

C180C2800P Installation – Cessna 180 SN30000-50911

December 28, 2015

Rev H

Instructions STC/SK28180.doc

CLoc® SK25S4 Series Conversion for Screw Cowlings

Changes from previous SK2601 and SK2800P Conversion Kits –

Because most early Cessna cowlings use platenuts with 11/16 **rivet** hole spacing, a receptacle adapter was required in order to mount typical SK212 or SK213 receptacles with the standard 3/4 inch hole spacing. This drove the kit cost higher. There are also issues with clearances around the engine mounts. The revised SK2800P Kits use a specially made receptacle, the SK213-26 with 11/16 inch spaced rivet holes. Even if your cowling used clip-on platenuts, the SK213-26 requires mounting holes to be drilled and dimpled accordingly.

Because the rivet hole spacing is closer to the barrel of the receptacle, we modify the adjustment process to enhance riveting. Note that the SK213-26 receptacles have no anti-lock pins installed, in other words, the locking clip is engaged and the insert is locked. This allows clearances for riveting.

For Rev H Kits, we have revised our kits to include the Skybolt CLoc® SK25S4 Series Studs that require a smaller outer panel hole of 1/4" (.250) and a smaller inner panel (lip) through hole of 5/16" (.3125). The previous SK2600 studs required a larger through hole that was very close to the lip edge.

Note: Pay attention to the orientation of the receptacle such that the locking clip groove is facing outward/upward for ease of access. Note Figures 1 and 2. If you install them facing inwards, access for adjustment is difficult.

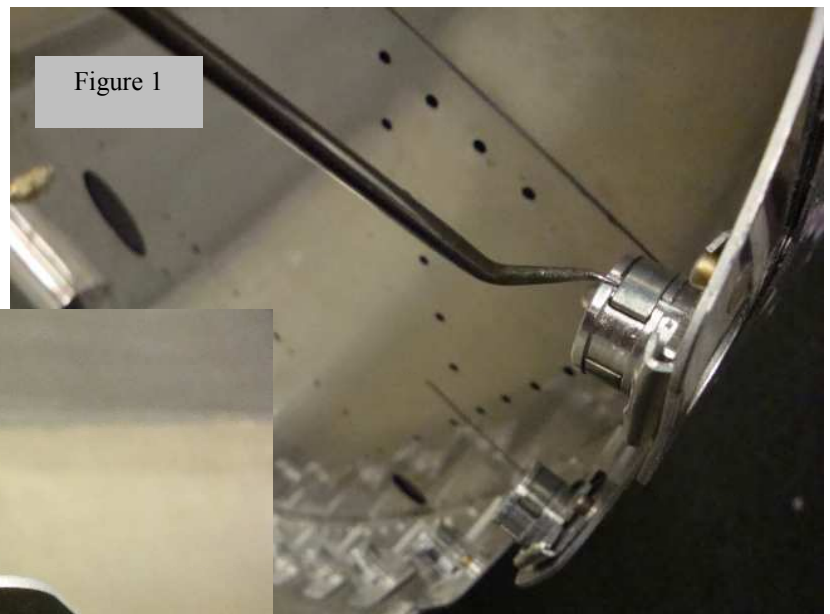
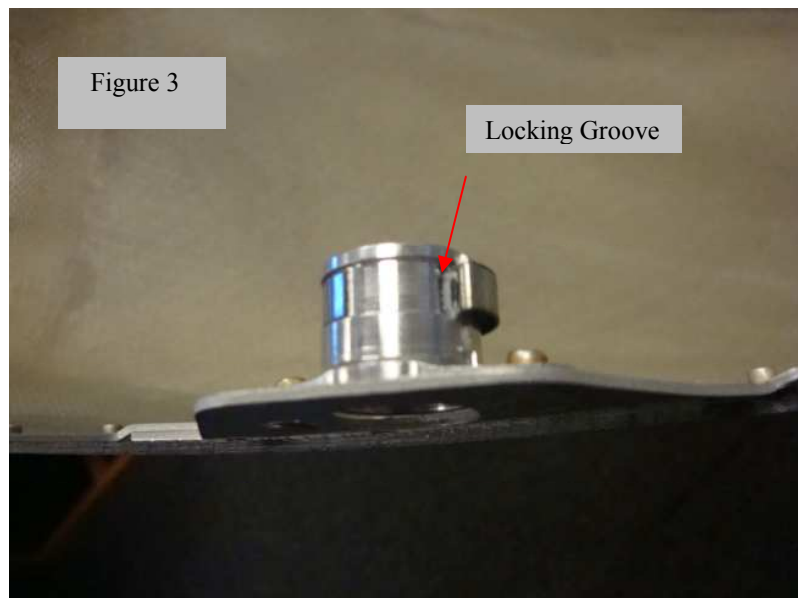


Figure 1



Figure 2

Once receptacles are installed, with a pick tool, pry the clip out of the groove onto the barrel to unlock the insert.

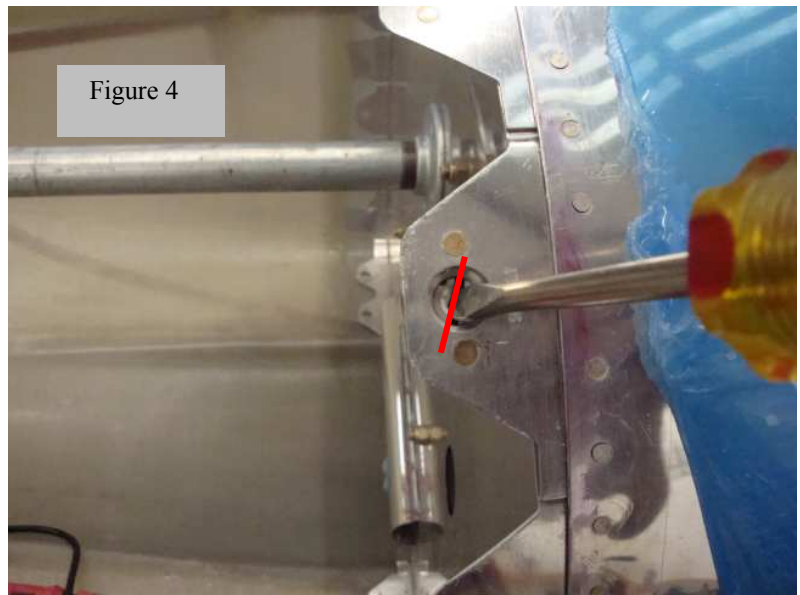


Upon the initial reinstallation of the cowling, engage the SK25S4 studs into the receptacle and screw the studs to the proper set position. Push and turn to unlock studs without disturbing the inserts. Remove the cowling. Turn each insert to align the “slot” with the rivets. With the pick tool, snap the clips back into the locking groove and check that the insert is locked (the slot will be a few degrees past being aligned with the rivets).

To begin installation -

- 1) Remove Cowling.
- 2) Drill out all platenuts mounted to firewall lip and cowling sides.
- 3) With Unibit 1, expand center hole to 5/16".
- 4) Mount SK213-26 Receptacle Assembly with MS20426AD3-4 Rivets. Note: Some locations require blind rivets CCR264SS-3-3.
- 5) With pick tool, pry locking clips out of groove onto barrel surface.
- 6) Drill all cowling holes to .250 to accommodate SK25S4 series studs that require no oversized or dimpled holes that tend to split the cowling edge. Note: Do not install retainers at this time.
- 7) Position cowling. Lock studs and continue to turn studs, thus adjusting receptacle inserts, until the stud is set to the proper locked height.

8) Unlock studs (Quick push-turn motion) and remove cowling. Turn each insert to align (approximately 1 o'clock to 7 o'clock as shown in Figure 4) the “slot” with the rivets. With the pick tool, snap the clips back into the locking groove and check that the insert is locked (the slot will be a few degrees past being aligned with the rivets).



9) Install retainers on all studs with SK-T26 tool.

10) Reinstall cowling. Note any studs that may require further adjustment. One 180-degree revolution is equivalent to .015 of an inch adjustment.



Proper Installation of this modification is important. Equally important is proper documentation.

Before returning your aircraft to service, you must accomplish 3 important steps:

- 1) Send Email to Skybolt to receive a copy of this STC, authorization to use the STC, and accepted language to file Form 337 with the FAA
- 2) Prepare and file Form 337 with the FAA. Note: as this is an STC'd installation, Form 337 is filed after the conversion is complete and no further acknowledgement from the FAA is required. But it must be filed for the aircraft to be returned to service.
- 3) Make a logbook entry that the kit was installed as per the Skybolt Instructions (Rev number/Date).

By contacting Skybolt (dbowers@skybolt.com or abraun@skybolt.com) this allows us to log and track the airframe that has been converted. If we have a revision to our kit or any issues with any component of the kit, we will have a method to contact the owner with important details.

Please provide the following:

- 1) **N Number of the aircraft**
- 2) **Model and Serial Number of Aircraft**
- 3) **Kit Serial Number**
- 4) Date of Purchase
- 5) From whom Purchased
- 6) Date of Installation
- 7) Approximate hours on engine and/or engine mounts