



Arctic Cat King Kit Installation on ATV with manual diff lock

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- 1) Unbox, attach flat bracket to actuator using 3 flat head screws.
- 2) Attach diff lock actuator to bracket using one flat head screw and lock nut, do not over tighten, the diff lock actuator needs to be able to move slightly during installation.
- 3) Raise quad and secure with jack stands and wheel chocks.
- 4) Remove front left wheel.
- 5) Remove electric actuator and diff lock bracket from differential.
- 6) Plug the supplied connector into where the actuator was plugged into.
- 7) Unplug the wire above the diff lock shaft, remove it from the diff lock bracket and plug it back in.
- 8) Remove the plastic panel that is just below your handle bars, on the front of the ATV.
- 9) Remove 2x4 4x4 switch, remove diff lock knob from handlebars.
- 10) Follow wires from 4x4 switch and disconnect at the connector.
- 11) Unscrew the cable from the diff lock lever and remove the cable.
- 12) Pull the diff lock cable out, start down at the differential.
- 13) Install the Tank Lever, first route the cables down to the actuator, do not bend or kink the cables. Route the wire from the Tank Lever and plug it in where your old switch was plugged in, the included wire extension with different connector may be needed depending on your vehicle.
- 14) Install the actuators;
 - a. First make sure the 4x4 cable is routed away from any moving parts or heat from the exhaust. Make sure it is in a good place that will allow the handlebars to turn without pulling on the cable.
 - b. Put one of the small o-rings on 4x4 cable and spin the actuator housing onto the cable. Do not tighten the jam nut yet.
 - c. Put the other small o-ring on actuator shaft so it sits in the groove.
 - d. Push actuator into place making sure to line up the diff lock pin. Rotate diff lock shaft that comes out of the differential so it lines up with the diff lock actuator. The diff lock arm and bracket also moves so it lines up. The diff lock arm should have play in it once the actuator is installed, it should not be tight or jammed in place. The length of the pin that goes into the diff lock shaft is also adjustable, if it is too long or short simply loosen the set screw and adjust the length as needed.
 - e. Install the 3 screws and only tighten two, leave the screw closest to the diff actuator loose for now.
- 15) Adjust cable;
 - a. Unscrew the adjusted so there is no slack in the 2x4 position.

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- b. Shift the Tank Lever into 4x4, the arm in the actuator should move about 1/2". If the shaft coming out of your differential doesn't move rotate your front wheels (by hand) and the shaft will pop out and lock you into 4x4.
- c. Lock the adjuster in place with the jam nut, slide the rubber cover over it.
- 16) Put the large o-ring on the lid, roll it in the opposite direction when putting it on the lid. This will force it to stay in place and not pop off. Screw the lid on and compress the o-ring. Do not overtighten the lid screws.
- 17) Diff Lock Cable Installation;
 - a. Slide the ball of the cable into the diff lock actuator arm, then slide plastic clip holder into place.
 - b. Unscrew one nut, then slide the cable in diff actuator bracket, tighten nuts and keep the cable from touching the 4x4 actuator.
 - c. Rotate the diff lock knob on the Tank Lever to the locked position. NEVER FORCE THE KNOB, If it will not go into diff lock make sure the diff lock cable adjuster is closed (no threads showing) and also rotate the front wheel while rotating the knob.
 - d. At the diff lock actuator, move the lever by, squeeze it in the direction the cable pulls it. If it won't move rotate the wheel with your other hand, this will get the gears inside the diff to line up and slide together allowing diff lock to be engaged. The shaft that comes out of the differential only moves about 1/8" to lock into diff lock, it will not move more than 0.20", do not try to force it. Take note of how far it moves and adjust the cable so it is pulling it that far. Lock the cable adjuster in place, tighten the screw holding the bracket to the diff and make sure the diff actuator still moves freely.
- 18) Secure the pull cables and wires with cable ties. Make sure you can still turn your handlebars without pulling on the cables.
- 19) Put the plastic back on the front, put the wheel back on, go riding!