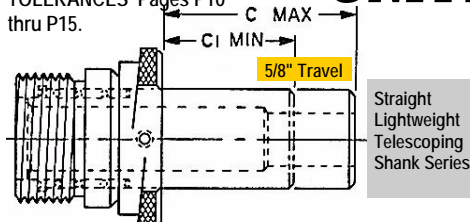


See complete DIMENSIONAL TOLERANCES Pages P10 thru P15.

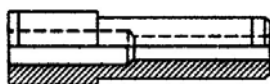
# UNITED'S Helical Nurlock Telescoping



Straight Lightweight Telescoping Shank Series

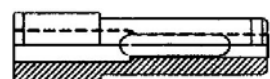
Lighter than the 51000-55000 and 61000-65000 Series. The 91000-95000 Series FITS ALL STANDARD LOCK LINERS and is interchangeable with the 21000-25000 Series.

TOLERANCE ON 'A' DIMENSION	
UP TO 1/4	+0.001 TO +0.0004
OVER 1/4 TO 3/4	+0.001 TO +0.0005
OVER 3/4 TO 1-1/2	+0.002 TO +0.0006
TOLERANCE ON 'B' DIM.	
	-0.002 TO -0.0005



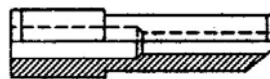
UDB-92531-3/16  
OMIT 'A'

**EXTENDED RANGE SHANK ONLY** —FOR SHANK ONLY, OMIT PREFIX A. Example: UDB-92531



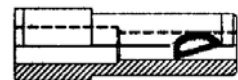
UDB-A-92531CS-3/16  
ADD 'CS'

**CHIP SLOT** —SPECIFY A CHIP SLOT ON LONGER SHANKS, ADD SUFFIX CS. Ex: UDB-A-92531CS-3/16



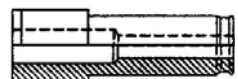
UDB-CTA-92531-3/16  
PREFIX 'CT'

**CONTOUR SURFACES** —FOR CONTOUR SURFACES, USE OUR ANGULAR NOSE SHANK. ADD PREFIX CT. Example: UDB-CTA-92531-3/16



UDB-A-92531CC-3/16  
ADD 'CC'

**CHIP CUTTER** —TO SPECIFY UNITED'S NEW PATENTED CHIP CUTTER, ADD SUFFIX CC TO PART NO. Example: UDB-A-92531CC-3/16



UDB-A-92531EZ-3/16  
ADD 'EZ'

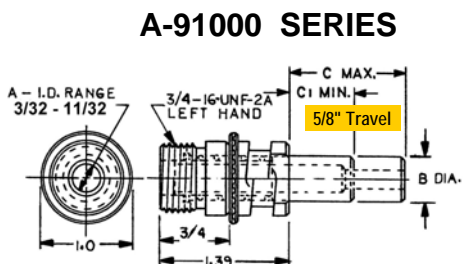
**EASE IN RADIUS** —TO SPECIFY UNITED'S NEW O.D. EASE IN RADIUS, ADD SUFFIX EZ TO PART NO. Example: UDB-A-92531EZ-3/16



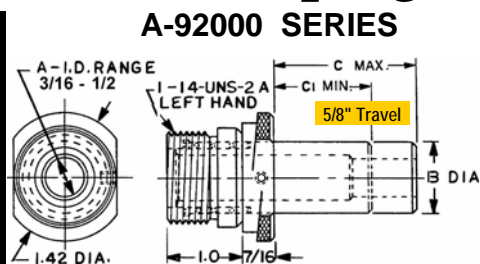
UDB-AU-92531-3/16  
Insert 'U' for **ULTRA III**  
UDB-AC-92531-3/16  
Insert 'C' for **CARBIDE**

**LONG WEARING INSERTS** —TO ORDER LONG WEARING INSERTS FOR FIVE TIMES WEAR, SPECIFY PREFIX AU FOR ULTRA III MATERIAL. FOR TEN TIMES WEAR, SPECIFY PREFIX AC FOR CARBIDE.

## LOCKING ACCESSORIES — In this Section



**SAME LOCK-THREAD AS 21000**  
Available in STANDARD or ULTRA III

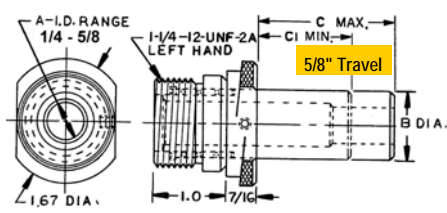


**SAME LOCK-THREAD AS 22000**  
Available in STANDARD or ULTRA III

	A-91000 SERIES					A-92000 SERIES				
	(DRILL) A MAX	1/4	5/16	11/32	9/32	11/32	13/32	15/32	1/2	
	A MIN	3/32	3/32	3/32	3/16	3/16	3/16	3/16	3/16	
	(SHANK OD) B	3/8	7/16	1/2	7/16	1/2	9/16	5/8	3/4	
T	C FLUSH TO	1/2	A-91102	A-91202	A-91302	A-92102	A-92202	A-92302	A-92402	A-92502
E	0	5/8	A-91103	A-91203	A-91303	A-92103	A-92203	A-92303	A-92403	A-92503
L	1/8	3/4	A-91104	A-91204	A-91304	A-92104	A-92204	A-92304	A-92404	A-92504
E	1/4	7/8	A-91105	A-91205	A-91305	A-92105	A-92205	A-92305	A-92405	A-92505
S	3/8	1"	A-91106	A-91206	A-91306	A-92106	A-92206	A-92306	A-92406	A-92506
C	7/16	1-1/16	A-91107	A-91207	A-91307	A-92107	A-92207	A-92307	A-92407	A-92507
O	1/2	1-1/8	A-91108	A-91208	A-91308	A-92108	A-92208	A-92308	A-92408	A-92508
P	9/16	1-3/16	A-91109	A-91209	A-91309	A-92109	A-92209	A-92309	A-92409	A-92509
I	5/8	1-1/4	A-91110	A-91210	A-91310	A-92110	A-92210	A-92310	A-92410	A-92510
N	3/4	1-3/8	A-91111	A-91211	A-91311	A-92111	A-92211	A-92311	A-92411	A-92511
G	13/16	1-7/16	A-91112	A-91212	A-91312	A-92112	A-92212	A-92312	A-92412	A-92512
L	7/8	1-1/2	A-91113	A-91213	A-91313	A-92113	A-92213	A-92313	A-92413	A-92513
E	1"	1-5/8	A-91114	A-91214	A-91314	A-92114	A-92214	A-92314	A-92414	A-92514
N	1-1/8	1-3/4	A-91115	A-91215	A-91315	A-92115	A-92215	A-92315	A-92415	A-92515
G	1-1/4	1-7/8	A-91116	A-91216	A-91316	A-92116	A-92216	A-92316	A-92416	A-92516
T	1-5/16	1-15/16	A-91117	A-91217	A-91317	A-92117	A-92217	A-92317	A-92417	A-92517
H	1-3/8	2"	A-91118	A-91218	A-91318	A-92118	A-92218	A-92318	A-92418	A-92518
R	1-1/2	2-1/8	A-91119	A-91219	A-91319	A-92119	A-92219	A-92319	A-92419	A-92519
A	1-5/8	2-1/4	A-91120	A-91220	A-91320	A-92120	A-92220	A-92320	A-92420	A-92520
N	1-3/4	2-3/8	A-91121	A-91221	A-91321	A-92121	A-92221	A-92321	A-92421	A-92521
G	1-7/8	2-1/2	A-91122	A-91222	A-91322	A-92122	A-92222	A-92322	A-92422	A-92522
E	2"	2-5/8	A-91123	A-91223	A-91323	A-92123	A-92223	A-92323	A-92423	A-92523
C	2-1/8	2-3/4	A-91124	A-91224	A-91324	A-92124	A-92224	A-92324	A-92424	A-92524
'F	2-3/8	3"	A-91125	A-91225	A-91325	A-92125	A-92225	A-92325	A-92425	A-92525
R	2-5/8	3-1/4	A-91126	A-91226	A-91326	A-92126	A-92226	A-92326	A-92426	A-92526
O	2-7/8	3-1/2	A-91127	A-91227	A-91327	A-92127	A-92227	A-92327	A-92427	A-92527
M	3-1/8	3-3/4	A-91128	A-91228	A-91328	A-92128	A-92228	A-92328	A-92428	A-92528
—	3-3/8	4"	A-91129	A-91229	A-91329	A-92129	A-92229	A-92329	A-92429	A-92529
T	3-5/8	4-1/4	A-91129A	A-91229A	A-91329A	A-92129A	A-92229A	A-92329A	A-92429A	A-92529A
O	3-7/8	4-1/2	A-91129B	A-91229B	A-91329B	A-92129B	A-92229B	A-92329B	A-92429B	A-92529B
'R	4-1/8	4-3/4	A-91129C	A-91229C	A-91329C	A-92129C	A-92229C	A-92329C	A-92429C	A-92529C
M	4-3/8	5"	A-91130	A-91230	A-91330	A-92130	A-92230	A-92330	A-92430	A-92530
—	4-5/8	5-1/4	A-91130A	A-91230A	A-91330A	A-92130A	A-92230A	A-92330A	A-92430A	A-92530A
T	4-7/8	5-1/2	A-91130B	A-91230B	A-91330B	A-92130B	A-92230B	A-92330B	A-92430B	A-92530B
O	5-1/8	5-3/4	A-91130C	A-91230C	A-91330C	A-92130C	A-92230C	A-92330C	A-92430C	A-92530C
	5-3/8	6"	A-91131	A-91231	A-91331	A-92131	A-92231	A-92331	A-92431	A-92531
	<b>COLLAR A-91000</b> ADD I.D. SIZE TO LINERS					<b>COLLAR A-92000</b> ADD I.D. SIZE TO LINERS				
	LINER I.D.	3/8	7/16	1/2	7/16	1/2	9/16	5/8	3/4	
	HELICAL NURLOCK LINERS	HNL-213212	HNL-214808	HNL-214808	HNL-224808	HNL-224808	HNL-225210	HNL-225610	HNL-226410	
	HELICAL NURLOCK LINERS	HNL-1-213212	HNL-1-214808	HNL-1-214808	HNL-1-224808	HNL-1-224808	HNL-1-225210	HNL-1-225610	HNL-1-226410	
	STD NURLOCK LINERS	NL-16520		NL-16521	<b>We Recommend HNL and HNL-1</b>				NL-16522	
	STD NURLOCK LINERS	NLP-375		NLP-500					NLP-750	
	LOCK LINERS FOR METAL	LL-21100	LL-21200	LL-21300					LL-22400	
	LOCK LINERS FOR PLASTIC	NL-21100	NL-21200	NL-21300	NL-22100	NL-22200	NL-22300	NL-22400		
	LOCK RINGS	UDB-521449	UDB-521450A	UDB-521450A	UDB-521451	UDB-521451	UDB-521451A	UDB-521451	UDB-521452	
	HELICAL NURLOCK LINERS	HNL-1-213212	HNL-1-214808	HNL-1-214808	HNL-1-224808	HNL-1-224808	HNL-1-225210	HNL-1-225610	HNL-1-226410	
	HELICAL NURLOCK LINERS	HNL-1-213212	HNL-1-214808	HNL-1-214808	HNL-1-224808	HNL-1-224808	HNL-1-225210	HNL-1-225610	HNL-1-226410	
	TAPEDED NURLOCK CLAMPS	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	
	LINER BUSHINGS	19936	19937	19938	19937	19938	19939	19940	19941	
	LOCK SCREWS	16531	16531	16531	16532	16532	16532	16532	16532	

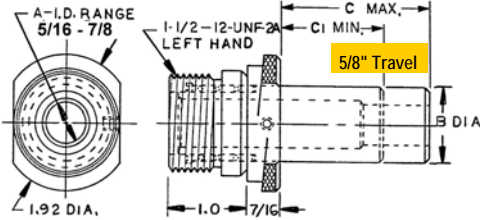
# Shanks — Standard Light Weight Series

## A-93000 SERIES



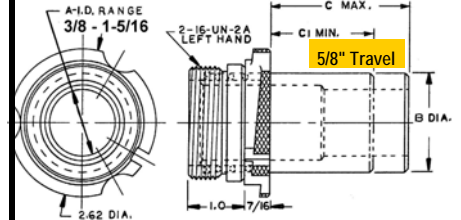
B' O.D. 5/8 is NEW Part No. **SAME LOCK-THREAD AS 23000** Available in STANDARD or ULTRA III

## A-94000 SERIES



**SAME LOCK-THREAD AS 24000** Available in STANDARD or ULTRA III

## A-95000 SERIES



**SAME LOCK-THREAD AS 25000** Available in STANDARD or ULTRA III

A-93000						A-94000						A-95000					COLLAR A-93000 ADD I. D. SIZE TO LINERS	COLLAR A-94000 ADD I. D. SIZE TO LINERS	COLLAR A-95000 ADD I. D. SIZE TO LINERS	C LEN ABOVE IS FROM TO MIN MAX	
15/32	17/32	19/32	21/32	23/32	25/32	15/32	17/32	19/32	21/32	25/32	27/32	7/8	1-1/32	1-5/32	1-9/32	1-5/16					(DRILL) A MAX
1/4	1/4	1/4	1/4	1/4	1/4	5/16	5/16	13/16	5/16	5/16	5/16	5/16	3/8	3/8	3/8	3/8					A MIN
5/8	3/4	13/16	7/8	1"	1-1/8	5/8	3/4	13/16	7/8	1"	1-1/8	1-1/4	1-1/4	1-3/8	1-1/2	1-3/4	(SHANK OD) B				
A-93002	A-93102	A-93202	A-93302	A-93402	A-93502	A-94102	A-94302	A-94202	A-94402	A-94502	A-94602	A-94702	A-95102	A-95202	A-95302	A-95402	C FLUSH TO 1/2				
A-93003	A-93103	A-93203	A-93303	A-93403	A-93503	A-94103	A-94303	A-94203	A-94403	A-94503	A-94603	A-94703	A-95103	A-95203	A-95303	A-95403	0 5/8				
A-93004	A-93104	A-93204	A-93304	A-93404	A-93504	A-94104	A-94304	A-94204	A-94404	A-94504	A-94604	A-94704	A-95104	A-95204	A-95304	A-95404	1/8 3/4				
A-93005	A-93105	A-93205	A-93305	A-93405	A-93505	A-94105	A-94305	A-94205	A-94405	A-94505	A-94605	A-94705	A-95105	A-95205	A-95305	A-95405	1/4 7/8				
A-93006	A-93106	A-93206	A-93306	A-93406	A-93506	A-94106	A-94306	A-94206	A-94406	A-94506	A-94606	A-94706	A-95106	A-95206	A-95306	A-95406	3/8 1"				
A-93007	A-93107	A-93207	A-93307	A-93407	A-93507	A-94107	A-94307	A-94207	A-94407	A-94507	A-94607	A-94707	A-95107	A-95207	A-95307	A-95407	7/16 1-1/16				
A-93008	A-93108	A-93208	A-93308	A-93408	A-93508	A-94108	A-94308	A-94208	A-94408	A-94508	A-94608	A-94708	A-95108	A-95208	A-95308	A-95408	1/2 1-1/8				
A-93009	A-93109	A-93209	A-93309	A-93409	A-93509	A-94109	A-94309	A-94209	A-94409	A-94509	A-94609	A-94709	A-95109	A-95209	A-95309	A-95409	9/16 1-3/16				
A-93010	A-93110	A-93210	A-93310	A-93410	A-93510	A-94110	A-94310	A-94210	A-94410	A-94510	A-94610	A-94710	A-95110	A-95210	A-95310	A-95410	5/8 1-1/4				
A-93011	A-93111	A-93211	A-93311	A-93411	A-93511	A-94111	A-94311	A-94211	A-94411	A-94511	A-94611	A-94711	A-95111	A-95211	A-95311	A-95411	3/4 1-3/8				
A-93012	A-93112	A-93212	A-93312	A-93412	A-93512	A-94112	A-94312	A-94212	A-94412	A-94512	A-94612	A-94712	A-95112	A-95212	A-95312	A-95412	13/16 1-7/16				
A-93013	A-93113	A-93213	A-93313	A-93413	A-93513	A-94113	A-94313	A-94213	A-94413	A-94513	A-94613	A-94713	A-95113	A-95213	A-95313	A-95413	7/8 1-1/2				
A-93014	A-93114	A-93214	A-93314	A-93414	A-93514	A-94114	A-94314	A-94214	A-94414	A-94514	A-94614	A-94714	A-95114	A-95214	A-95314	A-95414	1" 1-5/8				
A-93015	A-93115	A-93215	A-93315	A-93415	A-93515	A-94115	A-94315	A-94215	A-94415	A-94515	A-94615	A-94715	A-95115	A-95215	A-95315	A-95415	1-1/8 1-3/4				
A-93016	A-93116	A-93216	A-93316	A-93416	A-93516	A-94116	A-94316	A-94216	A-94416	A-94516	A-94616	A-94716	A-95116	A-95216	A-95316	A-95416	1-1/4 1-7/8				
A-93017	A-93117	A-93217	A-93317	A-93417	A-93517	A-94117	A-94317	A-94217	A-94417	A-94517	A-94617	A-94717	A-95117	A-95217	A-95317	A-95417	1-5/16 1-15/16				
A-93018	A-93118	A-93218	A-93318	A-93418	A-93518	A-94118	A-94318	A-94218	A-94418	A-94518	A-94618	A-94718	A-95118	A-95218	A-95318	A-95418	1-3/8 2"				
A-93019	A-93119	A-93219	A-93319	A-93419	A-93519	A-94119	A-94319	A-94219	A-94419	A-94519	A-94619	A-94719	A-95119	A-95219	A-95319	A-95419	1-1/2 2-1/8				
A-93020	A-93120	A-93220	A-93320	A-93420	A-93520	A-94120	A-94320	A-94220	A-94420	A-94520	A-94620	A-94720	A-95120	A-95220	A-95320	A-95420	1-5/8 2-1/4				
A-93021	A-93121	A-93221	A-93321	A-93421	A-93521	A-94121	A-94321	A-94221	A-94421	A-94521	A-94621	A-94721	A-95121	A-95221	A-95321	A-95421	1-3/4 2-3/8				
A-93022	A-93122	A-93222	A-93322	A-93422	A-93522	A-94122	A-94322	A-94222	A-94422	A-94522	A-94622	A-94722	A-95122	A-95222	A-95322	A-95422	1-7/8 2-1/2				
A-93023	A-93123	A-93223	A-93323	A-93423	A-93523	A-94123	A-94323	A-94223	A-94423	A-94523	A-94623	A-94723	A-95123	A-95223	A-95323	A-95423	2" 2-5/8				
A-93024	A-93124	A-93224	A-93324	A-93424	A-93524	A-94124	A-94324	A-94224	A-94424	A-94524	A-94624	A-94724	A-95124	A-95224	A-95324	A-95424	2-1/8 2-3/4				
A-93025	A-93125	A-93225	A-93325	A-93425	A-93525	A-94125	A-94325	A-94225	A-94425	A-94525	A-94625	A-94725	A-95125	A-95225	A-95325	A-95425	2-3/8 3"				
A-93026	A-93126	A-93226	A-93326	A-93426	A-93526	A-94126	A-94326	A-94226	A-94426	A-94526	A-94626	A-94726	A-95126	A-95226	A-95326	A-95426	2-5/8 3-1/4				
A-93027	A-93127	A-93227	A-93327	A-93427	A-93527	A-94127	A-94327	A-94227	A-94427	A-94527	A-94627	A-94727	A-95127	A-95227	A-95327	A-95427	2-7/8 3-1/2				
A-93028	A-93128	A-93228	A-93328	A-93428	A-93528	A-94128	A-94328	A-94228	A-94428	A-94528	A-94628	A-94728	A-95128	A-95228	A-95328	A-95428	3-1/8 3-3/4				
A-93029	A-93129	A-93229	A-93329	A-93429	A-93529	A-94129	A-94329	A-94229	A-94429	A-94529	A-94629	A-94729	A-95129	A-95229	A-95329	A-95429	3-3/8 4"				
A-93029A	A-93129A	A-93229A	A-93329A	A-93429A	A-93529A	A-94129A	A-94329A	A-94229A	A-94429A	A-94529A	A-94629A	A-94729A	A-95129A	A-95229A	A-95329A	A-95429A	3-5/8 4-1/4				
A-93029B	A-93129B	A-93229B	A-93329B	A-93429B	A-93529B	A-94129B	A-94329B	A-94229B	A-94429B	A-94529B	A-94629B	A-94729B	A-95129B	A-95229B	A-95329B	A-95429B	3-7/8 4-1/2				
A-93029C	A-93129C	A-93229C	A-93329C	A-93429C	A-93529C	A-94129C	A-94329C	A-94229C	A-94429C	A-94529C	A-94629C	A-94729C	A-95129C	A-95229C	A-95329C	A-95429C	4-1/8 4-3/4				
A-93030	A-93130	A-93230	A-93330	A-93430	A-93530	A-94130	A-94330	A-94230	A-94430	A-94530	A-94630	A-94730	A-95130	A-95230	A-95330	A-95430	4-3/8 5"				
A-93030A	A-93130A	A-93230A	A-93330A	A-93430A	A-93530A	A-94130A	A-94330A	A-94230A	A-94430A	A-94530A	A-94630A	A-94730A	A-95130A	A-95230A	A-95330A	A-95430A	4-5/8 5-1/4				
A-93030B	A-93130B	A-93230B	A-93330B	A-93430B	A-93530B	A-94130B	A-94330B	A-94230B	A-94430B	A-94530B	A-94630B	A-94730B	A-95130B	A-95230B	A-95330B	A-95430B	4-7/8 5-1/2				
A-93030C	A-93130C	A-93230C	A-93330C	A-93430C	A-93530C	A-94130C	A-94330C	A-94230C	A-94430C	A-94530C	A-94630C	A-94730C	A-95130C	A-95230C	A-95330C	A-95430C	5-1/8 5-3/4				
A-93031	A-93131	A-93231	A-93331	A-93431	A-93531	A-94131	A-94331	A-94231	A-94431	A-94531	A-94631	A-94731	A-95131	A-95231	A-95331	A-95431	5-3/8 6"				
HNL-235610	HNL-236410	HNL-236410	HNL-238016	HNL-239616	HNL-239624	HNL-245616	HNL-246416	HNL-248016	HNL-248016	HNL-248816	HNL-249616	HNL-2412816	HNL-25100	HNL-25200	HNL-25300	HNL-25400	HELICAL NURLOCK LINERS				
HNL-1-235610	HNL-1-236410	HNL-1-236410	HNL-1-238016	HNL-1-239616	HNL-1-239624	HNL-1-245616	HNL-1-246416	HNL-1-248016	HNL-1-248016	HNL-1-248816	HNL-1-249616	HNL-1-2412816	We Recommend HNL and HNLP				HELICAL NURLOCK LINERS				
			NL-16523		NL-16524					NL-16525		NL-16526					STD NURLOCK LINERS				
			NLP-16523		NLP-16524					NLP-16525		NLP-16526					STD NURLOCK LINERS				
	LL-23100	LL-23200	LL-23300	LL-23400	LL-23500	LL-24100	LL-24300	LL-24400	LL-24500	LL-24600	LL-24700	LL-24800	LL-25100	LL-25200	LL-25300	LL-25400	LOCK SCREW LINERS				
	NL-23100	NL-23200	NL-23300	NL-23400	NL-23500	NL-24100	NL-24300	NL-24400	NL-24500	NL-24600	NL-24700	NL-24800	LLP-25100	LLP-25200	LLP-25300	LLP-25400	LOCK SCREW LINERS				
UDB-521453A	UDB-521452	UDB-521452	UDB-521453	UDB-521454B	UDB-521454B	UDB-521451	UDB-521452	UDB-521453	UDB-521453	UDB-521454A	UDB-521454B	UDB-521457A	UDB-521458A	UDB-521458A	UDB-521458A	UDB-521458A	LOCK RINGS				
HNLP-235610	HNLP-236410	HNLP-236410	HNLP-238016	HNLP-239616	HNLP-239624	HNLP-245616	HNLP-246416	HNLP-248016	HNLP-248016	HNLP-248816	HNLP-249616	HNLP-2412816	HNLP-25100	HNLP-25200	HNLP-25300	HNLP-25400	HELICAL NURLOCK LINERS DOUBLE				
HNLP-1-235610	HNLP-1-236410	HNLP-1-236410	HNLP-1-238016	HNLP-1-239616	HNLP-1-239624	HNLP-1-245616	HNLP-1-246416	HNLP-1-248016	HNLP-1-248016	HNLP-1-248816	HNLP-1-249616	HNLP-1-2412816					HELICAL NURLOCK LINERS SINGLE				
TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-3	TLC-3	TLC-3	TLC-3	TAPERED NURLOCK CLAMPS				
19940	19942	19943	19944	19945	19946	19940	19942	19943	19944	19945	19946	19945	19952	19954	19955	19956	LINER BUSHINGS				
16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16530	16530	16530	16530	LOCK SCREWS				

# Locking Accessories

# Complete Selection Guide

The Only Complete Listing of Liners for Every Shank O.D. in our Industry!

See complete DIMENSIONAL TOLERANCES Pages P10 thru P15.

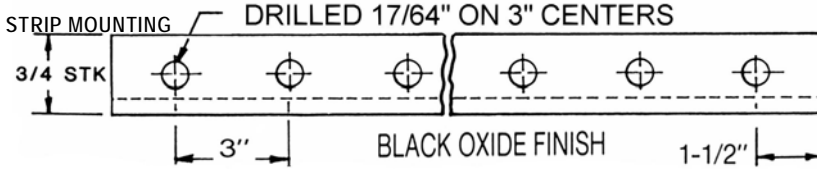
**SIMPLE STEPS:**  
 Select Drill or Reamer size.  
 Select smallest Shank O.D. with that size.  
 Select smallest Locking Collar for that shank.  
 Select I.D. Liner to guide O.D. Shank to fit Collar.  
 Select Lock Ring, Screw, TLC Clamp or Strip Mounting, if needed.  
 Lock up and Drill!!



The HOLE THING!



COLLAR THREAD SIZE	3/4"-16 L.H. THD. (EXCEPT 61000)			1"-14 L.H. THD. (EXCEPT 62000)							
COLLARS & SHANKS:	A-11000, A-21000, A-31000, A-41000			A-12000, A-22000, A-32000, A-42000							
STANDARD TELESCOPIC	A-51000, A-91000			A-52000, A-92000							
TELESCOPIC	A-61000 (COLLAR HAS 1"-14 UNF-2A L.H. THD)			A-62000 (COLLAR HAS 1-1/4"-12 UNF-2A L.H. THD)							
A MAX (DRILL SHANK I.D.)	1/4	5/16	3/8	9/32	11/32	13/32	15/32	15/32	15/32	15/32	
A MIN	3/32	3/32	3/32	3/16	3/16	3/16	3/16	3/16	3/16	3/16	
B SHANK O.D.	3/8	7/16	1/2	7/16	1/2	9/16	5/8	3/4	13/16	7/8	
Add Shank O.D. Size to LINER Part Number.			Please Add Shank O.D. Size to LINER Part Number.								
HELICAL NURLOCK LINERS	DOUBLE LOCK METAL	HNL-213212	HNL-214808	HNL-214808	HNL-224808	HNL-224808	HNL-225210	HNL-225610	HNL-226410	HNL-226416	HNL-227216
HELICAL NURLOCK LINERS	SINGLE LOCK METAL	HNL-1-213212	HNL-1-214808	HNL-1-214808	HNL-1-224808	HNL-1-224808	HNL-1-225210	HNL-1-225610	HNL-1-226410	HNL-1-226416	HNL-1-227216
STD NURLOCK LINERS	DOUBLE LOCK METAL	NL-16520		NL-16521	WE RECOMMEND HNL and HNLP ALL 'A-' PREFIXES INCLUDE 'AU-' & 'AC-' SERIES			NL-16522		NL-23200	NL-16523
STD NURLOCK LINERS	DOUBLE LOCK PLASTIC	NLP-375		NLP-500					NLP-750		
LOCK SCREW LINERS	FOR METAL	LL-21100	LL-21200	LL-21300				LL-22400			
LOCK SCREW LINERS	FOR PLASTIC	NL-21100	NL-21200	NL-21300	NL-21100	NL-22200	NL-22300	NL-22400			
LOCK RINGS		UDB-521449	UDB-521450	UDB-521450A	UDB-521451	UDB-521451	UDB-521451	UDB-521451	UDB-521452	UDB-521452	UDB-521453A
HELICAL NURLOCK LINERS	DOUBLE LOCK FOR PLASTIC	HNLP-213212	HNLP-214808	HNLP-214808	HNLP-224808	HNLP-224808	HNLP-225210	HNLP-225610	HNLP-226410	HNLP-226416	HNLP-227216
HELICAL NURLOCK LINERS	SINGLE LOCK FOR PLASTIC	HNLP-1-213212	HNLP-1-214808	HNLP-1-214808	HNLP-1-224808	HNLP-1-224808	HNLP-1-225210	HNLP-1-225610	HNLP-1-226410	HNLP-1-226416	HNLP-1-227216
TAPERED NURLOCK CLAMPS		TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2
LINER BUSHINGS		19936	19937	19938	19937	19938	19939	19940	19941	19943	19944
LOCK SCREWS		16531	16531	16531	16532	16532	16532	16532	16532	16532	16532



# For UNITED Clamps & Liners

Liners-Clamps-Screws

Page P30 Chart continued this page.

### SIMPLE STEPS:

Select Drill or Reamer size.

Select smallest Shank O.D. with that size.

Select smallest Locking Collar for that shank.

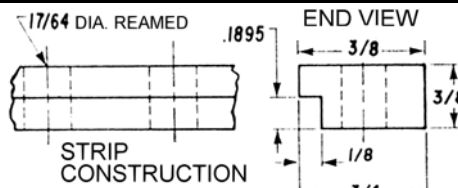
Select I.D. Liner to guide O.D. Shank to fit Collar.

Select Lock Ring, Screw, TLC Clamp or Strip Mounting, if needed.

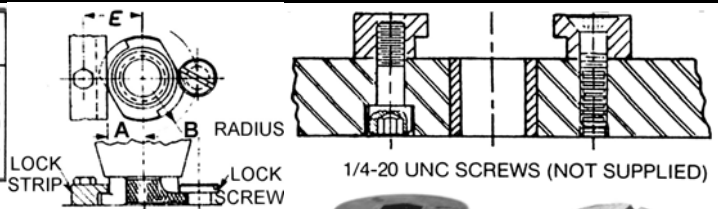
Lock up and Drill!!

TOLERANCE ON 'A' DIMENSION	
UP TO 1/4	+0.001 TO +0.004
OVER 1/4 TO 3/4	+0.001 TO +0.005
OVER 3/4 TO 1-1/2	+0.002 TO +0.006
TOLERANCE ON 'B' DIM. —.0002 TO —.0005	

1-1/4"-12 L.H. THD. (EXCEPT 63000)							1-1/2"-12 L.H. THD. (EXCEPT 64000)									2"-16 L.H. THD. (EXCEPT 65000)					
A-13000, A-23000, A-33000, A-43000 ALL 'A' PREFIXES INCLUDE 'AU-' & 'AC-'							A-14000, A-24000, A-34000, A-44000 ALL 'A-' PREFIXES INCLUDE 'AU-' & 'AC-'									A-15000, A-25000, A-35000, A-45000					
A-53000, A-93000							A-54000, A-94000									A-55000, A-95000					
A-63000 (COLLAR HAS 1-1/2"-12 UNF-2A L.H. THD)							A-64000 (COLLAR HAS 2"-16 UNF-2A L.H. THD)									A-65000 (COLLAR HAS 2-1/4"-16 UNF-2A L.H. THD)					
15/32	17/32	19/32	21/32	23/32	3/4	7/8	15/32	17/32	19/32	21/32	25/32	29/32	15/16	1"	1-1/16	1-1/32	1-5/32	1-9/32	1-	1-1/2	1-1/2
1/4	1/4	1/4	1/4	1/4	1/4	1/4	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16	3/8	3/8	3/8	3/8	3/8	3/8
5/8	3/4	13/16	7/8	1	1-1/8	1-1/4	5/8	3/4	13/16	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2	1-1/4	1-3/8	1-1/2	1-3/4	2	2-1/4
Add Shank O.D. Size to LINER Part Number.							Please Add Shank O.D. Size to LINER Part Number.														
HNL-235610	HNL-236410	HNL-236410	HNL-238016	HNL-239616	HNL-238816	HNL-239616	HNL-245616	HNL-246416	HNL-248016	HNL-248016	HNL-248016	HNL-248816	HNL-249616	HNL-2411216	HNL-2412816	HNL-25100	HNL-25200	HNL-25300	HNL-25400	HNL-25500	HNL-25600
HNL-1-235610	HNL-1-236410	HNL-1-236410	HNL-1-238016	HNL-1-239616	HNL-1-238816	HNL-1-239616	HNL-1-245616	HNL-1-246416	HNL-1-248016	HNL-1-248016	HNL-1-248016	HNL-1-248816	HNL-1-249616	HNL-1-2411216	HNL-1-2412816	WE RECOMMEND HNL and HNLP ALL 'A-' PREFIXES INCLUDE 'AU-' & 'AC-' SERIES					
			NL-16523		NL-16524							NL-16525		NL-16526	NL-16533						
			NLP-16523		NLP-16524							NLP-16525		NLP-16526	NLP-16533						
LL-23100	LL-23100	LL-23200	LL-23300	LL-23400	LL-23500		LL-24100	LL-24300		LL-24400	LL-24500	LL-24600	LL-24700		LL-24800	LL-25100	LL-25200	LL-25300	LL-25400	LL-25500	
NL-23100	NL-23100	NL-23200	NL-23300	NL-23400	NL-23500		NL-24100	NL-24300		NL-24400	NL-24500	NL-24600	NL-24700		NL-24800	LLP-25100	LLP-25200	LLP-25300	LLP-25400	LLP-25500	
UDB-521453A	UDB-521452	UDB-521452	UDB-521453	UDB-521454B	UDB-521454A	UDB-521454	UDB-521451	UDB-521452	UDB-521453	UDB-521453	UDB-521453	UDB-521454A	UDB-521454B	UDB-521456A	UDB-521457A	UDB-521458A	UDB-521458A	UDB-521458A	UDB-521458A	UDB-521458A	UDB-521458A
HNLP-235610	HNLP-236410	HNLP-236410	HNLP-238016	HNLP-239616	HNLP-238816	HNLP-239616	HNLP-245616	HNLP-246416	HNLP-248016	HNLP-248016	HNLP-248016	HNLP-248816	HNLP-249616	HNLP-2411216	HNLP-2412816	HNLP-25100	HNLP-25200	HNLP-25300	HNLP-25400	HNLP-25500	HNLP-25600
HNLP-1-235610	HNLP-1-236410	HNLP-1-236410	HNLP-1-238016	HNLP-1-239616	HNLP-1-238816	HNLP-1-239616	HNLP-1-245616	HNLP-1-246416	HNLP-1-248016	HNLP-1-248016	HNLP-1-248016	HNLP-1-248816	HNLP-1-249616	HNLP-1-2411216	HNLP-1-2412816						
TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-3	TLC-3	TLC-3	TLC-3	TLC-3	TLC-3
19940	19942	19943	19944	19945	19946	19952	19940	19942	19943	19944	19945	19946	19952	19954	19955	19952	19954	19955	19956	19957	19958
16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16530	16530	16530	16530	16530	16530



DRILL BUSHING TIP SERIES	A	B	E
21000	.312	.625	.687
22000	.609	.922	.984
23000	.734	1.047	1.109
24000	.859	1.172	1.234
25000	-	1.562	-



STANDARD LOCK LINERS

LINER BUSHING

LOCK RING

NURLOCK CLAMP

LOCK SCREW

**Helical Nurlock Liners  
21000 thru 23000**

# A Helical Nurlock Liner

**Eliminates Lock Screws - Closer Hole Spacing**

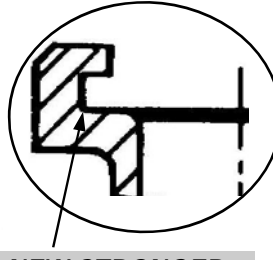
**FOR METAL      FOR PLASTIC**



TYPE HNL



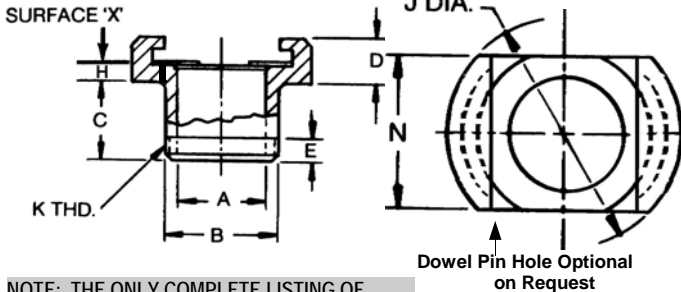
TYPE HNL P-13828



TYPE HNL-1

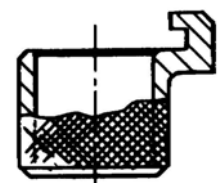
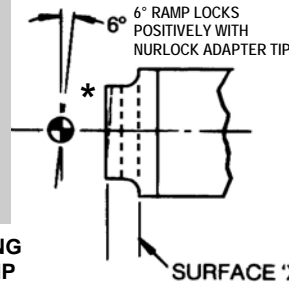


TYPE HNL P-1



**\* NEW STRONGER MATERIALS** will hold increasing weights and pressures of positive feed motor assemblies.

**\* POSITIVE LOCKING WITH ADAPTER TIP**



KNURLED O.D. ON TYPES HNL P AND HNL P-1

NOTE: THE ONLY COMPLETE LISTING OF LINERS FOR EVERY SHANK SIZE! SPECIFY TYPE BEFORE PART NUMBER WHEN ORDERING. SERIES continued next page.

**NEW LINER I.D. TOLERANCES ELIMINATE SHANK SEIZURE!**  
The six degree Helical Ramp of the Nurlock Liner locks positively to the Helical Ramp of the Nurlock Adapter Tip. Eliminates 'slip-slop.' Prevents startup drill breakage.

**\* HNL - 22 56 12 - 1/2**

Type HNL      Locking Series 22000      7/8" O.D. in 64ths      I.D. Size .5000      Fraction or Decimal      3/4" Length in 16ths

**SEE NEW ORDERING EXAMPLE: HNL-225612-1/2**

TYPE HNL      LOCK SERIES 22000      O.D. 7/8      LENGTH 3/4      I.D. SIZE 1/2 (.5000)

UNITED ADD TYPE PREFIX TO NEW PART NO.	OLD PART NO.	LINER I.D. A	+0.0005 -0.0000 B O.D.	C	D	E	J DIA	N	H	HNL AND K L. H. THD.	HNL-1 ONLY LOCK RING	MATCH COLLAR SERIES	DRILL 20000 SE MIN	SIZE RES. ONLY MAX
213208- 3/8	13800	.3751 / .3754	.4990	1/2	39/64	1/4	1-1/8	.505	.250	1/2 - 20	521449	21000	3/32	1/4
213212- 3/8	13801	.3751 / .3754	.4990	3/4	39/64	5/16	1-1/8	.505	.250	1/2 - 20	521449	21000	3/32	1/4
214808- 7/16	13814	.4377 / .4380	.7490	1/2	39/64	1/4	1-1/8	.755	.250	3/4 - 16	521450A	21000	3/32	5/16
214812- 7/16	NEW	.4377 / .4380	.7490	3/4	39/64	5/16	1-1/8	.755	.250	3/4 - 16	521450A	21000	3/32	5/16
214808- 1/2	13802	.5002 / .5005	.7490	1/2	39/64	1/4	1-1/8	.755	.250	3/4 - 16	521450A	21000	3/32	3/8
214812- 1/2	NEW	.5002 / .5005	.7490	3/4	39/64	5/16	1-1/8	.755	.250	3/4 - 16	521450A	21000	3/32	3/8
214816- 1/2	NEW	.5002 / .5005	.7490	1	39/64	5/16	1-1/8	.755	.250	3/4 - 16	521450A	21000	3/32	3/8
224808- 7/16	13816	.4377 / .4380	.7490	1/2	39/64	1/4	1-13/16	.755	.250	3/4 - 16	521450A	22000	3/16	9/32
224812- 7/16	NEW	.4377 / .4380	.7490	3/4	39/64	5/16	1-13/16	.755	.250	3/4 - 16	521450A	22000	3/16	9/32
224808- 1/2	13817	.5002 / .5005	.7490	1/2	39/64	1/4	1-13/16	.755	.250	3/4 - 16	521450A	22000	3/16	11/32
224812- 1/2	NEW	.5002 / .5005	.7490	3/4	39/64	5/16	1-13/16	.755	.250	3/4 - 16	521450A	22000	3/16	11/32
225210- 9/16	13804	.5627 / .5630	.8117	5/8	39/64	5/16	1-13/16	.816	.250	13/16 - 16	521451A	22000	3/16	13/32
225612- 1/2	NEW	.5002 / .5005	.8740	3/4	39/64	5/16	1-13/16	.880	.250	7/8 - 14	521451	22000	3/16	11/32
225610- 5/8	13805	.6252 / .6255	.8740	5/8	39/64	5/16	1-13/16	.880	.250	7/8 - 14	521451	22000	3/16	15/32
225612- 5/8	NEW	.6252 / .6255	.8740	3/4	39/64	5/16	1-13/16	.880	.250	7/8 - 14	521451	22000	3/16	15/32
226410- 3/4	13818	.7503 / .7506	.9990	5/8	39/64	5/16	1-13/16	1.005	.250	1" - 14	521452	22000	3/16	15/32
226412- 3/4	NEW	.7503 / .7506	.9990	3/4	39/64	5/16	1-13/16	1.005	.250	1" - 14	521452	22000	3/16	15/32
226416- 3/4	NEW	.7503 / .7506	.9990	1	39/64	5/16	1-13/16	1.005	.250	1" - 14	521452	22000	3/16	15/32
226416- 13/16	13819	.8128 / .8131	.9990	1	39/64	5/16	1-13/16	1.005	.250	1" - 14	521452	22000	3/16	15/32
227216- 7/8	13808	.8754 / .8757	1.1240	1	39/64	5/16	1-13/16	1.130	.250	1-1/8 - 16	521453A	22000	3/16	15/32
235610- 5/8	NEW	.6252 / .6255	.8740	5/8	5/8	5/16	2-1/8	1.005	.250	7/8 - 14	521451	23000	1/4	17/32
235616- 5/8	NEW	.6252 / .6255	.8740	1	5/8	1	2-1/8	1.005	.250	7/8 - 14	521451	23000	1/4	17/32
236410- 3/4	13807	.7503 / .7506	.9990	5/8	5/8	5/16	2-1/8	1.005	.250	1" - 14	521452	23000	1/4	17/32
236416- 3/4	NEW	.7503 / .7506	.9990	1	5/8	5/16	2-1/8	1.005	.250	1" - 14	521452	23000	1/4	17/32
236410- 13/16	13820	.8128 / .8131	.9990	5/8	5/8	5/16	2-1/8	1.005	.250	1" - 14	521452	23000	1/4	19/32
236416- 13/16	NEW	.8128 / .8131	.9990	1	5/8	5/16	2-1/8	1.005	.250	1" - 14	521452	23000	1/4	19/32
238016- 7/8	13821	.8754 / .8757	1.2490	1	5/8	5/16	2-1/8	1.255	.250	1-1/4 - 12	521453	23000	1/4	21/32
238816- 1-1/8	13823	1.1254/1.1257	1.3740	1	5/8	5/16	2-1/8	1.380	.250	1-3/8 - 16	521454A	23000	1/4	23/32
238820- 1-1/8	NEW	1.1254/1.1257	1.3740	1-1/4	5/8	5/16	2-1/8	1.380	.250	1-3/8 - 16	521454A	23000	1/4	23/32
239616- 1	13822	1.0004/1.0007	1.4990	1	5/8	5/16	2-1/8	1.505	.250	1-1/2 - 16	521454B	23000	1/4	23/32
239616- 1-1/4	13809	1.2505/1.2509	1.4990	1	5/8	5/16	2-1/8	1.505	.250	1-1/2 - 16	521454B	23000	1/4	23/32
239620- 1-1/4	NEW	1.2505/1.2509	1.4990	1-1/4	5/8	5/16	2-1/8	1.505	.250	1-1/2 - 16	521454B	23000	1/4	23/32
239624- 1	NEW	1.0004/1.0007	1.4990	1-1/2	5/8	5/16	2-1/8	1.505	.250	1-1/2 - 16	521454B	23000	1/4	23/32
239624- 1-1/8	NEW	1.1254/1.1257	1.4990	1-1/2	5/8	5/16	2-1/8	1.505	.250	1-1/2 - 16	521454B	23000	1/4	23/32
239628- 1-1/4	NEW	1.2505/1.2509	1.4990	1-3/4	5/8	5/16	2-1/8	1.505	.250	1-1/2 - 16	521454B	23000	1/4	23/32

\* Specify HNL, HNL-1, HNL P, HNL P-1 PLUS DASH NUMBER

ALLOY STEEL — HEAT TREATED — BLACK OXIDE FINISH

# For Every Shank Size

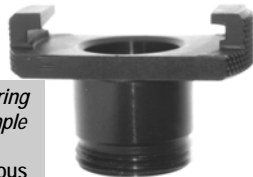
Holds Firmly - Positive Helical Lock - No Slip

FOR METAL

FOR PLASTIC

Helical Nurlock Liners  
24000 thru 25000

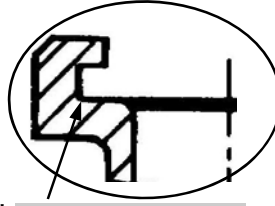
Ordering Example on previous page.



TYPE HNL



TYPE HNL P



\* **NEW STRONGER MATERIALS** will hold increasing weights and pressures of positive feed motor assemblies.

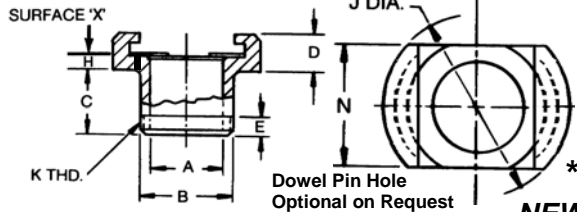


TYPE HNL-1

FOR CLOSE HOLE SPACING

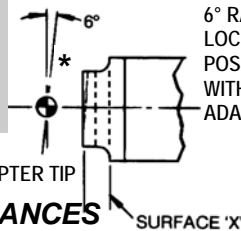


TYPE HNL P-1

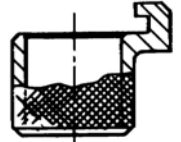


Dowel Pin Hole  
Optional on Request

\* **NEW LINER I.D. TOLERANCES ELIMINATE SHANK SEIZURE!**



6° RAMP LOCKS POSITIVELY WITH NURLOCK ADAPTER TIP.

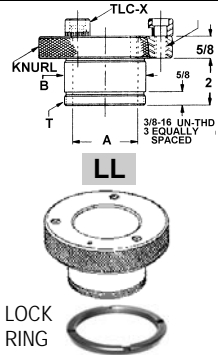


KNURLED O.D. ON TYPES HNL P AND HNL P-1 +.025 +.010

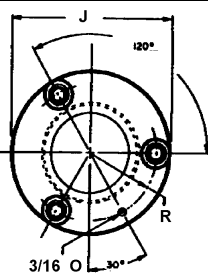
\* Specify HNL, HNL-1, HNL P, HNL P-1 PLUS DASH NUMBER.

ALLOY STEEL — HEAT TREATED — BLACK OXIDE FINISH

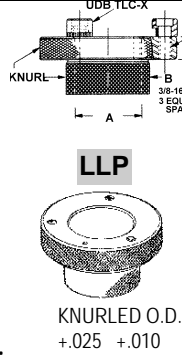
* UNITED ADD TYPE PREFIX TO NEW PART NO.	OLD PART NO.	LINER I. D. A	+ .0005 - .0000 B O. D.	C	D	E	J DIA	N	H	HNL AND K L. H. THD.	HNL-1 ONLY LOCK RING	MATCH COLLAR SERIES	DRILL 20000 SE MIN	SIZE RIES ONLY MAX
245616- 5/8	13824	.6252 / .6255	.8740	1	5/8	5/16	2-7/16	.880	.250	7/8 - 14	521451	24000	5/16	13/32
245624- 5/8	NEW	.6252 / .6255	.8740	1-1/2	5/8	5/16	2-7/16	.880	.250	7/8 - 14	521451	24000	5/16	13/32
246416- 3/4	13825	.7503 / .7506	.9990	1	5/8	5/16	2-7/16	1.005	.250	1" - 14	521452	24000	5/16	17/32
246424- 3/4	NEW	.7503 / .7506	.9990	1-1/2	5/8	5/16	2-7/16	1.005	.250	1" - 14	521452	24000	5/16	17/32
248016- 13/16	NEW	.8128 / .8131	1.2490	1	5/8	5/16	2-7/16	1.255	.250	1-1/4 - 12	521453	24000	5/16	19/32
248024- 13/16	NEW	.8128 / .8131	1.2490	1-1/2	5/8	5/16	2-7/16	1.255	.250	1-1/4 - 12	521453	24000	5/16	19/32
248016- 7/8	13826	.8754 / .8757	1.2490	1	5/8	5/16	2-7/16	1.255	.250	1-1/4 - 12	521453	24000	5/16	21/32
248024- 7/8	NEW	.8754 / .8757	1.2490	1-1/2	5/8	5/16	2-7/16	1.255	.250	1-1/4 - 12	521453	24000	5/16	21/32
248016- 1.0	13827	1.0004 / 1.0007	1.2490	1	5/8	5/16	2-7/16	1.255	.250	1-1/4 - 12	521453	24000	5/16	25/32
248024- 1.0	NEW	1.0004 / 1.0007	1.2490	1-1/2	5/8	5/16	2-7/16	1.255	.250	1-1/4 - 12	521453	24000	5/16	25/32
248816- 1-1/8	13828	1.1254 / 1.1257	1.3740	1	5/8	5/16	2-7/16	1.380	.250	1-3/8 - 16	521454A	24000	5/16	29/32
248824- 1-1/8	NEW	1.1254 / 1.1257	1.3740	1-1/2	5/8	5/16	2-7/16	1.380	.250	1-3/8 - 16	521454A	24000	5/16	29/32
249616- 1-1/4	13810	1.2505 / 1.2509	1.4990	1	5/8	5/16	2-7/16	1.505	.250	1-1/2 - 16	521454B	24000	1/4	23/32
249620- 1-1/4	NEW	1.2505 / 1.2509	1.4990	1-1/4	5/8	5/16	2-7/16	1.505	.250	1-1/2 - 16	521454B	24000	1/4	23/32
249624- 1-1/4	NEW	1.2505 / 1.2509	1.4990	1-1/2	5/8	5/16	2-7/16	1.505	.250	1-1/2 - 16	521454B	24000	5/16	15/16
2411216- 1-3/8	13829	1.3756 / 1.3760	1.7490	1	5/8	5/16	2-7/16	1.755	.250	1-3/4 - 16	521456A	24000	5/16	15/16
2411224- 1-3/8	NEW	1.3756 / 1.3760	1.7490	1-1/2	5/8	5/16	2-7/16	1.755	.250	1-3/4 - 16	521456A	24000	5/16	15/16
2412816- 1-1/2	13813	1.5006 / 1.5010	1.9990	1	5/8	5/16	2-7/16	2.005	.250	2" - 16	521457A	24000	5/16	15/16
2412824- 1-1/2	NEW	1.5006 / 1.5010	1.9990	1-1/2	5/8	5/16	2-7/16	2.005	.250	2" - 16	521457A	24000	5/16	15/16



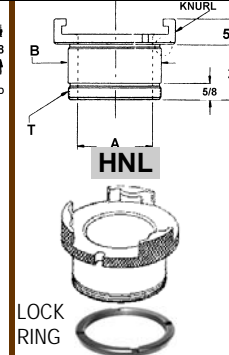
LL



Specify LL or LLP.

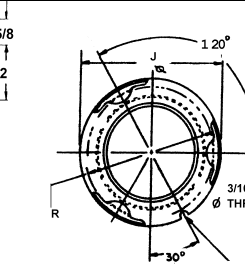


KNURLED O.D.  
+.025 +.010

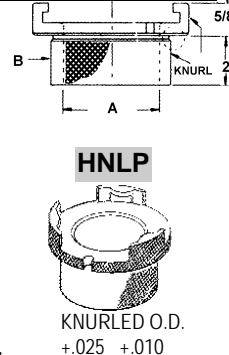


HNL

LOCK RING



Specify HNL or HNL P.



HNL P

KNURLED O.D.  
+.025 +.010

UNITED PART NO.	LINER I. D. A	B O. D. + .0005 - .0000	J	R	T LH THRD	TLC NO.	ADAPTER TIP SERIES	LOCK RING	UNITED PART NO.	LINER I. D. A	B O. D. + .0005 - .0000	J	R	T LH THRD	ADAPTER TIP SERIES	LOCK RING
UCC-LL-25100	1.2505 1.2509	2.499	3-3/4	1-9/16	2-1/2-16	-3	251XX	UDB-521458A	UCC-HNL-25100	1.2505 1.2509	2.499	3-1/8	1.335	2-1/2-16	251XX	UDB-521458A
UCC-LL-25200	1.3756 1.3760	2.499	3-3/4	1-9/16	2-1/2-16	-3	252XX	UDB-521458A	UCC-HNL-25200	1.3756 1.3760	2.499	3-1/8	1.335	2-1/2-16	252XX	UDB-521458A
UCC-LL-25300	1.5006 1.5010	2.499	3-3/4	1-9/16	2-1/2-16	-3	253XX	UDB-521458A	UCC-HNL-25300	1.5006 1.5010	2.499	3-1/8	1.335	2-1/2-16	253XX	UDB-521458A
UCC-LL-25400	1.7508 1.7512	2.499	3-3/4	1-9/16	2-1/2-16	-3	254XX	UDB-521458A	UCC-HNL-25400	1.7508 1.7512	2.499	3-1/8	1.335	2-1/2-16	254XX	UDB-521458A
UCC-LL-25500	2.0010 2.0015	2.499	3-3/4	1-9/16	2-1/2-16	-3	255XX	UDB-521458A	UCC-HNL-25500	2.0010 2.0015	2.499	3-1/8	1.335	2-1/2-16	255XX	UDB-521458A

3-14-08

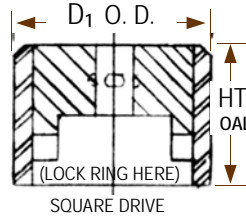
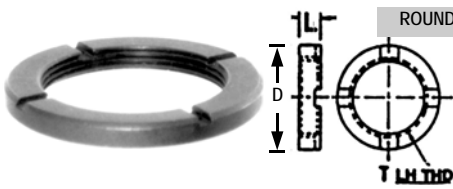
# Install/Remove Lock Rings

# Installation / Removal Tools for Lock Rings

## LOCK RINGS

## RTS SOCKETS.

## UDB-RT-5 HANDLES



For SETS,  
See below  
for  
RTS-5-11.

Includes  
Handle &  
Nine  
Sockets in  
a Set.



HANDLE  
FOR  
SOCKETS  
UDB-  
521449-  
RTS  
  
thru  
UDB-  
521453A-  
RTS

**HANDLE  
ONLY  
UDB-RT-5**

Handle is  
1/4 O.D.  
and  
6" Long.

ORDER  
INDIVIDUALLY  
OR IN SETS.

## UDB-RT-6 HANDLE



HANDLE  
FOR  
SOCKETS  
UDB-  
521453-  
RTS

**HANDLE  
ONLY  
UDB-RT-6**

thru  
UDB-  
521480-  
RTS

Handle is  
11/16 O.D.  
and 6" Long.

ORDER  
INDIVIDUALLY  
OR IN SETS.

ALL ITEMS AVAILABLE INDIVIDUALLY OR IN SETS.

LOCK RINGS	T L/H	D	L	SOCKETS	HANDLE STYLE	I.D.	D <sub>1</sub>	SOCKET HEIGHT	
UDB-521449	1/2 -20	0.75	0.25	UDB-521449-RTS	UDB-RT-5	0.75	1"	3/4	
UDB-521450	5/8 -18	0.87	0.25	UDB-521450-RTS	UDB-RT-5	0.87	1-1/8		
UDB-521450A	3/4 -16	1.00	0.25	UDB-521450A-RTS	UDB-RT-5	1.00	1-1/4		
UDB-521451A	13/16 -16	1.18	0.25	UDB-521451A-RTS	UDB-RT-5	1.18	1-7/16		
UDB-521451	7/8 -14	1.25	0.25	UDB-521451-RTS	UDB-RT-5	1.25	1-1/2		
UDB-521452A	15/16 -16	1.37	0.25	UDB-521452A-RTS	UDB-RT-5	1.37	1-5/8		
UDB-521452	1 - 14	1.37	0.25	UDB-521452-RTS	UDB-RT-5	1.37	1-5/8		
UDB-521453A	1-1/8 -16	1.50	0.25	UDB-521453A-RTS	UDB-RT-5	1.50	1-3/4		
UDB-521453	1-1/4 -12	1.75	0.31	UDB-521453-RTS	UDB-RT-5	1.75	2"		
UDB-521454A	1-3/8 -16	1.75	0.31	UDB-521454A-RTS	UDB-RT-6	1.75	2"	1"	
UDB-521454	1-1/2 -12	1.75	0.31	UDB-521454-RTS	UDB-RT-6	1.75	2"		
UDB-521454B	1-1/2 -16	1.75	0.25	UDB-521454B-RTS	UDB-RT-6	1.75	2"		
UDB-521455A	1-9/16 -16	2.06	0.25	UDB-521455A-RTS	UDB-RT-6	2.06	2-5/16		
UDB-521455	1-5/8 -16	2.12	0.25	UDB-521455-RTS	UDB-RT-6	2.12	2-3/8		
UDB-521455B	1-11/16 -16	2.18	0.25	UDB-521455B-RTS	UDB-RT-6	2.18	2-7/16		
UDB-521456A	1-3/4 -16	2.37	0.25	UDB-521456A-RTS	UDB-RT-6	2.37	2-5/8		
UDB-521456	1-7/8 -16	2.37	0.25	UDB-521456-RTS	UDB-RT-6	2.37	2-5/8		
UDB-521457A	2 -16	2.50	0.25	UDB-521457A-RTS	UDB-RT-6	2.50	2-3/4		
UDB-521457	2-1/8 -16	2.62	0.31	UDB-521457-RTS	UDB-RT-6	2.62	2-7/8		
UDB-521458	2-1/4 -16	2.75	0.31	UDB-521458-RTS	UDB-RT-6	2.75	3"		
UDB-521458A	2-1/2 -16	3.00	0.31	UDB-521458A-RTS	UDB-RT-6	3.01	3-1/4		
UDB-521459	2-5/8 -16	3.12	0.37	UDB-521459-RTS	UDB-RT-6	3.12	3-3/8		
UDB-521460	2-7/8 -16	3.37	0.37	UDB-521460-RTS	UDB-RT-6	3.37	3-5/8		
UDB-521470A	3 -16	3.50	0.37	UDB-521470A-RTS	UDB-RT-6	3.50	3-3/4		1-1/4
UDB-521472A	3-1/2 -16	4.00	0.37	UDB-521472A-RTS	UDB-RT-6	4.00	4-1/4		
UDB-521474A	4 -16	4.50	0.43	UDB-521474A-RTS	UDB-RT-6	4.50	4-3/4		
UDB-521480	4-1/2 -16	5.00	0.43	UDB-521480-RTS	UDB-RT-6	5.00	5-1/4		

**USE WITH  
MATCHING  
UNITED  
LOCK RINGS  
FOR DE-  
PENDABLE  
SERVICE.**

**Set RTS-6—16  
THESE SET ASSEMBLIES**  
Receive all Thread Lock Ring  
Sizes from 1-3/8 – 16 thru  
2-7/8 – 16 and HANDLE.  
**SET contains RTS-6 Handle  
and 14 Sockets in a case  
(UDB-521454ARTS--UDB-521460RTS).**

## STANDARD LOCK NUTS—TOUGH LEFT HAND—SPACE SAVERS

### LOCK NUTS



LOCK	T L/H	H	L
UDB-14441	1/2 -20	0.75	0.25
UDB-14442	3/4 -16	1.00	0.25
UDB-14443	7/8 -14	1.25	0.25
UDB-14445	1-1/4 -12	1.75	0.37
UDB-14446	1-1/2 -12	2.00	0.50
UDB-14447	2 -16	2.50	0.50
UDB-14448	2-1/2 -16	3.00	0.50

## Also in SETS!

**Set RTS-5—11  
THESE SET ASSEMBLIES**  
Receive all Thread Lock Ring  
Sizes from 1/2 – 20 thru  
1-1/4 – 12 and HANDLE.  
**SET contains RTS-5 Handle  
and 9 Sockets in a case  
(UDB-521449RTS -- UDB-521453RTS).**

**Set RTS-6—6  
THESE SET ASSEMBLIES**  
Receive all Thread Lock Ring  
Sizes from 3-1/2 – 16 thru  
4-1/2 – 16 and HANDLE.  
**SET contains RTS-6 Handle  
and 4 Sockets in a case  
(UDB-521470ARTS--UDB-521480RTS).**

# Reducers — Liners Clamps in All Diameters

## Reducer Bushings Liners & Clamps

### REDUCER BUSHINGS with COOLANT ADAPTERS

Reduce Nosepieces to Adapter Tips  
DOUBLES the USE of NOSEPIECES!  
REDUCERS are used to reduce the thread size  
in a specific nosepiece and adapt it to  
accommodate smaller thread drill bushing tips.

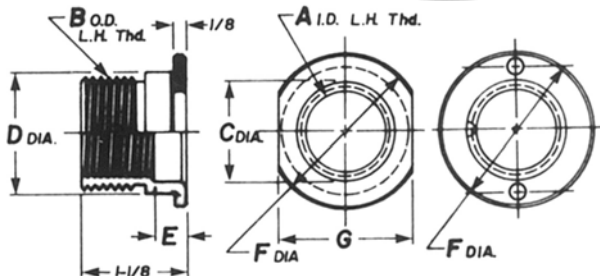


### STANDARD REDUCER BUSHINGS

USE PREFIX  
UDB-A-  
WITH  
COOLANT  
  
STANDARD  
USE PREFIX  
UDB-



COOLANT REDUCER PART NO.	STANDARD REDUCER PART NO.	A L.H. INSIDE THREAD	B L.H. OUTSIDE THREAD	C +.001 - .000	D +.0000 - .0006	E	F	G
UDB-A-17952	UDB-17952	3/4 -16	1" -14	.8125	1.0610	9/32	1-3/8	1-1/16
UDB-A-25018	UDB-25018	3/4 -16	1-1/4 -12	.8125	1.3110	9/32	1-5/8	1-5/16
UDB-A-25583	UDB-25583	1" -14	1-1/4 -12	1.0625	1.3110	11/32	1-5/8	1-5/16
UDB-A-25582	UDB-25582	3/4 -16	1-1/2 -12	.8125	1.5610	9/32	1-15/16	1-9/16
UDB-A-20132	UDB-20132	1" -14	1-1/2 -12	1.0625	1.5610	11/32	1-15/16	1-9/16
UDB-A-20017	UDB-20017	1-1/4 -12	1-1/2 -12	1.3125	1.5610	11/32	1-15/16	1-9/16
UDB-A-27910	UDB-27910	1-1/2 -12	2" -16	1.5625	2.0610	11/32	2-1/2	2-1/16



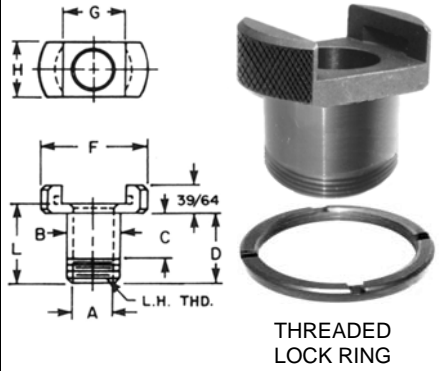
See Nosepiece Section for further information.

ALLOY STEEL - HEAT TREATED - BLACK OXIDE FINISH

NURLOCK LINER PART NO.	A	B	C	D	F	G	H	L	L.H. THREAD	LOCK RING NO.	MATCHING NURLOCK TIP
NL-16520	.3752 .3756	.4995 .4990	7/16	3/4	1-1/8	.625	3/4	1"	1/2 -20	521449	A-21106
NL-16521	.5002 .5006	.7495 .7490	7/16	3/4	1-3/16	.625	7/8	1"	3/4 -16	521450A	A-21306
NL-16522	.6252 .6256	.8745 .8740	7/16	3/4	1-13/16	1.218	1-1/8	1"	7/8 -14	521451	A-22406
NL-16523	.8753 .8757	1.2495 1.2490	9/16	1"	2-1/8	1.468	1-3/8	1-1/4	1-1/4 -12	521453	A-23310
NL-16524	1.1254 1.1257	1.4990 1.4985	27/32	1-1/2	2-1/8	1.468	1-5/8	1-3/4	1-1/2 12	521454	A-23515
NL-16525	1.1254 1.1257	1.4990 1.4985	27/32	1-1/2	2-7/16	1.718	1-5/8	1-3/4	1-1/2 -12	521454	A-24615
NL-16526	1.5006 1.5010	1.9990 1.9985	27/32	1-1/2	2-7/16	1.718	2-1/8	1-3/4	2" -16	521457A	A-24815

NEW LINER TOLERANCES PREVENT SHANK SEIZURE! Use Threaded Lock Rings.

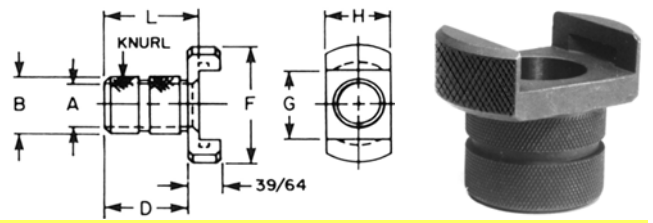
### STANDARD NURLOCK LINERS SLIP FIT Eliminates Lock Screws



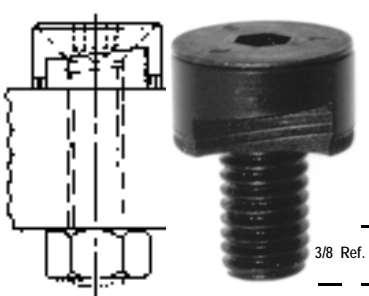
NURLOCK LINER PART NO.	A	B	D	F	G	H	L	MATCHING NURLOCK TIP
NLP-375	.3752 .3756	3/4	7/8	1-3/16	.625	7/8	1-1/8	A-21108
NLP-500	.5002 .5006	3/4	7/8	1-3/16	.625	7/8	1-1/8	A-21308
NLP-750	.7503 .7507	1-1/8	7/8	1-13/16	1.218	1-1/8	1-1/8	A-22508

MEDIUM HEAVY KNURL STAYS PUT! Perfect for laminate Drill Bars & fixtures.

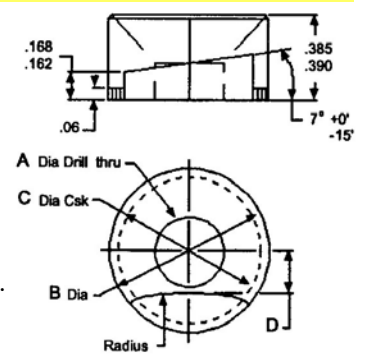
### STANDARD NURLOCK LINERS For PLASTIC TOOLING



NURLOCK CLAMPS — TOUGH — DURABLE							
CLAMP NO.	A	B	C	D	FLAT HEAD SCREW	JAM NUT	RADIUS
TLC-2	21/64	5/8	.595	.188	5/16-18x3/4	5/16-18	1.5
TLC-3	25/64	3/4	.720	.218	3/8-16x1	3/8-16	1.5
TLC-4	21/64	5/8	.595	.188	5/16-18x1-1/2	5/16-18	1.5
TLC-5	21/64	5/8	.595	.188	5/16-18x2	5/16-18	1.5
TLC-6	25/64	3/4	.720	.218	3/8-16x2	3/8-16	2.0
TLC-7	25/64	3/4	.720	.218	3/8-16x2	3/8-16	2.5



### NURLOCK CLAMPS



Tapered clamping surface accommodates all adapter tips in use · Positive lock · Uniform and Repeatable · Serrations Reduce Rotation · Heat-treated Steel · Interchanges with weaker lock screws.

4-20-01



# Lock Liners for Most All Adapter Tip Diameters



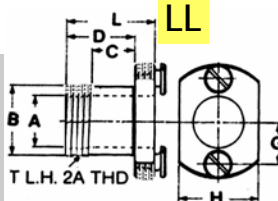
SLIP FIT WITH LOCK RING

KNURLED FOR EPOXY

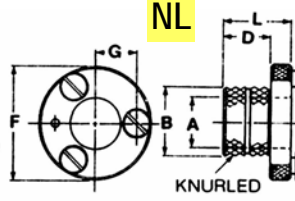


## Complete Size Range for Slip Fit Applications

Lock Liners are provided for all Adapter Tip diameters. Select any adapter tip and a corresponding lock liner with lock ring. Use when a high amount of torque is generated.



21100 thru 24800 SERIES



25000 SERIES ONLY

## Complete Size Range for Plastic Tooling

These Lock Liners will accept any Adapter Tip Shank diameter. They are both tough and knurled to "stay fast" in potted or cast-in-place applications.

SPECIFY LL FOR SLIP FIT OR NL FOR KNURLED

ROCKWELL 42-46C

OLD ER PART NUMBER	NEW PART NUMBER LL or NL	A I.D. NOMINAL	A I.D. ACTUAL	B O.D. NOMINAL	B O.D. ACTUAL	C	D	F	G NOM.	H	L	T L.H. THREAD	LOCK RING	MATCHING ADAPTER TIP SERIES	LOCK SCREWS USED
A-16520	LL-21100	3/8	.3750 .3756	1/2	.4995 .4989	7/16	3/4	1-3/4	5/8	3/4	1-1/16	1/2-20	521449	A-11100 A-16500 A-21100	16531 (2)
	LL-21200	7/16	.4375 .4381	3/4	.7495 .7489	7/16	3/4	1-3/4	5/8	1"	1-1/16	3/4-16	521450A	A-11200 A-21200	2 LOCK
A-16521	LL-21300	1/2	.5000 .5006	3/4	.7495 .7489	7/16	3/4	1-3/4	5/8	1"	1-1/16	3/4-16	521450A	A-11300 A-16501 A-21300	LL-21000
	LL-22100	7/16	.4375 .4381	7/8	.8745 .8739	7/16	3/4	2-7/16	59/64	1-1/8	1-3/16	7/8-14	521451	A-12100 A-22100	16532 (2)
	LL-22200	1/2	.5000 .5006	7/8	.8745 .8739	7/16	3/4	2-7/16	59/64	1-1/8	1-3/16	7/8-14	521451	A-12200 A-22200	2 LOCK
	LL-22300	9/16	.5625 .5631	7/8	.8745 .8739	7/16	3/4	2-7/16	59/64	1-1/8	1-3/16	7/8-14	521451	A-12300 A-22300	LL-22000
A-16522	LL-22400	5/8	.6250 .6256	7/8	.8745 .8739	7/16	3/4	2-7/16	59/64	1-1/8	1-3/16	7/8-14	521451	A-12400 A-16502 A-22400	
	LL-23100	3/4	.7500 .7506	1-1/4	1.2495 1.2485	9/16	1"	2-11/16	1-3/64	1-1/2	1-7/16	1-1/4-12	521453	A-13100 A-23100	16532 (2)
	LL-23200	13/16	.8125 .8131	1-1/4	1.2495 1.2485	9/16	1"	2-11/16	1-3/64	1-1/2	1-7/16	1-1/4-12	521453	A-13200 A-23200	2 LOCK
A-16523	LL-23300	7/8	.8750 .8756	1-1/4	1.2495 1.2485	9/16	1"	2-11/16	1-3/64	1-1/2	1-7/16	1-1/4-12	521453	A-13300 A-16503 A-23300	LL-23000
	LL-23400	1"	1.0000 1.0010	1-1/2	1.4990 1.4980	27/32	1-1/2	2-11/16	1-3/64	1-3/4	1-15/16	1-1/2-12	521454	A-13400 A-23400	
A-16524	LL-23500	1-1/8	1.1250 1.1260	1-1/2	1.4990 1.4980	27/32	1-1/2	2-11/16	1-3/64	1-3/4	1-15/16	1-1/2-12	521454	A-13500 A-16504 A-23500	
	LL-24100	5/8	.6250 .6256	1-1/2	1.4990 1.4980	27/32	1-1/2	3"	1-11/64	1-3/4	1-15/16	1-1/2-12	521454	A-14100 A-24100	16532 (2)
	LL-24300	3/4	.7500 .7506	1-1/2	1.4990 1.4980	27/32	1-1/2	3"	1-11/64	1-3/4	1-15/16	1-1/2-12	521454	A-14300 A-24300	
	LL-24400	7/8	.8750 .8756	1-1/2	1.4990 1.4980	27/32	1-1/2	3"	1-11/64	1-3/4	1-15/16	1-1/2-12	521454	A-14400 A-24400	2 LOCK
	LL-24500	1"	1.0000 1.0010	1-1/2	1.4990 1.4980	27/32	1-1/2	3"	1-11/64	1-3/4	1-15/16	1-1/2-12	521454	A-14500 A-24500	LL-24000
A-16525	LL-24600	1-1/8	1.1250 1.1260	1-1/2	1.4990 1.4980	27/32	1-1/2	3"	1-11/64	1-3/4	1-15/16	1-1/2-12	521454	A-14600 A-16505 A-24600	
	LL-24700	1-1/4	1.2500 1.2510	2"	1.9990 1.9980	27/32	1-1/2	3"	1-11/64	2-1/2	1-15/16	2"-16	521457A	A-14700 A-24700	
A-16526	LL-24800	1-1/2	1.5000 1.5010	2"	1.9990 1.9980	27/32	1-1/2	3"	1-11/64	2-1/2	1-15/16	2"-16	521457A	A-14800 A-16506 A-24800	
	LL-25100	1-1/4	1.2500 1.2510	2-1/2	2.4990 2.4980	1-3/8	2"	3-3/4	1-9/16	--	2-5/8	2-1/2-16	521458A	A-15100 A-25100	16530 (3)
	LL-25200	1-3/8	1.3750 1.3760	2-1/2	2.4990 2.4980	1-3/8	2"	3-3/4	1-9/16	--	2-5/8	2-1/2-16	521458A	A-15200 A-25200	
	LL-25300	1-1/2	1.5000 1.5010	2-1/2	2.4990 2.4980	1-3/8	2"	3-3/4	1-9/16	--	2-5/8	2-1/2-16	521458A	A-15300 A-25300	3 LOCK
	LL-25400	1-3/4	1.7500 1.7510	2-1/2	2.4990 2.4980	1-3/8	2"	3-3/4	1-9/16	--	2-5/8	2-1/2-16	521458A	A-15400 A-25400	LL-25000
A-16533	LL-25500	2"	2.0000 2.0015	2-1/2	2.4990 2.4980	1-3/8	2"	3-3/4	1-9/16	--	2-5/8	2-1/2-16	521458A	A-15500 A-16513 A-25500	

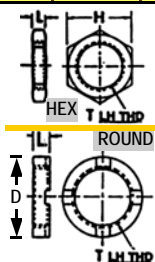
## LOCK RINGS



## HEX LOCK NUTS

are UDB-14441 thru UDB-14448. See pg. P34 for Installation Tools.

## P36



	LOCK RING #	T	L/H THD	H or D	L	LOCK RING #	T	L/H THD	O.D.	L	LOCK RING #	T	L/H THD	O.D.	L
HEX	UDB-14441	1/2	-20	0.75	0.25	UDB-521451	7/8	-14	1.25	0.25	UDB-521456A	1-3/4	-16	2.37	0.25
	UDB-14442	3/4	-16	1.00	0.25	UDB-521452A	15/16	-16	1.37	0.25	UDB-521456	1-7/8	-16	2.37	0.25
	UDB-14443	7/8	-14	1.25	0.25	UDB-521452	1	-14	1.37	0.25	UDB-521457A	2	-16	2.50	0.25
	UDB-14445	1-1/4	-12	1.75	0.37	UDB-521453A	1-1/8	-16	1.50	0.25	UDB-521457	2-1/8	-16	2.62	0.31
	UDB-14446	1-1/2	-12	2.00	0.50	UDB-521453	1-1/4	-12	1.75	0.31	UDB-521458	2-1/4	-16	2.75	0.31
	UDB-14447	2	-16	2.50	0.50	UDB-521454A	1-3/8	-16	1.75	0.31	UDB-521458A	2-1/2	-16	3.00	0.31
	UDB-14448	2-1/2	-16	3.00	0.50	UDB-521454	1-1/2	-12	1.75	0.31	UDB-521459	2-5/8	-16	3.12	0.37
ROUND	UDB-521449	1/2	-20	0.75	0.25	UDB-521454B	1-1/2	-16	1.75	0.25	UDB-521460	2-7/8	-16	3.37	0.37
LOCK	UDB-521450	5/8	-18	0.87	0.25	UDB-521455A	1-9/16	-16	2.06	0.25	UDB-521470A	3-1/2	-16	3.50	0.37
	UDB-521450A	3/4	-16	1.20	0.25	UDB-521455	1-5/8	-16	2.12	0.25	UDB-521472A	3-1/2	-16	4.00	0.37
	UDB-521451A	13/16	-16	1.18	0.25	UDB-521455B	1-11/16	-16	2.18	0.25	UDB-521474A	4	-16	4.50	0.43
											UDB-521480	4-1/2	-16	5.00	0.43

A New Product - A New Direction - A New Commitment!

# Nurlock Extended Range Tooling

## Locking Liners

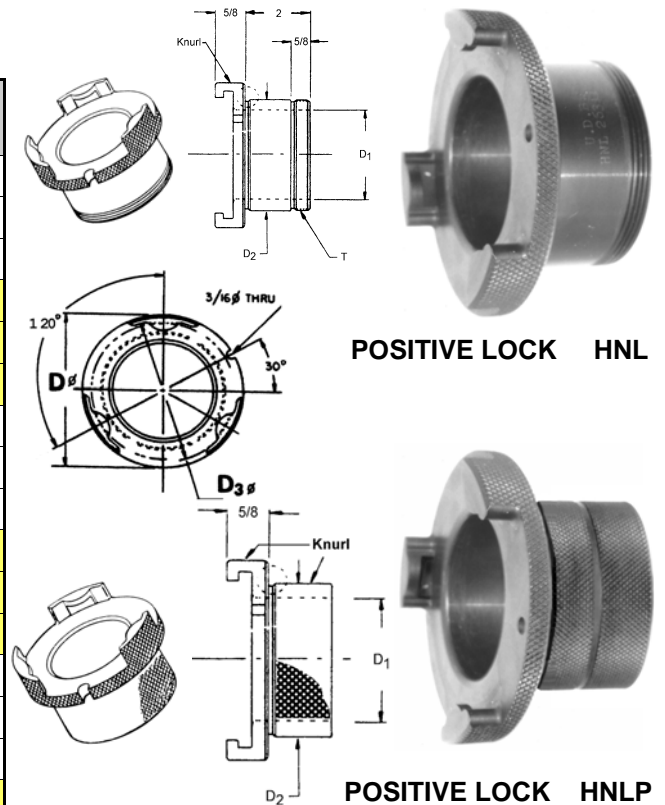
Extended Range sizes are used with TLC and our Taper Lock Clamp series.

### EXTENDED RANGE HELICAL NURLOCK LOCK LINERS (STYLES HNL and HNL P)

HNL is threaded for hard tooling. HNL P is coarse knurled to stay in place for soft tools. Specify either HNL or HNL P when ordering.

UNITED PART NO.	D HD DIA	D1 I.D.	D2 O.D.	T LH THRD	D3	ADAPTER TIP SERIES	LOCK RING
UCC-XXX-26160	3.50	1.50	2.499	2-1/2-16	2.920	261XX	UDB-521458A
UCC-XXX-26360	3.50	1.75	2.499	2-1/2-16	2.920	263XX	UDB-521458A
UCC-XXX-26560	3.50	2.00	2.499	2-1/2-16	2.920	265XX	UDB-521458A
UCC-XXX-27160	4.00	2.00	2.999	3-16	3.420	271XX	UDB-521470A
UCC-XXX-27360	4.00	2.37	2.999	3-16	3.420	273XX	UDB-521470A
UCC-XXX-27560	4.00	2.50	2.999	3-16	3.420	275XX	UDB-521470A
UCC-XXX-28160	4.50	2.50	3.499	3-1/2-16	3.920	281XX	UDB-521472A
UCC-XXX-28360	4.50	2.75	3.499	3-1/2-16	3.920	283XX	UDB-521472A
UCC-XXX-28560	4.50	3.00	3.499	3-1/2-16	3.920	285XX	UDB-521472A
UCC-XXX-29160	5.00	3.00	3.999	4-16	4.420	291XX	UDB-521474A
UCC-XXX-29360	5.00	3.25	3.999	4-16	4.420	293XX	UDB-521474A
UCC-XXX-29560	5.00	3.50	3.999	4-16	4.420	295XX	UDB-521474A
UCC-XXX-30160	5.50	3.50	4.499	4-1/2-16	4.920	301XX	UDB-521480
UCC-XXX-30360	5.50	3.75	4.499	4-1/2-16	4.920	303XX	UDB-521480
UCC-XXX-30560	5.50	4.00	4.499	4-1/2-16	4.920	305XX	UDB-521480

*Specify HNL or HNL P when ordering. Example: UCC-HNL P-30560*



POSITIVE LOCK HNL

POSITIVE LOCK HNL P

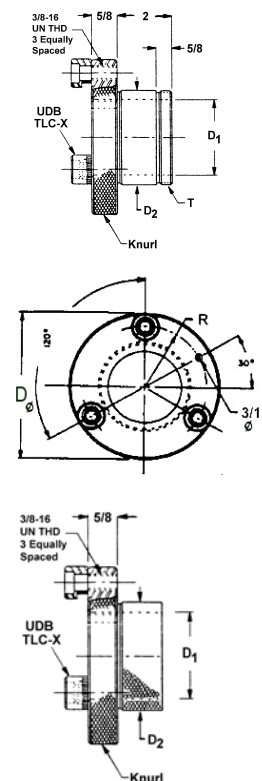
### EXTENDED RANGE STANDARD NURLOCK LOCK LINERS (STYLES LL and LLP)

Extended Range sizes are used with TLC and our Taper Lock Clamp series.

LL is threaded for hard tooling. LLP is coarse knurled to stay in place for soft tooling. Specify either LL or LLP when ordering.

UNITED PART NO.	D HD DIA	D1 I.D.	D2 O.D.	T LH THRD	R Lock Screw Location	TLC NO.	ADAPTER TIP SERIES	LOCK RING
UCC-XXX-26160	4-1/8	1.50	2.499	2-1/2-16	1.688	-3	261XX	UDB-521458A
UCC-XXX-26360	4-1/8	1.75	2.499	2-1/2-16	1.688	-3	263XX	UDB-521458A
UCC-XXX-26560	4-1/8	2.00	2.499	2-1/2-16	1.688	-3	265XX	UDB-521458A
UCC-XXX-27160	4-5/8	2.00	2.999	3-16	1.938	-6	271XX	UDB-521470A
UCC-XXX-27360	4-5/8	2.37	2.999	3-16	1.938	-6	273XX	UDB-521470A
UCC-XXX-27560	4-5/8	2.50	2.999	3-16	1.938	-6	275XX	UDB-521470A
UCC-XXX-28160	5-1/8	2.50	3.499	3-1/2-16	2.187	-6	281XX	UDB-521472A
UCC-XXX-28360	5-1/8	2.75	3.499	3-1/2-16	2.187	-6	283XX	UDB-521472A
UCC-XXX-28560	5-1/8	3.00	3.499	3-1/2-16	2.187	-6	285XX	UDB-521472A
UCC-XXX-29160	5-5/8	3.00	3.999	4-16	2.438	-7	291XX	UDB-521474A
UCC-XXX-29360	5-5/8	3.25	3.999	4-16	2.438	-7	293XX	UDB-521474A
UCC-XXX-29560	5-5/8	3.50	3.999	4-16	2.438	-7	295XX	UDB-521474A
UCC-XXX-30160	6-1/8	3.50	4.499	4-1/2-16	2.678	-7	301XX	UDB-521480
UCC-XXX-30360	6-1/8	3.75	4.499	4-1/2-16	2.678	-7	303XX	UDB-521480
UCC-XXX-30560	6-1/8	4.00	4.499	4-1/2-16	2.678	-7	305XX	UDB-521480

*Specify LL or LLP when ordering. Example: UCC-LL-30560*



STANDARD LOCK LL

STANDARD LLP



# Reducers-Increasers

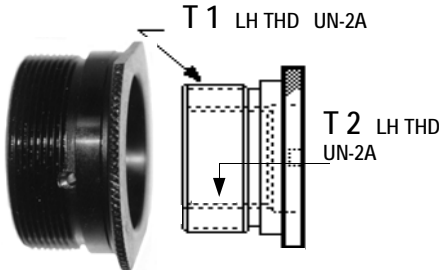
DOWN from 4-1/4 - 16 LH to 3/4 - 16 LH  
UP from 3/4 - 16 LH to 4-1/4 - 16 LH

## REDUCER BUSHINGS

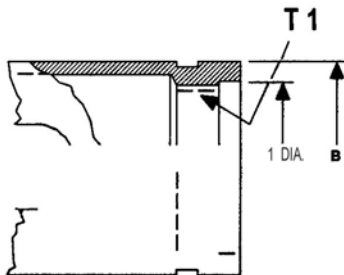
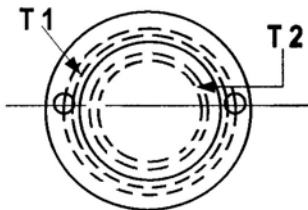
From 4-1/4-16 LH to 3/4-16 LH  
Add 'A' to Part No. for Coolant type.

## EXTENDED RANGE REDUCER BUSHINGS

Allowing REDUCTIONS from large 4-1/4 - 16 LH 30,000 Series to as small as 3/4 - 16 LH 21,000 Series. This provides a broad range of internal I.D. diameters available from a wide variety of Nurlock Adapter Tips.



T 1 Reducer Threads Fit T 1 Nosepiece



### NOSEPIECE

Part No. Indicates Thread Size

Add 'A' for Coolant Type to PART NO.	T 1 NOSEPIECE THREAD		T 2 BUSHING TIP THREAD	
	LENGTH THREAD	THREAD SERIES	LENGTH THREAD	THREAD SERIES
UCC-26021	2-1/4-16	26000	3/4-16	21000
UCC-26022	2-1/4-16	26000	1-14	22000
UCC-26023	2-1/4-16	26000	1-1/4-12	23000
UCC-26024	2-1/4-16	26000	1-1/2-12	24000
UCC-26025	2-1/4-16	26000	2-16	25000
UCC-27021	2-3/4-16	27000	3/4-16	21000
UCC-27022	2-3/4-16	27000	1-14	22000
UCC-27023	2-3/4-16	27000	1-1/4-12	23000
UCC-27024	2-3/4-16	27000	1-1/2-12	24000
UCC-27025	2-3/4-16	27000	2-16	25000
UCC-27026	2-3/4-16	27000	2-1/4-16	26000
UCC-28021	3-1/4-16	28000	3/4-16	21000
UCC-28022	3-1/4-16	28000	1-14	22000
UCC-28023	3-1/4-16	28000	1-1/4-12	23000
UCC-28024	3-1/4-16	28000	1-1/2-12	24000
UCC-28025	3-1/4-16	28000	2-16	25000
UCC-28026	3-1/4-16	28000	2-1/4-16	26000
UCC-28027	3-1/4-16	28000	2-3/4-16	27000
UCC-29021	3-3/4-16	29000	3/4-16	21000
UCC-29022	3-3/4-16	29000	1-14	22000
UCC-29023	3-3/4-16	29000	1-1/4-12	23000
UCC-29024	3-3/4-16	29000	1-1/2-12	24000
UCC-29025	3-3/4-16	29000	2-16	25000
UCC-29026	3-3/4-16	29000	2-1/4-16	26000
UCC-29027	3-3/4-16	29000	2-3/4-16	27000
UCC-29028	3-3/4-16	29000	3-1/4-16	28000
UCC-30021	4-1/4-16	30000	3/4-16	21000
UCC-30022	4-1/4-16	30000	1-14	22000
UCC-30023	4-1/4-16	30000	1-1/4-12	23000
UCC-30024	4-1/4-16	30000	1-1/2-12	24000
UCC-30025	4-1/4-16	30000	2-16	25000
UCC-30026	4-1/4-16	30000	2-1/4-16	26000
UCC-30027	4-1/4-16	30000	2-3/4-16	27000
UCC-30028	4-1/4-16	30000	3-1/4-16	28000
UCC-30029	4-1/4-16	30000	3-3/4-16	29000

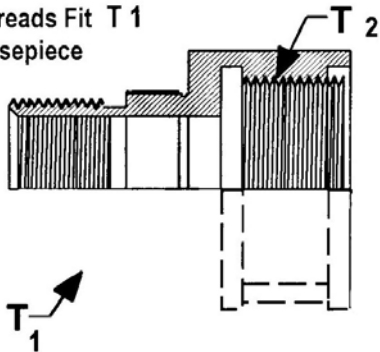
## INCREASER BUSHINGS

From 3/4-16 LH to 4-1/4-16 LH

## EXTENDED RANGE INCREASER BUSHINGS

Allowing INCREASES from small 3/4 - 16 LH 21,000 Series to as large as 4-1/4 - 16 LH 30,000 Series. This provides a broad range of internal I.D. diameters available from a wide variety of Nurlock Adapter Tips.

T 1 Increaser Threads Fit T 1 Nosepiece



PART NO.	NOSEPIECE		BUSHING TIP THREAD		PART NO.	NOSEPIECE		BUSHING TIP THREAD	
	T 1 LEN	THREAD SERIES	T 2 LEN	THREAD SERIES		T 1 LEN	THREAD SERIES	T 2 LEN	THREAD SERIES
UCC-25026	2-16	25000	2-1/4-16	26000	UCC-27028	2-3/4-16	27000	3-1/4-16	28000
UCC-25027	2-16	25000	2-3/4-16	27000	UCC-27029	2-3/4-16	27000	3-3/4-16	29000
UCC-25028	2-16	25000	3-1/4-16	28000	UCC-27030	2-3/4-16	27000	4-1/4-16	30000
UCC-25029	2-16	25000	3-3/4-16	29000	UCC-28029	3-1/4-16	28000	3-3/4-16	29000
UCC-25030	2-16	25000	4-1/4-16	30000	UCC-28030	3-1/4-16	28000	4-1/4-16	30000
UCC-26027	2-1/4-16	26000	2-3/4-16	27000	UCC-29030	3-3/4-16	29000	4-1/4-16	30000
UCC-26028	2-1/4-16	26000	3-1/4-16	28000					
UCC-26029	2-1/4-16	26000	3-3/4-16	29000					
UCC-26030	2-1/4-16	26000	4-1/4-16	30000					