



Ski Doo G4 Belt Drive Packing List

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- _____ Top Gear
Ratio _____
- _____ Spare Gear (if ordered)
Ratio _____
- _____ Belt
- _____ Spare Belt (if ordered)
- _____ Top Gear Assembly
- _____ Tensioner Assembly
- _____ Bottom Gear
- _____ Bottom Hub / Hardware
- _____ Bottom Gear Retainer
- _____ Hardware Kit
- _____ Bottom Cover w/ Speed
Sensor
- _____ Bottom Cover Left/Right
Spacers
- _____ Instructions



Ski-Doo G4 Installation Instructions

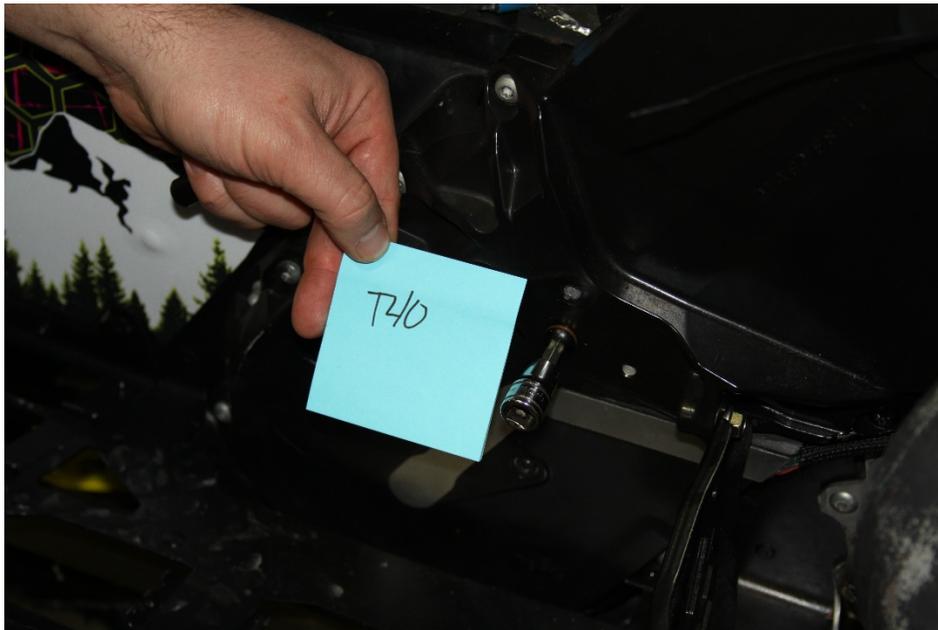
Step 1: Remove RH (throttle side) side cover.

Step 2: Remove exhaust, on sleds with factory muffler you will have to remove the hood.

Step 3: Remove (7) chain case cover bolts from OEM case cover using a T30 bit. The lower right bolt is a 10mm and can be reached through the lower belly pan.



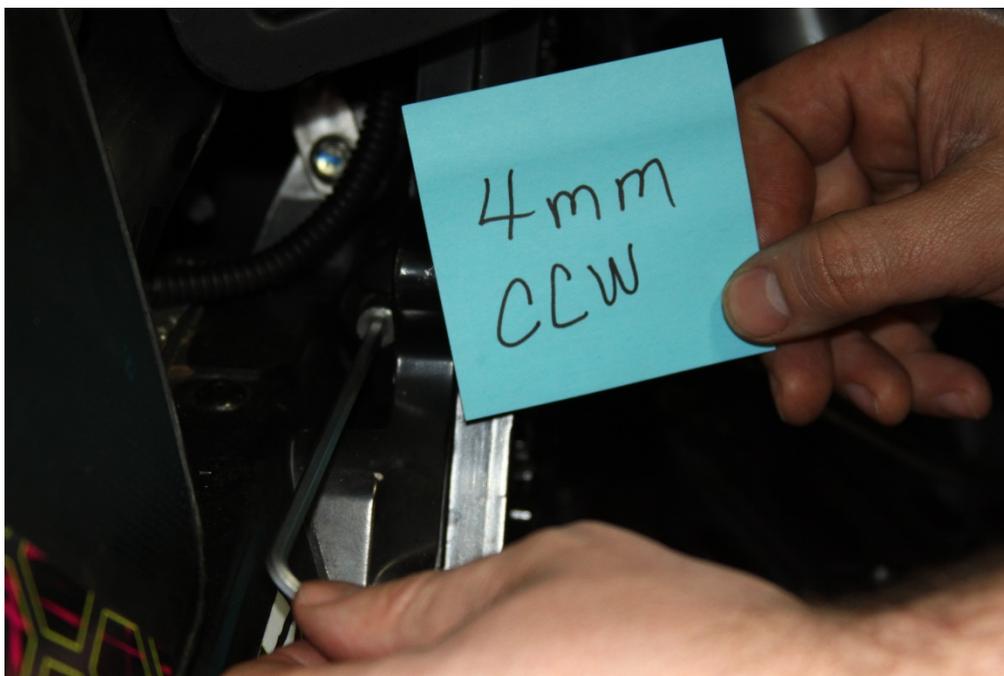
Step 4: You will need a T40 bit to remove the center bolt and also the lower right bolt. Both bolts are a black finish. DO NOT use the T30 bit as it will strip the head. You will need an oil pan to catch the chain case oil when the cover is removed.



Step 5: Unplug the speed sensor connector located on the front side of the chain case so that the cover can be removed. You will also need to remove the 10mm bolts that holds the running board to the chain case. Place a pry bar into the running board and press down so that you can get the cover to come out freely.



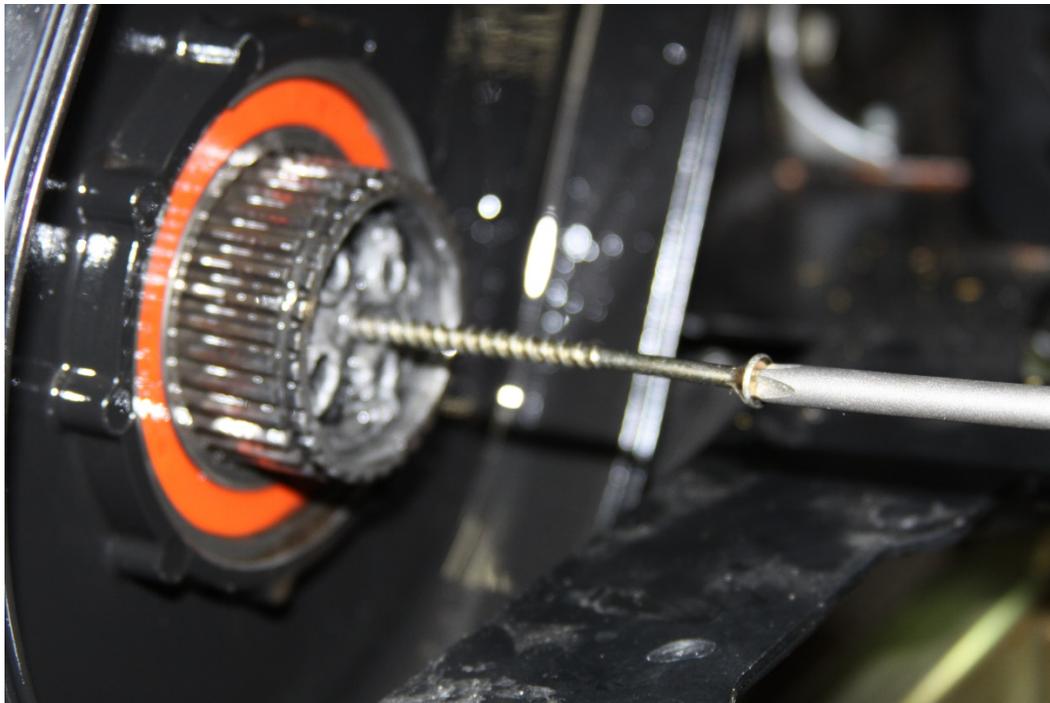
Step 6: You will want to loosen the top bolt that holds the top gear on before loosening the chain tension. You can set the parking brake and then loosen the 15mm bolt. You will need a 4mm allen wrench or T25 bit to loosen the chain tensioner. Remove the R clip before loosening tensioner bolt. Turn the bolt counter clockwise and loosen tensioner bolt until it can be removed. Remove tensioner bolt.



Step 7: You can then remove the top gear and tensioner from the chain case. You will need a snap ring pliers to remove the bottom snap ring from the lower drive shaft.



Step 8: Remove OEM gears and chain, and jackshaft spacer (top shaft). Thoroughly clean all residue and oil from inner chain case face, shafts, etc. using simple green, brake cleaner, etc. You should also remove the oring that is in the outer lip of the chain case.



Step 9: You will need a wood screw for removal of the bottom speed sensor plug. Screw into the center of the plug about 1 inch. You can then use a long handled pliers, moving up and down to pull the plug from the end of the shaft.

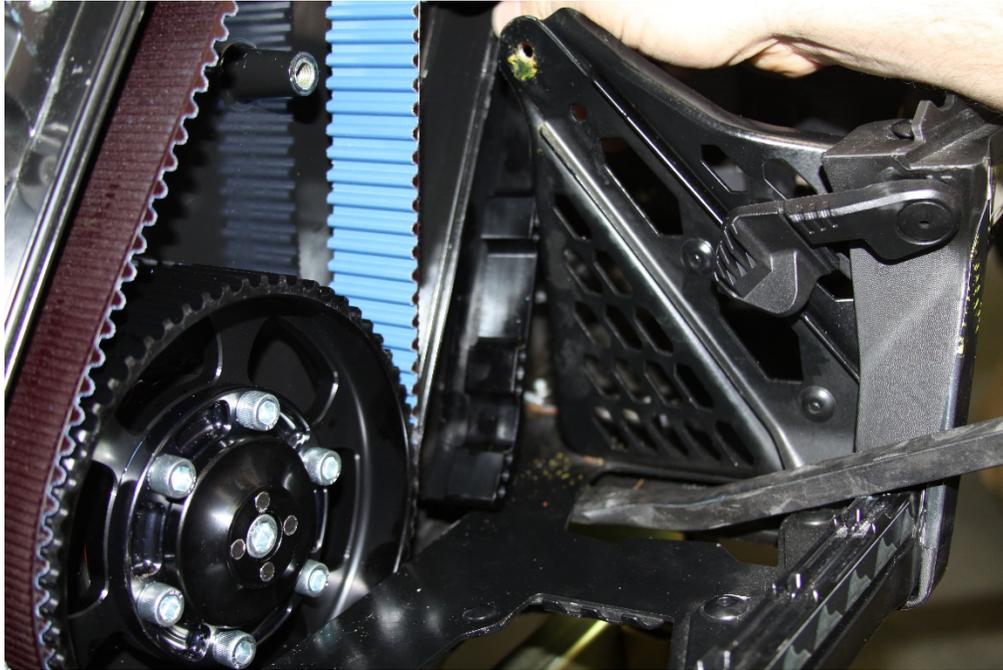


Step 10: Once the chain case is clean you can now place the belt into the chain case.



Step 11: On right hand standoff put a drop of blue Loctite onto 3 screws that hold cover. Place cover on standoff and tighten screws until they contact cover back screws off 1/2 turn these screws will not need to be removed again since the cover is slotted.

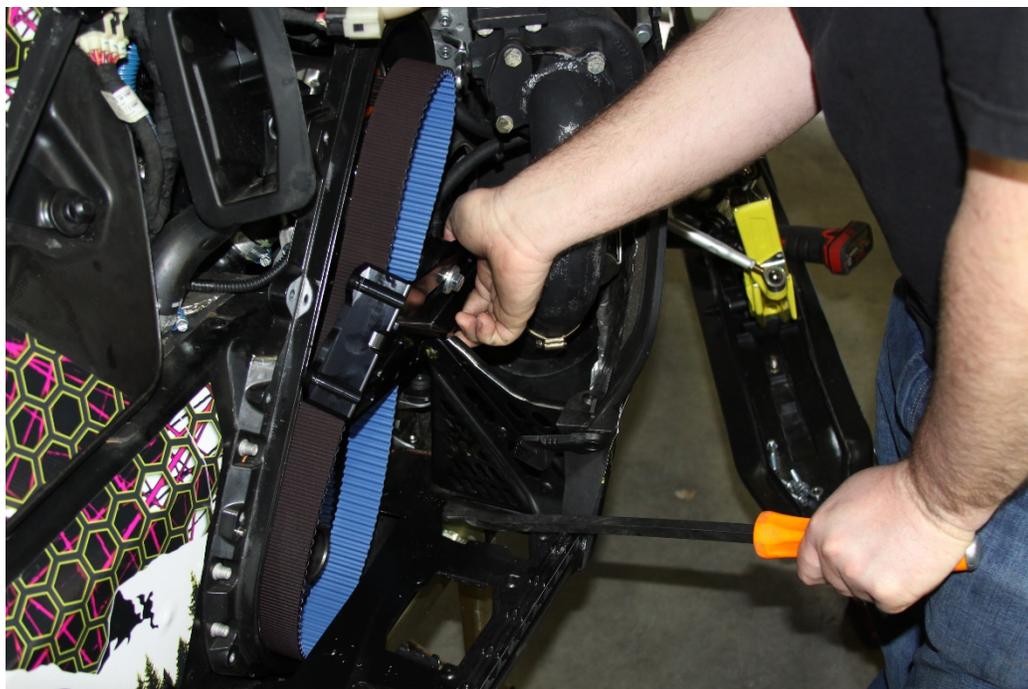
You will need to install the left and right standoffs for the bottom cover. Drop the front stand off piece in from the top and lower it into the chain case. Use the 6mm bolts and aluminum washers with 10mm hex heads. Leave the bolts loose. Use blue Loctite on all the bolts.



Step 12: Install the left hand standoff with the 2 bolts supplied making sure dowls are aligned. Leave the bolts loose until the outside cover is installed.



Step 13: You can now install the tensioner assembly onto the chain case. Use the pry bar to help reinstall into location. Make sure drive belt is on the inside (or left) of the of the idler pulley.

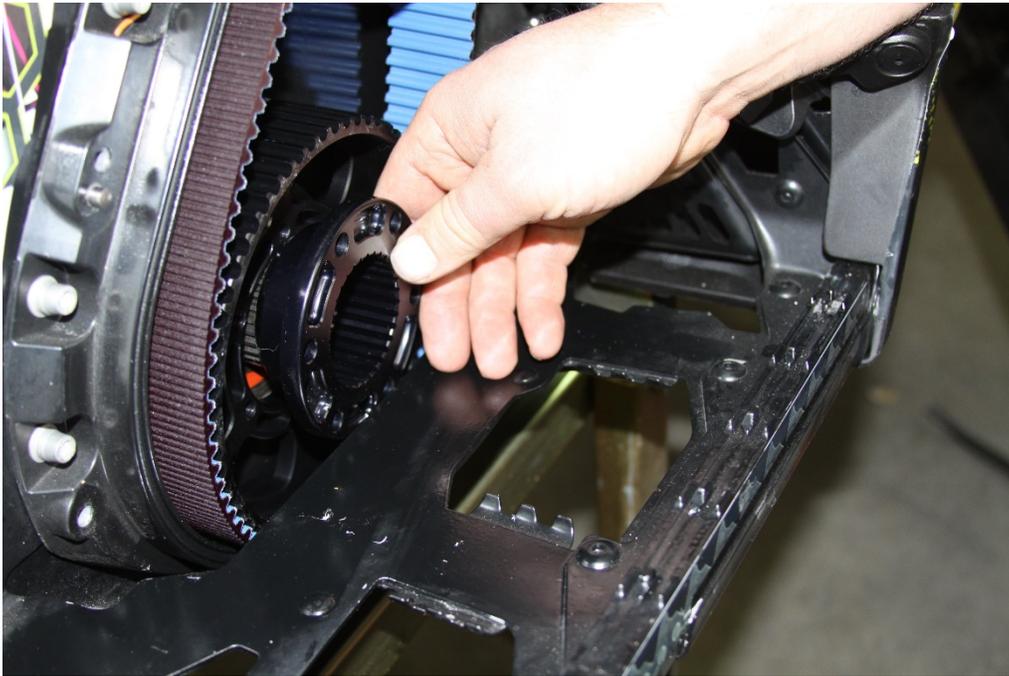


Step 14: You can now install the adjuster screw and thread it into the back tensioner post. The 10mm head bolts on the left get torqued to 10ftlbs and the 13mm head bolt on lower right get torqued to 14 ft lbs. Make sure to use blue Loctite on all bolts. (We do not use the center bolt in middle of tensioner unless for Ski-Doo Stock toe bars.)

Step 15: You can now install the bottom gear onto the drive shaft. The flat side of the gear should face out, and the side with the small step goes towards the chain case. There is engraving on the gear indicating proper placement.



Step 16: The lower hub can now be placed over the end of the drive shaft. If the splines fit a little tight you can use a hot air gun to warm the center hub so it will slip on. The splines should fit snug so that the gear and the shaft don't wear abnormally.



Step 17: You can now install the 6 bolts that hold on the bottom gear. Make sure to Loctite the bolts with blue Loctite and torque the bolts to 25 ft lbs. You will need a ¼ inch allen wrench.



Step 18: You can now install the bottom retainer. The silver retainer will need to be placed into the drive shaft and tapped into place with a 9/16 socket and extension. The retainer will sit about ¼ inch in from end of the drive shaft. **9/16 bolts must be tightened to expand retainer in bottom drive shaft.** Bottom bolt will need to be removed and discarded.

If retainer turns use green bearing Loctite 620 on outside of retainer and reinstall. Let Loctite set up then tighten bolt.



Step 19: The bottom washer and bolt can now be installed, you will need to remove the 9/16 bolt and replace it with the allen bolt supplied. Make sure to use blue Loctite on the threads. Bottom bolt needs to be torqued to 25 ftlbs.



Step 20: The top gear can now be installed with the outer flange and the stock bolt and washer. Top bolt gets torqued to 35 ft lbs, make sure to use blue Loctite. This bolt needs to be tightened after the belt is partially tensioned and the brake is set.



Step 21: You can now adjust the belt to proper tension. Rotate the tensioner screw CW with a 4mm allen wrench or T25 bit. You will want about 1/2-3/4 of an inch of deflection when the sled is cold. You want about 1/8 of an inch of deflection when the sled is hot or at operating temperature. We recommend setting the tension when the sled is hot. The outer 9/16 bolt on the tensioner assembly now needs to be tightened to 5 ft lbs. Make sure to use Loctite. Torque the top gear bolt to 35 ft lbs and double check the tension of the belt. Replace the R clip when the tension is set.

TURBO SLED: On turbo sleds we recommend tensioning belt to 3/4 of an inch of deflection due to extra heat and check every couple of miles for up to ten miles.

Step 22: Install the bottom cover with speed sensor. Thread the speed sensor plug behind the toe kick plate. You can then connect the speed sensor and then install the 3 small bolts to hold the left hand cover onto the standoffs, bolts just need to be snug with allen wrench. You can then tighten the 4-10mm bolts that hold the standoffs to the chain case. Torque bolts to 10 ftlbs. You can now install the 10 mm bolt that holds on the running board to the tensioner assembly. Make sure to use blue Loctite.

Step 23: Use a small zip tie to hold the speed sensor wire away from the muffler.



Step 24: You can now install the muffler, and reinstall the hood.