

Avoid Set Up Delays

UNITED GUN DRILL MASTER LINER SETS

With a **UNITED GDL MASTER GUN DRILL LINER SET** you avoid set up delays and increase your gun drill guiding capacity.

Each set covers minimum to maximum GDI Insert ranges.

Liners store easily in a durable polyethylene case.

**Gun Drill Master
Liners Sets in Cases**



**GUN DRILL MASTER LINER
SETS in CASES
AVAILABLE: CASES ONLY**

SELECT YOUR O.D.

1" O.D. SET: GDL-64	1-3/8 O.D. SET: GDL-88	1-3/4 O.D. SET: GDL-112	2-1/4 O.D. SET: GDL-144																																																				
Set of FIVE 1" O.D. by 1" long GDL Gun Drill Bushing Master Liners.	Set of SIX 1-3/8 O.D. by 1-3/8 long GDL Gun Drill Bushing Master Liners.	Set of SEVEN 1-3/4 O.D. by 1-3/4 long GDL Gun Drill Bushing Master Liners.	Set of FOUR 2-1/4 O.D. by 2-1/8 long GDL Gun Drill Bushing Master Liners.																																																				
<table border="0"> <tr> <th>GD MASTER LINER</th> <th>USE WITH 1/2" LONG INSERTS</th> </tr> <tr> <td>GDL-64-16-13</td> <td>13/64 O.D.</td> </tr> <tr> <td>GDL-64-16-16</td> <td>1/4 O.D.</td> </tr> <tr> <td>GDL-64-16-20</td> <td>5/16 O.D.</td> </tr> <tr> <td>GDL-64-16-32</td> <td>1/2 O.D.</td> </tr> <tr> <td>GDL-64-16-48</td> <td>3/4 O.D.</td> </tr> </table>	GD MASTER LINER	USE WITH 1/2" LONG INSERTS	GDL-64-16-13	13/64 O.D.	GDL-64-16-16	1/4 O.D.	GDL-64-16-20	5/16 O.D.	GDL-64-16-32	1/2 O.D.	GDL-64-16-48	3/4 O.D.	<table border="0"> <tr> <th>GD MASTER LINER</th> <th>USE WITH 3/4" LONG INSERTS</th> </tr> <tr> <td>GDL-88-22-13</td> <td>13/64 O.D.</td> </tr> <tr> <td>GDL-88-22-16</td> <td>1/4 O.D.</td> </tr> <tr> <td>GDL-88-22-20</td> <td>5/16 O.D.</td> </tr> <tr> <td>GDL-88-22-32</td> <td>1/2 O.D.</td> </tr> <tr> <td>GDL-88-22-48</td> <td>3/4 O.D.</td> </tr> <tr> <td>GDL-88-22-64</td> <td>1" O.D.</td> </tr> </table>	GD MASTER LINER	USE WITH 3/4" LONG INSERTS	GDL-88-22-13	13/64 O.D.	GDL-88-22-16	1/4 O.D.	GDL-88-22-20	5/16 O.D.	GDL-88-22-32	1/2 O.D.	GDL-88-22-48	3/4 O.D.	GDL-88-22-64	1" O.D.	<table border="0"> <tr> <th>GD MASTER LINER</th> <th>USE WITH 1" LONG INSERTS</th> </tr> <tr> <td>GDL-112-28-13</td> <td>13/64 O.D.</td> </tr> <tr> <td>GDL-112-28-16</td> <td>1/4 O.D.</td> </tr> <tr> <td>GDL-112-28-20</td> <td>5/16 O.D.</td> </tr> <tr> <td>GDL-112-28-32</td> <td>1/2 O.D.</td> </tr> <tr> <td>GDL-112-28-48</td> <td>3/4 O.D.</td> </tr> <tr> <td>GDL-112-28-64</td> <td>1" O.D.</td> </tr> <tr> <td>GDL-112-28-88</td> <td>1-3/8 O.D.</td> </tr> </table>	GD MASTER LINER	USE WITH 1" LONG INSERTS	GDL-112-28-13	13/64 O.D.	GDL-112-28-16	1/4 O.D.	GDL-112-28-20	5/16 O.D.	GDL-112-28-32	1/2 O.D.	GDL-112-28-48	3/4 O.D.	GDL-112-28-64	1" O.D.	GDL-112-28-88	1-3/8 O.D.	<table border="0"> <tr> <th>GD MASTER LINER</th> <th>USE WITH 1-1/4" LONG INSERTS</th> </tr> <tr> <td>GDL-144-34-48</td> <td>3/4 O.D.</td> </tr> <tr> <td>GDL-144-34-64</td> <td>1" O.D.</td> </tr> <tr> <td>GDL-144-34-88</td> <td>1-3/8 O.D.</td> </tr> <tr> <td>GDL-144-34-112</td> <td>1-3/4 O.D.</td> </tr> </table>	GD MASTER LINER	USE WITH 1-1/4" LONG INSERTS	GDL-144-34-48	3/4 O.D.	GDL-144-34-64	1" O.D.	GDL-144-34-88	1-3/8 O.D.	GDL-144-34-112	1-3/4 O.D.
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ALL O.D.s SET: GDL-176 Set of FIVE by 2-1/2 long GDL Gun Drill Bushing Master Liners. <table border="0"> <tr> <th>GD MASTER LINER</th> <th>USE WITH 2-1/2" LONG INSERTS</th> </tr> <tr> <td>GDL-176-40-48</td> <td>3/4 O.D.</td> </tr> <tr> <td>GDL-176-40-64</td> <td>1" O.D.</td> </tr> <tr> <td>GDL-176-40-88</td> <td>1-3/8 O.D.</td> </tr> <tr> <td>GDL-176-40-112</td> <td>1-3/4 O.D.</td> </tr> <tr> <td>GDL-176-40-144</td> <td>2-1/4 O.D.</td> </tr> </table> Order as: GDL-176	GD MASTER LINER	USE WITH 2-1/2" LONG INSERTS	GDL-176-40-48	3/4 O.D.	GDL-176-40-64	1" O.D.	GDL-176-40-88	1-3/8 O.D.	GDL-176-40-112	1-3/4 O.D.	GDL-176-40-144	2-1/4 O.D.																																											
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Sets of Slip Fit Drill & Reamer Bushings

Economical Slip Fit Bushings in SETS!



UTK-SF-13 SET **13** **SMALL SHOP SET**
Drill or Reamer Bushings 1/16 to 1/4 by 64ths

Set includes THIRTEEN SF Bushings all 1/2" long:
1 each
SF-20-8- 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 11/64, 3/16
SF-32-8- 13/64, 7/32, 15/64, 1/4

Order as:
UTK-SFD-13 DRILL BUSHINGS SET
UTK-SFD-13-DB DRILL BUSHINGS WITH 1 DRILL BAR-5/16"-1/2"
UTK-SFR-13 REAMER BUSHINGS SET
UTK-SFR-13-DB REAMER BUSHINGS WITH 1 DRILL BAR-5/16"-1/2"
UTK-SFDR-26-DB ALL Drill & Reamer Bushings above with 1 DRILL BAR-5/16"-1/2"



UTK-SF-15 SET **15** **TOOL MAKERS SET**
Drill or Reamer Bushings 1/16 to 1/2 by 32nds

Set includes FIFTEEN SF Bushings all 1/2" long:
1 each
SF-20-8- 1/16, 3/32, 1/8, 5/32, 3/16
SF-32-8- 7/32, 1/4, 9/32, 5/16, 11/32
SF-48-8- 3/8, 13/32, 7/16, 15/32, 1/2

Order as:
UTK-SFD-15 DRILL BUSHINGS SET
UTK-SFD-15-DB DRILL BUSHINGS & 2 DRILL BARS-5/16"-1/2"-3/4"
UTK-SFR-15 REAMER BUSHINGS SET
UTK-SFR-15-DB REAMER BUSHINGS & 2 DRILL BARS-5/16"-1/2"-3/4"
UTK-SFDR-30-DB ALL Drill & Reamer Bushings above & 2 DRILL BARS-5/16"-1/2"-3/4"



UTK-SF-21 SET **21** **MID-RANGE SET**
Drill or Reamer Bushings 1/16 to 3/8 by 64ths

Set includes TWENTY-ONE SF Bushings all 1/2" long:
1 each
SF-20-8- 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 11/64, 3/16
SF-32-8- 13/64, 7/32, 15/64, 1/4, 17/64, 9/32, 19/64, 5/16, 21/64
SF-48-8- 11/32, 23/64, 3/8

Order as:
UTK-SFD-21 DRILL BUSHINGS SET
UTK-SFD-21-DB DRILL BUSHINGS WITH 2 DRILL BARS-5/16"-1/2"-3/4"
UTK-SFR-21 REAMER BUSHINGS SET
UTK-SFR-21-DB REAMER BUSHINGS & 2 DRILL BARS-5/16"-1/2"-3/4"
UTK-SFDR-42-DB ALL Drill & Reamer Bushings above & 2 DRILL BARS-5/16"-1/2"-3/4"

UNITED's SF Drill & Reamer Bushings available in Sets!

Preferred by:
• Mechanics
• Machinists
• Retrofitters
• Toolmakers
• Specialists

UNITED Sets satisfy the requirements of any metalworking shop.

All Sets provided in attractive and distinctive black molded cases 2 to 3" thick—fits in tool box.

UNITED SF DRILL & REAMER BUSHINGS in Sets of the most popular sizes!

Sets available in **Drill Bushings (D)**, **Reamer Bushings (R)** and you can add a compact **Drill Bar (DB)**.

Specify **UTK-SF D, R** or add **DB** to Part No.

For All items, specify **UTK-SFDR- # -DB**.

TOLERANCES ON INSIDE DIAMETERS

For REAMER BUSHINGS		For DRILL BUSHINGS	
I. D. RANGE	TOLERANCE OVER NOM.	I. D. RANGE	TOLERANCE OVER NOM.
Up to .2500	+ .0005 to + .0008	Up to .2500	+ .0001 to + .0004
Over .2500 to 1.0000	+ .0006 to + .0010	Over .2500 to .7500	+ .0001 to + .0005
Over 1.0000	+ .0008 to + .0012	Over .7500 to 1.5000	+ .0002 to + .0006
		Over 1.5000 to 1.8750	+ .0003 to + .0007

Molded Custom Cases With Matching Drill Bars

Sets of SF Bushings
with Drill Bars Added

Simplify
your
location and
fixturing!

ADD
Double End
DRILL BARS
to your SF
Drill or
Reamer
Bushings
Set.

Drill Bars
provide
accurate
location and
alignment of
drilled
holes.

You get
UNITED'S
Best Bars!

UTK-SF-22 SET **22** **MINI-WIRE SET**
Drill or Reamer Bushings #80 to #61

Set includes TWENTY-TWO SF Bushings all 1/2" long:
1 each
SF-20-8- #80, 79, 1/64, 78, 77, 76, 75, 74, 73, 72, 71,
70, 69, 68, 1/32, 67, 66, 65, 64, 63, 62, 61

Order as:
UTK-SFD-22 DRILL BUSHINGS SET
UTK-SFD-22-DB DRILL BUSHINGS WITH 1 DRILL BAR-1/2"-3/4"
UTK-SFR-22 REAMER BUSHINGS SET
UTK-SFR-22-DB REAMER BUSHINGS WITH 1 DRILL BAR-1/2"-3/4"
UTK-SFDR-44-DB ALL Drill & Reamer Bushings above with 1 DRILL BAR-1/2"-3/4"



UTK-SFM-25 SET **25** **METRIC SET**
MM Drill or Reamer Bushings (.0394 THRU .5118) 1mm to 13mm METRIC

Set includes TWENTY-FIVE SFM Bushings all 1/2" long:
1 each
SFM-20-8- 1.00mm, 1.50mm, 2.00mm, 2.50mm, 3.00mm,
3.50mm, 4.00mm, 4.50mm, 5.00mm (.0394 thru .1968)
SFM-32-8- 5.50mm, 6.00mm, 6.50mm, 7.00mm, 7.50mm,
8.00mm, 8.50mm (.2165 thru .3346)
SFM-48-8- 9.00mm, 9.50mm, 10.00mm, 10.50mm,
11.00mm, 11.50mm, 12.00mm, 12.50mm, 13.00mm
(.3543 thru .5188)

Order as:
UTK-SFMD-25 DRILL BUSHINGS SET
UTK-SFMD-25-DB DRILL BUSHINGS & 2 DRILL BARS-5/16-1/2-3/4"
UTK-SFMR-25 REAMER BUSHINGS SET
UTK-SFMR-25-DB REAMER BUSHINGS & 2 DRILL BARS-5/16-1/2-3/4"
UTK-SFMDR-50-DB ALL Drill & Reamer Bushings above & 2 DRILL BARS-5/16-1/2-3/4"



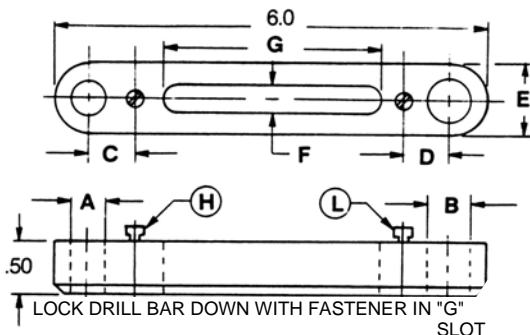
DOUBLE END DRILL BARS

Long Wear SF Drill & Reamer Bushings Sets!

- Premium Steel
- Durable
- Clearly labeled sizes for easy selection
- In quality custom molded cases only 2" to 3" thick
- Fits your tool box, rollaway, crib or shelf
- Organized
- Useful

UNITED Sets provide the most efficient way to keep your tools!

To get **UNITED'S** best in matching size Drill Bars,
Simply add 'DB' to Part No. and we will do the rest!



DOUBLE END DRILL BARS

UNITED PART NO.	A +.0005 -.0000	B +.0005 -.0000	C	D	E	F	G Travel	Lockscrews included		Use with Bushings
								H	L	
DBL-20-32	.3126	.5003	.500	.625	3/4	3/8	3-1/8	LS-1	LS-1	SF20-8 / SF32-8
DBL-32-48	.5003	.7503	.625	.578	1-1/8	3/8	2-5/8	LS-1	LS-1	SF32-8 / SF48-8

7-24-98

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

Sets of Slip Fit Drill & Reamer Bushings

A Variety of Slip Fit Bushings in SETS!



UTK-SF-26 SET **26** **LETTER SET**
 Drill or Reamer Bushings A thru Z

Set includes TWENTY-SIX SF Bushings all 1/2" long:
 1 each
SF-32-8- A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R
SF-48-8- S, T, U, V, W, X, Y, Z

Order as:
 UTK-SFD-26 DRILL BUSHINGS SET
 UTK-SFD-26-DB DRILL BUSHINGS WITH 1 DRILL BAR-1/2"-3/4"
 UTK-SFR-26 REAMER BUSHINGS SET
 UTK-SFR-26-DB REAMER BUSHINGS WITH 1 DRILL BAR-1/2"-3/4"
 UTK-SFDR-52-DB ALL Drill & Reamer Bushings above with 1 DRILL BAR-1/2"-3/4"



UTK-SF-29 SET **29** **COMPREHENSIVE SET**
 Drill or Reamer Bushings 1/16 to 1/2 by 64ths

Set includes TWENTY-NINE SF Bushings all 1/2" long:
 1 each
SF-20-8- 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 11/64, 3/16
SF-32-8- 13/64, 7/32, 15/64, 1/4, 17/64, 9/32, 19/64, 5/16, 21/64, 11/32
SF-48-8- 23/64, 3/8, 25/64, 13/32, 27/64, 7/16, 29/64, 5/32, 31/64, 1/2

Order as:
 UTK-SFD-29 DRILL BUSHINGS SET
 UTK-SFD-29-DB DRILL BUSHINGS & 2 DRILL BARS-5/16-1/2-3/4"
 UTK-SFR-29 REAMER BUSHINGS SET
 UTK-SFR-29-DB REAMER BUSHINGS & 2 DRILL BARS-5/16-1/2-3/4"
 UTK-SFDR-58-DB ALL Drill & Reamer Bushings above & 2 DRILL BARS-5/16-1/2-3/4"



UTK-SF-60 SET **60** **LARGE WIRE SET**
 Drill or Reamer Bushings #60 to #1

Set includes SIXTY SF Bushings all 1/2" long:
 1 each
SF-20-8- #60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21
SF-32-8- 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1

Order as:
 UTK-SFD-60 DRILL BUSHINGS SET
 UTK-SFD-60-DB DRILL BUSHINGS WITH 1 DRILL BAR-5/16"-1/2"
 UTK-SFR-60 REAMER BUSHINGS SET
 UTK-SFR-60-DB REAMER BUSHINGS WITH 1 DRILL BAR-5/16"-1/2"
 UTK-SFDR-120-DB ALL Drill & Reamer Bushings above with 1 DRILL BAR-5/16"-1/2"

ADD UNITED's Double End DRILL BARS to your SF Drill or Reamer Bushings Set.

Simplify your location and fixturing!

Drill Bars provide accurate location and alignment of drilled holes.

You get UNITED's Best Bars!

UNITED Sets satisfy the requirements of any metalworking shop.

UNITED SF DRILL & REAMER BUSHINGS in Sets of the most popular sizes! Sets available in **Drill Bushings (D)**, **Reamer Bushings (R)** and you can add a compact **Drill Bar (DB)**. Specify **UTK-SF D, R** or add **DB** to Part No. For All items, specify **UTK-SFDR- # -DB**.

TOLERANCES ON INSIDE DIAMETERS

For REAMER BUSHINGS			For DRILL BUSHINGS		
I. D. RANGE	TOLERANCE OVER NOM.		I. D. RANGE	TOLERANCE OVER NOM.	
Up to .2500	+ .0005 to	+ .0008	Up to .2500	+ .0001 to	+ .0004
Over .2500 to 1.0000	+ .0006 to	+ .0010	Over .2500 to .7500	+ .0001 to	+ .0005
Over 1.0000	+ .0008 to	+ .0012	Over .7500 to 1.5000	+ .0002 to	+ .0006
			Over 1.5000 to 1.8750	+ .0003 to	+ .0007

With UNITED You are Locked In With the Best!

Molded Custom Cases With Matching Drill Bars

Sets of SF Bushings
with Drill Bars Added

UTK-SF-
162
SET

162
Drill or Reamer
Bushings

COMPLETE SET
#80 thru 13MM

Set includes ONE HUNDRED SIXTY-TWO SF Bushings all 1/2" long:

1 each:

SF-20-8- #80, 79, 1/64, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 1/32, 67, 66, 65, 64, 63, 62, 61, 1.00mm, #60, 59, 58, 57, 56, 55, 54, 1.50mm, 53, 1/16, 52, 51, 50, 49, 48, 5/64, 47, 2.00mm, 46, 45, 44, 43, 42, 3/32, 41, 40, 2.50mm, 39, 38, 37, 36, 7/64, 35, 34, 33, 32, 3.00mm, 31, 1/8, 30, 29, 3.50mm, 28, 9/64, 27, 26, 25, 24, 23, 5/32, 22, 4.00mm, 21, 20, 19, 18, 11/64

SF-32-8- 17, 16, 4.50mm, 15, 14, 13, 3/16, 12, 11, 10, 9, 5.00mm, 8, 7, 13/64, 6, 5, 4, 3, 5.50mm, 7/32, 2, 1, A, 15/64, 6.00mm, B, C, D, E, 1/4, 6.50mm, F, G, 17/64, H, I, 7.00mm, J, K, 9/32, L, M, 7.50mm, 19/64, N, 5/16, 8.00mm, O, P, 21/64, Q, 8.50mm, R, 11/32

SF-48-8- S, 9.00mm, T, 23/64, U, 9.50mm, 3/8, V, W, 25/64, 10.00mm, X, Y, 13/32, Z, 10.50mm, 27/64, 11.00mm, 7/16, 11.50mm, 29/64, 15/32, 12.00mm, 31/64, 12.50mm, 1/2, 13.00mm

Order as:

UTK-SFD-162 DRILL BUSHINGS SET

UTK-SFD-162-DB DRILL BUSHINGS & 2 DRILL BARS 5/16"-1/2"-3/4"

UTK-SFR-162 REAMER BUSHINGS SET

UTK-SFR-162-DB REAMER BUSHINGS & 2 DRILL BARS 5/16"-1/2"-3/4"

UTK-SFDR-324-DB ALL Drill & Reamer Bushings above and 2 DRILL BARS 5/16"-1/2"-3/4"



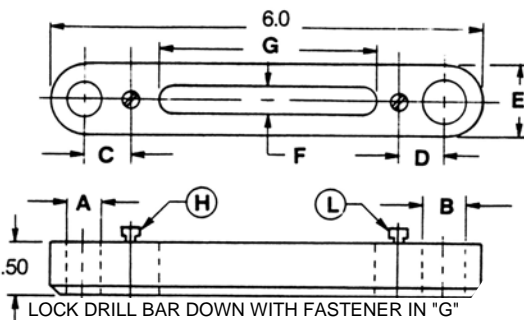
EVERY BUSHING YOU NEED IN A COMPACT
CUSTOM MOLDED CASE WITH
MATCHING DRILL BARS FROM **UNITED!**

Long Wear SF Drill & Reamer Bushings Sets!

- Premium Steel
- Durable
- Clearly labeled sizes for easy selection
- In quality custom molded cases only 2" to 3" thick
- Fits your tool box, rollaway, crib or shelf
- Organized
- Useful

UNITED Sets provide the most efficient way to keep your tools!

To get **UNITED's** best in matching size Drill Bars,
Simply add 'DB' to Part No. and we will do the rest!



DOUBLE END DRILL BARS



UNITED PART NO.	A +.0005 -.0000	B +.0005 -.0000	C	D	E	F	G Travel	Lockscrews included		Use with Bushings
								H	L	
DBL-20-32	.3126	.5003	.500	.625	3/4	3/8	3-1/8	LS-1	LS-1	SF20-8 / SF32-8
DBL-32-48	.5003	.7503	.625	.578	1-1/8	3/8	2-5/8	LS-1	LS-1	SF32-8 / SF48-8

Handle Bushing and Drill Stand Kit

Twisfit Handle and Drill Stand SF Bushing Kit



UTK-649 Twisfit Handle Bushing and Drill Stand Kit

UTK-649 KIT CONTENTS

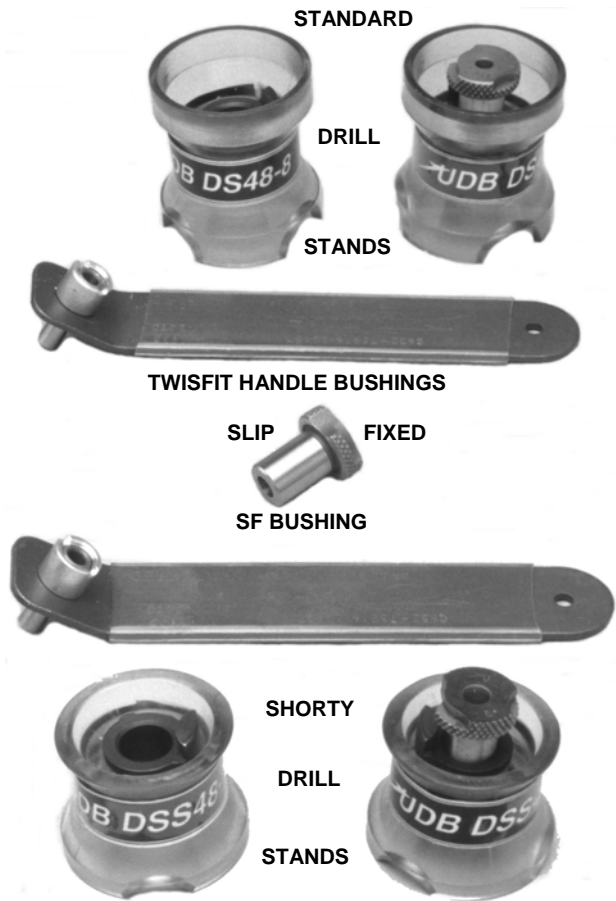
1	UTK-649 KIT ASSEMBLY			
QTY	PART NO.	I.D.	O.D.	LENGTH
HANDLE BUSHINGS				
2	UDB-752417	.1562 (5/32)	.266	1/2
2	UDB-752417	.1562 (5/32)	.261	1/2
2	UDB-752417	.1562 (5/32)	.257	1/2
2	UDB-752416	.1562 (5/32)	.250	1/2
2	UDB-752413	.1285 (#30)	.204	1/2
2	UDB-752413	.1285 (#30)	.199	1/2
2	UDB-752413	.1285 (#30)	.191	1/2
2	UDB-752412	.1285 (#30)	.166	1/2
2	UDB-752412	.1285 (#30)	.161	1/2
2	UDB-752410	.0980 (#40)	.156	1/2
SLIP-FIXED RENEWABLE BUSHINGS				
2	UDB-SF-32-12	.2660 (H)	1/2	3/4
2	UDB-SF-32-12	.2610 (G)	1/2	3/4
2	UDB-SF-32-12	.2570 (F)	1/2	3/4
2	UDB-SF-32-12	.2500 (E)	1/2	3/4
2	UDB-SF-32-12	.2040 (#6)	1/2	3/4
2	UDB-SF-32-12	.1990 (#8)	1/2	3/4
2	UDB-SF-32-12	.1910 (#11)	1/2	3/4
2	UDB-SF-32-12	.1660 (#19)	1/2	3/4
2	UDB-SF-32-12	.1610 (#20)	1/2	3/4
2	UDB-SF-32-12	.1562 (5/32)	1/2	3/4
2	UDB-SF-32-12	.1285 (#30)	1/2	3/4
2	UDB-SF-32-12	.0980 (#40)	1/2	3/4
2	UDB-DSS-48-12	DRILL STAND SHORTY 1/2" I.D.		
2	UDB-DS-48-8	STANDARD DRILL STAND 1/2" I.D.		

Ideal For Use in Hole Transfer!

This UTK-649 Kit is representative of **UNITED** Kits available for these tools when drilling or reaming cannot be reached with stationary or permanent tools. This Hole Transfer Kit was designed at **UNITED** and is specified for Lockheed's latest F-16 Aircraft. Send us your specifications.

Twisfit Bushings are reusable and replaceable. The handle has a comfortable plastic grip. A large variety of Slip Fixed Handle Bushings are available to satisfy your specific requirements.

Our light transparent and tough Drill Stand is designed to use with irregular or contoured surfaces. Does not crack and seats firmly to irregular surfaces. Assures 90° drill alignment.



Send us your requirements and we will design your Special Kit to get your job finished on time!

UNITED Street Plate Lifting System®



STREET PLATE LIFTING RINGS

UNITED Street Plate Lifting Rings enable the fastest and safest handling of heavy steel plates commonly used to cover trenches and excavations in streets and roadways to facilitate traffic flow during construction or repair. Used by Utility and Construction Companies.



**Swivels
360°**

**Pivots
180°**

**MATERIAL:
Alloy Material**

**FINISH:
Phosphate per DOD-P-16232F**

Magnetic Particle Inspected

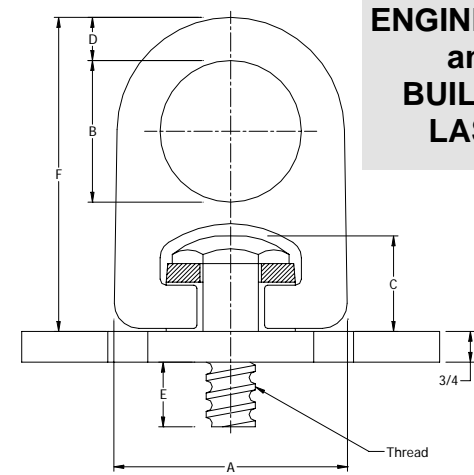
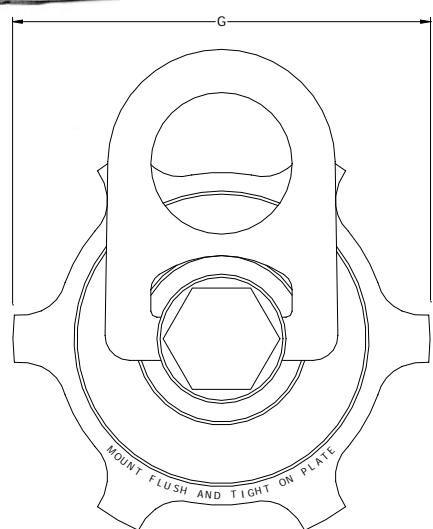
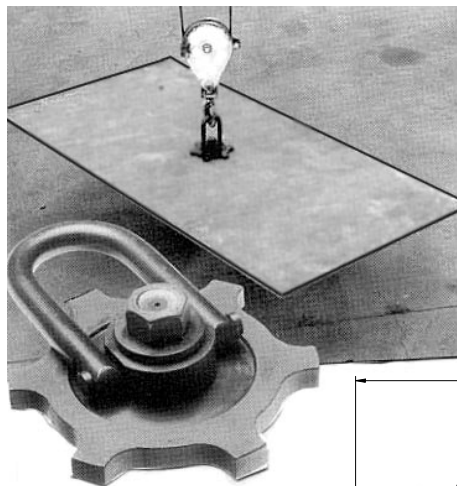
Certified Heat Treatment

200% Proof-Load Tested

Other Sizes Available

PATENT #6,161,883 & 6,161,884

SAFETY FACTOR: 5:1



**SAFETY
ENGINEERED
and
BUILT TO
LAST!**

Forged Hoist Ring Kits Available in most sizes. Please call UNITED.

No tools required with Weld-In Nut!
Please see Page K12 for Plate Nuts and Accessories.

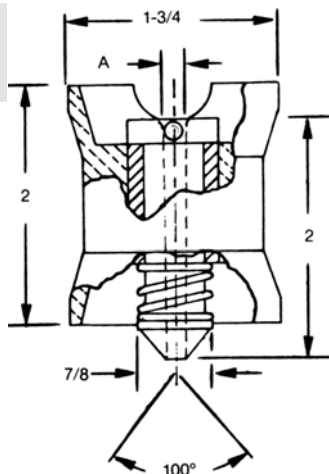


Part No.	Rated Load (lbs)	A	B	C	D	E	F	G	Thread Type	Thread Size	Torque Ft/Lbs
UDB-938215	10,000	5.40	3.20	2.62	1	1	7.48	7	Coil	1-1/4	230
UDB-938225	10,000	5.40	3.20	2.62	1	1-1/2	7.48	7	Coil	1-1/2	470
UDB-938865	15,000	6.75	4	3.28	1-1/4	1	9.35	9	Coil	1-1/4	230
UDB-938875	15,000	6.75	4	3.28	1-1/4	1-1/2	9.35	9	Coil	1-1/2	470

Drill Stands and Kits & Threaded Bushings

UNITED Drill Stands Spring Loaded & Threaded

SPRING LOADED DRILL STANDS



**NEW TRANSPARENT BLUE CODAR® MATERIAL
HIGH IMPACT STRENGTH
RESISTANT TO AIRCRAFT FUELS**

Spring Loaded Bushing in a Plastic Drill Stand can be used to transfer countersunk pilot holes into mating blank parts.

Manufactured from tough unbreakable plastic.

See page B10 for Drill Stands and Handle Bushing Kits.

UNITED PART NO.	A I. D. RANGE
DSP-40-32	#40 - 5/16

To order, specify Part Number and I. D.
Example: **DSP-40-32-1/4**



KITS with MATCHING BUSHINGS in a variety of sizes!

Align Drills and Reamers 90° to surface.

Transparent high impact strength plastic allows view of work and prevents skin damage.

Hardened bushings are interchangeable.



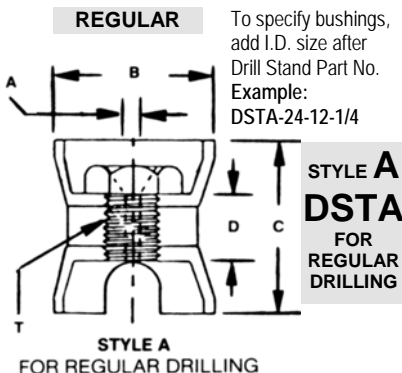
UDB-DSTAB-32-12-S DRILL STANDS and BUSHINGS SET

- Contents: 2 ea: DSTA-32-12 Drill Stands (Standard)
1 ea: DSTB-32-12 Drill Stand (Short)
1 ea: TB-32-12 Threaded Bushings (1/2-13)
I.D. Sizes: #40, 30, 5/32, 21, 20, 3/16, 10, 7/32, 1/4, F

UDB-DSTAB-48-16-S DRILL STANDS and BUSHINGS SET

- Contents: 2 ea: DSTA-48-16 Drill Stands (Standard)
1 ea: DSTB-48-16 Drill Stand (Short)
1 ea: TB-48-16 Threaded Bushings (3/4-16)
I.D. Sizes: 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2, 17/32, 9/16

THREADED DRILL STANDS FOR REPLACEABLE BUSHINGS Specify BUSHINGS by adding I.D. size after Drill Stand Part No.

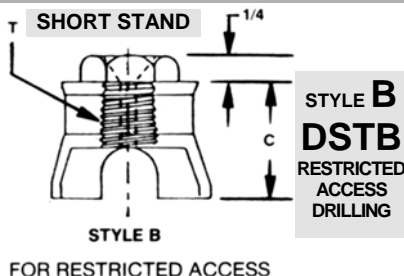


THREADED DRILL STANDS							THREADED BUSHINGS	
STAND ONLY PART NO.	STYLE	T THREAD	A I.D. RANGE	B	C	D	BUSHING ONLY	ADD I.D.
DSTA-24-12	A	24 = 3/8-16	#80 - #40	1	1-5/8	1/2	TB-24-12	XXX
DSTA-32-12	A	32 = 1/2-13	#28 - 11/32	1-5/8	1-5/8	1/2	TB-32-12	XXX
DSTA-48-16	A	48 = 3/4-16	9/32 - 1/2	1-3/4	2	3/4	TB-48-12	XXX
DSTB-24-12	B	24 = 3/8-16	#80 - #40	1	1-1/4	1/2	TB-24-12	XXX
DSTB-32-12	B	32 = 1/2-13	#28 - 11/32	1-5/8	1-1/8	1/2	TB-32-12	XXX
DSTB-48-16	B	48 = 3/4-16	9/32 - 1/2	1-3/4	1-1/2	3/4	TB-48-12	XXX

FOR STANDS—WITH BUSHINGS—SIMPLY ADD I.D.

DSTA-24-12-#30 (For Style A Regular Stand)

DSTB-24-12-#30 (For Style B Short Stand) See Column A for I.D. sizes available.



FOR BUSHINGS ONLY, 'TB' = THREADED BUSHINGS.

Available lengths under hex head are 1/2, 3/4 and 1".

Order example:
TB-O.D.-LENGTH-I.D.
TB-3/8-16—3/4—1/4
Or ANSI
TB-24-12-1/4

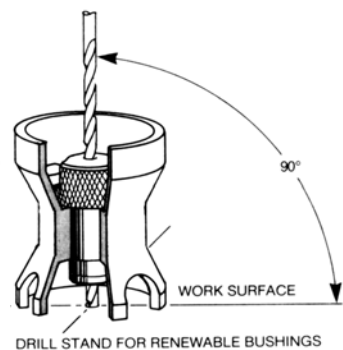
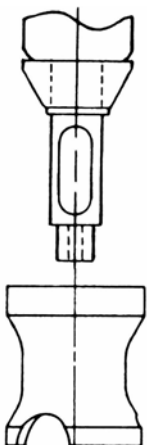
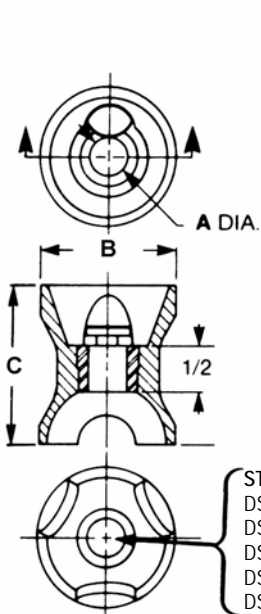


3/4 Lengths provided unless specified.
I.D. #80 - #40 I.D. #28 - 11/32 I.D. 9/32 - 1/2

Drill Stands Keep It Straight

UNITED's Portable Drill Stands keep your drills, reamers and taps 90° to your flat or curved working surface. Use the Drill Stand with **UNITED's** standard Slip Renewable or Slip Fixed Bushings. Manufactured from tough blue Codar® plastic with a precision hardened steel liner with locking lug for **S** or **SF** Bushings.

Drill Stands and Uni-Lock Bushings



STANDARD DRILL STANDS



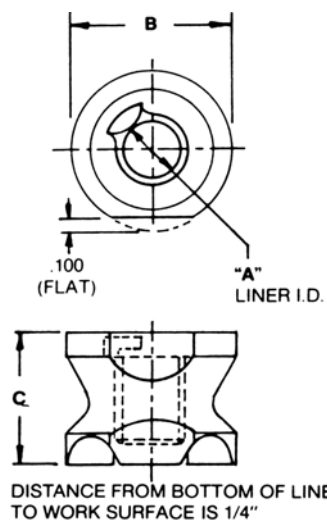
STAND PART NO.	A LINER I.D.	B STAND O.D.	C STAND LENGTH	FOR USE WITH 'SF' BUSHING	UNI-LOCK LINER
DS-20-8	3/16"	1"	1-5/8"	SF-12-12- #80 - #40	UL-20-8 3/16"
DS-32-8	5/16"	1-5/8"	1-5/8"	SF-20-12- #80 - #10	UL-32-8 5/16"
DS-48-8	1/2"	1-3/4"	2"	SF-32-12- #28 - 11/32	UL-48-8 1/2"
DS-56-8	5/8"	1-3/4"	2"	SF-40-12- 'S' - 7/16	UL-56-8 5/8"
DS-64-8	3/4"	1-3/4"	2"	SF-48-12- 9/32 - 9/16	UL-64-8 3/4"

DRILL STANDS WILL ACCOMMODATE BUSHINGS 1/2", 3/4" AND 1" LONG.
TOUGH - DURABLE - HIGH IMPACT PLASTIC - LASTS LONGER

SEE PAGE B10 DRILL STAND KITS.

UDB-DS-654325 DRILL STANDS-LINERS SET

DS-64-8 USE SF-48-12-I.D.	DS-56-8 USE SF-40-12-I.D.	DS-48-8 USE SF-32-12-I.D.	DS-32-8 USE SF-20-12-I.D.	DS-20-8 USE SF-12-12-I.D.	



GREAT FOR SITUATIONS WHERE YOU COME UP SHORT!

IDEAL FOR RESTRICTED AREAS. USE WITH SF BUSHINGS — SEE ABOVE.

Tough Durable blue PTMT with Alloy Steel Uni-Lock Liner.
Will accommodate bushings up to 1" long.

SHORT DRILL STANDS

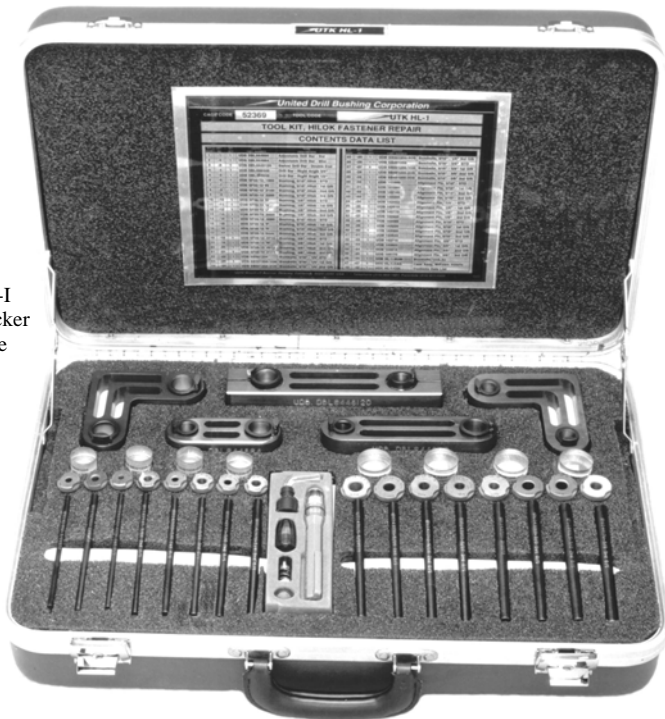
STAND PART NO.	A LINER I.D.	B STAND O.D.	C STAND LEN	USE 'SF' BUSHING	DRILL SIZE RANGES
DSS-24-8	3/16"	1"	1-3/8"	SF-12-12	#80 thru #40
DSS-32-8	5/16"	1-5/8"	1-3/8"	SF-20-12	#80 thru #10
DSS-48-8	1/2"	1-3/4"	1-3/8"	SF-32-12	28 thru 11/32
DSS-56-8	5/8"	1-3/4"	1-3/8"	SF-40-12	S thru 7/16
DSS-64-8	3/4"	1-3/4"	1-7/8"	SF-48-12	9/32 thru 9/16



UCC-HL-1 HiLok Repair Kit

Hilok-HiTigue-Lockbolt-Rivet Production and Repair Kit

Rib-I Stacker Case



UCC-HL-1 PRODUCTION, REPAIR and TRANSFER HOLE KIT

This is a complete Kit for alignment, location, transfer, production and relocation of holes on irregular and straight surfaces using 90° perpendicularity to surfaces. Ideal for installation of HiLoks, Hitigue or Lock Bolts and Rivets.

Easy to LOCATE - ALIGN - SPOT - CLAMP - FASTEN IN PLACE - DRILL - REAM and INSERT NEW FASTENERS.

KIT CONTENTS



FIVE DRILL BARS—10 LOCK LINERS See Page C35.

QTY	UNITED PART NO.	DESCRIPTION
1	UDB-DBL-644896	Adjustable Drill Bar - STD 1/2"-3/4"
1	UDB-DBL-644864	Adjustable Drill Bar - Mini 1/2"-3/4"
1	UDB-DBL-6448120	Swivel Drill Bar-Double End 1/2"-3/4"
1	UDB-DBLRA-646464	Drill Bar - Right Angle 3/4"
1	UDB-DBLRA-484864	Drill Bar - Right Angle 1/2"



MIGHTY MINI UNI-LITE See Page C34.

1	UDB-HL-1-LITE	Bombsite Mini UniLite
1	UDB-HL-1-CASE	Rib-I Stacker Case Assy



EIGHT 1/2" OD SLIP FIT BUSHINGS 3/4" LONG I.D.s 3/16 thru M See pages A6-A9

EIGHT 3/4" OD SLIP FIT BUSHINGS 3/4" LONG I.D.s 5/16" to 3/8" See pages A6-A9.

1	UDB-SF32-12 .1860	.1860 x 1/2" x 3/4" SF Bushing
1	UDB-SF32-12 #8	.1990 x 1/2" x 3/4" SF Bushing
1	UDB-SF32-12 .2140	.2140 x 1/2" x 3/4" SF Bushing
1	UDB-SF32-12 .2295	.2295 x 1/2" x 3/4" SF Bushing
1	UDB-SF32-12 D	.2460 x 1/2" x 3/4" SF Bushing
1	UDB-SF32-12 G	.2610 x 1/2" x 3/4" SF Bushing
1	UDB-SF32-12 J	.2790 x 1/2" x 3/4" SF Bushing
1	UDB-SF32-12 .2920	.2920 x 1/2" x 3/4" SF Bushing
1	UDB-SF48-12 .3085	.3085 x 3/4" x 3/4" SF Bushing
1	UDB-SF48-12 P	.3230 x 3/4" x 3/4" SF Bushing
1	UDB-SF48-12 R	.3390 x 3/4" x 3/4" SF Bushing
1	UDB-SF48-12 8mm	.3543 x 3/4" x 3/4" SF Bushing
1	UDB-SF48-12 .3710	.3710 x 3/4" x 3/4" SF Bushing
1	UDB-SF48-12 W	.3860 x 3/4" x 3/4" SF Bushing
1	UDB-SF48-12 .4015	.4015 x 3/4" x 3/4" SF Bushing
1	UDB-SF48-12 .4170	.4170 x 3/4" x 3/4" SF Bushing



EIGHT BOMBSITES See Pages C30, C34.

1	UDB-SB322034 Nominal	Bombsite, 3/16" - 1/4" STD
1	UDB-SB322034-1OS	Bombsite, 3/16" - 1/4" 1st O/S
1	UDB-SB322034-2OS	Bombsite, 3/16" - 1/4" 2nd O/S
1	UDB-SB322034-3OS	Bombsite, 3/16" - 1/4" 3rd O/S
1	UDB-482056 Nominal	Bombsite, 5/16" - 3/8" STD
1	UDB-482056-1OS	Bombsite, 5/16" - 3/8" 1st O/S
1	UDB-482056-2OS	Bombsite, 5/16" - 3/8" 2nd O/S
1	UDB-482056-3OS	Bombsite, 5/16" - 3/8" 3rd O/S



See Page M3.

26 PRECISION GROUND LOCATING PINS - CENTER PUNCH POINTS

1	UDB-141860	.1860 Locating Alignment Punch
1	UDB-141990	.1990 Locating Alignment Punch
1	UDB-142140	.2140 Locating Alignment Punch
1	UDB-142295	.2295 Locating Alignment Punch
1	UDB-142460	.2460 Locating Alignment Punch
1	UDB-142610	.2610 Locating Alignment Punch
1	UDB-142770	.2770 Locating Alignment Punch
1	UDB-142920	.2920 Locating Alignment Punch
1	UDB-143085	.3085 Locating Alignment Punch
1	UDB-143230	.3230 Locating Alignment Punch
1	UDB-143390	.3390 Locating Alignment Punch
1	UDB-143543	.3543 Locating Alignment Punch
1	UDB-143710	.3710 Locating Alignment Punch
1	UDB-143860	.3860 Locating Alignment Punch
1	UDB-144015	.4015 Locating Alignment Punch
1	UDB-144170	.4170 Locating Alignment Punch

Handy Adjustable Drill Bar Sets

Double End Adjustable Drill Bar Sets

UDB-DBS-1 TWO DRILL BARS and TWO SPOTTERS

UDB-DBS-1 ADJUSTABLE DRILL BAR SET includes Two Drill Bars and Two corresponding Spotters. The **Adjustable Drill Bars** have hardened steel liners to accommodate **1/2" and 3/4" Spotters**. In addition, appropriate Lock Screws are provided to secure **UNITED's** Slip Fit Renewable Bushings.

The **SET** includes the **Spotter SB-32-20**, the **Spotter SB-48-20**, the **Adjustable Drill Bar DBL-48-12** and the **Adjustable Drill Bar DBL-64-12** packaged with in an attractive compact **Molded Custom Case**.

UNITED OFFERS A LARGE VARIETY OF DRILL BARS AND BUSHING SETS. REFER TO PAGES A16 THRU A19 FOR OTHER STYLES.

UDB-DBS-1



UDB-DBS-2 ADJUSTABLE DRILL BAR and 12 BUSHINGS

UDB-DBS-2 ADJUSTABLE DRILL BAR SET includes a Drill Bar to accept the 1/2" Spotter and Bushings. With the Drill Bar is a Set of **Twelve Fixed Slip Renewable Bushings** in O.D. sizes: **5/32, #20, 3/16, #10, 7/32, 15/64, 1/4, F, 17/64, 9/32, 5/16 and 11/32**.

The **SET** includes the **Spotter SB-32-20** and the **Twelve SF-32-12 Bushings** packaged with the **Adjustable Drill Bar DBL-48-12** in a compact **Molded Custom Case**.

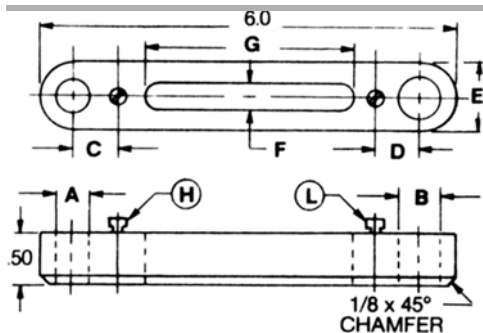


UDB-DBS-2

UDB-DBS-3 ADJUSTABLE DRILL BAR and 10 BUSHINGS

UDB-DBS-3 ADJUSTABLE DRILL BAR SET includes a Drill Bar to accept the 3/4" Spotter and Bushings. With the Drill Bar is a Set of **Ten Fixed Slip Renewable Bushings** in O.D. sizes: **9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2, 17/32 and 9/16**.

The **SET** includes the **Spotter SB-48-20** and the **Ten SF-48-12 Bushings** packaged with the **Adjustable Drill Bar DBL-64-12** in a compact **Molded Custom Case**.



ADJUSTABLE DOUBLE END DRILL BARS
PROVIDE ACCURATE LOCATION and ALIGNMENT OF DRILLED HOLES



LOCK DRILL BAR DOWN WITH FASTENER IN "G" SLOT.

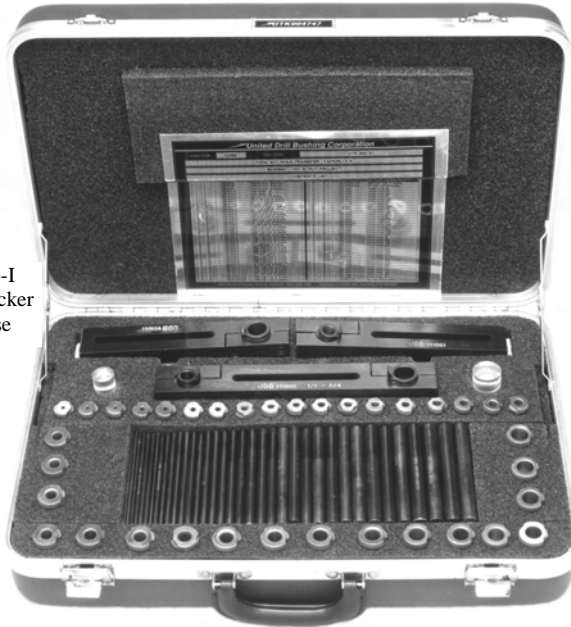
UNITED PART NO.	A +.0005 -.0000	B +.0005 -.0000	C	D	E	F	G Travel	Lockscrews included		Use with Bushings
								H	L	
DBL-16-20	.2501	.3126	.359	.500	3/4	3/8	3-1/8	TW-2	LS-1	SF-16-8/SF20-8
DBL-20-32	.3126	.5002	.500	.625	3/4	3/8	3-1/8	LS-1	LS-1	SF20-8/SF32-8
DBL-28-32	.4377	.5002	.453	.625	3/4	3/8	3-1/8	TW-2	LS-1	SF28-8/SF32-8
DBL-32-40	.5002	.6252	.625	.578	1	3/8	2-7/8	LS-1	TW-2	SF32-8/SF40-8
DBL-32-48	.5002	.7502	.625	.750	1-1/8	3/8	2-5/8	LS-1	LS-1	SF32-8/SF48-8
DBL-40-48	.6252	.7502	.578	.750	1-1/8	3/8	2-5/8	TW-2	LS-1	SF40-8/SF48-8

Hole Production Kit

Hole Alignment-Location-Production & Transfer Kit

FOR 747 STRUT PROJECT

Rib-I Stacker Case



UTK 994747 HOLE ALIGNMENT-LOCATION- PRODUCTION-TRANSFER KIT

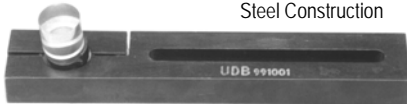
This Kit contains three Drill Bars, two Bombsite Spotters, thirty-six Slip-Fit Renewable Drill Bushings.

The thirty-six Alignment-Center Punches correspond to the Bushing I.D.s from #30 to 5/8 for a total of 78 kit items.

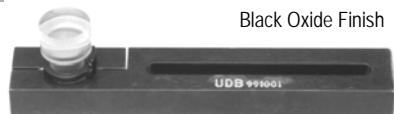
Ideal for fast and simple hole location!

KIT CONTENTS

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	UDB-991032	SWIVEL BAR ASSY- SINGLE END-1/2" I.D. UNILOCK LINER Steel Construction



2	1	UDB-991048	SWIVEL BAR ASSY-SINGLE END-3/4" I.D. UNILOCK LINER Black Oxide Finish
---	---	------------	--



3	2	UDB-994832	1/2" AND 3/4" SWIVEL BAR ASSY-DOUBLE END-1/2 & 3/4 UNILOCK LINERS
---	---	------------	---



Aligned-Locked-Loaded
Ready for Cutting Chips

ITEM	QTY	PART NO.	DESCRIPTION
4	1	SB-32-20	UDB-BOMBSITE CENTER SPOTTER -1/2" O.D.
5	1	SB-48-20	UDB-BOMBSITE CENTER SPOTTER -3/4" O.D.



See Page C30.

18 SF-32-12(+ I.D.) x 1/2" O. D. x 3/4" LONG		SLIP-FIXED RENEWABLE DRILL BUSHINGS WITH THE FOLLOWING I.D.s					
ITEM	I.D.	ITEM	I.D.	ITEM	I.D.	ITEM	I.D.

6	#30 = .1285	11	3/16 = .1875	16	1/4 = .2500	21	5/16 = .3125
7	9/64 = .1406	12	#10 = .1935	17	F = .2570	22	21/64 = .3218
8	5/32 = .1562	13	13/64 = .2031	18	17/64 = .2656	23	11/32 = .3451
9	#20 = .1610	14	7/32 = .2187	19	9/32 = .2812		
10	11/64 = .1719	15	15/64 = .2344	20	19/64 = .2968		

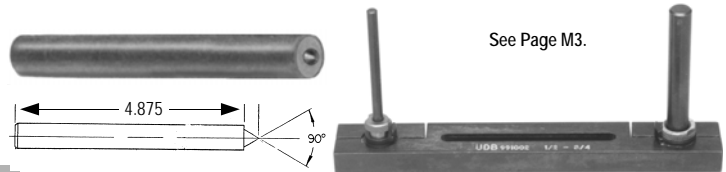


See Pages A6-A7.

18 SF-48-12(+ I.D.) x 3/4" O. D. x 3/4" LONG		SLIP-FIXED RENEWABLE DRILL BUSHINGS WITH THE FOLLOWING I.D.s					
ITEM	I.D.	ITEM	I.D.	ITEM	I.D.	ITEM	I.D.

24	23/64 = .3594	29	7/16 = .4375	34	33/64 = .5156	39	19/32 = .5937
25	3/8 = .3750	30	29/64 = .4521	35	17/32 = .5312	40	39/64 = .6049
26	25/64 = .3906	31	15/32 = .4688	36	35/64 = .5469	41	5/8 = .6250
27	13/32 = .4062	32	31/64 = .4844	37	9/16 = .5625		
28	27/64 = .4219	33	1/2 = .5000	38	37/64 = .5781		

36 1 EACH--See P/Ns Below		ALIGNMENT - CENTER PUNCHES
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See Page M3.

ITEM	UNITED PART NO.	ITEM	UNITED PART NO.
42	UDB-141285 #30 .1285	60	UDB-143594 23/64" .3594
43	UDB-141406 9/64" .1406	61	UDB-143750 3/8" .3750
44	UDB-141562 5/32" .1562	62	UDB-143906 25/64" .3906
45	UDB-141610 #20 .1610	63	UDB-144062 13/32" .4062
46	UDB-141719 11/64" .1719	64	UDB-144219 27/64" .4219
47	UDB-141875 3/16" .1875	65	UDB-144375 7/16" .4375
48	UDB-141935 #10 .1935	66	UDB-144531 29/64" .4531
49	UDB-142031 13/64" .2031	67	UDB-144687 15/32" .4687
50	UDB-142187 7/32" .2187	68	UDB-144843 31/64" .4843
51	UDB-142344 15/64" .2344	69	UDB-145000 1/2" .5000
52	UDB-142500 1/4" .2500	70	UDB-145156 33/64" .5156
53	UDB-142570 'F' .2570	71	UDB-145312 17/32" .5312
54	UDB-142656 17/64" .2656	72	UDB-145469 35/64" .5469
55	UDB-142812 9/32" .2812	73	UDB-145625 9/16" .5625
56	UDB-142968 19/64" .2968	74	UDB-145781 37/64" .5781
57	UDB-143125 5/16" .3125	75	UDB-145937 19/32" .5937
58	UDB-143281 21/64" .3281	76	UDB-146094 39/64" .6049
59	UDB-143437 11/32" .3437	77	UDB-146250 5/8" .6250

78	1	UCC-994747-78	RIB-I STACKER CASE WITH FOAM INSERTS
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New Jigs to Close Space Nurlock Adapter Tips, Liners, Locating Lock Screws and TLC Clamps

UTK-LJU-44 JIG KIT UNIVERSAL LOCATING JIG

New Universal Locating and Spacing Fixtures, Nurlock Shanks, Collars, Lock Screws and TLC Clamps. Spacing and location of lock screws and TLC clamps is achieved instantly!
THREE SIMPLE STEPS:

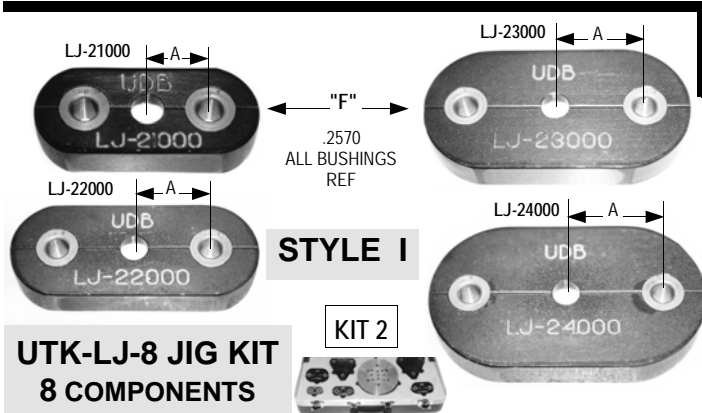
**UTK-LJU-44
MASTER
JIG KIT 44
COMPONENTS**



Rib-I
Stacker
Case

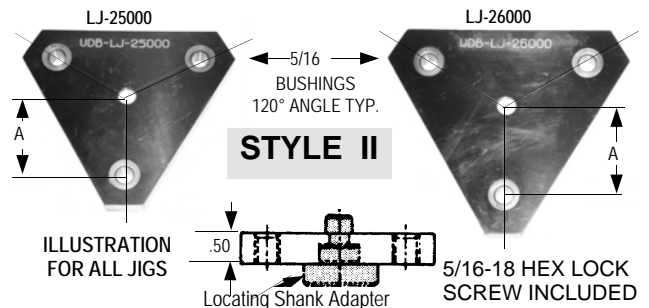
1. Select Locating Shanks and Adapters (LSA) that match your shank O.D.'s.
2. Select the Locating Jig that matches your Nurlock Adapter Tip Collar Series. Attach the Locating Shank Adapter to the Locating Jig with the 5/16-18 UNC Socket Head Screw. Your Jig is now complete!
3. Insert the Jig with the Locating Shank Adapter O.D. into the I.D. of your fixture hole or liner. Align to your drill line. Clamp, drill and tap thru jig bushing for correct spacing and lock screw or TLC location.

REF UTK-200118



**UTK-LJ-8 JIG KIT
8 COMPONENTS**

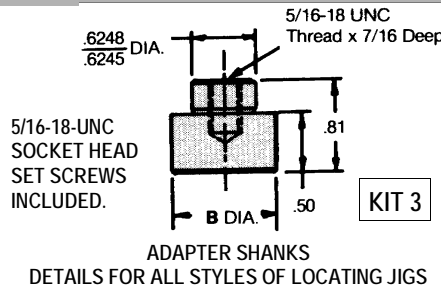
**UTK-LJU-44 KIT CONTAINS ALL 44 COMPONENTS ON THIS PAGE:
SHANKS, ADAPTERS, BUSHINGS, JIGS, SCREWS & CUSTOM CASE.**



UDB-LJ-8 KIT CONTAINS ALL 7 JIGS SHOWN THIS PAGE IN A CUSTOM-FITTED CASE WITH TOP & BOTTOM LAYOUT INSERTS.

UNITED PART NO.	A DIM	STYLE	LOCKSCREW TLC CLAMP NO.	UNITED PART NO.	A DIM	STYLE	LOCKSCREW TLC CLAMP NO.	UNITED PART NO.	A DIM	STYLE	LOCKSCREW TLC CLAMP NO.
LJ-21000	.625	I	16531 - TLC 2	LJ-23000	1.078	I	16532 - TLC 2	LJ-25000	1.562	II	16530 - TLC 3
LJ-22000	.953	I	16532 - TLC 2	LJ-24000	1.203	I	16532 - TLC 2	LJ-26000	1.687	II	16530 - TLC 3

UNITED PART NO.	B DIA.	UNITED PART NO.	B DIA.
LSA-1	.3745	LSA-10	1.1245
LSA-2	.4370	LSA-11	1.2495
LSA-3	.4995	LSA-12	1.3745
LSA-4	.5620	LSA-13	1.4995
LSA-5	.6245	LSA-14	1.6245
LSA-6	.7495	LSA-15	1.7495
LSA-7	.8120	LSA-16	1.9995
LSA-8	.8745	LSA-17	2.3745
LSA-9	.9995	LSA-18	2.4995

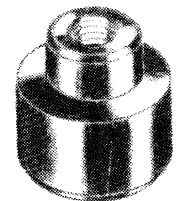


**UTK-LSA-37 KIT
37 COMPONENTS**

LOCATING SHANK ADAPTER

SPECIFY LSA-37 FOR KIT

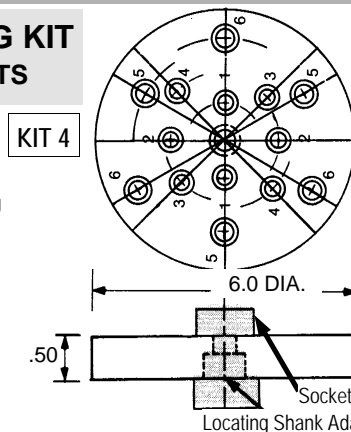
CONTENTS: ALL 18 LOCATING SHANK ADAPTERS, LSA-1 THRU LSA-18, AND ALL 18 OF THE 5/16-18 UNC SOCKET HEAD SCREWS IN A CASE.



**STYLE III UTK-ULJK-38 JIG KIT
38 COMPONENTS**

SCRIBED NUMBERS	COLLAR SERIES
1	21000
2	22000
3	23000
4	24000
5	25000
6	26000

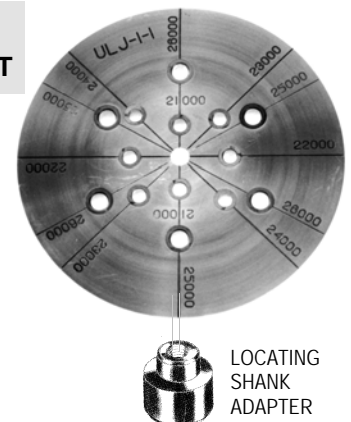
CONTENTS: ALL 18 LOCATING SHANK ADAPTERS: LSA-1 THRU LSA-18, ALL 5/16-18 UNC SOCKET HEAD SCREWS AND THE ULJ-1 UNIVERSAL LOCATING JIG, IN A CASE.



**ULJ-1 JIG
1 COMPONENT**

UNIVERSAL LOCATING JIG

LOCKING COLLAR SIZES SCRIBED TO LOCATE ALL LOCK SCREWS OR TLC CLAMPS, 21000 THRU 26000.



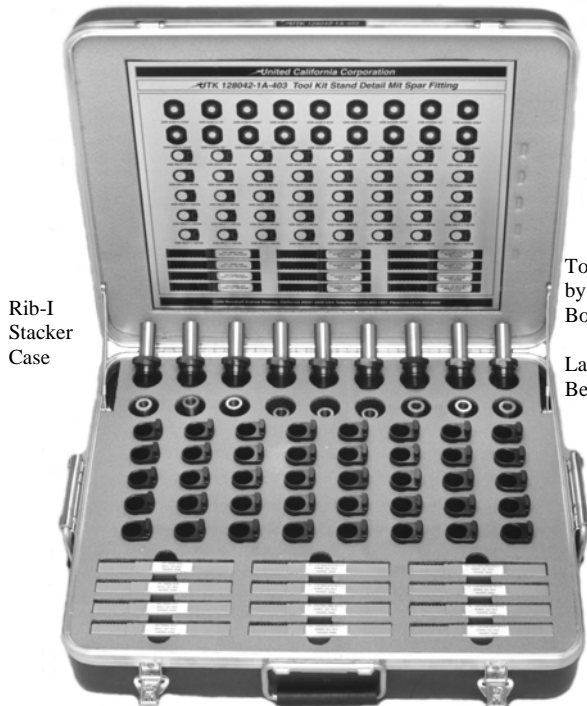
CONTAINS ALL LOCKING SERIES SIZES. LOCATING NUMBERS DENOTE LOCKING SERIES.

4-5-04

**Nurlock Liners in
Retrofit Kits**

Helical Nurlock Liners in Retrofit- Mod-Repair & A.O.G. Custom Kits

Tool Kit Drill Stand MIT Spar Fitting



Rib-I
Stacker
Case

Tool Design
by L. Ledoux,
Boeing.

Layout by Don
Bedell, United.

Rib-I Case UCC-128042-2 is
22" L x 18" W x 6-1/2" H

This handsome Navy Blue Rib-I Stacker Case contains Lasting Latch and Heavy Duty Hardware, including self-retracting rubber grip handles and quarter-turn pressurized latch clamps.

With quantity order and reasonable lead time, **UNITED** will provide your company logo molded in the case.

A large detailed metal contents tag is mounted inside the lid listing each tool with Part No. and location. Inside hard foam is light blue hard foam for ease of part location.

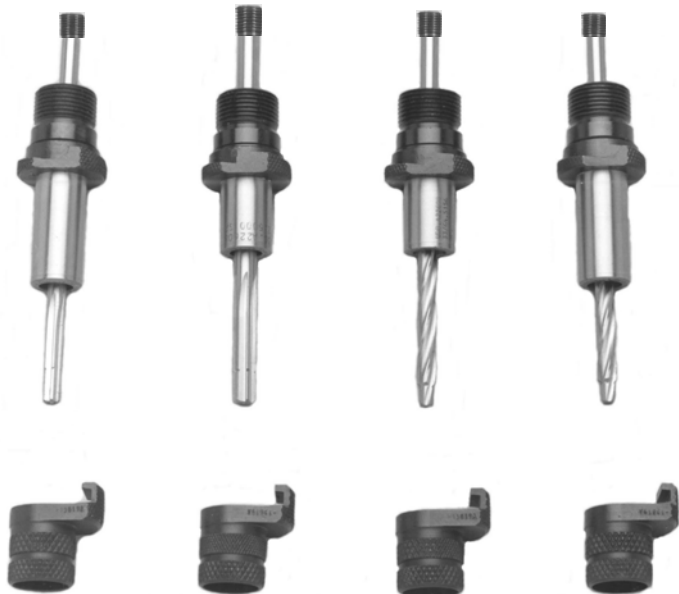
Kit Contents

12	UDBA-22615 15/32 thru 37/64 Nurlock Adapter Tips
6	UDBA-22608 15/32 thru 3-3/64 Nurlock Adapter Tips
40	UDB-HNLP-1 Single Ear Helical Nurlock Liners
2	UCC-796B-15/32 and 7/32 Custom Threaded Shanks
2	UCC-7110-1/2, 17/32, 9/16 & 37/64 Custom Piloted Oil Hole Threaded Shank Reamers

UTK-128042-1A-403 KIT

Modification, Retrofit Repair and A.O.G. Kits are manufactured with speed and alacrity for our preferred customer requirements. This Kit was designed by Senior Tool Engineer Lenny Ledoux, Boeing Everett, and manufactured for their 757 customer rework.

Coolant Oil Hole Threaded Shank Reamers



ADAPTABILITY KITS

Positive Feed Air Tools, Nosepieces, Adapters, Chucks and Accessories are kitted separately for use with those tools.

CUSTOM COMBINATION KITS

UNITED can supply you with a custom combination kit with tools for your particular needs.

A **UNITED** Engineer, experienced in Retrofit - Modification - Repair and A.O.G. Kit Design, is available to assist in selecting the correct tools, design layout, application data and case.

We will provide your requirements at reasonable cost and will guide you in any special kit conditions you require. Call or Fax us for further details. "Just in time!" Call **UNITED** — You'll be glad you did!

**Master Taperlock
Fastener Gauge Kit**

Master TAPERLOCK Fastener Gauge Kit

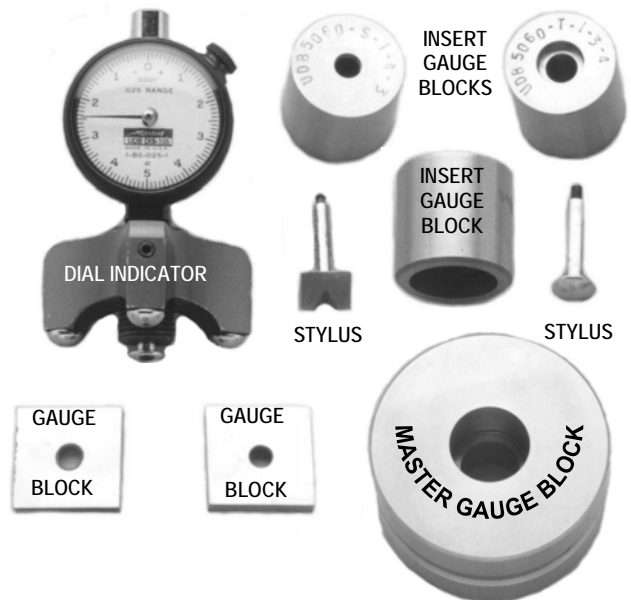
UTK-268002-27-4 KIT, Group 1 thru 4

UNITED'S Master Taperlock Fastener Gauge Kit contains all of the required gauges and tools to inspect Taperlock Fasteners.

Kit includes all necessary gauges to check sizes for 5/32", 3/16", 1/4", 5/16", 3/8" & 7/16" Groups 1 thru 4 for both Shear Head and Tension Head Fasteners.



**CASE SIZE IS 24" L x 24" W x 5" HEIGHT
RIB-I STACKABLE STYLE**



CONTENTS

2	UDB 5060-S-I-1-05	Insert, Gauge Block, Shear Hd., 5/32", Grp. 1	2	UDB 5060-T-I-4-3	Insert, Gauge Block, Tension Hd., 3/16", Grp. 4
2	UDB 5060-S-I-2-05	Insert, Gauge Block, Shear Hd., 5/32", Grp. 2	2	UDB 5060-T-I-1-4	Insert, Gauge Block, Tension Hd., 1/4", Grp. 1
2	UDB 5060-S-I-3-05	Insert, Gauge Block, Shear Hd., 5/32", Grp. 3	2	UDB 5060-T-I-2-4	Insert, Gauge Block, Tension Hd., 1/4", Grp. 2
2	UDB 5060-S-I-4-05	Insert, Gauge Block, Shear Hd., 5/32", Grp. 4	2	UDB 5060-T-I-3-4	Insert, Gauge Block, Tension Hd., 1/4", Grp. 3
2	UDB 5060-S-I-1-3	Insert, Gauge Block, Shear Hd., 3/16", Grp. 1	2	UDB 5060-T-I-4-4	Insert, Gauge Block, Tension Hd., 1/4", Grp. 4
2	UDB 5060-S-I-2-3	Insert, Gauge Block, Shear Hd., 3/16", Grp. 2	2	UDB 5060-T-I-1-5	Insert, Gauge Block, Tension Hd., 5/16", Grp. 1
2	UDB 5060-S-I-3-3	Insert, Gauge Block, Shear Hd., 3/16", Grp. 3	2	UDB 5060-T-I-2-5	Insert, Gauge Block, Tension Hd., 5/16", Grp. 2
2	UDB 5060-S-I-4-3	Insert, Gauge Block, Shear Hd., 3/16", Grp. 4	2	UDB 5060-T-I-3-5	Insert, Gauge Block, Tension Hd., 5/16", Grp. 3
2	UDB 5060-S-I-1-4	Insert, Gauge Block, Shear Hd., 1/4", Grp. 1	2	UDB 5060-T-I-4-5	Insert, Gauge Block, Tension Hd., 5/16", Grp. 4
2	UDB 5060-S-I-2-4	Insert, Gauge Block, Shear Hd., 1/4", Grp. 2	2	UDB 5060-1	Master Gauge Block
2	UDB 5060-S-I-3-4	Insert, Gauge Block, Shear Hd., 1/4", Grp. 3	1	UDB DI-105	Dial Indicator, .0001
2	UDB 5060-S-I-4-4	Insert, Gauge Block, Shear Hd., 1/4", Grp. 4	1	UDB DI-120	Dial Indicator, .0005
2	UDB 5060-S-I-1-5	Insert, Gauge Block, Shear Hd., 5/16", Grp. 1	1	UDB DIS-30	Stylus
2	UDB 5060-S-I-2-5	Insert, Gauge Block, Shear Hd., 5/16", Grp. 2	1	UDB DIS-40	Stylus
2	UDB 5060-S-I-3-5	Insert, Gauge Block, Shear Hd., 5/16", Grp. 3	1	UDB DIS-50	Stylus
2	UDB 5060-S-I-4-5	Insert, Gauge Block, Shear Hd., 5/16", Grp. 4	1	UTLG 5020-2M	Angle Plate Assembly
2	UDB 5060-S-I-1-6	Insert, Gauge Block, Shear Hd., 3/8", Grp. 1	1	UTLG 5121-1	Parallel Block Assembly
2	UDB 5060-S-I-2-6	Insert, Gauge Block, Shear Hd., 3/8", Grp. 2	1	UTLG 5121-2	Sine Plate Assembly
2	UDB 5060-S-I-3-6	Insert, Gauge Block, Shear Hd., 3/8", Grp. 3	1	UTLG 5015-05	Gauge Block, 5/32"
2	UDB 5060-S-I-4-6	Insert, Gauge Block, Shear Hd., 3/8", Grp. 4	1	UTLG 5015-3	Gauge Block, 3/16"
2	UDB 5060-S-I-1-7	Insert, Gauge Block, Shear Hd., 7/16", Grp. 1	1	UTLG 5015-4	Gauge Block, 1/4"
2	UDB 5060-S-I-2-7	Insert, Gauge Block, Shear Hd., 7/16", Grp. 2	1	UTLG 5015-5	Gauge Block, 5/16"
2	UDB 5060-S-I-3-7	Insert, Gauge Block, Shear Hd., 7/16", Grp. 3	1	UTLG 5015-6	Gauge Block, 3/8"
2	UDB 5060-T-I-1-3	Insert, Gauge Block, Tension Hd., 3/16", Grp. 1	1	UTLG 5015-7	Gauge Block, 7/16"
2	UDB 5060-T-I-2-3	Insert, Gauge Block, Tension Hd., 3/16", Grp. 2	1	UCC 268002-635	Rib-I Case, Foam Inserts
2	UDB 5060-T-I-3-3	Insert, Gauge Block, Tension Hd., 3/16", Grp. 3			

**Master Hole Gauge
Kit – 5/32" thru 7/16"**

Master TAPERLOCK Hole Gauge Kit Grp 1-2

UTK-268002-27-1 KIT, GROUP 1-2

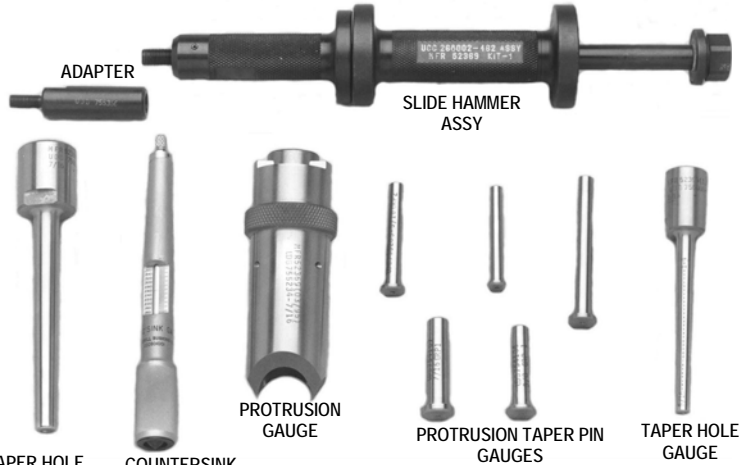
UNITED'S Master Taperlock Hole Gauge Kit contains all of the required gauges and tools to inspect Taperlock holes.

Kit contains all necessary gauging for Protrusion Check, Bluing Pin and Countersink Check for sizes 5/32", 3/16", 1/4", 5/16", 3/8" and 7/16", Group 1 & 2, for both Shear Head and Tension Head Fasteners.

CONTINUED ON NEXT PAGE.



Case UCC 268002-482 is
24" L x 24" W x 5" H Inside RIB 'I' STACK STYLE



CONTENTS

1	UCC 601001	Countersink Gauge, 100°	1	UDB 755232	Gauge, Protrusion 3/8"
1	UCC 601001-19	'C' Sink Gauge Check Block	1	UDB 755234	Gauge, Protrusion 7/16"
1	UCC 601001-20	Contour Gauge, 100°	2	UDB 756072	Gauge, Taper Hole 5/32"
1	UCC 601002	Countersink Gauge, 100°	4	UDB 756076	Gauge, Taper Hole 3/16"
1	UCC 601002-19	'C' Sink Gauge Check Block	2	UDB 756082	Gauge, Taper Hole 1/4"
1	UCC 601002-20	Contour Gauge, 100°	2	UDB 756086	Gauge, Taper Hole 5/16"
1	UCC 601003	Countersink Gauge, 100°	2	UDB 756090	Gauge, Taper Hole 3/8"
1	UCC 601003-19	'C' Sink Gauge Check Block	2	UDB 756094	Gauge, Taper Hole 7/16"
1	UCC 601003-20	Contour Gauge, 100°	1	UDB 755461	Slide Hammer Assembly
4	UDB 754101	Pin, Protrusion Gauge, Shear Hd., 5/32", Grp. 1	1	UDB 755365	Adapter, 9/16"-18 Thread
2	UDB 754201	Pin, Protrusion Gauge, Shear Hd., 5/32", Grp. 2	1	UDB 755366	Adapter, 5/16"-24 Thread
2	UDB 754102	Pin, Protrusion Gauge, Shear Hd., 3/16", Grp. 1	2	UDB 5120-100-1-05	Gauge, C'Sink, 100°, Shear Hd., 5/32", Grp. 1
4	UDB 754202	Pin, Protrusion Gauge, Shear Hd., 3/16", Grp. 2	2	UDB 5120-100-2-05	Gauge, C'Sink, 100°, Shear Hd., 5/32", Grp. 2
6	UDB 754104	Pin, Protrusion Gauge, Shear Hd., 1/4", Grp. 1	4	UDB 5120-100-1-3	Gauge, C'Sink, 100°, Shear Hd., 3/16", Grp. 1
3	UDB 754204	Pin, Protrusion Gauge, Shear Hd., 1/4", Grp. 2	3	UDB 5120-100-2-3	Gauge, C'Sink, 100°, Shear Hd., 3/16", Grp. 2
3	UDB 754105	Pin, Protrusion Gauge, Shear Hd., 5/16", Grp. 1	6	UDB 5120-100-1-4	Gauge, C'Sink, 100°, Shear Hd., 1/4", Grp. 1
2	UDB 754205	Pin, Protrusion Gauge, Shear Hd., 5/16", Grp. 2	3	UDB 5120-100-2-4	Gauge, C'Sink, 100°, Shear Hd., 1/4", Grp. 2
3	UDB 754106	Pin, Protrusion Gauge, Shear Hd., 3/8", Grp. 1	3	UDB 5120-100-1-5	Gauge, C'Sink, 100°, Shear Hd., 5/16", Grp. 1
2	UDB 754206	Pin, Protrusion Gauge, Shear Hd., 3/8", Grp. 2	2	UDB 5120-100-2-5	Gauge, C'Sink, 100°, Shear Hd., 5/16", Grp. 2
2	UDB 754107	Pin, Protrusion Gauge, Shear Hd., 7/16", Grp. 1	3	UDB 5120-100-1-6	Gauge, C'Sink, 100°, Shear Hd., 3/8", Grp. 1
4	UDB 755102	Pin, Protrusion Gauge, Tension Hd., 3/16", Grp. 1	2	UDB 5120-100-2-6	Gauge, C'Sink, 100°, Shear Hd., 3/8", Grp. 2
4	UDB 755202	Pin, Protrusion Gauge, Tension Hd., 3/16", Grp. 2	2	UDB 5120-100-1-7	Gauge, C'Sink, 100°, Shear Hd., 7/16", Grp. 1
6	UDB 755104	Pin, Protrusion Gauge, Tension Hd., 1/4", Grp. 1	4	UDB 5120-300-1-3	Gauge, C'Sink, 100°, Tension Hd., 3/16", Grp. 1
3	UDB 755204	Pin, Protrusion Gauge, Tension Hd., 1/4", Grp. 2	3	UDB 5120-300-2-3	Gauge, C'Sink, 100°, Tension Hd., 3/16", Grp. 2
3	UDB 755105	Pin, Protrusion Gauge, Tension Hd., 5/16", Grp. 1	6	UDB 5120-300-1-4	Gauge, C'Sink, 100°, Tension Hd., 1/4", Grp. 1
2	UDB 755205	Pin, Protrusion Gauge, Tension Hd., 5/16", Grp. 2	3	UDB 5120-300-2-4	Gauge, C'Sink, 100°, Tension Hd., 1/4", Grp. 2
1	UDB 755215	Gauge, Protrusion 5/32"	3	UDB 5120-300-1-5	Gauge, C'Sink, 100°, Tension Hd., 5/16", Grp. 1
1	UDB 755216	Gauge, Protrusion 3/16"	2	UDB 5120-300-2-5	Gauge, C'Sink, 100°, Tension Hd., 5/16", Grp. 2
1	UDB 755218	Gauge, Protrusion 1/4"	1	UCC 268002-482	Rib-I Case, With Foam Inserts
1	UDB 755230	Gauge, Protrusion 5/16"			

TAPERLOCK Hole Gauge Kit Grp 2-3 and Grp 3-4



UTK-268002-27-2 KIT, GROUP 2-3

1	UCC 601001	Countersink Gauge, 100°
1	UCC 601001-19	'C' Sink Gauge Check Block
1	UCC 601001-20	Contour Gauge, 100°
1	UCC 601002	Countersink Gauge, 100°
1	UCC 601002-19	'C' Sink Gauge Check Block
1	UCC 601002-20	Contour Gauge, 100°
1	UCC 601003	Countersink Gauge, 100°
1	UCC 601003-19	'C' Sink Gauge Check Block
1	UCC 601003-20	Contour Gauge, 100°
2	UDB 754201	Pin, Protrusion Gauge, Shear Hd., 5/32", Grp. 2
3	UDB 754301	Pin, Protrusion Gauge, Shear Hd., 5/32", Grp. 3
4	UDB 754202	Pin, Protrusion Gauge, Shear Hd., 3/16", Grp. 2
3	UDB 754302	Pin, Protrusion Gauge, Shear Hd., 3/16", Grp. 3
3	UDB 754204	Pin, Protrusion Gauge, Shear Hd., 1/4", Grp. 2
3	UDB 754304	Pin, Protrusion Gauge, Shear Hd., 1/4", Grp. 3
2	UDB 754205	Pin, Protrusion Gauge, Shear Hd., 5/16", Grp. 2
2	UDB 754305	Pin, Protrusion Gauge, Shear Hd., 5/16", Grp. 3
2	UDB 754206	Pin, Protrusion Gauge, Shear Hd., 3/8", Grp. 2
2	UDB 754306	Pin, Protrusion Gauge, Shear Hd., 3/8", Grp. 3
2	UDB 754207	Pin, Protrusion Gauge, Shear Hd., 7/16", Grp. 2
3	UDB 755302	Pin, Protrusion Gauge, Tension Hd., 3/16", Grp. 2
3	UDB 755204	Pin, Protrusion Gauge, Tension Hd., 1/4", Grp. 2
3	UDB 755304	Pin, Protrusion Gauge, Tension Hd., 1/4", Grp. 3
2	UDB 755205	Pin, Protrusion Gauge, Tension Hd., 5/16", Grp. 2
2	UDB 755305	Pin, Protrusion Gauge, Tension Hd., 5/16", Grp. 3
1	UDB 755215	Gauge, Protrusion 5/32"
1	UDB 755216	Gauge, Protrusion 3/16"
1	UDB 755218	Gauge, Protrusion 1/4"
1	UDB 755230	Gauge, Protrusion 5/16"

CONTENTS

CONTINUED FROM PG S2.

1	UDB 755232	Gauge, Protrusion 3/8"
1	UDB 755234	Gauge, Protrusion 7/16"
2	UDB 756072	Gauge, Taper Hole 5/32"
4	UDB 756076	Gauge, Taper Hole 3/16"
2	UDB 756082	Gauge, Taper Hole 1/4"
2	UDB 756086	Gauge, Taper Hole 5/16"
2	UDB 756090	Gauge, Taper Hole 3/8"
2	UDB 756094	Gauge, Taper Hole 7/16"
1	UDB 755461	Slide Hammer Assembly
1	UDB 755365	Adapter, 9/16"-18 Thread
1	UDB 755366	Adapter, 5/16"-24 Thread
2	UDB 5120-100-2-05	Gauge, C'Sink, 100°, Shear Hd., 5/32", Grp. 2
3	UDB 5120-100-3-05	Gauge, C'Sink, 100°, Shear Hd., 5/32", Grp. 3
3	UDB 5120-100-2-3	Gauge, C'Sink, 100°, Shear Hd., 3/16", Grp. 2
3	UDB 5120-100-3-3	Gauge, C'Sink, 100°, Shear Hd., 3/16", Grp. 3
3	UDB 5120-100-2-4	Gauge, C'Sink, 100°, Shear Hd., 1/4", Grp. 2
3	UDB 5120-100-3-4	Gauge, C'Sink, 100°, Shear Hd., 1/4", Grp. 3
2	UDB 5120-100-2-5	Gauge, C'Sink, 100°, Shear Hd., 5/16", Grp. 2
2	UDB 5120-100-3-5	Gauge, C'Sink, 100°, Shear Hd., 5/16", Grp. 3
2	UDB 5120-100-2-6	Gauge, C'Sink, 100°, Shear Hd., 3/8", Grp. 2
2	UDB 5120-100-3-6	Gauge, C'Sink, 100°, Shear Hd., 3/8", Grp. 3
2	UDB 5120-100-2-7	Gauge, C'Sink, 100°, Shear Hd., 7/16", Grp. 2
3	UDB 5120-300-2-3	Gauge, C'Sink, 100°, Tension Hd., 3/16", Grp. 2
3	UDB 5120-300-3-3	Gauge, C'Sink, 100°, Tension Hd., 3/16", Grp. 3
3	UDB 5120-300-2-4	Gauge, C'Sink, 100°, Tension Hd., 1/4", Grp. 2
3	UDB 5120-300-3-4	Gauge, C'Sink, 100°, Tension Hd., 1/4", Grp. 3
2	UDB 5120-300-2-5	Gauge, C'Sink, 100°, Tension Hd., 5/16", Grp. 2
2	UDB 5120-300-3-5	Gauge, C'Sink, 100°, Tension Hd., 5/16", Grp. 3
1	UCC 268002-535	Rib-I Case, Foam Inserts

UTK-268002-27-3 KIT, GROUP 3-4

1	UCC 601001	Countersink Gauge, 100°
1	UCC 601001-19	'C' Sink Gauge Check Block
1	UCC 601001-20	Contour Gauge, 100°
1	UCC 601002	Countersink Gauge, 100°
1	UCC 601002-19	'C' Sink Gauge Check Block
1	UCC 601002-20	Contour Gauge, 100°
1	UCC 601003	Countersink Gauge, 100°
1	UCC 601003-19	'C' Sink Gauge Check Block
1	UCC 601003-20	Contour Gauge, 100°
4	UDB 754202	Pin, Protrusion Gauge, Shear Hd., 3/16", Grp. 2
3	UDB 754302	Pin, Protrusion Gauge, Shear Hd., 3/16", Grp. 3
3	UDB 754402	Pin, Protrusion Gauge, Shear Hd., 3/16", Grp. 4
3	UDB 754304	Pin, Protrusion Gauge, Shear Hd., 1/4", Grp. 3
6	UDB 754404	Pin, Protrusion Gauge, Shear Hd., 1/4", Grp. 4
2	UDB 754305	Pin, Protrusion Gauge, Shear Hd., 5/16", Grp. 3
4	UDB 754405	Pin, Protrusion Gauge, Shear Hd., 5/16", Grp. 4
2	UDB 754306	Pin, Protrusion Gauge, Shear Hd., 3/8", Grp. 3
3	UDB 754406	Pin, Protrusion Gauge, Shear Hd., 3/8", Grp. 4
2	UDB 754307	Pin, Protrusion Gauge, Shear Hd., 7/16", Grp. 3
3	UDB 755302	Pin, Protrusion Gauge, Tension Hd., 3/16", Grp. 3
3	UDB 755402	Pin, Protrusion Gauge, Tension Hd., 3/16", Grp. 4
3	UDB 755304	Pin, Protrusion Gauge, Tension Hd., 1/4", Grp. 3
3	UDB 755404	Pin, Protrusion Gauge, Tension Hd., 1/4", Grp. 4
2	UDB 755305	Pin, Protrusion Gauge, Tension Hd., 5/16", Grp. 3
4	UDB 755405	Pin, Protrusion Gauge, Tension Hd., 5/16", Grp. 4
1	UDB 755215	Gauge, Protrusion 5/32"
1	UDB 755216	Gauge, Protrusion 3/16"
1	UDB 755218	Gauge, Protrusion 1/4"
1	UDB 755230	Gauge, Protrusion 5/16"

CONTENTS

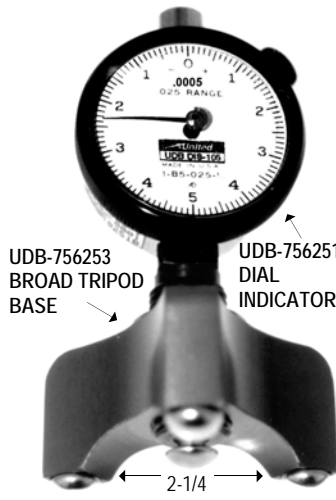
1	UDB 755232	Gauge, Protrusion 3/8"
1	UDB 755234	Gauge, Protrusion 7/16"
2	UDB 756072	Gauge, Taper Hole 5/32"
4	UDB 756076	Gauge, Taper Hole 3/16"
2	UDB 756082	Gauge, Taper Hole 1/4"
2	UDB 756086	Gauge, Taper Hole 5/16"
2	UDB 756090	Gauge, Taper Hole 3/8"
2	UDB 756094	Gauge, Taper Hole 7/16"
1	UDB 755461	Slide Hammer Assembly
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3	UDB 5120-100-3-05	Gauge, C'Sink, 100°, Shear Hd., 5/32", Grp. 3
4	UDB 5120-100-4-05	Gauge, C'Sink, 100°, Shear Hd., 5/32", Grp. 4
3	UDB 5120-100-3-3	Gauge, C'Sink, 100°, Shear Hd., 3/16", Grp. 3
3	UDB 5120-100-4-3	Gauge, C'Sink, 100°, Shear Hd., 3/16", Grp. 4
3	UDB 5120-100-3-4	Gauge, C'Sink, 100°, Shear Hd., 1/4", Grp. 3
3	UDB 5120-100-4-4	Gauge, C'Sink, 100°, Shear Hd., 1/4", Grp. 4
2	UDB 5120-100-3-5	Gauge, C'Sink, 100°, Shear Hd., 5/16", Grp. 3
4	UDB 5120-100-4-5	Gauge, C'Sink, 100°, Shear Hd., 5/16", Grp. 4
2	UDB 5120-100-3-6	Gauge, C'Sink, 100°, Shear Hd., 3/8", Grp. 3
3	UDB 5120-100-4-6	Gauge, C'Sink, 100°, Shear Hd., 3/8", Grp. 4
2	UDB 5120-100-3-7	Gauge, C'Sink, 100°, Shear Hd., 7/16", Grp. 3
3	UDB 5120-300-3-3	Gauge, C'Sink, 100°, Tension Hd., 3/16", Grp. 3
3	UDB 5120-300-4-3	Gauge, C'Sink, 100°, Tension Hd., 3/16", Grp. 4
3	UDB 5120-300-3-4	Gauge, C'Sink, 100°, Tension Hd., 1/4", Grp. 3
3	UDB 5120-300-4-4	Gauge, C'Sink, 100°, Tension Hd., 1/4", Grp. 4
2	UDB 5120-300-3-5	Gauge, C'Sink, 100°, Tension Hd., 5/16", Grp. 3
4	UDB 5120-300-4-5	Gauge, C'Sink, 100°, Tension Hd., 5/16", Grp. 4
1	UCC 268002-588	Rib-I Case, Foam Inserts

**Kit UDB-756200
For Hi-Lok & Hi-Tigue**

Countersink Flushness Gauge Kit



**UDB-756200 COUNTERSINK
FLUSHNESS GAUGE COMPLETE KIT**



UDB-756253
BROAD TRIPOD
BASE

UDB-756251
DIAL
INDICATOR

UDB-756250 GAUGE ASSEMBLY
.0005 WITH BROAD BASE
INDICATOR & STYLUS



UDB-756255 NARROW
INDICATOR BASE ONLY



HANDLES
(NINE)



UDB-10905
HEX KEY
3/32 SHORT

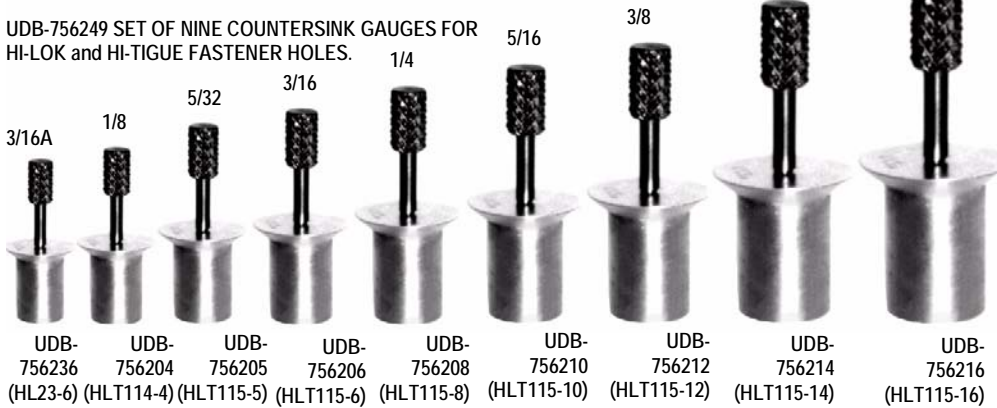
UDB-10903
HEX KEY
1/16 LONG



GAUGES
(NINE)

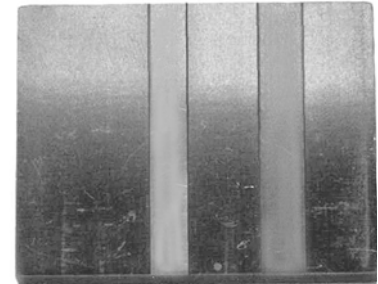
**UNITED KIT
FOR INSPECTION
OF CLOSE
TOLERANCES
ON FLUSH HEAD
FASTENERS**

UDB-756249 SET OF NINE COUNTERSINK GAUGES FOR
HI-LOK and HI-TIGUE FASTENER HOLES.



UDB-756236 (HL23-6) UDB-756204 (HLT114-4) UDB-756205 (HLT115-5) UDB-756206 (HLT115-6) UDB-756208 (HLT115-8) UDB-756210 (HLT115-10) UDB-756212 (HLT115-12) UDB-756214 (HLT115-14) UDB-756216 (HLT115-16)

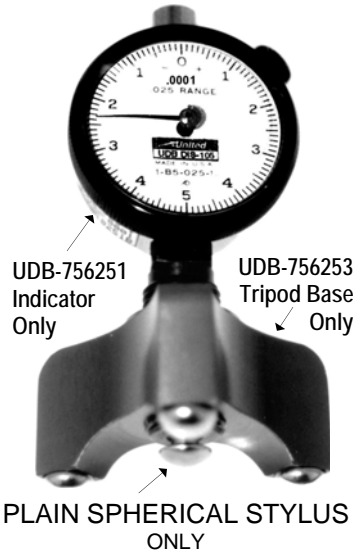
UDB-756259 CHECK BLOCK



CHECK BLOCK SETS ALL NINE GAUGES

DIAL INDICATOR

Tripod Base has contact points 2-1/4" apart. Base is counterbored 1-1/4 dia.

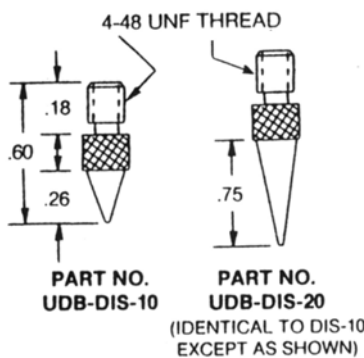


UDB-756251
Indicator
Only

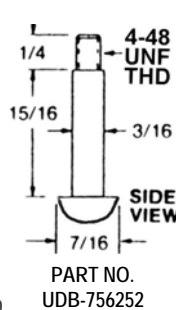
UDB-756253
Tripod Base
Only

PLAIN SPHERICAL STYLUS
ONLY

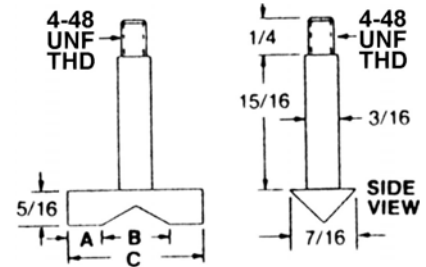
DIAL INDICATOR STYLUS



GROUP 1 PART NO.	MINIMUM GRADUATION	TOTAL RANGE
UDB-DI-105	.0001	0.025
UDB-DI-120	.0005	0.075
UDB-DI-135	.001	0.125



MEASURES
to .0001
INCH



PART NO.	A	B	C
UDB-DIS-30	.047	.095	.190
UDB-DIS-40	.075	.150	.300
UDB-DIS-50	.125	.250	.500
UDB-DIS-60	.200	.400	.800
UDB-DIS-70	.250	.500	1.000

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

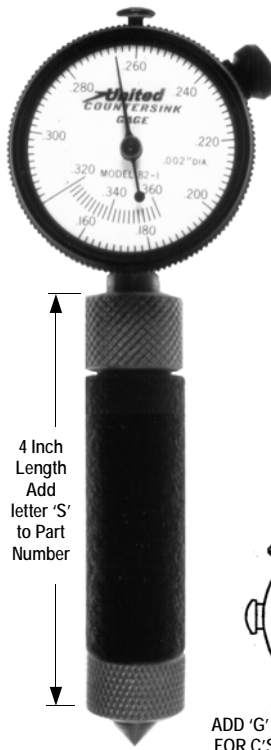
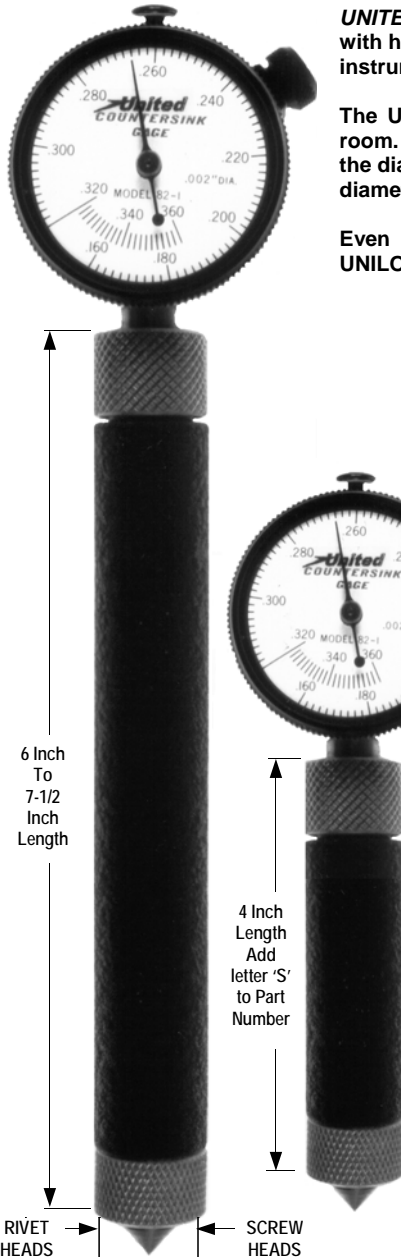
UNILOCK Countersink Gauge

New & Improved UNITED'S UNILOCK Countersink Gauges and Kits

UNITED's New UNILOCK Countersink Gauge displays accurate direct countersink depth diameter with high precision. The UNILOCK Gauge is a precision instrument which specifically measures the Top major Countersink Diameter.

The UNILOCK Gauge reads the print dimension fast and accurately on the shop floor or gauge room. Press the spring loaded precise exact angle countersink plunger into the countersink. Read the dial directly in 0.002 inch or 0.05mm diameter increments in the dial face.

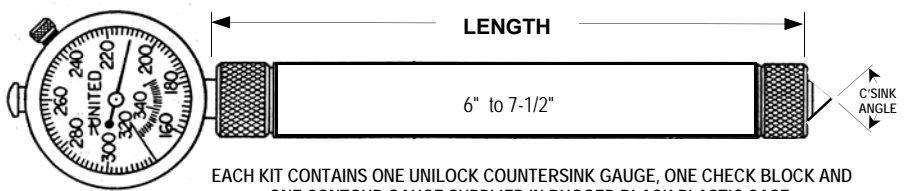
Even the inexperienced will find it virtually foolproof with its repeatable reliable results. The UNILOCK accuracy is plus or minus 0.0005 inch or plus or minus 0.015mm.



IDEAL APPLICATIONS:

- * Countersinks in Aircraft & Automotive Skin
- * Countersinks in Sheet Metal & Stampings
- * Automotive & Aircraft Assembly
- * Quality Control / Gauge Room
- * Screw Machine Components
- * Model Shop & Prototypes
- * Production Machining
- * Receiving Inspection
- * Thin Sheet of Metal
- * Rivets Holes

- ADD 'G' TO FOR COUNTER-SINK GAUGE ONLY
- ADD 'B' TO FOR CHECK BLOCK ONLY
- ADD 'C' FOR CONTOUR GAUGE ONLY



EACH KIT CONTAINS ONE UNILOCK COUNTERSINK GAUGE, ONE CHECK BLOCK AND ONE CONTOUR GAUGE SUPPLIED IN RUGGED BLACK PLASTIC CASE.

ADD 'G' TO PART NUMBER FOR C'SINK GAUGE ONLY

KIT PART NUMBER							
C'SINK	DIAMETER RANGE						
ANGLE	.020 - .170	.160 - .360	.360 - .560	.560 - 760	.780 - 1.000	1.000 - 1.335	1.000 - 1.500
82°	UCC-610820	UCC-610821	UCC-610822	UCC-610823	UCC-610824	UCC-610825	UCC-610826
90°	UCC-610900	UCC-610901	UCC-610902	UCC-610903	UCC-610904	UCC-610905	UCC-610906
100°	UCC-611000	UCC-611001	UCC-611002	UCC-611003	UCC-611004	UCC-611005	UCC-611006
110°	UCC-611100	UCC-611101	UCC-611102	UCC-611103	UCC-611104	UCC-611105	UCC-611106
120°	UCC-611200	UCC-611201	UCC-611202	UCC-611203	UCC-611204	UCC-611205	UCC-611206
LENGTH	6"	6"	6"	6"	6"	7-1/2"	7-1/2"

CHECK THE HOLES OR PRINTS WITH THE UNILOCK CONTOUR GAUGE. BE CERTAIN YOU HAVE A MATCH. KEEP GAUGE CLEAN AND IN CASE WHEN NOT IN USE.

1. PRESS CONICAL GAUGE FIRMLY INTO HOLE.
2. REST THE GAUGE BODY FIRMLY ON SURFACE AROUND COUNTERSINK.
3. READ THE DIAL DIRECTLY AND RECORD YOUR READING.

UNITED'S Electronic Digital Countersink Gauges & Kits

UNILOCK Electronic Countersink Gauges

UNITED'S New UNILOCK ELECTRONIC COUNTERSINK GAUGE displays accurate direct countersink depth diameter with high precision.

The Unilock Electronic Gauge is a precision instrument which specifically measures the Top major Countersink Diameter.

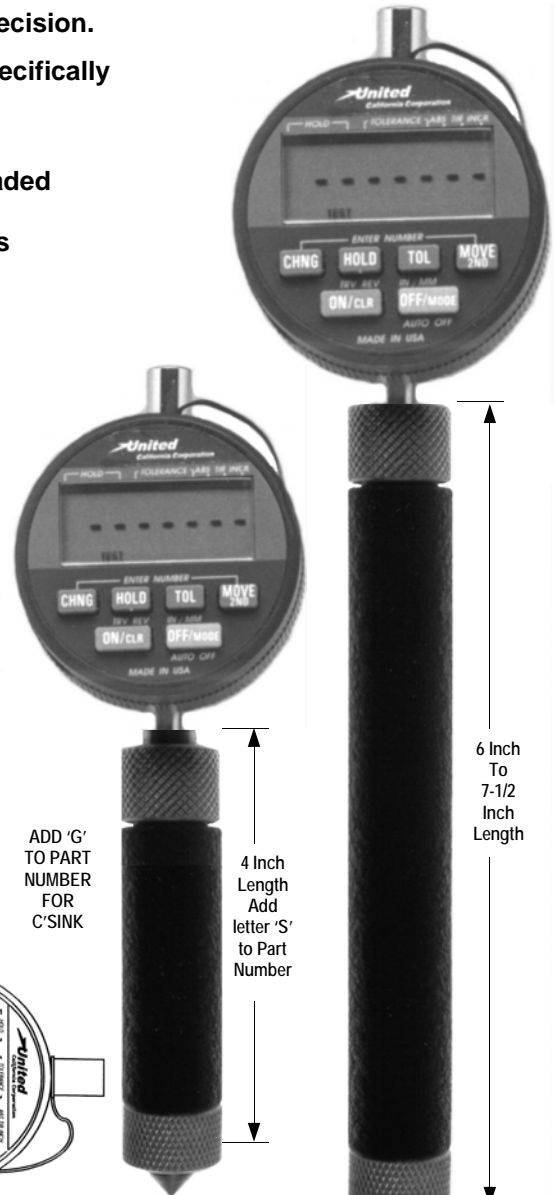
The Unilock Electronic Gauge reads the print dimension fast and accurately on the shop floor or gauge room. Press the spring loaded precise exact angle countersink plunger into the countersink. Read the electronic measurement directly in inches or millimeters on the gauge face.

Even the inexperienced will find it virtually foolproof with its repeatable reliable results. The UNILOCK accuracy is plus or minus 0.0005 inch or plus or minus 0.015mm.



IDEAL APPLICATIONS:

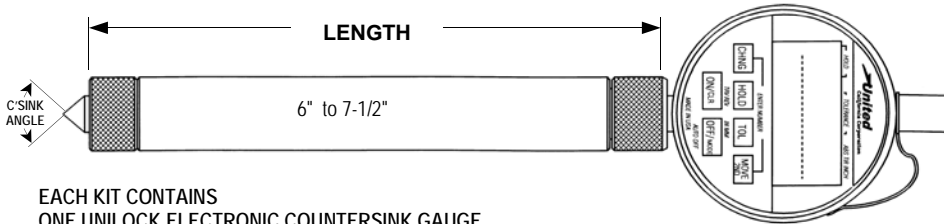
- * Countersinks in Aircraft & Automotive Skin
- * Countersinks in Sheet Metal & Stamping
- * Automotive & Aircraft Assembly
- * Quality Control / Gauge Room
- * Screw Machine Components
- * Model Shop & Prototypes
- * Production Machining
- * Receiving Inspection
- * Thin Sheet of Metal



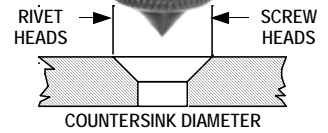
ADD 'G' TO PART NUMBER FOR C'SINK

4 Inch Length Add letter 'S' to Part Number

6 Inch To 7-1/2 Inch Length



EACH KIT CONTAINS ONE UNILOCK ELECTRONIC COUNTERSINK GAUGE SUPPLIED IN RUGGED BLACK PLASTIC CASE.



KIT PART NUMBER		DIAMETER RANGE					
C'SINK ANGLE	.020 - .170	.160 - .360	.360 - .560	.560 - .760	.780 - 1.000	1.000 - 1.335	1.000 - 1.500
82°	UCC-620820	UCC-620821	UCC-620822	UCC-620823	UCC-620824	UCC-620825	UCC-620826
90°	UCC-620900	UCC-620901	UCC-620902	UCC-620903	UCC-620904	UCC-620905	UCC-620906
100°	UCC-621000	UCC-621001	UCC-621002	UCC-621003	UCC-621004	UCC-621005	UCC-621006
110°	UCC-621100	UCC-621101	UCC-621102	UCC-621103	UCC-621104	UCC-621105	UCC-621106
120°	UCC-621200	UCC-621201	UCC-621202	UCC-621203	UCC-621204	UCC-621205	UCC-621206
LENGTH	6"	6"	6"	6"	6"	7-1/2"	7-1/2"

1. PRESS CONICAL GAUGE FIRMLY INTO HOLE.
2. REST THE GAUGE BODY FIRMLY ON SURFACE AROUND COUNTERSINK.
3. READ THE GAUGE FACE DIRECTLY AND RECORD YOUR READING.

CHECK THE HOLES OR PRINTS WITH THE UNILOCK CONTOUR GAUGE. BE CERTAIN YOU HAVE A MATCH.

KEEP GAUGE CLEAN AND IN CASE WHEN NOT IN USE.

UNITED'S Countersink Gauge Kits Assure Accuracy!

**UNILOCK
Chamfer Gauges**

UNITED'S NEW UNILOCK Chamfer Gauges

**UNILOCK CHAMFER GAUGES
ANALOG STYLE**

CHAMFER GAUGES ARE FOR INSTANT MEASURE OF TAPERED HOLES.



Precisely designed to measure the top major diameter of a chamfer, countersink or tapered hole.

Press the conically ground, spring loaded, precision 3-blade Gauging Plunger into the chamfer or countersink to read the dial instantly in .001" or .01mm/.02mm diameter increments.

Does not require setting or look-up charts!

To zero the Gauge or check setting, press the base of the Gauge against your flat surface and adjust the dial to read the 'Set To' number stamped on backside of the gauge.

Available in two angular ranges:

0° - 90° for angles of 90° or less,

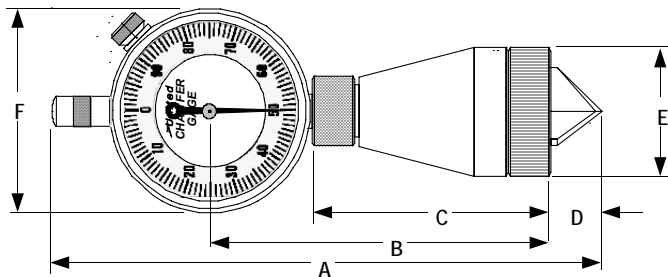
90° - 127° for angles greater than 90° but less than 127°.

**UNILOCK CHAMFER GAUGES
DIGITAL STYLE**

UNITED'S UNILOCK CHAMFER GAUGES ARE KNOWN FOR THEIR ACCURACY AND EASE OF USE IN PRECISION MEASURING.

THEY ARE MADE OF THE FINEST MATERIALS AND COME IN A PROTECTIVE CASE.

HARDENED PREMIUM TOOL STEEL PLUNGER OR SOLID CARBIDE FOR A LIFETIME HEAD. OTHER OPTIONS AVAILABLE INCLUDE .0001" SUPER READING CHAMFER GAUGES.



GAGE NO.	A	B	C	D	E	F
UCC-621090	6.30	4.00	2.80	.60	1.45	2.25
UCC-622090	6.30	4.00	2.80	.60	2.50	2.25
UCC-623090	6.30	4.00	2.80	.60	3.50	2.25
UCC-624090	6.30	4.00	2.80	.60	4.50	2.25
UCC-625090	6.30	4.00	2.80	.38	1.18	2.25

DIGITAL READOUT ELECTRONIC CHAMFER GAUGES are precision instruments similar in appearance and use to the above analog mechanical Gauges. They are completely self-contained and portable with no cables or attachments.

The indicator's special 360° rotational bezel allows you to read in any position with a high contrast LCD digital display. Equipped with rechargeable long-life batteries.