RV812-6	RV872-6	RV882-6
MS FULL THRU	MS20604 & MS20605	3	ALL	NONE	RV336-3	RV355-3	RV375-3	RV380-3
NUT PLATE	BACR15DR	4	ALL	NONE	RV336-4	RV355-4	RV375-4	RV380-4
SPECIALS	BACR15CC, CF & DA	5	ALL	NONE	---	RV355-5	RV375-5	RV380-5
		6	ALUM ONLY	NONE	---	RV355-6	RV375-6	RV380-6
SHAVE LOK	RV800 THRU RV891	3	ALL	NONE	RV836-3	RV855-3	RV875-3	RV880-3
		4	ALL	NONE	RV836-4	RV855-4	RV875-4	RV880-4
		5	ALL	NONE	---	RV855-5	RV875-5	RV880-5
		6	ALUM ONLY	NONE	---	RV855-6	RV875-6	RV880-6

FASTACK® TEMPORARY RIVETS	PART NUMBER	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	REDUCED DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
AF5055		-3 3/32	ALL	NONE	RV336-3	RV355-3	RV375-3	RV380-3
AF5075*	S149A020	-4 1/8	ALL	NONE	RV336-4	RV355-4	RV375-4	RV380-4
		-5 5/32	ALL	NONE	---	RV355-5	RV375-5	RV380-5
		-6 3/16	ALL	NONE	---	RV355-6	RV375-6	RV380-6

DUAL NUT PLATE RIVET PULLING HEAD	DIA.	MATERIAL	ADAPTER REQUIRED	.500" SPACING	.688" SPACING
NUT PLATE RIVETS	MS20605				
	BACR15DR	3	ALL	NONE	RV3353-500
	AF5141	4	ALL	NONE	RV3354-500
	AF5171				RV3353-688
					RV3354-688

PULLING HEADS SOLD SEPARATELY. REFER TO PAGE 11  
 \*AF5075 RIVETS USE NEXT DIAMETER LOWER TOOLING. (I.E. AF5075-4 USE RV355-3)



# RV53

## RV53 Pneumatic Riveter with Stem Collection



Size . . . . . 7" high  
 Weight . . . . . 2 lbs. 10 ozs.  
 Pull Capacity . . . . 880 lbs. min.  
 Stroke . . . . . 0.625 in.  
 Air Supply . . . . . 80 - 110 PSI

RIVET SERIES	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	REDUCED DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
All Rivet Series & Basic Part Numbers apply to the following:								
TACKBOLT®	AF3675-4	4	ALUM	NONE	--	RV833-4	--	--

RV53

# RV12E



## RV12E Cordless Electric Riveter

Size . . . . . 11 7/8" high

Weight . . . . . 5 lbs.

Pull Capacity . . 1,900 lbs. min.

Stroke . . . . . 0.79 in.

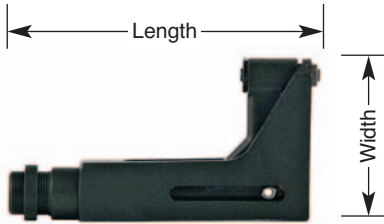
**Power Supply:**  
**12V DC Rechargeable Battery**

PERFORMANCE DATA		
RIVET DIAMETER	RIVET MATERIAL	PIECES PER BATTERY CHARGE
3/32	ALL	2000
	ALUMINUM	1400
1/8	ALUM/STEEL	1300
	MONEL/15-7	1100
	A286 & MONEL	1000
5/32	ALUMINUM	1200
	ALUM/STEEL	900
	MONEL/15-7	800
	A286 & MONEL	800
3/16	ALUMINUM	800
	ALUM/STEEL	600
	MONEL/15-7	500
	A286 & MONEL	400

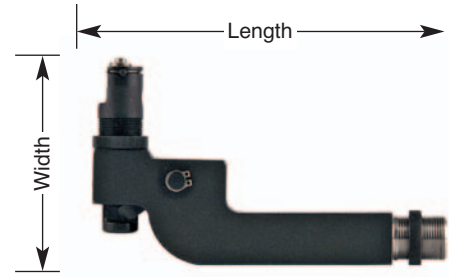
The RV12E comes complete with four different diameter inserts that will install ALLMAX® (M7885, NAS 9300, BACR15FR & FP) and most other blind rivets that do not require special pulling heads. Should you require the use of offset, right angle or other types of heads see the table below for adapters and pulling heads available.

RIVET SERIES	BASIC PART NUMBERS	RIVET DIA.	MATERIAL	ADAPTER REQUIRED	REDUCED DIA.	PULLING HEADS STRAIGHT	OFFSET	RIGHT ANGLE
ALLMAX SUPERMAX ALLMAX AB	M7885, NAS9301-9312 BACR15GJ & GK BACR15FR & FP NAS1398AB&1399AB	4, 5 & 6	ALL	RVA212	NONE	RV819	RV818	RV817
OLYMPIC LOK	NAS1398A CODE NAS1399A CODE	3 4	ALL ALL	RVA211 RVA211	RV832-3 RV832-4	RV812-3 RV812-4	RV872-3 RV872-4	RV882-3 RV882-4
BULB LOK	NAS1768 & NAS1769	5 6	ALL ALL	RVA211 RVA211	RV832-5 ---	RV812-5 RV812-6	RV872-5 RV872-6	RV882-5 RV882-6
MS SELF PLUGGING	MS20600 & MS20601	3	ALL	RVA211	RV336-3	RV355-3	RV375-3	RV380-3
MS PULL THRU	MS20604 & MS20605	4	ALL	RVA211	RV336-4	RV355-4	RV375-4	RV380-4
NUT PLATE	BACR15DR	5	ALL	RVA211	---	RV355-5	RV375-5	RV380-5
SPECIALS	BACR15CC, CF & DA	6	ALL	RVA211	---	RV355-6	RV375-6	RV380-6

# PULLING HEADS



RV375 2 1/8" W x 4 1/8" L  
RV872 RV875



RV380 2" W x 4 3/4" L  
RV880 RV882



RV8872 2 1/4" W x 4 5/8" L  
RV3375



Dual Nut Plate  
Rivet Nose Piece  
1 5/8" W x 3 5/8" L



RV981 2 1/2" W x 4 3/4" L



RV971 2 1/4" W x 5" L

Rivet Dia.	Spacing
RV3353	.500
RV3353	.688
RV3354	.500
RV3354	.688



RV819 3/4" W x 1 3/4" L



RV818 15/32" W x 4 5/16" L



RV355 5/8" W x 4 5/8" L  
RV812 RV855



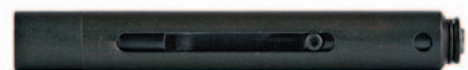
RV911 1/2" W x 5" L



RV817 2 3/16" W x 5 7/16" L



RV336 7/16" W x 5" L  
RV832 RV836



RV8812 13/16" W x 6" L

# ADAPTERS

**ALLFAST Nose Assemblies Extensions and Adapters help gain access to restricted areas. Adapters also enable one tool to accept many types of Pulling Heads.**



The RVA704 Adapter permits the use of screw-on type Pulling Heads including ground stud Pulling Heads on model RV15G and RV704 tools.



The RVA84 Adapter permits the use of screw-on type Pulling Heads on model RV784 tools.



RVA365 Pulling Head Extensions are for use in deep, hard to reach places they extend the reach of standard screw-on Pulling Heads in the following lengths: 2" (RVA365-2), 4" (RVA365-4) and 6" (RVA365-6).



The RVA704E Pulling Head Extensions are for use in deep, hard to reach places. They extend the reach of "MAX" type Pulling Heads in the following lengths: 2" (704002), 4" (704004), 6" (704006) and 12" (704012).

# HAND RIVETER & ACCESSORIES

## HAND RIVETER

### RV45GA

Size ..... 9 1/2" high

Weight ..... 1 1/2 lbs.

The RV45GA is a manually-operated tool, designed for installing most rivets 3/16" diameter and smaller.



## ACCESSORIES



### RV57

The RV57 side nipper is ideal for close trimming of aluminum rivet stems on installed self-plugging MS-type rivets. It is 7 1/2" long, has a flat-ground blade and curved handle.

### RVG3004



The RVG3004 Hook-type grip Gage is used to measure the actual material thickness for correct rivet grip length. It measures in increments of 1/16". It can also be used to check rivet diameter.

PART NUMBER	DESCRIPTION PREVENTIVE MAINTENANCE KITS
PMK14GC	MAINTENANCE KIT RV14GC RIVETER
PMK14GD	MAINTENANCE KIT RV14GD RIVETER
PMK30GC	MAINTENANCE KIT RV30GC RIVETER
PMK30GD	MAINTENANCE KIT RV30GD RIVETER
PMK51GA	MAINTENANCE KIT RV50GB / 51GA RIVETER
PMK704	MAINTENANCE KIT RV704 RIVETER
PMK784	MAINTENANCE KIT RV784 RIVETER

ALL O-RINGS, SEALS, GASKETS, ETC. TO OVERHAUL THE APPLICABLE POWER TOOLS.



# INSTALLATION TOOLING CHART

DO NOT USE THIS CHART FOR FASTENER INTERCHANGEABILITY PURPOSE  
 ADAPTER IS REQUIRED FOR SOME OF THE RIVETER - PULLING HEAD COMBINATIONS

Look up the ALLFAST or other Blind Rivet part series in the following table, then refer to the appropriate Riveter & pulling head pages.			ALLFAST/OLYMPIC RIVETER MODEL Best Recommendations are Shaded						Automatic Tool	Hand Tool	Tack-Bolt® Tool
Nut Plate Rivets	Customer Part Numbers	Diameters	RV50GB	RV51GA	RV14GE	RV15GA	RV30GE	RV3000	RV45	RV53	
	MS20604( )W - MS20605( )W 03A080 -03A081	-3* 3/32	X	X	X	X	X	-	X		
AF5170 - AF5140 AF5171 - AF5141	3D0142 ABS0112 3M949	-4 1/8	X	X	X	X	X	-	X		
	BACR15DR GR501AC	-5 5/32	Alum Only	X	X	X	X	-	X		
	CCR264 - CCR274	-6 3/16	-	Alum Only	X	X	X	-	Alum Only		

\*RV3353 offset nose piece available to Install two 3/32 diameter rivets in one stroke.

FASTACK® TEMPORARY RIVETS										
		-3 3/32	X	X	X	X	X	X	-	X
AF5055	S149A020	-4 1/8	X	X	X	X	X	X	X	X
AF5075		-5 5/32	X	X	X	X	X	X	X	X
AF5022		-6 3/16	-	X	X	X	X	X	-	X
		-8 1/4	-	-	X	X	X	X	-	-
TackBolt® Structural Temporary Fastener										
		-4 1/8	-	-	-	-	-	-	-	X
AF3675		-5 5/32	-	-	-	-	-	-	-	X
		-6 3/16	-	-	-	-	-	-	-	X

ALLFAST/OLYMPIC-LOK A-CODE BLIND RIVETS										
RV1200 - RV1201	NAS1398( )A - NAS1399( )A	-3 3/32	X	X	X	X	X	X	-	X
RV1203	3M1160									
RV1250 - RV1251	3M1235 - 3M1236	-4 1/8	X	X	X	X	X	X	-	X
RV1240 - RV1241	CR2572 - CR2573									
RV1290 - RV1291	CR2672 - CR2673	-5 5/32	Alum Only	X	X	X	X	X	-	X
RV1300 - RV1301	BACR15GE									
RV1340 - RV1341	ST3M793	-6 3/16	-	Alum Only	X	X	X	X	-	Alum Only
RV1390 - RV1391	ST3M806									
RV1393		-8 1/4	-	-	Alum Only	X	X	X	-	-

ALLFAST/OLYMPIC BULB-LOK BLIND RIVETS										
RV1100 - RV1101		-4 1/8	X	X	X	X	X	X	-	X
RV1140 - RV1141	NAS1768 - NAS1769	-5 5/32	Alum Only	X	X	X	X	X	-	X
RV1190 - RV1191		-6 3/16	-	-	Alum Only	X	X	X	-	Alum Only

ALLMAX® AB WIREDRAW BLIND RIVETS										
	NAS1398( )AB - NAS1399( )AB	-4 1/8	-	-	X	X	X	X	X	X
AF4562 - AF4563	CR4562 - CR4563	-5 5/32	-	-	X	X	X	X	X	X
AF4662 - AF4663	CR4662 - CR4663	-6 3/16	-	-	-	X	X	X	-	-
Monel & Cres Only										

ALLMAX® BULB BLIND RIVETS										
AF3212 - AF3213 - AF3214	M7885	-4 1/8	-	-	X	X	X	X	X	X
AF3222 - AF3223 - AF3224	NAS9301 thru NAS9312									
AF3522 - AF3523 - AF3524	CR3200 SERIES	-5 5/32	-	-	X	X	X	X	X	X
AF3242 - AF3243 - AF3245	CR3500 SERIES									
AF3252 - AF3253 - AF3255										
AF3552 - AF3553 - AF3555		-6 3/16	-	-	-	X	X	X	-	-

SUPERMAX® BLIND RIVETS										
		-4 1/8	-	-	X	X	X	X	X	X
AF9252 - AF9253	BACR15GJ BACR15GK	-5 5/32	-	-	X	X	X	X	X	-
		-6 3/16	-	-	-	X	X	X	-	-

ALLFAST/OLYMPIC SPECIAL BLIND RIVETS										
RV5033	BACR15CC	-4 1/8	Alum Only	X	X	X	X	X	-	X
RV5X Series	BACR15CD	-5 5/32	-	X	X	X	X	X	-	X
RV650/651	BACR15CF	-6 3/16	-	Alum Only	X	X	X	X	-	Alum Only
RV800 Shave-Lok Series	BACR15DA	-8 1/4	-	-	Alum Only	X	X	X	-	-

# PULLING HEADS

## REFERENCE TABLE

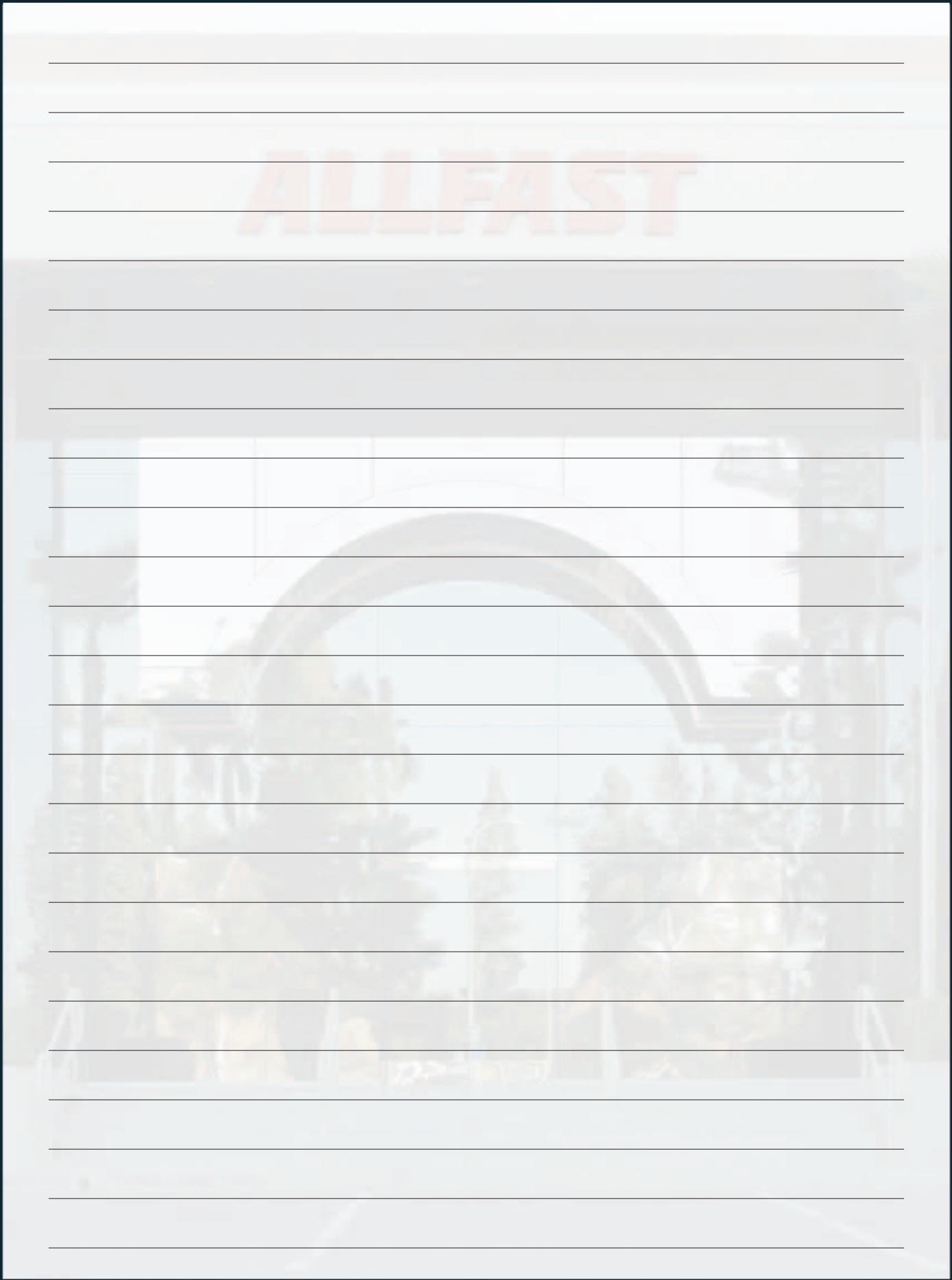
ALLFAST/OLYMPIC PART NUMBER	TYPE	NSN NUMBER	RIVET SERIES
RV3555-4	STRAIGHT	-	-
RV3355-5	STRAIGHT	-	-
RV3355-6	STRAIGHT	-	MS20600/1 & MS20604/5
RV3355-8	STRAIGHT	-	BACR15CC, CF, DA & DR
RV336-3	REDUCED STRAIGHT	-	-
RV336-4	REDUCED STRAIGHT	-	-
RV3375-8	OFFSET	-	-
RV3380-8	RT. ANGLE	-	-
RV355-3	STRAIGHT	-	-
RV355-4	STRAIGHT	-	-
RV355-5	STRAIGHT	-	-
RV355-6	STRAIGHT	-	-
RV375-3	OFFSET	-	-
RV375-4	OFFSET	-	MS20600/1 & MS20604/5
RV375-5	OFFSET	-	BACR15CC, CF, DA & DR
RV375-6	OFFSET	-	-
RV380-3	RT. ANGLE	-	-
RV380-4	RT. ANGLE	-	-
RV380-5	RT. ANGLE	-	-
RV380-6	RT. ANGLE	-	-
RV812-3	STRAIGHT	5130-01-395-1356	-
RV812-4	STRAIGHT	5130-01-395-1359	NAS1398-9 "A" CODES & NAS1768/9
RV812-5	STRAIGHT	5130-01-395-1360	-
RV812-6	STRAIGHT	5130-01-395-1361	-
RV817	RIGHT ANGLE	-	-
RV818	OFFSET	-	M7885/NAS9300/BACR15FR&FP
RV819	STRAIGHT	-	-
RV832-3	REDUCED STRAIGHT	-	-
RV832-4	REDUCED STRAIGHT	5130-01-395-1354	NAS1389/9 "A" CODE
RV832-5	REDUCED STRAIGHT	-	-
RV836-3	REDUCED STRAIGHT	-	-
RV836-4	REDUCED STRAIGHT	-	-
RV855-3	STRAIGHT	-	RV800/1 SHAVE LOK
RV855-4	STRAIGHT	-	-
RV855-5	STRAIGHT	-	-
RV872-3	OFFSET	-	-
RV872-4	OFFSET	5130-01-395-1358	NAS1389/9 "A" CODE
RV872-5	OFFSET	5130-01-395-1351	-
RV872-6	OFFSET	5130-01-395-1341	-
RV875-3	OFFSET	-	-
RV875-4	OFFSET	-	RV800/1 SHAVE LOK
RV875-5	OFFSET	-	-
RV880-3	RT. ANGLE	-	-
RV880-4	RT. ANGLE	-	-
RV880-5	RT. ANGLE	-	-
RV8812-4	STRAIGHT	5130-01-395-1357	-
RV8812-5	STRAIGHT	5130-01-395-1344	-
RV8812-6	STRAIGHT	5130-01-395-1345	-
RV8812-8	STRAIGHT	5130-01-395-1346	-
RV882-3	RT. ANGLE	-	NAS1389/9 "A" CODE
RV882-4	RT. ANGLE	5130-01-395-1355	-
RV882-5	RT. ANGLE	5130-01-395-1342	-
RV882-6	RT. ANGLE	5130-01-395-1343	-
RV8872-8	OFFSET	-	-
RV8882-8	RT. ANGLE	-	-

DUAL NUT PLATE PULLING HEAD	DIA.	MATERIAL	ADAPTER REQUIRED	.500" SPACING	.688" SPACING
NUT PLATE RIVETS	MS20605	-	-	-	-
	BACR15DR	3	ALL	NONE	RV3353-500
	AF5141	4	ALL	NONE	RV3354-500
	AF5171	-	-	-	RV3353-688
					RV3354-688

# NOTES

NOTES

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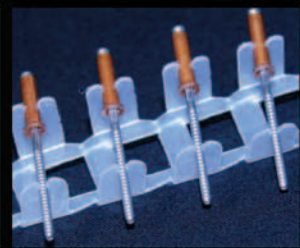
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