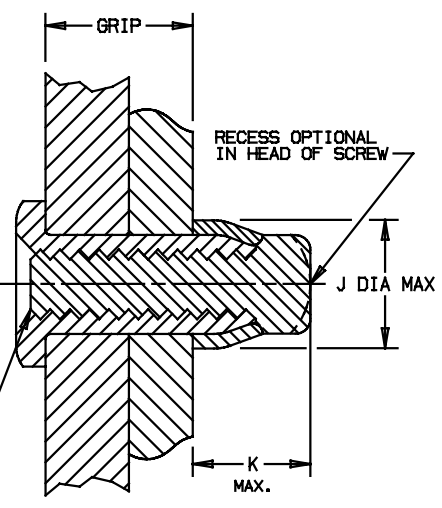
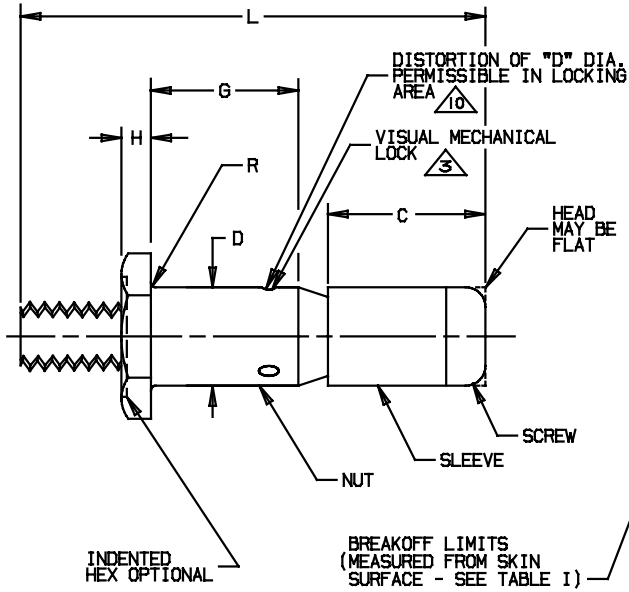
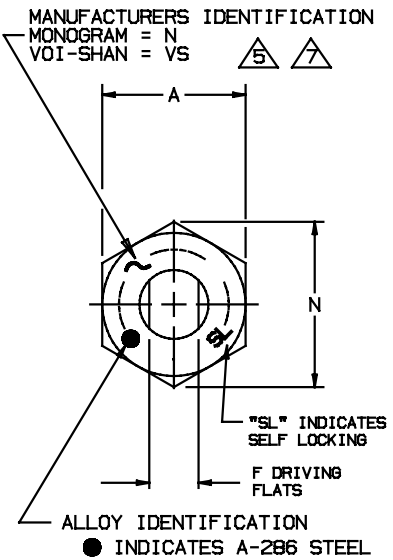




CUSTODIAN: ENGINEERING STANDARD COMMITTEE FOR BLIND BOLTS  
 3423 SOUTH GARFIELD AVENUE  
 LOS ANGELES, CALIFORNIA 90040



TYPICAL INSTALLATION

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TABLE I

PART NUMBER	NOM. DIA.	A	C MAX.	D DIA.	F DRIVING FLATS	H MAX.	J DIA. MAX.	K MAX.	N MIN.	R RAD.	HOLE SIZE	BREAK-OFF LIMITS	PREVAILING TORQUE IN. LBS. MIN.	DOUBLE SHEAR STRENGTH LBS. MIN.	TENSILE STRENGTH LBS. MIN.
PLT 220-5-(*)	.164	.250 .244	.268	.1645 .1625	.086 .081	.096	.244	.246	.272	.020 .010	.168 .165	+.088 +.000	1.0	3150	900
PLT 220-6-(*)	.200	.312 .305	.303	.1990 .1970	.104 .099	.113	.300	.281	.340	.025 .015	.202 .199	+.103 +.015	1.5	4600	1400
PLT 220-8-(*)	.260	.375 .367	.354	.2600 .2590	.135 .130	.135	.384	.325	.409	.025 .015	.263 .260	+.130 +.032	2.5	7900	2100
PLT 220-10-(*)	.312	.437 .429	.423	.3115 .3095	.152 .147	.160	.427	.390	.479	.030 .015	.315 .312	+.130 +.027	3.5	11350	3600
PLT 220-12-(*)	.375	.500 .491	.510	.3745 .3725	.185 .180	.190	.516	.470	.548	.030 .015	.378 .375	+.130 +.027	4.0	16450	5600

(\*) SEE TABLE II FOR SECOND DASH NUMBER AND APPROVED CALLOUT.

TABLE II

SECOND DASH NUMBER	Ø GRIP	GRIP RANGE		L REF.												
		9	11	PLT 220												
		MIN.	MAX.	-5-(*)	-6-(*)	-8-(*)	-10-(*)	-12-(*)								
-1	.093	.031	.093	.733	.874	-	-	-	-	-	-	-	-	-	-	
-2	.156	.094	.156	.795	.936	1.006	1.158	-	-	-	-	-	-	-	-	
-3	.219	.157	.219	.858	.999	1.069	1.221	1.367	-	-	-	-	-	-	-	
-4	.281	.220	.281	.920	1.061	1.131	1.283	1.429	-	-	-	-	-	-	-	
-5	.344	.282	.344	.983	1.124	1.194	1.346	1.492	-	-	-	-	-	-	-	
-6	.406	.345	.406	1.045	1.186	1.256	1.408	1.554	-	-	-	-	-	-	-	
-7	.469	.407	.469	1.108	1.249	1.319	1.471	1.617	-	-	-	-	-	-	-	
-8	.531	.470	.531	1.170	1.311	1.381	1.533	1.679	-	-	-	-	-	-	-	
-9	.594	.532	.594	1.233	1.374	1.444	1.596	1.742	-	-	-	-	-	-	-	
-10	.656	.595	.656	1.295	1.436	1.506	1.658	1.804	-	-	-	-	-	-	-	
-11	.719	.657	.719	1.358	1.499	1.569	1.721	1.867	-	-	-	-	-	-	-	
-12	.781	.720	.781	1.420	1.561	1.631	1.783	1.929	-	-	-	-	-	-	-	
-13	.844	.782	.844	1.483	1.624	1.694	1.846	1.992	-	-	-	-	-	-	-	
-14	.906	.845	.906	1.545	1.686	1.756	1.908	2.054	-	-	-	-	-	-	-	
-15	.969	.907	.969	1.608	1.749	1.819	1.971	2.117	-	-	-	-	-	-	-	
-16	1.031	.970	1.031	1.670	1.811	1.881	2.033	2.179	-	-	-	-	-	-	-	
-17	1.094	1.032	1.094	-	-	-	-	-	-	-	-	-	1.874	1.944	2.096	2.242
-18	1.156	1.095	1.156	-	-	-	-	-	-	-	-	-	1.936	2.006	2.158	2.304
-19	1.219	1.157	1.219	-	-	-	-	-	-	-	-	-	1.999	2.069	2.221	2.367
-20	1.281	1.220	1.281	-	-	-	-	-	-	-	-	-	2.061	2.131	2.283	2.429
-21	1.344	1.282	1.344	-	-	-	-	-	-	-	-	-	2.124	2.194	2.346	2.492
-22	1.406	1.345	1.406	-	-	-	-	-	-	-	-	-	2.186	2.256	2.408	2.554
-23	1.469	1.407	1.469	-	-	-	-	-	-	-	-	-	2.249	2.319	2.471	2.617
-24	1.531	1.470	1.531	-	-	-	-	-	-	-	-	-	2.311	2.381	2.533	2.679
-25	1.594	1.532	1.594	-	-	-	-	-	-	-	-	-	2.374	2.444	2.596	2.742
-26	1.656	1.595	1.656	-	-	-	-	-	-	-	-	-	2.436	2.506	2.658	2.804
-27	1.719	1.657	1.719	-	-	-	-	-	-	-	-	-	2.499	2.569	2.721	2.867
-28	1.781	1.720	1.781	-	-	-	-	-	-	-	-	-	2.561	2.631	2.783	2.929
-29	1.844	1.782	1.844	-	-	-	-	-	-	-	-	-	2.624	2.694	2.846	2.992
-30	1.906	1.845	1.906	-	-	-	-	-	-	-	-	-	2.686	2.756	2.908	3.054
-31	1.969	1.907	1.969	-	-	-	-	-	-	-	-	-	2.749	2.819	2.971	3.117
-32	2.031	1.970	2.031	-	-	-	-	-	-	-	-	-	2.811	2.881	3.033	3.179

▲ "G" TOLERANCES: FOR -5 & -6 SIZES +.030/-0.010; FOR -8 & -10 SIZES +.040/-0.010; FOR -12 SIZE +.050/-0.010.

U.S. PATENT NO. 3643544, OTHER PATENTS PENDING.

**Fairchild**  
 CODE IDENT. NO.  
**92215**

**MONOGRAM**  
 CODE IDENT. NO.  
**98524**

APPROVED DATE  
 13 NOVEMBER 1970

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TITLE  
**VISU-LOK, FASTENER, BLIND INTERNALLY THREADED, EXTERNAL SLEEVE A-286 STEEL PROTRUDING HEX HEAD, SELF LOCKING**

**STANDARD**  
**PLT 220**  
 SHEET 1 OF 2

PROCUREMENT SPEC. : ESCBB2 CLASS 2.

MATERIAL : NUT & SCREW  
 SLEEVE : CORROSION RESISTANT STEEL, TYPE A-286 PER AMS 5731, AMS 5732 OR AMS 5737.

HEAT TREAT : NUT & SCREW SOLUTION HEAT TREATED AND AGED TO A CORE HARDNESS OF Rc 30 TO Rc 45. ALL CORE HARDNESS READINGS ARE TAKEN ON MOUNTED SPECIMEN, USING A BRALE PENETRATOR AND A 30 Kg LOAD (ROCKWELL 30N).  
 SLEEVE : SOLUTION HEAT TREATED.

△ FINISH : NUT & SCREW  
 SLEEVE : PASSIVATE PER MIL-S-5002 (QQ-P-35).

△ LUBRICANT: LUBRICANTS LISTED BELOW MAY BE APPLIED TO ANY OR ALL COMPONENTS IF REQUIRED FOR FASTENER PERFORMANCE: DRY FILM LUBE MoS<sub>2</sub> PER MIL-L-46010 TYPE I OR MIL-L-81329, WWM CARBO-WAX, PARAFFIN WAX AND/OR CETYL ALCOHOL PER MIL-L-87132.

PART CODE & EXAMPLE : PLT 220 - 8 - 8  
 GRIP LENGTHS IN 1/16THS (SEE TABLE II).  
 NOMINAL BODY DIAMETER AS TABULATED.  
 BASIC PART NUMBER, SELF LOCKING BLIND FASTENER.

GENERAL NOTES :

- 1.) OUTSIDE DIAMETER OF HEAD OF SCREW AND OUTSIDE DIAMETER OF SLEEVE SHALL NOT BE GREATER THAN MAXIMUM "D" DIAMETER.
- 2.) REMOVE ALL LOOSE OR HANGING BURRS.
- △ 3.) LOCKING FEATURE CONSISTS OF THREE (3) INDENTATIONS LOCATED 120° APART ON THE PERIPHERY OF THE NUT COMPONENT AND APPROXIMATELY .040 ABOVE THE INTERSECTION OF THE NUT NOSE ANGLE AND O.D. (MEAN GRIP OF FASTENER).
- △ 4.) THE PREVAILING TORQUE SHALL CONFORM TO THE VALUES AS TABULATED, WHEN TESTED IN ACCORDANCE WITH SPECIFICATION ESCBB-2. HOWEVER, PREVAILING TORQUES FOR THE PLT220-5-1 AND PLT220-6-1 SHALL BE RECORDED THRU A ROTATION OF ONLY 360° OF THE NUT.
- △ 5.) MANUFACTURER'S IDENTIFICATION:  
 LETTER "N" DESIGNATES MONOGRAM AEROSPACE FASTENERS.  
 LETTERS "VS" DESIGNATE VOI-SHAN.
- 6.) HEAD MARKINGS ON NUT DEPRESSED .010 MAX.  
 △ 7.) THE PRODUCT DESCRIBED BY THIS DRAWING IS "EQUIVALENT TO" AND "INTERCHANGEABLE WITH" THE MANUFACTURER'S PRODUCT LISTED BELOW EXCEPT HEAD MARKING AND SELF-LOCKING FEATURE. EXISTING STOCK MAY BE REWORKED TO COLOR AND HEAD MARKING MAY BE AS SHOWN BELOW:  
 MONOGRAM... : PL164A-PL375A SERIES (MARKING: "O" AND "N" OVERSTAMPED "L" OR "SL"  
 VOI-SHAN... : VA 407 SERIES (MARKING: "VS", "O" AND "SL".
- △ 8.) STANDARD FINISHES AND LUBRICANTS ARE SHOWN ABOVE. REFER TO SPECIFICATION ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBRICANTS, IF REQUIRED.
- △ 9.) HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.  
 EXAMPLE: PLT 220-6-4.5 INDICATES A NOMINAL GRIP LENGTH OF 4.5 SIXTEENTHS = .281.  
 THE GRIP RANGE FOR THESE HALF-GRIP SIZES WILL BE NOMINAL GRIP + .031/- .030.  
 THE BASIC "G" DIMENSION WILL BE NOMINAL GRIP + .031 AND THE OVERALL SCREW LENGTH "L" DIMENSION MAY VARY AT MANUFACTURER'S OPTION.
- △ 10.) DISTORTION OF "D" DIAMETER SHALL NOT PREVENT INSERTION OF THE FASTENER INTO A RING GAUGE OF LENGTH EQUAL TO ONE DIAMETER AND DIAMETER EQUAL TO MAXIMUM "D" + .001".  
 FORCE FOR INSERTION SHALL NOT EXCEED FIVE (5) POUNDS
- △ 11.) STANDARD GRIP LENGTHS ARE SHOWN IN TABLE II, SHORTER OR LONGER GRIPS THAN THOSE LISTED MAY BE AVAILABLE AS SPECIALS. ON GRIP LENGTHS SHORTER THAN THOSE LISTED, THE BREAKOFF LIMITS AND PREVAILING TORQUES SHOWN IN TABLE I DO NOT APPLY.

12. DIMENSIONS ARE EXCLUSIVE OF LUBRICATION.

U.S. PATENT NO. 3643544, OTHER PATENTS PENDING.

Fairchild	
CODE IDENT. NO.	92215
APPROVED DATE	13 NOVEMBER 1970
REV. LETTER AND DATE	① 10-23-03

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TITLE  
 VISU-LOK, FASTENER, BLIND INTERNALLY THREADED, EXTERNAL SLEEVE  
 A-286 STEEL  
 PROTRUDING HEX HEAD, SELF LOCKING

MONOGRAM	
CODE IDENT. NO.	98524
STANDARD	
PLT 220	
SHEET 2 OF 2	