CHERRY TITANIUM MAXIBOLT®

BLIND BOLT

CHERRY® AEROSPACE

CHERRY TITANIUM MAXIBOLT®

CONTENTS

LIMITED WARRANTY

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

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

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

NOTE

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

ATTENTION

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

CHERRY® AEROSPACE

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CHERRY TITANIUM MAXIBOLT®

Titanium MAXIBOLT Blind Bolts feature expanded performance capabilities for metallic and composite blind fastening applications. They provide a flush, burr-free installation with no shaving required. The Titanium MAXIBOLT offers fast and consistent installation by utilizing single action tooling with a patented shift washer design. The all titanium sleeves and stems are compatible with composite materials. They cause no delamination of the exit side of the structure during installation and offer a blindside slope tolerance up to 7°.

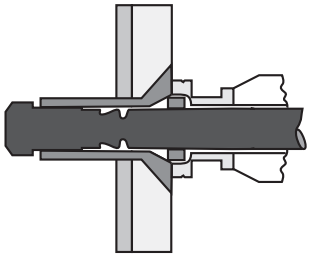
PRODUCT FEATURES

Feature	Benefit
flush break	no shaving
95KSI shear strength	high strength to weight ratio
titanium construction	light weight, compatible with metallic & composite structures
large bulb blind upset head	7° slope tolerance no exit hole delamination
single action tooling	fast, cost effective installation
single piece shift washer	no anvil tool wear
pull type blind bolt	fastener does not rotate during installation

INSTALLATION SEQUENCE

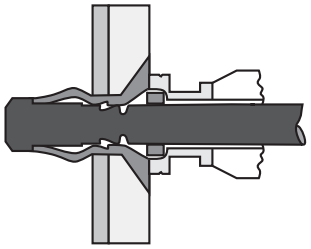
1

The Cherry titanium blind bolt is inserted into the prepared hole. The pulling head is slipped over the stem. Applying a firm pressure which seats the head, the installation tool is actuated.



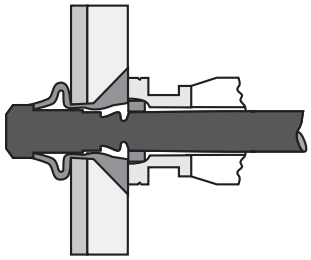
2

The pulling action on the stem causes the sleeve to start bulbing away from the backside of the structure, thereby eliminating exit hole delamination.



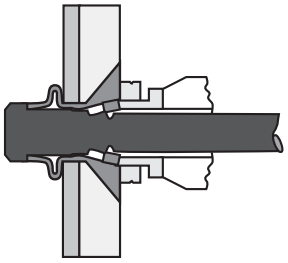
3

The continued pulling action compresses the large bulb bearing area against the backside of the structure.



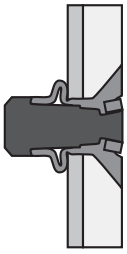
4

The Cherry patented shift washer collapses into itself, driving the locking collar into the head recess and into the stem locking groove to form an integral lock.



5

The stem is fractured at the break notch by continued pulling on the stem, thereby providing a flush, burr-free, installation.



INSTALLED WEIGHTS (lbs. per 1000 pieces)

Diameter	Grip Length	CR7770S	CR7771S	CR7773S	CR7774S
–04 (1/8")	–01	—	.98	1.00	—
	–02	.82	1.10	1.12	—
	–03	.94	1.22	1.25	—
	–04	1.06	1.34	1.37	—
	–05	1.18	1.46	1.56	—
	–06	1.30	1.58	1.64	—
–05 (5/32")	–01	—	1.44	1.49	—
	–02	1.38	1.67	1.71	1.28
	–03	1.61	1.90	1.92	1.51
	–04	1.83	2.12	2.13	1.73
	–05	2.05	2.34	2.34	1.95
	–06	2.28	2.57	2.55	2.18
	–07	2.50	2.79	2.76	2.40
	–08	2.72	3.01	2.97	2.62
	–09	2.94	3.23	3.18	2.84
	–10	3.17	3.46	3.39	3.07
	–11	3.39	3.68	3.60	3.29
	–12	3.61	3.90	3.81	3.51
	–13	3.83	4.12	4.02	3.73
	–14	4.06	4.35	4.23	3.96
	–15	4.28	4.57	4.44	4.18
–06 (3/16")	–02	2.34	2.76	2.81	2.21
	–03	2.64	3.06	3.12	2.50
	–04	2.94	3.36	3.44	2.80
	–05	3.24	3.66	3.75	3.10
	–06	3.52	3.94	4.06	3.38
	–07	3.83	4.25	4.37	3.69
	–08	4.13	4.55	4.68	3.99
	–09	4.42	4.84	5.00	4.28
	–10	4.72	5.14	5.31	4.58
	–11	5.01	5.43	5.62	4.87
	–12	5.31	5.73	5.93	5.17
	–13	5.60	6.02	6.24	5.46
	–14	5.90	6.32	6.56	5.76
	–15	6.19	6.61	6.87	6.05
–08 (1/4")	–03	4.94	6.24	6.50	4.72
	–04	5.50	6.80	7.03	5.28
	–05	6.06	7.36	7.56	5.84
	–06	6.62	7.92	8.09	6.40
	–07	7.18	8.48	8.62	6.96
	–08	7.74	9.04	9.15	7.52
	–09	8.30	9.60	9.68	8.08
	–10	8.86	10.16	10.21	8.64
	–11	9.42	10.72	10.74	9.20
	–12	9.98	11.28	11.27	9.76
	–13	10.54	11.84	11.80	10.32
	–14	11.10	12.40	12.33	10.88
	–15	11.66	12.96	12.86	11.44

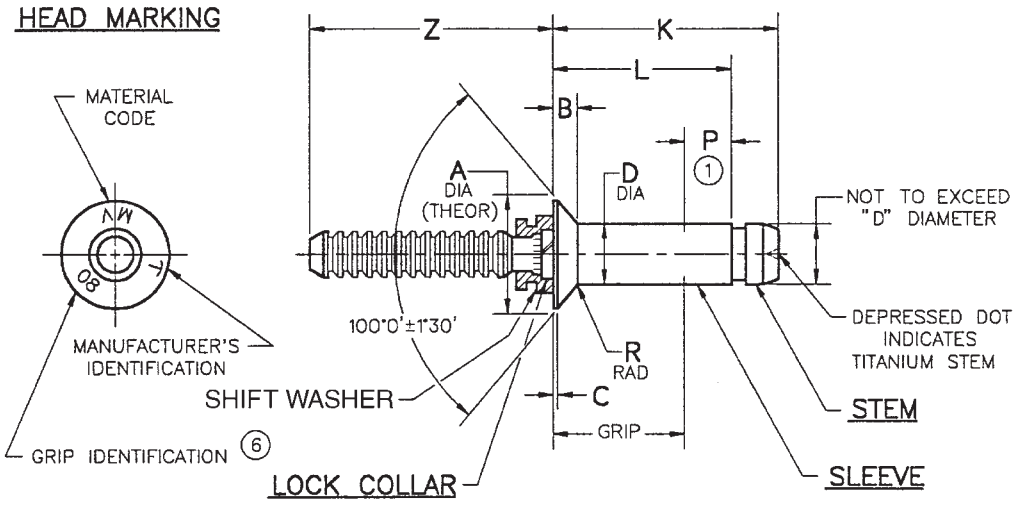


TABLE 1

Diameter Dash No.	D ±.001⑧	A Max	B Max.	C Max	P Max	R Max	Z Min	Hole Limits	Installed Strength (Lbs.)④	
									Single Shear Minimum⑤	Tensile Minimum
–04	.128	.229	.038	.011	.190	.012	.812	.129/.132	1222	600
–05	.163	.333	.072	.011	.215	.012	.844	.164/.167	1980	900
–06	.198	.386	.080	.013	.250	.015	.875	.199/.202	2925	1400
–08	.259	.507	.105	.017	.305	.020	1.000	.260/.263	5005	2100

TABLE 2

Grip Dash No.	Grip Limits				-04 Diameter		-05 Diameter		Grip Limits				-06 Diameter		-08 Diameter	
	Overlap Min	1/16 Range④		Overlap Max	L Ref	K Max	L Ref	K Max	Overlap Min	1/16 Range④		Overlap Max	L Ref	K Max	L Ref	K Max
		Min	Max							Min	Max					
–02	⑨	.094	.157	.173	.383	.455	.336	.476	—	.120	.157	.173	.355	.521	—	—
–03	.146	.156	.220	.236	.445	.517	.398	.539	⑨	.156	.220	.236	.417	.584	.479	.645
–04	.209	.219	.282	.298	.508	.580	.460	.602	.203	.219	.282	.298	.480	.647	.541	.708
–05	.271	.281	.345	.361	.570	.642	.523	.664	.265	.281	.345	.361	.542	.709	.604	.770
–06	.334	.344	.407	.423	.632	.704	.585	.727	.328	.344	.407	.423	.605	.772	.666	.833
–07	.396	.406	.470	.486	.695	.766	.648	.789	.390	.406	.470	.486	.667	.834	.729	.895
–08	.459	.469	.532	.548	—	—	.710	.852	.453	.469	.532	.548	.730	.897	.791	.958
–09	.521	.531	.595	.611	—	—	.773	.914	.515	.531	.595	.611	.792	.959	.854	1.020
–10	.584	.594	.657	.673	—	—	.835	.972	.578	.594	.657	.673	.855	1.022	.916	1.083
–11	.646	.656	.720	.736	—	—	.898	1.039	.640	.656	.720	.736	.917	1.084	.979	1.145
–12	.709	.719	.782	.798	—	—	.960	1.102	.703	.719	.782	.798	.980	1.147	1.041	1.208

TABLE 3

FINISH CODE	MATERIAL②			FINISH		
	SLEEVE	STEM	LOCK COLLAR	SLEEVE	STEM	LOCK COLLAR
NONE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR	NONE	NONE	PASSIVATE AMS 2700
			INCONEL 600 AMS 5687			NONE
BE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR	ALUMINUM COAT PER NAS 4006 AND BMS 10-85	NONE	PASSIVATE AMS 2700
			INCONEL 600 AMS 5687			NONE
D	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR	IVD ALUMINUM COAT PER MIL-DTL-83488 CLASS 3, TYPE 2 PLUS CHROMATE TREATMENT PER SAE AMS-C-5541, CLASS 3	NONE	PASSIVATE AMS 2700
			INCONEL 600 AMS 5687			NONE
EE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR	ALUMINUM COAT PER NAS 4006	NONE	PASSIVATE AMS 2700
			INCONEL 600 AMS 5687			NONE
HK	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR	HI-KOTE 1 PER HS294	NONE	PASSIVATE AMS 2700
			INCONEL 600 AMS 5687			NONE
W	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR	BLUE ANODIZE PER ISO 8080	NONE	PASSIVATE AMS 2700
			INCONEL 600 AMS 5687			NONE

NOTES

① This dimension of D dia. may be .002 undersize.

② Material designation refers to chemical composition only.

3 Sizes below heavy line in Table 2 are special order only.

④ Mechanical testing in the 1/16 grip range only. Installation tests are conducted in the extended grip.

⑤ Single shear tested in maximum grip. Shear values apply to -04-03 and longer; -05-04 and longer; -06-05 and longer; and -08-07 and longer.

⑥ Single digit head marking is permissible, at manufacturer's option, for grip dash numbers less than 10.

7 When lubricated, parts shall be lubricated per AS5272 Type 1, MIL-L-87132, DOD-L-85645, or LOX compatible dry film lubricant.

⑧ Fasteners shall be capable of insertion into a ring gage having a hole size equivalent to minimum recommended hole size +.0002/–.0000 up to the fillet radius with a maximum insertion force of 15 pounds. The ring gage length shall be 2D.

⑨ Overlap minimum for –04 diameter is .084 and –05 diameter is none. Overlap for -06 diameter is .140 and -08 diameter is none.

PART NUMBER

Part Number Example:

CR7770 S –05 –04 W = 5/32 nominal diameter Cherry MAXIBOLT blind bolt, .219 min. grip, .282 max. grip, with blue anodize on sleeve.

Finish Code: No Code Denotes No Special Finish Treatment
"BE" Code Denotes Aluminum Coat per NAS 4006 and BMS 10-85
"D" Code Denotes IVD Aluminum Coating
"EE" Code Denotes Aluminum Coating
"HK" Code Denotes Hi Kote Coating
"W" Code Denotes Blue Anodize

Grip Dash Number (Mid grip in 16ths of an inch)

Diameter Dash Number (Nominal Diameter in 1/32 Increments)

Type ("S" indicates use of single action installation tool & supplied with shift washer)

Basic Part Number (Materials, Head Style)

CR7771S

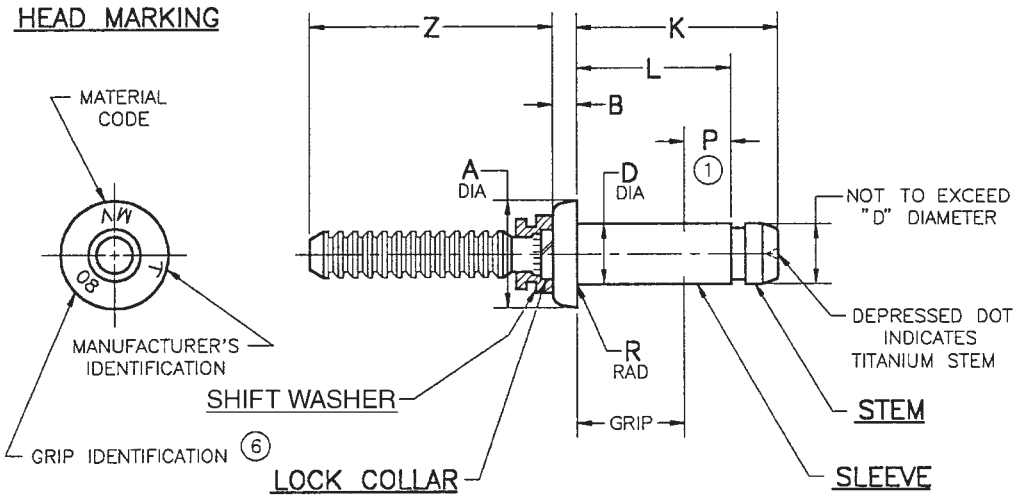


TABLE 1

Dia. Dash No.	D ±.001⑧	A	B	P Max	R Max	Z Min	Hole Limits	Installed Strength (Lbs.)④	
								Single Shear Minimum⑤	Tensile Minimum
–04	.128	.197/.215	.054/.060	.190	.010	.812	.129/.132	1222	600
–05	.163	.250/.272	.062/.070	.215	.010	.844	.164/.167	1980	900
–06	.198	.305/.332	.125/.135	.250	.015	.875	.199/.202	2925	1400
–08	.259	.400/.432	.130/.140	.305	.018	1.000	.260/.263	5005	2100

TABLE 2

Grip Dash No.	Grip Limits				-04 Diameter		-05 Diameter		Grip Limits				-06 Diameter		-08 Diameter	
	Overlap Min	1/16 Range④		Overlap Max	L Ref	K Max	L Ref	K Max	Overlap Min	1/16 Range④		Overlap Max	L Ref	K Max	L Ref	K Max
		Min	Max							Min	Max					
-01	—	.031	.095	.111	.320	.392	.274	.414	—	—	—	—	—	—	—	—
–02	.084	.094	.157	.173	.383	.455	.336	.476	.078	.094	.157	.173	.355	.521	—	—
–03	.146	.156	.220	.236	.445	.517	.398	.539	.140	.156	.220	.236	.417	.584	.479	.645
–04	.209	.219	.282	.298	.508	.580	.460	.602	.203	.219	.282	.298	.480	.647	.541	.708
–05	.271	.281	.345	.361	.570	.642	.523	.664	.265	.281	.345	.361	.542	.709	.604	.770
–06	.334	.344	.407	.423	.632	.704	.585	.727	.328	.344	.407	.423	.605	.772	.666	.833
–07	.396	.406	.470	.486	.695	.766	.648	.789	.390	.406	.470	.486	.667	.834	.729	.895
–08	.459	.469	.532	.548	—	—	.710	.852	.453	.469	.532	.548	.730	.897	.791	.958
–09	.521	.531	.595	.611	—	—	.773	.914	.515	.531	.595	.611	.792	.959	.854	1.020
–10	.584	.594	.657	.673	—	—	.835	.972	.578	.594	.657	.673	.855	1.022	.916	1.083
–11	.646	.656	.720	.736	—	—	.898	1.039	.640	.656	.720	.736	.917	1.084	.979	1.145
–12	.709	.719	.782	.798	—	—	.960	1.102	.703	.719	.782	.798	.980	1.147	1.041	1.208

TABLE 3

FINISH CODE	MATERIAL②			FINISH		
	SLEEVE	STEM	LOCK COLLAR	SLEEVE	STEM	LOCK COLLAR
NONE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	NONE	NONE	PASSIVATE AMS 2700 NONE
BE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	ALUMINUM COAT PER NAS 4006 AND BMS 10-85	NONE	PASSIVATE AMS 2700 NONE
D	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	IVD ALUMINUM COAT PER MIL-DTL-83488 CLASS 3, TYPE 2 PLUS CHROMATE TREATMENT PER SAE AMS-C-5541, CLASS 3	NONE	PASSIVATE AMS 2700 NONE
EE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	ALUMINUM COAT PER NAS 4006	NONE	PASSIVATE AMS 2700 NONE
HK	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	HI-KOTE 1 PER HS294	NONE	PASSIVATE AMS 2700 NONE
W	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	BLUE ANODIZE PER ISO 8080	NONE	PASSIVATE AMS 2700 NONE

NOTES

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⑤ Single shear tested in maximum grip. Shear values apply to -04-03 and longer; -05-03 and longer; -06-04 and longer; and -08-07 and longer.

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⑧ Fasteners shall be capable of insertion into a ring gage having a hole size equivalent to minimum recommended hole size +.0002/–.0000 up to the fillet radius with a maximum insertion force of 15 pounds. The ring gage length shall be 2D.

PART NUMBER

Part Number Example:

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Finish Code: No Code Denotes No Special Finish Treatment
"BE" Code Denotes Aluminum Coat per NAS 4006 and BMS 10-85
"D" Code Denotes IVD Aluminum Coating
"EE" Code Denotes Aluminum Coating
"HK" Code Denotes Hi Kote Coating
"W" Code Denotes Blue Anodize

Grip Dash Number (Mid grip in 16ths of an inch)

Diameter Dash Number (Nominal Diameter in 1/32 Increments)

Type ("S" indicates use of single action installation tool & supplied with shift washer)

Basic Part Number (Materials, Head Style)

CR7773S

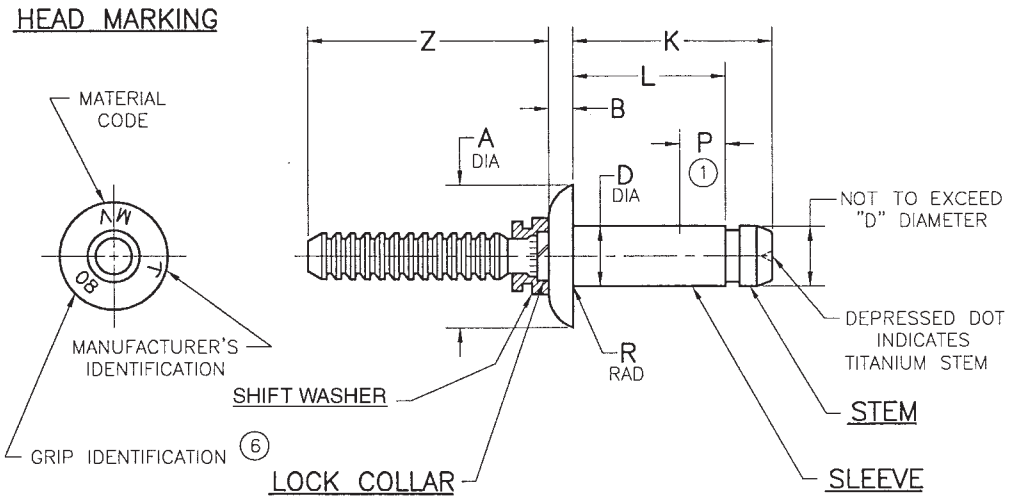

TABLE 1

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								Single Shear Minimum⑤	Tensile Minimum
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–05	.163	.296/.328	.067/.077	.215	.010	.844	.164/.167	1980	900
–06	.198	.356/.394	.080/.090	.250	.015	.875	.199/.202	2925	1400
–08	.259	.475/.525	.107/.117	.305	.018	1.000	.260/.263	5005	2100

TABLE 2

Grip Dash No.	Grip Limits				-04 Diameter		-05 Diameter		Grip Limits				-06 Diameter		-08 Diameter	
	Overlap Min	1/16 Range④		Overlap Max	L Ref	K Max	L Ref	K Max	Overlap Min	1/16 Range④		Overlap Max	L Ref	K Max	L Ref	K Max
		Min	Max							Min	Max					
–01	—	.031	.095	.111	.320	.392	.274	.414	—	—	—	—	—	—	—	—
–02	.084	.094	.157	.173	.383	.455	.336	.476	.078	.094	.157	.173	.355	.521	—	—
–03	.146	.156	.220	.236	.445	.517	.398	.539	.140	.156	.220	.236	.417	.584	.479	.645
–04	.209	.219	.282	.298	.508	.580	.460	.602	.203	.219	.282	.298	.480	.647	.541	.708
–05	.271	.281	.345	.361	.570	.642	.523	.664	.265	.281	.345	.361	.542	.709	.604	.770
–06	.334	.344	.407	.423	.632	.704	.585	.727	.328	.344	.407	.423	.605	.772	.666	.833
–07	.396	.406	.470	.486	.695	.766	.648	.789	.390	.406	.470	.486	.667	.834	.729	.895
–08	.459	.469	.532	.548	—	—	.710	.852	.453	.469	.532	.548	.730	.897	.791	.958
–09	.521	.531	.595	.611	—	—	.773	.914	.515	.531	.595	.611	.792	.959	.854	1.020
–10	.584	.594	.657	.673	—	—	.835	.977	.578	.594	.657	.673	.855	1.022	.916	1.083
–11	.646	.656	.720	.736	—	—	.898	1.039	.640	.656	.720	.736	.917	1.084	.979	1.145
–12	.709	.719	.782	.798	—	—	.960	1.102	.703	.719	.782	.798	.980	1.147	1.041	1.208
–13	.771	.781	.845	.861	—	—	1.023	1.164	.765	.781	.845	.861	1.042	1.209	1.104	1.270
–14	.834	.844	.907	.923	—	—	1.085	1.227	.828	.844	.907	.923	1.105	1.272	1.166	1.332
–15	.896	.906	.970	.986	—	—	1.148	1.289	.890	.906	.970	.986	1.167	1.334	1.229	1.395
–16	.959	.969	1.032	1.048	—	—	—	—	.953	.969	.1.032	1.048	—	—	1.291	1.458

TABLE 3

FINISH CODE	MATERIAL②			FINISH		
	SLEEVE	STEM	LOCK COLLAR	SLEEVE	STEM	LOCK COLLAR
NONE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	NONE	NONE	PASSIVATE AMS 2700 NONE
BE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	ALUMINUM COAT PER NAS 4006 AND BMS 10-85	NONE	PASSIVATE AMS 2700 NONE
D	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	IVD ALUMINUM COAT PER MIL-DTL-83488 CLASS 3, TYPE 2 PLUS CHROMATE TREATMENT PER SAE AMS-C-5541, CLASS 3	NONE	PASSIVATE AMS 2700 NONE
EE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	ALUMINUM COAT PER NAS 4006	NONE	PASSIVATE AMS 2700 NONE
HK	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	HI-KOTE 1 PER HS294	NONE	PASSIVATE AMS 2700 NONE
W	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	BLUE ANODIZE PER ISO 8080	NONE	PASSIVATE AMS 2700 NONE

NOTES

① This dimension of D dia. may be .002 undersize.

② Material designation refers to chemical composition only.

3 Sizes below heavy line in Table 2 are special order only.

④ Mechanical testing in the 1/16 grip range only. Installation tests are conducted in the extended grip.

⑤ Single shear tested in maximum grip. Shear values apply to -04-03 and longer; -05-03 and longer; -06-04 and longer; and -08-07 and longer.

⑥ Single digit head marking is permissible, at manufacturer's option, for grip dash numbers less than 10.

7 When lubricated, parts shall be lubricated per AS5272 Type 1, MIL-L-87132, DOD-L-85645, or LOX compatible dry film lubricant.

⑧ Fasteners shall be capable of insertion into a ring gage having a hole size equivalent to minimum recommended hole size +.0002/–.0000 up to the fillet radius with a maximum insertion force of 15 pounds. The ring gage length shall be 2D.

PART NUMBER

Part Number Example:

CR7773 S –05 –04 W = 5/32 nominal diameter Cherry MAXIBOLT blind bolt, .219 min. grip, .282 max. grip, with blue anodize on sleeve.

Finish Code: No Code Denotes No Special Finish Treatment
"BE" Code Denotes Aluminum Coat per NAS 4006 and BMS 10-85
"D" Code Denotes IVD Aluminum Coating
"EE" Code Denotes Aluminum Coating
"HK" Code Denotes Hi Kote Coating
"W" Code Denotes Blue Anodize

Grip Dash Number (Mid grip in 16ths of an inch)

Diameter Dash Number (Nominal Diameter in 1/32 Increments)

Type ("S" indicates use of single action installation tool & supplied with shift washer)

Basic Part Number (Materials, Head Style)

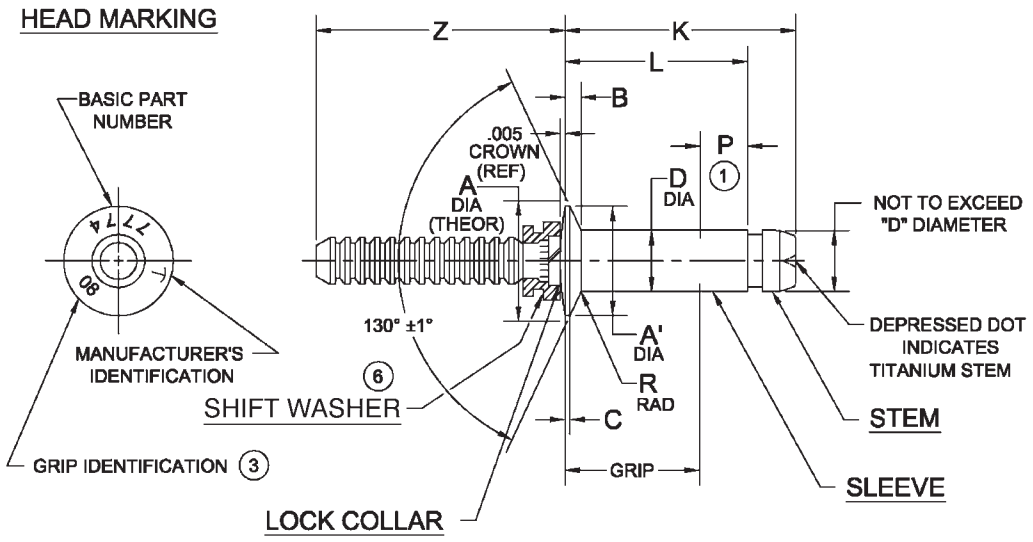


TABLE 1

Dia. Dash No.	D ±.001⑧	A Max	A' Min	B Max	P Max	R Max	Z Min	Hole Limits	Installed Strength (Lbs.)④	
									Single Shear Minimum⑤	Tensile Minimum
–05	.163	.333	.296	.039	.215	.025	.844	.164/.167	1980	900
–06	.198	.386	.342	.043	.250	.025	.875	.199/.202	2925	1400
–08	.259	.507	.463	.057	.305	.030	1.000	.260/.263	5005	2100

TABLE 2

Grip Dash No.	Grip Limits				-05 Diameter		Grip Limits				-06 Diameter		-08 Diameter	
	Overlap Min	1/16 Range④		Overlap Max	L Ref	K Max	Overlap Min	1/16 Range④		Overlap Max	L Ref	K Max	L Ref	K Max
		Min	Max					Min	Max					
–02	—	.094	.157	.173	.336	.476	—	.120	.157	.173	.355	.521	—	—
–03	.146	.156	.220	.236	.398	.539	⑨	.156	.220	.236	.417	.584	.479	.645
–04	.209	.219	.282	.298	.460	.602	.203	.219	.282	.298	.480	.647	.541	.708
–05	.271	.281	.345	.361	.523	.664	.265	.281	.345	.361	.542	.709	.604	.770
–06	.334	.344	.407	.423	.585	.727	.328	.344	.407	.423	.605	.772	.666	.833
–07	.396	.406	.470	.486	.648	.789	.390	.406	.470	.486	.667	.834	.729	.895
–08	.459	.469	.532	.548	.710	.852	.453	.469	.532	.548	.730	.897	.791	.958
–09	.521	.531	.595	.611	.773	.914	.515	.531	.595	.611	.792	.959	.854	1.020
–10	.584	.594	.657	.673	.835	.977	.578	.594	.657	.673	.855	1.022	.916	1.083
–11	.646	.656	.720	.736	.898	1.039	.640	.656	.720	.736	.917	1.084	.979	1.145
–12	.709	.719	.782	.798	.960	1.102	.703	.719	.782	.798	.980	1.147	1.041	1.208

TABLE 3

FINISH CODE	MATERIAL②			FINISH		
	SLEEVE	STEM	LOCK COLLAR	SLEEVE	STEM	LOCK COLLAR
NONE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	NONE	NONE	PASSIVATE AMS 2700 NONE
BE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	ALUMINUM COAT PER NAS 4006 AND BMS 10-85	NONE	PASSIVATE AMS 2700 NONE
D	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	IVD ALUMINUM COAT PER MIL-DTL-83488 CLASS 3, TYPE 2 PLUS CHROMATE TREATMENT PER SAE AMS-C-5541, CLASS 3	NONE	PASSIVATE AMS 2700 NONE
EE	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	ALUMINUM COAT PER NAS 4006	NONE	PASSIVATE AMS 2700 NONE
HK	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	HI-KOTE 1 PER HS294	NONE	PASSIVATE AMS 2700 NONE
W	CP TITANIUM PER ASTM-B348 GR. 1	38-6-44 TITANIUM PER AMS 4957	A-286 CRES AMS 5737 OR INCONEL 600 AMS 5687	BLUE ANODIZE PER ISO 8080	NONE	PASSIVATE AMS 2700 NONE

NOTES

① This dimension of D dia. may be .002 undersize.

② Material designation refers to chemical composition only.

3 Sizes below heavy line in Table 2 are special order only.

④ Mechanical testing in the 1/16 grip range only. Installation tests are conducted in the extended grip.

⑤ Single shear tested in maximum grip. Shear values apply to -05-04 and longer; -06-05 and longer; and -08-07 and longer.

⑥ Single digit head marking is permissible, at manufacturer's option, for grip dash numbers less than 10.

7 When lubricated, parts shall be lubricated per AS5272 Type 1, MIL-L-87132, DOD-L-85645, or LOX compatible dry film lubricant.

⑧ Fasteners shall be capable of insertion into a ring gage having a hole size equivalent to minimum recommended hole size +.0002/–.0000 up to the fillet radius with a maximum insertion force of 15 pounds. The ring gage length shall be 2D.

⑨ Overlap for -06 diameter is .140 and -08 diameter is none.

PART NUMBER

Part Number Example:

CR7774 S –05 –04 W = 5/32 nominal diameter Cherry MAXIBOLT blind bolt, .219 min. grip, .282 max. grip, with blue anodize on sleeve.

Finish Code: No Code Denotes No Special Finish Treatment
"BE" Code Denotes Aluminum Coat per NAS 4006 and BMS 10-85
"D" Code Denotes IVD Aluminum Coating
"EE" Code Denotes Aluminum Coating
"HK" Code Denotes Hi Kote Coating
"W" Code Denotes Blue Anodize

Grip Dash Number (Mid grip in 16ths of an inch)

Diameter Dash Number (Nominal Diameter in 1/32 Increments)

Type ("S" indicates use of single action installation tool & supplied with shift washer)

Basic Part Number (Materials, Head Style)

Fastener Diameter	Tool Number	Pulling Capacity Lbs.	Weight Lbs.	Straight Pulling Head	Offset Pulling Head	Right Angle Head
1/8"	G83	3750	4.6	H701B-456(3)	H781-456(3) H782 (3)	H753A-456(3)
	G84	5750	7.7	H701B-456(3)	H781-456(3) H782 (3)	H753A-456(3)
	G704B	3100	4.5	H701B-456	H781-456 H782	H753A-456
	G746A	1850	4.0	H701B-456	H781-456 H782	H753A-456
	G747	2100	3.5	H701B-456	H781-456 H782	H753A-456
	G750A	3800	1.9	H750A-456	H781-456(1) H782(1)	H753A-456(1)
5/32"	G83	3750	4.6	H83B-5MB	H781-456(3) H782 (3)	H828-5MB(2)
	G84	5750	7.7	H83B-5MB	H781-456(3) H782 (3)	H828-5MB(2)
	G704B	3100	4.5	H701B-456	H781-456 H782	H753A-456
	G747	2100	3.5	H701B-456	H781-456 H782	H753A-456
	G750A	3800	1.9	H750A-5MB	H781-456(1) H782(1)	H753A-456(1)
3/16"	G83	3750	4.6	H83B-6MB	H856-6MB(2)	H828-6MB(2)
	G84	5750	7.7	H83B-6MB	H856-6MB(2)	H828-6MB(2)
	G750A	3800	1.9	H750A-6MB	—	—
1/4"	G84	5750	7.7	H84A-8MB	—	—
	G85D-S	7000	10.5	H652-8MB	—	—
	G87D	9500	10.5	H652-8MB	—	—

(1) Requires 750A-088 adapter. (2) Requires 744-200 adapter. (3) Requries 744-300 adapter. For other pulling head combinations contact Cherry Aerospace.

H83B STRAIGHT PULLING HEAD

Available for 5/32" and 3/16" diameter MAXIBOLTS. For use with G83 & G84 tools. For use with Cherry 'S' type only. For 1/4" diameter "S" type, use H84A-8MB with G84 tool only.

H828-5MB/H828-6MB RIGHT ANGLE PULLING HEAD

This pulling head aids installation of MAXIBOLTS in limited access applications. Available for 5/32" and 3/16" diameter MAXIBOLTS. For use with G83 and G84 tools. For use with Cherry 'S' type only.

560-070 ADAPTER

Adapts H744-5/6MB, H856-6MB and H828-5/6MB pulling heads to G85D-S and G87D riveters.

GRIP GAGE 269B12

A simple, self-explanatory gage for determining material thickness and proper MAXIBOLT grip number.

G750A
NATIONAL STOCK NUMBER
5120-01-432-9361

The Cherry hand hydraulic riveting tool provides the versatility of a pneumatic-hydraulic riveter, but with the lightweight, high pull strength ratio desirability not found in other hand riveters. The Cherry G750A has a unique 2-step hydraulic power cylinder that provides the user with the ease of pulling the handle without the strain normally endured to install a high strength fastener. This patentable 2-step power feature allows the user to squeeze the handle without the increased power requirement, without feeling the need to squeeze harder to install the fastener. The Cherry G750A hand riveter can install a variety of blind fastener styles, diameters, head configurations, and material combinations without changing the pulling head or adjusting the tool.

G83
NATIONAL STOCK NUMBER
5130-01-435-3507

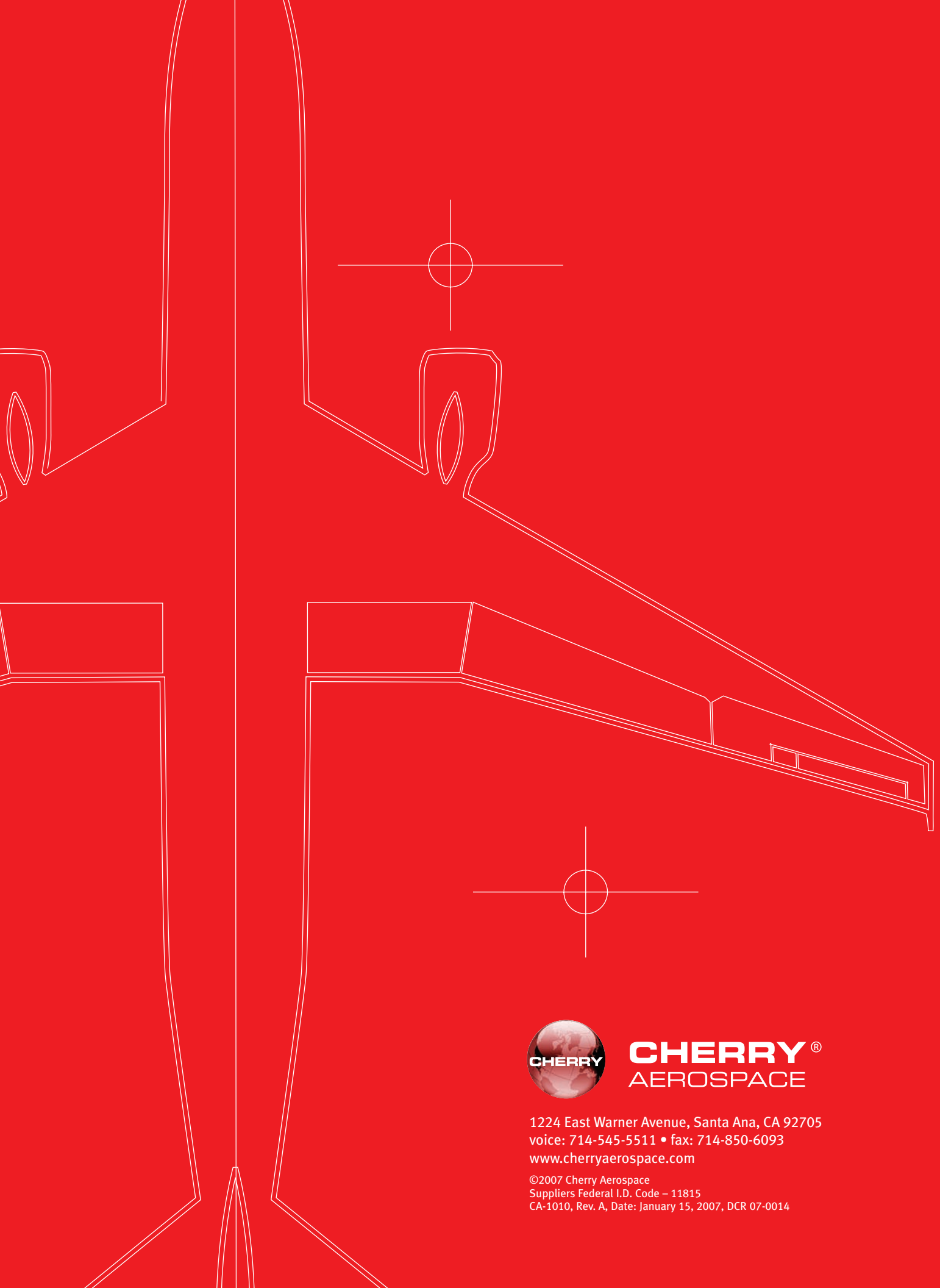
The Cherry G83 pneumatic-hydraulic Lockbolt installation tool is a rugged production tool designed for high speed, reliable installation of the most popular sizes of aircraft lockbolts and blind bolts. Weighing only 4.58 pounds, this tool has been designed with many ergonomic features — less recoil, low noise and comfortably fitting in the operator's hand. It can be operated in any position with one hand. The G83 is 11.5" high and operates on 90 to 100 psi at the tool. It has a .4375" stroke and a minimum of 3750 lbs. pulling capacity.

G84

The Cherry G84 pneumatic-hydraulic Lockbolt installation tool is a rugged production tool designed for high speed, reliable installation of the most popular sizes of aircraft lockbolts and blind bolts. It incorporates a new improved bayonet attachment for quick change of pulling heads. Weighing only 7.70 pounds (3.5 kg), this tool has been designed with many ergonomic features — less recoil, low noise and confortably fitting in the operator's hand. It can be operated in any position with one hand. The tool can install blind bolts, blind rivets and Lockbolts.

G704B
NATIONAL STOCK NUMBER
5130-01-393-1584

The G704B weighs 4.5 lbs. and can be operated in any position. It has a rivet setting stroke of .518" and a pulling capacity of 3136 lbs. on 90 psi air pressure at the inlet. Normal operating air pressure is 90-120 psi at the inlet. The G704B consumes approximately 4 CFM of air at 20 cycles per minute and its maximum noise level under load does not exceed 85 dB(A). This tool can install -04 and -05 diameter "S" type blind bolts.



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