

# SILVER SPORT

## Transmissions

### BELLOUSING ALIGNMENT DOWELL PIN INSTALLATION INSTRUCTIONS

1. After using a dial indicator to determine the direction and amount the bellhousing needs to be moved, remove the bellhousing and existing pins from your engine block.

There are tool companies that make dowel pin pullers and they are highly recommended. However, in some cases, it is possible to drive the existing dowel pins out of the block from the front side using a punch and a hammer. If the front of the pins cannot be accessed, the pins can sometimes be removed by twisting and pulling with vise grips.

If this fails, the pins can sometimes be removed by drilling and tapping the ends of the pins and using a slide hammer. It may be necessary to grind the end of the pin prior to drilling to remove the hardened surface.

If the pin is in a blind hole, it may also be possible to drill and tap all the way through the pin and then drive a screw through the pin. As the screw comes in contact with the wall of the blind hole, it will push the pin out as the screw is turned. Tack welding a nut on the end of the dowel may also work.

2. Before inserting the pins into the block, make sure the allen screws in the pins are not tight or the pins will not slip into the block. Insert the pins into the block slit end first. The dowels should be a slip fit or a very light press fit. If not, check for burrs on the pins or the holes in the block. Insert the pins into the block until the offset prevents them from going in any further.
3. Rotate the pins so the offset is pointing in the desired direction. Note the two flats machined into the pins are parallel with the offset so an open-end wrench can be used to turn the pins if needed. The flats on the pins must also remain parallel to one another (same angle) or the bellhousing will not fit onto the pins. Tighten the allen head screws in the pins lightly, just enough to keep the pins from moving while the bellhousing is installed.

4. Reinstall the bellhousing and check for alignment using your dial indicator. If the runout is still not within 0.010" TIR, remove the bellhousing and turn the dowels using an open-end wrench. Reinstall the bellhousing and check for alignment.
5. Once the bellhousing is concentric to the crankshaft within 0.005" (0.010 TIR), use an open-end wrench to keep the pin from rotating while you tighten the allen head screw to no more than 48 in-lb of torque. If the dowels need to be turned again, the screws can be loosened and turned to a new angle.
6. If it is not possible to achieve proper alignment, pins with a different amount of offset may be required.

For tech assistance, please call 844-609-8187, and our operator will connect you with the proper department.

Please visit <https://shiftsst.com/warranty> for warranty terms and return instructions if required.