

# Bucking Bars

# UNITED's New Bucking Bars

## FEATURES:

UNITED carefully manufactures *Quality First Bucking Bars On Time.*

- Maximum strength Bars
- Superior design and wear under the most severe conditions

*Cast Bars* manufactured to top standards with high grade tool steel, heat treated to RC-38-42

- Bars can be reused repeatedly

*Fabricated Custom Bars* machined from superior bar stock

- Hardened to develop tough working surfaces
- Highly polished to MRS 32 finish, black oxide finish, identifiable by engraved numbers

Repairable, reusable, mag particles inspected to avoid cracks, fissures and assure long life

**APPLICATIONS:** For use under severe conditions where solid strength and performance are required.

## UNITED BUCKING BAR STYLES

<p>UCC-700601 6 LBS</p>	<p>UCC-700605 1-1/2 LBS</p>	<p>UCC-700610 3/4 LB</p>	<p>UCC-700614 2-3/4 LBS</p>
<p>UCC-700619 1-1/4 LBS</p>	<p>UCC-700633 1-1/4 LBS</p>	<p>UCC-700634 1 LB</p>	<p>UCC-700638 1-1/4 LBS</p>
<p>UCC-700639 2 LBS</p>	<p>UCC-700643 1-1/4 LBS</p>	<p>UCC-700646 2-1/4 LBS</p>	<p>UCC-700647 1-1/2 LBS</p>
<p>UCC-700649 2 LBS</p>	<p>UCC-700658 3 LBS</p>	<p>UCC-700662 1 LB</p>	<p>UCC-700667 4-1/4 LBS</p>

# Bucking Bar Styles and Dimensions



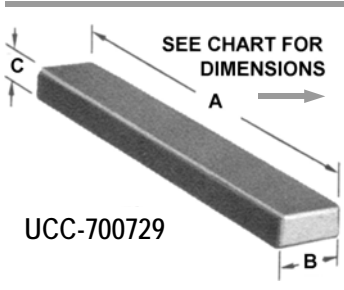
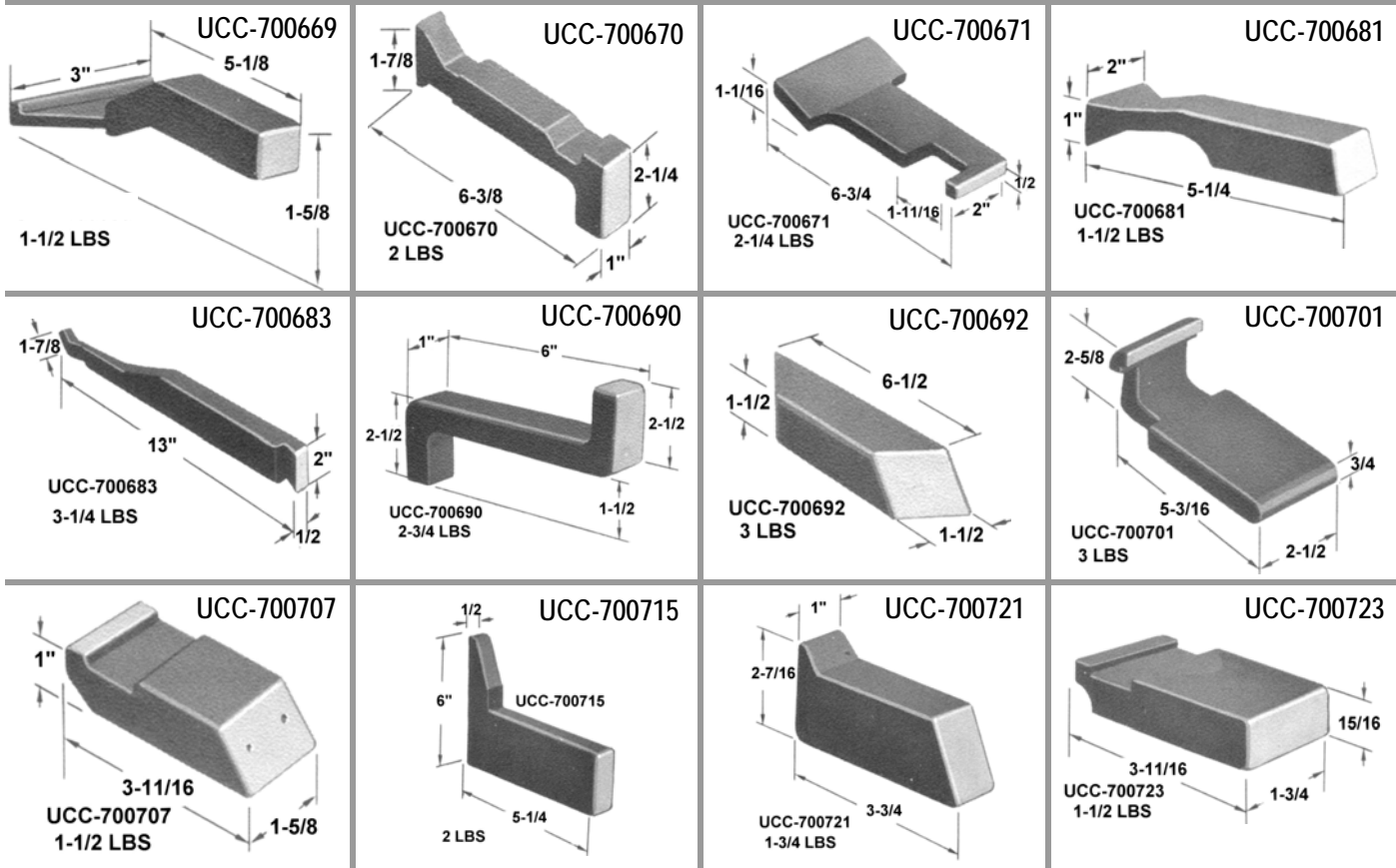
**UNITED's TWO Bucking Bar Types:**  
**CAST** — Clearly identified bars

- Nonporous
- High grade tool steel
- Heat treated to Rockwell 38-42
- Can be re-worked several times without more heat treating

**FABRICATED** — Part Numbers engraved, Dated, Black Oxide finish

- Machined from steel and can be refurbished
- Hardened for strong tough working surface - RC-40-44
- Satin-finished working area - Mag particle inspected
- Mirror-polished bucking surface on request to MRS 32-64

## UNITED BUCKING BAR STYLES



PART NO.	A	B	C	WT-LBS	PART NO.	A	B	C	WT-LBS
UCC-700729-1	4"	1/2	1/2	1-1/4	UCC-700729-7	5"	5/8	5/16	1/4
UCC-700729-2	4"	3/4	3/4	1/2	UCC-700729-8	6"	1"	3/4	1-1/4
UCC-700729-3	4"	1"	1"	1	UCC-700729-9	6"	2"	1"	3-1/2
UCC-700729-4	4"	1-1/2	1-1/2	2-1/2	UCC-700729-10	6"	2"	1-1/2	4-1/4
UCC-700729-5	4"	2"	2"	4-1/2	UCC-700729-11	6"	2"	2-1/2	8-1/2
UCC-700729-6	4"	1/2	1/4	1/8	UCC-700729-12	12"	4"	3"	40

# Bucking Bar Attachments

# UNITED's Bucking Bars & Attachments

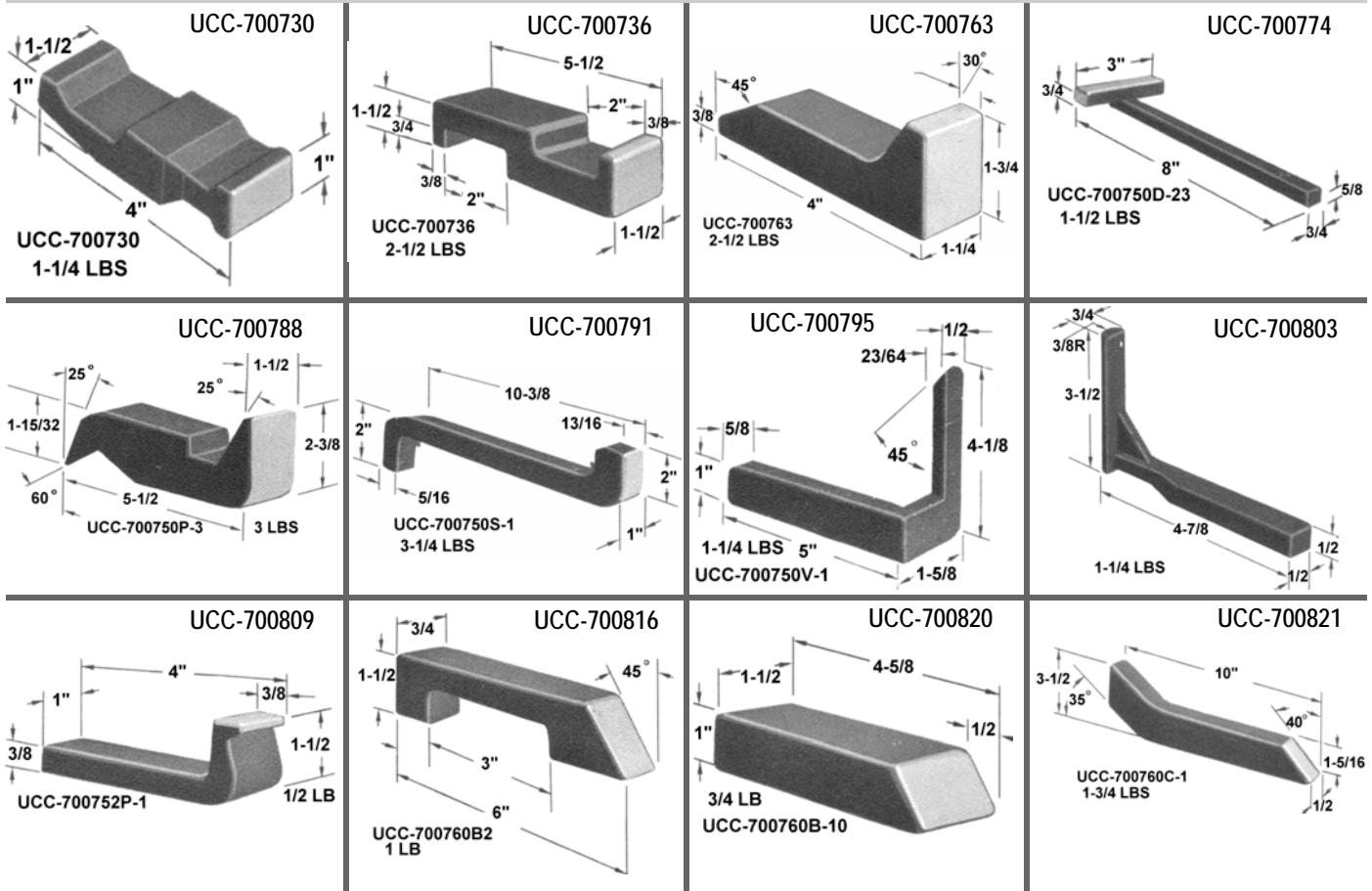
**Our Bucking Bars Reduce Shock and Decrease Vibrations!**

**APPLICATIONS:** For use in difficult areas or hard-to-get-to places and under severe conditions where steady strength and sure performance are required.

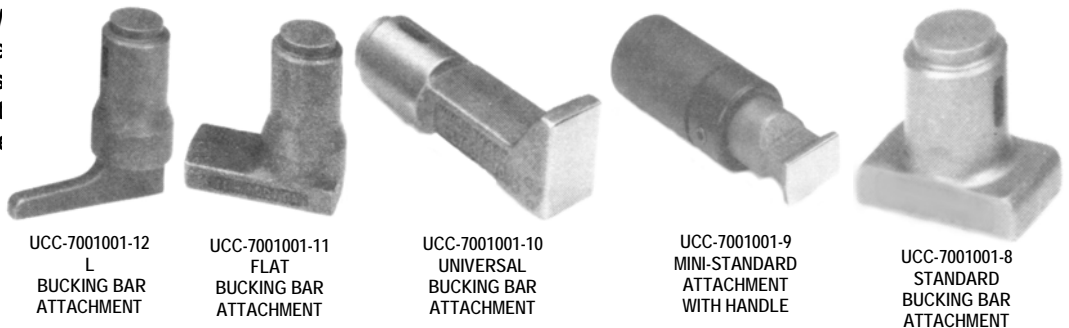
**CAUTION:** Eye Protection must be used when working with Bucking Bars.

Bucking Bars sold separately or in **UNITED Kits** - See Attachments below.

## UNITED BUCKING BAR STYLES



**BUCKING BAR ATTACHMENTS**  
Sold separately or as a set in UCC-7001001-BBK Kits. Special design has adjustable screw for increasing or decreasing spring tension according to rivet size. Comfortable cushioned handle reduces vibration.



# Plate Nut Drill Jig Types and Styles

## Plate Nut Drill Jigs

### UNITED's UCC 518xxx Series

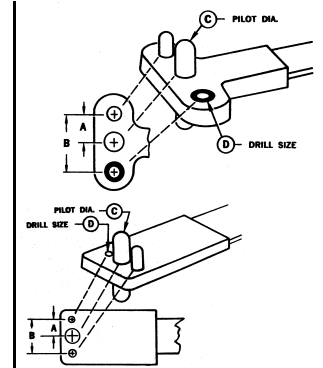
FOR INSTRUCTIONS &  
DETAILS, SEE PGS. U28-U35.

STYLE **A** TWO HOLES TWO LUGS  
SELECT:



**AS**  
STANDARD RIVET SPACING  
DOUBLE-WING  
TWO WING

**AR**  
REDUCED RIVET SPACING  
DOUBLE-WING, TWO WING  
MINIATURE OR MICRO-MINIATURE

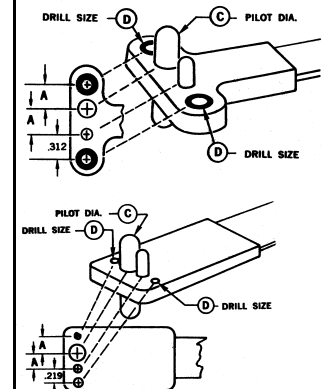


STYLE **B** ONE HOLE TWO LUGS  
SELECT:

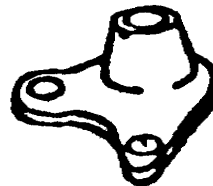


**BS**  
STANDARD RIVET SPACING  
SINGLE-WING  
ONE WING

**BR**  
REDUCED RIVET SPACING  
SINGLE-WING, ONE WING  
MINIATURE OR MICRO-MINIATURE

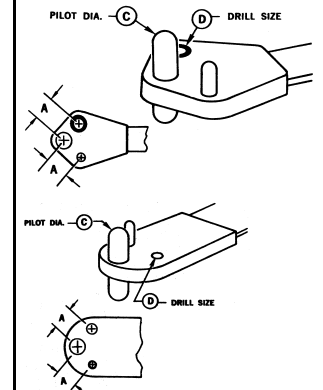


STYLE **C** CORNER ONE HOLE TWO LUGS  
SELECT:



**CS**  
STANDARD RIVET SPACING  
'MICKEY MOUSE'

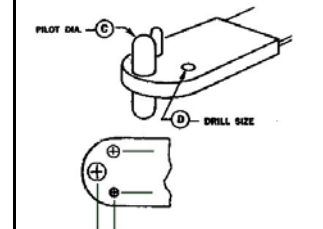
**CR**  
REDUCED RIVET SPACING  
'MICKEY MOUSE'  
MINIATURE OR MICRO-MINIATURE



STYLE **D** SIDE-BY-SIDE ONE HOLE TWO LUGS  
SELECT:


**DS**  
STANDARD RIVET SPACING

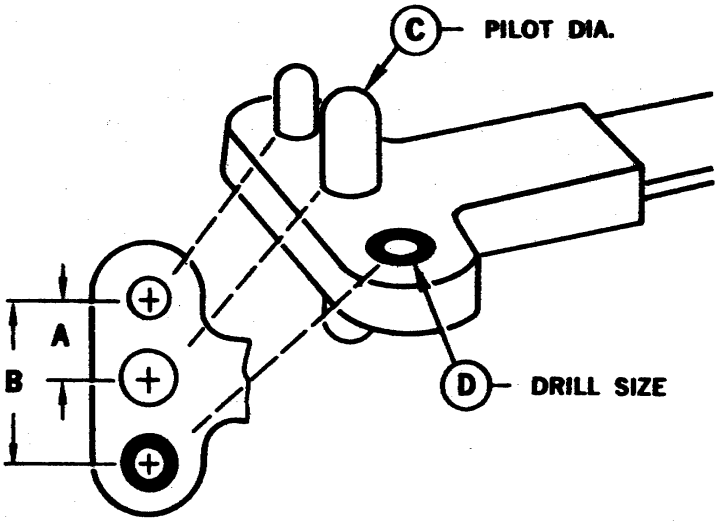
**DR**  
REDUCED RIVET SPACING  
SHORT WING OR SHORT LUG  
MINIATURE OR MICRO-MINIATURE



# Plate Nut Drill Jigs

# Two Lug Plate Nut Drill Jigs

<b>UCC 518XXX SERIES TYPES</b>	<b>AS</b> <b>TWO LUGS TWO HOLES</b> <b>ANCHOR PLATE NUT</b>
STANDARD RIVET SPACING  DOUBLE-WING OR TWO-WING	



## AS TWO LUGS TWO HOLES

STANDARD RIVET SPACING

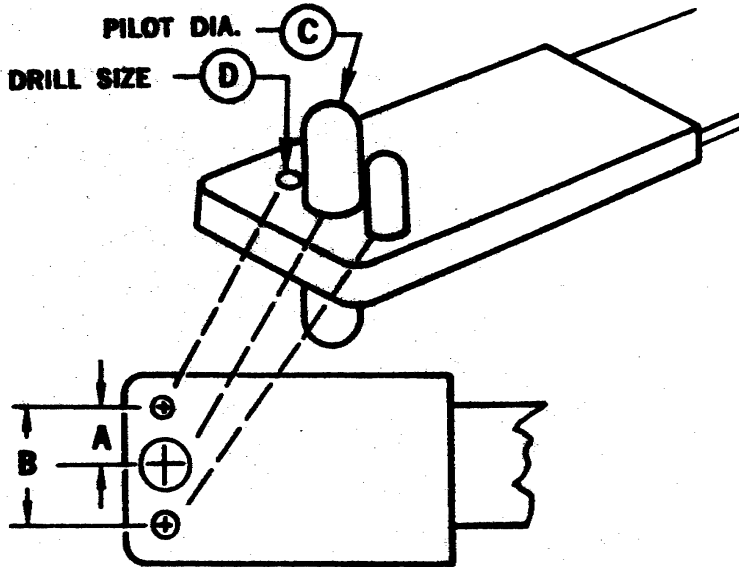
Select your *UNITED* Part Number by Drill (rivet) size D and then by Pilot Diameter size C. Lug Nut requires A and B.

HOLE PATTERN

<i>UNITED</i> PART NO.	Space A DIM	Space B DIM	Drill C	Jig D	PART NO.	A	B	C	D	PART NO.	A	B	C	D	PART NO.	A	B	C	D
UCC-518065	.312	.625	.187	.098	UCC-518050	.344	.68	.28	.09	UCC-518120	.500	1.00	.271	.098	UCC-518140	.500	1.00	.656	.098
UCC-518070	.312	.625	.218	.098	UCC-518055	.344	.68	.29	.09	UCC-518325	.500	1.00	.281	.098	UCC-518225	.500	1.00	.687	.128
UCC-518150	.344	.688	.118	.098	UCC-518060	.344	.688	.312	.098	UCC-518125	.500	1.00	.295	.098	UCC-518230	.500	1.00	.702	.128
UCC-518006	.344	.688	.128	.098	UCC-518335	.359	.718	.312	.128	UCC-518130	.500	1.00	.310	.098	UCC-518330	.562	1.12	.191	.098
UCC-518005	.344	.688	.139	.098	UCC-518075	.375	.750	.248	.098	UCC-518170	.500	1.00	.310	.128	UCC-518235	.562	1.12	.437	.128
UCC-518155	.344	.688	.142	.098	UCC-518080	.375	.750	.281	.098	UCC-518121	.500	1.00	.312	.098	UCC-518106	.562	1.12	.499	.161
UCC-518011	.344	.688	.159	.098	UCC-518085	.375	.750	.372	.098	UCC-518175	.500	1.00	.312	.128	UCC-518240	.592	1.18	.811	.128
UCC-518010	.344	.688	.164	.098	UCC-518320	.375	.750	.397	.098	UCC-518180	.500	1.00	.314	.128	UCC-518245	.595	1.19	.592	.128
UCC-518015	.344	.688	.164	.098	UCC-518315	.375	.750	.437	.098	UCC-518305	.500	1.00	.343	.128	UCC-518250	.625	1.25	.435	.128
UCC-518016	.344	.688	.166	.098	UCC-518090	.375	.750	.437	.098	UCC-518135	.500	1.00	.342	.098	UCC-518021	.625	1.25	.499	.151
UCC-518020	.344	.688	.167	.098	UCC-518095	.375	.750	.467	.098	UCC-518185	.500	1.00	.372	.128	UCC-518255	.687	1.37	.191	.128
UCC-518025	.344	.688	.187	.098	UCC-518340	.414	.828	.372	.128	UCC-518190	.500	1.00	.373	.128	UCC-518260	.687	1.37	.405	.128
UCC-518030	.344	.688	.191	.098	UCC-518004	.437	.875	.311	.098	UCC-518195	.500	1.00	.375	.128	UCC-518265	.687	1.37	.498	.128
UCC-518035	.344	.688	.192	.098	UCC-518100	.437	.875	.372	.098	UCC-518200	.500	1.00	.389	.128	UCC-518270	.687	1.37	.500	.128
UCC-518501	.344	.688	.218	.098	UCC-518105	.450	.900	.372	.098	UCC-518101	.500	1.00	.437	.128	UCC-518275	.687	1.37	.656	.128
UCC-518040	.344	.688	.226	.098	UCC-518160	.500	1.00	.191	.128	UCC-518310	.500	1.00	.467	.128	UCC-518280	.687	1.37	.718	.128
UCC-518061	.344	.688	.250	.098	UCC-518110	.500	1.00	.248	.098	UCC-518205	.500	1.00	.500	.128	UCC-518285	.687	1.37	.749	.128
UCC-518045	.344	.688	.255	.098	UCC-518165	.500	1.00	.248	.128	UCC-518210	.500	1.00	.561	.128	UCC-518290	.687	1.37	.811	.128
					UCC-518115	.500	1.00	.255	.098	UCC-518215	.500	1.00	.593	.128	UCC-518295	.687	1.37	.938	.128
					UCC-518502	.500	1.00	.266	.098	UCC-518220	.500	1.00	.624	.128	UCC-518300	.700	1.40	.850	.128

# Two Lug Plate Nut Drill Jigs

Plate Nut Drill Jigs



<b>AR</b> TWO LUGS TWO HOLES ANCHOR PLATE NUT	<b>UCC 518XXX SERIES TYPES</b>
	REDUCED RIVET SPACING DOUBLE-WING OR TWO WING MINIATURE OR MICRO-MINIATURE

## AR TWO LUGS TWO HOLES

REDUCED RIVET SPACING


Select your **UNITED** Part Number by Drill (rivet) size D and then by Pilot Diameter size C. Lug Nut requires A and B.

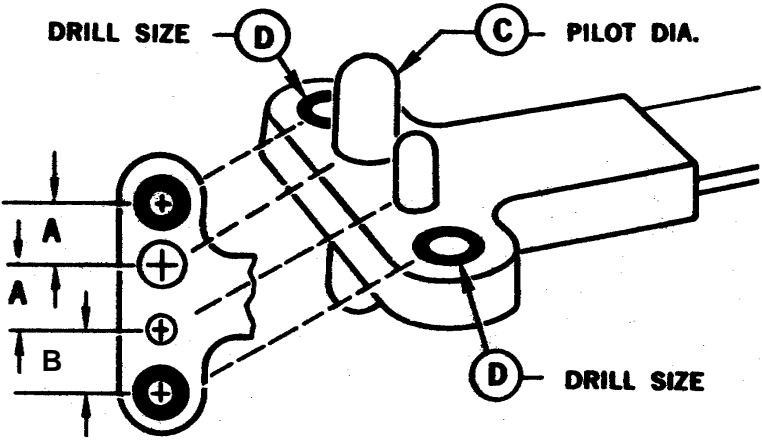
HOLE PATTERN

UNITED PART NO.	Space A DIM	Space B DIM	Drill C Pilot DIA	Jig D Rivet Hole	PART NO.	A	B	C	D	PART NO.	A	B	C	D
UCC-518345	.125	.250	.0860	.067	UCC-518385	.2185	.437	.1660	.098	UCC-518430	.250	.500	.2570	.098
UCC-518350	.1325	.265	.0990	.067	UCC-518041	.2185	.437	.1910	.098	UCC-518460	.2695	.539	.2480	.098
UCC-518355	.148	.296	.1120	.067	UCC-518390	.2185	.437	.2055	.098	UCC-518435	.281	.562	.2480	.098
UCC-518360	.1715	.343	.1390	.067	UCC-518481	.234	.468	.1560	.098	UCC-518440	.281	.562	.2810	.098
UCC-518365	.203	.406	.1120	.098	UCC-518395	.234	.468	.1640	.098	UCC-518056	.281	.562	.3120	.098
UCC-518478	.203	.406	.1140	.098	UCC-518400	.234	.468	.1925	.098	UCC-518445	.295	.562	.3230	.098
UCC-518071	.203	.406	.1280	.098	UCC-518405	.234	.468	.1930	.098	UCC-518476	.295	.590	.1760	.098
UCC-518370	.203	.406	.1400	.098	UCC-518046	.234	.468	.2180	.098	UCC-518475	.295	.590	.1910	.098
UCC-518036	.203	.406	.1660	.098	UCC-518410	.234	.468	.2270	.098	UCC-518477	.295	.590	.1940	.098
UCC-518375	.203	.406	.1800	.098	UCC-518415	.234	.468	.2340	.098	UCC-518450	.3125	.625	.3120	.1285
UCC-518380	.2185	.437	.1390	.098	UCC-518470	.250	.500	.1875	.098	UCC-518455	.3125	.625	.3430	.1285
UCC-518479	.2185	.437	.1400	.098	UCC-518420	.250	.500	.1910	.098	UCC-518081	.359	.718	.3120	.1285
UCC-518076	.2185	.437	.1590	.098	UCC-518482	.250	.500	.2170	.098	UCC-518465	.359	.718	.3730	.1285
					UCC-518425	.250	.500	.2180	.098	UCC-518086	.414	.828	.3730	.1285
					UCC-518051	.250	.500	.2500	.098	UCC-518066	.414	.828	.4360	.1285

# Plate Nut Drill Jigs

# Two Lug Plate Nut Drill Jigs

<b>UCC 518XXX SERIES TYPES</b>	<b>BS</b> <b>TWO LUGS ONE HOLE ANCHOR PLATE NUT</b>
STANDARD RIVET SPACING  SINGLE-WING OR ONE-WING	



## BS TWO LUGS ONE HOLE

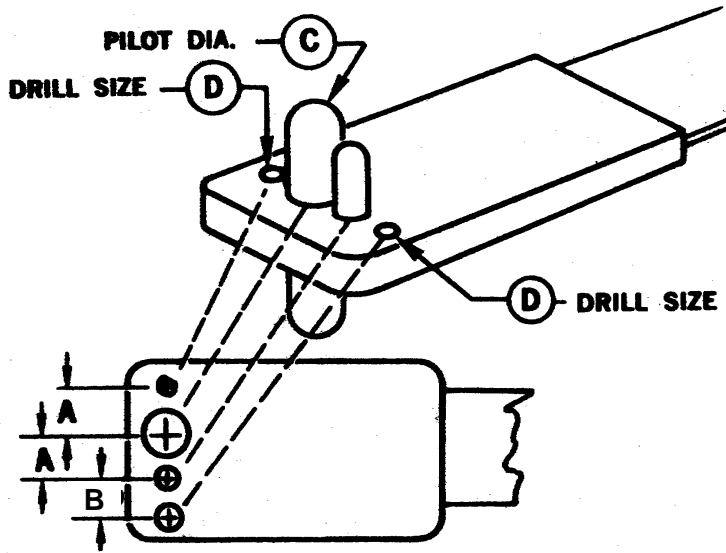
### STANDARD RIVET SPACING

Select your **UNITED** Part Number by Drill (rivet) size D and then by Pilot Diameter size C. Lug Nut requires A and B.

### HOLE PATTERN

UNITED PART NO.	Space A DIM	Space B DIM	Drill C Pilot DIA	Jig D Rivet Hole	PART NO.	A	B	C	D	PART NO.	A	B	C	D
UCC-518141	.344	.312	.1280	.098	UCC-518505	.344	.312	.1910	.1285	UCC-518545	.500	.312	.2480	.098
UCC-518480	.344	.312	.1390	.098	UCC-518510	.344	.312	.1920	.098	UCC-518550	.500	.312	.2555	.098
UCC-518590	.344	.312	.1425	.098	UCC-518515	.344	.312	.2130	.098	UCC-518503	.500	.312	.2660	.098
UCC-518091	.344	.312	.1590	.098	UCC-518126	.344	.312	.2180	.098	UCC-518555	.500	.312	.3105	.098
UCC-518485	.344	.312	.1640	.098	UCC-518520	.344	.312	.2265	.098	UCC-518565	.500	.312	.3105	.1285
UCC-518490	.344	.312	.1645	.098	UCC-518525	.344	.312	.2480	.098	UCC-518570	.500	.312	.3145	.1285
UCC-518495	.344	.312	.1675	.098	UCC-518530	.344	.312	.2555	.098	UCC-518560	.500	.312	.3430	.098
UCC-518500	.344	.312	.1875	.098	UCC-518535	.344	.312	.2810	.098	UCC-518575	.500	.312	.3720	.1285
					UCC-518540	.344	.312	.3105	.1285	UCC-518580	.500	.312	.3730	.1285
					UCC-518545	.500	.312	.2480	.098	UCC-518585	.562	.344	.4350	.1285

# Two Lug Plate Nut Drill Jigs



<h2>BR</h2> <p>TWO LUGS ONE HOLE ANCHOR PLATE NUT</p>	<h2>UCC 518XXX SERIES TYPES</h2>
	<p>REDUCED RIVET SPACING SINGLE-WING OR ONE WING. MINIATURE OR MICRO-MINIATURE</p>

## BR TWO LUGS ONE HOLE

### REDUCED RIVET SPACING

Select your **UNITED** Part Number by Drill (rivet) size D and then by Pilot Diameter size C. Lug Nut requires A and B.

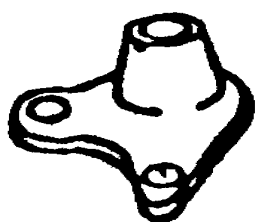
#### HOLE PATTERN

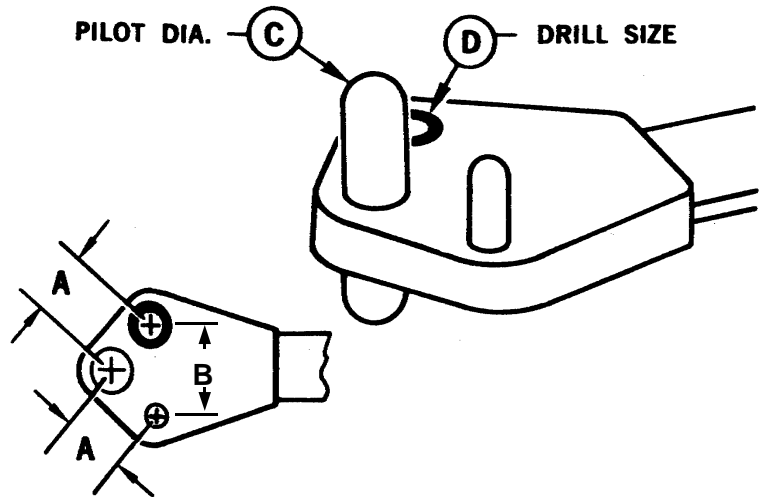
UNITED PART NO.	Space A DIM	Space B DIM	Drill C Pilot DIA	Jig D Rivet Hole	PART NO.	A	B	C	D	PART NO.	A	B	C	D
					UCC-518605	.125	.219	.0860	.067	UCC-518181	.203	.219	.1280	.098
UCC-518610	.133	.219	.0990	.067	UCC-518630	.203	.219	.1400	.098	UCC-518655	.250	.219	.1910	.098
UCC-518615	.148	.219	.1120	.067	UCC-518635	.218	.219	.1390	.098	UCC-518660	.250	.219	.2180	.1285
UCC-518620	.171	.219	.1390	.067	UCC-518186	.218	.219	.1640	.098	UCC-518665	.281	.219	.2480	.1285
UCC-518625	.203	.219	.1120	.067	UCC-518640	.218	.219	.1660	.1285	UCC-518670	.281	.219	.2810	.098
					UCC-518645	.234	.219	.1640	.098	UCC-518191	.359	.269	.3120	.1285
					UCC-518650	.234	.219	.1930	.098	UCC-518196	.414	.269	.3730	.1285



# Plate Nut Drill Jigs

# Corner 2-Lug Plate Nut Drill Jigs

<b>UCC 518XXX SERIES TYPES</b>	<b>CS</b> <b>TWO LUGS ONE HOLE ANCHOR PLATE NUT</b>
STANDARD RIVET SPACING  'MICKEY MOUSE'	



## CS TWO LUGS ONE HOLE

### STANDARD RIVET SPACING

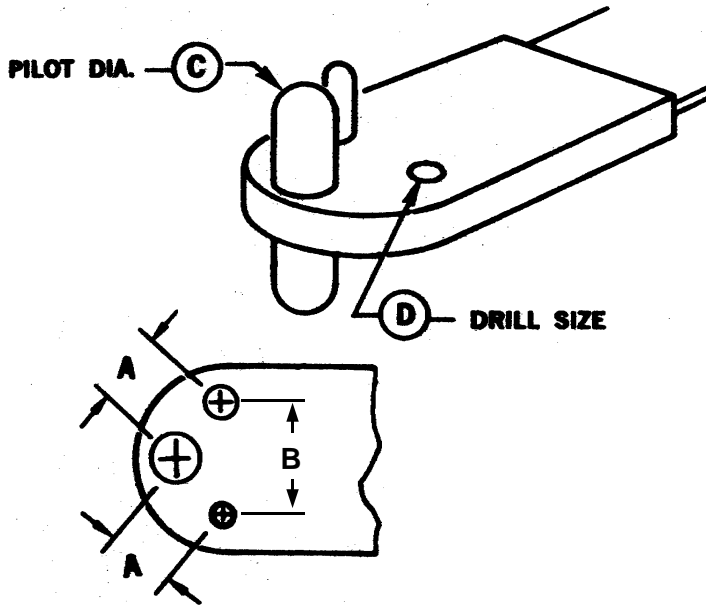
Select your **UNITED** Part Number by Drill (rivet) size D and then by Pilot Diameter size C. Lug Nut requires A and B.

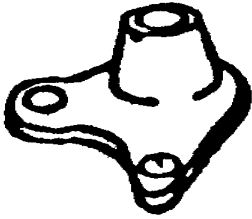
### HOLE PATTERN

UNITED PART NO.	Space A DIM	Space B DIM	Drill C Pilot DIA	Jig D Rivet Hole	PART NO.	A	B	C	D	PART NO.	A	B	C	D
UCC-518680	.344	.486	.1390	.098	UCC-518700	.344	.486	.1875	.098	UCC-518740	.500	.707	.3110	.1285
UCC-518775	.344	.486	.1425	.098	UCC-518705	.344	.486	.1910	.098	UCC-518745	.500	.707	.3120	.1285
UCC-518241	.344	.486	.1590	.098	UCC-518710	.344	.486	.1980	.098	UCC-518750	.500	.707	.3145	.1285
UCC-518685	.344	.486	.1640	.098	UCC-518201	.344	.486	.2180	.098	UCC-518755	.500	.707	.3720	.1285
UCC-518690	.344	.486	.1645	.098	UCC-518715	.344	.486	.2865	.098	UCC-518760	.500	.707	.3730	.1285
UCC-518695	.344	.486	.1675	.098	UCC-518780	.358	.506	.2120	.1285	UCC-518216	.500	.707	.4360	.1285
					UCC-518786	.414	.585	.3780	.1285	UCC-518765	.562	.795	.4350	.1285
					UCC-518725	.500	.707	.2480	.098	UCC-518251	.562	.795	.4360	.1610
					UCC-518720	.500	.707	.2555	.098	UCC-518770	.562	.795	.4375	.1285
					UCC-518735	.500	.707	.3105	.098	UCC-518221	.562	.795	.4990	.1610

# Corner 2-Lug Plate Nut Drill Jigs

Plate Nut Drill Jigs



<b>CR</b> TWO LUGS ONE HOLE ANCHOR PLATE NUT	<b>UCC 518XXX SERIES TYPES</b>
	REDUCED RIVET SPACING  'MICKEY MOUSE' MINIATURE OR MICRO- MINIATURE

## CR TWO LUGS ONE HOLE

REDUCED RIVET SPACING

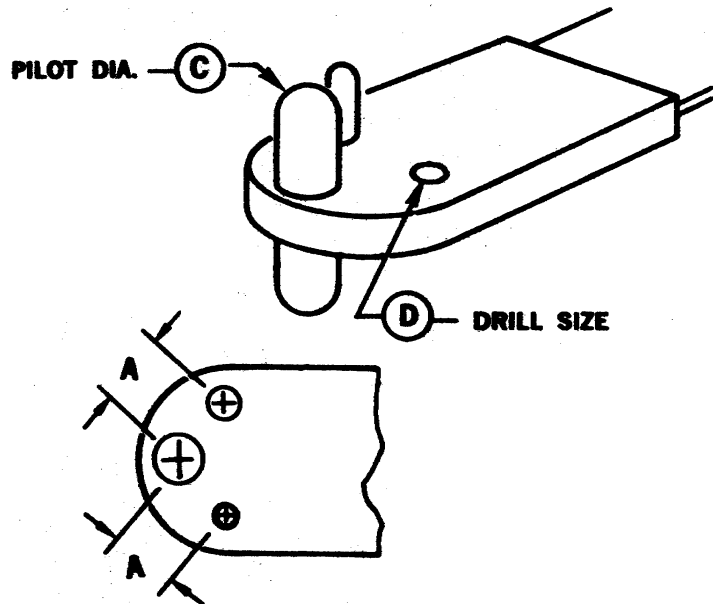
Select your **UNITED** Part Number by  
Drill (rivet) size D and then by Pilot  
Diameter size C. Lug Nut requires A and B.

HOLE PATTERN

UNITED PART NO.	Space A DIM	Space B DIM	Drill C Pilot DIA	Jig D Rivet Hole	PART NO.	A	B	C	D	PART NO.	A	B	C	D
UCC-518785	.125	.177	.0860	.067	UCC-518815	.218	.308	.1390	.098	UCC-518281	.250	.354	.2480	.098
UCC-518790	.138	.196	.0990	.067	UCC-518306	.218	.308	.1560	.098	UCC-518845	.281	.398	.2480	.098
UCC-518795	.148	.210	.1120	.067	UCC-518820	.218	.308	.1660	.098	UCC-518850	.281	.398	.2180	.098
UCC-518800	.178	.243	.1390	.067	UCC-518271	.218	.308	.1910	.098	UCC-518286	.281	.398	.3120	.098
UCC-518805	.203	.287	.1120	.098	UCC-518825	.234	.331	.1640	.098	UCC-518855	.312	.441	.3120	.1285
UCC-518301	.203	.287	.1275	.098	UCC-518830	.234	.331	.1930	.098	UCC-518860	.312	.441	.3430	.1285
UCC-518810	.203	.287	.1400	.098	UCC-518276	.234	.331	.2150	.098	UCC-518311	.359	.508	.3120	.1285
UCC-518266	.203	.287	.1660	.098	UCC-518865	.250	.354	.1875	.098	UCC-518291	.359	.508	.3730	.1285
					UCC-518835	.250	.354	.1910	.098	UCC-518316	.414	.585	.3730	.1285
					UCC-518840	.250	.354	.2180	.098	UCC-518296	.414	.585	.4360	.1285

## Plate Nut Drill Jigs

# Side-By-Side Plate Nut Drill Jigs



<b>UCC 518XXX SERIES TYPES</b>	<b>DS</b> TWO LUGS ONE HOLE ANCHOR PLATE NUT
STANDARD RIVET SPACING	

## DS TWO LUGS ONE HOLE

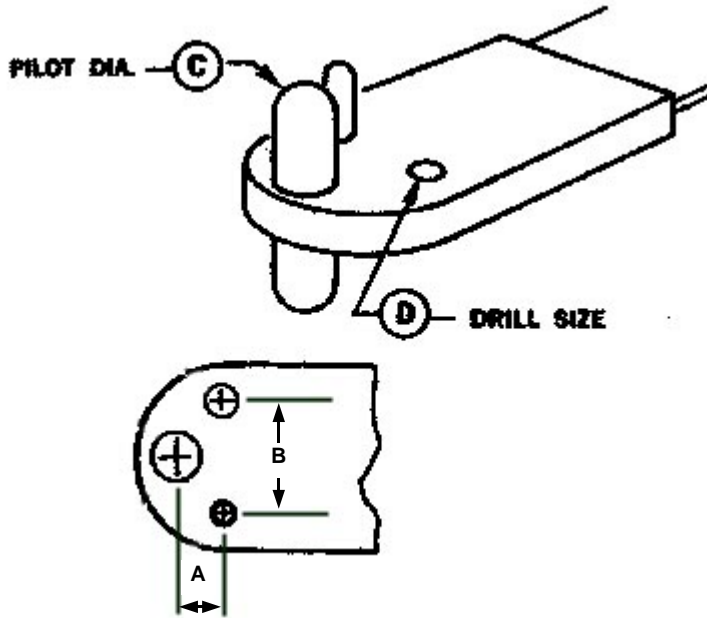
### STANDARD RIVET SPACING

Select your **UNITED** Part Number by Drill (rivet) size D and then by Pilot Diameter size C. Lug Nut requires A and B.

HOLE PATTERN

UNITED PART NO.	Space A DIM	Space B DIM	Drill C Pilot DIA	Jig D Rivet Hole	HOLE PATTERN																										
					PART NO.	A	B	C	D	PART NO.	A	B	C	D	PART NO.	A	B	C	D												
ALL BLANK CHART																															

# Side-By-Side Plate Nut Drill Jigs



<b>DR</b> TWO LUGS ONE HOLE ANCHOR PLATE NUT	<b>UCC 518XXX SERIES TYPES</b>
	REDUCED RIVET SPACING SHORT-WING OR SHORT LUG MINIATURE OR MICRO- MINIATURE

## DR TWO LUGS ONE HOLE

### REDUCED RIVET SPACING

Select your **UNITED** Part Number by Drill (rivet) size D and then by Pilot Diameter size C. Lug Nut requires A and B.

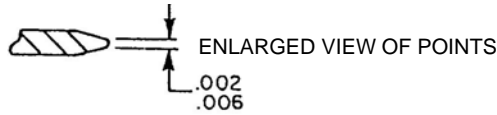
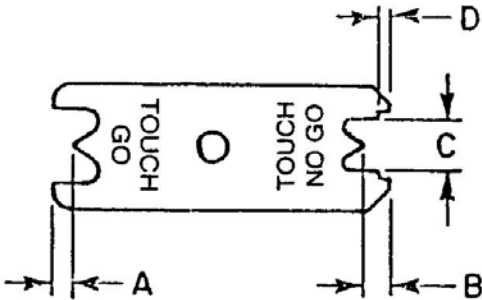
#### HOLE PATTERN

UNITED PART NO.	Space A DIM	Space B DIM	Drill C Pilot DIA	Jig D Rivet Hole	PART NO.	A	B	C	D	PART NO.	A	B	C	D
					UCC-518326	.250	.219	.2480	.098	UCC-518890	.359	.269	.3120	.1285
UCC-518870	.234	.219	.1640	.098	UCC-518880	.281	.219	.2480	.098	UCC-518900	.359	.269	.3125	.1285
UCC-518321	.234	.219	.2150	.098	UCC-518336	.281	.219	.3120	.098	UCC-518346	.359	.269	.3730	.1285
UCC-518905	.250	.219	.1875	.098	UCC-518885	.312	.250	.3120	.1285	UCC-518895	.414	.269	.3720	.1285
UCC-518875	.250	.219	.1910	.098	UCC-518351	.344	.300	.1910	.1285	UCC-518356	.438	.300	.2480	.1285
					UCC-518331	.344	.300	.2480	.1285	UCC-518341	.438	.300	.3120	.1285

# UDB-34D Pin Position Gauge

# Locking Pin And Swage

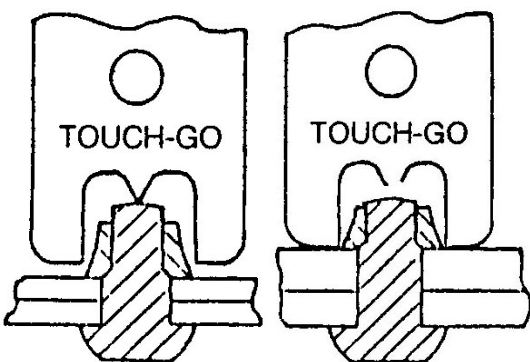
## Pin Position Gauge



UDB PART NO.	N.A.S. GAUGE NO.	NOMINAL SIZE	A +.001 -.000	B +.000 -.001	C ±.001	D ±.001
UDB-34D-9A	34D-9A	.164	.168	.260	.2530	.0875
UDB-34D-10A	34D-10A		.168	.254	.2400	.0795
UDB-34D-11	34D-11		.168	.254	.2530	.0605
UDB-34D-1	34D-1	.190 & .203	.238	.322	.2972	.0665
UDB-34D-2	34D-2	.203	.218	.288	.2972	.0725
UDB-34D-3	34D-3	.250 & .266	.307	.399	.3942	.0725
UDB-34D-4	34D-4	.266	.301	.379	.3942	.0995
UDB-34D-5	34D-5	.312 & .328	.399	.479	.4992	.0635
UDB-34D-6	34D-6	.328	.384	.449	.4862	.1055
UDB-34D-7	34D-7	.375 & .391	.496	.582	.5892	.1185
UDB-34D-8	34D-8	.391	.480	.545	.5892	.1555

<b>PIN POSITION GAUGE</b>	These gauges are designed to inspect the position of the installed swage locking pins in relation to the sheet line or work surface, verifying that the correct length of fastener was installed.
<b>PIN POSITION and SWAGE GAUGE</b>	These gauges, in addition to inspection of proper grip length, are also designed to inspect the swaged collar in relation to the sheet line or work surface to determine that the installed collar is completely and sufficiently swaged.

## USAGE INSTRUCTIONS FOR UDB-34D and 75, EXCEPT 75-6 and 75-7 See next page.

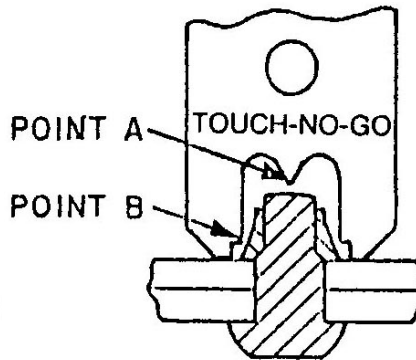


### ACCEPT

1. Point Touches Pin
2. Legs of Gauge Clear Sheet Line
3. Pin is Acceptable
4. Gauge Pin with Touch-No Go End

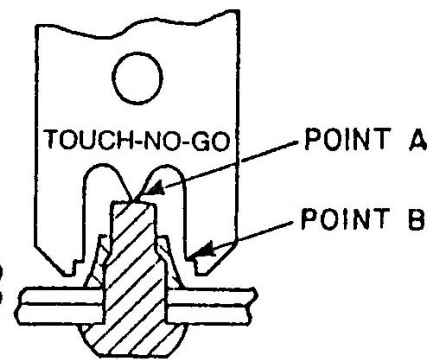
### REJECT

1. Point Does Not Touch Sheet Line.
2. Legs of Gauge Touch Sheet Line
3. Pin Grip is Too Short.



### ACCEPT

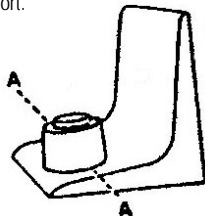
1. Point A Does Not Touch Pin
2. Legs of Gauge Touch Sheet Line
3. Points B Do Not Touch Collar
4. Pin Grip and Collar Swage is Acceptable
5. Gauge Pin with Touch-Go End



### REJECT

1. Point A Touches Pin
2. Legs of Gauge Clear Sheet Line
3. Points B Touch Collar
4. Pin is Too Long
5. Collar is Not Swaged Enough

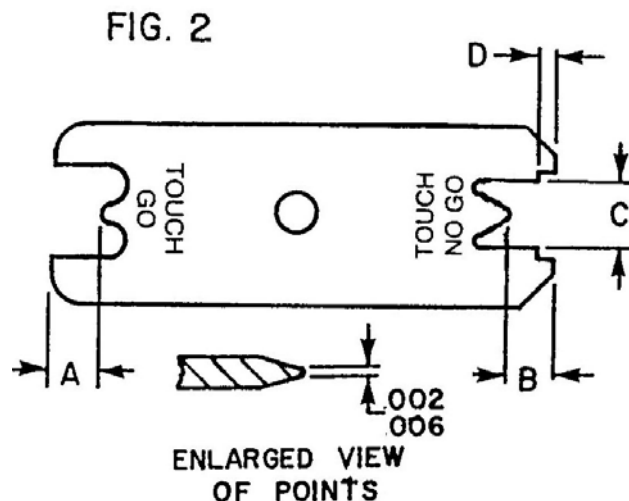
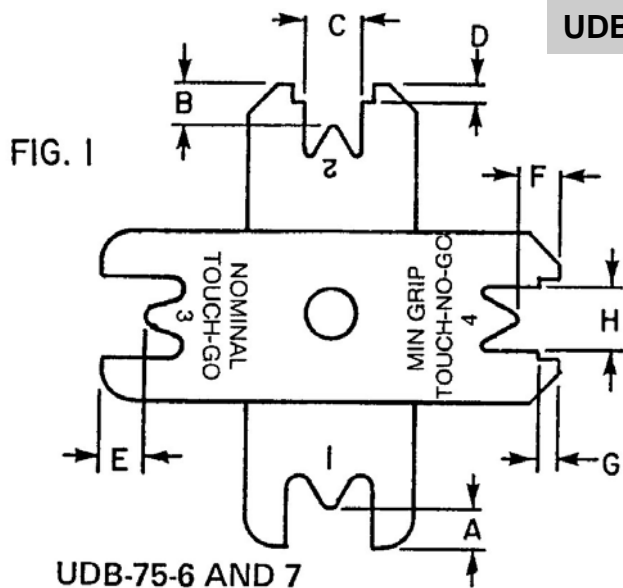
Against Slopes,  
Use Gauge in  
Plane A - A.



# Inspection Gauges

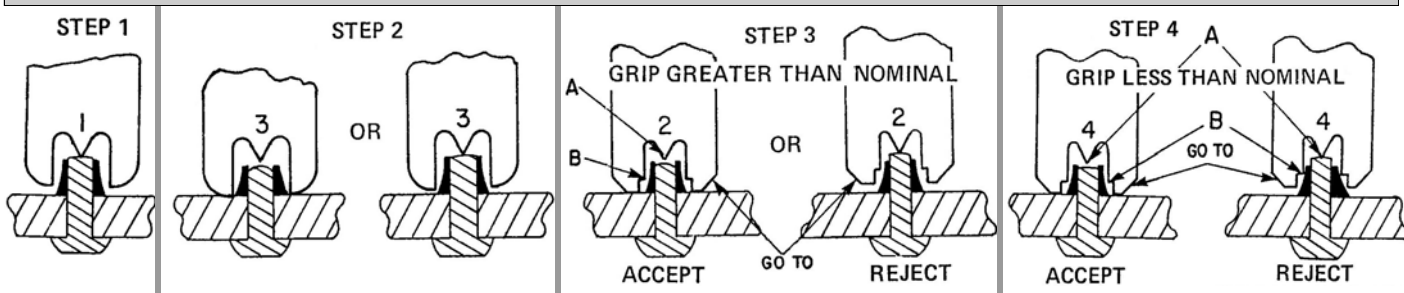
UDB-75

UDB-75-1 THRU 5 and 8 SHOWN on PREVIOUS PAGE



UDB PART NO.	N.A.S. GAUGE NO.	NOMINAL SIZE	A +.001 -.000	B +.000 -.001	C	D	E	F	G	H
UDB-75-5	75-5	.156 & .164	.169	.241	.2405	.081 .080				
UDB-75-8	75-11									
UDB-75-1	75-1	.190	.194	.266	.2795 .2775	.115 .113				
UDB-75-2	75-2	.250	.246	.318	.3704 .3684	.140 .138				
UDB-75-3	75-3	.312	.265	.337	.4720 .4700	.130 .128				
UDB-75-4	75-4	.375	.308	.380	.5657 .5637	.160 .158				
UDB-75-6	75-6	.125	.136	.1660	.1905	.072 .071	.1655	.209	.092	.1905
UDB-75-7	75-7									

**TO USE PIN POSITION AND SWAGE GAUGES UDB-75-6 and UDB-75-7, BOTH STEP 1 AND STEP 3 or STEP 4 MUST ACCEPT.**

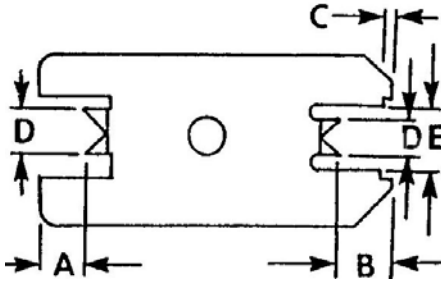
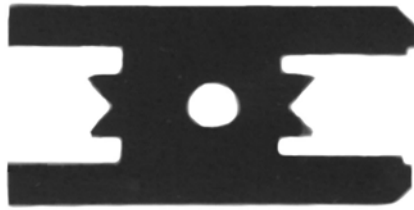


STEP 1	Point Touches Stump and Legs of Gauge Clear Sheet. Go to Step 2, if Point Clears Stump when Legs of Gauge Touch Sheet. <b>REJECT</b>
STEP 2	If Point Does <b>Not</b> Touch Pin, go to Step 3. If Point Touches Stump, go to Step 4.
STEP 3	Point A does <b>Not</b> Touch Stump. Grip is Not Under Minimum. Points B Do <b>Not</b> Touch Collar. Collar Swaged enough. <b>ACCEPT</b> Point A Touches Stump. Grip is Under Minimum and/or Points B Touch Collar. Collar Not Swaged enough. <b>REJECT</b>
STEP 4	Same procedure as Step 3 Except use Side 4 of Gauge.

# UDB-85 Pin Position Gauge

# Pin Position And Swage

## UDB-85 PIN POSITION and SWAGE GAUGES

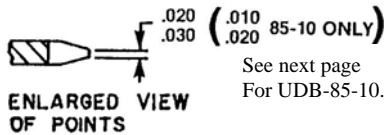
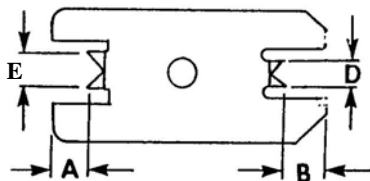


UDB PART NO.	N.A.S. GAUGE NO.	NOMINAL SIZE	A +.001 -.000	B	C	D ±.001	E ±.001
UDB-85-7	85-7	.164	.167	.230/.229	.030-.028	.136	.254-.252
UDB-85-12	85-12		.161	.234/.233	.037-.036	.136	.2535-.3530
UDB-85-17	85-17	.190 & .203	.200	.280/.279	.081-.079	.164	.286-.284
UDB-85-2	85-2	.250 & .266	.295	.374/.373	.038-.036	.224	.401-.399
UDB-85-18	85-18		.287	.364/.363	.058-.056	.224	.401-.399
UDB-85-21	85-21		.287	.364/.363	.140-.138	.224	.3704-.3684
UDB-85-3	85-3	.312 & .328	.339	.459/.458	.083-.081	.268	.487-.485
UDB-85-8	85-8		.404	.492/.491	.110-.109	.268	.4725-.4720
UDB-85-19	85-19		.404	.492/.491	.104-.102	.268	.487-.485
UDB-85-4	85-4	.375 & .391	.411	.549/.548	.062-.060	.339	.603-.601
UDB-85-9	85-9		.507	.604/.603	.120-.119	.339	.5755-.5750
UDB-85-22	85-22		.507	.604/.603	.150-.149	.339	.5755-.5750

## USAGE INSTRUCTIONS FOR UDB-85, EXCEPT 85-10 See next page.

<b>I</b>	<b>II</b>	<ol style="list-style-type: none"> <li>Points Touch Pin</li> <li>Legs of Gauge Clear Sheet Line</li> <li>Pin is Acceptable Gauge Pin with Touch-No Go End</li> </ol>	<b>III</b>	<b>IV</b>	<ol style="list-style-type: none"> <li>Points A Do Not Touch Pin</li> <li>Legs of Gauge Touch Sheet Line</li> <li>Points B Do Not Touch Collar</li> <li>Pin Grip and Collar Swage is Acceptable Gauge Pin with Touch-Go End</li> </ol>	<ol style="list-style-type: none"> <li>Points A Touch Pin</li> <li>Legs of Gauge Clear Sheet Line</li> <li>Points B Touch Collar</li> <li>Pin is Too Long</li> <li>Collar is Not Swaged Enough</li> </ol>
TOUCH GO ACCEPT	TOUCH GO REJECT	<ol style="list-style-type: none"> <li>Points Do Not Touch Pin</li> <li>Legs of Gauge Touch Sheet Line</li> <li>Pin Grip is Too Short.</li> </ol>	TOUCH NO GO ACCEPT	TOUCH NO GO REJECT		

## UDB-76 and UDB-90 PIN POSITION GAUGES



UDB PART NO.	N.A.S. GAUGE NO.	NOMINAL SIZE	A +.001 -.000	B +.001 -.000	D ±.001	E ±.001
<b>UDB-76-#</b>						
UDB-76-1A	76-1A	.190 & .203	.194	.264	.164	.150
UDB-76-2A	76-2A	.250 & .266	.248	.316	.224	.200
UDB-76-3	76-3	.312 & .328	.268	.341	.268	.268
UDB-76-4	76-4	.375 & .391	.319	.390	.339	.339
<b>UDB-90-#</b>						
UDB-90-4	90-4	.125	.160	.236	.100	.100
UDB-90-5	90-5	.156	.181	.261	.125	.125
UDB-90-6	90-6	.190	.186	.279	.164	.164
UDB-90-8	90-8	.250	.226	.318	.224	.224
UDB-90-10	90-10	.312	.265	.366	.268	.268
UDB-90-12	90-12	.375	.298	.403	.339	.339

## USAGE INSTRUCTIONS FOR UDB-76 and UDB-90

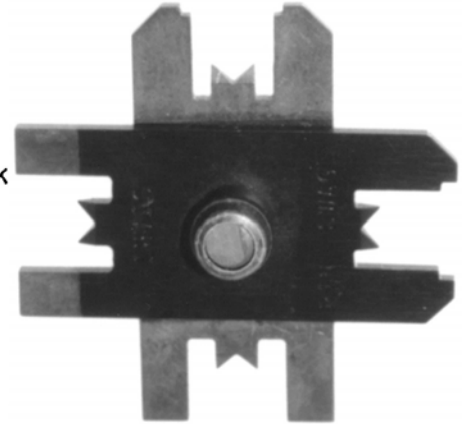
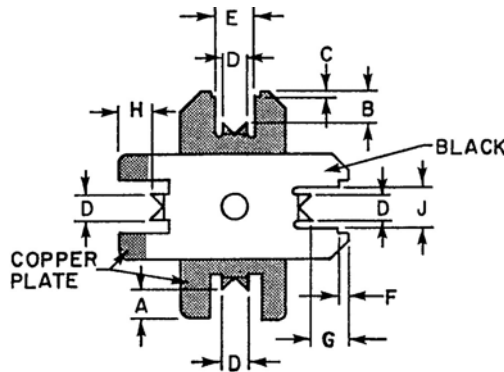
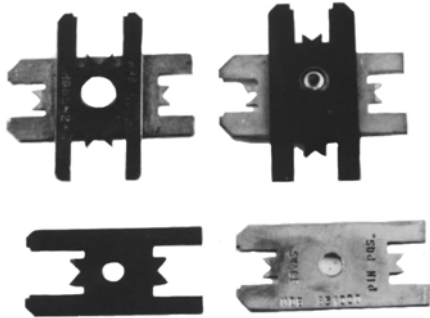
<b>TOUCH NO GO</b>	<ol style="list-style-type: none"> <li>Points Touch Pin</li> <li>Legs of Gauge Clear Sheet Line</li> <li>Pin is Acceptable Gauge Pin with Touch-No Go End</li> </ol>	<b>TOUCH NO GO</b>	<ol style="list-style-type: none"> <li>Points Do Not Touch Pin</li> <li>Legs of Gauge Touch Sheet Line</li> <li>Pin Grip is Too Short.</li> </ol>	<b>TOUCH NO GO</b>	<ol style="list-style-type: none"> <li>Points Do Not Touch Pin</li> <li>Legs of Gauge Touch Sheet Line</li> <li>Pin is acceptable Gauge Pin with Touch-Go End</li> </ol>	<b>TOUCH NO GO</b>	<ol style="list-style-type: none"> <li>Points Touch Pin</li> <li>Legs of Gauge Clear Sheet Line</li> <li>Pin is Too Long</li> </ol>
ACCEPT		REJECT		ACCEPT		REJECT	

# Pin Position And Swage

**UDB-85-10  
Pin Position Gauge**

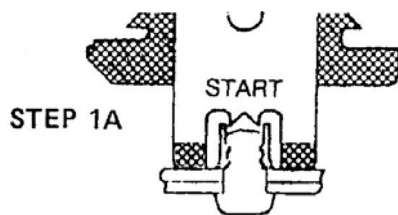
UDB-85-10 PIN POSITION and SWAGE GAUGES

SWAGE and PIN POSITION PROFILE GAUGE  
FOR 3/16" STANDARD PULL TYPE BOLTS.



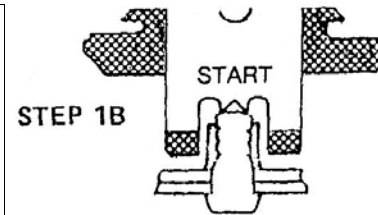
UDB PART NO.	N.A.S. GAUGE NO.	NOMINAL SIZE	A +.001 -.000	B	C	D ±.001	E	F	G	H	J
UDB-85-10	85-10	.190 & .203	.208	.2260 .2255	.039 .037	.164	.304 .302	.060 .058	.280 .279	.2255 .2250	.304 .302

## HOW TO USE PIN POSITION AND SWAGE GAUGES UDB-85-10



**STEP 1  
USE START**

- A. If Copper Plate Finish touches the Sheet, see Step 2 below.
- B. If Black Touches the Pin, see Step 3 below.



- STEP 2  
USE COPPER PLATE**
- A. Check Pin Position: Legs Must Not Touch the Sheet.
  - B. Check Swage: Legs Must Touch the Sheet.

- STEP 3  
USE BLACK**
- A. Check Pin Position: Legs Must Touch the Sheet.
  - B. Check Swage: Legs Must Touch the Sheet.

