2018+ Arctic Cat Mountain Cat Packing List

Billings, MT – (406) 534-3478 – www.tkicnc.com

____Top Gear
Ratio: _____

____Spare Gear
Ratio: _____

____Bottom Gear
____Bottom Gear Hub Assembly
____Belt (8MGT-960-36)

____Spare Belt (8MGT-960-36)

____Hardware Kit
____Bottom Cover w/ tensioner assembly & speed sensor

____Oil Tank with Hardware & Brackets

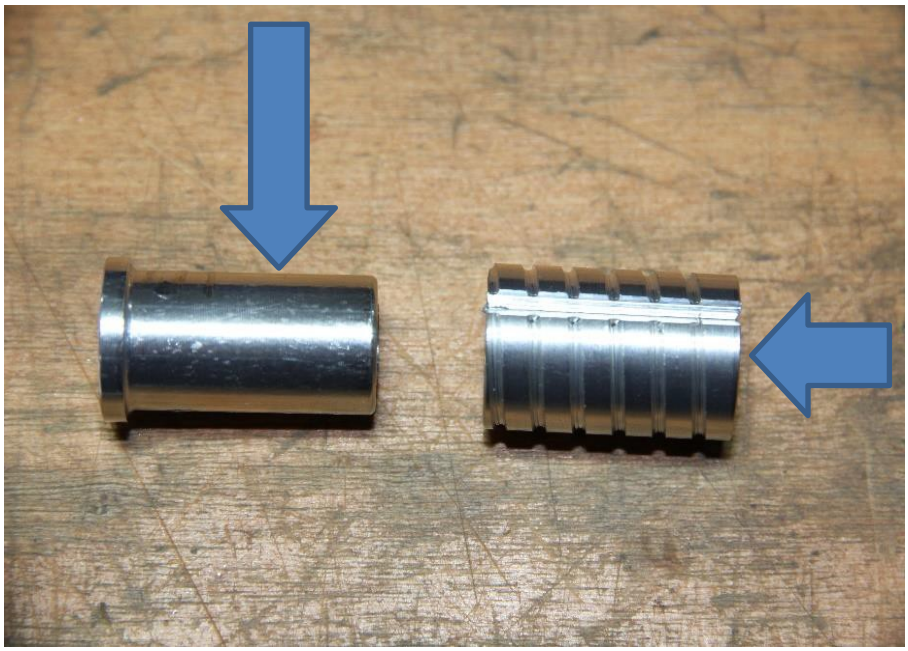
____Instructions

Arctic Cat 2018+ Mountain Cat

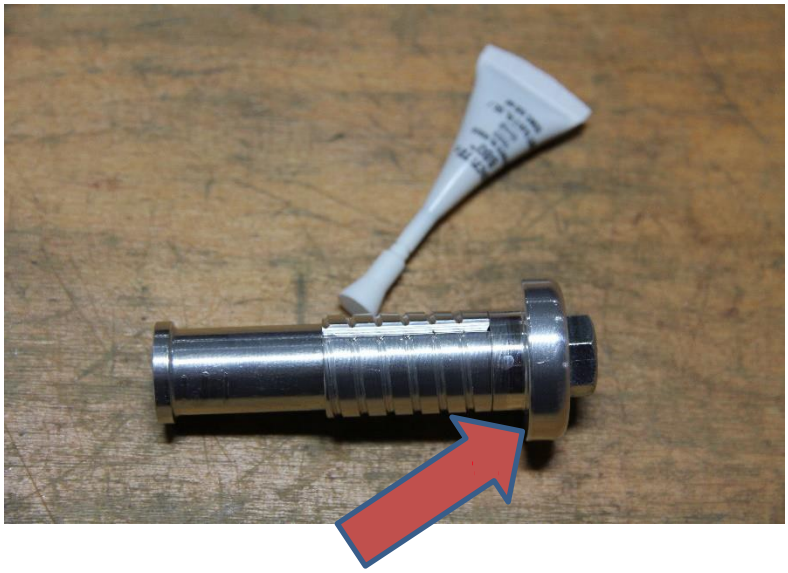
1. Remove the right-hand body panel for access to factory chain case and oil reservoir. (Throttle side) You may also choose to remove the factory exhaust or aftermarket turbo from this area.
2. To remove the oil reservoir (If reservoir hasn't already been removed) the easiest way is to leave the oil tank connected to the chain case and remove the 11 bolts that hold the cover to the case attached to the sled. You will need a T30 torque bit.
3. You will need to remove the electric oil pump from the stock tank. Disconnect the oil pump electrical connector and the speed sensor connector. Remove the 2 torque screws and remove the pump with a couple screw drivers prying lightly on opposite sides.
4. Remove the factory gears, chain, and tensioner.
5. Remove the retaining ring that holds the top bearing into the chain case.
6. You will need to heat the case with a hot air gun. Heat the area around the bearing not the bearing. This is done so the material will grow and the bearing will slide out. You may need to heat the case multiple times until you can get the bearing to slide out freely.

7. Use a couple screw drivers or picks to pry the bearing out. The case will be hot so proceed with caution.

8. After the bearing is removed use a clean towel to clean the area of any oil or debris that may be left.
9. On 2018 sleds there is already a pre- drilled hole in the shaft. You will need to use the supplied insert to hold on the top gear. Remove the plastic plug that is in the end of the shaft. You will need to prep the retainer to be inserted into the top shaft. Remove the from the assembly, you will need to put a light layer of grease on the outside of the threaded boss (left arrow) and the **INSIDE** of the sleeve (right arrow). Note picture with the blue arrows.



10. After coating with grease, reassemble the retainer like below picture. As you are inserting it into the shaft apply the green Loctite to the outside of the sleeve in the spirals. The Loctite is an extra measure to make sure the retainer doesn't move. You may need to tap the retainer in until the shaft bottoms out on the inside of the aluminum washer. Noted with the red arrow.

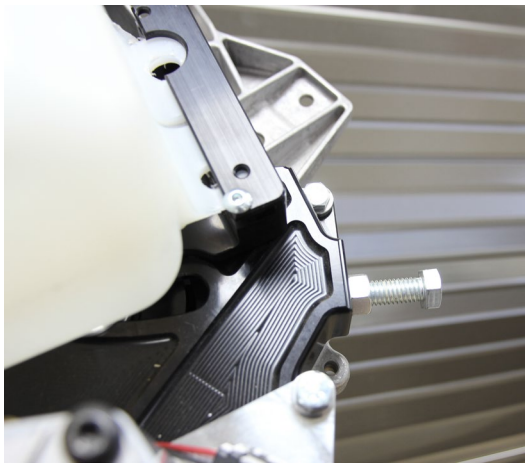


11. Now that the retainer is in place begin to tighten the bolt until the threaded boss is flush with the end of the sleeve. You may need to back off the top bolt to check your progress. When boss is flush you can remove the bolt and the washer, the washer can be discarded, the bolt can be cut down or use a different bolt to retain the top gear. Bolt should be about 1 ½ inches long. Allow the Loctite to setup approximately 30 minutes before torqueing the top bolt to spec.
12. Now you can install the top bearing.
13. You will need to re heat the chain case to insert the new bearing.
14. When the chain case is hot slide the bearing assembly onto the shaft, and into bearing pocket. Install snap ring back into the case groove.
15. You will NOT reuse the factory snap ring and the shim. The gear will press directly against the bearing.
16. Place the top gear with flanges onto the top jack shaft, fasten top gear to shaft with 3/8 bolt with a steel washer under the head of the bolt. You can use one supplied but make sure you cut it to 1 ½ inches or source a new one (torque 20 fps).

17. You will need to repack the bottom bearing with grease before installing a new seal that was supplied in the kit. The seal will snap into place with a little pressure.

18. The belt will be placed over the top gear and placed into the chain case before the next step.
19. Place supplied gear without the center hub into the chain case and over the bottom drive shaft. The center hub then can be placed onto the bottom drive shaft. Install the snap ring onto bottom drive shaft to retain the bottom gear. On 2018 kits you can install the ring with 2 ears over the end of the shaft it will slide into the bottom hub. On 2019+ sled, use your factory snap ring to retain the bottom hub. Install 6 supplied bolts and torque to 20 ft lbs. Make sure to apply red or blue Loctite on the ends of each of the bolt.
20. Install bottom cover assembly in place of the old chain case cover. Make sure belt is pushed to the left when installing the assembly and the tensioner arm is placed over the tapered post in the chain case.
21. You can now start installing the bolts to secure the cover to the chain case attached to the sled. Torque the bolts to 10 ft lbs.

22. Install supplied 3-inch bolt and jam nut into right hand side of case. This will push the tensioner arm and idlers over to tension the belt.



23. To tension the belt, make sure that teeth are properly aligned with the teeth on the gears. Tighten the adjuster screw on the right side of the bottom cover. Belt tension should be ½ inch (¼ inch when sled is hot). When belt is tensioned; tighten the locking nut on the tensioner bolt and the 9/16 bolt on the cover. (To make future tensioning easy you can use a colored marker to make indicator marks on the top edge of the bottom cover, as a quick reference.)
24. To ensure that the belt is properly tensioned, put sled on a track stand, and make sure track is not touching the ground. Rotate the track by hand to make sure the belt and gears are aligned properly. If belt is loose complete step 18 again.
25. This chain case will grow as the sled gets warm. You may need to tension and or check tension multiple times after kit is installed.

Always tension the belt when the sled is up to operating temperature!!!!

26. You will need to install the electric pump into the new supplied tank. Make sure to use Loctite on the bolts. Blue is preferred. Following the instructions below for the installation of the oil tank or watch the video on YouTube:

INSTALL INSTRUCTIONS

Arctic Cat 2018+ Mountain Cat Oil Tank

1. Your oil tank kit will include the tank, hardware, two brackets and an elbow. The contents of the plastic hardware, you will have 8 screws, two brackets and an elbow.

2. Begin by taking the filler neck and stock oil cap from the stock oil tank. You will also want to remove the stock oil level sensor and red grommet that comes with the factory tank. (The oil level sensor/red bushing is a two-piece assembly and will come apart even though they look like one piece.)

3. Using blue Loctite, apply a generous amount to the elbow pipe fitting threads and using a metric wrench, screw the elbow into the hole so that the fitting is facing just past 90 degrees from the logo as shown below.

5. Next you will take the upper bracket, this bracket is made of stainless steel and will mount to the two remaining holes located next to the filler neck. Again, you will start the two remaining screws before tightening all the way.

7. When installing the oil level sensor, we will begin with the red rubber grommet from the oil level sensor into the oil level sensor port on the side of the tank. Next, we will put the oil sensor level into the tank. When inserting the sensor into the tank, we want to make sure that the float drops straight down as shown below.

8. Next, we will take the assembled oil tank and install it onto the sled and connect to sensor harness. The tank is attached to the outside chain case cover and the sled chassis and does not attach to the belt drive as in previous kits.

9. We attach the upper bracket to the upper corner of the chain case as shown below using a 6 mm bolt (not provided). You will not tighten this this screw until after you have completed step 10. You can use the stock chain case screw if you choose.

11. Next, we will take the electronic oil pump into the tank by removing the oil pump from the stock tank (or previous TKI pump housing). Next use a generous amount of blue Loctite in the two offset holes on the bottom of the tank and insert the pump into the bottom of the tank. Ensure your screw holes line up before inserting the tank all the way. The power plug cord will come out by the lower bracket. You can now use the stock screws you took out (6mm) and tighten them so the pump doesn't fall out.

    Note: If your holes don't line up, rotate the pump 180 degrees and it should line up appropriately.

12. In the final installation of the tank, you will want to run the hoses on the outside of the tank (non-belt drive side) and snug the top screw.

13. Line the bottom screw holes up and then attach the two screws with bolt and nut. We prefer a 10 mm bolt as it will line up with the other belt drive bolts used.

14. Reconnect the plugs and speed sensor. Use a hose clamp on the top elbow, refill the tank and your installation is complete.

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