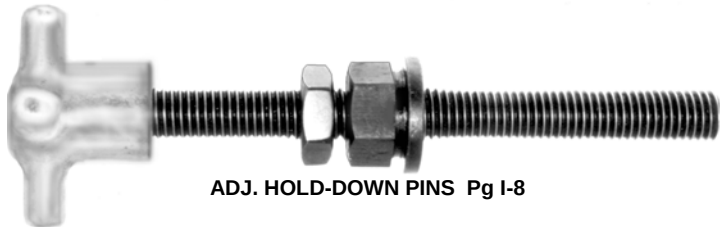


Torque, Knob, Screw Assemblies, Pads

**You Really Need
These Fixture Items!**



ADJ. HOLD-DOWN PINS Pg I-8



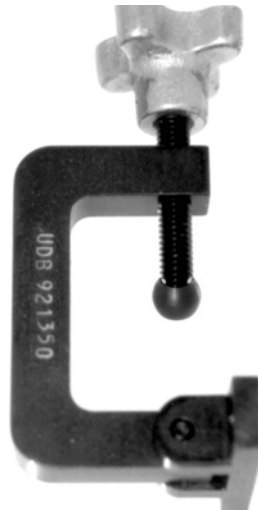
LARGE SWIVEL PAD SCREWS Pg I-2



ADJ. TORQUE
SCREWS
Pg I-13



SWIVEL KNOB SCREW
BODIES Pg I-6



HINGE CLAMPS Pg I-10



KNURLED SHOULDER SCREWS Pg I-8



EXTRA LARGE PAD
SWIVEL KNOB SCREWS Pg I-6



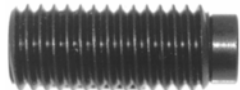
TORQUE HEAD SCREWS WITH
TOGGLE PADS Pg I-12



AD. TORQUE
HANDLES Pg I-13



ROUND PAD
SWIVEL HEAD
SCREWS Pg I-3



HEX HEADLESS SWIVEL
SCREWS Pg I-14



JACK SCREWS Pg I-15



JIG LATCH BOLTS Pg I-15



QUARTER-TURN SCREWS Pg I-15



LARGE VEE PAD SWIVEL
KNOB SCREWS Pg I-6



SWIVEL SCREW PADS Pg I-4

THE ORIGINAL KNURLED HEAD SCREWS Pg I-12

Swivel Screws with Removable Pads

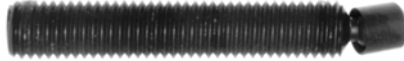
Endless Clamping Options

Threaded Ball allows removal of Swivel pads.

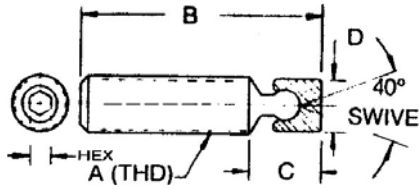
Swivel Pads are interchangeable with each thread size. See page I-4.

ALLOY STEEL — CASE-HARDENED — BLACK OXIDE FINISH

SMALL PAD SWIVEL SCREW



ONE PAD INCLUDED IN ASSEMBLY



SWIVEL SCREW CLAMP
WITH SMALL FOOT

PART NO.	A	B	C	D	HEX
UDB-952605	1/4-20	1/2	9/32	3/16	1/8
UDB-952606	1/4-20	3/4	9/32	3/16	1/8
UDB-952607	1/4-20	1	9/32	3/16	1/8
UDB-952608	1/4-20	1-1/2	9/32	3/16	1/8
UDB-952609	5/16-18	3/4	11/32	1/4	5/32
UDB-952610	5/16-18	1	11/32	1/4	5/32
UDB-952611	5/16-18	1-1/2	11/32	1/4	5/32
UDB-952612	5/16-18	2	11/32	1/4	5/32
UDB-952613	3/8-16	3/4	3/8	19/64	3/16
UDB-952614	3/8-16	1	3/8	19/64	3/16
UDB-952615	3/8-16	1-1/2	3/8	19/64	3/16

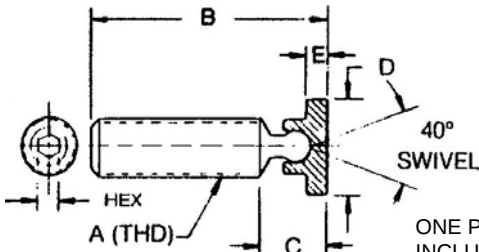
Add 'N' to Part No. for NYLON PAD.

PART NO.	A	B	C	D	HEX
UDB-952616	3/8-16	2	3/8	19/64	3/16
UDB-952617	3/8-16	3	3/8	19/64	3/16
UDB-952618	1/2-13	1-1/2	15/32	13/32	1/4
UDB-952619	1/2-13	2	15/32	13/32	1/4
UDB-952620	1/2-13	3	15/32	13/32	1/4
UDB-952621	5/8-11	2	5/8	1/2	5/16
UDB-952622	5/8-11	3	5/8	1/2	5/16
UDB-952623	5/8-11	4	5/8	1/2	5/16
UDB-952624	5/8-11	5	5/8	1/2	5/16

LARGE PAD SWIVEL SCREW



Add 'N' to Part No. for NYLON PAD.



SWIVEL SCREW CLAMP
WITH LARGE FOOT

ONE PAD
INCLUDED
IN
ASSEMBLY

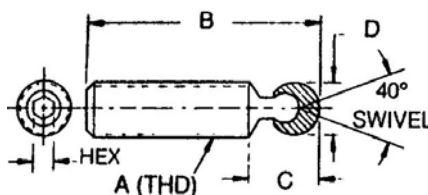
Removable Pads. Add 'N' to Part No. for NYLON PAD.

PART NO.	A	B	C	D	E	HEX
UDB-952622	1/4-20	19/32	23/64	3/8	1/8	1/8
UDB-952623	1/4-20	27/32	23/64	3/8	1/8	1/8
UDB-952624	1/4-20	1-3/32	23/64	3/8	1/8	1/8
UDB-952625	1/4-20	1-19/32	23/64	3/8	1/8	1/8
UDB-952626	5/16-18	27/32	27/64	1/2	5/32	5/32
UDB-952627	5/16-18	1-3/32	27/64	1/2	5/32	5/32
UDB-952628	5/16-18	1-19/32	27/64	1/2	5/32	5/32
UDB-952629	5/16-18	2-3/32	27/64	1/2	5/32	5/32
UDB-952630	3/8-16	7/8	1/2	9/16	3/16	3/16
UDB-952631	3/8-16	1-1/8	1/2	9/16	3/16	3/16
UDB-952632	3/8-16	1-5/8	1/2	9/16	3/16	3/16
UDB-952633	3/8-16	2-1/8	1/2	9/16	3/16	3/16
UDB-952634	3/8-16	3-1/8	1/2	9/16	3/16	3/16
UDB-952635	1/2-13	1-9/16	17/32	3/4	3/16	1/4
UDB-952636	1/2-13	2-1/16	17/32	3/4	3/16	1/4
UDB-952637	1/2-13	3-1/16	17/32	3/4	3/16	1/4
UDB-952638	1/2-13	4-1/16	17/32	3/4	3/16	1/4
UDB-952639	5/8-11	2-3/64	21/32	15/16	7/32	5/16
UDB-952640	5/8-11	3-3/64	21/32	15/16	7/32	5/16
UDB-952641	5/8-11	4-3/64	21/32	15/16	7/32	5/16
UDB-952642	5/8-11	5-3/64	21/32	15/16	7/32	5/16

ROUND PAD SWIVEL SCREW



ALLOY STEEL — CASE-HARDENED — BLACK OXIDE FINISH



SWIVEL SCREW CLAMP
WITH ROUND FOOT

ONE PAD INCLUDED IN ASSEMBLY

PART NO.	A	B	C	D	HEX
UDB-952647	1/4-20	17/32	5/16	1/4	1/8
UDB-952648	1/4-20	25/32	5/16	1/4	1/8
UDB-952649	1/4-20	1-1/32	5/16	1/4	1/8
UDB-952650	1/4-20	1-17/32	5/16	1/4	1/8
UDB-952651	5/16-18	25/32	23/64	5/16	5/32
UDB-952652	5/16-18	1-1/32	23/64	5/16	5/32
UDB-952653	5/16-18	1-17/32	23/64	5/16	5/32
UDB-952654	5/16-18	2-1/32	23/64	5/16	5/32
UDB-952655	3/8-16	25/32	7/16	3/8	3/16
UDB-952656	3/8-16	1-1/32	7/16	3/8	3/16
UDB-952657	3/8-16	1-17/32	7/16	3/8	3/16

See Page I-4 for Pad selections.

PART NO.	A	B	C	D	HEX
UDB-952658	3/8-16	2-1/32	7/16	3/8	3/16
UDB-952659	3/8-16	3-1/32	7/16	3/8	3/16
UDB-952660	1/2-13	1-19/32	9/16	1/2	1/4
UDB-952661	1/2-13	2-3/32	9/16	1/2	1/4
UDB-952662	1/2-13	3-3/32	9/16	1/2	1/4
UDB-952663	1/2-13	4-3/32	9/16	1/2	1/4
UDB-952664	5/8-11	2-7/32	11/16	5/8	5/16
UDB-952665	5/8-11	3-7/32	11/16	5/8	5/16
UDB-952666	5/8-11	4-7/32	11/16	5/8	5/16
UDB-952667	5/8-11	5-7/32	11/16	5/8	5/16

Multi Clamping Options

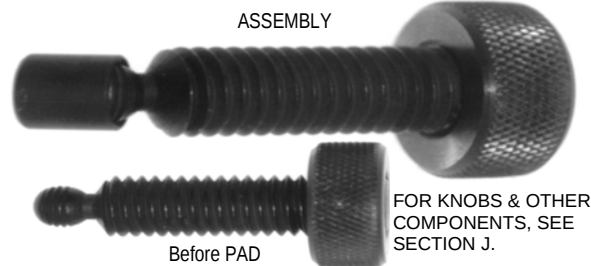
Swivel Head Screws With Removable Pads

Swivel Head Screws Removable Pads

SMALL PAD SWIVEL HEAD

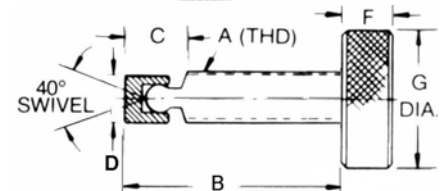
ALLOY STEEL – CASE-HARDENED
BLACK OXIDE FINISH

ASSEMBLY



Before PAD

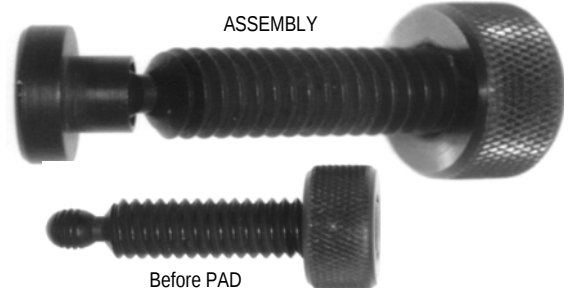
**SWIVEL HEAD
SCREW WITH
SMALL FOOT
(INCLUDED)**
Add 'N' to
Part No. for
Nylon Pad.



PART NO.	A	B	C	D	F	G
UDB-952505	1/4-20	1"	9/32	3/16	5/16	1"
UDB-952506	1/4-20	1-1/2	9/32	3/16	5/16	1"
UDB-952507	1/4-20	2"	9/32	3/16	5/16	1"
UDB-952531	1/4-20	3"	9/32	3/16	5/16	1"
UDB-952508	5/16-18	1"	11/32	1/4	3/8	1-1/8
UDB-952509	5/16-18	1-1/2	11/32	1/4	3/8	1-1/8
UDB-952510	5/16-18	2"	11/32	1/4	3/8	1-1/8
UDB-952532	5/16-18	3"	11/32	1/4	3/8	1-1/8
UDB-952511	3/8-16	1-1/2	3/8	19/64	7/16	1-1/4
UDB-952512	3/8-16	2"	3/8	19/64	7/16	1-1/4
UDB-952533	3/8-16	3"	3/8	19/64	7/16	1-1/4
UDB-952534	3/8-16	4"	3/8	19/64	7/16	1-1/4
UDB-952513	1/2-13	1-1/2	15/32	13/32	1/2	1-1/4
UDB-952514	1/2-13	2"	15/32	13/32	1/2	1-1/4
UDB-952515	1/2-13	3"	15/32	13/32	1/2	1-1/4
UDB-952535	1/2-13	4"	15/32	13/32	1/2	1-1/4
UDB-952516	5/8-11	2"	5/8	1/2	1/2	1-1/4
UDB-952517	5/8-11	3"	5/8	1/2	1/2	1-1/4
UDB-952536	5/8-11	4"	5/8	1/2	1/2	1-1/4
UDB-952537	5/8-11	5"	5/8	1/2	1/2	1-1/4

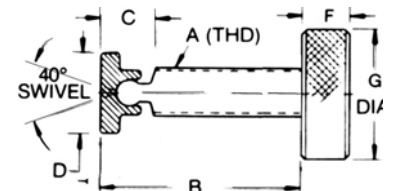
LARGE PAD SWIVEL HEAD SCREW

ASSEMBLY



Before PAD

**SWIVEL HEAD
SCREW WITH
LARGE FOOT
(INCLUDED)**
Add 'N' to Part No.
for Nylon Pad.



PART NO.	A	B	C	D	F	G
UDB-952518	1/4-20	1-3/32	23/64	3/8	5/16	1"
UDB-952519	1/4-20	1-19/32	23/64	3/8	5/16	1"
UDB-952520	1/4-20	2-3/32	23/64	3/8	5/16	1"
UDB-952538	1/4-20	3-3/32	23/64	3/8	5/16	1"
UDB-952521	5/16-18	1-3/32	27/64	1/2	3/8	1-1/8
UDB-952522	5/16-18	1-19/32	27/64	1/2	3/8	1-1/8
UDB-952523	5/16-18	2-3/32	27/64	1/2	3/8	1-1/8
UDB-952539	5/16-18	3-3/32	27/64	1/2	3/8	1-1/8
UDB-952524	3/8-16	1-5/8	1/2	9/16	7/16	1-1/4
UDB-952525	3/8-16	2-1/8	1/2	9/16	7/16	1-1/4
UDB-952540	3/8-16	3-1/8	1/2	9/16	7/16	1-1/4
UDB-952541	3/8-16	4-1/8	1/2	9/16	7/16	1-1/4
UDB-952526	1/2-13	1-9/16	17/32	3/4	1/2	1-1/4
UDB-952527	1/2-13	2-1/16	17/32	3/4	1/2	1-1/4
UDB-952528	1/2-13	3-1/16	17/32	3/4	1/2	1-1/4
UDB-952542	1/2-13	4-1/16	17/32	3/4	1/2	1-1/4
UDB-952529	5/8-11	2-3/64	21/32	15/16	1/2	1-1/4
UDB-952530	5/8-11	3-3/64	21/32	15/16	1/2	1-1/4
UDB-952543	5/8-11	4-3/64	21/32	15/16	1/2	1-1/4
UDB-952544	5/8-11	5-3/64	21/32	15/16	1/2	1-1/4

ROUND PAD SWIVEL HEAD SCREW

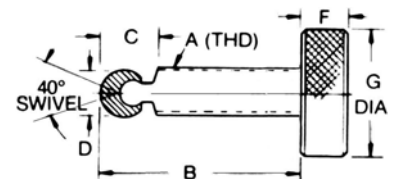
FOR KNOBS & OTHER COMPONENTS, SEE SECTION J.

ASSEMBLY



Before PAD

**SWIVEL HEAD
SCREW WITH
ROUND FOOT
(INCLUDED)**
Add 'N' to Part No.
for Nylon Pad.



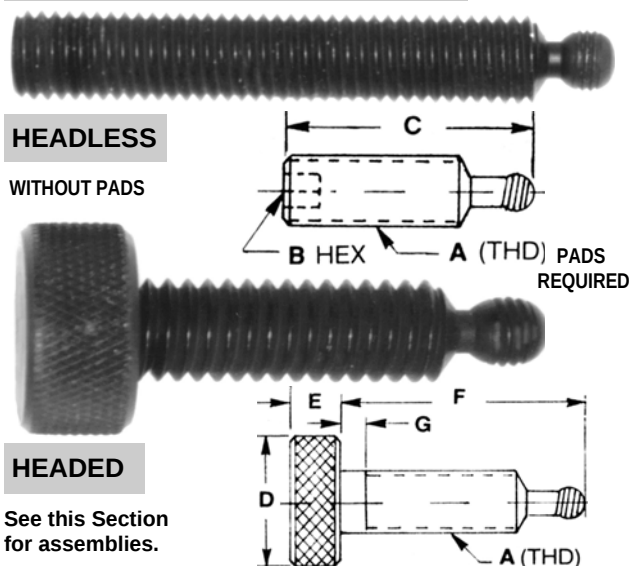
PART NO.	A	B	C	D	F	G
UDB-952545	1/4-20	1-1/32	5/16	1/4	5/16	1"
UDB-952546	1/4-20	1-17/32	5/16	1/4	5/16	1"
UDB-952547	1/4-20	2-1/32	5/16	1/4	5/16	1"
UDB-952548	1/4-20	3-3/32	5/16	1/4	5/16	1"
UDB-952549	5/16-18	1-1/64	23/64	5/16	3/8	1-1/8
UDB-952550	5/16-18	1-33/64	23/64	5/16	3/8	1-1/8
UDB-952551	5/16-18	2-1/64	23/64	5/16	3/8	1-1/8
UDB-952552	5/16-18	3-1/64	23/64	5/16	3/8	1-1/8
UDB-952553	3/8-16	1-9/16	7/16	19/64	7/16	1-1/4
UDB-952554	3/8-16	2-1/16	7/16	19/64	7/16	1-1/4
UDB-952555	3/8-16	3-1/16	7/16	19/64	7/16	1-1/4
UDB-952556	3/8-16	4-1/16	7/16	19/64	7/16	1-1/4
UDB-952557	1/2-13	1-19/32	9/16	13/32	1/2	1-1/4
UDB-952558	1/2-13	2-3/32	9/16	13/32	1/2	1-1/4
UDB-952559	1/2-13	3-3/32	9/16	13/32	1/2	1-1/4
UDB-952560	1/2-13	4-3/32	9/16	13/32	1/2	1-1/4
UDB-952561	5/8-11	2-1/8	11/16	5/8	1/2	1-1/4
UDB-952562	5/8-11	3-1/8	11/16	5/8	1/2	1-1/4
UDB-952563	5/8-11	4-1/8	11/16	5/8	1/2	1-1/4
UDB-952564	5/8-11	5-1/8	11/16	5/8	1/2	1-1/4

Swivel Screw Bodies and Pads

Do It Yourself With Our Swivel Screws and

SWIVEL SCREW BODIES

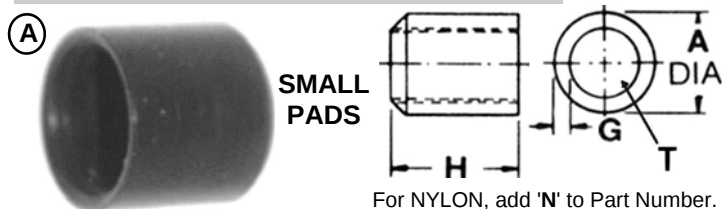
ALLOY STEEL CASE - HARDENED BLACK OXIDE FINISH
THREADED END ALLOWS FAST INSTALLATION OF PAD REQUIRED
FOR KNOBS & OTHER COMPONENTS, SEE SECTION J.



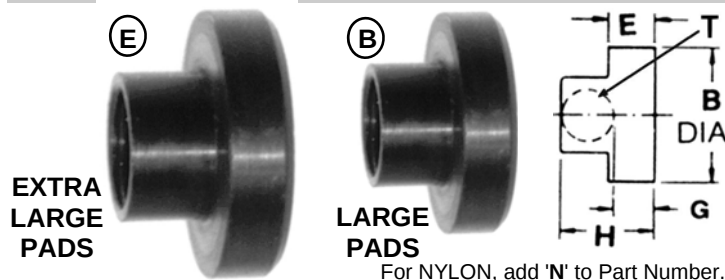
HEADLESS TYPE SCREW BODIES				HEADED TYPE SCREW BODIES					
PART NO.	A-BODY	B	C	PART NO.	A-BODY	D	E	F	G
UDB-952301			15/32	UDB-952343				31/32	
UDB-952303	1/4-20	1/8	23/32	UDB-952345	1/4-20	1"	5/16	1-15/32	1/8
UDB-952305	BALL THD is 8-36-LH		31/32	UDB-952347	BALL THD is 8-36-LH			1-31/32	
UDB-952307			1-15/32	UDB-952349				2-31/32	
UDB-952309			23/32	UDB-952351				31/32	
UDB-952311	5/16-18	5/32	31/32	UDB-952353	5/16-18	1-1/8	3/8	1-15/32	3/16
UDB-952313	BALL THD is 12-28-LH		1-15/32	UDB-952355	BALL THD is 12-28-LH			1-31/32	
UDB-952315			1-31/32	UDB-952357				2-31/32	
UDB-952317			11/16	UDB-952359				1-7/16	
UDB-952319			15/16	UDB-952361	3/8-16	1-1/4	7/16	1-15/16	3/16
UDB-952321	BALL THD is 1/4-28-LH	3/16	1-7/16	UDB-952363	BALL THD is 1/4-28-LH			2-15/16	
UDB-952323			1-15/16	UDB-952365				3-15/16	
UDB-952325			2-15/16	UDB-952367				1-7/16	
UDB-952327			1-7/16	UDB-952369	1/2-13	1-1/4	1/2	1-15/16	3/16
UDB-952329	BALL THD is 5/16-24-LH	1/4	1-15/16	UDB-952371	BALL THD is 5/16-24-LH			2-15/16	
UDB-952331			2-15/16	UDB-952373				3-15/16	
UDB-952333			3-15/16	UDB-952375				1-15/16	
UDB-952335			1-15/16	UDB-952377	5/8-11	1-1/4	1/2	2-15/16	3/16
UDB-952337	BALL THD is 7/16-20-LH	5/16	2-15/16	UDB-952379	BALL THD is 7/16-20-LH			3-15/16	
UDB-952339			3-15/16	UDB-952381				4-15/16	
UDB-952341			4-15/16						

SWIVEL SCREW PADS ONLY

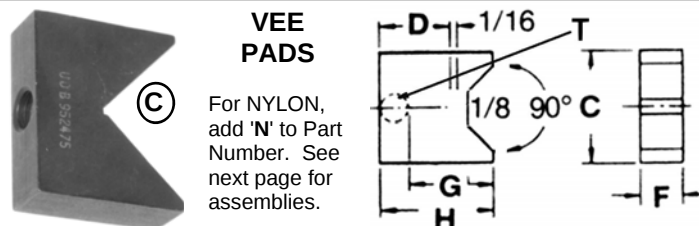
ALLOY STEEL CASE-HARDENED BLACK OXIDE FINISH
TYPE II CLASS 3 - LEFT HAND THREAD PREVENTS BACKOUT



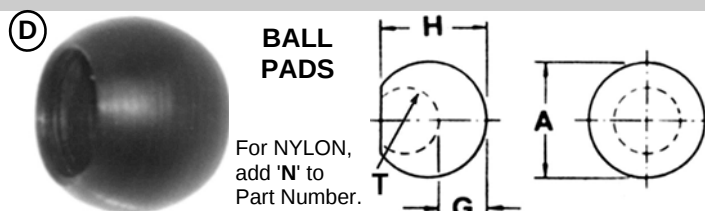
SMALL PADS	A	G	H	T INTERNAL THD	FITS BODY THD
UDB-952403	.146	.026	.125	4-48 LH	10-32
UDB-952405	.187	.031	.200	8-36 LH	1/4-20
UDB-952410	.250	.046	.255	12-28 LH	5/16-18
UDB-952415	.298	.053	.315	1/4-28 LH	3/8-16
UDB-952420	.406	.058	.359	5/16-24 LH	1/2-13
UDB-952425	.500	.076	.470	7/16-20 LH	5/8-11
UDB-952428	.625	.093	.470	7/16-20 LH	3/4-10



LARGE PADS	B	E	G	H	T INTERNAL THD	FITS BODY THD
UDB-952430	.375	.125	.131	.300	8-36 LH	1/4-20
UDB-952435	.500	.156	.141	.350	12-28 LH	5/16-18
UDB-952440	.562	.187	.177	.437	1/4-28 LH	3/8-16
UDB-952445	.750	.187	.119	.420	5/16-24 LH	1/2-13
UDB-952450	.930	.218	.121	.515	7/16-20 LH	5/8-11
EXTRA LARGE	B	E	G	H	T INTERNAL THD	FITS BODY THD
UDB-952452	1.50	1/4	.26	.50	5/16-24 LH	1/2-13
UDB-952453	2.00	5/16	.31	.70	7/16-20 LH	5/8-18



VEE PADS	C	D	F	G	H	T I.D. INTERNAL THD	FITS BODY THD SIZE
UDB-952455	1.0	.500	.312	.706	.875	8-36 LH	1/4-20
UDB-952460	1.0	.562	.375	.729	.938	12-28 LH	5/16-18
UDB-952465	1.0	.625	.438	.739	1.000	1/4-28 LH	3/8-16
UDB-952470	2.0	.688	.500	1.199	1.500	5/16-24 LH	1/2-13
UDB-952475	2.0	.750	.625	1.231	1.725	7/16-20 LH	5/8-11



ROUND PADS	A	G	H	T I.D. INTERNAL THD	FITS BODY THD SIZE
UDB-952480	.2500	.080	.220	8-36 LH	1/4-20
UDB-952485	.3125	.114	.280	12-28 LH	5/16-18
UDB-952490	.3750	.090	.325	1/4-28 LH	3/8-16
UDB-952495	.5000	.168	.433	5/16-24 LH	1/2-13
UDB-952500	.6250	.173	.531	7/16-20 LH	5/8-11

Hand Knob Swivel Screw Assy with Removable Pads

**Swivel Knob Screws
Removable Pads**

BODY — ALLOY STEEL — HARDENED — BLACK OXIDE FINISH
KNOBS — CAST IRON — ZINC PLATED — CLEAR CHROMATE FINISH

PART NO.	A	B	C	D	F	G
UDB-952565	1/4-20	1"	9/32	3/16	5/8	1-1/8
UDB-952566	1/4-20	1-1/2	9/32	3/16	5/8	1-1/8
UDB-952567	1/4-20	2"	9/32	3/16	5/8	1-1/8
UDB-952568	1/4-20	3"	9/32	3/16	5/8	1-1/8
UDB-952569	5/16-18	1"	11/32	1/4	7/8	1-1/2
UDB-952570	5/16-18	1-1/2	11/32	1/4	7/8	1-1/2
UDB-952571	5/16-18	2"	11/32	1/4	7/8	1-1/2
UDB-952572	5/16-18	3"	11/32	1/4	7/8	1-1/2
UDB-952573	3/8-16	1-1/2	3/8	19/64	1-1/8	2"
UDB-952574	3/8-16	2"	3/8	19/64	1-1/8	2"
UDB-952575	3/8-16	3"	3/8	19/64	1-1/8	2"
UDB-952576	3/8-16	4"	3/8	19/64	1-1/8	2"
UDB-952577	1/2-13	1-1/2	15/32	13/32	1-1/2	2"
UDB-952578	1/2-13	2"	15/32	13/32	1-1/2	2"
UDB-952579	1/2-13	3"	15/32	13/32	1-1/2	2"
UDB-952580	1/2-13	4"	15/32	13/32	1-1/2	2"
UDB-952581	5/8-11	2"	5/8	1/2	1-3/4	2-1/2
UDB-952582	5/8-11	3"	5/8	1/2	1-3/4	2-1/2
UDB-952583	5/8-11	4"	5/8	1/2	1-3/4	2-1/2
UDB-952584	5/8-11	5"	5/8	1/2	1-3/4	2-1/2

PART NO.	A	B	C	D	F	G
UDB-952585	1/4-20	1-3/32	23/64	3/8	5/8	1-1/8
UDB-952586	1/4-20	1-19/32	23/64	3/8	5/8	1-1/8
UDB-952587	1/4-20	2-3/32	23/64	3/8	5/8	1-1/8
UDB-952588	1/4-20	3-3/32	23/64	3/8	5/8	1-1/8
UDB-952589	5/16-18	1-3/32	27/64	1/2	7/8	1-1/2
UDB-952590	5/16-18	1-19/32	27/64	1/2	7/8	1-1/2
UDB-952591	5/16-18	2-3/32	27/64	1/2	7/8	1-1/2
UDB-952592	5/16-18	3-3/32	27/64	1/2	7/8	1-1/2
UDB-952593	3/8-16	1-5/8	1/2	9/16	1-1/8	2"
UDB-952594	3/8-16	2-1/8	1/2	9/16	1-1/8	2"
UDB-952595	3/8-16	3-1/8	1/2	9/16	1-1/8	2"
UDB-952596	3/8-16	4-1/8	1/2	9/16	1-1/8	2"
UDB-952597	1/2-13	1-9/16	17/32	3/4	1-1/2	2"
UDB-952598	1/2-13	2-1/16	17/32	3/4	1-1/2	2"
UDB-952599	1/2-13	3-1/16	17/32	3/4	1-1/2	2"
UDB-952600	1/2-13	4-1/16	17/32	3/4	1-1/2	2"
UDB-952601	5/8-11	2-3/64	21/32	15/16	1-3/4	2-1/2
UDB-952602	5/8-11	3-3/64	21/32	15/16	1-3/4	2-1/2
UDB-952603	5/8-11	4-3/64	21/32	15/16	1-3/4	2-1/2
UDB-952604	5/8-11	5-3/64	21/32	15/16	1-3/4	2-1/2

PART NO.	A	B	C	D	F	G
UDB-952675	1/4-20	1-1/32	5/16	1/4	5/8	1-1/8
UDB-952676	1/4-20	1-17/32	5/16	1/4	5/8	1-1/8
UDB-952677	1/4-20	2-1/32	5/16	1/4	5/8	1-1/8
UDB-952678	1/4-20	3-3/32	5/16	1/4	5/8	1-1/8
UDB-952679	5/16-18	1-1/64	23/64	5/16	7/8	1-1/2
UDB-952680	5/16-18	1-33/64	23/64	5/16	7/8	1-1/2
UDB-952681	5/16-18	2-1/64	23/64	5/16	7/8	1-1/2
UDB-952682	5/16-18	3-1/64	23/64	5/16	7/8	1-1/2
UDB-952683	3/8-16	1-9/16	7/16	19/64	1-1/8	2"
UDB-952684	3/8-16	2-1/16	7/16	19/64	1-1/8	2"
UDB-952685	3/8-16	3-1/16	7/16	19/64	1-1/8	2"
UDB-952686	3/8-16	4-1/16	7/16	19/64	1-1/8	2"
UDB-952687	1/2-13	1-19/32	9/16	13/32	1-1/2	2"
UDB-952688	1/2-13	2-3/32	9/16	13/32	1-1/2	2"
UDB-952689	1/2-13	3-3/32	9/16	13/32	1-1/2	2"
UDB-952690	1/2-13	4-3/32	9/16	13/32	1-1/2	2"
UDB-952691	5/8-11	2-1/8	11/16	5/8	1-3/4	2-1/2
UDB-952692	5/8-11	3-1/8	11/16	5/8	1-3/4	2-1/2
UDB-952693	5/8-11	4-1/8	11/16	5/8	1-3/4	2-1/2
UDB-952694	5/8-11	5-1/8	11/16	5/8	1-3/4	2-1/2

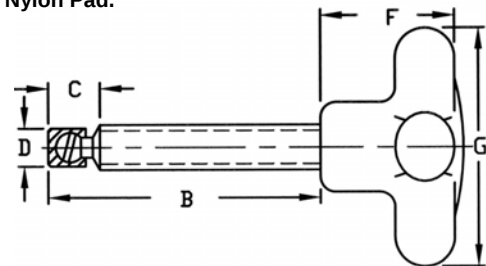
SMALL PAD SWIVEL KNOB SCREW

SWIVEL KNOB
SCREW WITH
SMALL FOOT

ASSEMBLY

Add 'N' to
Part No. for
Nylon Pad.

FOR KNOBS & OTHER
COMPONENTS, SEE SECTION J.

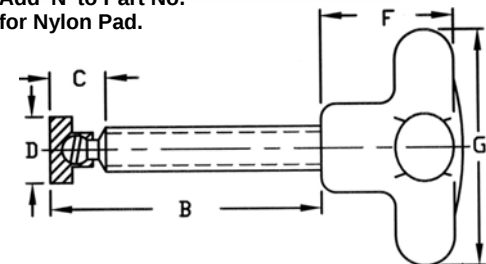


LARGE PAD SWIVEL KNOB SCREW

SWIVEL KNOB
SCREW WITH
LARGE FOOT

ASSEMBLY

Add 'N' to Part No.
for Nylon Pad.

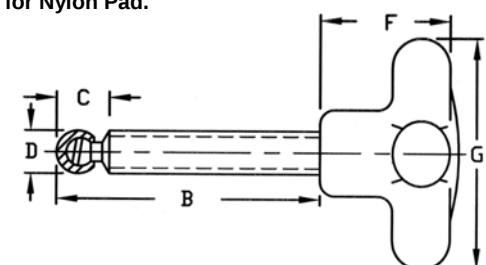


ROUND PAD SWIVEL KNOB

SWIVEL KNOB
SCREW WITH
ROUND FOOT

ASSEMBLY

Add 'N' to Part No.
for Nylon Pad.

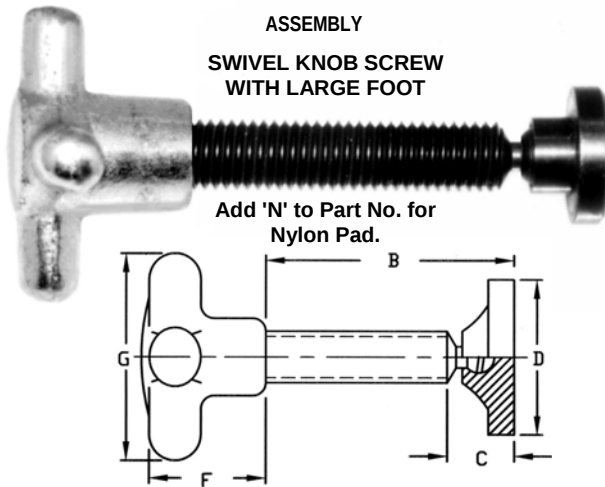


Swivel Knob Screws Removable Pads

Heavy Duty Knob Swivel Screw Assy with Removable Pads

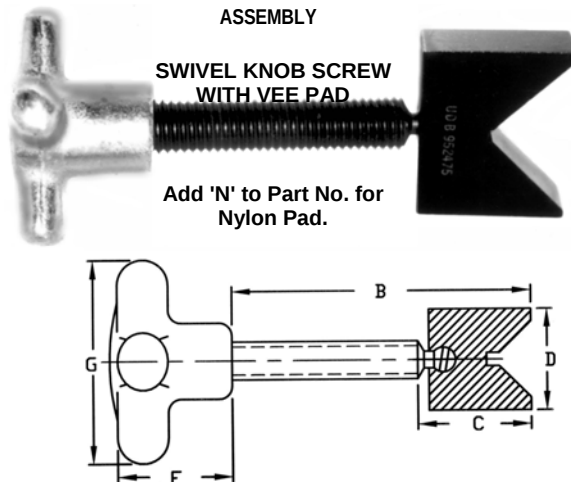
BODY — ALLOY STEEL — CASE-HARDENED — BLACK OXIDE FINISH
KNOBS — CAST IRON — ZINC PLATED — CLEAR CHROMATE FINISH

EXTRA LARGE PAD SWIVEL KNOB SCREW



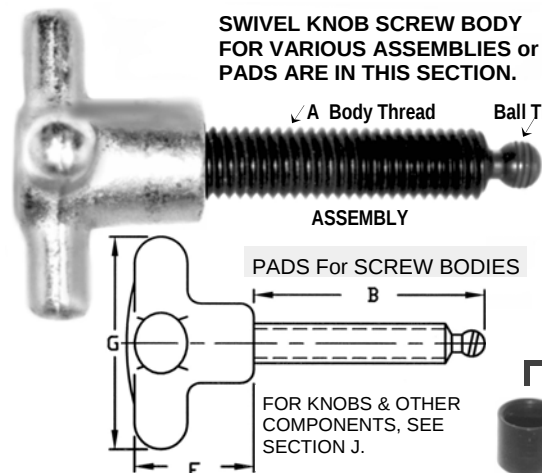
PART NO.	A	B	C	D	F	G
UDB-952700	1/4-20	1-3/32	23/64	3/8	5/8	1-1/8
UDB-952701	1/4-20	1-19/32	23/64	3/8	5/8	1-1/8
UDB-952702	1/4-20	2-3/32	23/64	3/8	5/8	1-1/8
UDB-952703	1/4-20	3-3/32	23/64	3/8	5/8	1-1/8
UDB-952704	5/16-18	1-3/32	27/64	1/2	7/8	1-1/2
UDB-952705	5/16-18	1-19/32	27/64	1/2	7/8	1-1/2
UDB-952706	5/16-18	2-3/32	27/64	1/2	7/8	1-1/2
UDB-952707	5/16-18	3-3/32	27/64	1/2	7/8	1-1/2
UDB-952708	3/8-16	1-5/8	1/2	9/16	1-1/8	2"
UDB-952709	3/8-16	2-1/8	1/2	9/16	1-1/8	2"
UDB-952710	3/8-16	3-1/8	1/2	9/16	1-1/8	2"
UDB-952711	3/8-16	4-1/8	1/2	9/16	1-1/8	2"
UDB-952712	1/2-13	1-5/32	17/32	1-1/2	1-1/2	2"
UDB-952713	1/2-13	2-5/32	17/32	1-1/2	1-1/2	2"
UDB-952714	1/2-13	3-5/32	17/32	1-1/2	1-1/2	2"
UDB-952715	1/2-13	4-5/32	17/32	1-1/2	1-1/2	2"
UDB-952716	5/8-11	2-7/32	21/32	2"	1-3/4	2-1/2
UDB-952717	5/8-11	3-7/32	21/32	2"	1-3/4	2-1/2
UDB-952718	5/8-11	4-7/32	21/32	2"	1-3/4	2-1/2
UDB-952719	5/8-11	5-7/32	21/32	2"	1-3/4	2-1/2

LARGE VEE PAD SWIVEL KNOB SCREW



PART NO.	A	B	C	D	F	G
UDB-952730	1/4-20	1-21/32	23/64	1"	5/8	1-1/8
UDB-952731	1/4-20	2-5/32	23/64	1"	5/8	1-1/8
UDB-952732	1/4-20	2-21/32	23/64	1"	5/8	1-1/8
UDB-952733	1/4-20	3-21/32	23/64	1"	5/8	1-1/8
UDB-952734	5/16-18	1-21/32	27/64	1"	7/8	1-1/2
UDB-952735	5/16-18	2-5/32	27/64	1"	7/8	1-1/2
UDB-952736	5/16-18	2-21/32	27/64	1"	7/8	1-1/2
UDB-952737	5/16-18	3-21/32	27/64	1"	7/8	1-1/2
UDB-952738	3/8-16	1-29/32	1/2	1"	1-1/8	2"
UDB-952739	3/8-16	2-25/32	1/2	1"	1-1/8	2"
UDB-952740	3/8-16	3-25/32	1/2	1"	1-1/8	2"
UDB-952741	3/8-16	4-25/32	1/2	1"	1-1/8	2"
UDB-952742	1/2-13	2-5/16	17/32	2"	1-1/2	2"
UDB-952743	1/2-13	3-5/16	17/32	2"	1-1/2	2"
UDB-952744	1/2-13	4-5/16	17/32	2"	1-1/2	2"
UDB-952745	1/2-13	5-5/16	17/32	2"	1-1/2	2"
UDB-952746	5/8-11	3-1/4	21/32	2"	1-3/4	2-1/2
UDB-952747	5/8-11	4-1/4	21/32	2"	1-3/4	2-1/2
UDB-952748	5/8-11	5-1/4	21/32	2"	1-3/4	2-1/2
UDB-952749	5/8-11	6-1/4	21/32	2"	1-3/4	2-1/2

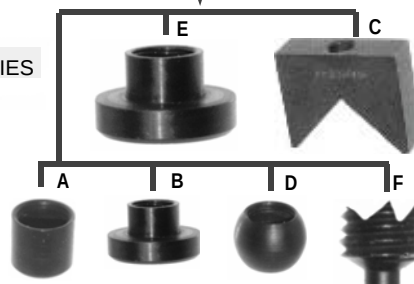
SWIVEL KNOB SCREW BODY



SELECT A COMPLETE SET OR
AS MANY SWIVEL SCREW
PADS AS YOU REQUIRE
FOR YOUR
SWIVEL KNOB SCREW BODY.

SEE DETAILS IN THIS SECTION,
PAGE I-4.

SELECT PAD STYLE



CAST IRON KNOB SCREW BODIES

PART NO.	A	B	F	G
UDB-952243	1/4-20	31/32	5/8	1-1/8
UDB-952245	BALL THD is	1-15/32		
UDB-952247	is 8-36-LH	1-31/32		
UDB-952249		2-31/32		
UDB-952251	5/16-18	31/32	7/8	1-1/2
UDB-952253	BALL THD is	1-15/32		
UDB-952255	12-28-LH	1-31/32		
UDB-952257		2-31/32		
UDB-952259	3/8-16	1-7/16	1-1/8	2"
UDB-952261	BALL THD is	1-15/16		
UDB-952263	1/4-28-LH	2-15/16		
UDB-952265		3-15/16		
UDB-952267	1/2-13	1-7/16	1-1/2	2"
UDB-952269	BALL THD is	1-15/16		
UDB-952271	5/16-24LH	2-15/16		
UDB-952273		3-15/16		
UDB-952275	5/8-11	1-15/16	1-3/4	2-1/2
UDB-952277	BALL THD is	2-15/16		
UDB-952279	7/16-20LH	3-15/16		
UDB-952281		4-15/16		

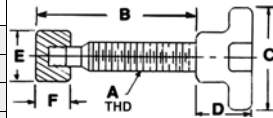
Wide Variety of Styles

Hand Knob Assemblies

PART NO.	A	B	C	D	E	F
UDB-930300	1/4-20	1-1/4	1-1/8	5/8	3/8	3/8
UDB-930302	1/4-20	1-7/8	1-1/8	5/8	3/8	3/8
UDB-930305	5/16-18	1-7/16	1-1/2	7/8	1/2	7/16
UDB-930306	5/16-18	2"	1-1/2	7/8	1/2	7/16
UDB-930307	5/16-18	2-3/16	1-1/2	7/8	1/2	7/16
UDB-930308	5/16-18	2-1/2	1-1/2	7/8	1/2	7/16
UDB-930310	3/8-16	2"	2"	1-1/8	3/4	3/4
UDB-930311	3/8-16	2-1/2	2"	1-1/8	3/4	3/4
UDB-930312	3/8-16	2-3/4	2"	1-1/8	3/4	3/4
UDB-930313	3/8-16	3"	2"	1-1/8	3/4	3/4
UDB-930315	3/8-16	3-1/2	2"	1-1/8	3/4	3/4
UDB-930317	1/2-13	2-5/8	2-1/2	1-1/2	7/8	7/8
UDB-930319	1/2-13	3-3/8	2-1/2	1-1/2	7/8	7/8
UDB-930321	1/2-13	4-1/8	2-1/2	1-1/2	7/8	7/8
UDB-930322	5/8-11	3"	3"	1-3/4	1"	1"
UDB-930323	5/8-11	3-3/4	3"	1-3/4	1"	1"
UDB-930325	5/8-11	4-1/2	3"	1-3/4	1"	1"
UDB-930327	5/8-11	5"	3"	1-3/4	1"	1"
UDB-930329	3/4-10	3-1/8	3"	1-3/4	1-1/8	1-1/8
UDB-930331	3/4-10	3-7/8	3"	1-3/4	1-1/8	1-1/8
UDB-930333	3/4-10	4-5/8	3"	1-3/4	1-1/8	1-1/8

HAND KNOB TOGGLE SCREWS

CAST IRON BRIGHT ZINC PLATED KNOB
ADD 'A' TO PART NO. FOR ALUMINUM



ASSEMBLY

HEAVY DUTY PAD	E	F	T INTERNAL THD	FIT BODY THD
UDB-930350	3/8	3/8	#8-36 L.H.	1/4-20
UDB-930355	1/2	7/16	#12-28 L.H.	5/16-18
UDB-930360	3/4	3/4	1/4-28 L.H.	3/8-16
UDB-930365	7/8	7/8	5/16-24 L.H.	1/2-13
UDB-930370	1"	1"	7/16-20 L.H.	5/8-11
UDB-930375	1-1/8	1-1/8	1/2-20 L.H.	3/4-10

Shoe swivels 4° in all directions.

Marring of finished surfaces is eliminated.

Toggle Screw stops rotation on contact with work piece.

Toggle shoe is removed and replaced easily for installation in jig or fixture mounting holes.

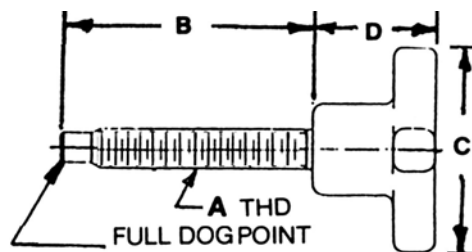
UNITED PART NO.	A THD	B LEN	C KNOB	D KNOB LEN
UDB-930251	1/4-20	1"	1-1/8	5/8
UDB-930253	1/4-20	1-1/2	1-1/8	5/8
UDB-930255	1/4-20	1-3/4	1-1/8	5/8
UDB-930257	1/4-20	2"	1-1/8	5/8
UDB-930259	1/4-20	3"	1-1/8	5/8
UDB-930260	5/16-18	1"	1-1/2	7/8
UDB-930261	5/16-18	1-3/4	1-1/2	7/8
UDB-930263	5/16-18	2-1/2	1-1/2	7/8
UDB-930265	5/16-18	3"	1-1/2	7/8
UDB-930266	3/8-16	1"	2"	1-1/8
UDB-930267	3/8-16	1-1/4	2"	1-1/8
UDB-930268	3/8-16	1-1/2	2"	1-1/8
UDB-930269	3/8-16	1-3/4	2"	1-1/8
UDB-930271	3/8-16	2"	2"	1-1/8
UDB-930273	3/8-16	2-1/2	2"	1-1/8
UDB-930275	3/8-16	3"	2"	1-1/8
UDB-930276	1/2-13	1"	2-1/2	1-1/2
UDB-930277	1/2-13	1-1/2	2-1/2	1-1/2
UDB-930279	1/2-13	1-3/4	2-1/2	1-1/2
UDB-930281	1/2-13	2"	2-1/2	1-1/2
UDB-930283	1/2-13	2-1/2	2-1/2	1-1/2
UDB-930285	1/2-13	3"	2-1/2	1-1/2
UDB-930287	5/8-11	1-3/4	2-1/2	1-1/2
UDB-930289	5/8-11	2-1/2	2-1/2	1-1/2
UDB-930291	5/8-11	3"	2-1/2	1-1/2
UDB-930293	5/8-11	3-1/2	2-1/2	1-1/2
UDB-930295	3/4-10	3"	3"	1-3/4
UDB-930297	3/4-10	3-1/2	3"	1-3/4
UDB-930299	3/4-10	4"	3"	1-3/4

HAND KNOB SCREWS

CAST IRON BRIGHT ZINC PLATED KNOB
ADD 'A' TO PART NO. FOR ALUMINUM

FOR KNOBS & OTHER COMPONENTS,
SEE SECTION J.

ASSEMBLY



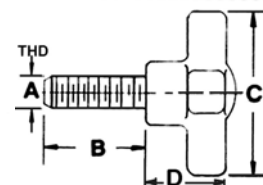
FULL DOG POINT
CLASS 2A THREAD
SCREW BLACK OXIDED

UNITED PART NO.	A THD	B LEN	C KNOB	D REF. PART NO. PG J3
UDB-930200	1/4-20	1-3/4	1-1/2	UDB-945550 7/8
UDB-930205	1/4-20	3"	1-1/2	UDB-945550 7/8
UDB-930210	5/16-18	1-3/4	2"	UDB-945575 1-1/8
UDB-930215	5/16-18	3"	2"	UDB-945575 1-1/8
UDB-930220	3/8-16	1-3/4	2"	UDB-945575 1-1/8
UDB-930225	3/8-16	3"	2"	UDB-945575 1-1/8
UDB-930230	1/2-13	1-3/4	2-1/2	UDB-945615 1-1/2
UDB-930235	1/2-13	3"	2-1/2	UDB-945615 1-1/2
UDB-930240	5/8-11	1-3/4	2-1/2	UDB-945645 1-1/2
UDB-930245	5/8-11	3"	2-1/2	UDB-945645 1-1/2

HAND KNOB ASSEMBLIES

CAST IRON BRIGHT ZINC PLATED KNOB

ADD 'A'
TO PART NO.
FOR ALUMINUM

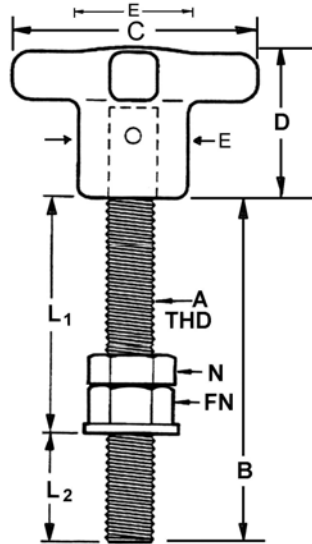


Adj. Hold Down Pins & Shoulder Screws

Adjustable Hold Down Pins Knurled Shoulder Screws

ADJUSTABLE HOLD DOWN PINS – Threaded Spindle Assy

FOR KNOBS & OTHER
COMPONENTS, SEE SECTION J.



HEAT TREATED STEEL BLACK OXIDE FINISH SPINDLE
CAST IRON BRIGHT ZINC PLATED KNOB
BLACK OXIDE FINISH FLANGE AND JAM NUTS

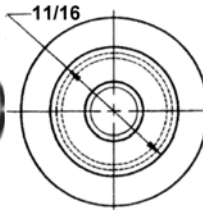
UNITED PART NO.	A THD	B LEN	C KNOB DIA	D KNOB LEN	E KNOB HUB	N JAM NUT & HEIGHT	FN FLANGE NUT & HT.
UDB-930718	1/4-20	2"	1-1/8	5/8	5/8	UDB-925350 11/64	UDB-925150 5/16
UDB-930722	1/4-20	3"	1-1/8	5/8			
UDB-930724	1/4-20	4"	1-1/8	5/8			
UDB-930726	1/4-20	5"	1-1/8	5/8			
UDB-930728	1/4-20	6"	1-1/8	5/8			
UDB-930730	5/16-18	2"	1-1/2	7/8	3/4	UDB-925355 13/64	UDB-925155 3/8
UDB-930732	5/16-18	4"	1-1/2	7/8			
UDB-930734	5/16-18	6"	1-1/2	7/8			
UDB-930736	5/16-18	8"	1-1/2	7/8			
UDB-930738	3/8-16	2"	2"	1-1/8			
UDB-930740	3/8-16	4"	2"	1-1/8	1-1/8	UDB-925360 15/64	UDB-925160 1/2
UDB-930742	3/8-16	6"	2"	1-1/8			
UDB-930744	3/8-16	8"	2"	1-1/8			
UDB-930746	1/2-13	2-1/2	2-1/2	1-1/2			
UDB-930748	1/2-13	4"	2-1/2	1-1/2			
UDB-930750	1/2-13	6"	2-1/2	1-1/2	1-1/8	UDB-925370 23/64	UDB-925170 13/16
UDB-930752	1/2-13	8"	2-1/2	1-1/2			
UDB-930754	5/8-11	2-1/2	2-1/2	1-1/2			
UDB-930756	5/8-11	4"	2-1/2	1-1/2			
UDB-930758	5/8-11	6"	2-1/2	1-1/2			
UDB-930760	5/8-11	8"	2-1/2	1-1/2	1-1/4	UDB-925375 27/64	UDB-925175 1
UDB-930762	3/4-10	3"	3"	1-3/4			
UDB-930764	3/4-10	5"	3"	1-3/4			
UDB-930766	3/4-10	6"	3"	1-3/4			
UDB-930768	3/4-10	8"	3"	1-3/4			

Adjust Flange Nut to required grip and distance (L). Then locate the Jam Nut firmly against the Flange Nut. This prevents the Flange Nut from moving.

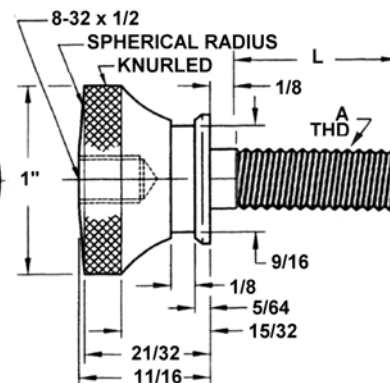
If permanent hold-down is required, bond both nuts into position with Loctite®, copper bronze weld or appropriate bonding material.

REPLACEMENT OPTION
FOR UT-7036 SERIES

KNURLED SHOULDER SCREW



SPECIAL LENGTHS AVAILABLE



Heat treated Steel
Black Oxide finish

The end of the
Threaded Spindle
has a slight crown
and is polished.

Conforms to
UT-7111

UNITED Knurled Shoulder
Screws provide a positive grip
for finger tightening with infinite
adjustment ability.

The 8-32 x 1/2 tapped center
hole permits extension of the
knob when required while
adding strength.

A THREAD CLASS 3	L = LENGTH OF THREAD						KNOBS ONLY
	1/2	1	1-1/2	3	3-1/2	4	
1/4-20 NC	UDB-711408	UDB-711416	UDB-711424	UDB-711448	UDB-711456	UDB-711464	UDB-711400
5/16-18	UDB-711508	UDB-711516	UDB-711524	UDB-711548	UDB-711556	UDB-711564	UDB-711500
3/8-16 NC	UDB-711608	UDB-711616	UDB-711624	UDB-711648	UDB-711656	UDB-711664	UDB-711600

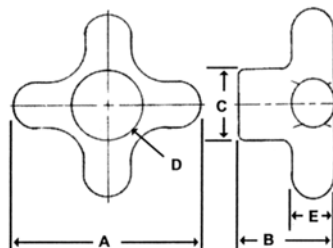
Hand Knobs

Cast Iron & Aluminum Alloy

**Heavy Duty
Hand Knobs**

UnEcon Cast Iron Hand Knobs — INCH & METRIC SIZES

CAST IRON	A	B	C HUB	D HOLE STYLE	E
UDB-945500	1-1/8	5/8	5/8	BLANK	5/16
UDB-945505	1-1/8	5/8	5/8	10-32 TAP	5/16
UDB-945510	1-1/8	5/8	5/8	10-24 TAP	5/16
UDB-945515	1-1/8	5/8	5/8	3/16 REAM	5/16
UDB-945525	1-1/8	5/8	5/8	1/4 – 20 TAP x 1/2 DP	5/16
UDB-945530	1-1/8	5/8	5/8	1/4 REAM x 1/2 DP	5/16
UDB-945531	1-1/8	5/8	5/8	M6 TAP THRU	5/16
UDB-945532	1-1/8	5/8	5/8	M6 TAP x 1/2 DP	5/16
UDB-945533	1-1/8	5/8	5/8	6MM REAM x 1/2 DP	5/16
UDB-945540	1-1/2	7/8	3/4	1/4 – 20 TAP THRU	3/8
UDB-945541	1-1/2	7/8	3/4	1/4 – 20 TAP x 3/4 DP	3/8
UDB-945542	1-1/2	7/8	3/4	1/4 REAM x 3/4 DP	3/8
UDB-945550	1-1/2	7/8	3/4	BLANK	3/8
UDB-945555	1-1/2	7/8	3/4	5/16 – 18 TAP x 3/4 DP	3/8
UDB-945556	1-1/2	7/8	3/4	5/16 – 18 TAP THRU	3/8
UDB-945560	1-1/2	7/8	3/4	5/16 REAM x 3/4 DP	3/8
UDB-945575	2"	1-1/8	3/4	BLANK	1/2
UDB-945580	2"	1-1/8	3/4	5/16 REAM x 3/4 DP	1/2
UDB-945581	2"	1-1/8	3/4	5/16 – 18 TAP x 3/4 DP	1/2
UDB-945582	2"	1-1/8	3/4	5/16 – 18 TAP THRU	1/2
UDB-945585	2"	1-1/8	3/4	3/8 REAM x 7/8 DP	1/2
UDB-945586	2"	1-1/8	3/4	3/8 – 16 TAP THRU	1/2
UDB-945590	2"	1-1/8	3/4	3/8 – 16 TAP x 7/8 DP	1/2
UDB-945591	2"	1-1/8	3/4	1/2 – 13 TAP THRU	1/2
UDB-945592	2"	1-1/8	3/4	1/2 – 13 TAP x 7/8 DP	1/2
UDB-945593	2"	1-1/8	3/4	1/2 REAM x 7/8 DP	1/2
UDB-945594	2"	1-1/8	3/4	M10 TAP THRU	1/2
UDB-945595	2"	1-1/8	3/4	M10 TAP x 7/8 DP	1/2
UDB-945596	2"	1-1/8	3/4	10MM REAM x 7/8 DP	1/2
UDB-945597	2"	1-1/8	3/4	M12 TAP THRU	1/2
UDB-945598	2"	1-1/8	3/4	M12 TAP x 7/8 DP	1/2
UDB-945599	2"	1-1/8	3/4	12MM REAM x 7/8 DP	1/2
UDB-945615	2-1/2	1-1/2	1-1/8	BLANK	1/2
UDB-945620	2-1/2	1-1/2	1-1/8	3/8 REAM	1/2
UDB-945625	2-1/2	1-1/2	1-1/8	1/2 – 13 TAP x 1-1/4 DP	1/2
UDB-945626	2-1/2	1-1/2	1-1/8	1/2 – 13 TAP THRU	1/2
UDB-945630	2-1/2	1-1/2	1-1/8	1/2 REAM x 1-1/4 DP	1/2
UDB-945635	2-1/2	1-1/2	1-1/8	5/8 – 11 TAP	1/2
UDB-945636	2-1/2	1-1/2	1-1/8	5/8 – 11 TAP THRU	1/2
UDB-945637	2-1/2	1-1/2	1-1/8	5/8 REAM 1-1/4 DP	1/2
UDB-945638	2-1/2	1-1/2	1-1/8	M10 TAP THRU	1/2
UDB-945639	2-1/2	1-1/2	1-1/8	M10 TAP x 1" DP	1/2
UDB-945640	2-1/2	1-1/2	1-1/8	5/8 REAM THRU	1/2
UDB-945641	2-1/2	1-1/2	1-1/8	10MM REAM x 1" DP	1/2
UDB-945642	2-1/2	1-1/2	1-1/8	M12 TAP THRU	1/2
UDB-945643	2-1/2	1-1/2	1-1/8	M12 TAP x 1" DP	1/2
UDB-945644	2-1/2	1-1/2	1-1/8	12MM REAM x 1" DP	1/2
UDB-945645	2-1/2	2-1/4	1"	BLANK	1/2
UDB-945650	2-1/2	2-1/4	1"	1/2 – 13 TAP	1/2
UDB-945651	2-1/2	2-1/4	1"	5/8 – 11 TAP THRU	1/2
UDB-945652	2-1/2	2-1/4	1"	5/8 – 11 TAP x 1-1/8 DP	1/2
UDB-945653	2-1/2	2-1/4	1"	5/8 REAM x 1-1/8 DP	1/2
UDB-945654	2-1/2	2-1/4	1"	3/4-10 TAP THRU	1/2
UDB-945655	2-1/2	2-1/4	1"	3/4-10 TAP x 1-1/8 DP	1/2
UDB-945656	2-1/2	2-1/4	1"	3/4 REAM x 1-1/8 DP	1/2
UDB-945657	2-1/2	2-1/4	1"	M16 TAP THRU	1/2
UDB-945658	2-1/2	2-1/4	1"	M16 TAP x 1-1/8 DP	1/2
UDB-945659	2-1/2	2-1/4	1"	16MM REAM x 1-1/8 DP	1/2
UDB-945660	2-1/2	2-1/4	1"	M20 TAP x 1-1/8 DP	1/2
UDB-945661	2-1/2	2-1/4	1"	20MM REAM x 1-1/8 DP	1/2



BRIGHT ZINC PLATED CAST IRON



Classic HAND KNOBS are cast from fine grain Iron and Zinc Plated for protection. Or choose from our Aluminum Alloy Hand Knobs.

Select from five knob sizes with Hole Styles: Blank, Tapped, Tapped Thru and Reamed in both Metric and Inch sizes.

UnEcon Aluminum Hand Knobs — INCH SIZES

ALUMINUM	A	B	C	D Ream	D Tap	E
UDB-945665	1-1/8	3/4	9/16		1/4 – 20	3/8
UDB-945666	1-1/8	3/4	9/16	1/4		3/8
UDB-945667	1-1/8	3/4	9/16	BLANK		3/8
UDB-945668	1-1/2	7/8	5/8		5/16 – 18	3/8
UDB-945669	1-1/2	7/8	5/8	5/16		3/8
UDB-945670	1-1/2	7/8	5/8	BLANK		3/8
UDB-945671	2"	7/8	3/4		3/8 – 16	3/8
UDB-945672	2"	7/8	3/4	5/16		3/8
UDB-945673	2"	1-1/8	3/4	3/8		3/8
UDB-945674	2"	1-1/8	3/4	BLANK		3/8
UDB-945677	2-1/2	1-1/2	1-1/8		1/2 – 13	1/2
UDB-945678	2-1/2	1-1/2	1-1/8	1/2		1/2
UDB-945679	2-1/2	1-1/2	1-1/8		5/8 – 11	1/2
UDB-945680	2-1/2	1-1/2	1-1/8	5/8		1/2
UDB-945681	2-1/2	1-1/2	1-1/8	3/8		1/2
UDB-945682	2-1/2	1-1/2	1-1/8	BLANK		1/2
UDB-945683	3"	1-3/4	1-1/4		5/8 – 11	1/2
UDB-945684	3"	1-3/4	1-1/4	5/8		1/2
UDB-945685	3"	1-3/4	1-1/4	3/4		1/2
UDB-945686	3"	1-3/4	1-1/4	BLANK		1/2
UDB-945687	3"	1-3/4	1-1/2		3/4 – 10	1/2
UDB-945688	3"	1-3/4	1-1/2	5/8		1/2
UDB-945689	3"	1-3/4	1-1/2	3/4		1/2
UDB-945690	3"	1-3/4	1-1/2	BLANK		1/2

Hinge Clamp Assemblies

Hinge Clamps with Swivel Screw Pads

HINGE CLAMP ASSEMBLIES



PAD 'B'

HINGE DOWN



PAD 'D'

HINGE OUT



PAD 'A'

HINGE UP

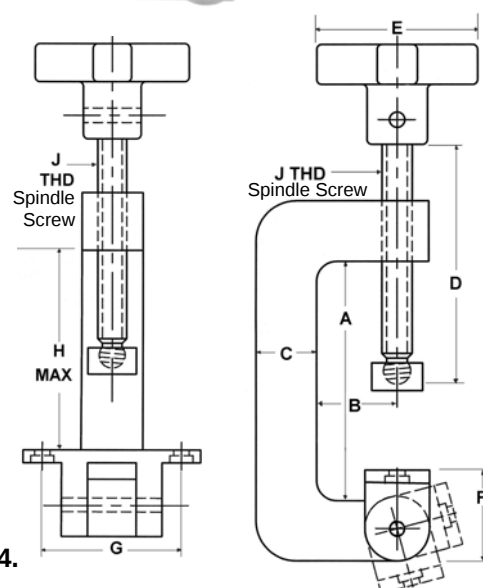
FOR ADDITIONAL SIZES OR PADS, SEE SWIVEL PADS IN THIS SECTION.

UNITED HINGE CLAMPS have it

Their 'U' Base allows excellent edge clamp depth. The Clamp Pad moves up, down and out as required. The pad holes which fit No. 10 Socket Head Screws secure any desired mounting position.

The clamp threaded spindle bodies accept any of the feet shown below. The spindle ball and foot are threaded to allow easy installation and removal. Once their left handed threads clear the foot, the pads pivot and rotate freely.

These new improved clamps with hinged mounting pads and swivel screw spindles have pads that move fast and clear the work piece when released. The clamp feet stop swivel rotation on pressure contact with the work piece.



PADS



'T' Additional spindle screws and swivel feet are available separately: See pages I-10, I-4.

SHADED ROWS BELOW ARE COMPLETE ASSEMBLIES. FOR KNOBS & OTHER COMPONENTS, SEE SECTION J.

					CAST IRON KNOB IS CADMIUM PLATED. ALL OTHER PARTS ARE TOUGH HEAT TREATED STEEL WITH BLACK OXIDE FINISH. See Page I-4 for Assembly Foot Pad dimensions.								
P COMPLETE ASSEMBLY Spindle has DOG POINT	A COMPLETE ASSEMBLY * FOOT PAD ONLY	B COMPLETE ASSEMBLY * FOOT PAD ONLY	C COMPLETE ASSEMBLY * FOOT PAD ONLY	D COMPLETE ASSEMBLY * FOOT PAD ONLY	A THROAT	B SPINDLE BODY	C FRAME	D SPINDLE LEN	E KNOB	F HINGE HT	G HINGE	H MAX TRAVEL	J THD SPINDLE SCREW
UDB-921350P	UDB-921350A	UDB-921350B	UDB-921350C	UDB-921350D	2"	3/4	1/2	2"	1-1/2	7/8	1-1/2	1-1/4	5/16-18
PAD ONLY →	* UDB-930355	* UDB-952435	* UDB-952460	* UDB-952485	BALL SCREW THREAD 'T' IS 12-28-LH								
UDB-921355P	UDB-921355A	UDB-921355B	UDB-921355C	UDB-921355D	2-1/2	3/4	1/2	2-1/2	1-1/2	7/8	1-1/2	1-3/4	5/16-18
PAD ONLY →	* UDB-930355	* UDB-952435	* UDB-952460	* UDB-952485	BALL SCREW THREAD 'T' IS 12-28-LH								
UDB-921360P	UDB-921360A	UDB-921360B	UDB-921360C	UDB-921360D	2-1/2	1"	5/8	2-1/2	2"	1"	1-3/4	1-5/8	3/8-16
PAD ONLY →	* UDB-930360	* UDB-952440	* UDB-952465	* UDB-952490	BALL SCREW THREAD 'T' IS 1/4-28-LH								
UDB-921365P	UDB-921365A	UDB-921365B	UDB-921365C	UDB-921365D	3"	1"	5/8	3"	2"	1"	1-3/4	2-1/8	3/8-16
PAD ONLY →	* UDB-930360	* UDB-952440	* UDB-952465	* UDB-952490	BALL SCREW THREAD 'T' IS 1/4-28-LH								
UDB-921370P	UDB-921370A	UDB-921370B	UDB-921370C	UDB-921370D	3-1/2	1"	5/8	3-1/2	2"	1"	1-3/4	2-5/8	3/8-16
PAD ONLY →	* UDB-930360	* UDB-952440	* UDB-952465	* UDB-952490	BALL SCREW THREAD 'T' IS 1/4-28-LH								

Adjustable Torque Head Screw Assembly with Removable

Adj. Torque Screws
Removable Pads

**UNITED'S ADJUSTABLE
TORQUE HEAD ASSEMBLIES
are the STRONGEST!**

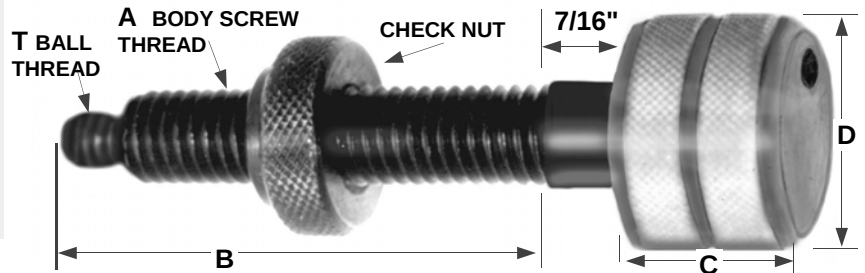
**The ADDITIONAL 7/16" LONG
O.D. SUPPORTING the SPINDLE
ASSURES the PRECISION
TORQUE TOOL'S LONGER LIFE.**

Use **UNITED** ADJUSTABLE TORQUE HEAD SWIVEL SCREWS with **REMOVABLE PADS** wherever controlled end pressure is required for holding parts against the drive or cutting tools. Preset pressure prevents over clamping and part distortion while providing positive, repeatable clamping forces.

Over tightening is eliminated! **UNITED's** Adjustable Torque Head Swivel Screw Head rotates freely when reaching the preset end pressure. The positive backing off action expedites unloading operations.

ADJUSTABLE TORQUE HEAD SCREW ASSEMBLIES

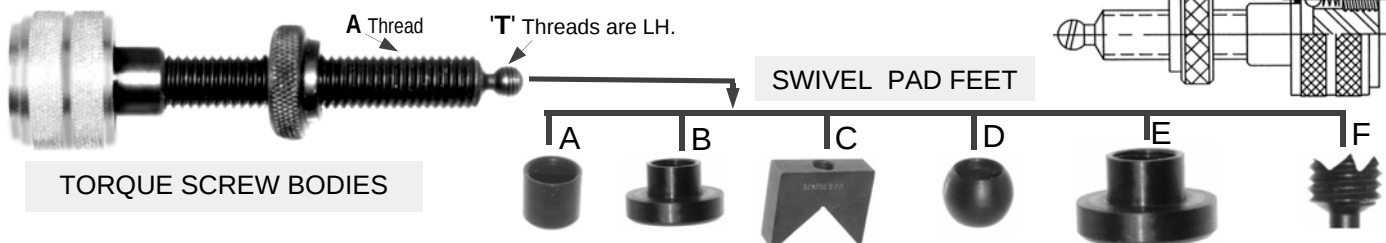
ALLOY STEEL — CASE-HARDENED — BLACK OXIDE FINISH SCREW BODY
HARD ANODIZED ALUMINUM TORQUE HEAD — ALLOY STEEL INSERTS
PRECISION SPINDLE AND CHECK NUTS — WEAREVER MINIATURE SPRINGS



Insert a 1/8" Hex Key Wrench into the top of the Torque Head. Increase the pressure by turning your **UNITED** Hex Ball Wrench clockwise (to the right). Decrease pressure by turning to the left.

Our 'T' Foot Internal Thread and our Spindle External Ball Thread are threaded left hand to allow easy insertion and removal. The left hand thread is a positive back-out prevention safety feature. The Screw Body 'A' Thread, listed in column A, is right hand.

When our Feet clear during installation, they rotate freely. Currently we provide 10-24 and 10-32 threads in Dog Point only.

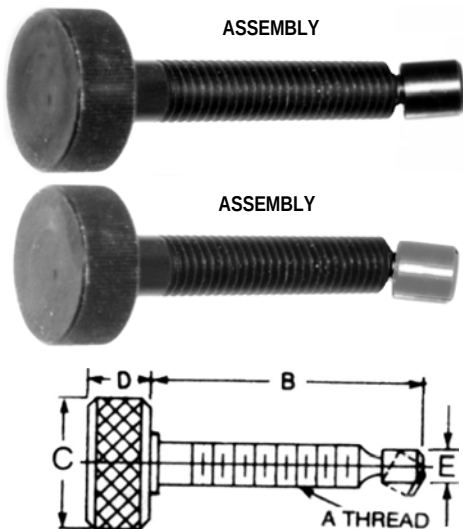


ADJUSTABLE TORQUE SCREW BODIES					ASSEMBLY NUMBER WITH PAD STYLES SHOWN ABOVE					
PART NO.	A	B	C	D	A PAD	B PAD	C PAD	D PAD	E PAD	F DOG POINT
UDB-953340	#10-24	1-1/4	7/8	7/8	—	—	—	—	—	UDB-953340F
UDB-953342	#10-32	1-1/4	—	—	—	—	—	—	—	UDB-953342F
UDB-953343	1/4-20	31/32	7/8	7/8	UDB-953343A	UDB-953343B	UDB-953343C	UDB-953343D	—	UDB-953343F
UDB-953345	BALL THD IS	1-15/32			UDB-953345A	UDB-953345B	UDB-953345C	UDB-953345D	—	UDB-953345F
UDB-953347		1-31/32			UDB-953347A	UDB-953347B	UDB-953347C	UDB-953347D	—	UDB-953347F
UDB-953349		2-31/32			UDB-953349A	UDB-953349B	UDB-953349C	UDB-953349D	—	UDB-953349F
UDB-953351	5/16-18	31/32	7/8	1-1/4	UDB-953351A	UDB-953351B	UDB-953351C	UDB-953351D	—	UDB-953351F
UDB-953353	BALL THD IS	1-15/32			UDB-953353A	UDB-953353B	UDB-953353C	UDB-953353D	—	UDB-953353F
UDB-953355		1-31/32			UDB-953355A	UDB-953355B	UDB-953355C	UDB-953355D	—	UDB-953355F
UDB-953357		2-31/32			UDB-953357A	UDB-953357B	UDB-953357C	UDB-953357D	—	UDB-953357F
UDB-953359	3/8-16	1-7/16	7/8	1-1/4	UDB-953359A	UDB-953359B	UDB-953359C	UDB-953359D	—	UDB-953359F
UDB-953361	BALL THD IS	1-15/16			UDB-953361A	UDB-953361B	UDB-953361C	UDB-953361D	—	UDB-953361F
UDB-953363		2-15/16			UDB-953363A	UDB-953363B	UDB-953363C	UDB-953363D	—	UDB-953363F
UDB-953365		3-15/16			UDB-953365A	UDB-953365B	UDB-953365C	UDB-953365D	—	UDB-953365F
UDB-953367	1/2-13	1-7/16	7/8	1-1/4	UDB-953367A	UDB-953367B	UDB-953367C	UDB-953367D	UDB-953367E	UDB-953367F
UDB-953369	BALL THD IS	1-15/16			UDB-953369A	UDB-953369B	UDB-953369C	UDB-953369D	UDB-953369E	UDB-953369F
UDB-953371		2-15/16			UDB-953371A	UDB-953371B	UDB-953371C	UDB-953371D	UDB-953371E	UDB-953371F
UDB-953373		3-15/16			UDB-953373A	UDB-953373B	UDB-953373C	UDB-953373D	UDB-953373E	UDB-953373F
UDB-953375	5/8-11	1-15/16	7/8	1-1/4	UDB-953375A	UDB-953375B	UDB-953375C	UDB-953375D	UDB-953375E	UDB-953375F
UDB-953377	BALL THD IS	2-15/16			UDB-953377A	UDB-953377B	UDB-953377C	UDB-953377D	UDB-953377E	UDB-953377F
UDB-953379		3-15/16			UDB-953379A	UDB-953379B	UDB-953379C	UDB-953379D	UDB-953379E	UDB-953379F
UDB-953381		4-15/16			UDB-953381A	UDB-953381B	UDB-953381C	UDB-953381D	UDB-953381E	UDB-953381F

Screws — Toggle, Knurled & Torque

Knurled Head Screws Toggle and Torque Head Screws

KNURLED HEAD TOGGLE SCREWS



ASSEMBLY

ASSEMBLY

Swivel is 40 degrees in any direction.

The O.D. of the pad is smaller than the major pitch diameter allowing the pad to pass thru a threaded hole without disassembling.

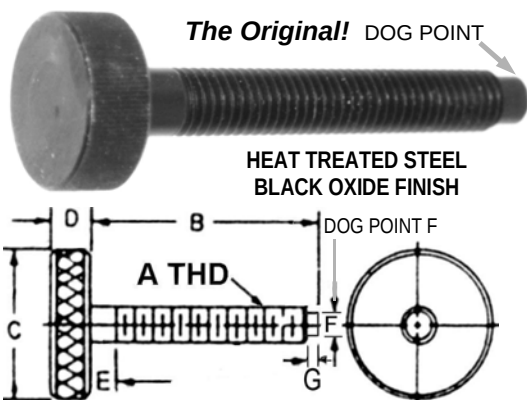
HEAT TREATED
STEEL
BLACK OXIDE
FINISH

UNITED KNURLED HEAD TOGGLE SCREWS have ball bearing Swivel Pads that securely clamp parts with off angle surfaces. Marring or damaging of work piece surface is eliminated. The ball construction eliminates binding and absorbs screw torque.

STEEL PAD	NYLON PAD	A THD	B	C	D	E	LOAD PRESSURE	PAD PART NO.	KNOB PART NO.
UDB-952005	UDB-952007	1/4-20	1-1/2	7/8	5/16	.185	900	UDB-	UDB-
UDB-952010	UDB-952012		2"				LBS	952430	120491
UDB-952015	UDB-952017		1-1/2						
UDB-952020	UDB-952022	5/16-18	2"	7/8	5/16	.240	2290	UDB-	UDB-
UDB-952025	UDB-952027		2-1/2				LBS	952435	120485
UDB-952030	UDB-952032		1-1/2						
UDB-952035	UDB-952037	3/8 - 16	2"	1"	3/8	.293	3340	UDB-	UDB-
UDB-952040	UDB-952042		2-1/2				LBS	952440	120481
UDB-952045	UDB-952047		3"						
UDB-952050	UDB-952052		1-1/2						
UDB-952055	UDB-952057	1/2-13	2"	1"	3/8	.400	7300	UDB-	UDB-
UDB-952060	UDB-952062		2-1/2				LBS	952445	120463
UDB-952065	UDB-952067		3"						

KNURLED HEAD SCREWS

For Stainless, add 'SS' to P/N.



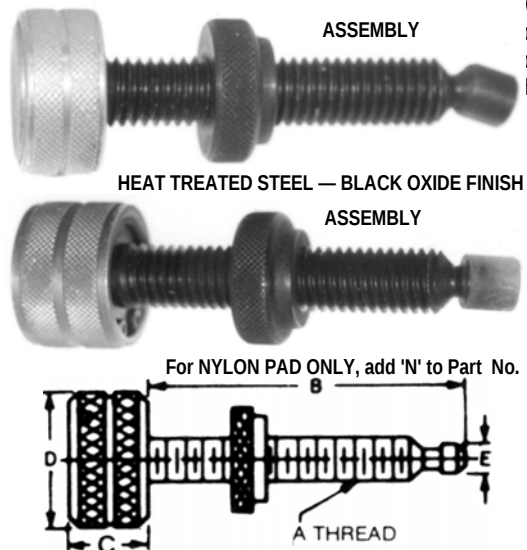
The Original! DOG POINT

HEAT TREATED STEEL
BLACK OXIDE FINISH

KNURLED HEAD SCREWS provide light duty clamping finger tight. The tips are relieved to protect the end threads from damage should they peen. NO PAD

PART NO.	A	B	C	D	E	F	G	KNOB
UDB-930400		1"			1/4	1/8	3/32	UDB-
UDB-930405	10-24	1-1/2	3/4	1/4	1/4	1/8	3/32	UDB-
UDB-930410		2"			1/4	1/8	3/32	UDB-
UDB-930415		1-1/2			1/4	5/32	1/8	UDB-
UDB-930420	1/4-20	2"	1"	5/16	1/4	5/32	1/8	120250
UDB-930425		2-1/2			1/4	5/32	1/8	
UDB-930430		1-1/2			1/4	13/64	5/32	UDB-
UDB-930435	5/16-18	2"	1-1/8	3/8	1/4	13/64	5/32	120251
UDB-930440		2-1/2			1/4	13/64	5/32	
UDB-930445		2"			1/4	1/4	3/16	UDB-
UDB-930450	3/8 - 16	2-1/2	1-1/4	7/16	1/4	1/4	3/16	120252
UDB-930455		3"			1/4	1/4	3/16	
UDB-930460	1/2-13	3"	1-1/4	1/2	1/4	11/32	1/4	UDB-
UDB-930465		3-1/2			1/4	11/32	1/4	120253

TORQUE HEAD SCREWS WITH TOGGLE PADS



ASSEMBLY

HEAT TREATED STEEL — BLACK OXIDE FINISH

ASSEMBLY

UNITED TORQUE HEAD SCREWS WITH TOGGLE PADS combine torque limiting control with ball bearing SWIVEL PADS. They provide positive repeatable end pressure.

Ideal for applications where controlled end pressure is essential.

When the end pressure is achieved the head screw freely turns and prevents over tightening. Part damage and deflection are eliminated. The pad swivels 40 degrees in any direction without marring or damaging work surface. Fixture loading and unloading is simplified. The swivel pad passes thru tapped hole. They cannot be over tightened.

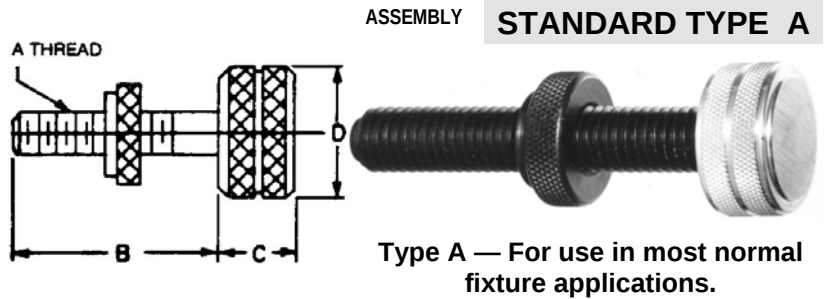
PLAIN HEAD							END PRESSURE IN LBS.	PAD ONLY PART NO.	CHECK NUT PART NO.
STEEL PAD	NYLON PAD	A	B	C	D	E			
UDB-953210	UDB-953212	1/4-20	2-1/4	1/2	7/8	.185	12-14	UDB-952405	UDB-955105
UDB-953220	UDB-953222	5/16-18	2-1/4	1/2	7/8	.240	14-16	UDB-952410	UDB-955110
UDB-953230	UDB-953232	3/8 - 16	2-1/4	9/16	1-1/8	.293	16-18	UDB-952415	UDB-955115
UDB-953240	UDB-953242	1/2-13	3"	9/16	1-1/8	.400	18-20	UDB-952415	UDB-955120
ADJUSTABLE HEAD							END PRESSURE IN LBS.	PAD ONLY PART NO.	CHECK NUT PART NO.
STEEL PAD	NYLON PAD	A	B	C	D	E			
UDB-953250	UDB-953252	3/8 - 16	1-3/4	25/32	1-1/8	.293	0-50	UDB-	UDB-
UDB-953255	UDB-953257	3/8 - 16	3"	25/32	1-1/8	.293	0-50	952415	955115
UDB-953260	UDB-953262	1/2-13	1-3/4	25/32	1-1/8	.400	0-50	UDB-	UDB-
UDB-953265	UDB-953267	1/2-13	3"	25/32	1-1/8	.400	0-50	952420	955120

Controlled Positioning with Torque Screws

Torque Screw Assemblies

PART NO.	A	B	C	D	LBS. END PRESSURE
UDB-953005	10 - 32	1-1/4	1/2	7/8	10—12
UDB-953010	1/4 - 20	1-3/4	1/2	7/8	12—14
UDB-953015	1/4 - 20	2-1/2	1/2	7/8	12—14
UDB-953020	5/16 - 18	1-3/4	1/2	7/8	14—16
UDB-953025	5/16 - 18	2-1/4	1/2	7/8	14—16
UDB-953030	5/16 - 18	3	1/2	7/8	14—16
UDB-953035	3/8 - 16	1-3/4	1/2	1-1/8	16—18
UDB-953040	3/8 - 16	2-1/4	1/2	1-1/8	16—18
UDB-953045	3/8 - 16	3	1/2	1-1/8	16—18
UDB-953050	1/2 - 13	1-3/4	1/2	1-1/8	18—20
UDB-953055	1/2 - 13	2-1/4	1/2	1-1/8	18—20
UDB-953065	1/2 - 13	3	1/2	1-1/8	18—20
UDB-953070	1/2 - 13	3-1/2	1/2	1-1/8	18—20
UDB-953075	5/8 - 11	1-3/4	1/2	1-1/8	20—22
UDB-953080	5/8 - 11	3	1/2	1-1/8	20—22

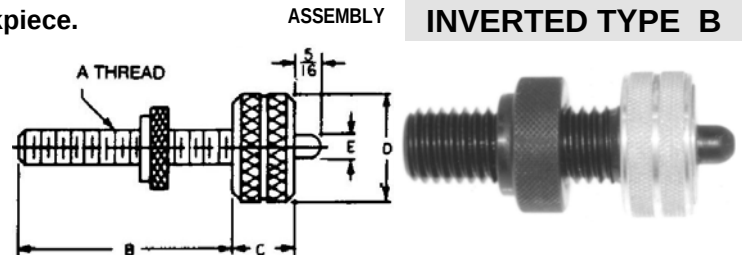
UNITED Torque Screws are for use where controlled end pressure is required for holding parts against the drive of cutting tools. Over-tightening is eliminated. The heads rotate when the pre-set end pressure is reached. Positive backing off action expedites unloading operations.



Type B — Applies reverse holding support for workpiece.

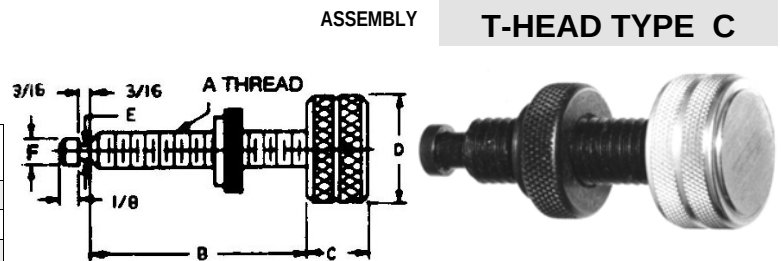
Ideal for limited space.

PART NO.	A	B	C	D	E	LBS. END PRESSURE
UDB-953105	1/4 - 20	1-3/4	7/16	7/8	5/32	12—14
UDB-953110	3/8 - 16	1-3/4	7/16	7/8	5/16	16—18
UDB-953115	1/2 - 13	1-3/4	1/2	1-1/8	5/16	18—20
UDB-953120	5/8 - 11	1-3/4	1/2	1-1/8	5/16	20—22



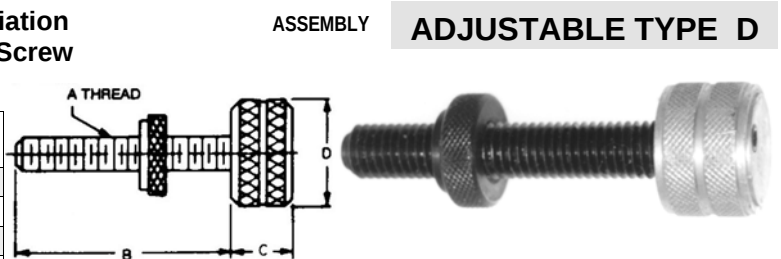
Type C — Used with sliding V-Blocks.

PART NO.	A	B	C	D	E	F
UDB-953175	1/4 - 20	1-3/4	1/2	7/8	.093	.184
UDB-953180	3/8 - 16	1-3/4	1/2	1-1/8	.174	.290
UDB-953185	1/2 - 13	1-3/4	1/2	1-1/8	.276	.396



Type D — Hex wrench adjustment allows for variation in holding pressures. This versatile Adjustable Screw holds either fragile or heavy work pieces.

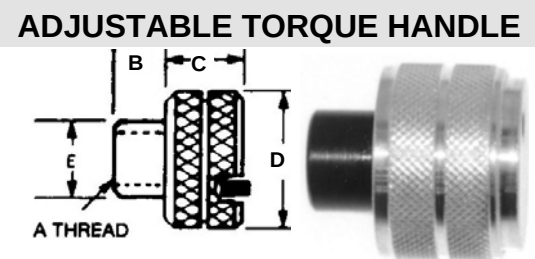
PART NO.	A	B	C	D	LBS. END PRESSURE
UDB-953140	3/8 - 16	1-3/4	21/32	1-3/16	5—50
UDB-953145	3/8 - 16	3	21/32	1-3/16	5—50
UDB-953150	1/2 - 13	1-3/4	21/32	1-3/16	5—50
UDB-953155	1/2 - 13	3	21/32	1-3/16	5—50



Adjustable Torque Handle — Has a simple hex wrench head adjustment, permitting holding pressures to vary as needed. Minimum adjustment is 15 lbs.

PART NO.	A	B	C	D	E
UDB-955150	5/16 - 18	7/16	7/8	1-1/4	5/8
UDB-955155	3/8 - 16	7/16	7/8	1-1/4	5/8
UDB-955160	1/2 - 13	7/16	7/8	1-1/4	5/8

Handle is aluminum with hardened steel insert.

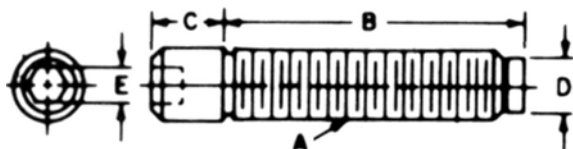
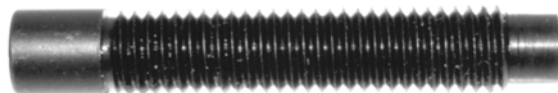


Swivel Screws

Head / Headless Swivel Screws, Hex Socket Toggle Screws

HEX HEAD SWIVEL SCREWS

ASSEMBLY



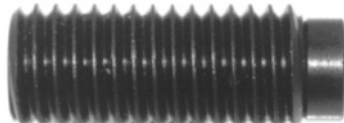
UNITED SOCKET DRIVE HEAD SWIVEL SCREWS prevent marring of work piece because the pad does not rotate.

HEAT TREATED — BLACK OXIDE

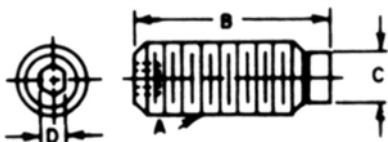
STEEL PART NO.	A THD	B	C	D	E HEX	PAD NO.
UDB-930900	1/4-20	5/8	1/4	3/16	1/8	UDB-120319
UDB-930905		1"				
UDB-930910		1-1/4				
UDB-930915	5/16-18	3/4	5/16	15/64	5/32	UDB-120320
UDB-930920		1-1/4				
UDB-930925		1-1/2				
UDB-930930	3/8 - 16	1"	3/8	9/32	3/16	UDB-120321
UDB-930935		1-1/4				
UDB-930940		1-1/2				
UDB-930945		2"				
UDB-930950	1/2-13	1-1/2	1/2	25/64	1/4	UDB-120322
UDB-930955		2"				
UDB-930960		2-1/2				
UDB-930965	5/8-11	2"	1/2	1/2	5/16	UDB-120323
UDB-930970		2-1/2				
UDB-930975		3"				
UDB-930980	3/4-10	2-1/2	3/4	39/64	3/8	UDB-120324
UDB-930985		3"				
UDB-930990		3-1/2				

HEX HEADLESS SWIVEL SCREWS

ASSEMBLY

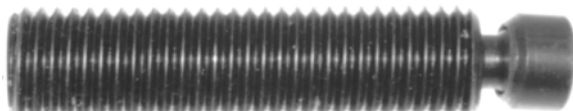


HEAT TREATED
BLACK OXIDE

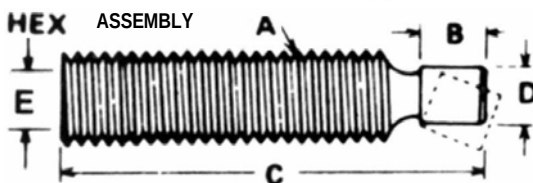
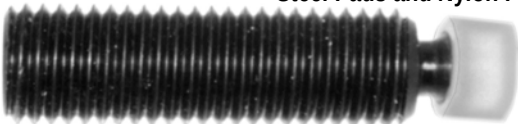


PART NO.	A THD	B	C	D HEX	PAD PART NO.
UDB-930800	1/4-20	3/4	3/16	1/8	UDB-120319
UDB-930805		1"			
UDB-930810	5/16-18	3/4	15/64	5/32	UDB-120320
UDB-930815		1"			
UDB-930820	3/8 - 16	1"	9/32	3/16	UDB-120321
UDB-930825		1-1/4			
UDB-930830	1/2-13	1"	25/64	1/4	UDB-120322
UDB-930835		1-1/4			
UDB-930840	5/8-11	1"	1/2	5/16	UDB-120323
UDB-930845		1-1/2			

HEX SOCKET TOGGLE SCREWS



Steel Pads and Nylon Pads



UNITED BALL BEARING SWIVEL PAD HEX SOCKET SCREWS securely clamp parts with off angle surfaces. Marring or damaging of work piece surface is eliminated. The ball construction eliminates binding and absorbs screw torque. Swivel is 20 degrees in any direction. The O.D. of the pad is smaller than the major pitch diameter allowing the pad to pass thru a threaded hole without disassembling.

HEAT TREATED — BLACK OXIDE

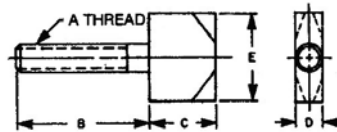
STEEL PAD ASSEMBLY NO.	NYLON PAD ASSEMBLY NO.	A THD	B	C	D	E HEX	LOAD PRESSURE	PAD UDB PART NO.	T LH THD
UDB-952100	UDB-952102	10-32	1/8	1/2	.146	3/32	500 LBS	UDB-952403	#4-48 LH
UDB-952105	UDB-952107			1/2	.185	1/8	900 LBS	UDB-952403	#8-36 LH
UDB-952110	UDB-952112			3/4					
UDB-952115	UDB-952117			1"					
UDB-952120	UDB-952122			1-1/2	.240	5/32	2290 LBS	UDB-952410	12-28 LH
UDB-952125	UDB-952127	5/16-18	15/64	3/4					
UDB-952130	UDB-952132			1"					
UDB-952135	UDB-952137			1-1/4					
UDB-952140	UDB-952142			1-1/2					
UDB-952145	UDB-952147			2"	.293	3/16	3340 LBS	UDB-952415	1/4-28 LH
UDB-952150	UDB-952152	3/8 - 16	9/32	3/4					
UDB-952155	UDB-952157			1"					
UDB-952160	UDB-952162			1-1/2					
UDB-952165	UDB-952167			2"					
UDB-952170	UDB-952172	1/2-13	3/8	3/4	.400	1/4	7300 LBS	UDB-952420	5/16-24 LH
UDB-952175	UDB-952177			1"					
UDB-952180	UDB-952182			1-1/2					
UDB-952185	UDB-952187			2"					
UDB-952190	UDB-952192			2-1/2					
UDB-952195	UDB-952197	5/8-11	7/16	3"	.506	5/16	11700 LBS	UDB-952425	7/16-24 LH
UDB-952200	UDB-952202			2"					
UDB-952205	UDB-952207			2-1/2					
UDB-952210	UDB-952212			3"					
UDB-952215	UDB-952217			2-1/2	.625	3/8	15000 LBS	UDB-952428	7/16-20 LH
UDB-952220	UDB-952222	3/4-10	13/32	3"					
UDB-952225	UDB-952227			3-1/2					

Adjust and Lock Quickly Screw & Bolt Assortment

Quarter, Half, Jack &
Locating Screws - Jig
Latch & Swing Bolts

PART NO.	A	B	C	D	E
UDB-930610	10 - 32	1	1/2	3/16	1/2
UDB-930612		1-1/2			
UDB-930615	1/4 - 20	1-1/4	5/8	1/4	3/4
UDB-930617		1-3/4			
UDB-930620	5/16 - 18	1-1/2	3/4	5/16	1
UDB-930622		2			
UDB-930625	3/8 - 16	1-1/2	1	3/8	1
UDB-930627		2			
UDB-930630	1/2 - 13	1-3/4	1	1/2	1-1/4
UDB-930632		2-1/4			

CHAMFERS ALIGN QUARTER TURN SCREWS WITH PLATE LATCH SLOTS. ROTATE ONE QUARTER TURN TO ENGAGE LIDS AND COVERS OR TO SWING AWAY ARMS. MATERIAL IS LEFT SOFT FOR EASE OF MACHINEABILITY. BLACK OXIDE FINISH.

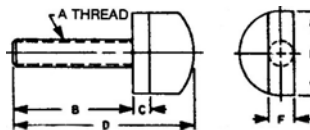


QUARTER TURN SCREWS



HALF TURN SCREWS ARE USED FOR POSITIVE LOCKING OF LEAF AND JIG PLATES. ROTATE ONE HALF TURN TO ENGAGE. MATERIAL IS LEFT SOFT FOR EASE OF MACHINEABILITY. BLACK OXIDE FINISH.

PART NO.	A	B	C	D	E	F
UDB-930700	10 - 32	1	3/16	1-11/16	3/4	3/16
UDB-930705	1/4 - 20	1-1/4	3/16	2	3/4	1/4
UDB-930710	5/16 - 18	1-1/4	3/16	2-1/16	1	5/16
UDB-930715	3/8 - 16	1-3/4	1/4	2-11/16	1-1/16	3/8
UDB-930720	1/2 - 13	1-3/4	1/4	2-3/4	1-1/4	1/2

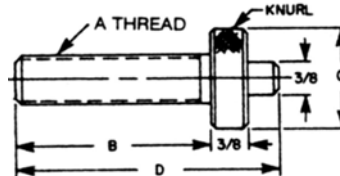


HALF TURN SCREWS



JACK SCREWS SUPPORT WORK PIECES AND ARE IDEALLY SUITED FOR IRREGULAR SHAPES. USE OF JACK SCREWS FOR WORK PIECE SUPPORT HELP TO ELIMINATE MACHINING DISTORTION. MATERIAL IS 12L14 STEEL, HEAT TREATED WITH BLACK OXIDE FINISH.

PART NO.	A	B	C	D
UDB-930500		1-1/4		1-7/8
UDB-930510	3/8 - 16	1-5/8	1-1/8	2-1/4
UDB-930515		2		2-5/8
UDB-930520		1-1/4		1-7/8
UDB-930525	1/2 - 13	1-5/8	1-1/8	2-1/4
UDB-930530		2		2-5/8
UDB-930535		2-1/2		3-1/8
UDB-930540		1-5/8		2-1/4
UDB-930545	5/8-11	2	1-3/8	2-5/8
UDB-930550		2-1/2		3-1/8

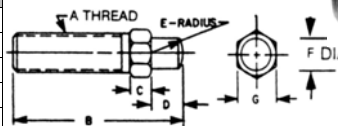


JACK SCREWS



ADJUSTABLE LOCATING SCREW OR ADJUSTABLE LOCATING BUTTONS POSITION WORK PIECE ACCURATELY IN A JIG OR FIXTURE. THEY ARE COMMONLY USED AS LEVELING SCREWS. HEAT TREATED BLACK OXIDE FINISH.

PART NO.	A	B	C	D	E	F	G
UDB-930575	10 - 32	1	1/8	1/8	1/8	3/16	1/4
UDB-930580	1/4 - 28	1-1/2	3/16	3/16	3/16	1/4	3/8
UDB-930585	3/8 - 24	2	1/4	1/4	1/4	3/8	1/2
UDB-930590	1/2 - 20	2-1/2	5/16	5/16	5/16	1/2	5/8
UDB-930595	5/8 - 18	3	3/8	3/8	3/8	5/8	3/4

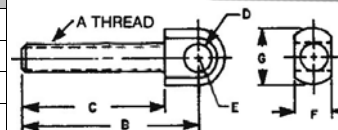


ADJUSTABLE LOCATING SCREWS



JIG LATCH BOLTS PREVENT OBSTRUCTION BY SWINGING OUT OF POSITION WHEN UNLOCKED. MADE OF HIGH TENSILE STEEL AND HEAT TREATED TO PROVIDE MAXIMUM STRENGTH. BLACK OXIDE FINISH.

PART NO.	A	B	C	D	E	F	G
UDB-932850	1/4 - 20	2-5/8	2-5/16	.257	1/4	1/4	1/2
UDB-932855	5/16 - 18	3-13/16	3-13/16	.323	5/16	5/16	5/8
UDB-932860	3/8 - 16	3-3/4	3-5/16	.385	3/8	3/8	3/4
UDB-932865	1/2 - 13	4-7/8	4-5/16	.515	1/2	1/2	1

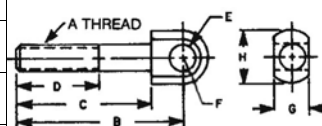


JIG LATCH BOLTS



PART NO.	A	B	C	D	E	F	G	H
UDB-932700	1/4 - 20	1-1/2	1-3/16	3/4	1/4	1/4	5/16	1/2
UDB-932710		2-1/2	2-3/16	1-1/4				
UDB-932720	5/16 - 18	2	1-5/8	1	5/16	5/16	3/8	5/8
UDB-932730		3	2-5/8	1-3/8				
UDB-932740	3/8 - 16	2-1/2	2	1-3/8	3/8	3/8	1/2	3/4
UDB-932750		3-1/2	3	2				
UDB-932760	1/2 - 13	3-1/8	2-1/2	1-3/4	1/2	1/2	5/8	1
UDB-932770		4-1/8	3-1/2	2-1/4				
UDB-932780	5/8 - 11	3-1/2	2-3/4	1-3/4	5/8	5/8	3/4	1-1/4
UDB-932790		4-3/4	4	2-1/2				
UDB-932800	3/4 - 10	4-1/2	3-5/8	2	3/4	3/4	7/8	1-1/2
UDB-932810		6	5-1/8	3				

SWING BOLTS, ALSO CALLED LATCH BOLTS, SWING OUT OF POSITION WHEN UNLOCKED AND AVOID BECOMING AN OBSTRUCTION. HEAT TREATED STEEL. BLACK OXIDE FINISH.



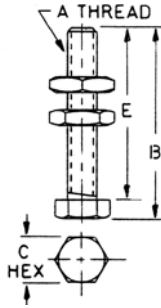
SWING BOLTS



Clamp Support Assemblies

Clamp Assemblies for Rest, Center, Rear and Spindle Support

ADJUSTABLE SPINDLES

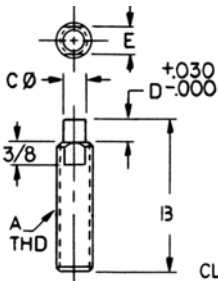


TOUGH DURABLE MULTI-PURPOSE SPINDLE HAS BOLT FULLY THREADED FOR MAXIMUM ADJUSTMENT. ALSO USED WITH TOGGLE CLAMPS.

CARBON STEEL ZINC PLATED REFER TO SECTION G9.

UNITED ADJUSTABLE SPINDLES	SIZE	A THD	B OAL	C HEX	E LENGTH UNDER HD
UCC-700050	SMALL	5/16-18	2-11/16	1/2	2-1/2
UCC-700052	MEDIUM	3/8-16	3-1/4	9/16	3
UCC-700054	STANDARD	1/2-13	3-5/16	3/4	3
UCC-700056	HEAVY	5/8-11	4-3/8	15/16	4

CLAMP REST SCREWS



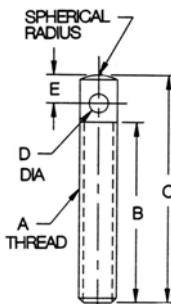
DESIGNED FOR DRILL, SPOT, HEEL, SWIVEL HEEL, REAR SUPPORT AND TAPPED HEEL CLAMPS.

REFER TO SECTION G9.

CARBURIZED AND HARDENED 12L14 STEEL
BLACK OXIDE FINISH

PART NO.	A	B	C	D	E
UDB-932261		2"			
UDB-932262	3/8-16	2-1/2	.250	.313	1/4
UDB-932263		3"			
UDB-932264		2"			
UDB-932265	1/2-13	2-1/2	.344	.313	3/8
UDB-932266		3"			

CLAMP SCREWS — REAR SUPPORT



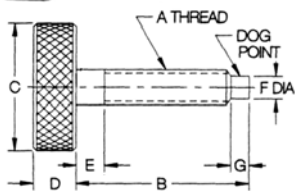
STEEL and STAINLESS REAR SUPPORT CLAMP SCREWS WITH SPHERICAL HEADS GIVE SOLID INSTANT LOW COST SUPPORT.

DRILL HOLE ALLOWS TURNING WITH A PIN. USE UP OR DOWN.

12L14 STEEL and 300 SERIES STAINLESS
HEAT TREATED BLACK OXIDE FINISH
REFER TO SECTION G19.

STEEL	STAINLESS	A THD	B	C	D DIA	E
UDB-930670	UDB-930670S		1/2	3/4		
UDB-930672	UDB-930672S	#10-32	3/4	1"	3/32	1/8
UDB-930674	UDB-930674S		1-1/4	1-1/2		
UDB-930676	UDB-930676S		11/16	1"		1/8
UDB-930678	UDB-930678S	1/4 - 20	1-3/16	1-1/2	1/8	3/16
UDB-930680	UDB-930680S		1-7/16	1-3/4		1/4
UDB-930682	UDB-930682S		7/8	1-1/4		
UDB-930684	UDB-930684S	5/16-18	1-1/8	1-1/2	5/32	3/16
UDB-930686	UDB-930686S		1-5/8	2"		
UDB-930688	UDB-930688S		1-1/8	1-1/2		
UDB-930690	UDB-930690S	3/8 - 16	1-3/8	1-3/4	3/16	3/16
UDB-930692	UDB-930692S		2-3/8	2-3/4		

KNURLED HEX SOCKET SCREWS



STEEL and STAINLESS KNURLED HEX SOCKET HEAD SCREWS ALLOW FINGER TIGHTENING FOR LIGHT CLAMPING.

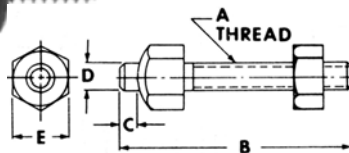
STEEL PART NO.	STAINLESS PART NO.	A THD SIZE	B LENGTH	C DIA	D HD THICK	E RELIEF LEN	F DOG POINT DIA	G POINT LENGTH
UDB-923200	UDB-923200S	#10-32	3/4	1/2	3/16	1/8	1/8	3/32
UDB-923202	UDB-923202S	#10-32	1"	1/2	3/16	1/8	1/8	3/32
UDB-923204	UDB-923204S	#10-32	1-1/4	1/2	3/16	1/8	1/8	3/32
UDB-923206	UDB-923206S	#10-32	1-1/2	1/2	3/16	1/8	1/8	3/32
UDB-923208	UDB-923208S	1/4-20	3/4	1"	5/16	1/8	5/32	1/8
UDB-923210	UDB-923210S	1/4-20	1"	1"	5/16	1/8	5/32	1/8
UDB-923212	UDB-923212S	1/4-20	1-1/4	1"	5/16	1/8	5/32	1/8
UDB-923214	UDB-923214S	1/4-20	1-1/2	1"	5/16	1/8	5/32	1/8
UDB-923216	UDB-923216S	1/4-20	2"	1"	5/16	1/8	5/32	1/8
UDB-923218	UDB-923218S	5/16-18	1-1/2	1-1/8	3/8	3/16	13/64	5/32
UDB-923220	UDB-923220S	5/16-18	2"	1-1/8	3/8	3/16	13/64	5/32
UDB-923222	UDB-923222S	5/16-18	2-1/2	1-1/8	3/8	3/16	13/64	5/32
UDB-923224	UDB-923224S	3/8 - 16	2"	1-1/4	7/16	3/16	1/4	1/4
UDB-923226	UDB-923226S	3/8 - 16	2-1/2	1-1/4	7/16	3/16	1/4	1/4
UDB-923228	UDB-923228S	3/8 - 16	3"	1-1/4	7/16	3/16	1/4	1/4

CLAMP RESTS



Heat Treated
Black Oxide Finish

REFER TO SECTION G12.



USE CLAMP RESTS WITH SINGLE END CLAMP ASSEMBLIES.

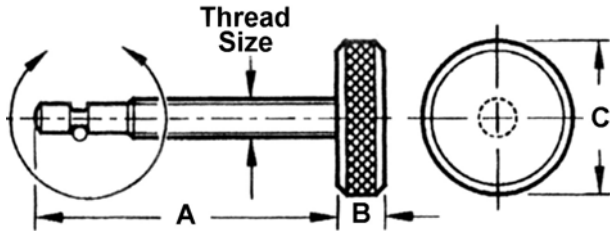
For matching single end clamp straps, refer to Clamp Assemblies.

PART NO.	A	B	C	D	E
UDB-932200	1/4-20	1-1/4	1/8	5/32	7/16
UDB-932205	5/16-18	1-7/8	11/64	7/32	1/2
UDB-932210	5/16-18	3-1/4	11/64	7/32	1/2
UDB-932220	3/8-16	2-1/4	7/32	11/32	9/16
UDB-932225	3/8-16	3-7/8	7/32	11/32	9/16
UDB-932230	1/2-13	2-3/8	1/4	11/32	11/16
UDB-932235	1/2-13	3-7/8	1/4	11/32	11/16
UDB-932240	5/8-11	2-5/8	1/4	15/32	7/8
UDB-932245	5/8-11	3-7/8	1/4	15/32	7/8
UDB-932250	3/4-10	2-3/4	1/4	15/32	1-1/16
UDB-932255	3/4-10	3-7/8	1/4	15/32	1-1/16

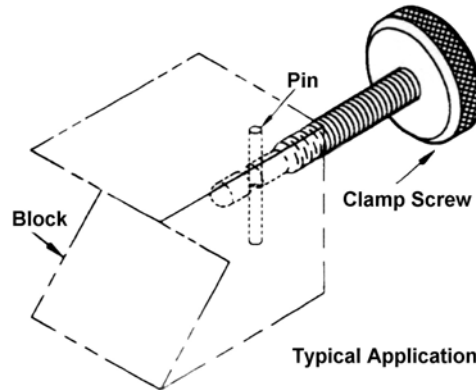
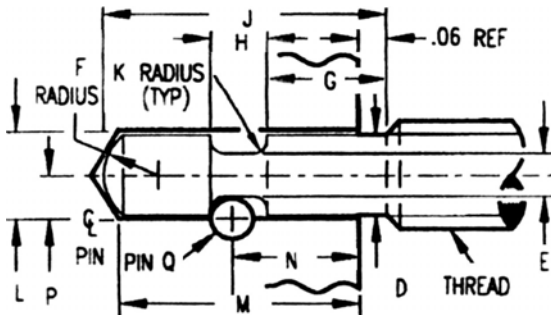
Clamp Screw Assemblies

Clamp Screw Assemblies

CLAMP SCREW ASSEMBLIES



The view below shows screw end, pin and hole dimensions.



CARBURIZED
AND
HARDENED
12L14 STEEL

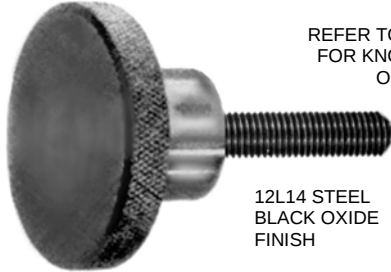
BLACK OXIDE
FINISH

Clamp Screw designed for locating, clamping and hold-down applications
After machining for hole, thread and pin.

UNITED PART NO.	THD UNC-2A	A ±.06	B ±.06	C ±.06	D +.000 — .010	E +.000 — .010	F RADIUS	G THRU TO GROOVE	H GROOVE LENGTH	J LENGTH TO END	K RADIUS TYP.	L DRILL	M WORK SURFACE TO END	N SURFACE TO PIN	P +.010 — .000	Q PIN DIA
UCC-715320	10-24	1.25	.31	.75	.139	.059	.09	.27	.12	.50	.03	.16	.34	.25	.078	.09
UCC-715326		1.62														
UCC-715332		2.00														
UCC-715416	1/4-20	1.00	.31	1.00	.187	.100	.12	.27	.12	.62	.03	.20	.53	.28	.102	.09
UCC-715424		1.50														
UCC-715432		2.00														
UCC-715440		2.50														
UCC-715448		3.00														
UCC-715516	5/16-18	1.00	.38	1.12	.250	.120	.19	.27	.19	.62	.06	.27	.53	.28	.133	.12
UCC-715524		1.50														
UCC-715528		1.75														
UCC-715536		2.25														
UCC-715544		2.75														
UCC-715548		3.00														
UCC-715616	3/8-16	1.00	.44	1.25	.281	.151	.19	.27	.19	.62	.06	.30	.53	.28	.152	.12
UCC-715624		1.50														
UCC-715632		2.00														
UCC-715640		2.50														
UCC-715648		3.00														
UCC-715656		3.50														
UCC-715664		4.00														
UCC-715844	1/2-13	2.75	.50	1.25	.406	.235	.25	.28	.25	.75	.06	.42	.62	.31	.218	.16
UCC-715856		3.50														

Steel and Stainless Control Knob Assy

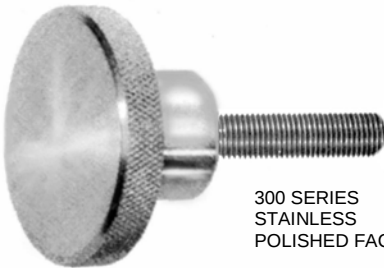
KNURLED STEEL CONTROL KNOBS — THREADED SPINDLES



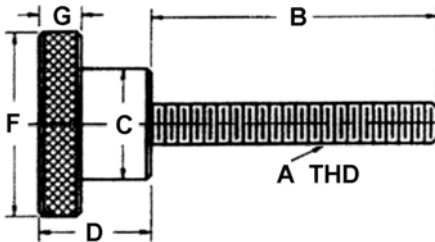
REFER TO J2
FOR KNOBS
ONLY

12L14 STEEL
BLACK OXIDE
FINISH

KNURLED STAINLESS CONTROL KNOBS — THREADED SPINDLES



300 SERIES
STAINLESS
POLISHED FACE



Each Knob is carefully
machined with a knurled
non-slip grip.

The threaded spindle is
assembled and held firmly
in the flanged head with a
spring pin.

Stainless Steel Knobs and
Threads are non-corrosive.

UNITED Precision Knobs
are accurate and durable.

They will improve the
appearance of your fixture
and outlast plastic and
aluminum knobs.

Knurled Control Knobs with Threaded Spindles In Steel and Stainless

UNITED Long Wear Precision Control Knobs with Threaded Spindles
For Individual Components and Other Knobs, see Section J.

STEEL 12L14 KNOB	STAINLESS 300 SERIES KNOB	A THREAD SIZE	B LEN OF SPINDLE	C HUB DIA	D HEAD OAL	F DIA OF KNOB	G FLANGE WIDTH
UCC-933002	UCC-933002S	10-24	1/2	1/2	5/8	3/4	1/4
UCC-933002M	UCC-933002SM	M-5	12.7MM	12.7MM	15.9MM	19.0MM	6.4MM
UCC-933004	UCC-933004S	10-24	1	1/2	5/8	3/4	1/4
UCC-933004M	UCC-933004SM	M-5	25.4MM	12.7MM	15.9MM	19.0MM	6.4MM
UCC-933006	UCC-933006S	1/4-20	3/4	1/2	5/8	3/4	1/4
UCC-933006M	UCC-933006SM	M-6	19.0MM	12.7MM	15.9MM	19.0MM	6.4MM
UCC-933008	UCC-933008S	1/4-20	1-1/4	1/2	5/8	3/4	1/4
UCC-933008M	UCC-933008SM	M-6	31.7MM	12.7MM	15.9MM	19.0MM	6.4MM
UCC-933010	UCC-933010S	1/4-20	1-3/4	5/8	3/4	1	1/4
UCC-933010M	UCC-933010SM	M-6	44.5MM	15.9MM	19.0MM	25.4MM	6.4MM
UCC-933012	UCC-933012S	5/16-18	1-3/4	5/8	3/4	1	1/4
UCC-933012M	UCC-933012SM	M-8	44.5MM	15.9MM	19.0MM	25.4MM	6.4MM
UCC-933014	UCC-933014S	5/16-18	3	5/8	3/4	1	1/4
UCC-933014M	UCC-933014SM	M-8	76.2MM	15.9MM	19.0MM	25.4MM	6.4MM
UCC-933016	UCC-933016S	5/16-18	1-3/4	3/4	1	1-1/2	5/16
UCC-933016M	UCC-933016SM	M-8	44.5MM	19.0MM	25.4MM	38.1MM	7.9MM
UCC-933018	UCC-933018S	5/16-18	3	3/4	1	1-1/2	5/16
UCC-933018M	UCC-933018SM	M-8	76.2MM	19.0MM	25.4MM	38.1MM	7.9MM
UCC-933020	UCC-933020S	3/8-16	1-3/4	3/4	1	1-1/2	5/16
UCC-933020M	UCC-933020SM	M-10	44.5MM	19.0MM	25.4MM	38.1MM	7.9MM
UCC-933022	UCC-933022S	3/8-16	3	3/4	1	1-1/2	5/16
UCC-933022M	UCC-933022SM	M-10	76.2MM	19.0MM	25.4MM	38.1MM	7.9MM
UCC-933024	UCC-933024S	3/8-16	1-3/4	1	1-1/8	2	3/8
UCC-933024M	UCC-933024SM	M-10	44.5MM	25.4MM	28.6MM	50.8MM	9.5MM
UCC-933026	UCC-933026S	3/8-16	3	1	1-1/8	2	3/8
UCC-933026M	UCC-933026SM	M-10	76.2MM	25.4MM	28.6MM	50.8MM	9.5MM
UCC-933028	UCC-933028S	1/2-13	1-3/4	1	1-1/8	2	3/8
UCC-933028M	UCC-933028SM	M-12	44.5MM	25.4MM	28.6MM	50.8MM	9.5MM
UCC-933030	UCC-933030S	1/2-13	1-3/4	1-1/2	1-1/2	2-1/2	9/16
UCC-933030M	UCC-933030SM	M-12	44.5MM	38.1MM	38.1MM	63.5MM	14.3MM
UCC-933032	UCC-933032S	1/2-13	3	1-1/2	1-1/2	2-1/2	9/16
UCC-933032M	UCC-933032SM	M-12	76.2MM	38.1MM	38.1MM	63.5MM	14.3MM
UCC-933034	UCC-933034S	1/2-13	1-3/4	1-1/2	1-1/2	2-1/2	9/16
UCC-933034M	UCC-933034SM	M-12	44.5MM	38.1MM	38.1MM	63.5MM	14.3MM
UCC-933036	UCC-933036S	5/8-11	3	1-1/2	1-1/2	2-1/2	9/16
UCC-933036M	UCC-933036SM	M-16	76.2MM	38.1MM	38.1MM	63.5MM	14.3MM
UCC-933038	UCC-933038S	3/4-10	1-3/4	1-5/8	1-5/8	2-5/8	5/8
UCC-933038M	UCC-933038SM	M-20	44.5MM	41.3MM	41.3MM	66.7MM	15.9MM
UCC-933040	UCC-933040S	3/4-10	3	1-5/8	1-5/8	2-5/8	5/8
UCC-933040M	UCC-933040SM	M-20	76.2MM	41.3MM	41.3MM	66.7MM	15.9MM
UCC-933042	UCC-933042S	3/4-10	4	1-5/8	1-5/8	2-5/8	5/8
UCC-933042M	UCC-933042SM	M-20	101.6MM	41.3MM	41.3MM	66.7MM	15.9MM