

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

TABLE I NOMINAL SIZE 8 (CONTINUED)

BOEING STANDARD NUMBER BACB30DX 1	Ø F MAX	Ø J 3		K MAX 3	L ±.010	M		P ±.05
		MAX	MIN			MAX	MIN	
5	.158	.1670	.1635	.026	G+.188	.012	.008	G+1.19
6	.183	.1915	.1880	.031	G+.233	.014	.010	G+1.23
8	.243	.2515	.2480	.042	G+.312	.018	.014	G+1.31
10	.299	.3140	.3105	.052	G+.440	.023	.017	G+1.44
12	.359	.3765	.3730	.062	G+.547	.027	.021	G+1.55

TABLE I NOMINAL SIZE 8 (CONTINUED)

BOEING STANDARD NUMBER BACB30DX 1	Ø Q		R RAD		Ø S 2 +.0000 -.0025	TOL X	TOL Y
	MAX	MIN	MAX	MIN			
5	.158	.152	.020	.010	.1650	.010	.0025
6	.185	.177	.025	.010	.1895	.011	.0030
8	.242	.235	.025	.010	.2495	.015	.0040
10	.305	.294	.025	.010	.3120	.019	.0050
12	.368	.361	.030	.015	.3745	.022	.0060

TABLE II .0156 OVERSIZE 8 12

BOEING STANDARD NUMBER BACB30DX 1	NOM SIZE	Ø A		B		Ø C GAGE REF 10	Ø D	
		MAX	MIN	MAX	MIN		MAX	MIN
5 13	---	---	---	---	---	---	---	---
6	.190	.327	.297	.111	.099	.164	.2025	.2010
8	.250	.430	.390	.147	.128	.224	.2650	.2635
10	.312	.535	.485	.184	.158	.268	.3275	.3260
12	.375	.655	.595	.224	.194	.339	.3900	.3885

DATE 15-JUN-2007 REV (V) 15-JUN-2007

CAGE CODE 81205

BACB30DX

SH 2

BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)

BACB30DX

SH 2

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

TABLE II .0156 OVERSIZE 8 12 (CONTINUED)

BOEING STANDARD NUMBER BACB30DX 1	Ø F MAX	Ø J 3		K MAX 3	L ±.010	M	
		MAX	MIN			MAX	MIN
5 13	---	---	---	---	---	---	---
6	.183	.2045	.2010	.031	G+.233	.014	.010
8	.243	.2670	.2635	.042	G+.312	.018	.014
10	.299	.3295	.3260	.052	G+.440	.023	.017
12	.359	.3920	.3885	.062	G+.547	.027	.021

TABLE II .0156 OVERSIZE 8 12 (CONTINUED)

BOEING STANDARD NUMBER BACB30DX 1	Ø Q		R RAD		Ø S 2 +.0000 -.0025	TOL X	TOL Y
	MAX	MIN	MAX	MIN			
5 13	---	---	---	---	---	---	---
6	.185	.177	.025	.010	.2025	.011	.003
8	.242	.235	.025	.010	.2650	.015	.004
10	.305	.294	.025	.010	.3275	.019	.005
12	.368	.361	.030	.015	.3900	.022	.006

NOTES

- 1 SEE CODING UNDER USAGE AND APPLICATION FOR COMPLETE BOEING PART NUMBER.
- 2 TAPER AND LOCKING GROOVE ANGLES AT END OF SHANK NEED NOT BLEND. SLIGHT HOOK AT JUNCTURE OF ANGLES AND KNURLING NORMAL TO COLD ROLLING IS PERMISSIBLE.
- 3 SHANK TAPER ALLOWED: "J" DIAMETER FOR "K" LENGTH UNDER HEAD, MEASURED FROM TANGENT OF RADIUS "R"; "S" DIAMETER FOR "K" LENGTH AT END OF SHANK; "D" DIAMETER FOR REMAINDER OF SHANK.
- 4 FOUR GROOVES FOR .164, .190 AND .250 SIZES. FIVE GROOVES FOR .312 AND .375 SIZES.
- 5 RADIUS IS NATURAL FLOW OF MATERIAL.
- 6 1 TO 5 DEGREE ANGLE UNDER HEAD OPTIONAL FOR A286 MATERIAL.

DATE 15-JUN-2007 REV (V) 15-JUN-2007

CAGE CODE 81205

BACB30DX

SH 3

BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)

BACB30DX

SH 3

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

NOTES (CONTINUED)

- 7 G = GRIP. THE NUMBER DESIGNATING GRIP EQUALS REQUIRED GRIP LENGTH DIVIDED BY .0625.
- 8 DIMENSIONS FOR PLATED PARTS TO BE AFTER PLATING.
- 9 SHANK STRAIGHTNESS WITHIN .004 FOR .164 AND .190 SIZE AND .003 FOR LARGER SIZES WHEN MEASURED WITH A .25 WIDE FEELER GAGE AND A SURFACE PLATE.
- 10 "C" = GAGE DIAMETER FOR MEASURING BOLT LENGTH.
- 11 RESTRICTED USAGE: REPAIR ONLY
- 12 FOR .0156 OVERSIZE, LENGTH "P" IS A VENDOR OPTION. PINTAIL MUST BE ADEQUATE FOR INSTALLATION PER BAC5004 AND BAC5004-2.
- 13 TO REPLACE BACB30DX5 BOLTS, USE BACB30DX6 BOLTS.
- 14 USE ON SLOPED SURFACES OF 1 DEGREE TO 7 DEGREES.
- 15 INSTALL NUTS PER BAC5004-2. BACB30MB SIZE CODES ARE IN .0312 INCREMENTS, MATING PART SIZE CODES ARE IN .0625 INCREMENTS.
- 16 OVERSIZE REPAIR FASTENER SUBSTITUTION AUTHORITY IS LISTED IN PROCESS SPECIFICATION BAC5004-2.
- 17 STANDARD PART SUBSTITUTIONS AUTHORIZED BY PROGRAM SUBSTITUTION DRAWINGS MY BE USED IN LIEU OF THE SUPERSESSIONS LISTED HEREIN.
- 18 REASON FOR SUPERSESSION: REDUCE PRODUCTION INVENTORY COST AND IMPROVE CORROSION RESISTANCE.
- 19 FORMERLY TEXTRON AEROSPACE. NAME CHANGE ONLY. NO CHANGE TO PLANT LOCATION OR FACILITIES. STOCK MANUFACTURED UNDER THE TEXTRON AEROSPACE FASTENERS NAME MAY BE PROCURED AND USED UNTIL DEPLETED.
- 20 HUCK INTERNATIONAL INC. (CARSON) IS NOW ALCOA FASTENING SYSTEMS – CARSON. THIS CHANGE WAS A NAME CHANGE ONLY. STOCK MANUFACTURED UNDER THE HUCK NAME MAY BE PROCURED AND USED UNTIL DEPLETED.

PROCUREMENT SPECIFICATION

BPS-F-46 EXCEPT AS NOTED. MAGNETIC PARTICLE INSPECTION IS NOT REQUIRED ON PULL TYPE LOCK BOLTS.

DATE 15-JUN-2007 REV (V) 15-JUN-2007

CAGE CODE 81205

BACB30DX
SH 4

BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)

BACB30DX
SH 4

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

MATERIAL

ALLOY STEEL, 8740 (PREFERRED) PER MIL-S-6049 OR AMS 6322. OPTIONAL MATERIALS: AMS 6304, E4340 PER AMS-S-5000, 4140 PER MIL-S-5626 OR AMS 6349 OR AMS 6382.

A286 CORROSION RESISTANT STEEL PER AMS5737.

ALLOY STEEL, E4340 PER AMS-S-5000. OPTIONAL MATERIALS: AMS 6304, 8740 PER MIL-S-6049 OR AMS 6322.

HEAT TREATMENT

PER BPS-F-46.

FINISH

CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2. IDENTIFY CADMIUM PLATED A286 WITH THIN GREEN DYE ON AT LEAST HALF OF THE PINTAIL PRIOR TO LUBRICATION.

DIFFUSED NICKEL-CADMIUM PLATE PER AMS 2416.

SILVER PLATE PER QQ-S-365.

PASSIVATE PER AMS 2700, TYPE OPTIONAL.

SURFACE TEXTURE

PER ASME B46.1. BEARING SURFACE OF HEAD, HEAD TO SHANK FILLET AND SHANK 63 MICROINCHES Ra; OTHER SURFACES, 125 MICROINCHES Ra.

LUBRICATION

PER BPS-F-46.

MARKING

NOMINAL

MARK HEAD WITH DEPRESSED BAR. MANUFACTURERS SYMBOL/INSIGNIA RECOGNIZED BY MIL-HDBK-57 OR REGISTERED WITH THE U.S. PATENT AND TRADEMARK OFFICE (PTO) OF THE U.S. DEPARTMENT OF COMMERCE OPTIONAL. ADD "DT" FOR E4340 AND AMS 6304 MATERIAL. ADD "EU" FOR A286 MATERIAL. MARKINGS INDENTED .010 MAXIMUM; ARRANGEMENT OPTIONAL.

OVERSIZE

MARK HEAD WITH DEPRESSED PLATEAU WITH RAISED BAR AND SUPPLIERS SYMBOL/INSIGNIA RECOGNIZED BY MIL-HDBK-57 OR REGISTERED WITH THE U.S. PATENT AND TRADEMARK OFFICE (PTO) OF THE U.S. DEPARTMENT OF COMMERCE. ADD "DT" FOR E4340 AND AMS 6304 MATERIALS. ADD "EU" FOR A286 MATERIALS. MARKINGS INDENTED .010 MAXIMUM; ARRANGEMENT OPTIONAL. 11

DATE 15-JUN-2007 REV (V) 15-JUN-2007

CAGE CODE 81205

BACB30DX

SH 5

**BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)**


BACB30DX

SH 5

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

PROCUREMENT

ALCOA FASTENING SYSTEMS – CARSON (CAGE CODE 17446) 

CHERRY AEROSPACE LLC (CAGE CODE 11815) 


THE MANUFACTURERS LISTED IN BPS–F–46SUP AND THEIR AUTHORIZED DISTRIBUTORS ARE THE ONLY APPROVED SOURCES FOR THE ABOVE QUALIFIED PRODUCTS. SEE BPS–F–46SUP FOR PLANT ADDRESSES. CHANGES IN PRODUCT DESIGN OR QUALITY WITHOUT PRIOR BOEING APPROVAL MAY RESULT IN THE MANUFACTURER BEING DISQUALIFIED. MANUFACTURERS OF COMPETITIVE PRODUCTS MAY APPLY TO A SUPPLIER MANAGEMENT AND PROCUREMENT DEPARTMENT OF THE BOEING COMPANY FOR QUALIFICATION. IF A MANUFACTURER IS SHOWN ON THIS STANDARD, BUT NOT LISTED IN THE SUPPLEMENT, CONTACT THE DIVISIONAL ENGINEERING STANDARDS FOCAL POINT OR ENGINEERING STANDARDS FOR VERIFICATION.

THIS IS A MANUFACTURER–DESIGNED PRODUCT. BOEING MAKES NO REPRESENTATION WHATEVER REGARDING PATENT OR OTHER RIGHTS AFFECTING THE PRODUCT. THE LISTING OF ANY SUPPLIER DOES NOT IMPLY ANY DETERMINATION BY THE BOEING COMPANY OR BY ANY OTHER LISTED MANUFACTURER AS TO THE RIGHTS OF SUCH MANUFACTURER.


USAGE AND APPLICATION INFORMATION

LOCKBOLTS AND COLLARS ARE RECOMMENDED FOR USE IN LIEU OF BOLTS AND NUTS WHERE A PERMANENT TYPE FASTENER IS SATISFACTORY.

LOCKBOLTS AND COLLARS PROVIDE REDUCTION IN WEIGHT AND INSTALLED COST.

.0156 OVERSIZE BOLTS ARE TO BE USED AS REPLACEMENTS FOR STANDARD SIZE BACB30DX WHEN THE HOLE FOR THE STANDARD BOLT IS OVERSIZE OR MUST BE MADE OVERSIZE TO CORRECT DAMAGE OR MISALIGNMENT. 

BCA SUPERSESSON INFORMATION

BACB30DX()()X BOLTS SUPERSEDE THE EQUIVALENT BACB30HW AND BACB30CG BOLTS. BACB30DX BOLTS ARE THE SAME AS THE EQUIVALENT SUPERSEDED PARTS EXCEPT FOR THE REDUCED “D” DIAMETER. CLOSER TOLERANCE “D” DIAMETERS ON BACB30DX BOLTS WILL PERMIT LARGER HOLE TOLERANCE PER BAC5004. 

IDS ALTERNATIVE PARTS

NAS1465 THRU 1472 LOCKBOLTS MAY BE PROCURED AND USED IN PLACE OF BACB30DX FOR B–52 APPLICATIONS ONLY.

DATE 15–JUN–2007 REV (V) 15–JUN–2007

CAGE CODE 81205

BACB30DX

SH 6

BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)

BACB30DX

SH 6

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

CODING

FIRST DASH NUMBER DESIGNATES NOMINAL SHANK DIAMETER IN (APPROXIMATELY) .031 INCREMENTS. SEE TABLE I AND TABLE II.

CODES FOLLOWING THE FIRST DASH NUMBER DESIGNATE MATERIALS, AS FOLLOWS:

A "DASH" (NO CODE) DESIGNATES 8740 ALLOY STEEL (PREFERRED) OR THE OPTIONS: AMS 6304, E4340 OR 4140.

LETTER "A" DESIGNATES A286 CRES.

LETTER "D" DESIGNATES E4340 ALLOY STEEL OR THE OPTIONS: 8740 OR AMS 6304.

SECOND DASH NUMBER DESIGNATES NOMINAL GRIP LENGTH IN .0625 INCREMENTS.

CODE LETTERS FOLLOWING THE SECOND DASH NUMBER DESIGNATE FINISH, AS FOLLOWS:

NO CODE DESIGNATES CADMIUM PLATE.

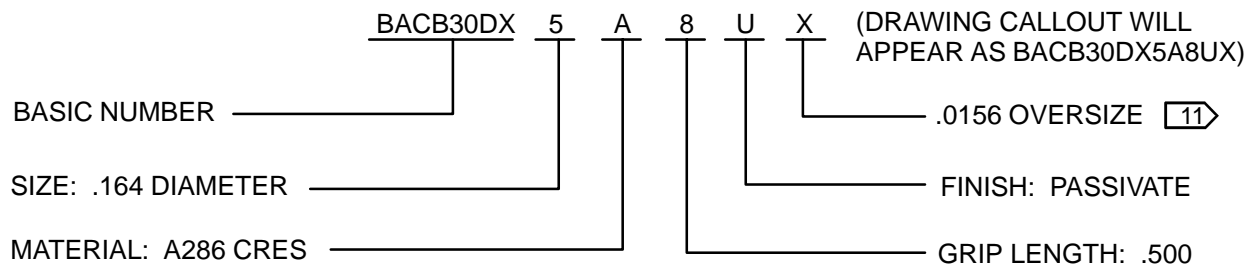
LETTER "N" DESIGNATES DIFFUSED NICKEL-CADMIUM PLATE (APPLICABLE TO CODE "D" MATERIALS ONLY).

LETTER "S" DESIGNATES SILVER PLATE (APPLICABLE ONLY TO "NO-CODE" MATERIALS).

LETTER "U" DESIGNATES PASSIVATED FINISH (APPLICABLE ONLY TO CODE "A" MATERIAL).

SUFFIX "X" TO THE PART NUMBER DESIGNATES A .0156 OVERSIZE BOLT. 11

EXAMPLE OF PART NUMBER



DATE 15-JUN-2007 REV (V) 15-JUN-2007

CAGE CODE 81205

BACB30DX

SH 7

**BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)**

BACB30DX

SH 7

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

INSTALLATION

INSTALL PER BAC5004 AND BAC5004-2.

FASTENER CODE

SEE BACD2074

TABLE III CLASS II SUPERSESSIONS FOR BCA AND IDS 16 17

OBSOLETE			SUPERSEDING	
BOLT	MATING PART	FASTENER CODE (REF)	BOLT	MATING PART
BACB30DX()-()	NAS1080-()	XEP	BACB30MB()A()	BACC30BH()
BACB30DX5-()	NAS1080-5		BACB30MB5A()	BACC30AG5 14
BACB30DX()-()	NAS1080-()		BACB30MB()A()	BACN10YT()CD PLUS BACW10CA()CC AND BACW10CA()PV 14 15
BACB30DX()-()	NAS1080P()	XER	BACB30MB()A()	BACC30BH()
BACB30DX()-()	NAS1080P()		BACB30MB()A()	BACN10YT()CD PLUS BACW10CA()CC AND BACW10CA()PV 14 15
BACB30DX()-()	NAS1080R()	XES	BACB30MB()A()	BACC30BH()
BACB30DX5-()	NAS1080R5		BACB30MB5A()	BACC30AG5() 14
BACB30DX()-()	NAS1080R()		BACB30MB()A()	BACN10YT()CD PLUS BACW10CA()CC AND BACW10CA()PV 14 15
BACB30DX()D()N	BACC30L()	XET	BACB30MB()A()	BACC30BH()S
BACB30DX()D()N	BACC30L()		BACB30MB()A()	BACN10YT()CS PLUS BACW10CA()CCU AND BACW10CA()PVU 14 15
BACB30DX()A()	BACC30Q()	XEV	BACB30MB()A()	BACC30BH()S
BACB30DX()A()	BACC30Q()		BACB30MB()A()	BACN10YT()CS PLUS BACW10CA()CCU AND BACW10CA()PVU 14 15
BACB30DX()-()S	BACC30Q()	XGW	BACB30MB()A()U	BACC30BH()P
BACB30DX()-()S	BACC30Q()		BACB30MB()A()U	BACN10YT()C PLUS BACW10CA()CCU AND BACW10CA()PVU 14 15

DATE 15-JUN-2007 REV (V) 15-JUN-2007

CAGE CODE 81205

BACB30DX

SH 8

BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)

BACB30DX

SH 8

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

TABLE III CLASS II SUPERSESSIONS FOR BCA AND IDS (CONTINUED)

OBSOLETE			SUPERSEDING	
BOLT	MATING PART	FASTENER CODE (REF)	BOLT	MATING PART
BACB30DX()A()U	NAS1080R()	XOB	BACB30MB()A()U	BACC30BH()
BACB30DX5A()U	NAS1080R5		BACB30MB5A()U	BACC30AG5 14
BACB30DX()A()U	NAS1080R()		BACB30MB()A()U	BACN10YT()CD PLUS BACW10CA()CC AND BACW10CA()PV 14 15
BACB30DX()A()U	BACC30Q()	XOF	BACB30MB()A()U	BACC30BH()P
BACB30DX()A()U	BACC30Q()		BACB30MB()A()U	BACN10YT()C PLUS BACW10CA()CCU AND BACW10CA()PVU 14 15
BACB30DX()A()U	NAS1080-()	XOG	BACB30MB()A()U	BACC30BH()
BACB30DX5A()U	NAS1080-5		BACB30MB5A()U	BACC30AG5 14
BACB30DX()A()U	NAS1080-()		BACB30MB()A()U	BACN10YT()CD PLUS BACW10CA()CC AND BACW10CA()PV 14 15
BACB30DX()A()	NAS1080-()	XOH	BACB30MB()A()	BACC30BH()
BACB30DX5A()	NAS1080-5		BACB30MB5A()	BACC30AG5 14
BACB30DX()A()	NAS1080-()		BACB30MB()A()	BACN10YT()CD PLUS BACW10CA()CC AND BACW10CA()PV 14 15
BACB30DX()A()	NAS1080P()	XOJ	BACB30MB()A()	BACC30BH()
BACB30DX()A()	NAS1080P()		BACB30MB()A()	BACN10YT()CD PLUS BACW10CA()CC AND BACW10CA()PV 14 15
BACB30DX()A()	NAS1080R()	XOK	BACB30MB()A()	BACC30BH()
BACB30DX5A()	NAS1080R5		BACB30MB5A()	BACC30AG5 14
BACB30DX()A()	NAS1080R()		BACB30MB()A()	BACN10YT()CD PLUS BACW10CA()CC AND BACW10CA()PV 14 15
BACB30DX()A()U	BACC30L()	YMV	BACB30MB()A()U	BACC30BH()S
BACB30DX()A()U	BACC30L()		BACB30MB()A()U	BACN10YT()CS PLUS BACW10CA()CCU AND BACW10CA()PVU 14 15

DATE 15-JUN-2007 REV (V) 15-JUN-2007

CAGE CODE 81205

BACB30DX

SH 9

BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)

BACB30DX

SH 9

FOR STATUS OF INACTIVATION
SEE APPLICABILITY BLOCK

TABLE III CLASS II SUPERSESSIONS FOR BCA AND IDS (CONTINUED)

OBSOLETE			SUPERSEDING	
BOLT	MATING PART	FASTENER CODE (REF)	BOLT	MATING PART
BACB30DX()A()U	NAS1080MG()	YTG	BACB30MB()A()U	BACC30BH()S
BACB30DX()A()U	NAS1080MG()		BACB30MB()A()U	BACN10YT()CS PLUS BACW10CA()CCU AND BACW10CA()PVU 14 15
BACB30DX()A()U	NAS1080MK()	YTL	BACB30MB()A()U	BACC30BH()S
BACB30DX()A()U	NAS1080MK()		BACB30MB()A()U	BACN10YT()CS PLUS BACW10CA()CCU AND BACW10CA()PVU 14 15

SEE D-590-PREFACE (INDEX) FOR INACTIVATION DEFINITIONS. SEE D-590-SUPERSESSION-LIST FOR SUPERSESSION CLASS DEFINITIONS AND SUPERSESSION LIST.

INACTIVATION APPLICABILITY

BCA & IDS – (EXCEPTIONS: BH)

BACB30DX()-(), BACB30DX()D()N AND BACB30DX()A() ARE INACTIVE FOR DESIGN AND PROCUREMENT.

BACB30MB()A() IS A CLASS II SUPERSESSION USING MATING PARTS PER TABLE III. 16 17 18

BACB30DX()-()S AND BACB30DX()A()U ARE INACTIVE FOR DESIGN AND PROCUREMENT.

BACB30MB()A()U IS A CLASS II SUPERSESSION USING MATING PARTS PER TABLE III. 16 17 18

NOTE: INSTALLATION TOOLING DIFFERS.

DATE 15-JUN-2007 REV (V) 15-JUN-2007

CAGE CODE 81205

BACB30DX

SH 10

BOLT,
LOCK, TENSION, PROTRUDING HEAD, STEEL,
C. T. SHANK, 1.0 PINTAIL, PULL TYPE, GUN
DRIVEN (NOMINAL AND OVERSIZED)

BACB30DX

SH 10