

Bolts-Inserts-Tools- Nuts-Screws-Washers- Hex Wrenches

*Every Style
and Type*



T-BOLT SETS Pg F22



L-WRENCH
HEX DRIVERS
Pg F18



SIDE GRIP CLAMPS
Pg F12



MODULAR T-SLOT BARS Pg F34



PNEUMATIC INSTALLATION TOOL Pg F11



SOCKET HEAD CAP SCREWS Pg F15



SOCKET SHOULDER SCREWS Pg F13



SOCKET HEAD LOCATING
SCREWS Pg F15



CLAMPING STUDS Pg F26



SQUARE HOLE SLEEVES Pg F17



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ROTARY T-SLOT BOLTS Pg F24



PULL-OUT
DOWELS Pg F17



SPHERICAL FLANGE NUTS
& WASHERS Pg F33



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CHECK NUTS
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C-WASHERS
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CARBON UNI-
INSERTS Pg F7



SS THREADED
INSERTS Pg F4



CROSS SLIDE
T-NUTS Pg F36

Threaded Inserts

Carbon Steel Inserts

E-Z LOK Threaded Inserts



LOCTITE®
BONDING
ASSURES
FIRM
LASTING
THREADS.



EZ-LOK for Strong Threads in Metal
UNITED's metal threads re-work and repair stripped or worn threads. **Available in bulk quantities or in kits.**

Use in steel, magnesium, aluminum, cast iron, copper, brass, masonite and plastic.

	UNITED PART NO.	INTERNAL THREAD	EXTERNAL THREAD	LEN	TAP SIZE DRILL	TAP SIZE	MIN. THRD DEPTH	DRIVE TOOL NO.	CONVERSION NO.
#10 to 1"									
   COARSE THREAD SIZES	COARSE THREADS								
	UDB-329004	4-40	10-32	.250	5/32	10-32	9/32	--	329-004
	UDB-329006	6-32	1/4-20	.280	7	1/4-20	11/32	--	329-006
	UDB-329008	8-32	5/16-18	.290	F	5/16-18	7/16	UDB-500001	329-008
	UDB-329300	10-24	3/8-16	.406	5/16	3/8-16	15/32	UDB-500002	329-3
	UDB-329400	1/4-20	7/16-14	.437	23/64	7/16-14	1/2	UDB-500003	329-4
	UDB-329500	5/16-18	1/2-13	.484	27/64	1/2-13	9/16	UDB-500004	329-5
	UDB-329600	3/8-16	9/16-12	.515	31/64	9/16-12	19/32	UDB-500005	329-6
	UDB-329700	7/16-14	5/8-11	.656	17/32	5/8-11	23/32	UDB-500006	329-7
	UDB-329800	1/2-13	3/4-10	.656	21/32	3/4-10	3/4	UDB-500007	329-8
	UDB-329900	9/16-12	3/4-10	.656	21/32	3/4-10	3/4	UDB-500007	329-9
	UDB-329100	5/8-11	7/8-9	.687	49/64	7/8-9	13/16	UDB-500008	329-10
	UDB-3291018	5/8-11	7/8-9	1.125	49/64	7/8-9	1-1/4	UDB-500008	329-1018
	UDB-329120	3/4-10	1-8	.781	7/8	1-8	7/8	UDB-500009	329-12
	UDB-329140	7/8-9	1-1/4-7	1.125	1-7/64	1-1/4-7	1-1/4	--	329-14
	UDB-329160	1-8	1-3/8-12	1.250	1-9/32	1-3/8-12	1-3/8	--	329-16
#10 to 1"									
  FINE THREAD SIZES	FINE THREADS								
	UDB-329332	10-32	3/8-16	.406	5/16	3/8-16	15/32	UDB-500002	329-332
	UDB-329428	1/4-28	7/16-14	.437	23/64	7/16-14	1/2	UDB-500003	329-428
	UDB-329524	5/16-24	1/2-13	.484	27/64	1/2-13	9/16	UDB-500004	329-524
	UDB-329624	3/8-24	9/16-12	.515	31/64	9/16-12	19/32	UDB-500005	329-624
	UDB-329720	7/16-20	5/8-11	.656	17/32	5/8-11	23/32	UDB-500006	329-720
	UDB-329820	1/2-20	3/4-10	.656	21/32	3/4-10	3/4	UDB-500007	329-820
	UDB-329918	9/16-18	3/4-10	.656	21/32	3/4-10	3/4	UDB-500007	329-918
	UDB-32910F	5/8-18	7/8-9	.687	49/64	7/8-9	13/16	UDB-500008	329-10F
	UDB-3291216	3/4-16	1-8	.781	7/8	1-8	7/8	UDB-500009	329-1216
	UDB-3291414	7/8-14	1-1/4-7	1.125	1-7/64	1-1/4-7	1-1/4	--	329-1414
	UDB-3291614	1-14	1-3/8-12	1.250	1-9/32	1-3/8-12	1-3/8	--	329-1614
1/4 to 5/8									
 COARSE THREAD SIZES	EXTRA HEAVY WALL								
	UDB-335400	1/4-20	1/2-13	.484	27/64	1/2-13	9/16	UDB-500003	335-4
	UDB-335500	5/16-18	9/16-12	.515	31/64	9/16-12	19/32	UDB-500004	335-5
	UDB-335600	3/8-16	5/8-11	.656	17/32	5/8-11	23/32	UDB-500005	335-6
	UDB-335800	1/2-13	7/8-9	.687	49/64	7/8-9	13/16	UDB-500007	335-8
	UDB-335100	5/8-11	1-8	.781	7/8	1-8	7/8	--	335-10
M6 to M16									
 METRIC THREAD & U.S. EXTERNAL	IDs are METRIC THREADS O.D.s are U.S.								
	UDB-650600	M6-1.0	3/8-16	.406	5/16	3/8-16	15/32	UDB-500003	650-6
	UDB-650800	M8-1.25	1/2-13	.484	27/64	1/2-13	9/16	UDB-500004	650-8
	UDB-650100	M10-1.50	9/16-12	.515	31/64	9/16-12	19/32	UDB-500005	650-10
	UDB-65010F	M10-1.25	9/16-12	.515	31/64	9/16-12	19/32	UDB-500005	650-10F
	UDB-650120	M12-1.75	3/4-10	.656	21/32	3/4-10	3/4	UDB-500006	650-12
	UDB-650140	M14-2.0	7/8-9	.687	49/64	7/8-9	13/16	UDB-500007	650-14
	UDB-650160	M16-2.0	1-8	.781	7/8	1-8	7/8	UDB-500008	650-16
M3 to M16									
 METRIC THREAD & METRIC EXTERNAL	IDs are METRIC THREADS O.D.s are METRIC								
	UDB-450300	M3-0.5	M6-1.0	6.5 mm	5.1 mm	M6-1.0	7.8 mm	--	450-3
	UDB-450400	M4-0.7	M8-1.25	7.5 mm	6.9 mm	M8-1.25	9.0 mm	UDB-500001	450-4
	UDB-450500	M5-0.8	M8-1.25	7.5 mm	6.9 mm	M8-1.25	9.0 mm	UDB-500001	450-5
	UDB-450600	M6-1.0	M10-1.5	10.5	8.6 mm	M10-1.5	12.0 mm	UDB-500003	450-6
	UDB-450800	M8-1.25	M12-1.75	12.5	10.4 mm	M12-1.75	14.5 mm	UDB-500004	450-8
	UDB-450100	M10-1.5	M16-2.0	17.0	14.0 mm	M16-2.0	19.0 mm	UDB-500005	450-10
	UDB-450120	M12-1.75	M16-2.0	17.0	14.0 mm	M16-2.0	19.0 mm	UDB-500006	450-12
	UDB-450160	M16-2.0	M24-3.0	20.0	21.0 mm	M24-3.0	24.0 mm	UDB-500008	450-16

Carbon Steel Insert Kits

Carbon Steel Thread
Inserts & Repair Kits

HEAVY DUTY WELDED HINGED LID



STEEL CASE



REPAIR KIT
CONTAINS
INSTRUCTIONS
FOR THREE
EASY STEPS.

Inserts & Repair Kits



POWER DRIVE
TOOL FOR
VOLUME
INSTALLATION

UDB E-Z LOCK INSERTS can be used within minutes because the Loctite® bonding sets immediately and cures overnight to seal against gases and liquids and to prevent vibration.

REPAIR KITS will replace your worn threads. Use *UNITED* complete kits for all types of threads. Our quick Installation Tool offers easy installation and removal. Select the thread size range kits you require.

UNITED KIT NUMBER	NO. OF INSERTS	INSERT PART NO.	INTERNAL THREAD	EXTERNAL THREAD
COARSE THREAD #10 TO 1/2 INCH				
UDB-325108C	10	UDB-329300	10-24	3/8-16
	10	UDB-329400	1/4-20	7/16-14
	10	UDB-329500	5/16-18	1/2-13
	10	UDB-329600	3/8-16	9/16-12
	6	UDB-329800	1/2-13	3/4-10
COARSE THREAD 1/2 TO 1 INCH				
UDB-325816C	6	UDB-329800	1/2-13	3/4-10
	7	UDB-329100	5/8-11	7/8-9
	7	UDB-329120	3/4-10	1-8
	2	UDB-329160	1-8	1-3/8-12
FINE THREAD #10 TO 1/2 INCH				
UDB-325108F	10	UDB-329332	10-32	3/8-16
	10	UDB-329428	1/4-28	7/16-14
	10	UDB-329524	5/16-24	1/2-13
	10	UDB-329624	3/8-24	9/16-12
	6	UDB-329820	1/2-20	3/4-10
FINE THREAD 1/2 TO 1 INCH				
UDB-325816F	6	UDB-329820	1/2-20	3/4-10
	7	UDB-32910F	5/8-18	7/8-9
	7	UDB-3291216	3/4-16	1-8
	2	UDB-3291614	1-14	1-3/8-12
METRIC THREAD M6 TO M12				
UDB-325612M	10	UDB-650600	M6-1.0	3/8-16
	10	UDB-650800	M8-1.25	1/2-13
	10	UDB-650100	M10-1.50	9/16-12
	6	UDB-650120	M12-1.75	3/4-10
M3-0.5 TO M8-1.25				
UDB-325100M	10	UDB-450300	M3-0.5	M6-1.0
	10	UDB-450400	M4-0.7	M8-1.25
	10	UDB-450500	M5-0.8	M8-1.25
	10	UDB-450600	M6-1.0	M10-1.5
	10	UDB-450800	M8-1.25	M12-1.75
M8-1.25 TO M16-2.0				
UDB-325200M	10	UDB-450800	M8-1.25	M12-1.75
	10	UDB-450100	M10-1.5	M16-2.0
	8	UDB-450120	M12-1.75	M16-2.0
	5	UDB-450160	M16-2.0	M24-3.0

1 Drill with standard drill.

E-Z LOK
EXTERNAL
THREADS are
standard and
pitched to permit
use of standard
installation tools.



2 Tap hole with standard tap.

EXTERNAL
THREADS provide
superior holding
power in soft and
hard metals. Micro
encapsulated
Loctite bonding
assures firm lasting
threads.



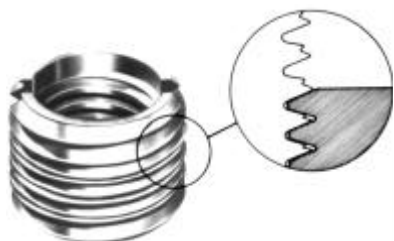
3 Turn and tighten E-Z LOK flush with bolt.

INSTALL-REMOVE
INSERT by
overcoming the
Loctite bonding with
a standard screw
and bolt extractor
and replace with a
new insert with the
same tools.



E-Z LOK 303

Stainless 303 Thread Inserts



- ★ NON-SEIZING
- ★ NON-GALLING
- ★ NON-MAGNETIC
- ★ WEAR RESISTANT

- ★ CORROSION RESISTANT
- ★ AIRCRAFT QUALITY
- ★ IDEAL FOR FASTENERS
- ★ SPECIFIED BY OEMS



WIDE VARIETY of STAINLESS STEEL LOCTITE® INSERTS

	UNITED PART NO.	INTERNAL THREAD	EXTERNAL THREAD	LEN	TAP DRILL SIZE	TAP SIZE	MIN. THRD DEPTH	DRIVE TOOL PART NO.	CONVERSION NO.
#10 to 1"	COARSE THREADS								
STAINLESS STEEL COARSE THREAD	UDB-303004	4-40	10-32	.250	5/32	10-32	9/32	--	303-004
	UDB-303006	6-32	1/4-20	.280	7	1/4-20	11/32	--	303-006
	UDB-303008	8-32	5/16-18	.290	F	5/16-18	7/16	UDB-325001	303-008
	UDB-303300	10-24	3/8-16	.406	5/16	3/8-16	15/32	UDB-325002	303-3
	UDB-303400	1/4-20	7/16-14	.437	23/64	7/16-14	1/2	UDB-325003	303-4
	UDB-303500	5/16-18	1/2-13	.484	27/64	1/2-13	9/16	UDB-325004	303-5
	UDB-303600	3/8-16	9/16-12	.515	31/64	9/16-12	19/32	UDB-325005	303-6
	UDB-303700	7/16-14	5/8-11	.656	17/32	5/8-11	23/32	UDB-325006	303-7
	UDB-303800	1/2-13	3/4-10	.656	21/32	3/4-10	3/4	UDB-325007	303-8
	UDB-303100	5/8-11	7/8-9	.687	49/64	7/8-9	13/16	UDB-325008	303-10
	UDB-303120	3/4-10	1-8	.781	7/8	1-8	7/8	UDB-325009	303-12
#10 to 1/2"	FINE THREADS								
STAINLESS STEEL FINE THREAD	UDB-303332	10-32	3/8-16	.406	5/16	3/8-16	15/32	UDB-325002	303-332
	UDB-303428	1/4-28	7/16-14	.437	23/64	7/16-14	1/2	UDB-325003	303-428
	UDB-303524	5/16-24	1/2-13	.484	27/64	1/2-13	9/16	UDB-325004	303-524
	UDB-303624	3/8-24	9/16-12	.515	31/64	9/16-12	19/32	UDB-325005	303-624
	UDB-303720	7/16-20	5/8-11	.656	17/32	5/8-11	23/32	UDB-325006	303-720
	UDB-303820	1/2-20	3/4-10	.656	21/32	3/4-10	3/4	UDB-325007	303-820
M6 to M16	IDs are METRIC THREADS O.D.s are U.S.								
SS METRIC INTERNAL & U.S. EXTERNAL	UDB-653600	M6-1.0	3/8-16	.406	5/16	3/8-16	15/32	UDB-325003	653-6
	UDB-653800	M8-1.25	1/2-13	.484	27/64	1/2-13	9/16	UDB-325004	653-8
	UDB-653100	M10-1.50	9/16-12	.515	31/64	9/16-12	19/32	UDB-325005	653-10
	UDB-65310F	M10-1.25	9/16-12	.515	31/64	9/16-12	19/32	UDB-325006	653-10F
	UDB-653120	M12-1.75	3/4-10	.656	21/32	3/4-10	3/4	UDB-325007	653-12
	UDB-653140	M14-2.0	7/8-9	.687	49/64	7/8-9	13/16	UDB-325008	653-14
	UDB-653160	M16-2.0	1-8	.781	7/8	1-8	7/8		653-16
M3 to M16	IDs are METRIC THREADS O.D.s are METRIC								
SS METRIC INTERNAL & METRIC EXTERNAL	UDB-453300	M3-0.5	M6-1.0	6.5 mm	5.1 mm	M6-1.0	7.8 mm	--	453-3
	UDB-453400	M4-0.7	M8-1.25	7.5 mm	6.9 mm	M8-1.25	9.0 mm	UDB-325001	453-4
	UDB-453500	M5-0.8	M8-1.25	7.5 mm	6.9 mm	M8-1.25	9.0 mm	UDB-325001	453-5
	UDB-453600	M6-1.0	M10-1.5	10.5 mm	8.6 mm	M10-1.5	12.0 mm	UDB-325003	453-6
	UDB-453800	M8-1.25	M12-1.75	12.5 mm	10.4 mm	M12-1.75	14.5 mm	UDB-325004	453-8
	UDB-453100	M10-1.5	M16-2.0	17.0 mm	14.0 mm	M16-2.0	19.0 mm	UDB-325005	453-10
	UDB-453120	M12-1.75	M16-2.0	17.0 mm	14.0 mm	M16-2.0	19.0 mm	UDB-325006	453-12
	UDB-453160	M16-2.0	M24-3.0	20.0 mm	21.0 mm	M24-3.0	24.0 mm	UDB-325008	453-16

Stainless 303 Thread Insert Kits

UNITED STAINLESS 303 INSERTS are Non-Magnetic. They resist corrosion. **UNITED** Stainless meets the exacting requirements of the Aircraft Industry. The Non-Seizing and Non-Galling properties of **UNITED** s Stainless are ideal for use with Threaded Fasteners.



**303 Stainless
Threads**

**303 STAINLESS
THREADED INSERTS**



REPAIR KITS WITH 303 STAINLESS INSERTS

UNITED KIT NUMBER	NO. OF INSERTS	INSERT PART NO.	INTERNAL THREAD	EXTERNAL THREAD
#10 to 1/2"				
COARSE THREAD				
UDB-303300K	10	UDB-303300	10-24	3/8-16
	10	UDB-303400	1/4-20	7/16-14
	10	UDB-303500	5/16-18	1/2-13
	10	UDB-303600	3/8-16	9/16-12
	6	UDB-303800	1/2-13	3/4-10
#10 to 1/2"				
FINE THREAD				
UDB-30332K	10	UDB-303332	10-32	3/8-16
	10	UDB-303428	1/4-28	7/16-14
	10	UDB-303524	5/16-24	1/2-13
	10	UDB-303624	3/8-24	9/16-12
	6	UDB-303820	1/2-20	3/4-10
M6 to M12				
METRIC THREAD M6 TO M12				
UDB-653600K	10	UDB-653600	M6-1.0	3/8-16
	10	UDB-653800	M8-1.25	1/2-13
	10	UDB-653100	M10-1.50	9/16-12
	6	UDB-653120	M12-1.75	3/4-10
M3 to M8				
METRIC THREAD M3-0.5 TO M8-1.25				
UDB-453300K	10	UDB-453300	M3-0.5	M6-1.0
	10	UDB-453400	M4-0.7	M8-1.25
	10	UDB-453500	M5-0.8	M8-1.25
	10	UDB-453600	M6-1.0	M10-1.5
	10	UDB-453800	M8-1.25	M12-1.75
M8 to M16				
METRIC THREAD M8-1.25 TO M16-2.0				
UDB-453800K	10	UDB-453800	M8-1.25	M12-1.75
	10	UDB-453110	M10-1.5	M16-2.0
	8	UDB-453112	M12-1.75	M16-2.0
	5	UDB-453116	M16-2.0	M24-3.0

**INSTRUCTIONS AND
INSERTING TOOL FOR
VOLUME PRODUCTION
INCLUDED IN EACH KIT**



INSERTING TOOL

STEEL CASE



**UniSerts—Fast
Thread Repair**

UNITED's Threaded Inserts

FOUR EASY STEPS TO SIMPLIFIED INSTALLATION



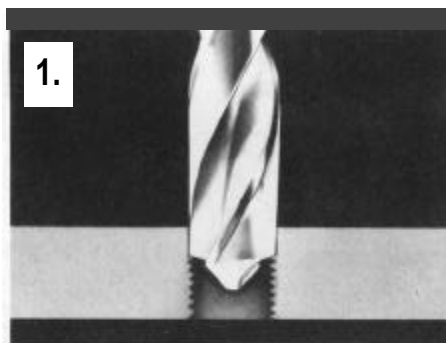
PERMANENT
STEEL THREADS

UniSerts FEATURE:

- A. Permanent stronger steel threads
- B. Fast repair
- C. Ideal for original equipment-OEM
- D. Positive lock against rotation
- E. No tang break off
- F. High strength and reliability
- G. Wear resistant
- H. Specified by auto and truck industry
- I. Stronger than original
- J. Can be used in most materials aluminum, steel, magnesium, cast iron, plastic

MINIATURE INSERTS

Screw miniature series into threaded mandrel and screw insert into tapped hole. A spring-loaded trip mechanism drives the keys into the parent material. See far right.



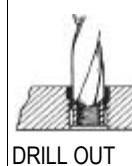
1.

It's unlikely that our strong UniSert threads will be removed.

Drill out old threads. Use standard drill.

(A)

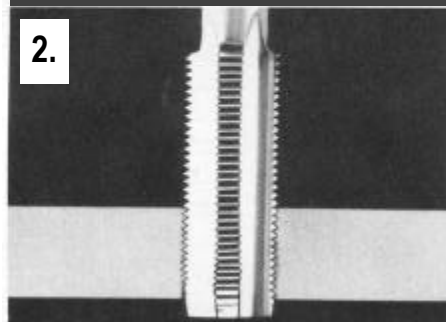
(B)



DRILL OUT



DEFLECT
KEYS and
BREAK OFF



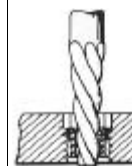
2.

Remove old insert.

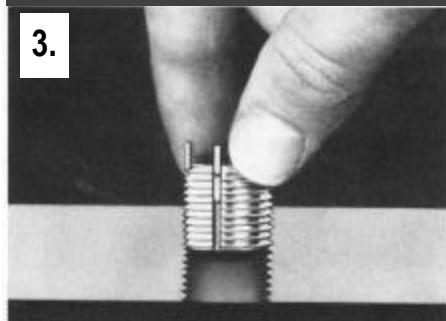
Tap with standard tap.

(C)

(D)



REMOVE
INSERT WITH
EASY OUT
TOOL AND
TAP AS
SHOWN



3.

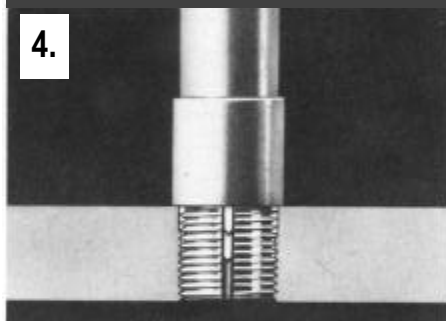
Screw in new UniSert until slightly below surface. Keys act as depth stop.

(E)



INSTALL AN
IDENTICAL
UNISERT IN
ORIGINAL
HOLE.

NO FURTHER RE-WORK
NECESSARY



4.

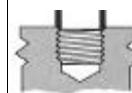
Drive Keys down with several light taps on installation tool.

(F)

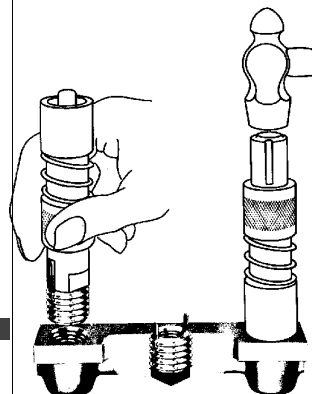
(G)

KEYS FIRMLY
LOCK IN
PLACE TO
PREVENT
ROTATION

KEYS DRIVEN
INTO BASE MA-
TERIAL AND
POSITIVE LOCK
IS SECURED



Screw insert on mandrel. Turn insert into tapped hole. Spring-loaded trip mechanism drives Keys into material.



THE "PERFECT" HOLE

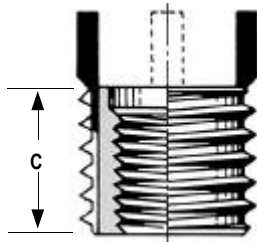
Carbon Steel UniSerts

PERMANENT STEEL THREADS FOR QUICK REPAIR
WITH POSITIVE MECHANICAL LOCK AGAINST REPAIRS

UniSerts-Tools-Kits



INSTALLATION
TOOL



A - INTERNAL THREAD - I.D.
B - EXTERNAL THREAD - O.D.

HEAVY DUTY INSERTS
Are used for general
purpose applications.

30 USA sizes from
10 24 to 1-1/2 12.

12L15 Steel
Black Oxide Finish



HEAVY DUTY - USA														
INSERTS	INSERT DIMENSIONS				INSTALLATION DATA							REMOVAL DATA		
UNITED PART NO.	A INTERNAL	B EXTERN	C LEN	SHEAR ENGAG (SQ.IN)	REQ D TAP DRILL	C SINK DIA	MIN THRD DPTH	STANDRD TAP UN-2B	INSTALL N TOOL PART NO.	REPAIR KIT PART NO.	INSERTS PER KIT	DRILL SIZE	DRILL DEPTH	
UDB-1024-US	#10-24	3/8-16	.31	.1901	(Q)	3/8	3/8	3/8-16	UDB-10-UST	UDB-1024-USK	15	9/32	1/8	
UDB-1032-US	#10-32				.332									
UDB-1420-US	1/4-20	7/16-14	.37	.2842	(X)	7/16	7/16	7/16-14	UDB-14-UST	UDB-1420-USK	13	11/32	3/16	
UDB-1428-US	1/4-28				.397									
UDB-51618-US	5/16-18	1/2-13	.43	.3588	(29/64)	1/2	1/2	1/2-13	UDB-516-UST	UDB-51618-USK	8	13/32	3/16	
UDB-51624-US	5/16-24				.453									
UDB-3816-US	3/8-16	9/16-12	.50	.4975	(33/64)	9/16	9/16	9/16-12	UDB-38-UST	UDB-3816-USK	6	15/32	3/16	
UDB-3824-US	3/8-24				.516									
UDB-71614-US	7/16-14	5/8-11	.62	.7172	(37/64)	5/8	11/16	5/8-11	UDB-716-UST	UDB-71614-USK	6	17/32	3/16	
UDB-71620-US	7/16-20				.578									
UDB-1213-US	1/2-13	3/4-16	.62	1.0573	(45/64)	3/4	11/16	3/4-16	UDB-12-UST	UDB-1213-USK	5	21/32	3/16	
UDB-1220-US	1/2-20				.703									
UDB-91612-US	9/16-12	3/4-16	.81	1.0573	(45/64)	3/4	7/8	3/4-16	UDB-916-UST	UDB-91612-USK	3	21/32	3/16	
UDB-91618-US	9/16-18				.703									
UDB-5811-US	5/8-11	7/8-14	.87	1.4866	(53/64)	7/8	1	7/8-14	UDB-58-UST	UDB-5811-USK	2	25/32	3/16	
UDB-5818-US	5/8-18				.828									
UDB-3410-US	3/4-10	1-1/8-12	1.12	2.4901	(1-1/16)	1-1/8	1-5/16	1-1/8-12	UDB-34-UST	UDB-3410-USK	2	31/32	5/16	
UDB-3416-US	3/4-16				1.062									
UDB-789-US	7/8-9	1-1/4-12	1.25	3.1370	(1-3/16)	1-1/4	1-7/16	1-1/4-12	UDB-78-UST	UDB-789-USK	2	1-3/32	5/16	
UDB-7814-US	7/8-14				1.187									
UDB-18-US	1-8	1-3/8-12	1.37	3.8381	(1-5/16)	1-3/8	1-9/16	1-3/8-12	UDB-1-UST	UDB-18-USK	2	1-7/32	5/16	
UDB-112-US	1-12				1.312									
UDB-1187-US	1-1/8-7	1-1/2-12	1.62	4.7519	(1-7/16)	1-1/2	1-11/16	1-1/2-12	UDB-118-UST	UDB-1187-USK	2	1-11/32	5/16	
UDB-11812-US	1-1/8-12				1.437									
UDB-1147-US	1-1/4-7	1-5/8-12	1.81	5.4459	(1-35/64)	1-5/8	2	1-5/8-12	UDB-114-UST	UDB-1147-USK	2	1-15/32	5/16	
UDB-11412-US	1-1/4-12				1.547									
UDB-1386-US	1-3/8-6	1-3/4-12	1.90	6.2140	(1-11/16)	1-3/4	2-1/16	1-3/4-12	UDB-138-UST	UDB-1386-USK	2	1-19/32	5/16	
UDB-13812-US	1-3/8-12				1.688									
UDB-1126-US	1-1/2-6	1-7/8-12	2.00	7.1032	(1-51/64)	1-7/8	2-3/16	1-7/8-12	UDB-112-UST	UDB-1126-USK	2	1-23/32	5/16	
UDB-11212-US	1-1/2-12				1.797									
HEAVY DUTY - METRIC														
UDBM-58-USM	M5	M8	.315	.1626	H	.32	.36	M8	UDBM-58-USMT	UDBM-58-USK	15	7/32	5/32	
UDBM-61-USM	M6	M10x1.25	.394	.2754	S	.40	.45	M10x1.25	UDBM-61-USMT	UDBM-61-USK	13	19/64	3/16	
UDBM-8125-USM	M8	M12x1.25	.472	.4134	27/64	.48	.54	M12x1.25	UDBM-516-USMT	UDBM-8125-USK	8	3/8	3/16	
UDBM-81-USM	M8x1.0									UDBM-81-USK				
UDBM-1015-USM	M10	M14x1.5	.551	.5295	1/2	.56	.62	M14x1.5	UDBM-38-USMT	UDBM-015-USK	6	29/64	3/16	
UDBM-10125-USM	M10x1.25									UDBM-10125-USK				
UDBM-12175-USM	M12	M16x1.5	.630	.7288	37/64	.63	.69	M16x1.5	UDBM-12175-USMT	UDBM-12175-USK	5	17/32	3/16	
UDBM-12125-USM	M12x1.25									UDBM-12125-USK				
UDBM-162-USM	M16	M22x1.5	.866	1.3900	13/16	.88	.96	M22x1.5	UDBM-58-USMT	UDBM-162-USK	2	11/16	1/4	
UDBM-1615-USM	M16x1.5									UDBM-1615-USK				
UDBM-2025-USM	M20	M30x2	1.181	2.7502	1-7/64	1.19	1.36	M30x2	UDBM-2015-USMT	UDBM-2025-USK	2	1	1/4	
UDBM-2015-USM	M20x1.5									UDBM-2015-USK				

Repair Kits

UniSert Kit Assortments



Each assortment contains the insert tools you need. The convenient durable case permits super clear storage and organization.

Threaded Inserts



UniSert Kit Assortments

Convenient UniSert Kits – the right Insert and the correct Installation Tool for your repairs.

UNITED KIT NO.	INSERTS INCLUDED IN KIT			TOOLS INCLUDED
	QTY	ID THD	UNITED PART NO.	
UNF FINE KIT				
UDB-1-US-F	5	#10-32	UDB-1032-US	UDB-10-UST
	10	1/4-28	UDB-1428-US	UDB-14-UST
	10	5/16-24	UDB-51624-US	UDB-516-UST
	10	3/8-24	UDB-3824-US	UDB-38-UST
	10	1/2-20	UDB-1220-US	UDB-12-UST
	10	5/8-18	UDB-5818-US	UDB-58-UST
	5	3/4-16	UDB-3416-US	UDB-34-UST
UNC COARSE KIT				
UDB-1-US-C	5	#10-24	UDB-1024-US	UDB-10-UST
	10	1/4-20	UDB-1420-US	UDB-14-UST
	10	5/16-18	UDB-51618-US	UDB-516-UST
	10	3/8-16	UDB-3816-US	UDB-38-UST
	10	1/2-13	UDB-1213-US	UDB-12-UST
	10	5/8-11	UDB-5811-US	UDB-58-UST
	5	3/4-10	UDB-3410-US	UDB-34-UST
UNC COARSE STAINLESS KIT				
UDB-1-SUS-C	5	#10-24	UDB-1024-SUS	UDB-10-UST
	10	1/4-20	UDB-1420-SUS	UDB-14-UST
	10	5/16-18	UDB-51618-SUS	UDB-516-UST
	10	3/8-16	UDB-3816-SUS	UDB-38-UST
	10	1/2-13	UDB-1213-SUS	UDB-12-UST
	10	5/8-11	UDB-5811-SUS	UDB-58-UST
	5	3/4-10	UDB-3410-SUS	UDB-34-UST
METRIC COARSE KIT				
UDB-M-1-USM-C	5	M5	UDB-M-58-USM	UDB-M-58-USMT
	10	M6	UDB-M-61-USM	UDB-M-61-USMT
	10	M8	UDB-M-8125-USM	UDB-516-UST
	10	M10	UDB-M-1015-USM	UDB-38-UST
	10	M12	UDB-M-12175-USM	UDB-M-12175-USMT
	10	M16	UDB-M-162-USM	UDB-58-UST
	5	M20	UDB-M-2025-USM	UDB-M-2015-USMT
SOLID STAINLESS STEEL KIT				
UDB-1-USS-S	QTY	O.D. THD	PART NO.	TOOLS
	5	5/16-18	UDB-51618-USS	UDB-51618-USST
	10	3/8-16	UDB-3816-USS	UDB-3816-USST
	10	1/2-13	UDB-1213-USS	UDB-1213-USST
	10	9/16-12	UDB-91612-USS	UDB-91612-USST
	10	5/8-11	UDB-5811-USS	UDB-5811-USST
	10	7/8-14	UDB-7814-USS	UDB-7814-USST
	5	1-1/8-12	UDB-11812-USS	UDB-11812-USST

UniSerts - Stainless Steel

STANDARD HEAVY-DUTY AND THINWALL VERSIONS

UNITED UniSerts

THINWALL



HEAVY DUTY



THINWALL



HEAVY DUTY



STAINLESS INTERNAL THREAD LOCKING SERIES

Internal thread locking UniSerts are designed to securely lock a bolt when it is entered into the UniSert only a few turns.

STANDARD STAINLESS SERIES

Standard stainless heavy duty and thinwall UniSerts meet MS and NAS specifications: MS SPEC. 51830/51832 and NAS SPEC. 1394/1395. Standard heavy duty on thinwalls are available. Thinwalls have smaller O.D. threads.

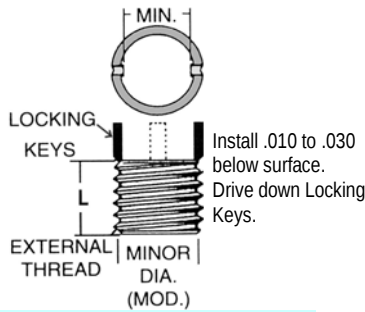
STANDARD HEAVY-DUTY OR OPTIONAL THINWALL VERSIONS AVAILABLE.

MATERIAL — BODY: 303 STAINLESS STEEL KEYS: 302 STAINLESS STEEL

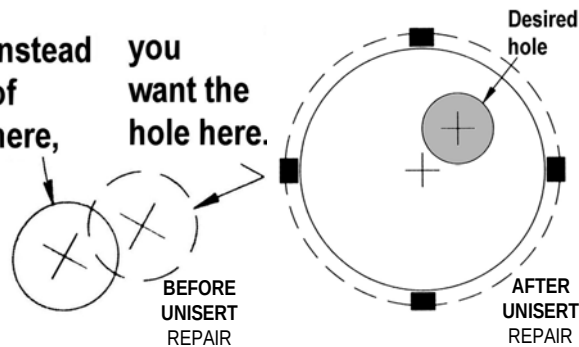
INSERT DIMENSIONS					INSTALLATION DATA					REMOVAL		SPECS	
UNITED PART NO.	INTERNAL THREAD	EXTERNAL THREAD	SHEAR ENGAG (SQ. IN.)	LEN	REQ'D TAP DRILL	C'SINK DIA.	MIN THRD LEN	STANDARD TAP UN-2B	INSTALLATION TOOL PART NO.	DRILL SIZE	DRILL DEPTH	MS SPEC	NAS SPEC
STANDARD — HEAVY DUTY (USA) — STAINLESS													
UDB-1024-SUS	#10-24											MS51831-101	
UDB-1032-SUS	#10-32	3/8-16	.1901	.31	.332	.385	.37	3/8-16	UDB-10-UST	9/32	1/8	MS51831-201	NAS1395C3
UDB-1420-SUS	1/4-20											MS51831-102	
UDB-1428-SUS	1/4-28	7/16-14	.2842	.37	.397	.447	.43	7/16-14	UDB-14-UST	11/32	3/16	MS51831-202	NAS1395C4
UDB-51618-SUS	5/16-18											MS51831-103	
UDB-51624-SUS	5/16-24	1/2-13	.3588	.43	.453	.510	.50	1/2-13	UDB-516-UST	13/32	3/16	MS51831-203	NAS1395C5
UDB-3816-SUS	3/8-16											MS51831-104	
UDB-3824-SUS	3/8-24	9/16-12	.4975	.50	.516	.572	.56	9/16-12	UDB-38-UST	15/32	3/16	MS51831-204	NAS1395C6
UDB-1213-SUS	1/2-13												
UDB-1220-SUS	1/2-20	3/4-16	1.0573	.62	.703	.750	.69	3/4-16	UDB-12-UST	21/32	3/16		
UDB-5811-SUS	5/8-11	7/8-14	1.4866	.87	.828	.885	1.00	7/8-14	UDB-58-UST	25/32	3/16	MS51831-108	
UDB-3410-SUS	3/4-10	1-1/8-12	2.4901	1.12	1.062	1.145	1.31	1-1/8-12	UDB-34-UST	31/32	5/16	MS51831-109	
STANDARD — THINWALL (USA) — STAINLESS													
UDB-1024-TSUS	#10-24											MS51830-105	
UDB-1032-TSUS	#10-32	5/16-18	.1517	.31	.272	.323	.37	5/16-18	UDBM-58-USMT	7/32	5/32	MS51830-201	NAS1394C3
UDB-1420-TSUS	1/4-20											MS51830-106	
UDB-1428-TSUS	1/4-28	3/8-16	.2371	.37	.332	.385	.43	3/8-16	UDB-10-UST	9/32	3/16	MS51830-202	NAS1394C4
UDB-51618-TSUS	5/16-18	7/16-14	.3049	.43	.397	.447	.50	7/16-14	UDB-14-UST	11/32	3/16	MS51830-107	
UDB-3816-TSUS	3/8-16	1/2-13	.4299	.50	.453	.510	.56	1/2-13	UDB-516-UST	13/32	3/16	MS51830-108	
UDB-1213-TSUS	1/2-13	5/8-11	.7175	.62	.578	.635	.68	5/8-11	UDB-716-UST	17/32	3/16	MS51830-110	
STAINLESS — INTERNAL THREAD LOCKING (USA) — HEAVY DUTY													
UDB-1420-SUSL	1/4-20	7/16-14	.1970	.37	.397	.447	.43	7/16-14	UDB-14-UST	11/32	3/16	MS51831-102L	
UDB-51618-SUSL	5/16-18	1/2-13	.2608	.43	.453	.510	.50	1/2-13	UDB-516-UST	13/32	3/16	MS51831-103L	
UDB-3816-SUSL	3/8-16	9/16-12	.3843	.50	.516	.572	.56	9/16-12	UDB-38-UST	15/32	3/16	MS51831-104L	
UDB-1213-SUSL	1/2-13	11/16-11NS	.7368	.68	.641	.700	.75	11/16-	UDB-111611-USST	19/32	3/16	MS51831-106L	
UDB-5811-SUSL	5/8-11	7/8-14	1.2415	.87	.828	.885	1.00	7/8-14	UDB-58-UST	25/32	3/16	MS51831-108L	
UDB-3410-SUSL	3/4-10	1-1/8-12	2.4478	1.25	1.062	1.145	1.31	1-1/2-12	UDB-34-UST	31/32	5/16	MS51831-109L	
STAINLESS — INTERNAL THREAD LOCKING (USA) — THINWALL													
UDB-1032-TSUSL	#10-32	5/16-18	.0945	.31	.272	.323	.37	5/16-18	UDBM-58-USMT	7/32	5/32	MS51830-201L	NAS1394C3L
UDB-1420-TSUSL	1/4-20	3/8-16	.1726	.37	.332	.385	.43	3/8-16	UDB-10-UST	9/32	3/16	MS51830-106L	
UDB-51618-TSUSL	5/16-18	7/16-14	.2321	.43	.397	.447	.50	7/16-14	UDB-14-UST	11/32	3/16	MS51830-107L	
UDB-3816-TSUSL	3/8-16	1/2-13	.3366	.50	.453	.510	.56	1/2-13	UDB-516-UST	13/32	3/16	MS51830-108L	
UDB-1213-TSUSL	1/2-13	5/8-11	.5906	.62	.578	.635	.68	5/8-11	UDB-716-UST	17/32	3/16	MS51830-110L	

UniSerts Varieties

UniSerts—Stainless Steel, Self-Tapping and Cast



Instead of here, you want the hole here.



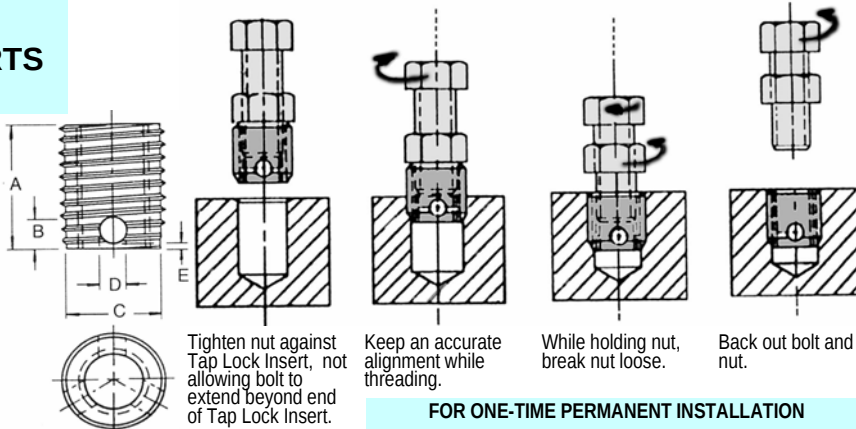
REMOVAL TOOL
SEE BELOW

STAINLESS FOR RELOCATING DRILLED OR TAPPED HOLES.
UNISERT KEYS PREVENT THE UNISERT FROM ROTATING.

UNISERT BODY: 303 STAINLESS STEEL. UNISERT KEYS: 302 STAINLESS STEEL

STAINLESS STEEL UNITED PART NO.	INSERT DIMENSIONS				INSTALLATION DATA					REMOVAL DATA	
	EXTERNAL THREAD	(SQ. IN) SHEAR ENGAGEMENT	L	K (MIN)	REQ'D TAP DRILL	C' SINK DIA	STD TAP UN-2B	MIN THRD DPTH	INSTALL'N TOOL PART NO.	DRILL SIZE	DRILL DEPTH
UDB-51618-USS	5/16-18	.1517	.31	.216	.272	.323	5/16-18	.37	UDB-51618-UST	7/32	1/8
UDB-3816-USS	3/8-16	.1901	.31	.285	.332	.385	3/8-16	.37	UDB-3816-UST	9/32	1/8
UDB-71614-USS	7/16-14	.2842	.37	.341	.397	.447	7/16-14	.43	UDB-71614-UST	11/32	3/16
UDB-1213-USS	1/2-13	.3588	.43	.403	.453	.510	1/2-13	.50	UDB-1213-UST	13/32	3/16
UDB-91612-USS	9/16-12	.4975	.50	.465	.516	.572	9/16-12	.56	UDB-91612-UST	15/32	3/16
UDB-5811-USS	5/8-11	.7172	.62	.528	.578	.635	5/8-11	.68	UDB-5811-UST	17/32	3/16
UDB-111611-USS	11/16-11-NS	.8884	.68	.590	.641	.700	11/16-11-NS	.75	UDB-111611-UST	19/32	3/16
UDB-131616-USS	13/16-16	1.2493	.81	.716	.766	.822	13/16-16	.94	UDB-131616-UST	23/32	3/16
UDB-7814-USS	7/8-14	1.4866	.87	.778	.828	.885	7/8-14	1.00	UDB-7814-UST	25/32	3/16
UDB-11812-USS	1-1/8-12	2.4901	1.12	.970	1.062	1.145	1-1/8-12	1.31	UDB-11812-UST	31/32	5/16
UDB-11412-USS	1-1/4-12	3.1370	1.25	1.095	1.187	1.270	1-1/4-12	1.41	UDB-11412-UST	1-3/32	5/16
UDB-13812-USS	1-3/8-12	3.8381	1.37	1.220	1.312	1.395	1-3/8-12	1.56	UDB-13812-UST	1-7/32	5/16

UNITED TAP LOCK INSERTS



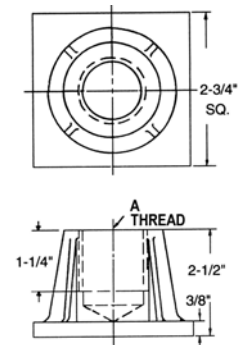
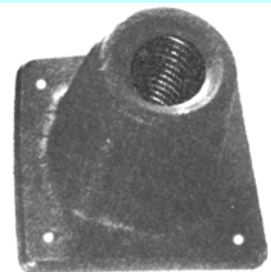
FOR ONE-TIME PERMANENT INSTALLATION

FOR ALUMINUM AND MAGNESIUM

U.S.A.

UNITED PART NO.	INTERNAL THREAD	EXTERNAL THREAD	A	B	C PILOT DIA	D DIA	E	HOLE SIZE	
								ALUM & MAG PLATE	CAST ALUM & MAG
UDB-4-LSTI	1/4-20	3/8-20	.484	.103	.332	1/8	.031	.356-.349	.349-.343
UDB-5-LSTI	5/16-18	15/32-18	.562	.117	.420	9/64	.035	.447-.440	.440-.433
UDB-6-LSTI	3/8-16	9/16-16	.687	.129	.510	5/32	.038	.538-.530	.530-.521
UDB-8-LSTI	1/2-13	47/64-13	.906	.172	.668	7/32	.045	.704-.694	.694-.684
UDB-10-LSTI	5/8-11	29/32-11	.937	.198	.827	1/4	.052	.871-.859	.859-.847
UDB-12-LSTI	3/4-10	1-5/64-10	1.375	1.375	.993	9/32	.057	1.028-1.016	1.016-1.004
METRIC									
UDB-M-6-STI	M6	3/8-20	.484	.103	.332	1/8	.031	.356-.349	.349-.343
UDB-M-8-STI	M8	15/32-18	.562	.117	.420	9/64	.035	.447-.440	.440-.433
UDB-M-10-STI	M10	9/16-16	.687	.129	.510	5/32	.038	.538-.530	.530-.521
UDB-M-12-STI	M12	47/64-13	.906	.172	.668	7/32	.045	.704-.694	.694-.684
UDB-M-16-STI	M16	29/32-11	.937	.198	.827	1/4	.052	.871-.859	.859-.847

CAST UNI-SERTS FOR DROP-HAMMER-DIE STUDS



UNITED PART NO.	A
UDB-14-K1	7/8 - 9
UDB-16-K1	1 - 8

Hex & Wing Nut Fasteners

Hex/Wing Nut Fasteners

FREE WHEELING, POWER OR MANUALLY OPERATED
TEMPORARY TYPES

HEX NUT FASTENERS are recommended for high production applications that require a consistent clamping force and are pneumatically driven with UDB-QNR 300 Power Nut Runner.

UNITED PART NO.	CROSS REF	COLOR CODE	GRIP	DIA.	DRILL SIZE
UDB-QHN-3/32	HNX-SF-3/32	ZINC	0-1/2"	3/32"	#40
UDB-QHN-1/8	HNX-SF-1/8	COPPER	0-1/2"	1/8"	#30
UDB-QHN-5/32	HNX-SF-5/32	BLACK	0-1/2"	5/32"	#21
UDB-QHN-3/16	HNX-SF-3/16	BRASS	0-1/2"	3/16"	#10

UDB-QHN SERIES



Power Hex Nut Style - Standard Grip

UDB-QHNL-3/32	HNXL-3/32	ZINC	0-1"	3/32"	#40
UDB-QHNL-1/8	HNXL-1/8	COPPER	0-1"	1/8"	#30
UDB-QHNL-5/32	HNXL-5/32	BLACK	0-1"	5/32"	#21
UDB-QHNL-3/16	HNXL-3/16	BRASS	0-1"	3/16"	#10

UDB-QHNL SERIES



Power Hex Nut Style - Long Grip

WING NUT FASTENERS are recommended for low production applications where high clamping force with ranges from zero to 300 lbs. is required.

UDB-QWN-3/32	WNX-3/32	ZINC	0-1/2"	3/32"	#40
UDB-QWN-1/8	WNX-1/8	COPPER	0-1/2"	1/8"	#30
UDB-QWN-5/32	WNX-5/32	BLACK	0-1/2"	5/32"	#21
UDB-QWN-3/16	WNX-3/16	BRASS	0-1/2"	3/16"	#10

UDB-QWN SERIES



Manual Wing Nut Style - Standard Grip

UDB-QWNL-3/32	WNXL-3/32	ZINC	0-1"	3/32"	#40
UDB-QWNL-1/8	WNXL-1/8	COPPER	0-1"	1/8"	#30
UDB-QWNL-5/32	WNXL-5/32	BLACK	0-1"	5/32"	#21
UDB-QWNL-3/16	WNXL-3/16	BRASS	0-1"	3/16"	#10

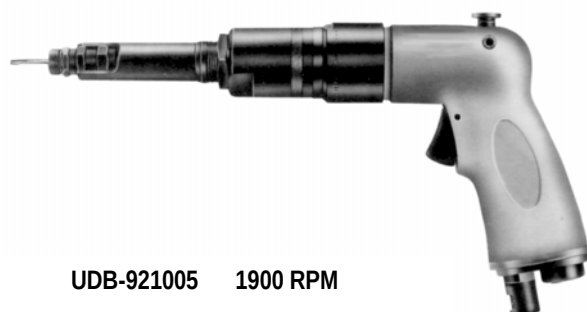
UDB-QWNL SERIES



Manual Wing Nut Style - Long Grip

PNEUMATIC HEX NUT INSTALLATION TOOL

INTERNAL HEX CAPACITY; 9/16-6 pt EXTERNAL HEX CAPACITY. LENGTH: 9 1/8; WT. 2 LBS. 9 OZ. SIMPLE & RUGGED. EASY ACCESS ABILITY. REVERSIBLE. For all brands and styles of hex nut fasteners. Reversible tool with pre-set torque control 1/2"-12 pt.



UDB-921005 1900 RPM

PNEUMATIC INSTALLATION TOOL

1-7/16 OD X 5-1/8 OAL 360 FULL SWIVEL MOUNT STRAIGHT LEVER ACTUATES THROTTLE CHUCK. Ergonomically designed high speed insertion and removal tool used for all styles of "button" plunger type "Cleko's" side grip and tension clamps like those shown on page F12.



UDB-921002

Plier-Actuated Fasteners

Temporary Fasteners

PRECISE HOLDING

UDB-QC series fasteners of standard button plunger type Cleko are spring-loaded. Durably made of strong steel-plated bodies, *UNITED*'s fasteners are plier-operated for precise holding of sheets during the process before task completion.

UDB-QC SERIES



Quick Lock Regular

UNITED PART NO.	CROSS REF	COLOR CODE	GRIP	DIA.	DRILL SIZE
UDB-QC-3/32	M-3/32	ZINC	0-1/4"	3/32"	#40
UDB-QC-1/8	M-1/8	COPPER	0-1/4"	1/8"	#30
UDB-QC-5/32	M-5/32	BLACK	0-1/4"	5/32"	#21
UDB-QC-3/16	M-3/16	BRASS	0-1/4"	3/16"	#10

UDB-QM SERIES



Quick Lock Regular

UDB-QM series fasteners, of miniature style, are designed for confined areas and normal clamping force.

UDB-QM-3/32	MM-3/32	ZINC	0-1/4"	3/32"	#40
UDB-QM-1/8	MM-1/8	COPPER	0-1/4"	1/8"	#30
UDB-QM-5/32	MM-5/32	BLACK	0-1/4"	5/32"	#21
UDB-QM-3/16	MM-3/16	BRASS	0-1/4"	3/16"	#10

UDB-QHD SERIES



Regular Q-type with extended grip

UDB-QHD series fasteners have an extended grip range for heavier applications.

UDB-QHD-3/32	MHD-3/32	ZINC	0-1/2"	3/32"	#40
UDB-QHD-1/8	MHD-1/8	COPPER	0-1/2"	1/8"	#30
UDB-QHD-5/32	MHD-5/32	BLACK	0-1/2"	5/32"	#21
UDB-QHD-3/16	MHD-3/16	BRASS	0-1/2"	3/16"	#10

UDB-QCL SERIES



Standard plunger type

UDB-QCL series fasteners with an extended grip range are the standard plunger type Cleko.

UDB-QCL-3/32	ML-3/32	ZINC	1/4"-1/2"	3/32"	#40
UDB-QCL-1/8	ML-1/8	COPPER	1/4"-1/2"	1/8"	#30
UDB-QCL-5/32	ML-5/32	BLACK	1/4"-1/2"	5/32"	#21
UDB-QCL-3/16	ML-3/16	BRASS	1/4"-1/2"	3/16"	#10

MODEL UDB-QC 200 PLIER-OPERATED



UDB-QC-200 is for installing all Quick Lock Plier-operated Fasteners. Nickel-plated forged steel resists corrosion and extends their life. For use with all UDB-QC, UDB-QM, UDB-QHD and UDB-QCL fasteners.

UDB-QSG SERIES SIDE-GRIP CLAMPS



No holes bar *UNITED*'s Side-Grip Quick Grip Clamp.

UDB-QUICKLOCK SIDE GRIP CLAMPS MODEL UDB-QSG

UNITED PART NO.	CLAMPING CAPACITY (GAP)	EFFECTIVE BODY DEPTH	BODY LENGTH
UDB-QSG 1/2 x 1/2	0-1/2"	1/2"	2-3/16"
UDB-QSG 3/4 x 1/2	0-3/4"	1/2"	2-7/16"
UDB-QSG 1/2 x 1	0-1/2"	1"	2-3/16"
UDB-QSG 3/4 x 1	0-3/4"	1"	2-7/16"

SIDE GRIP CLAMPS HOLD WORKPIECES AT THE EDGE OF A WORK AREA DURING BONDING OR SIMILAR TASKS.

Fasten Precisely

MANUFACTURED TO ANSI B18.3 1998 SPECS
MIL-S-21472A and SSPBSS-100 SPECS

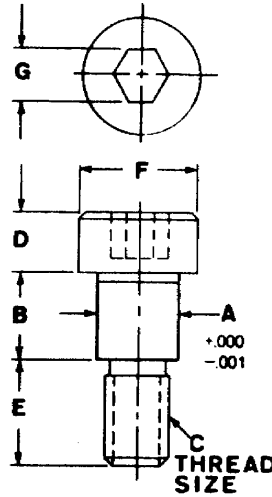
Manufactured to tool and die standards, **UNITED** Socket Shoulder Screws replace costly special parts, shafts, pivots, clevis pins, guides, trunnion mountings, linkages, etc.

Tough, reliable heat treated. Closer tolerances are held than on standard stripper bolts. The "B" dimension is always a plus, eliminating binding on movable plates. The "A" dimension is held within +.000 -.001 for bearing unless otherwise specified.

UNITED Hex Wrenches are shown on catalog page F18.

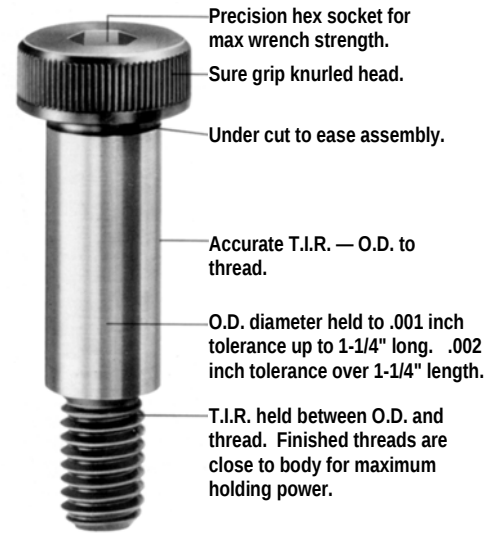
STANDARD PACKAGE QUANTITY IS 25.

PART NO.	A O.D.	B LEN	C THD	D	E	F	G
UDB-931000	1/4 .250/.249	*1/4	10-24	3/16	3/8	3/8	1/8
UDB-931002		*5/16					
UDB-931005		*3/8					
UDB-931010		*1/2					
UDB-931015		*5/8					
UDB-931020		*3/4					
UDB-931022		*7/8					
UDB-931025		*1					
UDB-931026	.248/.246	1-1/4	← THESE SIZES CAN BE MFG'D FROM .250/.249.				
UDB-931027		1-1/2					
UDB-931030	5/16 .3125/.3115	*1/4	1/4-20	7/32	7/16	7/16	5/32
UDB-931035		*5/16					
UDB-931040		*3/8					
UDB-931045		*1/2					
UDB-931050		*5/8					
UDB-931055		*3/4					
UDB-931060		*1					
UDB-931061		5/16					
UDB-931062		1-1/2					
UDB-931063	.3105/.3085	1-3/4					
UDB-931064		2					
UDB-931065	3/8 .375/.374	*1/4	5/16-18	1/4	1/2	9/16	3/16
UDB-931067		*5/16					
UDB-931070		*3/8					
UDB-931075		*1/2					
UDB-931080		*5/8					
UDB-931085		*3/4					
UDB-931090		*1					
UDB-931091		3/8 .373/.371					
UDB-931092	1-1/2						
UDB-931093	1-3/4						
UDB-931094	2						
UDB-931095			2-1/4				
UDB-931096	2-1/2						
UDB-931097	2-3/4						
UDB-931098	3						
UDB-931099	3-1/4						
UDB-931100	3-1/2						
UDB-931101	3-3/4						
UDB-931102	4						
UDB-931111	1/2 .500/.499	*3/8	3/8-16	5/16	5/8	3/4	1/4
UDB-931112		*1/2					
UDB-931113		*5/8					
UDB-931114		*3/4					
UDB-931115		*7/8					
UDB-931116		*1					
UDB-931117	1/2 .498/.496	1-1/4	← THESE SIZES CAN BE MFG'D FROM .500/.499.				
UDB-931118		1-1/2					
UDB-931119		1-3/4					
UDB-931120		2					
UDB-931121			2-1/4				
UDB-931122		2-1/2					
UDB-931123		2-3/4					
UDB-931124		3					
UDB-931125		3-1/4					
UDB-931126		3-1/2					
UDB-931127		3-3/4					
UDB-931128		4					
UDB-931129			4-1/4				
UDB-931130		4-1/2					
UDB-931131		4-3/4					
UDB-931132		5					



1998
SPECIFICATIONS

Socket Shoulder Precision Screws



PACKAGED 25 PER BOX
UNIFIED NATIONAL COARSE 3A FIT
MICRO-INCH FINISH 32 OR BETTER

PART NO.	A O.D.	B LEN	C THD	D	E	F	G
UDB-931141	5/8	*1/2	1/2-13	3/8	3/4	7/8	5/16
UDB-931142		*5/8					
UDB-931143		*3/4					
UDB-931144		*7/8					
UDB-931145		*1					
UDB-931146	.625/.624	1-1/4	← THESE SIZES CAN BE MFG'D FROM .625/.624.				
UDB-931147		1-1/2					
UDB-931148		1-3/4					
UDB-931149		2					
UDB-931150		2-1/4					
UDB-931151		2-1/2					
UDB-931152		2-3/4					
UDB-931153		3					
UDB-931154		3-1/4					
UDB-931155		3-1/2					
UDB-931156		3-3/4					
UDB-931157		4					
UDB-931158		4-1/4					
UDB-931159		4-1/2					
UDB-931160		4-3/4					
UDB-931161		5					
UDB-931163		5-1/2					
UDB-931165		6					
UDB-931171	3/4	*1/2	5/8-11	1/2	7/8	1	3/8
UDB-931172		*5/8					
UDB-931173		*3/4					
UDB-931174		*7/8					
UDB-931175		*1					
UDB-931170	.750/.749	*1-1/4	← THESE SIZES CAN BE MFG'D FROM .750/.749.				
UDB-931176		1-1/2					
UDB-931177		1-3/4					
UDB-931178		2					
UDB-931179		2-1/4					
UDB-931180		2-1/2					
UDB-931181		2-3/4					
UDB-931182		3					
UDB-931183		3-1/4					
UDB-931184		3-1/2					
UDB-931185		3-3/4					
UDB-931186		4					
UDB-931187		4-1/4					
UDB-931188		4-1/2					
UDB-931189		4-3/4					
UDB-931190		5					
UDB-931192		5-1/2					
UDB-931194		6					
UDB-931198		7					

NOTE: All items listed in column B marked with an asterisk (*) have O.D.s held to +.000-.001. All sizes not marked with an asterisk have O.D.s held to commercial tolerances of +.000 -.002 -.004.

ALL SIZES CAN BE SUPPLIED WITH ±.000 -.001 ON REQUEST.

12200 WOODRUFF AVE. • DOWNEY, CA 90241-5608 • TELEPHONE (562) 803-1521 / (800) 421-3466 IN CA / (800) 486-3466 • FAX (562) 803-6898 / (800) 486-3465

8-22-06

EMAIL united@ucc-udb.com WEBSITE www.ucc-udb.com

F13

Socket Set Screws

Socket Set Screws

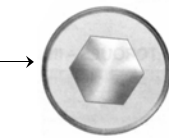
Heat Treated – Alloy Steel – Unified 3A Thread Fit – B18.3 – ASME/ANSI

SOCKET SET SCREWS

Stress is distributed uniformly with **UNITED's** Socket Set Screws to minimize reaming or cracking and to increase strength and tightening power.

UDB-SSS-C Series Coarse Thread
UDB-SSS-F Series Fine Thread

RADIUSED SOCKET EDGES HAVE CORNERS ROUNDED TO RESIST CRACKING



ROLLED THREAD MINIMIZES STRIPPING, SHEARING OR CRACKING

UNITED SOCKET SET SCREWS HAVE CLASS 3A THREADS FOR SMOOTH ASSEMBLING.
CLASS 3A – RC-45-53 118° ANGLE

LENGTH

HEAT TREATMENT CONTROLLED FOR MAXIMUM STRENGTH

BLACK OXIDE FINISH

FULL FORMED RADIUS THREAD FOR HIGHER TIGHTENING TORQUE



CUP POINT CAN BE USED AGAINST HARDENED SHAFTS, DIE CASTING, ZINC AND SOFT MATERIALS WHEN HIGH TORQUE TIGHTENING IS NOT PRACTICAL.

UNC-COARSE THREAD SERIES = C

THREAD SIZE:	4-40	5-40	6-32	8-32	10-24	1/4-20	5/16-18	3/8-16	7/16-14	1/2-13	5/8-11	3/4-10
HEX KEY SIZE:	.050 HEX	1/16 HEX	1/16 HEX	5/64 HEX	3/32 HEX	1/8 HEX	5/32 HEX	3/16 HEX	7/32 HEX	1/4 HEX	5/16 HEX	3/8 HEX
THD O.D. PART NO.:	4	5	6	8	10	16	20	24	28	32	40	48
ACTUAL LEN	NO. PART											
1/8	02	4-02	5-02	6-02	8-02							
3/16	03	4-03	5-03	6-03	8-03	10-03	16-03					
1/4	04	4-04	5-04	6-04	8-04	10-04	16-04	20-04	24-04			
5/16	05	4-05	5-05	6-05	8-05	10-05	16-05	20-05	24-05			
3/8	06	4-06	5-06	6-06	8-06	10-06	16-06	20-06	24-06	28-06	32-06	
7/16	07				8-07			20-07	24-07	28-07		
1/2	08	4-08	5-08	6-08	8-08	10-08	16-08	20-08	24-08	28-08	32-08	40-08
5/8	10		5-10	6-10	8-10	10-10	16-10	20-10	24-10	28-10	32-10	40-10☆
3/4	12		5-12	6-12	8-12	10-12	16-12	20-12	24-12	28-12	32-12	40-12☆
7/8	14			6-14	8-14	10-14	16-14	20-14	24-14	28-14	32-14☆	
1"	16			6-16	8-16	10-16	16-16	20-16	24-16	28-16	32-16☆	40-16☆
1-1/4	20					10-20	16-20	20-20	24-20	28-20☆	32-20☆	40-20☆
1-1/2	24	ORDERING EXAMPLE: ADD SUFFIX 'C' FOR COARSE THREAD. UDB-SSS-C – 1/4-20x1 = UDB-SSS-16-16C					16-24	20-24	24-24	28-24☆	32-24☆	40-24☆
1-3/4	28						16-28☆	20-28☆	24-28☆		32-28☆	40-28☆
2"	32						16-32☆	20-32☆	24-32☆		32-32☆	40-32☆
2-1/2	40								24-40☆		32-40☆	40-40☆
3"	48	OTHER SIZES AVAILABLE ON REQUEST.									32-48☆	40-48☆

SYMBOL FOR BOX QUANTITIES
☆ = 50 PIECES
⊛ = 25 PIECES
* = 10 PIECES
ALL OTHERS ARE 100 PER BOX.

UNF-3A FINE THREAD SERIES = F

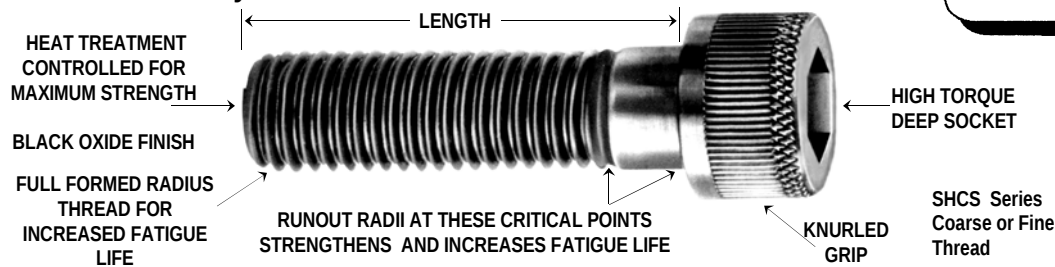
THREAD SIZE:	4-48	5-44	6-40	8-36	10-32	1/4-28	5/16-24	3/8-24	7/16-20	1/2-20	5/8-18	
HEX KEY SIZE:	.050 HEX	1/16 HEX	1/16 HEX	5/64 HEX	3/32 HEX	1/8 HEX	5/32 HEX	3/16 HEX	7/32 HEX	1/4 HEX	5/16 HEX	
THD O.D. PART NO.:	4	5	6	8	10	16	20	24	28	32	40	
ACTUAL LEN	NO. PART											
1/8	02	4-02	5-02	6-02	8-02							
3/16	03	4-03	5-03	6-03	8-03	10-03	16-03					
1/4	04	4-04	5-04	6-04	8-04	10-04	16-04	20-04	24-04			
5/16	05	4-05	5-05	6-05	8-05	10-05	16-05	20-05	24-05			
3/8	06	4-06	5-06	6-06	8-06	10-06	16-06	20-06	24-06	28-06	32-06	
7/16	07				8-07			20-07	24-07	28-07		
1/2	08	4-08	5-08	6-08	8-08	10-08	16-08	20-08	24-08	28-08	32-08	40-08
5/8	10		5-10	6-10	8-10	10-10	16-10	20-10	24-10	28-10	32-10	40-10☆
3/4	12		5-12	6-12	8-12	10-12	16-12	20-12	24-12	28-12	32-12	40-12☆
7/8	14			6-14	8-14	10-14	16-14	20-14	24-14	28-14	32-14☆	
1"	16			6-16	8-16	10-16	16-16	20-16	24-16	28-16	32-16☆	40-16☆
1-1/4	20					10-20	16-20	20-20	24-20	28-20☆	32-20☆	40-20☆
1-1/2	24						16-24	20-24	24-24	28-24☆	32-24☆	40-24☆
1-3/4	28	ORDERING EXAMPLE: ADD SUFFIX 'F' FOR FINE THREAD. UDB-SSS-F – 1/4-20x1 = UDB-SSS-16-16F					16-28☆	20-28☆	24-28☆		32-28☆	40-28☆
2"	32						16-32☆	20-32☆	24-32☆		32-32☆	40-32☆
2-1/2	40								24-40☆		32-40☆	40-40☆
3"	48										32-48☆	40-48☆

UNITED Socket Set Screws have great endurance and torque power!

Socket Head Cap Screws

Socket Head Cap Screws

Heat Treated – Alloy Steel – Unified 3A Thread Fit – 1960 Series – ASME/



SOCKET HEAD CAP SCREWS

Stress is distributed uniformly throughout UNITED's Socket Head Cap Screw to minimize failure and increase strength and life.

UNC-COARSE THREAD 1960 SERIES = C

THREAD SIZE:	4-40	5-40	6-32	8-32	10-24	1/4-20	5/16-18	3/8-16	7/16-14	1/2-13	5/8-11	3/4-10
HEX KEY SIZE:	3/32 HEX	3/32 HEX	7/64 HEX	9/64 HEX	5/32 HEX	3/16 HEX	1/4 HEX	5/16 HEX	3/8 HEX	3/8 HEX	1/2 HEX	5/8 HEX
THD O.D. PART NO.:	4	5	6	8	10	16	20	24	28	32	40	48
ACTUAL LEN	NO. PART											
1/4	04	4-04	5-04	6-04	8-04		16-04			SYMBOL FOR BOX QUANTITIES ☆ = 50 PIECES ◎ = 25 PIECES * = 10 PIECES ALL OTHERS ARE 100 PER BOX.		
5/16	05	4-05										
3/8	06	4-06	5-06	6-06	8-06	10-06	16-06	20-06				
1/2	08	4-08	5-08	6-08	8-08	10-08	16-08	20-08	24-08			
5/8	10	4-10	5-10	6-10	8-10	10-10	16-10	20-10	24-10			
3/4	12	4-12	5-12	6-12	8-12	10-12	16-12	20-12	24-12	28-12	32-12☆	
7/8	14	4-14		6-14	8-14	10-14	16-14	20-14	24-14	28-14	32-14☆	
1"	16	4-16		6-16	8-16	10-16	16-16	20-16	24-16	28-16	32-16☆	40-16☆
1-1/4	20			6-20	8-20	10-20	16-20	20-20	24-20	28-20	32-20☆	40-20☆
1-1/2	24			6-24	8-24	10-24	16-24	20-24	24-24	28-24	32-24☆	40-24☆
1-3/4	28			6-28		10-28	16-28	20-28	24-28☆	28-28	32-28☆	40-28☆
2"	32			6-32	8-32	10-32	16-32	20-32	24-32☆	28-32☆	32-32☆	40-32☆
2-1/4	36						16-36	20-36	24-36☆	28-36☆	32-36☆	40-36◎
2-1/2	40	UNITED Fasteners do a better job and live longer!			8-40	10-40	16-40	20-40☆	24-40☆	28-40☆	32-40☆	40-40◎
2-3/4	44						16-44	20-44☆	24-44☆	28-44☆	32-44☆	40-44◎
3"	48				8-48		16-48	20-48☆	24-48☆	28-48☆	32-48☆	40-48◎
3-1/4	52						16-52	20-52☆	24-52☆	28-52☆	32-52☆	40-52◎
3-1/2	56						16-56	20-56☆	24-56☆	28-56☆	32-56☆	40-56◎
4"	64						16-64		24-64☆	28-64☆	32-64☆	40-64◎
4-1/2	72								24-72☆		32-72◎	40-72◎
5"	80	ORDERING EXAMPLE: ADD SUFFIX 'C' FOR COARSE THREAD. UDB-SHCS – 1/4-20x1 = UDB-SHCS-16-16C							24-80☆		32-80◎	40-80◎
5-1/2	88										32-88◎	40-88*
6"	96										32-96◎	40-96*
6-1/2	104										32-104◎	40-104*
7"	112	OTHER SIZES AVAILABLE ON REQUEST.									32-112◎	40-112*
8"	128										32-128◎	40-128*

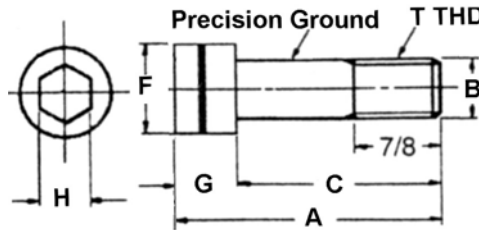
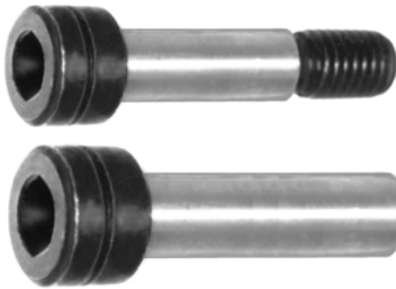
UNF-3A FINE THREAD 1960 SERIES = F

THREAD SIZE:			6-40	8-36	10-32	1/4-28	5/16-24	3/8-24	7/16-20	1/2-20	5/8-18	
HEX KEY SIZE:			7/64 HEX	9/64 HEX	5/32 HEX	3/16 HEX	1/4 HEX	5/16 HEX	3/8 HEX	3/8 HEX	1/2 HEX	
THD O.D. PART NO.:	4	5	6	8	10	16	20	24	28	32	40	48
ACTUAL LEN	NO. PART											
1/4	04		6-04		10-04					UNITED Socket Head Cap Screws have great endurance and fatigue life!		
3/8	06		6-06	8-06	10-06	16-06						
1/2	08		6-08	8-08	10-08	16-08	20-08	24-08				
5/8	10		6-10		10-10	16-10	20-10	24-10				
3/4	12		6-12	8-12	10-12	16-12	20-12	24-12				
7/8	14				10-14	16-14	20-14	24-14				
1"	16				10-16	16-16	20-16	24-16	28-16☆	32-16☆	40-16☆	
1-1/4	20				10-20	16-20	20-20	24-20	28-20☆	32-20☆	40-20☆	
1-1/2	24				10-24	16-24	20-24	24-24	28-24☆	32-24☆	40-24☆	
1-3/4	28	ORDERING EXAMPLE: ADD SUFFIX 'F' FOR FINE THREAD. UDB-SHCS – 1/4-28x1 = UDB-SHCS – 16-16F				10-28	16-28	20-28	24-28	28-28☆	32-28☆	40-28☆
2"	32					10-32	16-32	20-32	24-32	28-32☆	32-32☆	40-32☆
2-1/4	36					10-36	16-36	20-36	24-36		32-36☆	40-36☆
2-1/2	40					10-40		20-40	24-40☆		32-40☆	40-40☆
3"	48					10-48			24-48☆		32-48☆	

Socket Head Locating Screws

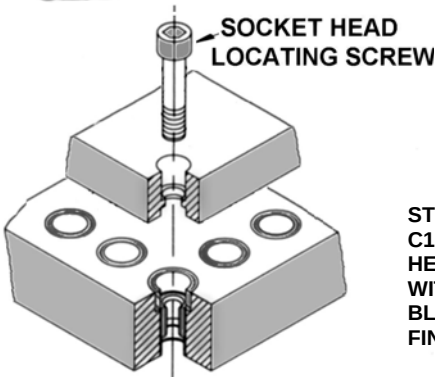
Socket Head Precision Locating Screws

SOCKET HEAD PRECISION LOCATING SCREWS



Socket Head Precision Locating Screws are used to mount all multi-purpose grid holes in standard or heavy applications.

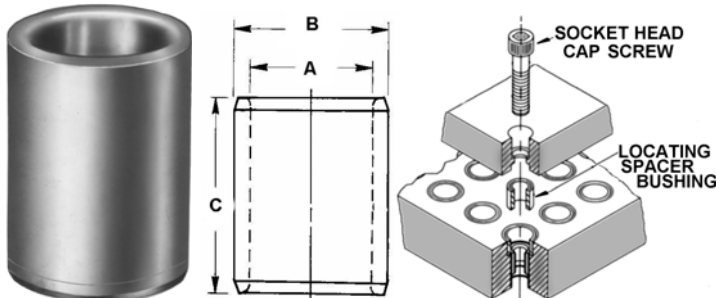
Refer to previous pages in F Section for complete listings for all sizes of Socket Head Precision Locating and Hex Head Cap Screws.



STRESS-PROOF
C1144 STEEL
HEAT TREATED
WITH RC-35-40
BLACK OXIDE
FINISH

UNITED PART NO.	SIZE	A	B DIA -.0009 -.0013	C	T	F	G	H
UCC-SHLS-32-28	STANDARD	2-1/4	.5000	1-3/4	1/2-13	3/4	1/2	3/8
UCC-SHLS-32-32	STANDARD	2-3/4	.5000	2-1/4	1/2-13	3/4	1/2	3/8
UCC-SHLS-32-44	STANDARD	3-1/4	.5000	2-3/4	1/2-13	3/4	1/2	3/8
UCC-SHLS-40-32	HEAVY	2-5/8	.6250	2"	5/8-11	15/16	5/8	1/2
UCC-SHLS-40-40	HEAVY	3-1/8	.6250	2-1/2	5/8-11	15/16	5/8	1/2
UCC-SHLS-40-48	HEAVY	3-5/8	.6250	3"	5/8-11	15/16	5/8	1/2

PRECISION LOCATING SPACER BUSHINGS



These Bushings fit **UNITED** Hex and Socket Head 5/16 – 1/2 – 5/8 Screws!

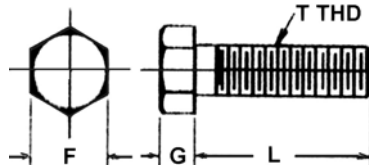
Socket Head Precision Locating Screws and Hex Head Cap Screws should be used with Locating Bushings adding super strength for small components and helping eliminate thread fatigue.

UNITED PART NO.	SIZE	A I. D. ±.002	B O. D. +.0001 +.0004	C LENGTH ±.001	FITS SOCKET HEAD CAP SCREW
UCC-PS-32-10-325	SMALL	.335	.5000	.590	5/16-18
UCC-PS-48-10-525	MEDIUM	.525	.7500	.590	1/2-13
UCC-PS-56-10-650	LARGE	.650	.8750	.590	5/8-11

STRESS-PROOF C1144 STEEL HEAT TREATED WITH RC-58-64 BLACK OXIDE FINISH

HEX HEAD CAP SCREWS

When mounting high rise clamps and/or when access to a Socket Head Screw is limited, use these convenient Hex Head Cap Screws.



RC-34-40
MIN TENSILE STRENGTH
150,000 PSI per SAE J429
and ASTM 354BD

GRADE 8 BLACK OXIDE FINISH

PART NO.	SIZE	T	L	G	F	BOX QTY
UCC-HHCS-20-12	LIGHT	5/16-18	.75	13/64	1/2	100
UCC-HHCS-20-20	LIGHT	5/16-18	1.25	13/64	1/2	100
UCC-HHCS-20-24	LIGHT	5/16-18	1.50	13/64	1/2	100
UCC-HHCS-32-28	STANDARD	1/2-13	1.75	5/16	3/4	100
UCC-HHCS-32-44	STANDARD	1/2-13	2.75	5/16	3/4	100
UCC-HHCS-32-48	STANDARD	1/2-13	3.00	5/16	3/4	100
UCC-HHCS-40-32	HEAVY	5/8-11	2.00	25/64	15/16	50
UCC-HHCS-40-48	HEAVY	5/8-11	3.00	25/64	15/16	50
UCC-HHCS-40-56	HEAVY	5/8-11	3.50	25/64	15/16	50

Pull Out Dowels for Locating & Holding Square Hole Sleeves

Pull Out Dowels and Sleeves

PULL OUT DOWELS

PART NO.	A O.D.	T THD	L LEN
UDB-300002	1/4	8-32x3/8	3/4
UDB-300004	1/4	8-32x3/8	1"
UDB-300006	1/4	8-32x3/8	1-1/4
UDB-300008	1/4	8-32x3/8	1-1/2
UDB-300010	1/4	8-32x3/8	2"
UDB-300012	5/16	10-32x1/4	3/4
UDB-300014	5/16	10-32x1/4	1"
UDB-300016	5/16	10-32x1/4	1-1/4
UDB-300018	5/16	10-32x1/4	1-1/2
UDB-300020	5/16	10-32x1/4	2"
UDB-300022	3/8	10-32x3/8	1"
UDB-300024	3/8	10-32x3/8	1-1/4
UDB-300026	3/8	10-32x3/8	1-1/2
UDB-300028	3/8	10-32x3/8	2"
UDB-300030	3/8	10-32x3/8	2-1/2
UDB-300032	3/8	10-32x3/8	3"
UDB-300034	7/16	1/4-20x3/8	1-1/2

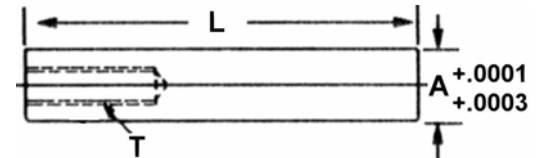
PART NO.	A O.D.	T THD	L LEN
UDB-300036	7/16	1/4-20x3/8	2"
UDB-300038	1/2	1/4-20x1/2	1"
UDB-300040	1/2	1/4-20x1/2	1-1/4
UDB-300042	1/2	1/4-20x1/2	1-1/2
UDB-300044	1/2	1/4-20x1/2	1-3/4
UDB-300046	1/2	1/4-20x1/2	2"
UDB-300048	1/2	1/4-20x1/2	2-1/2
UDB-300050	1/2	1/4-20x1/2	3"
UDB-300052	5/8	5/16-18x1/2	1-1/2
UDB-300054	5/8	5/16-18x1/2	2"
UDB-300056	5/8	5/16-18x1/2	2-1/2
UDB-300058	5/8	5/16-18x1/2	3"
UDB-300060	3/4	3/8-16x1/2	2"
UDB-300062	3/4	3/8-16x1/2	2-1/2
UDB-300064	3/4	3/8-16x1/2	3"
UDB-300066	1"	3/8-16x1/2	2-1/2
UDB-300068	1"	3/8-16x1/2	3"



FLAT GROUND ON THE SIDE FOR AIR RELEASE IN BLIND HOLES

BUTTON HEAD CAP SCREW INCLUDED FOR DRIVING AND REMOVING

C-12L15 STEEL CASE HARDENED



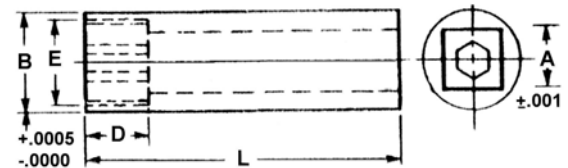
Customize **UNITED** sleeves to utilize your square and rectangular tool bits by reaming a hole at the angle you need and insert our Square Hole Sleeve.

SQUARE HOLE SLEEVES

PART NO.	TOOL BIT	A I.D.	B O.D.	L LEN	D DEPTH	E THD I. D.
UDB-140611	3/16	.1915	.3125	1-1/2	7/16	1/4-28
UDB-140612	1/4	.2550	.4375	2"	1/2	5/16-24
UDB-140613	5/16	.3175	.5000	2-1/4	9/16	3/8-24
UDB-140614	3/8	.3800	.5937	2-1/2	5/8	1/2-20
UDB-140615	7/16	.4425	.6875	2-5/8	5/8	1/2-20
UDB-140616	1/2	.5050	.7812	2-3/4	5/8	5/8-18
UDB-140617	5/8	.6300	.9375	3-1/4	1"	3/4-16
UDB-140618	3/4	.7550	1.1250	4"	1"	1-14
UDB-140619	7/8	.8800	1.3125	4"	1-1/4	1-14
UDB-140620	1"	1.0080	1.5000	5"	1-1/2	1-1/8-12



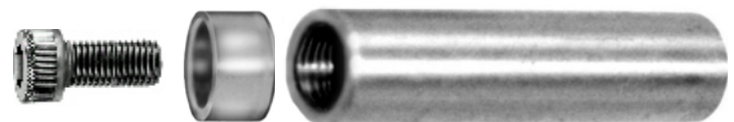
THREADED END OF SLEEVE ALLOWS ADJUSTMENTS OF TOOL BITS. PLUGS AVAILABLE.
C-12L14 STEEL GROUND CONCENTRICALLY TO HOLE



MANUFACTURED FROM C-12 L14 CASE HARDENED FLAT GROUND ON ONE SIDE TO RELEASE OR BLEND HOLES BETTER.

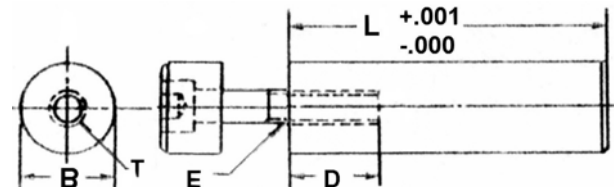
UNITED Jig Legs cut costs in jig plates. Attach four Jig Legs to your plate and save costs while improving quality! These Jig Legs assure accuracy and greater bearing surface at top of leg. Large diameter Rest Buttons provide the greater surface for spot facing and counterboring.

CREATE-YOUR-OWN JIG LEGS



HARDENED FOR LASTING QUALITY AND USE

PART NO.	L LEN	B O.D.	T THD	D DEPTH	E CAP SCREW
UCC-250001	1"	5/8	1/4-20	5/8	1/4-20x1
UCC-250002	2"	5/8	1/4-20	5/8	1/4-20x1
UCC-250003	3"	5/8	1/4-20	5/8	1/4-20x1
UCC-250004	4"	7/8	3/8-16	7/8	3/8-16x1-3/4
UCC-250005	5"	7/8	3/8-16	7/8	3/8-16x1-3/4
UCC-250006	6"	7/8	3/8-16	7/8	3/8-16x1-3/4



L-Wrenches Hex Ball Drivers®

Hex Ball Driver® L-Wrenches and Sets

L – WRENCHES HEX BALL DRIVERS®

Save Time and Costs!

UNITED BALL DRIVER® L-Wrenches are guaranteed to be free of defects.
We will replace free any returned defective tools.

UNITED BALL DRIVER®

L-Wrenches are work savers as this ball point on long blades reaches difficult, blind, remote or hard-to-access locations.

The short arm provides higher torque than regular hex keys.

Precision chamfering eliminates cut off burrs and avoids interference with socket engagement.

INDIVIDUAL PART NO.	INCH SIZES	BLADE INCH	LEN MM	PKG QTY	INDIVIDUAL PART NO.	METRIC SIZES	BLADE INCH	LEN MM	PKG QTY
UDB-10902	.050	2.8	71	10	UDB-10949	1.27	2.8	71	10
UDB-10903	1/16	3.0	76	10	UDB-10950	1.5	3.0	76	10
UDB-10904	5/64	3.2	81	10	UDB-10952	2	3.2	81	10
UDB-10905	3/32	3.4	86	10	UDB-10954	2.5	3.5	89	10
UDB-10906	7/64	3.6	91	10	UDB-10956	3	3.9	99	10
UDB-10907	1/8	3.8	97	10	UDB-10958	3.5	4.0	102	10
UDB-10908	9/64	3.9	99	10	UDB-10960	4	4.3	109	10
UDB-10909	5/32	4.1	104	10	UDB-10962	4.5	4.7	119	10
UDB-10910	3/16	4.5	114	10	UDB-10964	5	5.0	127	10
UDB-10911	7/32	4.9	124	10	UDB-10966	5.5	5.5	140	10
UDB-10912	1/4	5.2	132	10	UDB-10968	6	5.9	150	10
UDB-10913	5/16	6.0	152	10	UDB-10970	7	6.0	152	10
UDB-10914	3/8	6.8	173	10	UDB-10972	8	6.7	170	10
UDB-10915	7/16	7.5	191	2	UDB-10974	9	7.1	180	10
UDB-10916	1/2	8.3	211	2	UDB-10976	10	7.4	188	10
UDB-10917	9/16	9.0	229	2	UDB-10978	11	7.9	201	2
UDB-10918	5/8	9.8	249	2	UDB-10980	12	8.7	221	2
UDB-10919	3/4	11.3	287	1	UDB-10984	14	10.2	259	2
					UDB-10986	17	11.0	279	1
					UDB-10988	19	11.6	295	1

Bulk and Individuals are available.

L – WRENCHES HEX BALL DRIVERS® SETS

UNITED BALL DRIVER®

L-Wrenches Sets are compact and versatile.

Sets are packaged in UNITED's key case that has individually marked slots securing each wrench by twisting in place.

The variety of tool sizes allow you to do the job quicker and easier.

Ideal for jobs requiring a variety of tool sizes!

UNITED PART NO.	USA INCH SIZES	TOOLS PER SET
UDB-10932	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32	8
UDB-10936	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16	12
UDB-10937	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	13
UDB-10938	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	10
UDB-10945	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	7

UNITED PART NO.	USA METRIC SIZES	TOOLS PER SET
UDB-10946	1.5, 2, 2.5, 3, 4, 5	6
UDB-10999	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	9

12-17-98

Hex Ball Drivers® And Sets

Hex Ball Driver® Sets

UNITED HEX BALL DRIVERS® are superior to any standard hex tools. The ball point on the blade allows access in a wide variety of work situations. The arm and handle grip allows high torque.

They are easy to use and identify. Handles are color coded and stamped in both inch and metric sizes.

Handles and blade lengths are proportioned to allow optimum torque.

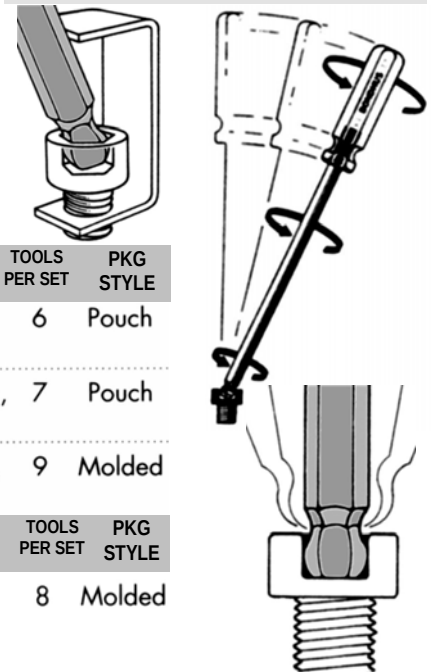
UNITED PART NO.	USA INCHES SIZES	TOOLS PER SET	PKG STYLE
UDB-10632	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32	8	Pouch
UDB-10633	7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16	8	Roll Up
UDB-10637	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	13	Molded
UDB-10645	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	7	Pouch

UNITED PART NO.	LONGER INCH SIZES	TOOLS PER SET	PKG STYLE
UDB-10737	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	11	Molded

UNITED PART NO.	USA METRIC SIZES	TOOLS PER SET	PKG STYLE
UDB-10686	1.5, 2, 2.5, 3, 4, 5mm	6	Pouch
UDB-10687	1.27, 1.5, 2, 2.5, 3, 4, 5mm	7	Pouch
UDB-10699	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	9	Molded
PART NO.	LONGER METRIC SIZES	TOOLS PER SET	PKG STYLE
UDB-10733	2, 2.5, 3, 4, 5, 6, 8, 10mm	8	Molded

UNITED BALL DRIVER® Socket Drivers work faster because the ball point on the long blade reaches difficult or hard to access locations.

Handles and blade length are proportional to allow fasteners torque. Easy color coding and ergonomically designed handles made of 8650 tool steel give you the best in the industry.



Both inch and metric sizes are available in standard and long length.



Protanium™ High Torque 8650 Steel — Ergonomically designed handles

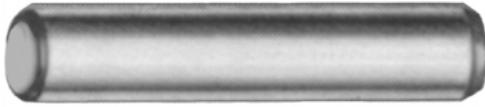
PART NO.	SIZES	INCH	MM	OAL MM	PKG QTY
UDB-10602	.050	3.2	81	4.7	10
UDB-10603	1/16	3.3	83	4.8	10
UDB-10604	5/64	3.5	88	5.3	10
UDB-10605	3/32	3.7	94	5.6	10
UDB-10606	7/64	2.9	73	5.1	10
UDB-10607	1/8	3.1	78	5.3	10
UDB-10608	9/64	3.3	83	6.1	10
UDB-10609	5/32	3.5	88	6.4	10
UDB-10610	3/16	3.8	96	7.3	10
UDB-10611	7/32	4.2	106	7.7	10
UDB-10612	1/4	4.7	119	8.6	5
UDB-10613	5/16	5.6	142	9.4	5
UDB-10614	3/8	6.5	165	10.4	5
UDB-10615	7/16	7.6	193	11.5	1
UDB-10616	1/2	8.5	215	12.5	1
PART NO.	SIZES	INCH	MM	OAL MM	PKG QTY
UDB-10649	1.27	3.2	81	119	10
UDB-10650	1.5	3.4	86	124	10
UDB-10652	2	3.5	89	138	10
UDB-10654	2.5	3.9	99	146	10
UDB-10656	3	3.3	81	139	10
UDB-10658	3.5	3.5	89	143	10
UDB-10660	4	3.8	97	170	10
UDB-10662	4.5	4.3	109	182	10
UDB-10664	5	4.3	109	199	10
UDB-10666	5.5	5.0	127	215	10
UDB-10668	6	5.4	137	227	10
UDB-10670	7	5.7	145	234	10
UDB-10672	8	6.4	163	261	5
UDB-10674	9	6.9	175	273	5
UDB-10676	10	7.3	185	283	5

HEX BALL SOCKET DRIVER® SETS

Longer
sizes
available.

Dowel Pins

Precise Alignment in Mating Parts with UNITED Dowel Pins



8 RMS-RC55-60 TO NAS-MS STDS
ALLOY STEEL — NOMINAL PLUS .0002 MAX

UNITED's DOWEL PINS: Precision ground—Finish 8 RMS—Heat treated—RC55-60—Meet NAS and MS standards—Tough Alloy Steel—Available .0002 or .001 oversize
Oversize .0002 is standard. DOWEL PINS are most commonly used to retain parts in a fixed position. They may also be used for alignment in mating parts.
Special sizes, materials and finishes available on request.

	LENGTH OVER ALL	PART NO. .0002 OVERSIZED DIAMETER A	PART NO. .001 OVERSIZED DIAMETER B	NO PER BOX		LENGTH OVER ALL	PART NO. .0002 OVERSIZED DIAMETER A	PART NO. .001 OVERSIZED DIAMETER B	NO PER BOX	
DIA.					DIA.					
1/8"	3/8	DP-A-1/8-3/8	DP-B-1/8-3/8	100	7/16"	7/8 SPL	DP-A-7/16-7/8	DP-B-7/16-7/8	100	
	1/2	DP-A-1/8-1/2	DP-B-1/8-1/2			1	DP-A-7/16-1	DP-B-7/16-1		
	5/8	DP-A-1/8-5/8	DP-B-1/8-5/8			1 1/4	DP-A-7/16-1 1/4	DP-B-7/16-1 1/4		
	3/4	DP-A-1/8-3/4	DP-B-1/8-3/4			1 1/2	DP-A-7/16-1 1/2	DP-B-7/16-1 1/2		
	7/8	DP-A-1/8-7/8	DP-B-1/8-7/8			1 3/4	DP-A-7/16-1 3/4	DP-B-7/16-1 3/4		
	1	DP-A-1/8-1	DP-B-1/8-1			2	DP-A-7/16-2	DP-B-7/16-2		
	1 1/8 SPL	DP-A-1/8-1 1/8	DP-B-1/8-1 1/8			2 1/4 SPL	DP-A-7/16-2 1/4	DP-B-7/16-2 1/4		
	1 1/4	DP-A-1/8-1 1/4	DP-B-1/8-1 1/4			2 1/2	DP-A-7/16-2 1/2	DP-B-7/16-2 1/2		
	1 3/8	DP-A-1/8-1 3/8	DP-B-1/8-1 3/8			2 3/4 SPL	DP-A-7/16-2 3/4	DP-B-7/16-2 3/4		
	1 1/2	DP-A-1/8-1 1/2	DP-B-1/8-1 1/2			3	DP-A-7/16-3	DP-B-7/16-3		
	1 3/4	DP-A-1/8-1 3/4	DP-B-1/8-1 3/4			3/4	DP-A-1/2-3/4	DP-B-1/2-3/4		
	2	DP-A-1/8-2	DP-B-1/8-2			1	DP-A-1/2-1	DP-B-1/2-1		
3/16"	1/2	DP-A-3/16-1/2	DP-B-3/16-1/2	100	1/2"	1 1/4	DP-A-1/2-1 1/4	DP-B-1/2-1 1/4	100	
	5/8	DP-A-3/16-5/8	DP-B-3/16-5/8			1 1/2	DP-A-1/2-1 1/2	DP-B-1/2-1 1/2		
	3/4	DP-A-3/16-3/4	DP-B-3/16-3/4			1 3/4	DP-A-1/2-1 3/4	DP-B-1/2-1 3/4		
	7/8	DP-A-3/16-7/8	DP-B-3/16-7/8			2	DP-A-1/2-2	DP-B-1/2-2		
	1	DP-A-3/16-1	DP-B-3/16-1			2 1/4	DP-A-1/2-2 1/4	DP-B-1/2-2 1/4		
	1 1/8 SPL	DP-A-3/16-1 1/8	DP-B-3/16-1 1/8			2 1/2	DP-A-1/2-2 1/2	DP-B-1/2-2 1/2		
	1 1/4	DP-A-3/16-1 1/4	DP-B-3/16-1 1/4			2 3/4 SPL	DP-A-1/2-2 3/4	DP-B-1/2-2 3/4		
	1 3/8 SPL	DP-A-3/16-1 3/8	DP-B-3/16-1 3/8			3	DP-A-1/2-3	DP-B-1/2-3		
	1 1/2	DP-A-3/16-1 1/2	DP-B-3/16-1 1/2			3 1/4 SPL	DP-A-1/2-3 1/4	DP-B-1/2-3 1/4		
	1 3/4	DP-A-3/16-1 3/4	DP-B-3/16-1 3/4			3 1/2	DP-A-1/2-3 1/2	DP-B-1/2-3 1/2		
	2	DP-A-3/16-2	DP-B-3/16-2			3 3/4	DP-A-1/2-3 3/4	DP-B-1/2-3 3/4		
						4	DP-A-1/2-4	DP-B-1/2-4		
1/4"	1/2	DP-A-1/4-1/2	DP-B-1/4-1/2	100	5/8"	1	DP-A-5/8-1	DP-B-5/8-1	50	
	5/8	DP-A-1/4-5/8	DP-B-1/4-5/8			1 1/4	DP-A-5/8-1 1/4	DP-B-5/8-1 1/4		
	3/4	DP-A-1/4-3/4	DP-B-1/4-3/4			1 1/2	DP-A-5/8-1 1/2	DP-B-5/8-1 1/2		
	7/8	DP-A-1/4-7/8	DP-B-1/4-7/8			1 3/4	DP-A-5/8-1 3/4	DP-B-5/8-1 3/4		
	1	DP-A-1/4-1	DP-B-1/4-1			2	DP-A-5/8-2	DP-B-5/8-2		
	1 1/8	DP-A-1/4-1 1/8	DP-B-1/4-1 1/8			2 1/4	DP-A-5/8-2 1/4	DP-B-5/8-2 1/4		
	1 1/4	DP-A-1/4-1 1/4	DP-B-1/4-1 1/4			2 1/2	DP-A-5/8-2 1/2	DP-B-5/8-2 1/2		
	1 3/8	DP-A-1/4-1 3/8	DP-B-1/4-1 3/8			2 3/4 SPL	DP-A-5/8-2 3/4	DP-B-5/8-2 3/4		
	1 1/2	DP-A-1/4-1 1/2	DP-B-1/4-1 1/2			3	DP-A-5/8-3	DP-B-5/8-3		
	1 3/4	DP-A-1/4-1 3/4	DP-B-1/4-1 3/4			3 1/4 SPL	DP-A-5/8-3 1/4	DP-B-5/8-3 1/4		
	2	DP-A-1/4-2	DP-B-1/4-2			3 1/2	DP-A-5/8-3 1/2	DP-B-5/8-3 1/2		
	2 1/4	DP-A-1/4-2 1/4	DP-B-1/4-2 1/4			3 3/4 SPL	DP-A-5/8-3 3/4	DP-B-5/8-3 3/4		
5/16"	2 1/2	DP-A-1/4-2 1/2	DP-B-1/4-2 1/2			4	DP-A-5/8-4	DP-B-5/8-4		
						4 1/2	DP-A-5/8-4 1/2	DP-B-5/8-4 1/2		
	1/2	DP-A-5/16-1/2	DP-B-5/16-1/2	100		5	DP-A-5/8-5	DP-B-5/8-5	10	
	5/8	DP-A-5/16-5/8	DP-B-5/16-5/8			1 1/2 SPL	DP-A-3/4-1 1/2	DP-B-3/4-1 1/2		
	3/4	DP-A-5/16-3/4	DP-B-5/16-3/4			2	DP-A-3/4-2	DP-B-3/4-2		
	7/8	DP-A-5/16-7/8	DP-B-5/16-7/8			2 1/4 SPL	DP-A-3/4-2 1/4	DP-B-3/4-2 1/4		
	1	DP-A-5/16-1	DP-B-5/16-1			2 1/2	DP-A-3/4-2 1/2	DP-B-3/4-2 1/2		
	1 1/8 SPL	DP-A-5/16-1 1/8	DP-B-5/16-1 1/8			2 3/4 SPL	DP-A-3/4-2 3/4	DP-B-3/4-2 3/4		
	1 1/4	DP-A-5/16-1 1/4	DP-B-5/16-1 1/4			3	DP-A-3/4-3	DP-B-3/4-3		
	1 3/8 SPL	DP-A-5/16-1 3/8	DP-B-5/16-1 3/8			3 1/4 SPL	DP-A-3/4-3 1/4	DP-B-3/4-3 1/4		
	1 1/2	DP-A-5/16-1 1/2	DP-B-5/16-1 1/2			3 1/2	DP-A-3/4-3 1/2	DP-B-3/4-3 1/2		
	1 3/4	DP-A-5/16-1 3/4	DP-B-5/16-1 3/4			3 3/4 SPL	DP-A-3/4-3 3/4	DP-B-3/4-3 3/4		
	2	DP-A-5/16-2	DP-B-5/16-2			4	DP-A-3/4-4	DP-B-3/4-4		
	2 1/4	DP-A-5/16-2 1/4	DP-B-5/16-2 1/4			4 1/2	DP-A-3/4-4 1/2	DP-B-3/4-4 1/2		
3/8"	2 1/2	DP-A-5/16-2 1/2	DP-B-5/16-2 1/2	3/4"	5	DP-A-3/4-5	DP-B-3/4-5	10		
	2 3/4	DP-A-5/16-2 3/4	DP-B-5/16-2 3/4		6	DP-A-3/4-6	DP-B-3/4-6			
	3	DP-A-5/16-3	DP-B-5/16-3		2	DP-A-7/8-2	DP-B-7/8-2			
					2 1/2	DP-A-7/8-2 1/2	DP-B-7/8-2 1/2			
	1/2	DP-A-3/8-1/2	DP-B-3/8-1/2		100		3		DP-A-7/8-3	DP-B-7/8-3
	5/8	DP-A-3/8-5/8	DP-B-3/8-5/8				3 1/2		DP-A-7/8-3 1/2	DP-B-7/8-3 1/2
	3/4	DP-A-3/8-3/4	DP-B-3/8-3/4				4		DP-A-7/8-4	DP-B-7/8-4
	7/8	DP-A-3/8-7/8	DP-B-3/8-7/8				4 1/2		DP-A-7/8-4 1/2	DP-B-7/8-4 1/2
	1	DP-A-3/8-1	DP-B-3/8-1				5		DP-A-7/8-5	DP-B-7/8-5
	1 1/4	DP-A-3/8-1 1/4	DP-B-3/8-1 1/4				6		DP-A-7/8-6	DP-B-7/8-6
	1 3/8 SPL	DP-A-3/8-1 3/8	DP-B-3/8-1 3/8				2		DP-A-1-2	DP-B-1-2
	1 1/2	DP-A-3/8-1 1/2	DP-B-3/8-1 1/2				2 1/2		DP-A-1 2 1/2	DP-B-1 2 1/2
	1 3/4	DP-A-3/8-1 3/4	DP-B-3/8-1 3/4				3		DP-A-1-3	DP-B-1-3
	2	DP-A-3/8-2	DP-B-3/8-2				3 1/2		DP-A-1-3 1/2	DP-B-1-3 1/2
	2 1/4	DP-A-3/8-2 1/4	DP-B-3/8-2 1/4	1"	4	DP-A-1-4	DP-B-1-4	5		
	2 1/2	DP-A-3/8-2 1/2	DP-B-3/8-2 1/2		4 1/2	DP-A-1 1/2	DP-B-1 1/2			
	2 3/4 SPL	DP-A-3/8-2 3/4	DP-B-3/8-2 3/4		5	DP-A-1-5	DP-B-1-5			
	3	DP-A-3/8-3	DP-B-3/8-3		6	DP-A-1-6	DP-B-1-6			

Flat, Spherical, Plain C and Swing C-Washers

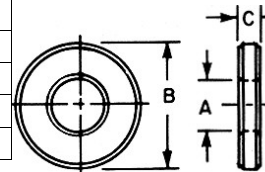
**UNITED
Washers**

FLAT WASHERS

UNITED PART NO.	BOLT / STUD SIZE	A I. D.	B O. D.	C THICK- NESS	UNITED PART NO.	BOLT / STUD SIZE	A I. D.	B O. D.	C THICK- NESS
UDB-926545(-SS)	#10 (3/16)	13/64	1/2	3/32	UDB-926590	5/8	21/32	1-3/8	3/16
UDB-926550(-SS)	1/4	9/32	5/8	1/8	UDB-926595(-SS)	3/4	25/32	1-5/8	5/32
UDB-926555(-SS)	5/16	11/32	3/4	1/8	UDB-926600	3/4	25/32	1-5/8	1/4
UDB-926560	5/16	11/32	3/4	3/16	UDB-926605(-SS)	7/8	29/32	1-3/4	5/32
UDB-926565(-SS)	3/8	13/32	7/8	1/8	UDB-926610	7/8	29/32	1-3/4	1/4
UDB-926570	3/8	13/32	7/8	3/16	UDB-926615(-SS)	1"	1-1/32	2"	3/16
UDB-926572(-SS)	7/16	15/32	1"	1/8	UDB-926620	1"	1-1/32	2"	9/32
UDB-926575(-SS)	1/2	17/32	1-1/8	1/8	UDB-926625	1-1/8	1-5/32	2-1/4	9/32
UDB-926580	1/2	17/32	1-1/8	3/16	UDB-926627	1-1/4	1-9/32	2-1/2	1/4
UDB-926585(-SS)	5/8	21/32	1-3/8	1/8	UDB-926630(-SS)	1-1/4	1-9/32	2-1/2	9/32

C-12L14 STEEL
CARBURIZED
HARDENED
HEAT TREATED
BLACK OXIDE FINISH

STAINLESS 300
SERIES AVAILABLE



Refer to Page G23 for Stainless.

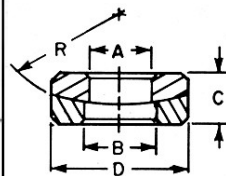
'(-SS)' INDICATES SIZES AVAILABLE IN STAINLESS STEEL. ADD 'SS' TO PART NO. FOR STAINLESS.

ADD 'SS' TO PART NO. FOR STAINLESS STEEL. SHADED PART NO.s AVAILABLE IN STAINLESS. ALL OTHERS ARE

SPHERICAL WASHERS

Assembly PART NO.	* TOP PART NO.	* BOTTOM PART NO.	STUD DIA.	A	B	C	D	R
* UDB-926250	UDB-926350	UDB-926450	1/4	9/32	5/16	3/16	5/8	3/4
* UDB-926255	UDB-926355	UDB-926455	5/16	11/32	3/8	1/4	3/4	1
* UDB-926260	UDB-926360	UDB-926460	3/8	13/32	7/16	1/4	7/8	1-1/4
* UDB-926265	UDB-926365	UDB-926465	1/2	17/32	9/16	5/16	1-1/8	1-1/2
* UDB-926270	UDB-926370	UDB-926470	5/8	21/32	11/16	5/16	1-3/8	1-3/4
* UDB-926275	UDB-926375	UDB-926475	3/4	25/32	13/16	3/8	1-5/8	2-1/4
* UDB-926280	UDB-926380	UDB-926480	7/8	15/16	1	3/8	1-3/4	2-1/2
* UDB-926285	UDB-926385	UDB-926485	1	1-1/16	1-1/8	1/2	2	2-3/4
UDB-926290	UDB-926390	UDB-926490	1-1/8	1-11/64	1-1/4	1/2	2-1/4	3
UDB-926295	UDB-926395	UDB-926495	1-1/4	1-19/64	1-3/8	1/2	2-5/8	3
UDB-926300	UDB-926400	UDB-926500	1-1/2	1-9/16	1-5/8	9/16	2-7/8	3

SPECIALS IF
STAINLESS.



* T.C.M.A. STANDARD



Refer to Page G21 for Stainless.

C-WASHERS are best used for applications requiring repetitive insertion and removal of the work piece.

C - WASHERS

PART NO.	A	B	C	PART NO.	A	B	C
* UDB-926000	9/32	3/4	1/4	* UDB-926028	21/32	2-1/8	3/8
* UDB-926002		1		UDB-926030		2-1/2	
* UDB-926004		1-1/4		UDB-926032		3	
UDB-926006		1-1/2		* UDB-926034	25/32	2-1/2	7/16
UDB-926008		1-3/4		UDB-926036		2-7/8	
UDB-926010	11/32	1	5/16	UDB-926038		3-3/8	
* UDB-926012		1-1/4		UDB-926040	29/32	2	7/16
UDB-926014		1-1/2		UDB-926042		2-1/2	
* UDB-926016	13/32	1-1/4	3/8	UDB-926044		3	
* UDB-926018		1-1/2		UDB-926046	1-1/32	2-1/2	1/2
* UDB-926020		1-3/4		UDB-926048		3	
* UDB-926022	17/32	1-7/8	3/8	UDB-926050		3-1/2	
* UDB-926024		2-1/4					
UDB-926026		2-3/4					



GROUND PARALLEL
HEAT TREATED STEEL — BLACK OXIDE FINISH

* T.C.M.A. STANDARD

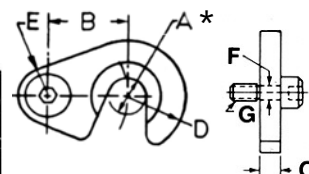
Refer to Page G23 for Stainless.

All SWING C-WASHERS are available with the 'A' dimension radiused for Flange Nuts. UNITED Swing C Washers act as a latch for jigs and fixtures and special machinery. They can be swung in and out of the way for quick insertion and removal of the work piece.

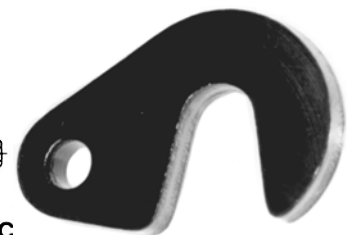
Manufactured from durable steel. Socket shoulder screws are included.

* ADD 'R' TO PART NO. TO SPECIFY RADIUS 'A' DIMENSION (FOR FLANGE NUTS).

PART NO.	A	B	C	D	E	F	G	SCREW NO.
* UDB-926210	13/32	1	1/4	3/4	3/8	3/8	5/16-18	931065
* UDB-926215	17/32	1-1/4	5/16	1	1/2	3/8		931067
* UDB-926220	21/32	1-1/2	3/8	1-1/8	9/16	1/2	3/8-16	931111
* UDB-926225	25/32	1-3/4	1/2	1-1/4	5/8	1/2		931112



Refer to Page G23 for Stainless.



* T.C.M.A. STANDARD HEAT TREATED — BLACK OXIDE FINISH

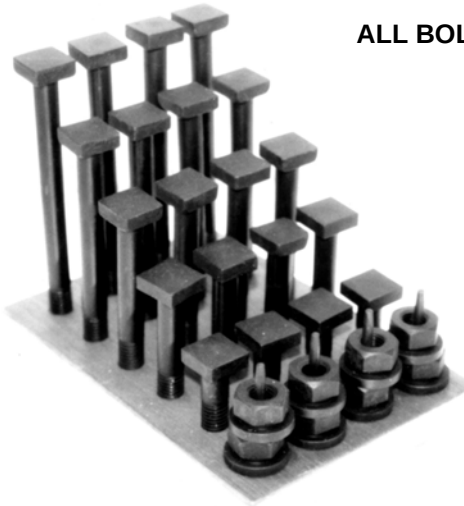
SOCKET SHOULDER SCREWS INCLUDED
GROUND PARALLEL

T-Bolts Square Head Individual and Sets

Square Head T-Bolts

HIGH GRADE ALLOY STEEL

T-BOLT SETS — Consist of 29 Pieces: 20 Bolts, 8 Flange Nuts and 1 Holder



ALL BOLTS are the SAME THREAD SIZE in EACH SET.

UNITED T-BOLTS will reduce set up time in all forms of milling.

UNITED T-BOLT SETS

Conform to V.I.C. specifications.

High Grade Alloy Steel provides minimum of 150,000 P.S.I.

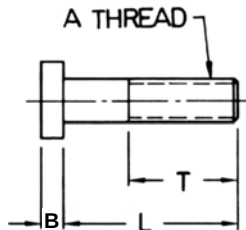
Threads rolled to class 2A standard.

Heat treated with Black Oxide finish.



Custom Configurations available on request.

EACH T-BOLT SET CONSISTS OF 29 PIECES				L = BOLT LENGTH T = THREAD LENGTH									
T-BOLT SET NO.	THD SIZE	H	C	L	T	L	T	L	T	L	T	L	T
UDB-941500	3/8 - 16	1/4	11/16	2	1-3/4	3	2	4	2	5	2	6	2
UDB-941000	1/2 - 13	5/16	7/8	2	1-3/4	3	2	4	2	5	2	6	2-1/2
UDB-941100	5/8 - 11	13/32	1-1/8	3	2	4	2	5	2	6	2-1/2	8	2-1/2
UDB-941200	3/4 - 10	17/32	1-5/16	3	2	4	2	5	2	6	2-1/2	8	2-1/2
UDB-941400	1 - 8	11/16	1-11/16	4	4	5	4	6	4	8	4	10	4



T-BOLTS

Use **UNITED T-BOLTS** with
Clamp Straps
Flange Nuts
Spherical Washers

FOR NATIONAL ACME T-BOLTS, SEE PAGE F35.

L LENGTH UNDER HEAD	A - 3/8-16 B - 1/4 C - 11/16	T THD LEN	A - 1/2-13 B - 5/16 C - 7/8	T THD LEN	A - 5/8-11 B - 13/32 C - 1-1/8	T THD LEN	A - 3/4-10 B - 17/32 C - 1-5/16	T THD LEN	A - 1-8 B - 11/16 C - 1-11/16	T THD LEN
1-1/2	UDB-941503	1-1/4	UDB-941003	1-1/4	UDB-941103	1-1/4				
2"	UDB-941504	1-3/4	UDB-941004	1-3/4	UDB-941104	1-3/4	UDB-941204	1-3/4		
2-1/2	UDB-941505	2"	UDB-941005	2"	UDB-941105	2"	UDB-941205	2"		
3"	UDB-941506	2"	UDB-941006	2"	UDB-941106	2"	UDB-941206	2"		
3-1/2	UDB-941507	2"	UDB-941007	2"	UDB-941107	2"	UDB-941207	2"		
4	UDB-941508	2"	UDB-941008	2"	UDB-941108	2"	UDB-941208	2"	UDB-941408	4"
4-1/2	UDB-941509	2"	UDB-941009	2"	UDB-941109	2"	UDB-941209	2"		
5	UDB-941510	2"	UDB-941010	2"	UDB-941110	2"	UDB-941210	2"	UDB-941410	4"
5-1/2	UDB-941511	2"	UDB-941011	2"	UDB-941111	2"	UDB-941211	2"		
6	UDB-941512	2"	UDB-941012	2-1/2	UDB-941112	2-1/2	UDB-941212	2-1/2	UDB-941412	4"
7	UDB-941514	2"	UDB-941014	2-1/2	UDB-941114	2-1/2	UDB-941214	2-1/2	UDB-941414	4"
8	UDB-941516	2"	UDB-941016	2-1/2	UDB-941116	2-1/2	UDB-941216	2-1/2	UDB-941416	4"
9							UDB-941218	3"	UDB-941418	4"
10			UDB-941020	3"	UDB-941120	3"	UDB-941220	3"	UDB-941420	4"
11							UDB-941222	3"	UDB-941422	4"
12			UDB-941024	3"	UDB-941124	3"	UDB-941224	3"	UDB-941424	4"
13									UDB-941426	4"
14									UDB-941428	4"
15									UDB-941430	4"
16									UDB-941432	4"
20									UDB-941440	4"

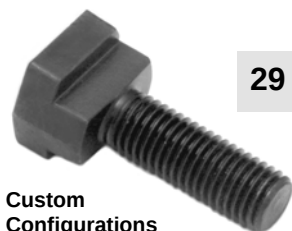
8-21-02

F22 The Key to Efficiency—A Complete Line of 'Nuts & Bolts' From UNITED!

T-Slot Bolts

HIGH GRADE ALLOY STEEL

T-Slot Bolts
Individual and Sets



Custom
Configurations
available on
request.

29 Pieces: 20 Bolts, 8 Flange Nuts and 1 Holder are in T-SLOT BOLT SETS

ALL BOLTS are the SAME THREAD SIZE in EACH SET.

We also feature T-Slot Bolts
for Bridgeport Machine Tables.

UNITED T-SLOT BOLT SETS

Machined contact surfaces on head.
High Grade Alloy Steel provides minimum of 150,000 P.S.I.
Threads rolled to class 2A standard.
Heat treated to Grade 5 (150,000 psi) with Black Oxide finish.

Most of our threads are longer than industry standards.



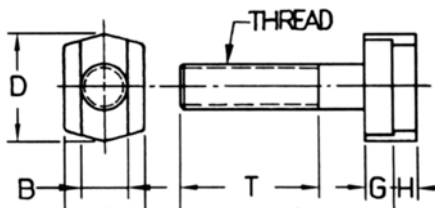
**UNITED T-SLOT BOLTS
SERVE YOUR
MACHINE NEEDS AND
ASSURE LONG
DEPENDABLE WEAR.**

EACH T-SLOT BOLT SET CONSISTS OF 29 PIECES

T-BOLT SET NO.	A THD SIZE	L BOLT LENGTH 4 PCS PER SIZE					B	C	D	G	H
UDB-942300	3/8 - 16	1-1/2	2	2-1/2	3	4	3/8	11/16	13/16	3/16	3/16
UDB-942500	1/2 - 13	2	3	4	5	6	1/2	7/8	1-3/16	5/16	1/4
UDB-942600	5/8 - 11	2	3	4	5	6	5/8	1-1/8	1-5/16	11/32	11/32
UDB-942700	3/4 - 10	2	3	4	5	6	3/4	1-1/4	1-9/16	13/32	15/32

UNITED T-SLOT BOLTS
make set up time easy and
fast in all forms of milling.

Use with Clamp Straps
And Flange Nuts.



T-SLOT BOLTS

L LENGTH UNDER HEAD INCL. SHOULDER	A 3/8-16 D 11/16	B 1/4 G 3/16	C 11/16 H 3/16	A 1/2-13 D 1-3/16	B 1/2 G 5/16	C 7/8 H 1/4	A 5/8-11 D 1-5/16	B 5/8 G 11/32	C 1-1/8 H 11/32	A 3/4-10 D 1-5/16	B 3/4 G 13/32	C 1-1/4 H 15/32
	THD LEN		T	THD LEN		T	THD LEN		T	THD LEN		T
1"	UDB-942310		3/4									
1-1/2	UDB-942315		1"	UDB-942515		1"	UDB-942615		1"			
2"	UDB-942320		1-1/2	UDB-942520		1-1/2	UDB-942620		1-1/2	UDB-942720		1-1/2
2-1/2	UDB-942325		2"	UDB-942525		2"	UDB-942625		2"	UDB-942725		2"
3"	UDB-942330		2"	UDB-942530		2"	UDB-942630		2"	UDB-942730		2"
3"				UDB-944530 *		2"						
3-1/2	UDB-942335		2"	UDB-942535		2"	UDB-942635		2"	UDB-942735		2"
4"	UDB-942340		2-1/2	UDB-942540		2-1/2	UDB-942640		2-1/2	UDB-942740		2-1/2
4"				UDB-944540 *		2-1/2						
4-1/2				UDB-942545		2-1/2						
5"	UDB-942350		2-1/2	UDB-942550		2-1/2	UDB-942650		2-1/2	UDB-942750		2-1/2
5"				UDB-944550 *		2-1/2						
6"	UDB-942360		2-1/2	UDB-942560		2-1/2	UDB-942660		2-1/2	UDB-942760		2-1/2
6"				UDB-944560 *		2-1/2						
7"				UDB-942570		3"	UDB-942670		3"	UDB-942770		3"
8"	UDB-942380		3-1/2	UDB-942580		3-1/2	UDB-942680		3-1/2	UDB-942780		3-1/2
9"										UDB-942790		4"
10"							UDB-942691		4"	UDB-942791		4"
12"							UDB-942692		4"	UDB-942792		4"

BOLDED PART NUMBERS DESIGNED TO FIT BRIDGEPORT MACHINE TABLES. * B = .625, C = 1", D = 1-1/4

Rotary T-Slot Bolts Individual and Sets

Rotary T-Slot Bolts & Sets

HIGH GRADE ALLOY STEEL

ROTARY T-SLOT BOLT SETS: 12 Bolts, 2 Pivot Clamps, 2 Springs, 4 Flange Nuts and 1 Holder



ALL PARTS IN
EACH SET HAVE
SAME THREAD SIZE.

UNITED 21 PIECE SETS of ROTARY T-SLOT BOLTS, PIVOT CLAMPS and FLANGE NUTS

High Grade Alloy Steel
provides minimum of
150,000 P.S.I.

Threads rolled to class
2A standard.

Heat treated with Black
Oxide finish.

These two Sets, UDB-850755 – 1/2-13 and UDB-850765 – 5/8-11, feature two of our new Adjustable Forged Clamps. The sets include our new Rotary T-Slot Bolts in lengths of 3," 4," 5" and 6."

Designed for Bridgeport type milling machine tables, these simple efficient time saver tool sets include 2 Springs, 4 Flange Nuts, 12 Rotary T-Slot Bolts, 2 forged Adjustable Clamps and a handy holder.

These Sets take the place of space consuming clamp sets that require step blocks, step clamps, T-Slot nuts and studs. They are fast, efficient and adjust simply to eliminate other unnecessary expensive tools. You will be glad you made the change!

21 Pieces UDB-850755 T-SLOT BOLT SET 1/2-13

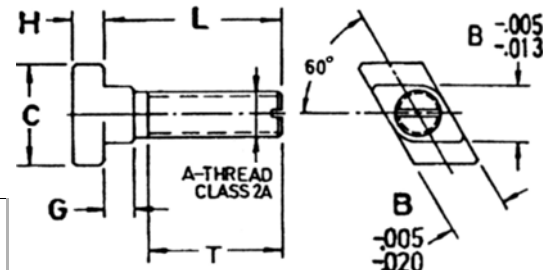
QTY	PART NO.	SIZE	DESCRIPTION
3	UDB-843530	1/2 – 13 x 3	ROTARY T-SLOT BOLT
3	UDB-843540	1/2 – 13 x 4	ROTARY T-SLOT BOLT
3	UDB-843550	1/2 – 13 x 5	ROTARY T-SLOT BOLT
3	UDB-843560	1/2 – 13 x 6	ROTARY T-SLOT BOLT
2	UDB-850750	1/2	ADJUSTABLE PIVOT CLAMP
4	UDB-925165	1/2 – 13	FLANGE NUT
1	UDB-850751	1/2 – 13	SET HOLDER
2	UDB-850752	1/2	SPRING

21 Pieces UDB-850765 T-SLOT BOLT SET 5/8-11

QTY	PART NO.	SIZE	DESCRIPTION
3	UDB-843630	5/8 – 11 x 3	ROTARY T-SLOT BOLT
3	UDB-843640	5/8 – 11 x 4	ROTARY T-SLOT BOLT
3	UDB-843650	5/8 – 11 x 5	ROTARY T-SLOT BOLT
3	UDB-843660	5/8 – 11 x 6	ROTARY T-SLOT BOLT
2	UDB-850751	5/8	ADJUSTABLE PIVOT CLAMP
4	UDB-925170	5/8 – 11	FLANGE NUT
1	UDB-850761	5/8 – 11	SET HOLDER
2	UDB-850762	5/8	SPRING

ROTARY T-SLOT BOLTS

TOP OF HEAD IS EASY TO
INSERT—ROTATE AND
SECURE TO MACHINE BED.



Custom Configurations in Sets are
available on request.

The Rotary T-Slot Bolts fit smoothly
and snugly in 1/2" and 5/8" wide
table slots on all major machine
tables.

**UNITED T-SLOT BOLTS will reduce
set up time in all forms of milling.**

**Use UNITED
ROTARY T-SLOT BOLTS with
Pivot Clamps and Flange Nuts.**

T-SLOT BOLT PART NO.	L LENGTH UNDER HEAD INCL. SHOULDER	T THD LEN	A	B	C	G	H
UDB-843515	1-1/2	1"	1/2 – 13	5/8	1-1/8	11/32	11/32
UDB-843520	2"	1-1/2					
UDB-843525	2-1/2	2"					
UDB-843530	3"	2-1/2					
UDB-843535	3-1/2	2"					
UDB-843540	4	2-1/2					
UDB-843545	4-1/2	2-1/2					
UDB-843550	5	2-1/2	5/8 – 11	3/4	1-1/4	13/32	13/32
UDB-843560	6	4-1/2					
UDB-843615	1-1/2	1"					
UDB-843620	2"	1-1/2					
UDB-843625	2-1/2	2"					
UDB-843630	3"	2-1/2					
UDB-843635	3-1/2	2"					
UDB-843640	4	2-1/2					
UDB-843650	5	2-1/2					
UDB-843660	6	4-1/2					

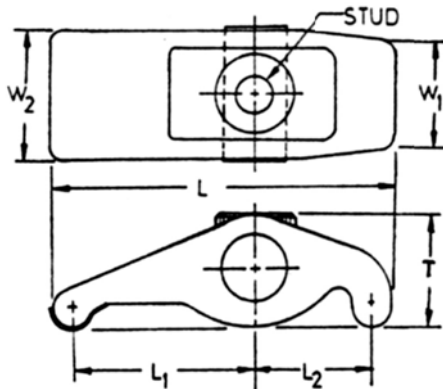
Adjustable Pivot Clamps And Assemblies With T-Slot Bolts and Flange Nuts

Adjustable Pivot
Clamps & Assemblies

FORGED ADJUSTABLE PIVOT CLAMPS



Removable brass
Shims protect work piece.



Strong!

Dependable!

Does the Job!

Economical
Products
from **UNITED**

ADJUSTABLE PIVOT CLAMP ASSEMBLY

ASSEMBLY
INCLUDES: T-SLOT
BOLT, FLANGE
NUT, SPRING and
PIVOT CLAMP.



UNITED's Adjustable Pivot Clamp Assemblies allow quick setups.

Strong forged steel Pivot Clamp instantly adjusts height without blocks or shims.

UNITED's Adjustable Pivot Clamp Assemblies swing 90° in either direction. Clearance for loading is assured.

Removable brass Shims protect work piece and machine surfaces. One piece assembly eliminates lost clamp pieces.

PIVOT CLAMP ASSEMBLY PART NO.	T-SLOT BOLT LENGTH	T-SLOT BOLT PART NO.	PIVOT CLAMP PART NO.	THREAD SIZE	CLAMPING RANGE	L	L ₁	L ₂	T	W ₁	W ₂
UDB-850745	3"	UDB-942330	UDB-850740	3/8 - 16	0 TO 1-3/4	3-1/4	1-7/8	1-1/8	1"	7/8	1-1/4
UDB-850755	4"	UDB-942540	UDB-850750	1/2 - 13	0 TO 2-1/16	4"	2-5/16	1-7/16	1-7/16	1-1/8	1-5/8
UDB-850765	5"	UDB-942650	UDB-850760	5/8 - 11	0 TO 3"	5-1/2	3-1/4	2"	1-7/8	1-3/8	1-7/8
UDB-850775	6"	UDB-942760	UDB-850770	3/4 - 10	0 TO 4-1/4	6-1/4	3-1/2	2-1/8	2-1/4	2"	2-5/8

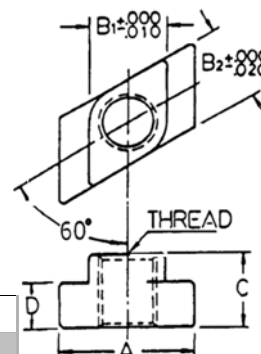
You can add Studs and Clamp Straps without disturbing previous set-ups.

UNITED's Rotary Tee Nuts supplement Standard T-Slot Nuts.

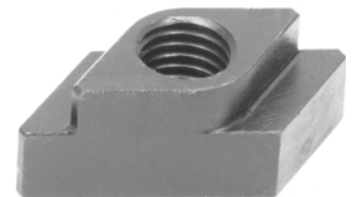
Seven sizes available that cover 3/8, 1/2, 5/8 and 3/4 stud diameters with different slot widths.

Case hardened alloy steel. Last thread is closed.

PART NO.	THREAD	TABLE SLOT	A	B	C	D
UDB-825736	3/8 - 16	1/2	7/8	0.495	1/2	9/32
UDB-825755	1/2 - 13	9/16	7/8	0.557	5/8	11/32
UDB-825756	1/2 - 13	5/8	1"	0.620	5/8	11/32
UDB-825757	1/2 - 13	11/16	1-1/8	0.682	3/4	7/16
UDB-825765	5/8 - 11	11/16	1-1/8	0.682	3/4	7/16
UDB-825766	5/8 - 11	3/4	1-1/4	0.745	3/4	15/32
UDB-825777	3/4 - 10	1"	1-5/8	0.995	1"	5/8

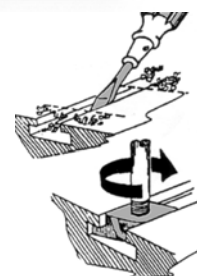


ROTARY TEE NUTS



QUICK and EASY!

- CLEAN TABLE SLOT.
- INSERT the ROTARY TEE NUT WITH STUD.



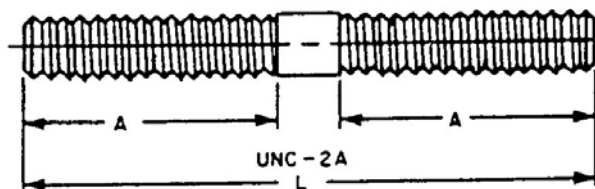
Clamping Studs T-Slot Nuts

UNITED Clamping Studs and T-Slot Nuts

CLAMPING STUDS



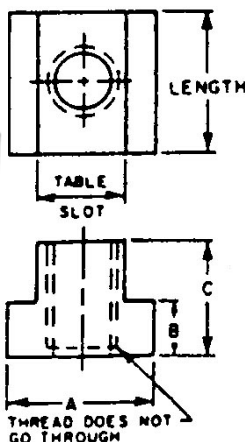
Stressproof Steel. Tensile Strength is 125,000 Minimum P.S.I.
Brinell is 225. Yield is 100,000 Minimum P.S.I. Elongation is 10% in 2".
Machinability is 80% of B-1112. Rockwell is 25C. Heat Treated Steel.
Black Oxide finish.



O/A	1/4 - 20	5/16 - 18	3/8 - 16	1/2 - 13	5/8 - 11	3/4 - 10	7/8 - 9	1" - 8
LENGTH	A = 1"	A = 1-1/8	A = 1-1/4	A = 1-1/2	A = 1-3/4	A = 2"	A = 2-1/4	A = 2-1/2
	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
1-1/2	UDB-940003	UDB-940103	UDB-940203	UDB-940303	■ UDB-940403			
2"	■ UDB-940004	■ UDB-940104	■ UDB-940204	■ UDB-940304	■ UDB-940404			
2-1/2	■ UDB-940005	■ UDB-940105	■ UDB-940205	■ UDB-940305	UDB-940405			
3"	■ UDB-940006	■ UDB-940106	■ UDB-940206	■ UDB-940306	■ UDB-940406	■ UDB-940506	■ UDB-940606	■ UDB-940706
3-1/2	■ UDB-940007	■ UDB-940107	■ UDB-940207	■ UDB-940307	■ UDB-940407	■ UDB-940507	■ UDB-940607	■ UDB-940707
4"	■ UDB-940008	■ UDB-940108	■ UDB-940208	■ UDB-940308	■ UDB-940408	■ UDB-940508	UDB-940608	UDB-940708
4-1/2	UDB-940009	UDB-940109	■ UDB-940209	■ UDB-940309	■ UDB-940409	■ UDB-940509	UDB-940609	UDB-940709
5"	UDB-940010	UDB-940110	■ UDB-940210	■ UDB-940310	■ UDB-940410	■ UDB-940510	UDB-940610	UDB-940710
5-1/2	UDB-940011	UDB-940111	■ UDB-940211	■ UDB-940311	■ UDB-940411	■ UDB-940511	UDB-940611	◆ UDB-940711
6"	UDB-940012	UDB-940112	■ UDB-940212	■ UDB-940312	■ UDB-940412	■ UDB-940512	UDB-940612	UDB-940712
6-1/2	◆ UDB-940013	◆ UDB-940113	UDB-940213	UDB-940313	■ UDB-940413	■ UDB-940513	UDB-940613	◆ UDB-940713
7"	◆ UDB-940014	◆ UDB-940114	UDB-940214	UDB-940314	■ UDB-940414	■ UDB-940514	UDB-940614	UDB-940714
7-1/2	◆ UDB-940015	◆ UDB-940115	UDB-940215	UDB-940315	■ UDB-940415	■ UDB-940515	UDB-940615	◆ UDB-940715
8"	◆ UDB-940016	◆ UDB-940116	UDB-940216	UDB-940316	■ UDB-940416	■ UDB-940516	UDB-940616	◆ UDB-940716
8-1/2				UDB-940317	◆ UDB-940417			
9"				UDB-940318	UDB-940418	UDB-940518	UDB-940618	UDB-940718
9-1/2				UDB-940319	◆ UDB-940419			
10"				UDB-940320	UDB-940420	UDB-940520	UDB-940620	UDB-940720
10-1/2					UDB-940421			
11"					UDB-940422	UDB-940522	UDB-940622	UDB-940722
11-1/2					UDB-940423			
12"					UDB-940424	UDB-940524	UDB-940624	UDB-940724

■ = CONFORMS TO T.C.M.A. STANDARDS ◆ = SPECIALS NOTE: STUDS TOO SHORT FOR GIVEN THREAD LENGTHS ARE THREADED AS CLOSE TO CENTER AS PRACTICAL

T-SLOT NUTS



An incomplete thread is left at the T-Nut Base. This eliminates threading the stud through the bottom of the T-Nut and damaging the Table Slot.
Heat Treated Steel.
Black Oxide finish.

PART NO.	REF. NO.	TABLE SLOT	THREAD SIZE	A	B	C	LENGTH
UDB-957001	375-TN	3/8	5/16 - 18	5/8	3/16	1/2	7/8
■ UDB-957002	437-TN	7/16	3/8 - 16	11/16	7/32	1/2	7/8
■ UDB-957003	500-TN	1/2	3/8 - 16	7/8	9/32	1/2	7/8
UDB-957004	560-TN	9/16	3/8 - 16	7/8	11/32	5/8	1-1/8
■ UDB-957005	562-TN	9/16	1/2 - 13	7/8	11/32	5/8	1-1/8
■ UDB-957006	625-TN	5/8	1/2 - 13	1	11/32	5/8	1-1/8
■ UDB-957007	680-TN	11/16	1/2 - 13	1-1/8	7/16	3/4	1-1/4
■ UDB-957008	687-TN	11/16	5/8 - 11	1-1/8	7/16	3/4	1-1/4
■ UDB-957009	750-TN	3/4	5/8 - 11	1-1/4	15/32	3/4	1-1/4
■ UDB-957010	800-TN	13/16	5/8 - 11	1-1/4	9/16	1	1-1/2
■ UDB-957011	812-TN	13/16	3/4 - 10	1-1/4	9/16	1	1-1/2
■ UDB-957012	875-TN	7/8	3/4 - 10	1-1/2	9/16	1	1-1/2
■ UDB-957013	102-TN	1	3/4 - 10	1-5/8	5/8	1	1-3/4
UDB-957014	100-TN	1	7/8 - 9	1-5/8	5/8	1	1-3/4
■ UDB-957015	1060-TN	1-1/16	3/4 - 10	1-5/8	11/16	1-1/8	2
UDB-957016	1062-TN	1-1/16	1" - 8	1-5/8	11/16	1-1/8	2

■ = CONFORMS TO T.C.M.A. STANDARDS

T-Nuts, Flange Coupling Nuts & Studs Kits

**T-Nut Sets
Punch Press Sets**

T-NUT and STUD SETS

Each Set includes:

4 Studs each length:

3" - 4" - 5" - 6" - 7" - 8" of the set selected

6 T-Nuts in sizes to fit your machine

4 Coupling Nuts

4 Flanged Nuts

1 UNITED Holder

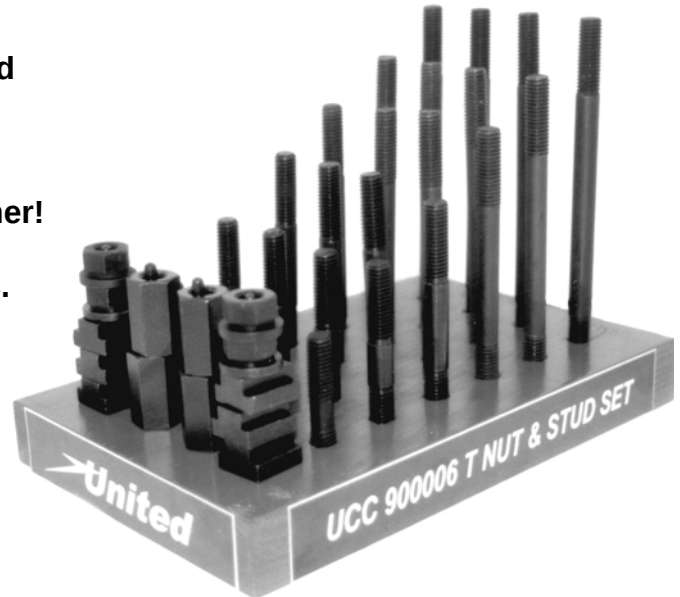
Plus

A FREE Chip T-Slot Cleaner!

See below.

AVAILABLE IN METRIC.

T-NUT STUD SET NO.	T-SLOT SIZE	TABLE SLOT	T-NUT PART NO.	STUD & NUT SIZES
UCC-900001	375-TS	3/8	UCC-957001	5/16-18
UCC-900002	437-TS	7/16	UCC-957002	3/8-16
UCC-900003	500-TS	1/2	UCC-957003	3/8-16
UCC-900004	560-TS	9/16	UCC-957004	3/8-16
UCC-900005	562-TS	9/16	UCC-957005	1/2-13
UCC-900006	625-TS	5/8	UCC-957006	1/2-13
UCC-900007	680-TS	11/16	UCC-957007	1/2-13
UCC-900008	687-TS	11/16	UCC-957008	5/8-11
UCC-900009	750-TS	3/4	UCC-957009	5/8-11
UCC-900010	800-TS	13/16	UCC-957010	5/8-11
UCC-900011	812-TS	13/16	UCC-957011	3/4-10
UCC-900012	875-TS	7/8	UCC-957012	3/4-10
UCC-900013	102-TS	1"	UCC-957013	3/4-10
UCC-900014	100-TS	1"	UCC-957014	7/8-9
UCC-900015	1060-TS	1-1/16	UCC-957015	3/4-10
UCC-900016	1062-TS	1-1/16	UCC-957016	1"-8



Set-Ups for Mills, Presses, Boring Machines and all machines with T-Slot Base are made for UNITED T-Nut and Stud Sets.

Sets accommodate 3/8 T-Slot thru 1-1/16 Table Slots.

Check your table slots and select the correct set.

Each Set includes:

4 Studs each length:

3" - 4" - 5" - 6" - 7" - 8"

of the set selected

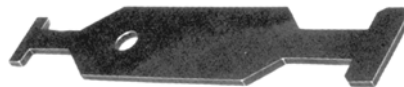
4 Coupling Nuts

8 Flanged Nuts

1 UNITED Holder

Plus

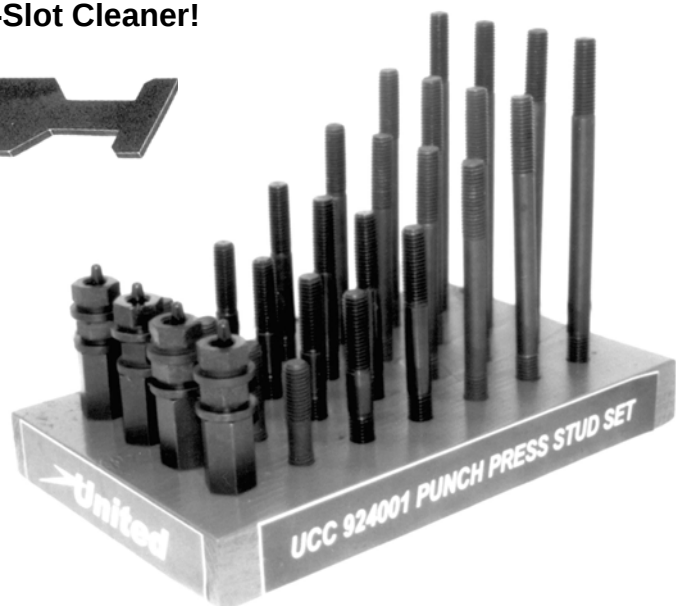
A FREE Chip T-Slot Cleaner!



**AVAILABLE
IN METRIC.**

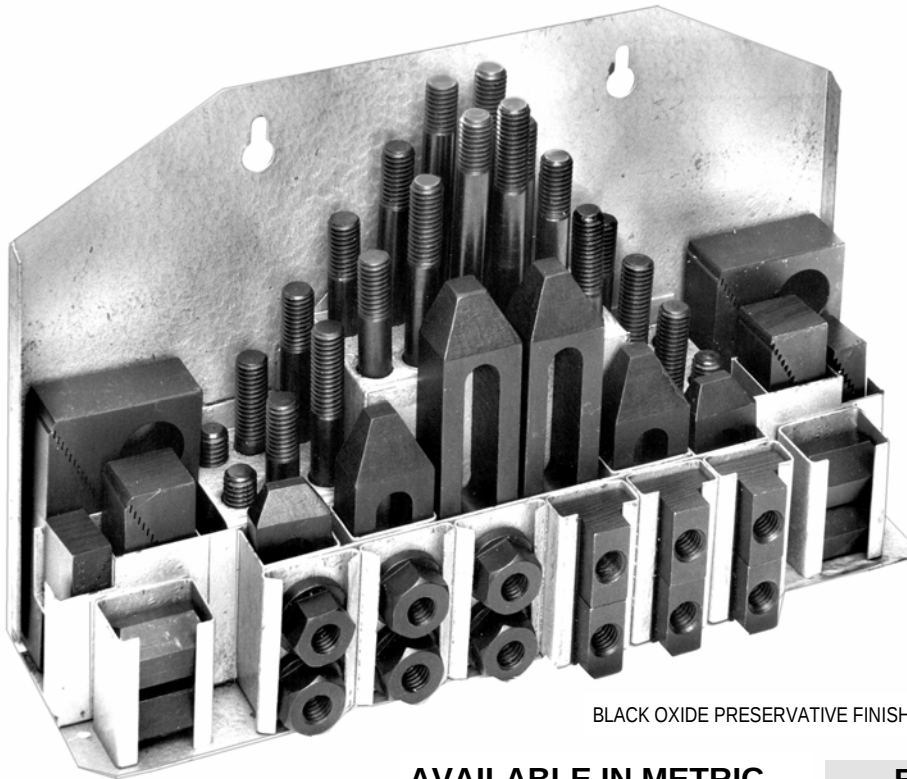
PUNCH PRESS SET NO.	FLANGE & COUPLING NUT PART NO.	STUD & NUT THREAD SIZE
UCC-924001	.500-CFN	1/2-13
UCC-924002	.625-CFN	5/8-11
UCC-924003	.750-CFN	3/4-10
UCC-924004	.875-CFN	7/8-9
UCC-924005	1.000-CFN	1"-8

PUNCH PRESS SETS



**53 Piece
Clamping Kits**

Complete Basic Clamping Kits 53 Pieces

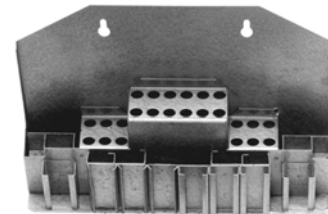


BLACK OXIDE PRESERVATIVE FINISH

*One Kit for every size
milling machine table slot!*

No more searching and down time
with **UNITED CLAMPING KITS**.

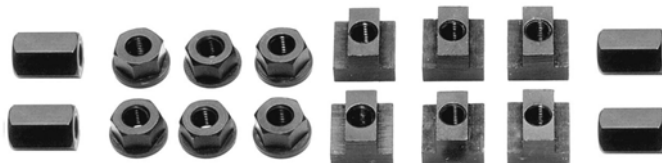
UNITED offers the Clamping Kit
designed to attach to your mill or
work bench. Select the correct
table slots for each mill.



AVAILABLE IN METRIC.

Each Kit includes 53 Pieces:
4 Studs each length (24 Studs):
 3" - 4" - 5" - 6" - 7" - 8"
6 T-Nuts in sizes to fit your machine
4 Coupling Nuts
6 Flanged Nuts
6 Step Clamps
6 Step Blocks
1 UNITED Holder

**Plus
A FREE Chip
T-Slot Cleaner!**



**UDB-940838 IS OUR MOST
POPULAR KIT!**
Fits all Bridgeport Mills.



COMPLETE KIT NO.	TABLE SLOT	STUD SIZE	STUD & NUT SET PART NO.	STEP BLOCK & STEP CLAMP SET PART NO.
UDB-940830	7/16	3/8-16	UDB-940800	UDB-940930
UDB-940832	1/2	3/8-16	UDB-940802	UDB-940930
UDB-940834	9/16	3/8-16	UDB-940804	UDB-940930
UDB-940836	9/16	1/2-13	UDB-940805	UDB-940935
UDB-940838	5/8	1/2-13	UDB-940807	UDB-940935
UDB-940840	11/16	1/2-13	UDB-940809	UDB-940935
UDB-940842	11/16	5/8-11	UDB-940810	UDB-940940
UDB-940844	3/4	5/8-11	UDB-940812	UDB-940940
UDB-940846	13/16	5/8-11	UDB-940814	UDB-940940

Basic T-Nuts & Studs Sets — 37 Pieces

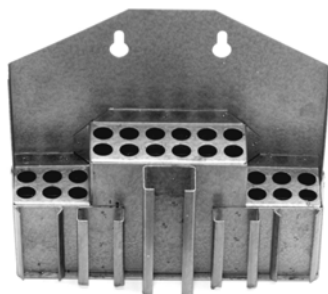
Basic 37 Piece
T-Nut and Stud Sets

ALL STUDS, T-NUTS, FLANGE NUTS, COUPLING NUTS
IN A METAL CONTAINER

T-NUT and STUD KITS

Wasted Time is eliminated!

Safe clamping is assured when each of
your mills has its own set-up tools.



ONE FOR EVERY MILLING MACHINE!



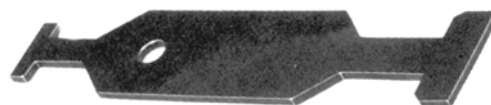
BLACK OXIDE PRESERVATIVE FINISH

AVAILABLE IN METRIC.

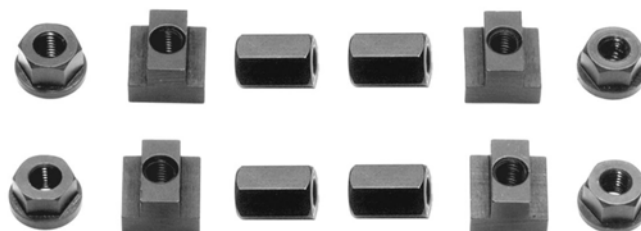
The UDB-940807 IS OUR MOST POPULAR
BASIC SET! GET YOURS TODAY.

Each Kit includes 37 Pieces:
4 Studs each in length (24 Studs):
3" - 4" - 5" - 6" - 7" - 8"
4 T-Nuts in sizes to fit your machine
4 Coupling Nuts
4 Flanged Nuts
1 UNITED Holder

Plus
A FREE Chip T-
Slot Cleaner!



BASIC SET NO.	TABLE SLOT	STUD SIZE	T-NUT PART NO.
UDB-940800	7/16	3/8-16	UDB-957002
UDB-940802	1/2	3/8-16	UDB-957003
UDB-940804	9/16	3/8-16	UDB-957004
UDB-940805	9/16	1/2-13	UDB-957005
UDB-940807	5/8	1/2-13	UDB-957006
UDB-940809	11/16	1/2-13	UDB-957007
UDB-940810	11/16	5/8-11	UDB-957008
UDB-940812	3/4	5/8-11	UDB-957009
UDB-940814	13/16	5/8-11	UDB-957010
UDB-940815	13/16	3/4-10	UDB-957011
UDB-940817	7/8	3/4-10	UDB-957012
UDB-940819	1"	3/4-10	UDB-957013
UDB-940820	1-1/16	3/4-10	UDB-957015

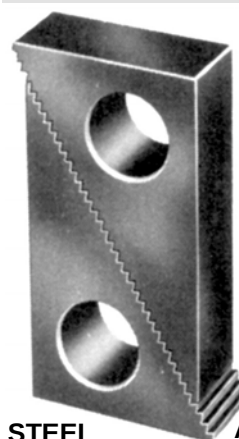


Step Blocks Clamp Straps Sets

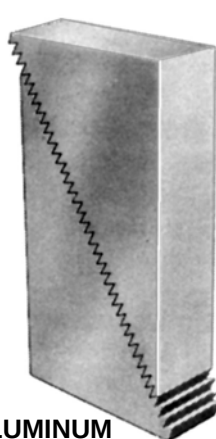
Step Blocks - Clamp Straps Plain/Step - Sets

STEP BLOCKS

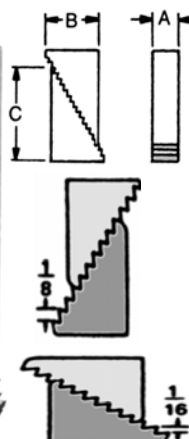
One Step Block is Two Mating Halves.



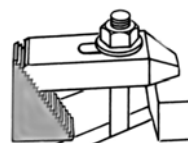
STEEL



ALUMINUM



Add 'A' to Part No.
for Aluminum.



Steel is Heat Treated
Black Oxide

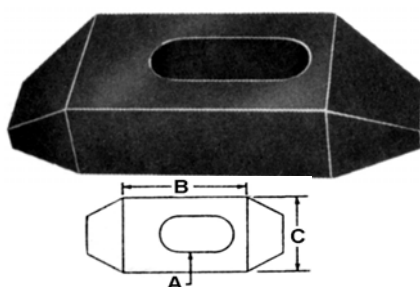
STEEL PART NO.	A WIDTH	B	C	HEIGHT RANGE
UDB-948960	1"	0.681	1.104	3/4 to 1-1/2
UDB-948962	1"	1.068	1.747	1-1/8 to 2-1/2
UDB-948964	1"	2.355	3.890	2-1/2 to 6"
UDB-948966	1-1/2	1.454	2.390	1-3/4 to 3-3/4
UDB-948968	1-1/2	2.355	3.890	2-1/2 to 6"
UDB-948970	1-1/2	3.385	5.064	3-1/2 to 9"
UDB-948972	2"	1.454	2.390	1-3/4 to 3-3/4
UDB-948974	2"	2.355	3.890	2-1/2 to 6"
UDB-948976	2"	3.385	5.064	3-1/2 to 9"

STRAP CLAMPS

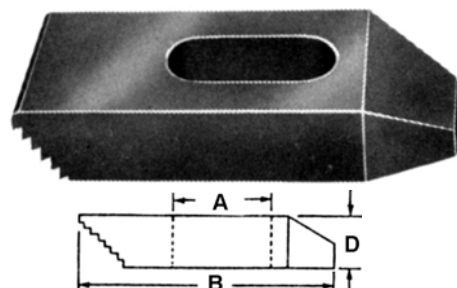
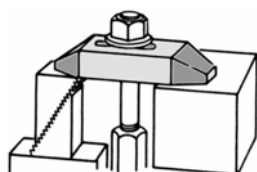
Serrations in Step Clamps match Serrations in Step Blocks.

Versatile — Easy to Use!

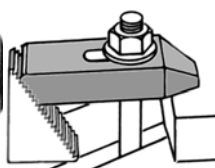
Steel is Heat Treated Black Oxide



PLAIN



STEP



PLAIN PART NO.	STEP PART NO.	A BOLT SIZE	B LENGTH	C WIDE	D THICK
UDB-948930	UDB-948900	5/16 or 3/8	2-1/2	1"	1/2
UDB-948932	UDB-948902	5/16 or 3/8	4"	1"	5/8
UDB-948934	UDB-948904	5/16 or 3/8	6"	1-1/8	3/4
UDB-948936	UDB-948906	1/2	2-1/2	1-1/8	1/2
UDB-948938	UDB-948908	1/2	4"	1-1/4	3/4
UDB-948940	UDB-948910	1/2	6"	1-1/4	7/8
UDB-948942	UDB-948912	5/8	2-1/2	1-1/4	5/8
UDB-948944	UDB-948914	5/8	4"	1-1/2	3/4
UDB-948946	UDB-948916	5/8	6"	1-1/2	7/8
UDB-948948	UDB-948918	3/4	4"	1-1/2	3/4
UDB-948950	UDB-948920	3/4	6"	1-1/2	1"
UDB-948952	UDB-948922	3/4	8"	1-3/4	1-1/8
UDB-948954	UDB-948924	7/8 or 1"	6"	2"	1-1/4
UDB-948956	UDB-948926	7/8 or 1"	8"	2"	1-3/8
UDB-948958	UDB-948928	7/8 or 1"	10"	2"	1-1/2

STEP BLOCK SETS

QUICK SET-UPS! Safe clamping is assured with UNITED STEP BLOCKS.

One Block is Two Mating Halves.



Aluminum or Steel

Steel
Black Oxide

Aluminum
Anodized Gray

STEEL SET NO.	ALUMINUM SET NO.	SET CONTENTS			
		QTY	WIDTH	CAPACITY	BLOCK HT.
UDB-837101	UDB-837101A	4 each:	1" wide	3/4 to 1-1/2	1-1/2
		4 each:	1" wide	1-1/8 to 2-1/2	1-3/4
		2 each:	1" wide	2-1/2 to 6"	3-7/8
UDB-837102	UDB-837102A	2 each:	1-1/2 wide	3/4 to 1-1/2	1-1/2
		2 each:	1-1/2 wide	1-1/8 to 2-1/2	1-3/4
		2 each:	1-1/2 wide	2-1/2 to 6"	3-7/8
UDB-837103	UDB-837103A	2 each:	2" wide	3/4 to 1-1/2	1-1/2
		2 each:	2" wide	1-1/8 to 2-1/2	1-3/4
		2 each:	2" wide	2-1/2 to 6"	3-7/8

Step Blocks and Serrated Clamps

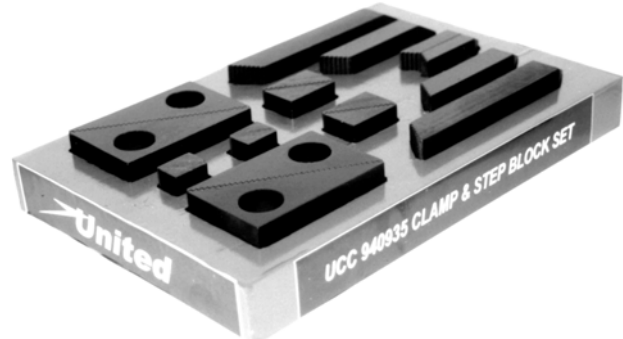
Clamp Block Sets

FOR USE WITH T-SLOT BOLTS, STUDS AND NUTS

ALL STEEL CLAMP BLOCK SETS

One Block consists of two Half Blocks.
Use a single Block with Step Clamps. Use a pair of Blocks with plain Clamps. Serrated Blocks are used in pairs or individually.

Each milling machine requires a Step Block, Serrated Clamp Set and a Complete 53-Piece Set of Studs, T-Nut, Coupling Nut and Flange Nut to perform a wide variety of set ups and production.



Blocks are supports for Strap Clamp Step Block capacities of 3/4" to 9".

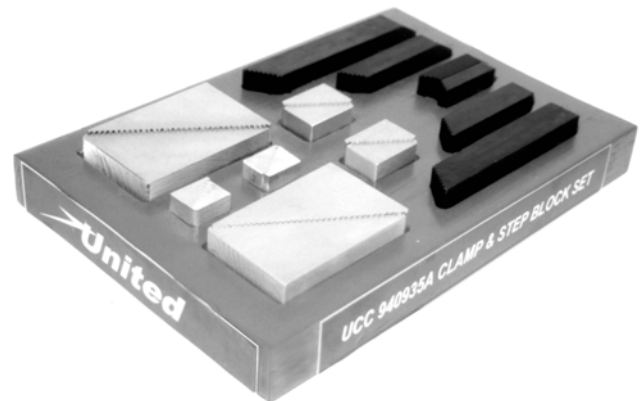
11L17 Steel Carburized — Hardened — Black Oxide Finish

STEEL STEP BLOCKS WITH STEEL CLAMP SETS								
SET PART NO.	BOLT SIZES	STEEL STEP CLAMPS			A SET CONSISTS OF 2 OF EACH.	STEEL STEP BLOCKS		CAPACITY OF FULL BLOCK
STEEL CLAMPS WITH STANDARD 1" WIDE STEEL BLOCKS								
UCC-940930	5/16 or 3/8	UDB-948900	UDB-948902	UDB-948904	UDB-948960	UDB-948962	UDB-948964	3/4 to 6"
UCC-940935	1/2	UDB-948906	UDB-948908	UDB-948910	UDB-948960	UDB-948962	UDB-948964	3/4 to 6"
UCC-940940	5/8	UDB-948912	UDB-948914	UDB-948916	UDB-948960	UDB-948962	UDB-948964	3/4 to 6"
STEEL CLAMPS WITH HEAVY DUTY 1-1/2" WIDE STEEL BLOCKS								
UCC-940945	1/2	UDB-948906	UDB-948908	UDB-948910	UDB-948966A	UDB-948968A	UDB-948970A	1-1/2 to 9"
UCC-940950	5/8	UDB-948912	UDB-948914	UDB-948916	UDB-948966A	UDB-948968A	UDB-948970A	1-1/2 to 9"
UCC-940955	3/4	UDB-948916	UDB-948920	UDB-948922	UDB-948966A	UDB-948968A	UDB-948970A	1-1/2 to 9"
STEEL CLAMPS WITH DOUBLE DUTY 2" WIDE STEEL BLOCKS								
UCC-940960	7/8 or 1"	UDB-948924	UDB-948926	UDB-948928	UDB-948972	UDB-948974	UDB-948976	1-1/2 to 9"

ALUMINUM STEP BLOCKS and STEEL CLAMPS

Designed for use with T-Nut, Studs, T-Slot Bolts Sets

All Serrated Clamps and Step Block serrations must be fully engaged before servicing to prevent damage to work piece, Step Block or Clamp.



Step Block capacities of 3/4" to 9".

Anodized Aluminum Step Blocks

ALUMINUM STEP BLOCKS WITH STEEL CLAMP SETS							
SET PART NO.	BOLT SIZE	STEEL STEP CLAMPS			A SET CONSISTS OF 2 OF EACH.	ALUMINUM STEP BLOCKS	
1" WIDE STEEL CLAMPS WITH STANDARD ALUMINUM BLOCKS							
UCC-940930A	5/16 or 3/8	UDB-948900	UDB-948902	UDB-948904	UDB-948960A	UDB-948962A	UDB-948964A
UCC-940935A	1/2	UDB-948906	UDB-948908	UDB-948910	UDB-948960A	UDB-948962A	UDB-948964A
UCC-940940A	5/8	UDB-948912	UDB-948914	UDB-948916	UDB-948960A	UDB-948962A	UDB-948964A
1-1/2" WIDE STEEL CLAMPS WITH HEAVY DUTY ALUMINUM BLOCKS							
UCC-940945A	1/2	UDB-948906	UDB-948908	UDB-948910	UDB-948966A	UDB-948968A	UDB-948970A
UCC-940950A	5/8	UDB-948912	UDB-948914	UDB-948916	UDB-948966A	UDB-948968A	UDB-948970A
UCC-940955A	3/4	UDB-948918	UDB-948920	UDB-948922	UDB-948966A	UDB-948968A	UDB-948970A

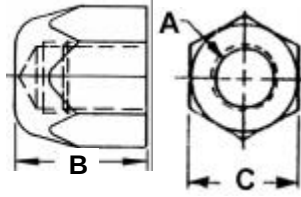
12200 WOODRUFF AVE. • DOWNEY, CA 90241-5608 • TELEPHONE (562) 803-1521 / (800) 421-3466 IN CA / (800) 486-3466 • FAX (562) 803-6898 / (800) 486-3465

**Nuts: Acorn-Coupling-
Lock - Spherical Flange**

UNITED's Nuts! Acorn, Coupling, Lock and Flange Nuts

GET MORE FOR LESS AT UNITED!

ACORN NUTS



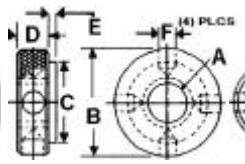
Closed end protects stud threads from damage. Heat treated black oxide finish.

C12L15 STEEL HEAT TREATED WITH BLACK OXIDE FINISH.

See Section G for Stainless.

ACORN NUT	A	B	C
UDB-925000	1/4-20	1/2	1/2
UDB-925005	5/16-18	5/8	9/16
UDB-925010	3/8 16	3/4	11/16
UDB-925015	1/2-13	15/16	7/8
UDB-925020	5/8-11	1-3/16	1-1/16
UDB-925025	3/4 10	1-3/8	1-1/4
UDB-925030	7/8 9	1-7/16	1-7/16

KNURLED LOCK NUTS



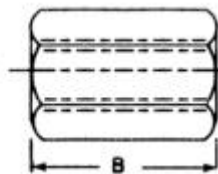
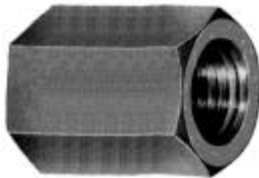
Quick thread locking on jigs and fixtures. 1/4 detents permit additional tightening with 1/4" pin.

See Section G for Stainless.

1018 STEEL HEAT TREATED BLACK OXIDE

STEEL PART NO.	STAINLESS PART NO.	A THD I. D. SIZE	B O. D. DIA	C STEP DIA	D WIDTH	E LIP	F DIA +.005 -.000
UDB-925110	UDB-925110S	1/4 20	1-1/8	1"	7/16	1/16	.250
UDB-925115	UDB-925115S	3/8 16	1-1/8	1"	7/16	1/16	.250
UDB-925120	UDB-925120S	1/2 13	1-1/8	1"	7/16	1/16	.250
UDB-925125	UDB-925125S	5/8 11	1-3/8	1"	7/16	1/16	.250

COUPLING NUTS



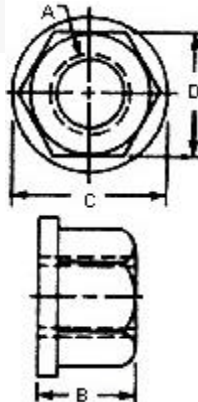
Makes unlimited stud length combinations available. Heat treated black oxide finish.

COUPLING NUT	A	B	C
UDB-925050	3/8 16	1	11/16
UDB-925055	1/2-13	1-1/4	7/8
UDB-925060	5/8-11	1-5/8	1-1/16
UDB-925065	3/4 10	1-7/8	1-1/4
UDB-925070	7/8 9	2-1/4	1-7/16
UDB-925075	1-8	2-1/2	1-5/8

FLANGE NUTS



Large bearing area assures full surface contact. Available in National Coarse and National Fine Threads. See Section G for Stainless.



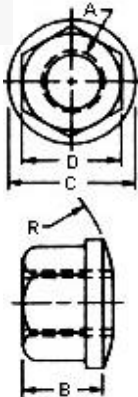
See Section G for Stainless.

COARSE THD FLANGE NUT	A STUD THD	FINE THD FLANGE NUT	A STUD THD	B HT.	C DIA FLANGE	D HEX
UDB-925148	10 24	UDB-925198	1/4-28	5/16	1/2	1/2
UDB-925150	1/4-20	UDB-925200	1/4-28	5/16	5/8	1/2
UDB-925155	5/16-18	UDB-925205	5/16-24	3/8	3/4	9/16
UDB-925160	3/8-16	UDB-925210	3/8-24	1/2	7/8	11/16
UDB-925165	1/2-13	UDB-925215	1/2-20	11/16	1-1/8	7/8
UDB-925170	5/8-11	UDB-925220	5/8-18	13/16	1-3/8	1-1/16
UDB-925175	3/4-10	UDB-925225	3/4-16	1	1-5/8	1-1/4
UDB-925180	7/8-9	UDB-925230	7/8-14	1-1/8	1-3/4	1-7/16
UDB-925185	1-8	UDB-925235	1-14	1-1/4	2	1-5/8
UDB-925190	1-1/8-7	UDB-925240	1-1/8-12	1-3/8	2-1/4	1-13/16
UDB-925195	1-1/4-7	UDB-925245	1-1/4-12	1-3/8	2-1/4	1-13/16

SPHERICAL FLANGE NUTS



Used with Spherical Washers shown in this Section. Spherical Nuts and Washers assure alignment and balanced thread loads.



See Section G for Stainless.

SPHERICAL FLANGE NUT	A	B	C	D	R	Use with SPHERICAL WASHER NO.
UDB-925250	1/4-20	5/16	5/8	1/2	3/4	UDB-926450
UDB-925255	5/16-18	3/8	3/4	9/16	1	UDB-926455
UDB-925260	3/8-16	1/2	7/8	11/16	1-1/4	UDB-926460
UDB-925265	1/2-13	11/16	1-1/8	7/8	1-1/2	UDB-926465
UDB-925270	5/8-11	13/16	1-3/8	1-1/16	1-3/4	UDB-926470
UDB-925275	3/4-10	1	1-5/8	1-1/4	2-1/4	UDB-926475
UDB-925280	7/8-9	1-1/8	1-3/4	1-7/16	2-1/2	UDB-926480
UDB-925285	1-8	1-1/4	2	1-5/8	2-3/4	UDB-926485
UDB-925290	1-1/8-7	1-1/4	2-1/4	1-13/16	3	UDB-926490
UDB-925295	1-1/4-7	1-1/4	2-5/8	2	3	UDB-926495

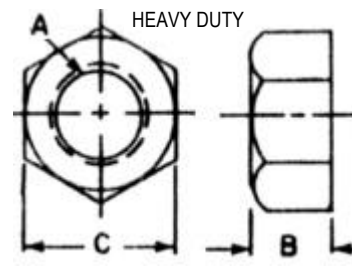
UNITED's Nuts! Hex, Jam, Check and Swivel Flange Nuts

GET MORE FOR LESS AT UNITED!

Nuts: Hex—Hex Jam
Check—Swivel Flange

HEX NUT	A	B	C
UDB-925350	1/4-20	1/4	1/2
UDB-925355	5/16-18	5/16	9/16
UDB-925360	3/8-16	3/8	11/16
UDB-925365	1/2-13	1/2	7/8
UDB-925370	5/8-11	5/8	1-1/16
UDB-925375	3/4-10	3/4	1-1/4
UDB-925380	7/8-9	7/8	1-7/16
UDB-925385	1-8	1	1-5/8

Outlasts competitive standard nuts! Precision machined and heat treated.

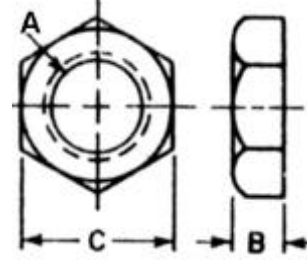


HEX NUTS



HEX JAM NUT	A	B	C
UDB-925400	1/4-20	11/64	1/2
UDB-925405	5/16-18	13/64	9/16
UDB-925410	3/8-16	15/64	11/16
UDB-925415	1/2-13	19/64	7/8
UDB-925420	5/8-11	23/64	1-1/16
UDB-925425	3/4-10	27/64	1-1/4
UDB-925430	7/8-9	31/64	1-7/16
UDB-925435	1-8	35/64	1-5/8

Used as lock nuts and in other light duty applications. Heat treated black oxide finish.

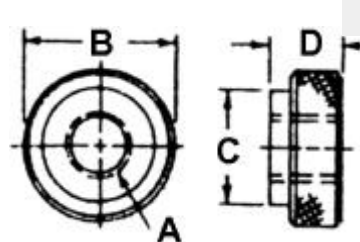


HEX JAM NUTS



ALLOY STEEL	Provided with all Torque Toggle Head Screws.			
CHECK NUT	A THD	B DIA.	C DIA.	D
UDB-955100	#10-32	3/4	7/16	3/16
UDB-955103	#10-24	3/4	7/16	3/16
UDB-955105	1/4-20	3/4	1/2	7/32
UDB-955110	5/16-18	3/4	1/2	1/4
UDB-955115	3/8-16	1	3/4	7/16
UDB-955120	1/2-13	1	3/4	7/16
UDB-955125	5/8-11	1-1/16	13/16	1/2

BLACK OXIDE FINISH
Used in essential tool room applications. Provided with toggle head screws. Black oxide finish. A wide variety of applications.



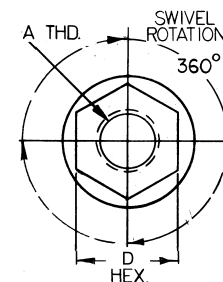
CHECK NUTS



The large bearing area of UNITED Flange Nuts insures full surface contact. Available with National Coarse or National Fine threads. Swivel Nuts do not mar surface.

SWIVEL FLANGE NUTS

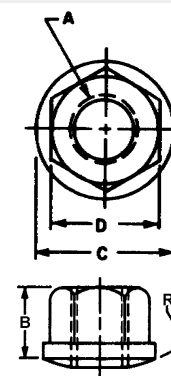
COARSE THD UNITED NO.	A	FINE THD UNITED NO.	A	B	C	D	E
UDB-925150SN	1/4-20	UDB-925200SN	1/4-28	5/16	5/8	1/2	.12
UDB-925155SN	5/16-18	UDB-925205SN	5/16-24	3/8	3/4	9/16	.12
UDB-925160SN	3/8-16	UDB-925210SN	3/8-24	1/2	7/8	11/16	.15
UDB-925165SN	1/2-13	UDB-925215SN	1/2-20	11/16	1-1/8	7/8	.20
UDB-925170SN	5/8-11	UDB-925220SN	5/8-18	13/16	1-3/8	1-1/16	.20
UDB-925175SN	3/4-10	UDB-925225SN	3/4-16	1	1-5/8	1-1/4	.28
UDB-925180SN	7/8-9	UDB-925230SN	7/8-14	1-1/8	1-3/4	1-7/16	.28
UDB-925185SN	1-8	UDB-925235SN	1-14	1-1/4	2	1-5/8	.28
UDB-925190SN	1-1/8-7	UDB-925240SN	1-1/8-12	1-3/8	2-1/4	1-13/16	.28
UDB-925195SN	1-1/4-7	UDB-925245SN	1-1/4-12	1-3/8	2-1/4	1-13/16	.28



Spherical Nuts are used with the spherical washers shown in Sections F and G. UNITED's Spherical Nut and Washer Sets assure alignment and balanced thread loads.

STANDARD SPHERICAL FLANGE NUT and SPHERICAL WASHER SETS

SPHERICAL FLANGE NUT UNITED NO.	Use with SPHERICAL WASHER NO.	A	B	C	D	R	Set Spherical Flange Nuts & Washers
UDB-925250	UDB-926450	1/4-20	5/16	5/8	1/2	3/4	UDB-925550
UDB-925255	UDB-926455	5/16-18	3/8	3/4	9/16	1	UDB-925555
UDB-925260	UDB-926460	3/8-16	1/2	7/8	11/16	1-1/4	UDB-925560
UDB-925265	UDB-926465	1/2-13	11/16	1-1/8	7/8	1-1/2	UDB-925565
UDB-925270	UDB-926470	5/8-11	13/16	1-3/8	1-1/16	1-3/4	UDB-925570
UDB-925275	UDB-926475	3/4-10	1	1-5/8	1-1/4	2-1/4	UDB-925575
UDB-925280	UDB-926480	7/8-9	1-1/8	1-3/4	1-7/16	2-1/2	UDB-925580
UDB-925285	UDB-926485	1-8	1-1/4	2	1-5/8	2-3/4	UDB-925585
UDB-925290	UDB-926490	1-1/8-7	1-1/4	2-1/4	1-13/16	3	UDB-925590
UDB-925295	UDB-926495	1-1/4-7	1-1/4	2-5/8	2	3	UDB-925595



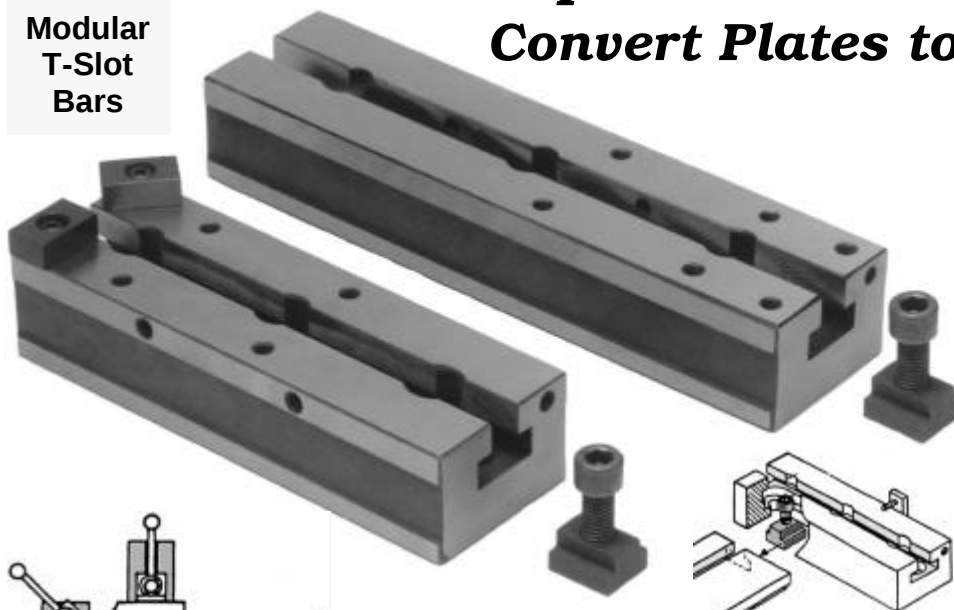
Black Oxide Case Hardened

Modular T-Slot Bars

Modular T-Slot Bars

Expand, Relocate, Change, Reposition Your T-Slot Tables or Convert Plates to T-Slot Modules

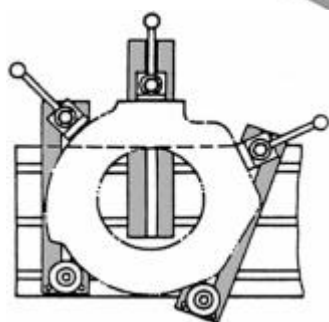
Modular T-Slot Bars



T-Slot Bars provide maximum positions for your table slots.

Double deck your table, grid plates or Tombstone fixtures.

Strong modular design allows use as tooling construction elements.



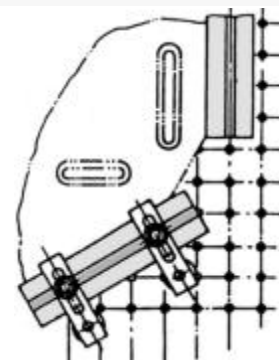
- ☆ Protect table surfaces
- ☆ Position clamps at an angle to table
- ☆ Extend machine table

Set-Ups are quick and simple!

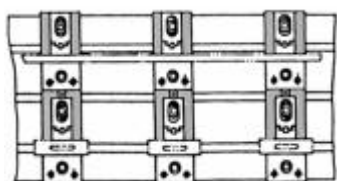
UNITED T-Slot Bars can be used vertically and on all T-Slot tables.

Position clamps and workpiece on or beyond the machine table.

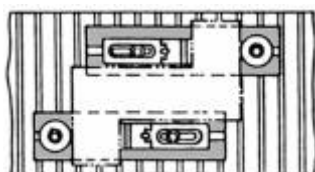
Bars are precisely ground to ± 0.0005 " so they may be used as parallels.



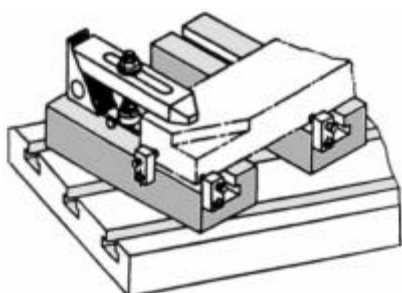
- ☆ Use as work stops
- ☆ Add T-Slot to grid plate
- ☆ Extend machining flexibility



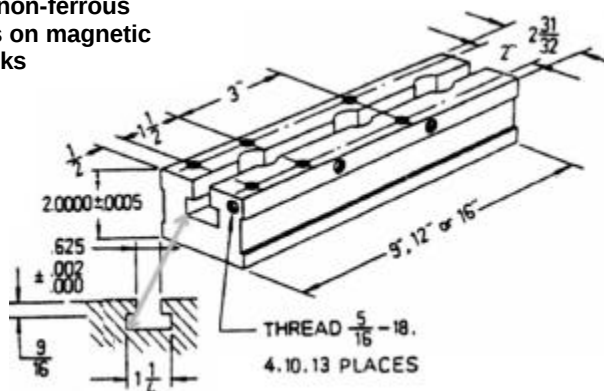
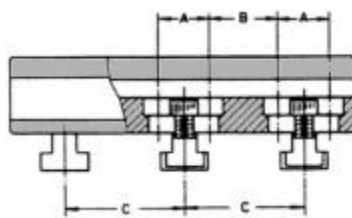
- ☆ Allows large or long work
- ☆ Holds multiple parts



- ☆ Holds non-ferrous parts on magnetic chucks



- ☆ Workpiece positioned at angle
- ☆ Clamps positioned anywhere
- ☆ Locate work piece with stops



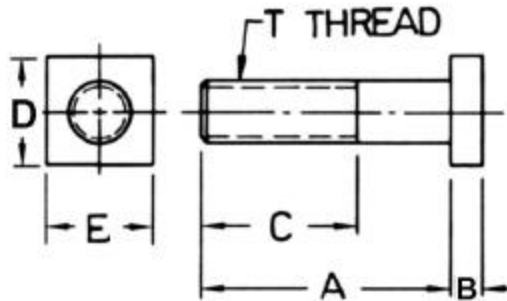
UNITED PART NO.	LENGTH	A	B	C FIT T-SLOT SPACING	THD HOLES 5/16-18	HOLES ON TOP	HOLES ON SIDE	HOLES ON END
UDB-501090	9"	1-3/8	1-3/4	1-3/4 to 4-1/2	10 HOLES	6	2	2
UDB-501100	9"	1-3/8	1-3/4	1-3/4 to 4-1/2	4 HOLES		2	2
UDB-501120	12"	2-1/8	1-7/8	1-7/8 to 6-1/8	10 HOLES	6	2	2
UDB-501130	12"	2-1/8	1-7/8	1-7/8 to 6-1/8	4 HOLES		2	2
UDB-501160	16"	2-1/8	1-7/8	1-7/8 to 6-1/8	13 HOLES	8	2	3

National ACME Automatic Tooling

ACME – GRIDLEY
TOOLING

CROSS-SLIDE & TOOL-SLIDE T – BOLTS

HEAT TREATED HIGH GRADE ALLOY STEEL of 130,000 PSI MINIMUM YIELD STRENGTH, and 150,000 PSI MINIMUM TENSILE STRENGTH. CONFORMS TO VIC SPECIFICATIONS. BLACK OXIDE FINISH.

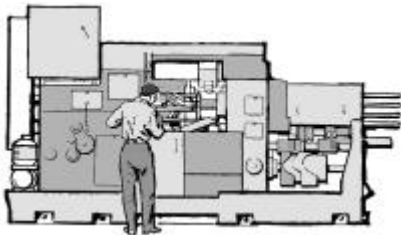


FOR HIGH CLAMPING STRENGTH

FOR MATING T-SLOT NUTS, SEE PAGE F36.

UNITED PART NO.	ACME PART NO.	T THD	A LEN	B HEAD	C THD LEN	D HT.	E TABLE SLOT	TOOL SLIDE	MACHINE SIZE
UDB-941621		3/8- 16	1"	15/64	13/16	3/4	3/4	FLAT/ANGULAR	9/16-1-1/4 RA-6
UDB-941622		3/8- 16	1-1/2	15/64	1-5/16	3/4	3/4	FLAT/ANGULAR	9/16-1-1/4 RA-6
UDB-941623	14707	7/16 14	23/32	15/64	1/2	3/4	3/4	ANGULAR	9/16 1 RA-6
UDB-941628	14745	7/16 14	7/8	7/32	1/2	5/8	3/4	FLAT	9/16 1 RA-6
UDB-941630		7/16 14	1-1/2	15/64	1-5/16	3/4	3/4	FLAT/ANGULAR	9/16-1-1/4 RA-6
UDB-941634	A-1058	3/8 16	1-1/16	3/16	11/16	5/8	5/8	FLAT	3/4 RA-8
UDB-941636	1129	7/16 14	31/32	11/32	1/2	7/8	7/8	ANGULAR	1-1/4 1 RA-6
UDB-941637	14727	7/16 14	1-3/16	19/64	3/4	3/4	3/4	FLAT	1-1/4 1 RA-6
UDB-941638	4866	7/16 14	1-5/16	11/32	3/4	7/8	7/8	FLAT	1-5/8 2 RB-6, RB-8 2-5/8 RB-6

EYE BOLTS FOR NATIONAL ACME MACHINES

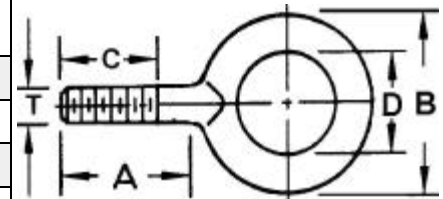


DO NOT GRIND OR MACHINE
OR UNDERCUT EYEBOLT
SPINDLE.

IF DAMAGED, REPLACE
EYEBOLT IMMEDIATELY.



UNITED PART NO.	ACME PART NO.	T THD	A LEN	B OD EYE	C THD	D EYE	TOOL SLIDE	MACHINE SIZE
UDB-702040	1646	1/4 20	3/4	1/2	3/4	1/4	FLAT	7/16 RA-6
UDB-702042	1938	7/16 20	1-7/8	5/8	3/4	3/8	FLAT	3/4 RA-8
UDB-702044	1938	7/16 20	1-7/8	5/8	3/4	3/8	FLAT	9/16 1 RA-6
UDB-702046	1946	7/16 20	1-11/16	5/8	3/4	3/8	ANGULAR	9/16 1 RA-6
UDB-702048	1945	1/2 20	2-5/8	11 16	7/8	3/8	FLAT & ANGULAR	1-1/4 RB-6 1-1/4 RB-8 1-5/8 RBN-8
UDB-702050	1947	1/2 20	3-3/16	11 16	7/8	3/8	FLAT	1-5/8 2 RB-6, RB-8
UDB-702052	A-44781	1/2 20	3-3/16	11 16	7/8	3/8	FLAT	2-5/8 RB-6
UDB-702054	1949	5/8 20	4	1	1-1/4	1/2	FLAT	3-1/2 RB-6



QUALITY STEEL

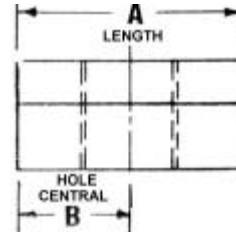
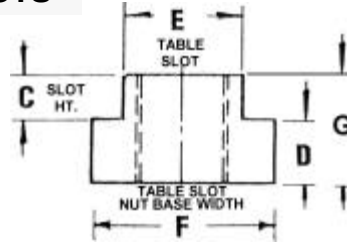
DROP FORGED

HEAT TREATED FOR
MAXIMUM STRENGTH

ACME TOOLING

National ACME Slide Slot T Nuts

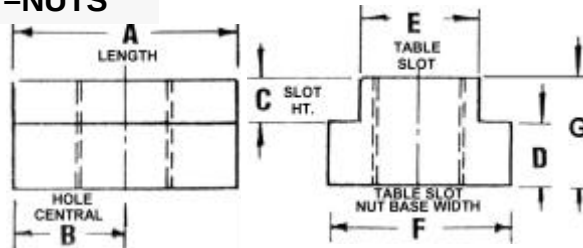
ACME CROSS SLIDE T-NUTS



BLACK OXIDE FINISH
HEAT TREATED
CASE HARDENED
1018 MATERIAL

UNITED PART NO.	ACME PART NO.	T DIA THD	A LEN	B HOLE CENTRAL	C T-TABLE SLOT HT.	D SHOULDER HEIGHT	E TABLE SLOT	F WIDTH	G NUT HEIGHT	MACHINE SIZE
UDB-957030	52202	7/16 14	1-1/4	5/8	5/32	7/32	1/2	3/4	3/8	9/16 1 RA-6
UDB-957031		3/8 16	7/8	7/16	1/2	7/32	1/2	3/4	3/8	9/16 1 1-1/4 RA-6
UDB-957032	52203	3/8 16	1-1/4	5/8	1/8	7/32	1/2	3/4	11/32	9/16 1 RA-6
UDB-957034	51870	1/2 13	1-1/4	5/8	1/4	3/8	19/32	15/16	5/8	1-1/4 1 RA-6
UDB-957036	52206	5/8 11	1-1/4	5/8	5/16	7/16	23/32	1-1/4	3/4	1-5/8 2 RB-6
UDB-957038	14805	3/8 16	1	1/2	1/8	5/16	1/2	7/8	7/16	1-5/8 2 RB-6
UDB-957040	14799	3/8 16	1	1/2	7/32	7/32	15/32	3/4	7/16	2-5/8 3-1/2 RB-6
UDB-957042	14802	3/8 16	1	1/2	7/32	7/32	17/32	3/4	7/16	2-5/8 3-1/2 RB-6
UDB-957044	14801	7/16 14	1	1/2	7/32	7/32	17/32	3/4	7/32	2-5/8 3-1/2 RB-6
UDB-957046	52212	5/16 18	1	1/2	1/4	3/16	27/64	11/16	7/16	2-5/8 3-1/2 RB-6
UDB-957048	14803	1/2 13	1-1/4	5/8	1/4	11/32	1/2	13/16	15/32	2-5/8 3-1/2 RB-6

ACME TOOL SLIDE T-NUTS



BLACK OXIDE FINISH HEAT TREATED
CASE HARDENED 1018 MATERIAL



UNITED PART NO.	ACME PART NO.	T DIA THD	A LEN	B HOLE	C T-TABLE	D SHOULDER	E TABLE	F WIDTH	G NUT	MACHINE
UDB-957060	A-1050	1/4 20	5/8	5/16	1/4	1/8	0.277	0.387	3/8	7/16 RA-6
UDB-957061		3/8 16	7/8	7/16	1/4	1/4	1/2	3/4	1/2	9/16 1- 1-1/4 RA-6
UDB-957062	52210	3/8 16	1	1/2	9/64	15/64	27/64	21/32	3/8	3/4 RA-8
UDB-957064	A-1116	5/16 18	1	1/2	1/4	3/16	27/64	5/8	7/16	9/16 1 RA-6
UDB-957066	FLAT T.S. 5021	3/8 16	1	1/2	5/32	3/16	1/2	5/8	11/32	9/16 1 RA-6
UDB-957067		7/16 14	7/8	7/16	1/8	7/32	1/2	3/4	3/8	9/16 1 - 1-1/4 RA-8
UDB-957068	ANG. T.S. 52202	7/16 14	1-1/4	5/8	5/32	7/32	1/2	3/4	3/8	1-1/4 RB-6, 1-1/4 RB-8
UDB-957070	FLAT T.S. 14798	7/16 14	1	1/2	1/8	5/16	9/16	3/4	3/8	1-1/4 RB-6, 1-1/4 RB-8
UDB-957072	ANG. T.S. 14811	7/16 14	7/8	CENTRAL	7/32	11/32	11/32	7/8	9/16	1-1/4 RB-6, 1-1/4 RB-8
UDB-957074	14811	7/16 14	7/8	CENTRAL	7/32	11/32	11/32	7/8	9/16	1-5/8 2 RB-6, RB-8, 2-5/8 RB-6, RB8
UDB-957076	5026D	1/2 13	1-1/4	5/8	5/16	5/16	5/8	1	5/8	3-1/2 RB-6, RB-8, 4 RB-6, RB-8, 5-1/8, 5-1/2, 4-3/4, 5 RB-4, 6 RB-6