

# *Custom Stick Grip Spacer Installation Instructions*

**CONGRATULATIONS !** , and *Thanks Loads* for purchasing our Stick Grips with Custom Spacers for your Pride and Joy !!

Your Custom Spacer is mounted into the ID of your stick tube and held in place via 3 stainless steel Button Head Set Screws and 3 Nord-Lock type washers ( <https://www.youtube.com/watch?v=WPCfd4Zr6rE> ).

The installation is very simple, but please read these instructions at least 3 times before starting . . .

- \* **FIRST**, check that the ID of your stick tube is de-burred and round. If you can't run the cable out the bottom of your stick tube and loop it back up to the pivot point and tie it down with 2 tie wraps, pop an oval hole in your stick tube probably on the front just above your pivot point. My A&P book says you should weld a doubler over any hole in a tube. An RV guy came up with a good idea using a fender washer forming it over a mandrel and tac welding the formed fender washer over the oval hole and opening up the fender washer hole to an oval hole. Deburr the oval hole, then pull your cable out thru that oval hole coating the hole with a little silicone to help protect your cable from vibration &/or movement after mounting the Custom Spacer ;
- \* If your Custom Spacer is not already installed into your Stick Grip, slide your Custom Spacer over your cable and install it into your Stick Grip following the Installation Instructions, then install it into your stick tube for fit ;
- \* While sitting on your parachute ( I think one should always fly with a parachute, and the best are from *Paraphernalia Parachutes* ( <http://www.softieparachutes.com> ), or seat and back cushions, slide your Stick Grip cable and Stick Grip with the installed Custom Spacer into your stick tube ID to figure out how much of your stick tube to trim off, if any. If it doesn't fit, you can lap sand the ID of your stick tube a little bit to make it fit. Full forward stick so your Stick Grip China Hat just clears under your instrument panel ( even though you are not doing outside loops ) probably drives your stick tube length. Don't forget to clock your Stick Grip 15 to 20 degrees from straight ahead for wrist ergonomics ;
- \* After fitting your Stick Grip with Custom Spacer for stick tube length, pull it out and set it aside. Drill 3 small 5/64" pilot holes about 3/8" down from the top of your stick tube relatively equally distanced around the circumference with the center of the 3 small pilot holes near the center of the stick tube on the aft side. The reason for the short distance down from the top of your stick tube is simply, if you wish, for cosmetics so that the bottom of the Stick Grip will block the view of the ss Button Head Screws as you fly. If you do not care that you can see them while you are flying ( I think they look nice ), then drill the 3 small 5/64" pilot holes anywhere you want along the length of your stick tube where the Stick Grip Custom Spacer will live. Then put your Stick Grip Custom Spacer back inside your stick tube and drill the 3 small 5/64" pilot holes into your Stick Grip Custom Spacer using the already drilled pilot holes in your stick tube as a drill guide ;
- \* Then, pull the Stick Grip Custom Spacer out and drill a 7/64" pilot hole thru the small 5/64" hole in the center aft of the stick tube. Then put the Stick Grip Custom Spacer back into the stick tube and drill thru the wall of the Custom Spacer with a 7/64" pilot hole. Do NOT drill so deep that you scar the opposite inside surface of the stick tube or drill into the wires ;
- \* Pull the Custom Spacer out of the stick tube ID and tap the 7/64" pilot hole you just made in your Stick Grip Custom Spacer with a 6-32 tap ;
- \* Slide the Custom Spacer back into your stick tube and install 1 of the provided ss Button Head Screws thru the 7/64" hole in the back of the stick tube. Now the stick tube is your jig to drill 7/64" pilot holes in the other 2 small holes in the stick tube withOUT scarring the opposite side or drilling into the wires. Then, take the ss

Button Head Screw and the Custom Spacer out and tap the other (2) 7/64" pilot holes in the Custom Spacer with a 6-32 tap ;

\* Deburr your new threaded holes and practice fit all 3 ss Button Head Screws WITH provided Nord-Lock type washers and check the ID of the Custom Spacer to make sure the ss Button Head Screws will NOT protrude into the ID of the Custom Spacer too far. If they do, shorten the ss Button Head Screw(s) so that they do NOT protrude too far into your Stick Grip Custom Spacer ID ;

\* Slide your Stick Grip Custom Spacer into your stick tube ID and install the 3 ss Button Head Screws with their Nord-Lock type washers torqued to 16.8 inch lbs. for final assembly ;

Call me any afternoon after 1330 – 2200+ M-S Pacific Time if you have any questions – 619-448-5103.

OBTW – if you have any suggestions to improve these instructions, please let me know.

PS -- If you liked the movie "Top Gun", I'm helping my friend sell his book. See link below.

Infinity's Forever ( <http://www.InfinityAerospace.com> ),

JD

Retired F-14 Naval Aviator, F-14 Flight Test, F-14 Instructor,  
OIC Navy UAV's, and Navy Flying Club Pres. for 3+ years  
EAA National Lifetime Member, and Local Chapter 14 Member  
EAA Technical Counselor, and EAA Flight Advisor  
Both American Legion & AMVET Lifetime Member  
AOPA Member

Test Pilot

Eagle Scout

Grip Whisperer

Kwisatz Haderach -- watch the 1984 un-cut movie version of "Dune"

Been flying, and working on and around aircraft, since I was a perm.

SOTW, OJAAT

My \$0.02 = \$37+

Skype: kingvulcan007

"Top Gun Days" ( <http://www.topgunbio.com> ) -- if you like F-14's &/or the movie "Top Gun", my friend wrote a GREAT book about it, and our 1st 3 years in our first F-14 Fleet Squadron. OBTW -- I'm the tallest one in the group picture in the middle of the book :-).

Some of what JD used to do:

<https://www.facebook.com/video.php?v=769841983036329&fref=nf>