

Tech Tip

FROM YOUR FRIENDS AT
NEW YORK BUS SALES!



Monobolts

Complaint – We are told that the monobolts which we just installed are not proper due to the center “pulling through” the body of the monobolt holding the panels together or are breaking before being set leaving a hole in the center.

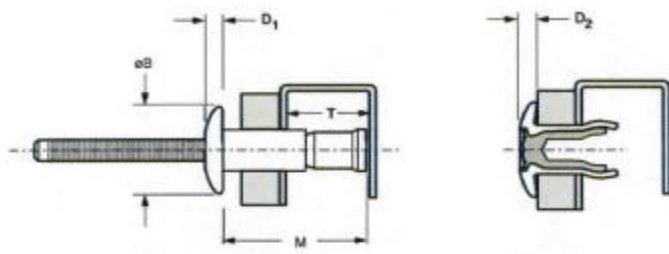
Cause – There are several conditions which may cause this –

- The tip on the gun being used may be worn
- An improper sized monobolt being used
- Improper gun tip being used
- Material too thin for the monobolt

Correction – Attached in Figure #1 is a chart indicating the minimum and maximum material thickness (**OUTLINED IN RED**) as well as the minimum and maximum drill size (**OUTLINED IN GREEN**). Figure #2 shows the gun tip and where to monitor for wear and Figure #3 shows how that section of the tip works to essentially “lock” the stem into place. As you can see using a regular rivet gun would NOT produce this affect and should not be used with the monobolts. Figure #4 shows how the installed monobolt can be checked visually for the locked stem.

You should also not depend on the monobolt to pull panels together when fastening.

PLEASE NOTE: You can see an animated illustration of how a monobolt is designed to work at <http://www.avdel-global.com/en/products/breakstem-fasteners/monoboltr.html>



ø	[Cross-section diagram]		[Thread diagram]		M	ø B	D ₁	T	D ₂	[Torque symbol]	[Strength symbol]
	min.	max.	min.	max.							
3/16" (4.8 mm)	.064	.270	.193	.201	.716	.395	.083	.410	.073	1450	1150
	.064	.437			.962			.530			
1/4" (6.4 mm)	.080	.375	.260	.275	.933	.525	.114	.480	.104	2650	2350
	.080	.625			1.296			.645			
3/8" (10 mm)	.120	.625	.392	.409	1.425	.798	.160	.875	.156	5940	3953

Figure #1

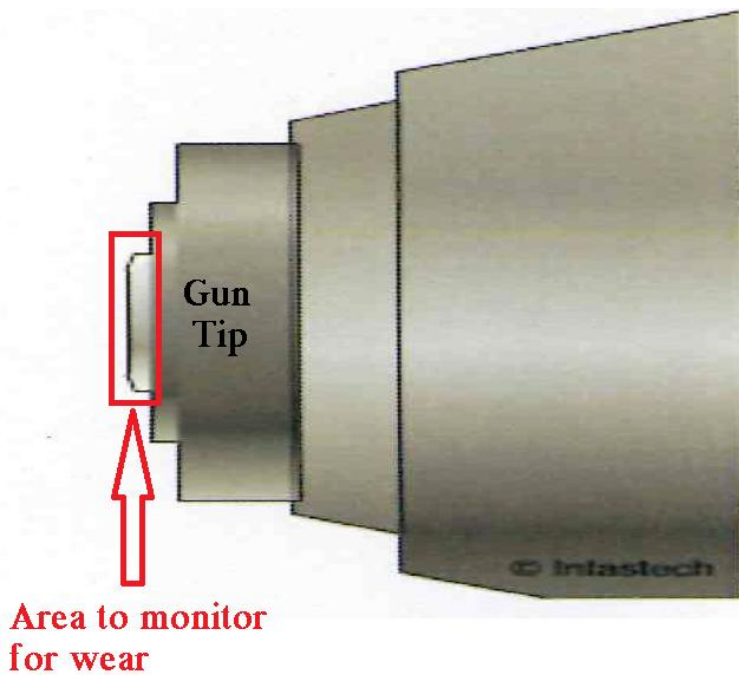


Figure #2

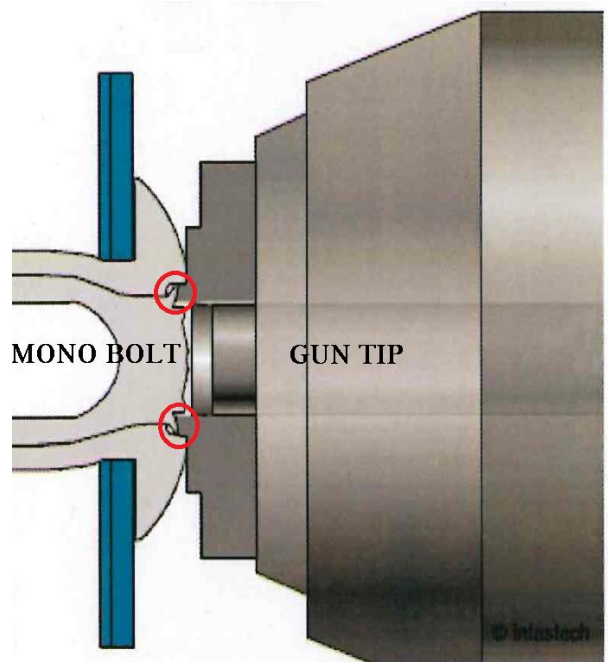


Figure #3

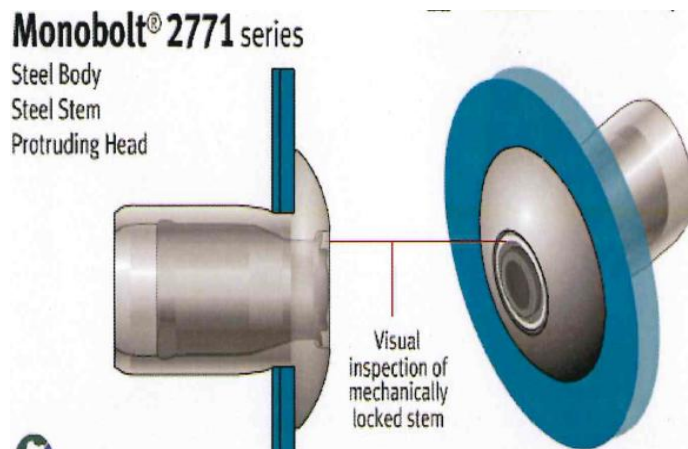


Figure #4



Contact Our Service Department With Any Questions

CHITTENANGO – phone 800-962-5768 or

Daryl Wallace : dwallace@newyorkbussales.com

Brian Lamaitis : blamaitis@newyorkbussales.com

ROCHESTER – phone 800-463-3232 or

Gary Chichester: gchichester@newyorkbussales.com

ALBANY – phone 866-867-1100 or

Ben Reiling: breiling@newyorkbussales.com

Steve Searles: ssearles@newyorkbussales.com

WARRANTY – 800-962-5768 ext 237

Morgan Jenkins: mjenkins@newyorkbussales.com

ALL of our Tech Tips can be found on the New York Bus Sales website at

<http://www.newyorkbussales.com/pages/bulletins.cfm>

Or at the New York Head Mechanic website at

<http://www.nyhma.org/viewforum.php?f=2&start=0>