MITEE-BITE PRODUCTS LLC
340 Route 16B • Center Ossipee, NH 03814
800-543-3580 • 603-539-4538 • Fax: 603-539-2183
MiteeBite.com

Cad files available online

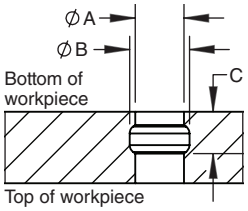
MADE IN THE USA

Loc-Down® System Instructions

PREPARING WORKPIECE OR PLATE USING LOC-DOWN® CARBIDE CUTTERS

1. Drill thru hole ("A").
2. Using Loc-Down® Cutter, touch off on bottom face of workpiece. Drop tool to "C" dimension. Cut a groove to the "B" dimension.
3. Add Chamfer to hole to suit.

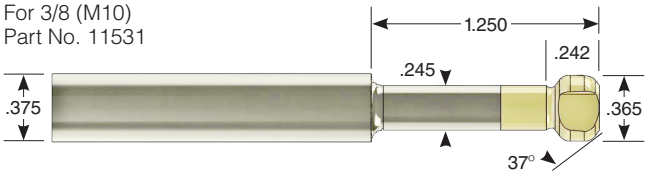
See chart below for dimensions.



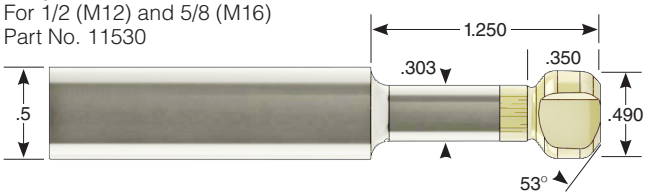
TYPICAL FEEDS AND SPEEDS FOR LOC-DOWN® CUTTER

Material	Feed	Speed
Aluminum	25 IPM	3000 RPM/1 radial pass
Hard Metals	1 IPM	1200 RPM/3 equal radial passes

Loc-Down® 3/8" Carbide Cutter
For 3/8 (M10)
Part No. 11531



Interpolated Loc-Down® 1/2" Carbide Cutter
For 1/2 (M12) and 5/8 (M16)
Part No. 11530



PREPARATION OF TOP FIXTURE PLATE FOR BUSHING

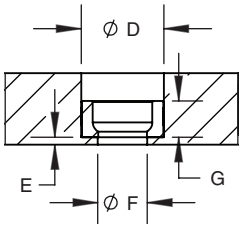
(Use for Dedicated Fixture or Pallet mounting to Sub Base)

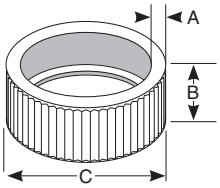
1. Measure the bushing Ø.
2. The bushings are designed to be an interference fit. Suggested sizes for "D" dim. are as follows:
   - Aluminum: 0.001 smaller than OD of bushing
   - Steel: 0.0005-0.001 smaller than OD of bushing

   These are only SUGGESTED sizes. Actual hole size may vary depending on application.
3. The flat bottom hole is needed to properly seat the bushing. It should be at least as deep as "G" dimension, but leave enough room to accommodate "E" dimension

See chart below for dimensions.

Loc-Down®
See chart below for Part Numbers





HEAVY WALL LOC-DOWN® BUSHING DATA

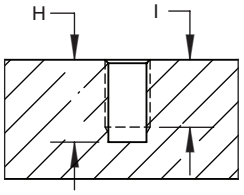
Part No.	A	B	C
11524	.111 2.82mm	.390 10mm	.7105/.7095 18.05mm/18.02mm
11520*	.122 3.09mm	.380 9.7mm	.868/.867 22.05/22.03mm
11528	.127 3.22mm	.551 14mm	1.065/1.064 27.05/27.03mm

*Replaces Part No. 11525

PREPARATION FOR BASE PLATE

1. Drill and tap appropriate hole for Loc-Down® Pin.
2. The bottom of blind hole ("H" dim.) MUST have a flat bottom for pin to work properly.
3. Thread must have a length of MINIMUM of "I" dimension

See chart below for dimensions.



	Loc-Down® Part No.	Thread Size	Bushing Part No.	Cutter Part No.	Workpiece Prep wtihout Bushings A	B	C	Top Plate Prep with Bushings D Bushing Hole Ø	E	F	G	Base Plate Prep H	I (Min)
Inch	11538	3/8-16	11524	11531	0.39	.492-.502	0.450	.7085-.7095	0.078	.386-.391	0.394	0.866	0.71
	11500	1/2-13	11520	11530	0.51	.625-.635	0.462	.866-.867	0.078	.512-.531	0.38	0.866	0.71
	11558	5/8-11	11528	11530	0.65	.812-.822	0.594	1.0632-1.0642	0.098	.641-.656	0.551	1.06	0.87
Metric	11610	M10-1.5	11524	11531	9.9	12.5-12.7	11.43	18.00-18.02	2.0	10.3-10.5	10	22	18
	11612	M12-1.75	11520	11530	13	15.9-16.0	11.73	22.00-22.03	2.0	13.0-13.5	9.7	22	18
	11616	M16-2.0	11528	11530	16.5	20.6-20.9	15.09	27.00-27.03	2.5	16.3-16.6	14	27	22

ADDITIONAL INFORMATION

The Loc-Down® System can be used as a quick change pallet system used with our **Locating Pins and Liners** (PN 51000/52000) to provide better than 0.0004"/0.01mm repeatability. Each Loc-Down® provides a clamp force of approximately 100 lbs per 1 ft lb (330N per Nm) of tightening torque.

Loc-Down® vertical travel after balls have fully extended is 0.08 (2mm). Drive hex size for 5/8 is 5/16, M16 is 8mm, 1/2 is 1/4, M12 is 6mm, 3/8 is 3/16, M10 is 5mm.

Hand tightening for majority of applications is sufficient.

PATENT #61553569

Heavy Duty Custom Bushing

for ½-13 & M12 Loc-Down® Clamps

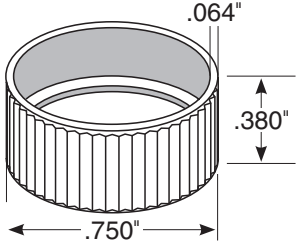
NEW!

Loc-Down®
1/2-13 - Part No. 11500
M12-1.75 - Part No. 11612

We have received many requests for a larger diameter bushing that can be easily incorporated into current sub-plates with counter-bored mounting holes for ½-13 and M12 socket head cap screws. This bushing is large enough to allow customers to “open-up” bores and press it into current fixtures converting them into quick change plates. Made of heat-treated 440c stainless steel. These Heavy-Duty Bushings are replacing the original bushings.

A small supply of the original bushings are currently on hand, once depleted it will no longer be available.

Original Bushing
Part No. 11525



Heavy Duty Bushing
Part No. 11520