

CHERRYBUCK® TITANIUM SHEAR PIN

95KSI LIGHTWEIGHT TITANIUM SHEAR PIN



CHERRY®
AEROSPACE
SPS Fastener Division, a PCC Company

CHERRYBUCK® TITANIUM SHEAR PIN

95KSI LIGHTWEIGHT TITANIUM SHEAR PIN

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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 MERCHANT ABILITY IS HEREBY SPECIFICALLY DISCLAIMED AND EXCLUDED BY SELLER. This warranty is void if seller is not notified in writing of any rejection of the goods within one (1) Year after initial use by buyer of any power Riveter or ninety (90) days after initial use of any other product. Seller shall not be liable under any circumstances for incidental, special or consequential damages arising in whole or in part from any breach by Seller, AND SUCH INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES ARE HEREBY EXPRESSLY EXCLUDED.

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

CHERRY® and CherryBuck® are trademarks of Cherry Aerospace.

NOTE

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

CHERRYBUCK® TITANIUM SHEAR PIN

FEATURES AND SPECIFICATIONS

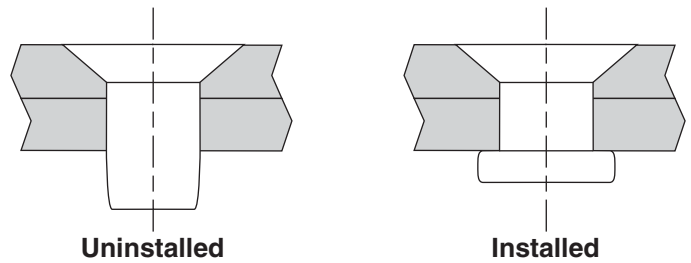
THE OPTIMUM SHEAR PIN FOR AUTOMATIC INSTALLATION

- A one-piece fastener
- No additional tooling required
- Requires simplest feed mechanism
- No expensive operator training
- No torquing...just a straight squeeze to install
- Fast...simple...and labor saving

CherryBUCK is a bi-metallic, one-piece fastener that combines a 95KSI shear strength shank with a ductile, Ti/Cb tail, interchangeable functionally with comparable 6Al-4V, two-piece shear fasteners...but with a number of advantages:

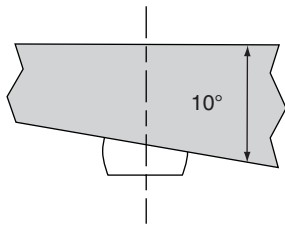
CherryBUCK is the lightest weight shear pin...saving 10% to 42% of the weight of comparable two-piece shear pin fasteners. Being a one-piece fastener, CherryBUCK cannot disassemble or shake loose in service. No FOD problems!

CherryBUCK has a 600°F allowable temperature...eliminating the need of costly high temperature CRES nuts or collars required by other shear fasteners.

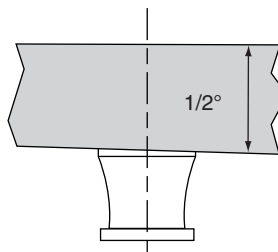


SELF-ALIGNING

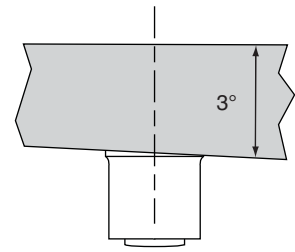
CherryBUCK may be installed on backside slopes of up to 10°, eliminating the need for expensive self-aligning washers. Just compare CherryBUCK's versatility with any two-piece shear pin fastener.



CherryBUCK®



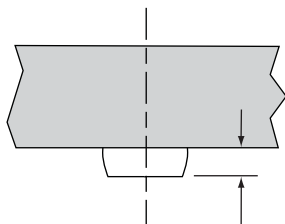
Hex-Driven Shear Pin



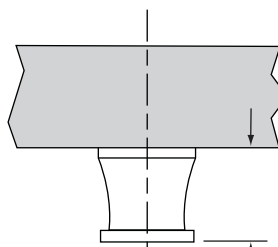
Lockbolt

BACKSIDE CLEARANCE

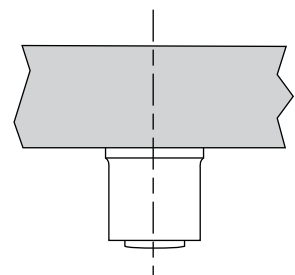
CherryBUCK's low upset profile offers obvious advantages over two-piece fasteners...especially in applications where hydraulic lines or electrical conduits are present.



CherryBUCK®



Hex-Driven Shear Pin



Lockbolt

CherryBUCK® Upset 50% lower than comparable hex driven shear pin

CHERRYBUCK® TITANIUM SHEAR PIN

STRENGTH

ALLOWABLE JOINT STRENGTH — Joint allowable loads (lbs.) per MMPDS-02 criteria

Fastener Type	STRENGTH IN LBS.														
	CSR924						CSR925						CSR922		
	CLAD 7075—T6			CLAD 2024—T3			CLAD 7075—T6			CLAD 2024—T3			CLAD 2024—T3		
Rivet Diameter	5/32	3/16	1/4	5/32	3/16	1/4	5/32	3/16	1/4	5/32	3/16	1/4	5/32	3/16	1/4
Sheet Thickness	ULTIMATE STRENGTH														
0.050	941	—	—	737	—	—	995	—	—	807	—	—	—	—	—
0.063	1207	1383	—	1019	1118	—	1227	1442	—	1020	1180	—	1039	—	—
0.071	1385	1588	—	1152	1319	—	1371	1607	—	1150	1335	—	1152	—	—
0.080	1557	1779	2281	1279	1509	1837	1532	1792	2415	1300	1505	1970	1279	1509	—
0.090	1775	2050	2594	1419	1673	2168	1711	2001	2688	1465	1695	2220	1419	1673	—
0.100	1876	2263	2919	1560	1834	2500	1890	2205	2960	1630	1885	2470	1560	1834	2500
0.125	1950	2542	3765	1898	2242	3036	2007	2694	3641	2007	2360	3095	1898	2242	3036
0.160	2007	2660	4387	2007	2680	3786	—	—	4595	—	2694	3975	2007	2680	3786
0.190	—	2694	4525	—	2694	4404	—	—	4660	—	—	4660	—	2694	4404
0.250	—	—	4660	—	—	4660	—	—	—	—	—	—	—	—	4660
Sheet Thickness	YIELD STRENGTH														
0.050	659	—	—	511	—	—	861	—	—	619	—	—	—	—	—
0.063	887	985	—	712	778	—	1013	1225	—	747	889	—	430	—	—
0.071	1022	1148	—	786	922	—	1107	1334	—	827	981	—	484	—	—
0.080	1116	1325	1625	840	1038	1276	1213	1455	2067	916	1085	1494	544	632	—
0.090	1189	1480	1894	900	1109	1513	1331	1592	2246	1015	1200	1645	610	709	—
0.100	1257	1545	2162	960	1178	1750	1448	1727	2425	1115	1315	1795	677	785	1041
0.125	1393	1733	2619	1110	1352	1979	1741	2068	2873	1360	1600	2175	842	978	1293
0.160	1608	1978	2950	1320	1596	2300	—	—	3499	—	2002	2705	1075	1247	1648
0.190	—	2191	3231	—	1805	2575	—	—	4036	—	—	3155	—	1478	1951
0.250	—	—	3794	—	—	3125	—	—	—	—	—	—	—	—	2558

Allowable data sources: CSR924 in 7075-T6: MMPDS-02 Table 8.1.4.2 (c)
 CSR924 in 2024-T3: MMPDS-02 Table 8.1.4.2 (d)
 CSR925 in 7075-T6: MMPDS-02 Table 8.1.4.1 (a)
 CSR925 in 2024-T3: MMPDS-02 Table 8.1.4.1 (b)
 CSR922 in 2024-T3: Cherry Report No. C74-132

SHEAR AND TENSILE STRENGTHS — Minimum values in pounds, as installed in steel plates

Shank Diameter	Tensile Strength (2)			Single-Shear Strength (1)
	CSR924 CSR926	CSR922 CSR925	CSR927 CSR942	
-05 (5/32)	1480	1600	1600	1820
-06 (3/16)	1980	2100	2210	2620
-08 (1/4)	3430	3700	4080	4660
-10 (5/16)	5350	5700	6500	7290
-12 (3/8)	7730	8300	10100	10450

1) Shear Values based on 95KSI and area of nominal shank diameter per Table 8.1.5(a) MMPDS-02.

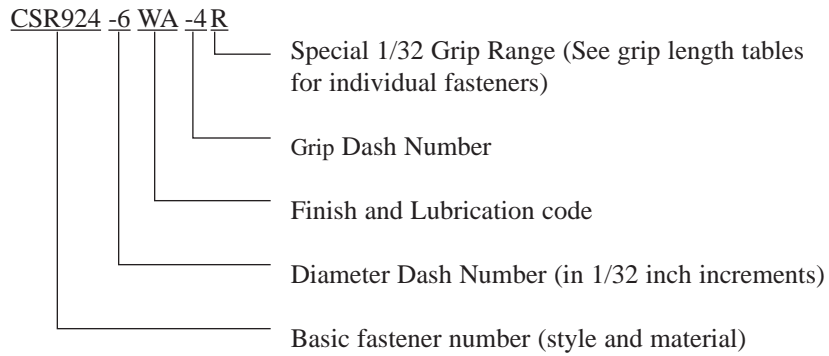
2) With minimum upset thicknesses as shown in Table on page 23.

CHERRYBUCK® TITANIUM SHEAR PIN

PART NUMBERS

NUMBERING SYSTEM

Cherry Part Number Example:



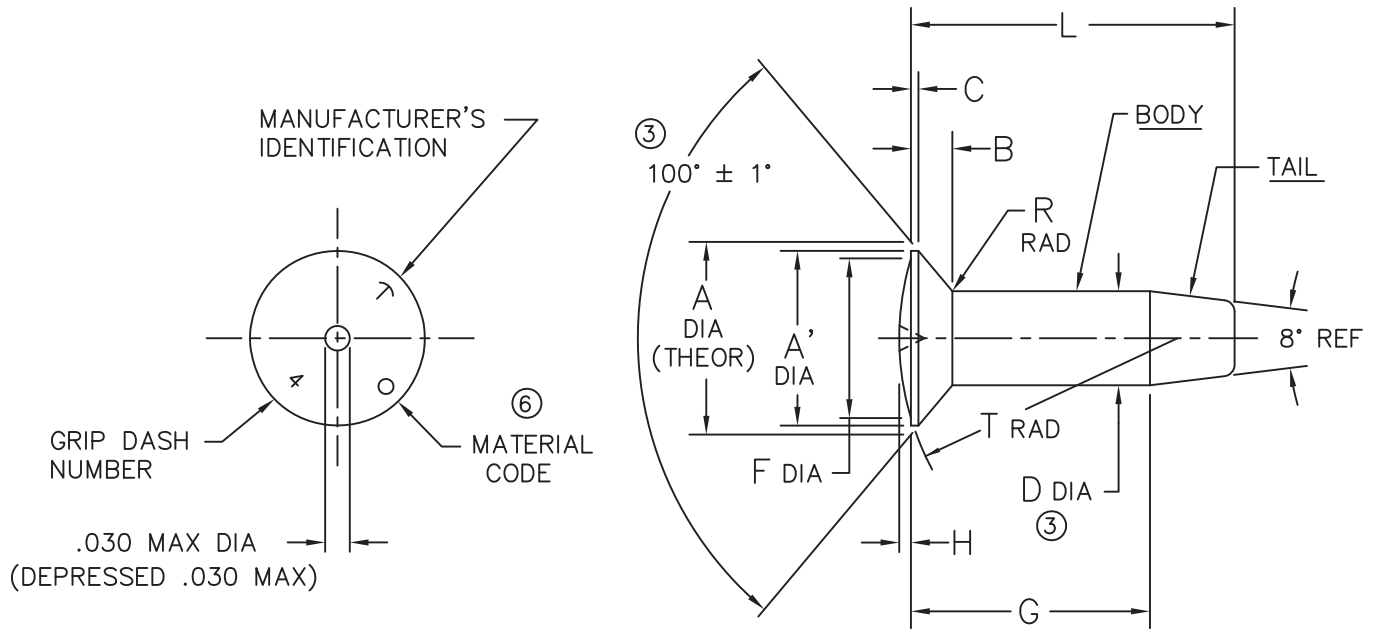
CONVERSION TO NASM83459

NASM83459 is the specification covering 1/16 grip CherryBUCK® fasteners. Conversion of the basic part numbers are listed below.

NASM-SPEC Number	Cherry Number
NASM83459/1	CSR927
NASM83459/2	CSR942
NASM83459/3	CSR926

CHERRYBUCK® TITANIUM SHEAR PIN

MS20426 100° FLUSH HEAD/CSR922



DIA DASH	A ±.0025	A' MIN	B REF	C ±.002	D +.0000 -.0005	F ±.005	H ±.002	R ±.005	T REF
-5	.286	.271	.051	.004	.1640	.261	.005	.020	1.70
-6	.353	.336	.069	.005	.1895	.326	.005	.025	2.66
-8	.476	.456	.095	.006	.2495	.446	.005	.025	4.98
-10	.564	.540	.106	.008	.3120	.530	.005	.035	7.03
-12	.694	.670	.134	.008	.3745	.660	.005	.035	10.90

Finish Code	Finish	Lubrication
—	NONE	CHLORINE-FREE DRY CETYL ALCOHOL
E	ALUMINUM COATING PER NAS 4006	NONE
WA	BLUE ANODIZE PER ISO 8080	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132
D	I.V.D. ALUMINUM COATING PER BAC5315	NONE
T	TIODIZE TYPE II ANODIC COATING, TAL 58	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132

CHERRYBUCK® TITANIUM SHEAR PIN

MS20426 100° FLUSH HEAD/CSR922

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤		
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA
-3	.126	.156	.125	.330	.347	
-3R	.157	.187	.156	.361	.378	.423
-4	.188	.218	.187	.392	.410	.455
-4R	.219	.250	.218	.423	.441	.486
-5	.251	.281	.250	.455	.472	.517
-5R	.282	.312	.281	.486	.503	.548
-6	.313	.343	.312	.517	.535	.580
-6R	.344	.375	.343	.548	.566	.611
-7	.376	.406	.375	.580	.597	.642
-7R	.407	.437	.406	.611	.628	.673
-8	.438	.468	.437	.642	.660	.705
-8R	.469	.500	.468	.673	.691	.736
-9	.501	.531	.500	.705	.722	.767
-9R	.532	.562	.531	.736	.753	.798
-10	.563	.593	.562	.767	.785	.830
-10R	.594	.625	.593	.798	.816	.861
-11	.626	.656	.625	.830	.847	.892
-11R	.657	.687	.656	.861	.878	.923
-12	.688	.718	.687	.892	.910	.955
-12R	.719	.750	.718	.923	.941	.986
-13	.751	.781	.750	.955	.972	1.017
-13R	.782	.812	.781	.986	1.003	1.048
-14	.813	.843	.812	1.017	1.035	1.080
-14R	.844	.875	.843	1.048	1.066	1.111
-15	.876	.906	.875	1.080	1.097	1.142
-15R	.907	.937	.906	1.111	1.128	1.173
-16	.938	.968	.937	1.142	1.160	1.205
-16R	.969	1.000	.968	1.173	1.191	1.236
-17	1.001	1.031	1.000	1.205	1.222	1.267
-17R	1.032	1.062	1.031	1.236	1.253	1.298
-18	1.063	1.093	1.062	1.267	1.285	1.330
-18R	1.094	1.125	1.093	1.298	1.316	1.361
-19	1.126	1.156	1.125	1.330	1.347	1.392
-19R	1.157	1.187	1.156	1.361	1.378	1.423
-20	1.188	1.218	1.187	1.392	1.410	1.455
-20R	1.219	1.250	1.218	1.423	1.441	1.486
-21	1.251	1.281	1.250	1.455	1.472	1.517

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤	
	MIN	MAX		-10 DIA	-12 DIA
-5	.251	.312	.250	.565	—
-6	.313	.375	.312	.627	.672
-7	.376	.437	.375	.690	.735
-8	.438	.500	.437	.752	.797
-9	.501	.562	.500	.815	.860
-10	.563	.625	.562	.877	.922
-11	.626	.687	.625	.940	.985
-12	.688	.750	.687	1.002	1.047
-13	.751	.812	.750	1.065	1.110
-14	.813	.875	.812	1.127	1.172
-15	.876	.937	.875	1.190	1.235
-16	.938	1.000	.937	1.252	1.297
-17	1.001	1.062	1.000	1.315	1.360
-18	1.063	1.125	1.062	1.377	1.422
-19	1.126	1.187	1.125	1.440	1.485
-20	1.188	1.250	1.187	1.502	1.547
-21	1.251	1.312	1.250	1.565	1.610

Material: Body—6AL-4V Titanium alloy (AMS 4967)
Tail—55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: Processed to produce a 95 ksi shear strength and a soft buckable tail.

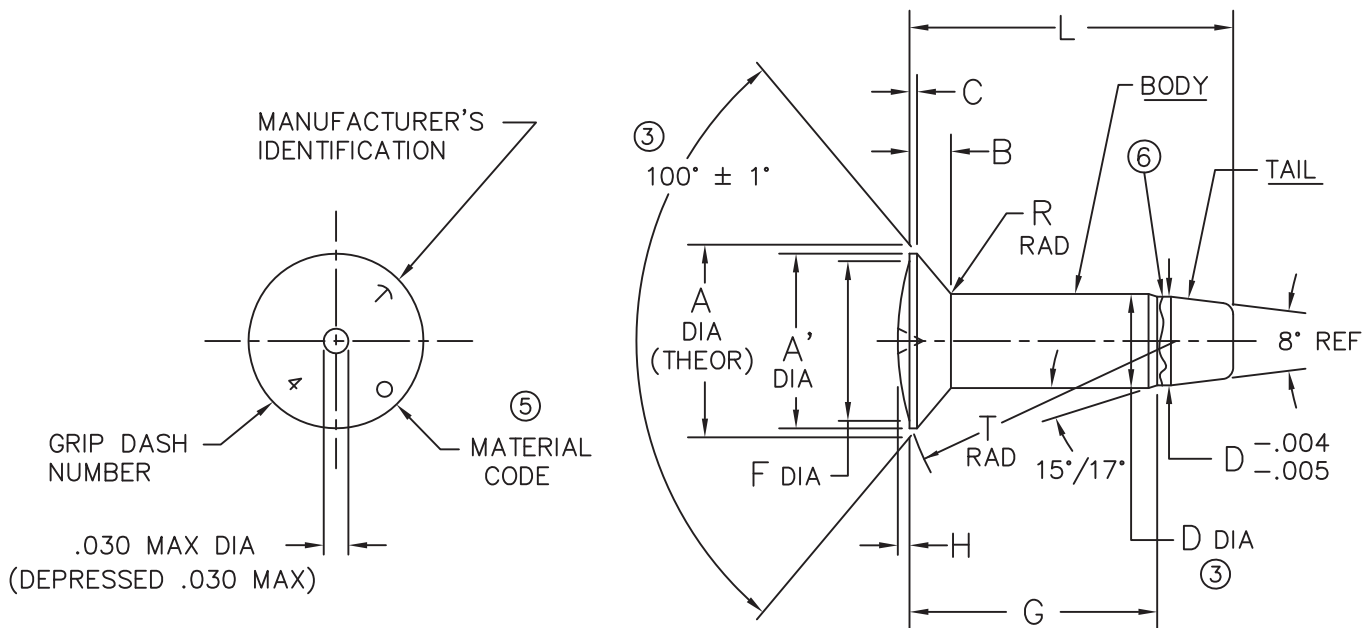
Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

Notes

1. Caution: do not cut to shorter length.
2. Do not use in less than specified minimum grip.
- ③ Conical surface of head and "D" diameter to be concentric within .003 FIM.
4. All dimensions apply before application of finish and/or lubrication.
- ⑤ Grip lengths below heavy lines are special order only.
- ⑥ Depressed dot identifies Ti/Columbium tail material.

CHERRYBUCK® TITANIUM SHEAR PIN

MS20426 CROWN HEAD/CSR922F



DIA DASH	A ±.0025	A' MIN	B REF	C ±.002	D +.0000 -.0005	F ±.005	H ±.002	R ±.005	T REF
-5	.286	.271	.051	.004	.1640	.261	.005	.020	1.70
-6	.353	.336	.069	.005	.1895	.326	.005	.025	2.66
-8	.476	.456	.095	.006	.2495	.446	.005	.025	4.98
-10	.564	.540	.106	.008	.3120	.530	.005	.035	7.03
-12	.694	.670	.134	.008	.3745	.660	.005	.035	10.90

Finish Code	Finish*	Lubrication
—	NONE	CHLORINE-FREE DRY CETYL ALCOHOL
T	TIODIZE TYPE II ANODIC COATING, TAL 58	CHLORINE-FREE LIQUID CETYL ALCOHOL PERMIL-L-87132

*See Standards for additional finishes.

CHERRYBUCK® TITANIUM SHEAR PIN

MS20426 CROWN HEAD/CSR922F

GRIP DASH NO.	GRIP RANGE		G +.010 -.000	L ± .010 ⑤		
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA
-3	.126	.156	.112	.330	.347	
-3R	.157	.187	.143	.361	.378	.423
-4	.188	.218	.174	.392	.410	.455
-4R	.219	.250	.205	.423	.441	.486
-5	.251	.281	.237	.455	.472	.517
-5R	.282	.312	.268	.486	.503	.548
-6	.313	.343	.299	.517	.535	.580
-6R	.344	.375	.330	.548	.566	.611
-7	.376	.406	.362	.580	.597	.642
-7R	.407	.437	.393	.611	.628	.673
-8	.438	.468	.424	.642	.660	.705
-8R	.469	.500	.455	.673	.691	.736
-9	.501	.531	.487	.705	.722	.767
-9R	.532	.562	.518	.736	.753	.798
-10	.563	.593	.549	.767	.785	.830
-10R	.594	.625	.580	.798	.816	.861
-11	.626	.656	.612	.830	.847	.892
-11R	.657	.687	.643	.861	.878	.923
-12	.688	.718	.674	.892	.910	.955
-12R	.719	.750	.705	.923	.941	.986
-13	.751	.781	.737	.955	.972	1.017
-13R	.782	.812	.768	.986	1.003	1.048
-14	.813	.843	.799	1.017	1.035	1.080
-14R	.844	.875	.830	1.048	1.066	1.111
-15	.876	.906	.862	1.080	1.097	1.142
-15R	.907	.937	.893	1.111	1.128	1.173
-16	.938	.968	.924	1.142	1.160	1.205
-16R	.969	1.000	.955	1.173	1.191	1.236

GRIP DASH NO.	GRIP RANGE		G +.010 -.000	L ± .010 ⑤	
	MIN	MAX		-10 DIA	-12 DIA
-5	.251	.312	.237	.565	—
-6	.313	.375	.299	.627	.672
-7	.376	.437	.362	.690	.735
-8	.438	.500	.424	.752	.797
-9	.501	.562	.487	.815	.860
-10	.563	.625	.549	.877	.922
-11	.626	.687	.612	.940	—
-12	.688	.750	.674	1.002	—
-13	.751	.812	.737	1.065	—
-14	.813	.875	.799	1.127	—
-15	.876	.937	.862	1.190	—
-16	.938	1.000	.924	1.252	—

Material: Body—6AL-4V Titanium alloy (AMS 4967)
Tail—55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: Processed to produce a 95 ksi shear strength and a soft buckable tail.

Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

Notes

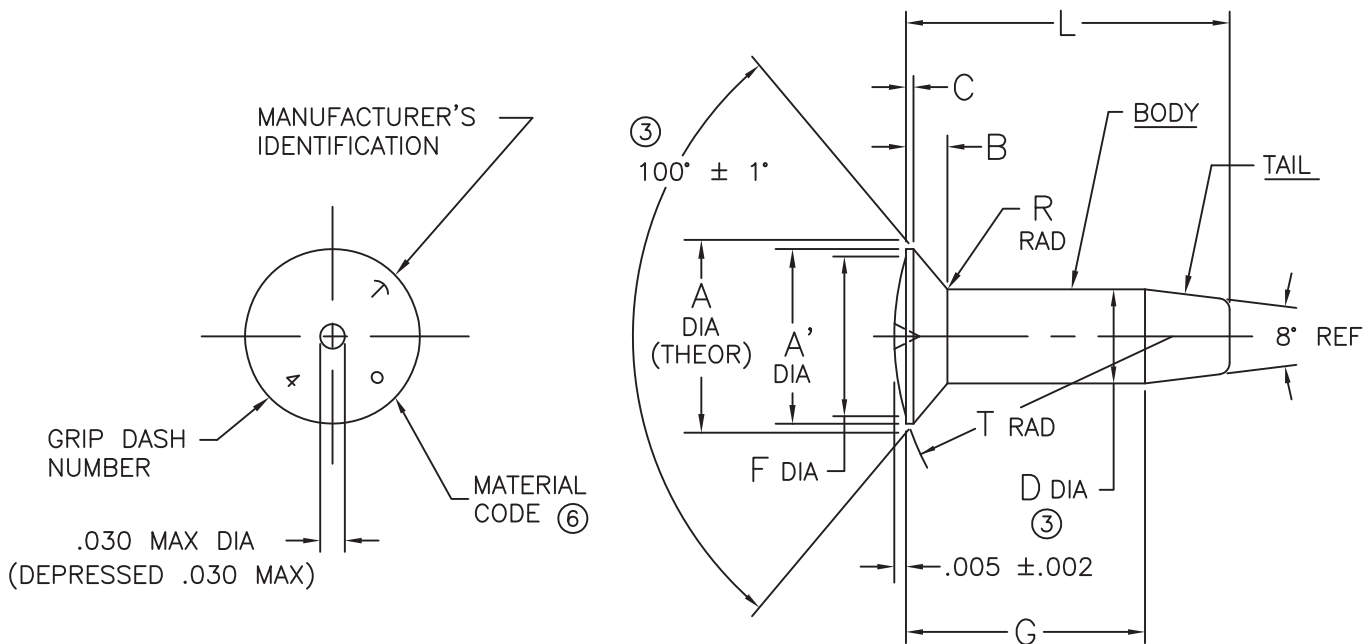
1. Caution: do not cut to shorter length.
2. Do not use in less than specified minimum grip.
- ③ Conical surface of head and "D" diameter to be concentric within .003 FIM.
4. All dimensions apply before application of finish and/or lubrication.

⑤ Depressed dot identifies ti/columbium tail material.

⑥ For weld location, see PS-TBM-920.

CHERRYBUCK® TITANIUM SHEAR PIN

NAS1097 LOW CROWN HEAD/CSR924



DIADASH	A ±.0025	A' MIN	B REF	C ±.002	D +.0000 -.0005	F ±.005	R ±.005	T REF
-5	.2444	.230	.034	.004	.1640	.220	.020	1.70
-6	.2991	.282	.046	.005	.1895	.272	.025	2.66
-8	.3923	.373	.060	.006	.2495	.363	.025	4.98
-10	.4714	.447	.067	.008	.3120	.437	.035	7.03
-12	.5579	.534	.077	.008	.3745	.524	.035	10.90

Finish Code	Finish	Lubrication
—	NONE	CHLORINE-FREE DRY CETYL ALCOHOL
E	ALUMINUM COATING PER NAS 4006	NONE
WA	BLUE ANODIZE PER ISO 8080	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132
D	I.V.D. ALUMINUM COATING PER BAC5315	NONE
T	TIODIZE TYPE II ANODIC COATING, TAL 58	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132

CHERRYBUCK® TITANIUM SHEAR PIN

NAS1097 LOW CROWN HEAD/CSR924

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤		
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA
-2R	.094	.125	.093	.298	—	—
-3	.126	.156	.125	.330	.347	—
-3R	.157	.187	.156	.361	.378	.423
-4	.188	.218	.187	.392	.410	.455
-4R	.219	.250	.218	.423	.441	.486
-5	.251	.281	.250	.455	.472	.517
-5R	.282	.312	.281	.486	.503	.548
-6	.313	.343	.312	.517	.535	.580
-6R	.344	.375	.343	.548	.566	.611
-7	.376	.406	.375	.580	.597	.642
-7R	.407	.437	.406	.611	.628	.673
-8	.438	.468	.437	.642	.660	.705
-8R	.469	.500	.468	.673	.691	.736
-9	.501	.531	.500	.705	.722	.767
-9R	.532	.562	.531	.736	.753	.798
-10	.563	.593	.562	.767	.785	.830
-10R	.594	.625	.593	.798	.816	.861
-11	.626	.656	.625	.830	.847	.892
-11R	.657	.687	.656	.861	.878	.923
-12	.688	.718	.687	.892	.910	.955
-12R	.719	.750	.718	.923	.941	.986
-13	.751	.781	.750	.955	.972	1.017
-13R	.782	.812	.781	.986	1.003	1.048
-14	.813	.843	.812	1.017	1.035	1.080
-14R	.844	.875	.843	1.048	1.066	1.111
-15	.876	.906	.875	1.080	1.097	1.142
-15R	.907	.937	.906	1.111	1.128	1.173
-16	.938	.968	.937	1.142	1.160	1.205
-16R	.969	1.000	.968	1.173	1.191	1.236
-17	1.001	1.031	1.000	1.205	1.222	1.267
-17R	1.032	1.062	1.031	1.236	1.253	1.298
-18	1.063	1.093	1.062	1.267	1.285	1.330
-18R	1.094	1.125	1.093	1.298	1.316	1.361
-19	1.126	1.156	1.125	1.330	1.347	1.392
-19R	1.157	1.187	1.156	1.361	1.378	1.423
-20	1.188	1.218	1.187	1.392	1.410	1.455
-20R	1.219	1.250	1.218	1.423	1.441	1.486
-21	1.251	1.281	1.250	1.455	1.472	1.517
-21R	1.282	1.313	1.281	1.486	1.503	—
-22	1.314	1.344	1.312	1.517	1.535	—
-22R	1.345	1.376	1.343	1.548	1.566	—
-23	1.377	1.407	1.376	1.580	1.597	—
-23R	1.408	1.439	1.407	1.611	1.628	—
-24	1.440	1.470	1.438	1.642	1.660	—
-24R	1.471	1.502	1.469	—	1.691	—
-25	1.503	1.583	1.501	—	1.722	—

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤	
	MIN	MAX		-10 DIA	-12 DIA
-4	.188	.250	.187	.502	—
-5	.251	.312	.250	.565	.610
-6	.313	.375	.312	.627	.672
-7	.376	.437	.375	.690	.735
-8	.438	.500	.437	.752	.797
-9	.501	.562	.500	.815	.860
-10	.563	.625	.562	.877	.922
-11	.626	.687	.625	.940	.985
-12	.688	.750	.687	1.002	1.047
-13	.751	.812	.750	1.065	1.110
-14	.813	.875	.812	1.127	1.172
-15	.876	.937	.875	1.190	1.235
-16	.938	1.000	.937	1.252	1.297
-17	1.001	1.062	1.000	1.315	1.360
-18	1.063	1.125	1.062	1.377	1.422
-19	1.126	1.187	1.125	1.440	1.485
-20	1.188	1.250	1.187	1.502	1.547
-21	1.251	1.312	1.250	1.565	1.610

Material: Body-6AL-4V Titanium alloy (AMS 4967)
Tail-55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: processed to produce a 95 ksi shear strength and a soft buckable tail.

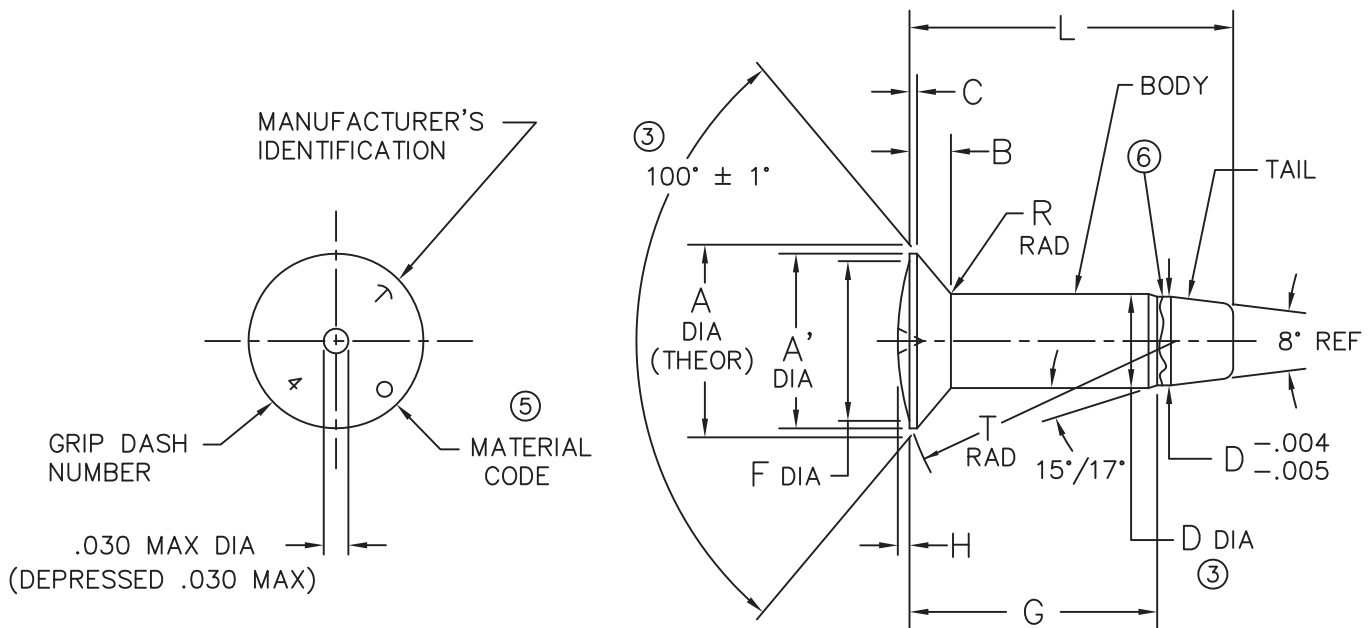
Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

Notes

1. Caution: do not cut to shorter length.
2. Do not use in less than specified minimum grip.
- ③ Conical surface of head and "D" diameter to be concentric within .003 FIM.
4. All dimensions apply before application of finish and/or lubrication.
- ⑤ Grip lengths below heavy lines are special order only.
- ⑥ Depressed dot identifies Ti/Columbium tail material.

CHERRYBUCK® TITANIUM SHEAR PIN

NAS1097 LOW CROWN HEAD/CSR924F



DIA DASH	A ±.0025	A' MIN	B REF	C ±.002	D +.0000 -.0005	F ±.005	H ±.002	R ±.005	T REF
-5	.2444	.230	.034	.004	.1640	.220	.005	.020	1.70
-6	.2991	.282	.046	.005	.1895	.272	.005	.025	2.66
-8	.3923	.373	.060	.006	.2495	.363	.005	.025	4.98
-10	.4714	.447	.067	.008	.3120	.437	.005	.035	7.03
-12	.5579	.534	.077	.008	.3745	.524	.005	.035	10.90

Finish Code	Finish	Lubrication
—	NONE	CHLORINE-FREE DRY CETYL ALCOHOL
T	TIODIZE TYPE II ANODIC COATING, TAL 58	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132

CHERRYBUCK® TITANIUM SHEAR PIN

NAS1097 LOW CROWN HEAD/CSR924F

GRIP DASH NO.	GRIP RANGE		G +.010 -.000	L ± .010 ⑤		
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA
-2R	.094	.125	.080	.298	—	—
-3	.126	.156	.112	.330	.347	—
-3R	.157	.187	.143	.361	.378	.423
-4	.188	.218	.174	.392	.410	.455
-4R	.219	.250	.205	.423	.441	.486
-5	.251	.281	.237	.455	.472	.517
-5R	.282	.312	.268	.486	.503	.548
-6	.313	.343	.299	.517	.535	.580
-6R	.344	.375	.330	.548	.566	.611
-7	.376	.406	.362	.580	.597	.642
-7R	.407	.437	.393	.611	.628	.673
-8	.438	.468	.424	.642	.660	.705
-8R	.469	.500	.455	.673	.691	.736
-9	.501	.531	.487	.705	.722	.767
-9R	.532	.562	.518	.736	.753	.798
-10	.563	.593	.549	.767	.785	.830
-10R	.594	.625	.580	.798	.816	.861
-11	.626	.656	.612	.830	.847	.892
-11R	.657	.687	.643	.861	.878	.923
-12	.688	.718	.674	.892	.910	.955
-12R	.719	.750	.705	.923	.941	.986
-13	.751	.781	.737	.955	.972	1.017
-13R	.782	.812	.768	.986	1.003	1.048
-14	.813	.843	.799	1.017	1.035	1.080
-14R	.844	.875	.830	1.048	1.066	1.111
-15	.876	.906	.862	1.080	1.097	1.142
-15R	.907	.937	.893	1.111	1.128	1.173
-16	.938	.968	.924	1.142	1.160	1.205
-16R	.969	1.000	.955	1.173	1.191	1.236

GRIP DASH NO.	GRIP RANGE		G +.010 -.000	L ± .010 ⑤	
	MIN	MAX		-10 DIA	-12 DIA
-4	.188	.250	.187	.502	—
-5	.251	.312	.250	.565	.610
-6	.313	.375	.312	.627	.672
-7	.376	.437	.375	.690	.735
-8	.438	.500	.437	.752	.797
-9	.501	.562	.500	.815	.860
-10	.563	.625	.562	.877	.922
-11	.626	.687	.625	.940	—
-12	.688	.750	.687	1.002	—
-13	.751	.812	.750	1.065	—
-14	.813	.875	.812	1.127	—
-15	.876	.937	.875	1.190	—
-16	.938	1.000	.937	1.252	—

Material: Body—6AL-4V Titanium alloy (AMS 4967)
Tail—55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: Processed to produce a 95 ksi shear strength and a soft buckable tail.

Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

Notes

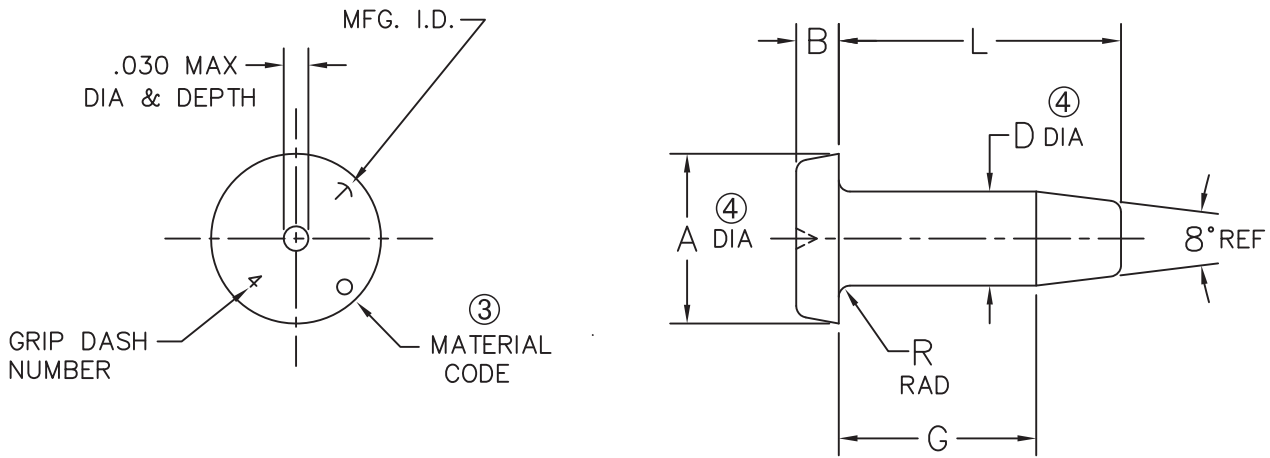
1. Caution: do not cut to shorter length.
2. Do not use in less than specified minimum grip.
- ③ Conical surface of head and "D" diameter to be concentric within .003 FIM.
4. All dimensions apply before application of finish and/or lubrication.

⑤ Grip lengths below heavy lines are special order only.

⑥ Depressed dot identifies Ti/Columbium tail material.

CHERRYBUCK® TITANIUM SHEAR PIN

PROTRUDING HEAD/CSR925



DIA DASH	A		B ±.003	D +.0000 - .0005	R ±.005
	MIN	MAX			
-5	.235	.249	.052	.1640	.015
-6	.288	.302	.059	.1895	.020
-8	.363	.377	.077	.2495	.020
-10	.455	.471	.097	.3120	.025
-12	.549	.565	.116	.3745	.025

Finish Code	Finish	Lubrication
—	NONE	CHLORINE-FREE DRY CETYL ALCOHOL
WA	BLUE ANODIZE PER ISO 8080	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132
D	I.V.D. ALUMINUM COATING PER BAC 5315	NONE
U	TIODIZE TYPE II ANODIC COATING	TIOLUBE 460

CHERRYBUCK® TITANIUM SHEAR PIN

PROTRUDING HEAD/CSR925

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤		
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA
-2R	.094	.125	.093	.298	—	—
-3	.126	.156	.125	.330	.347	.392
-3R	.157	.187	.156	.361	.378	.423
-4	.188	.218	.187	.392	.410	.455
-4R	.219	.250	.218	.423	.441	.486
-5	.251	.281	.250	.455	.472	.517
-5R	.282	.312	.281	.486	.503	.548
-6	.313	.343	.312	.517	.535	.580
-6R	.344	.375	.343	.548	.566	.611
-7	.376	.406	.375	.580	.597	.642
-7R	.407	.437	.406	.611	.628	.673
-8	.438	.468	.437	.642	.660	.705
-8R	.469	.500	.468	.673	.691	.736
-9	.501	.531	.500	.705	.722	.767
-9R	.532	.562	.531	.736	.753	.798
-10	.563	.593	.562	.767	.785	.830
-10R	.594	.625	.593	.798	.816	.861
-11	.626	.656	.625	.830	.847	.892
-11R	.657	.687	.656	.861	.878	.923
-12	.688	.718	.687	.892	.910	.955
-12R	.719	.750	.718	.923	.941	.986
-13	.751	.781	.750	.955	.972	1.017
-13R	.782	.812	.781	.986	1.003	1.048
-14	.813	.843	.812	1.017	1.035	1.080
-14R	.844	.875	.843	1.048	1.066	1.111
-15	.876	.906	.875	1.080	1.097	1.142
-15R	.907	.937	.906	1.111	1.128	1.173
-16	.938	.968	.937	1.142	1.160	1.205
-16R	.969	1.000	.968	1.173	1.191	1.236
-17	1.001	1.031	1.000	1.205	1.222	1.267
-17R	1.032	1.062	1.031	1.236	1.253	1.298
-18	1.063	1.093	1.062	1.267	1.285	1.330
-18R	1.094	1.125	1.093	1.298	1.316	1.361
-19	1.126	1.156	1.125	1.330	1.347	1.392
-19R	1.157	1.187	1.156	1.361	1.378	1.423
-20	1.188	1.218	1.187	1.392	1.410	1.455
-20R	1.219	1.250	1.218	1.423	1.441	1.486
-21	1.251	1.281	1.250	1.455	1.472	1.517

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤	
	MIN	MAX		-10 DIA	-12 DIA
-3	.126	.187	.125	.440	—
-4	.188	.250	.187	.502	.547
-5	.251	.312	.250	.565	.610
-6	.313	.375	.312	.627	.672
-7	.376	.437	.375	.690	.735
-8	.438	.500	.437	.752	.797
-9	.501	.562	.500	.815	.860
-10	.563	.625	.562	.877	.922
-11	.626	.687	.625	.940	.985
-12	.688	.750	.687	1.002	1.047
-13	.751	.812	.750	1.065	1.110
-14	.813	.875	.812	1.127	1.172
-15	.876	.937	.875	1.190	1.235
-16	.938	1.000	.937	1.252	1.297
-17	1.001	1.062	1.000	1.315	1.360
-18	1.063	1.125	1.062	1.377	1.422
-19	1.126	1.187	1.125	1.440	1.485
-20	1.188	1.250	1.187	1.502	1.547
-21	1.251	1.312	1.250	1.565	1.610

Material: Body—6AL-4V Titanium alloy (AMS 4967)
Tail—55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: processed to produce a 95 ksi shear strength and a soft buckable tail.

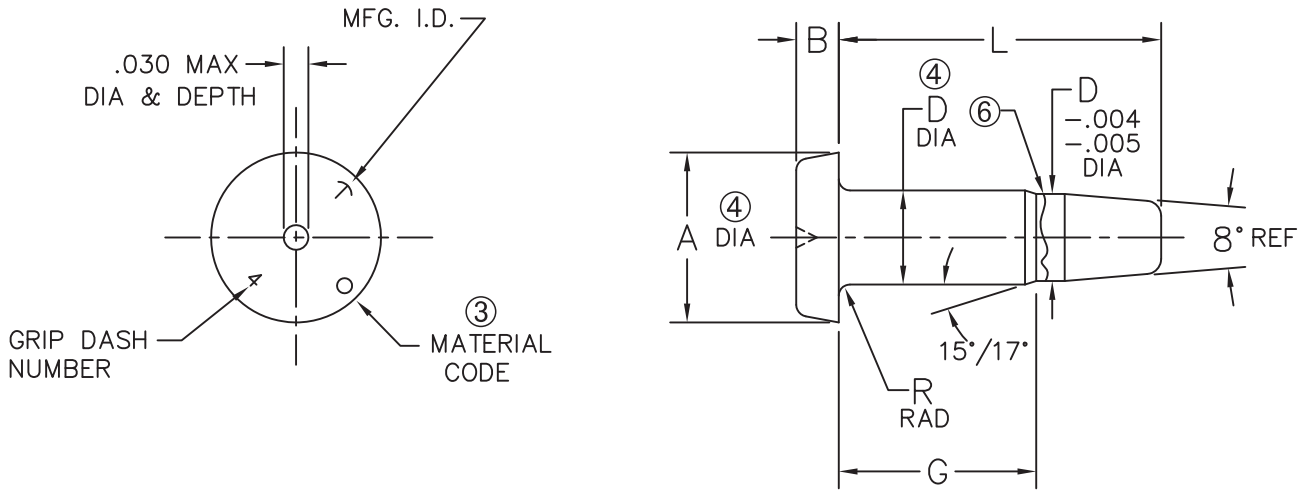
Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

Notes

1. Caution: do not cut to shorter length.
2. Do not use in less than specified minimum grip.
- ③ Depressed dot identifies Ti/Columbium tail material.
- ④ "A" diameter and "D" diameter to be concentric within 5% of "D" diameter.
- ⑤ Grip lengths below heavy lines are special order only.
6. Bottom bearing surface of head to be perpendicular to "D" diameter within $\pm 1/2^\circ$; top of head and "D" diameter to be perpendicular within $\pm 1^\circ$.
7. All dimensions apply before application of finish and/or lubrication.

CHERRYBUCK® TITANIUM SHEAR PIN

PROTRUDING HEAD/CSR925F



DIA DASH	A		B ±.003	D +.0000 -.0005	R ±.005
	MIN	MAX			
-5	.235	.249	.052	.1640	.015
-6	.288	.302	.059	.1895	.020
-8	.363	.377	.077	.2495	.020
-10	.455	.471	.097	.3120	.025
-12	.549	.565	.116	.3745	.025

Finish Code	Finish	Lubrication
—	NONE	CHLORINE-FREE DRY CETYL ALCOHOL
T	TIODIZE TYPE II ANODIC COATING, TAL 58	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132

CHERRYBUCK® TITANIUM SHEAR PIN

PROTRUDING HEAD/CSR925F

GRIP DASH NO.	GRIP RANGE		G +.010 -.000	L ± .010		
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA
-2R	.094	.125	.080	.298	—	—
-3	.126	.156	.112	.330	.347	.392
-3R	.157	.187	.143	.361	.378	.423
-4	.188	.218	.174	.392	.410	.455
-4R	.219	.250	.205	.423	.441	.486
-5	.251	.281	.237	.455	.472	.517
-5R	.282	.312	.268	.486	.503	.548
-6	.313	.343	.299	.517	.535	.580
-6R	.344	.375	.330	.548	.566	.611
-7	.376	.406	.362	.580	.597	.642
-7R	.407	.437	.393	.611	.628	.673
-8	.438	.468	.424	.642	.660	.705
-8R	.469	.500	.455	.673	.691	.736
-9	.501	.531	.487	.705	.722	.767
-9R	.532	.562	.518	.736	.753	.798
-10	.563	.593	.549	.767	.785	.830
-10R	.594	.625	.580	.798	.816	.861
-11	.626	.656	.612	.830	.847	.892
-11R	.657	.687	.643	.861	.878	.923
-12	.688	.718	.674	.892	.910	.955
-12R	.719	.750	.705	.923	.941	.986
-13	.751	.781	.737	.955	.972	1.017
-13R	.782	.812	.768	.986	1.003	1.048
-14	.813	.843	.799	1.017	1.035	1.080
-14R	.844	.875	.830	1.048	1.066	1.111
-15	.876	.906	.862	1.080	1.097	1.142
-15R	.907	.937	.893	1.111	1.128	1.173
-16	.938	.968	.924	1.142	1.160	1.205
-16R	.969	1.000	.955	1.173	1.191	1.236

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010	
	MIN	MAX		-10 DIA	-12 DIA
-3	.126	.187	.125	.440	—
-4	.188	.250	.187	.502	.547
-5	.251	.312	.250	.565	.610
-6	.313	.375	.312	.627	.672
-7	.376	.437	.375	.690	.735
-8	.438	.500	.437	.752	.797
-9	.501	.562	.500	.815	.860
-10	.563	.625	.562	.877	.922
-11	.626	.687	.625	.940	—
-12	.688	.750	.687	1.002	—
-13	.751	.812	.750	1.065	—
-14	.813	.875	.812	1.127	—
-15	.876	.937	.875	1.190	—
-16	.938	1.000	.937	1.252	—

Material: Body: 6AL-4V Titanium alloy (AMS 4967) Tail: 55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: processed to produce a 95 ksi shear strength and a soft buckable tail.

Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

Notes

1. Caution: do not cut to shorter length.
2. Do not use in less than specified minimum grip.
- ③ Depressed dot identifies Ti/Columbium tail material.
- ④ "A" diameter and "D" diameter to be concentric within 5% of "D" diameter.
5. Bottom bearing surface of head to be perpendicular to "D" diameter within $\pm 1/2^\circ$; top of head and "D" diameter to be perpendicular within $\pm 1^\circ$.
- ⑥ For weld location, see PS-TBM-920.
7. All dimensions apply before application of finish and/or lubrication.

CHERRYBUCK® TITANIUM SHEAR PIN

LOW CROWN NAS1097 HEAD/CSR926

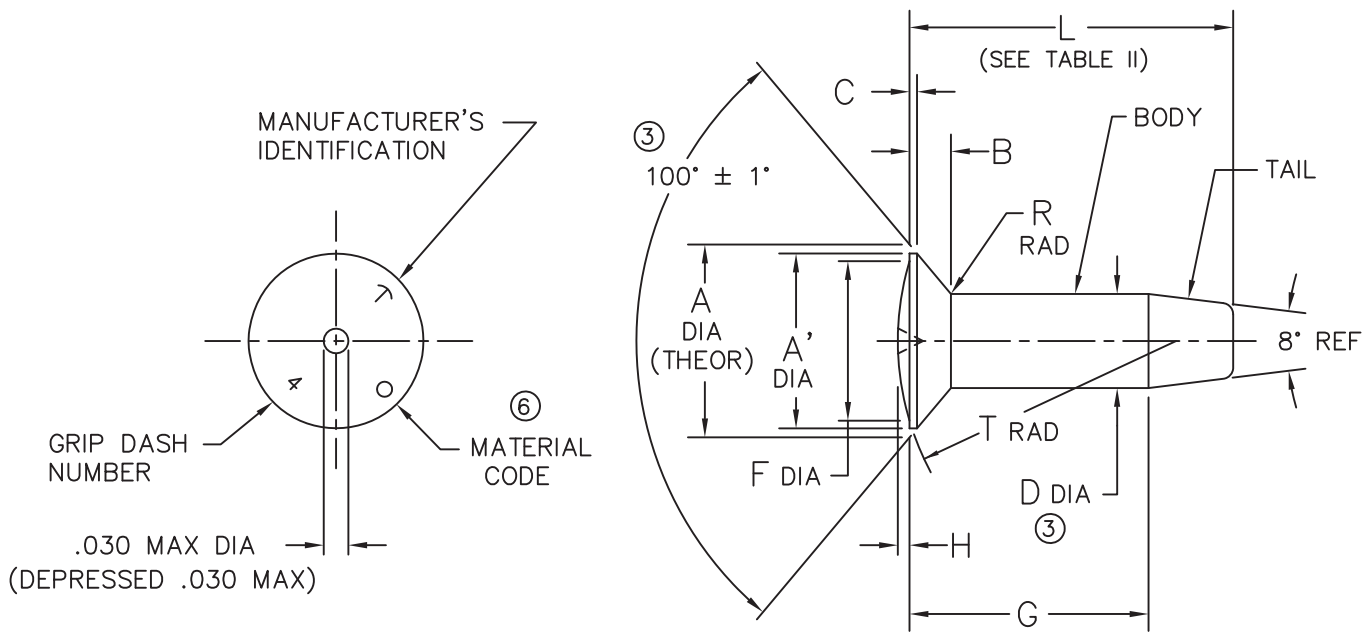


TABLE I

DIA DASH	A ±.0025	A' MIN	B REF	C ±.002	D +.0000 -.0005	F ±.005	H ±.002	R ±.005	T REF	Tensile Strength (lbs. min.)	Fatigue Loading	
											Low Load	High Load
-5	.2444	.230	.034	.004	.1640	.220	.005	.020	1.21	1480	61	615
-6	.2991	.282	.046	.005	.1895	.272	.005	.025	1.85	1980	90	900
-8	.3923	.373	.060	.006	.2495	.363	.005	.025	3.29	3430	125	1250
-10	.4714	.447	.067	.008	.3120	.437	.005	.035	4.77	5350	192	1920
-12	.5579	.534	.077	.008	.3745	.524	.005	.035	6.86	7730	300	3000

Finish Code	Finish	Lubrication
—	NONE	CHLORINE-FREE DRY CETYL ALCOHOL
D	I.V.D. ALUMINUM COATING PER BAC5315	NONE
EA	ALUMINUM COATING PER NAS 4006	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132
U	TIODIZE TYPE II ANODIC COATING	TIOLUBE 460
WA	BLUE ANODIZE PER ISO 8080	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132

CHERRYBUCK® TITANIUM SHEAR PIN

LOW CROWN NAS1097 HEAD/CSR926

TABLE II

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤				
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA	-10 Dia	-12 DIA
-3	.126	.187	.125	.360	.385	—	—	—
-4	.188	.250	.187	.422	.447	.502	.557	—
-5	.251	.312	.250	.485	.510	.565	.620	.675
-6	.313	.375	.312	.547	.572	.627	.682	.737
-7	.376	.437	.375	.610	.635	.690	.745	.800
-8	.438	.500	.437	.672	.697	.752	.807	.862
-9	.501	.562	.500	.735	.760	.815	.870	.925
-10	.563	.625	.562	.797	.822	.877	.932	.987
-11	.626	.687	.625	.860	.885	.940	.995	1.050
-12	.688	.750	.687	.922	.947	1.002	1.057	1.112
-13	.751	.812	.750	.985	1.010	1.065	1.120	1.175
-14	.813	.875	.812	1.047	1.072	1.127	1.182	1.237
-15	.876	.937	.875	1.110	1.135	1.190	1.245	1.300
-16	.938	1.000	.937	1.172	1.197	1.252	1.307	1.362
-17	1.001	1.062	1.000	1.235	1.260	1.315	1.370	1.425
-18	1.063	1.125	1.062	1.297	1.322	1.377	1.432	1.487
-19	1.126	1.187	1.125	1.360	1.385	1.440	1.495	1.550
-20	1.188	1.250	1.187	1.422	1.447	1.502	1.557	1.612
-21	1.251	1.312	1.250	1.485	1.510	1.565	1.620	1.675
-22	1.313	1.375	1.312	1.547	1.572	1.627	1.682	1.737
-23	1.376	1.437	1.375	1.610	1.635	1.690	1.745	1.800

Material: Body–6AL-4V Titanium alloy (AMS 4967)
Tail–55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: processed to produce a 95 ksi shear strength and a soft buckable tail.

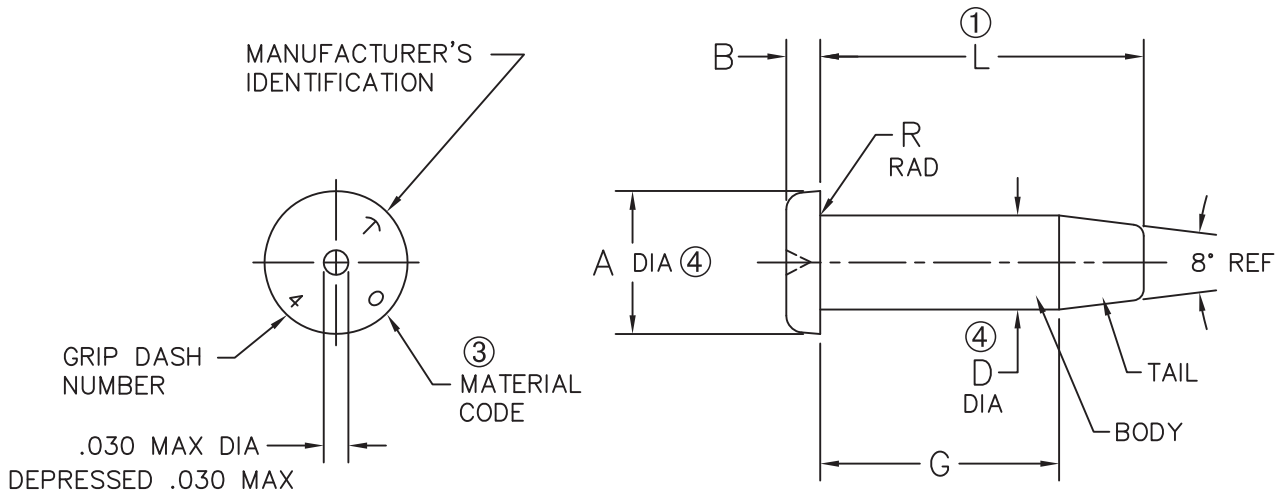
Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

Notes

1. Caution: do not cut to shorter length.
2. Do not use in less than specified minimum grip.
- ③ Conical surface of head and "D" diameter to be concentric within .003 FIM.
4. All dimensions apply before application of finish and/or lubrication.
- ⑤ Grip lengths below heavy lines are special order only.
- ⑥ Depressed dot identifies TI/Columbium tail material.
- ⑦ Procurement specification: MIL-R-83459, except tensile and fatigue loading as noted in Table I.

CHERRYBUCK® TITANIUM SHEAR PIN

PROTRUDING SHEAR HEAD/CSR927



DIA DASH	Nominal Diameter	A		B		D +.0000 -.0005	R ±.005
		MIN	MAX	MIN	MAX		
-5	5/32	.246	.256	.055	.060	.1640	.015
-6	3/16	.285	.297	.064	.074	.1895	.020
-8	1/4	.375	.391	.080	.090	.2495	.020
-10	5/16	.469	.489	.102	.112	.3120	.025
-12	3/8	.563	.587	.130	.140	.3745	.025

Finish Code	Finish	Lubrication
—	NONE	CHLORINE-FREEDRYCETYLALCOHOL
E	ALUMINUM COATING PER NAS 4006	NONE
EA	ALUMINUM COATING PER NAS 4006	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132
WA	BLUE ANODIZE PER ISO 8080	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132
D	I.V.D. ALUMINUM COATING PER BAC5315	NONE
T	TIODIZE TYPE II ANODIC COATING, TAL 58	CHLORINE-FREE LIQUID CETYL ALCOHOL PER MIL-L-87132

CHERRYBUCK® TITANIUM SHEAR PIN

PROTRUDING SHEAR HEAD/CSR927

TABLE II

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤				
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA	-10 Dia	-12 DIA
-3	.126	.187	.125	.360	.385	—	—	—
-4	.188	.250	.187	.422	.447	.502	.557	—
-5	.251	.312	.250	.485	.510	.565	.620	.675
-6	.313	.375	.312	.547	.572	.627	.682	.737
-7	.376	.437	.375	.610	.635	.690	.745	.800
-8	.438	.500	.437	.672	.697	.752	.807	.862
-9	.501	.562	.500	.735	.760	.815	.870	.925
-10	.563	.625	.562	.797	.822	.877	.932	.987
-11	.626	.687	.625	.860	.885	.940	.995	1.050
-12	.688	.750	.687	.922	.947	1.002	1.057	1.112
-13	.751	.812	.750	.985	1.010	1.065	1.120	1.175
-14	.813	.875	.812	1.047	1.072	1.127	1.182	1.237
-15	.876	.937	.875	1.110	1.135	1.190	1.245	1.300
-16	.938	1.000	.937	1.172	1.197	1.252	1.307	1.362
-17	1.001	1.062	1.000	1.235	1.260	1.315	1.370	1.425
-18	1.063	1.125	1.062	1.297	1.322	1.377	1.432	1.487
-19	1.126	1.187	1.125	1.360	1.385	1.440	1.495	1.550
-20	1.188	1.250	1.187	1.422	1.447	1.502	1.557	1.612
-21	1.251	1.312	1.250	1.485	1.510	1.565	1.620	1.675
-22	1.313	1.375	1.312	—	—	1.627	—	—
-23	1.376	1.437	1.375	—	—	1.690	—	—
-24	1.438	1.500	1.437	—	—	1.752	—	—
-25	1.501	1.562	1.500	—	—	1.815	—	—
-26	1.563	1.625	1.562	—	—	1.877	—	—
-27	1.626	1.687	1.625	—	—	1.940	—	—

Material: Body-6AL-4V Titanium alloy (AMS 4967)
Tail-55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: Processed to produce a 95 ksi shear strength and a soft buckable tail.

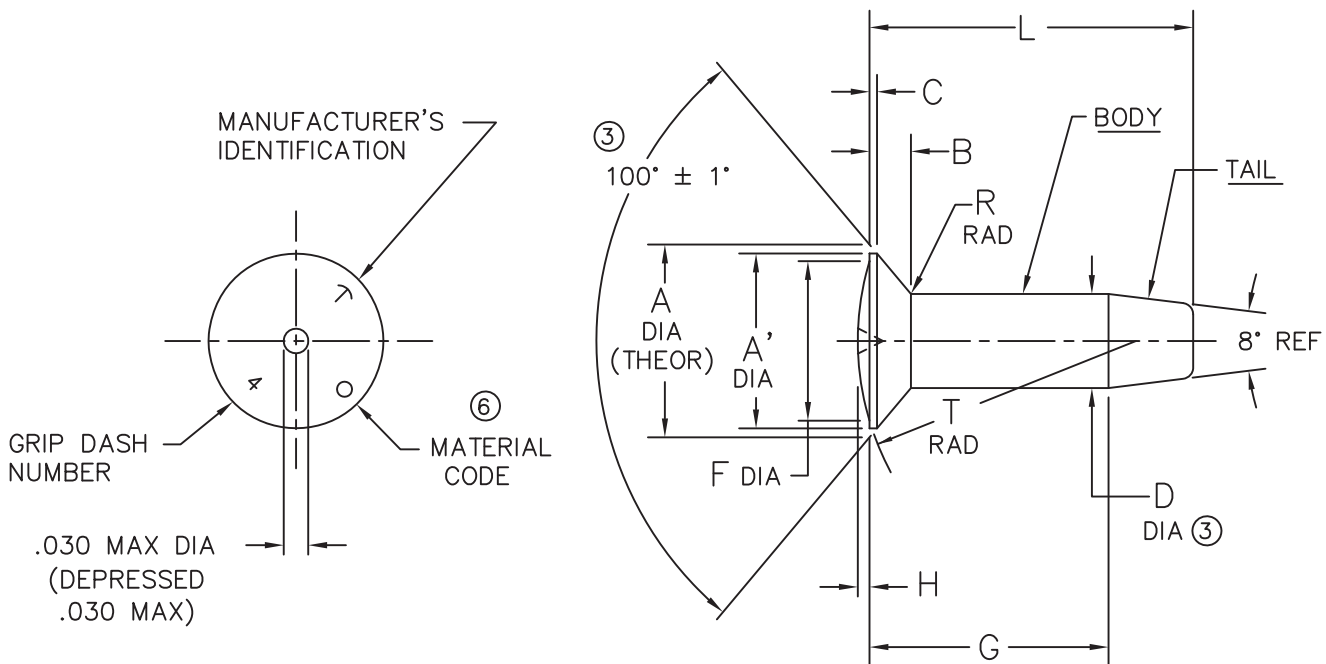
Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

Notes

- ① Caution: do not cut to shorter length.
2. Do not use in less than specified minimum grip.
- ③ Depressed dot identifies Ti/Columbium tail material.
- ④ "A" diameter and "D" diameter to be concentric within 5% of "D" diameter.
- ⑤ Grip lengths below heavy lines are special order only.
6. Bottom bearing surface of head to be perpendicular to "D" diameter within $\pm 1/2^\circ$; top of head and "D" diameter to be perpendicular within $\pm 1^\circ$.
7. All dimensions apply before application of finish and/or lubrication.

CHERRYBUCK® TITANIUM SHEAR PIN

MS20426 CROWN HEAD/CSR942



DIA DASH	A ±.0025	A' MIN	B REF	C ±.002	D +.0000 -.0005	F ±.005	H ±.002	R ±.005	T REF
-5	.286	.271	.051	.004	.1640	.261	.005	.020	1.70
-6	.353	.336	.069	.005	.1895	.326	.005	.025	2.66
-8	.476	.456	.095	.006	.2495	.446	.005	.025	4.98
-10	.564	.540	.106	.008	.3120	.530	.005	.035	7.03
-12	.694	.670	.134	.008	.3745	.660	.005	.035	10.90

Finish Code	Finish	Lubrication
NONE	NONE	CHLORINE-FREE DRY CETYL ALCOHOL
D	I.V.D. ALUMINUM COATING PER BAC 5315	NONE
DA	I.V.D. ALUMINUM COATING PER MIL-C-83488 CLASS 3 TYPE II	CHLORINE-FREELIQUIDCETYALALCOHOLPERMIL-L-87132
E	ALUMINUM COATING PER NAS 4006	NONE
EA	ALUMINUM COATING PER NAS 4006	CHLORINE-FREELIQUIDCETYALALCOHOLPERMIL-L-87132
HA	ALUMINUM COATING PER HI-KOTE 1/ HS-294	CHLORINE-FREELIQUIDCETYALALCOHOLPERMIL-L-87132
T	TIODIZE TYPE II ANODIC COATING, TAL 58	CHLORINE-FREELIQUIDCETYALALCOHOLPERMIL-L-87132
U	TIODIZE TYPE II ANODIC COATING	CHLORINE-FREELIQUIDCETYALALCOHOLPERMIL-L-87132
WA	BLUE ANODIZE PER ISO 8080	CHLORINE-FREELIQUIDCETYALALCOHOLPERMIL-L-87132
WMA	BLUE ANODIZE PER ISO 8080 AND TIODIZE MOLYCOAT	CHLORINE-FREELIQUIDCETYALALCOHOLPERMIL-L-87132

CHERRYBUCK® TITANIUM SHEAR PIN

MS20426 CROWN HEAD/CSR942

TABLE II

GRIP DASH NO.	GRIP RANGE		G +.015 -.000	L ± .010 ⑤				
	MIN	MAX		-5 DIA	-6 DIA	-8 DIA	-10 Dia	-12 DIA
-3	.126	.187	.125	.360	—	—	—	—
-4	.188	.250	.187	.422	.447	.502	—	—
-5	.251	.312	.250	.485	.510	.565	.620	—
-6	.313	.375	.312	.547	.572	.627	.682	.737
-7	.376	.437	.375	.610	.635	.690	.745	.800
-8	.438	.500	.437	.672	.697	.752	.807	.862
-9	.501	.562	.500	.735	.760	.815	.870	.925
-10	.563	.625	.562	.797	.822	.877	.932	.987
-11	.626	.687	.625	.860	.885	.940	.995	1.050
-12	.688	.750	.687	.922	.947	1.002	1.057	1.112
-13	.751	.812	.750	.985	1.010	1.065	1.120	1.175
-14	.813	.875	.812	1.047	1.072	1.127	1.182	1.237
-15	.876	.937	.875	1.110	1.135	1.190	1.245	1.300
-16	.938	1.000	.937	1.172	1.197	1.252	1.307	1.362
-17	1.001	1.062	1.000	1.235	1.260	1.315	1.370	1.425
-18	1.063	1.125	1.062	1.297	1.322	1.377	1.432	1.487
-19	1.126	1.187	1.125	1.360	1.385	1.440	1.495	1.550
-20	1.188	1.250	1.187	1.422	1.447	1.502	1.557	1.612
-21	1.251	1.312	1.250	1.485	1.510	1.565	1.620	1.675

Material: Body–6AL-4V Titanium alloy (AMS 4967)
Tail–55TI-45CB Titanium alloy (AMS 4982)

Heat Treat: processed to produce a 95 ksi shear strength and a soft buckable tail.

Surface Texture: (RHR max per ANSI B46.1) 63 microinches on "D" diameter, head to shank radius, and bearing surface of head; 125 microinches on other surfaces.

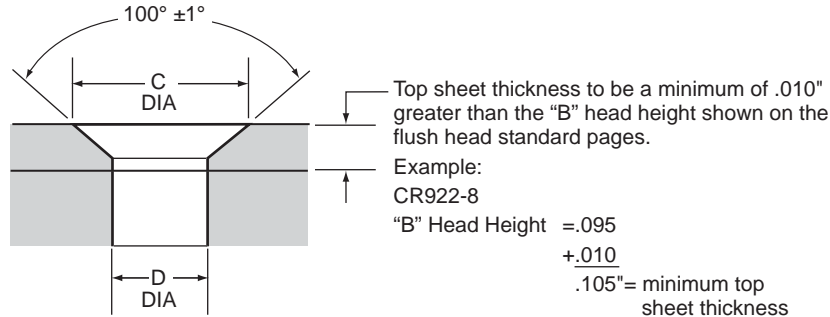
Notes

- ① Caution: do not cut to shorter length.
- 2. Do not use in less than specified minimum grip.
- ③ Conical surface of head and "D" diameter to be concentric within .003 FIM.
- 4. All dimensions apply before application of finish and/or lubrication.
- ⑤ Grip lengths below heavy lines are special order only.
- ⑥ Depressed dot identifies TI/Columbium tail material.

CHERRYBUCK® TITANIUM SHEAR PIN

HOLE PREPARATION

HOLE & COUNTERSINK DIMENSIONS

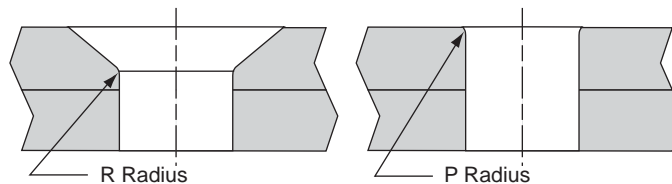


Fastener Diameter	D (Hole Diameter)		C (Countersink Diameter)			
			MS20426 Head		NAS1097 Head	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
-05 (5/32)	.1600	.1630	.284	.289	.242	.247
-06 (3/16)	.1855	.1885	.351	.356	.297	.302
-08 (1/4)	.2455	.2485	.474	.479	.390	.395
-10 (5/16)	.3080	.3110	.562	.567	.469	.474
-12 (3/8)	.3705	.3735	.692	.697	.556	.561

BREAK EDGE RECOMMENDATIONS

For CherryBUCK® installations into high strength materials, such as steel, titanium, or CRES, the juncture of the countersink bottom edge and the hole for flush head applications and the top surface of the sheet and the edge of the hole protruding head applications must be radiused in accordance with the table above.

FASTENER DIAMETER	R Radius (Countersunk) ±005	P Radius Protruding) ±005
-05 (5/32)	.030	.025
-06 (3/16)	.035	.030
-08 (1/4)	.035	.030
-10 (5/16)	.045	.035
-12 (3/8)	.045	.035



CHERRYBUCK® TITANIUM SHEAR PIN

INSTALLATION

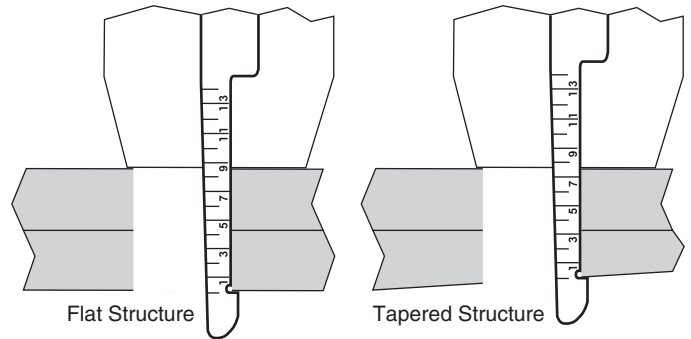


INSPECTION GRIP GAUGE NO. 247A6

Measure grip requirement on the Cherry Grip Gauge using 1/16" grip increments.

GRIP SELECTION

Measure structure thickness using the Cherry Grip Gauge No. 247A6 or its equivalent. Measure grip on flat and tapered structures as shown in the examples above.



INSTALLATION

Use of automatic rivet equipment provides optimum installation of CherryBUCK® shear pins. Squeezers of sufficient force may also be used to install CherryBUCK® shear pins in some applications.

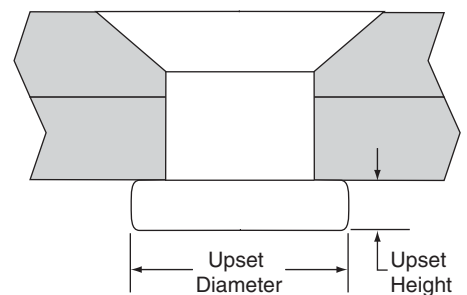
5/32" (-5) diameter CherryBUCK® shear pins can be installed using rivet hammers and bucking bars. Contact Cherry Technical Services for details.

The values shown in the chart below indicate typical upset loads required to achieve 1.3D upset diameter and apply to CherryBUCK® shear pins in maximum grip. Upset loads are guidelines and may be varied as required.

Nominal Fastener Diameter	Typical Upset Loads in lbs.
5/32 (-5)	3700
3/16 (-6)	5000
1/4 (-8)	8600
5/16 (-10)	15200
3/8 (-12)	22000

INSPECTION

Nominal Diameter	Min. Upset Diameter 1.3d	CSR922 CSR924 CSR925	CSR942 CSR926 CSR927
		Min. Upset Height .34d	Min. Upset Height .42d
5/32	.213	.056	.069
3/16	.246	.065	.080
1/4	.325	.085	.105
5/16	.408	.106	.131
3/8	.488	.128	.157



CHERRYBUCK® TITANIUM SHEAR PIN

WEIGHTS—POUNDS PER 1000 PIECES

1/32 GRIP RANGE CHERRYBUCK®

GRIP DASH NO.	-5(5/32)			-6(3/16)			-8(1/4)			-10(5/16)			-12(3/8)		
	CSR922 CSR922F	CSR924 CSR924F	CSR925 CSR925F	CSR922 CSR922F	CSR924 CSR924F	CSR925 CSR925F	CSR922 CSR922F	CSR924 CSR924F	CSR925 CSR925F	CSR922 CSR922F	CSR924 CSR924F	CSR925 CSR925F	CSR922 CSR922F	CSR924 CSR924F	CSR925 CSR925F
-2R	—	1.18	1.46	—	—	—	—	—	—	—	—	—	—	—	—
-3	1.40	1.29	1.57	—	1.87	2.41	—	—	—	—	—	—	—	—	—
-3R	1.51	1.40	1.68	2.35	2.01	2.55	—	3.79	4.80	—	—	—	—	—	—
-4	1.62	1.51	1.79	2.49	2.15	2.69	4.83	4.03	5.04	8.57	7.61	9.78	14.45	12.35	16.15
-4R	1.73	1.62	1.90	2.63	2.29	2.83	5.08	4.28	5.29	—	—	—	—	—	—
-5	1.84	1.73	2.01	2.77	2.43	2.97	5.32	4.52	5.53	9.34	8.37	10.54	15.55	13.45	17.25
-5R	1.95	1.84	2.12	2.91	2.57	3.11	5.57	4.77	5.78	—	—	—	—	—	—
-6	2.06	1.95	2.23	3.05	2.71	3.25	5.81	5.01	6.02	10.11	9.14	11.31	16.65	14.55	18.35
-6R	2.17	2.06	2.34	3.19	2.85	3.39	6.06	5.26	6.27	—	—	—	—	—	—
-7	2.28	2.17	2.45	3.33	2.99	3.53	6.30	5.50	6.51	10.87	9.90	12.07	17.75	15.65	19.45
-7R	2.39	2.28	2.56	3.47	3.13	3.67	6.55	5.75	6.76	—	—	—	—	—	—
-8	2.50	2.39	2.67	3.61	3.27	3.81	6.79	5.99	7.00	11.64	10.67	12.84	18.85	16.75	20.55
-8R	2.61	2.50	2.78	3.75	3.41	3.95	7.04	6.24	7.25	—	—	—	—	—	—
-9	2.72	2.61	2.89	3.89	3.55	4.09	7.28	6.48	7.49	12.40	11.43	13.60	19.95	17.85	21.65
-9R	2.83	2.72	3.00	4.03	3.69	4.23	7.53	6.73	7.74	—	—	—	—	—	—
-10	2.94	2.83	3.11	4.17	3.83	4.37	7.77	6.97	7.98	13.17	12.20	14.37	21.05	18.95	22.75
-10R	3.05	2.94	3.22	4.31	3.97	4.51	8.02	7.22	8.23	—	—	—	—	—	—
-11	3.16	3.05	3.33	4.45	4.11	4.65	8.26	7.46	8.47	13.93	12.96	15.13	22.15	20.05	23.85
-11R	3.27	3.16	3.44	4.59	4.25	4.79	8.51	7.71	8.72	—	—	—	—	—	—
-12	3.38	3.27	3.55	4.73	4.39	4.93	8.75	7.95	8.96	14.70	13.73	15.90	23.25	21.15	24.95
-12R	3.49	3.38	3.67	4.87	4.53	5.07	9.00	8.20	9.21	—	—	—	—	—	—
-13	3.60	3.49	3.78	5.01	4.67	5.21	9.24	8.44	9.45	15.46	14.49	16.66	24.35	22.25	26.05
-13R	3.71	3.60	3.89	5.15	4.81	5.35	9.49	8.69	9.70	—	—	—	—	—	—
-14	3.82	3.71	4.00	5.29	4.95	5.49	9.73	8.93	9.94	16.23	15.26	17.43	25.45	23.35	27.15
-14R	3.93	3.82	4.11	5.33	5.00	5.53	9.98	9.18	10.19	—	—	—	—	—	—
-15	4.04	3.93	4.23	5.47	5.23	5.67	10.22	9.42	10.43	16.99	16.02	18.19	26.55	24.45	28.25
-15R	4.15	4.04	4.34	5.61	5.37	5.81	10.47	9.67	10.68	—	—	—	—	—	—
-16	4.26	4.15	4.35	5.75	5.51	5.95	10.71	9.91	10.92	17.76	16.79	18.96	27.65	25.55	29.35
-16R	4.37	4.26	4.56	5.89	5.65	6.09	10.96	10.16	11.17	—	—	—	—	—	—

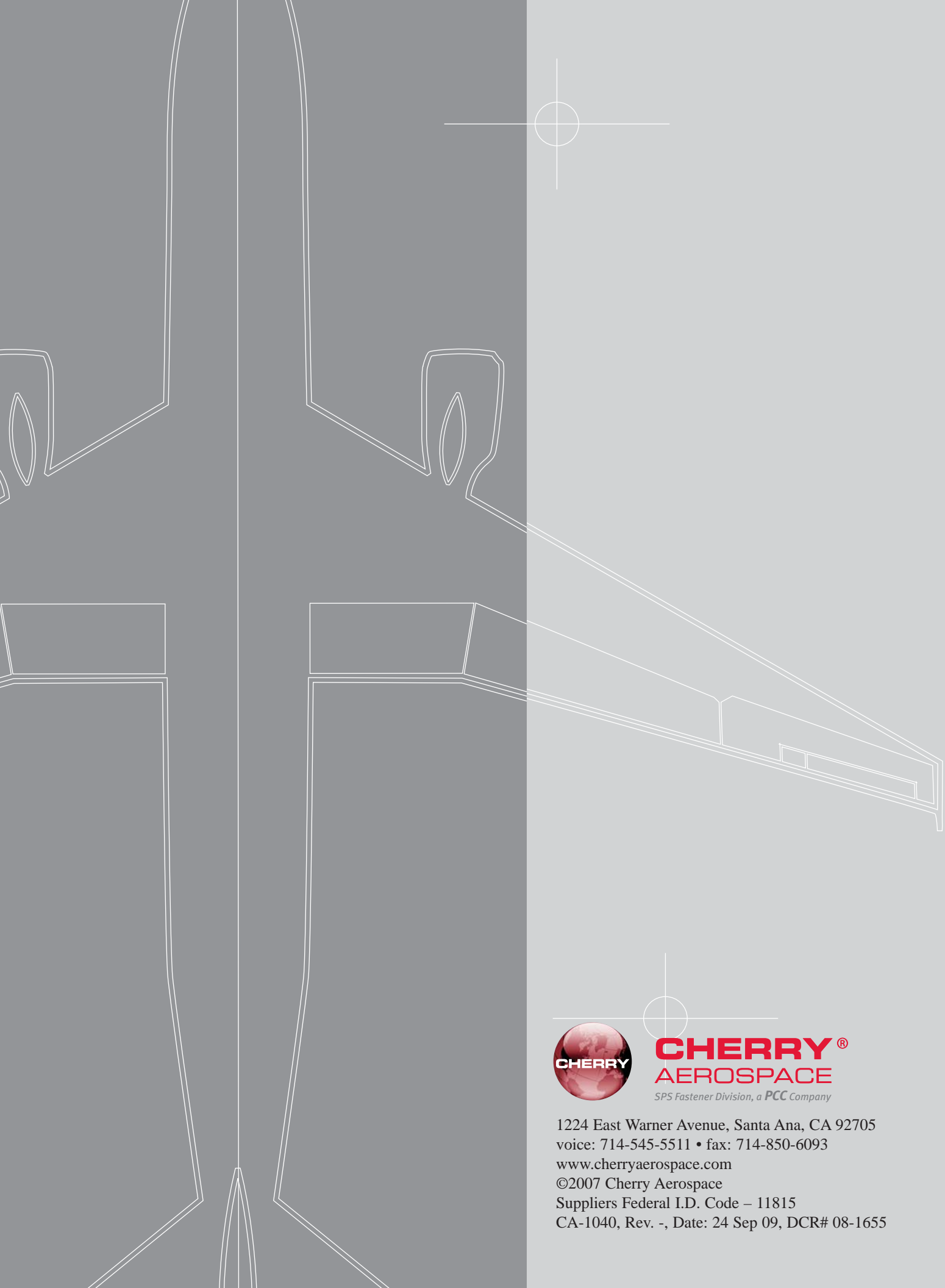
CHERRYBUCK® TITANIUM SHEAR PIN

WEIGHTS—POUNDS PER 1000 PIECES

1/16 GRIP RANGE CHERRYBUCK®

GRIP DASH NO.	-5 (5/32)			-6 (3/16)			-8 (1/4)			-10 (5/16)			-12 (3/8)		
	CSR926 CSR926F	CSR927 CSR927F	CSR942 CSR942F	CSR926 CSR926F	CSR927 CSR927F	CSR942 CSR942F	CSR926 CSR926F	CSR927 CSR927F	CSR942 CSR942F	CSR926 CSR926F	CSR927 CSR927F	CSR942 CSR942F	CSR926 CSR926F	CSR927 CSR927F	CSR942 CSR942F
-3	1.39	1.69	1.51	2.14	2.54	—	—	—	—	—	—	—	—	—	—
-4	1.61	1.91	1.73	2.42	2.87	2.60	4.52	5.65	4.71	7.93	10.19	9.78	—	—	—
-5	1.83	2.13	1.95	2.70	3.15	2.88	5.01	6.14	5.20	8.70	10.96	10.55	14.03	17.99	15.96
-6	2.35	2.35	2.17	2.98	3.43	3.16	5.50	6.63	5.69	9.47	11.73	11.32	15.14	19.10	17.07
-7	2.27	2.57	2.39	3.26	3.71	3.44	5.99	7.12	6.18	10.24	12.50	12.09	16.25	20.21	18.18
-8	2.49	2.79	2.61	3.54	3.99	3.72	6.48	7.61	6.67	11.01	13.27	12.86	17.36	21.32	19.29
-9	2.71	3.01	2.83	3.82	4.27	4.00	6.97	8.10	7.16	11.78	14.04	13.67	18.47	22.43	20.40
-10	2.93	3.23	3.05	4.10	4.55	4.28	7.46	8.59	7.65	12.55	14.81	14.40	19.58	23.54	21.51
-11	3.15	3.45	3.27	4.38	4.83	4.56	7.95	9.08	8.14	13.32	15.58	15.17	20.69	24.65	22.62
-12	3.37	3.67	3.49	4.66	5.11	4.84	8.44	9.57	8.63	14.09	16.35	15.94	21.80	25.76	23.73
-13	3.59	3.89	3.71	4.94	5.39	5.12	8.93	10.06	9.12	14.86	17.12	16.71	22.91	26.87	24.84
-14	3.81	4.11	3.93	5.22	5.67	5.40	9.42	10.55	9.61	15.63	17.89	17.48	24.02	27.98	25.95
-15	4.03	4.33	4.15	5.50	5.95	5.68	9.91	11.04	10.10	16.40	18.66	18.25	25.13	29.09	27.06
-16	4.25	4.55	4.37	5.78	6.23	5.96	10.40	11.53	10.59	17.17	19.43	19.02	26.24	30.20	28.17
-17	4.47	4.78	4.60	6.06	6.51	6.24	10.89	12.02	11.08	17.94	20.20	19.79	27.35	31.31	29.28
-18	4.69	5.01	4.83	6.34	6.79	6.52	11.38	12.51	11.57	18.71	20.97	20.56	28.46	32.42	30.39
-19	4.91	5.24	5.06	6.62	7.07	6.80	11.87	13.00	12.06	19.48	21.74	21.33	29.57	33.53	31.50
-20	5.13	5.47	5.29	6.90	7.35	7.08	12.36	13.49	12.55	20.25	22.51	22.10	30.68	34.64	32.61
-21	5.35	5.70	5.52	7.18	7.63	7.36	12.85	13.98	13.04	21.02	23.28	22.87	31.79	35.75	33.72

Call Cherry Aerospace, Technical Services at 714-545-5511 for information on special grip lengths and lubrication requirements.



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