EPIperformance.com

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SUZUKI ATV CLUTCH KIT INSTRUCTIONS

Model: **750 KING QUAD AXi 4X4 2008-2009 (STOCK TIRES)** **Part #**: **WE436349**

Kits designed for Stock motor and stock exhaust at 0-3000 feet elevation.

ATV's can be dangerous. **EPI** has no control over the use of any part. **EPI** expects the customer to exercise good judgment as to the proper selection, installation, use and maintenance of any part. **EPI** assumes no responsibility for damage or injury of any kind because of misuse, improper installation and improper application of any parts in any way by any person. Contact your local dealer to schedule installation of this clutch kit if you are not a qualified ATV mechanic.

This product is NOT to be installed on any ATV that will be used by any person under the age of 16.

Tools needed to install clutch kit
- Metric socket set
- Torque wrench
- Spring tool or needle nose pliers
- clutch compression tool or shop press (EPI part # CCT510)
- 1/2" impact wrench
- Suzuki oil
- Punch or spanner wrench
- Flat tip screwdriver
- Clutch shoe remover (Suzuki part # 09920-33540)
- Sliding shaft (Suzuki part # 09930-30104)

Gaskets needed
- Order gaskets from you local dealer before you install clutch kit
- Internal clutch housing gasket - part # 11482-31G00

Engagement
1,900 RPMs

1. Remove the key from ignition. Remove the right side foot rest including the metal support bracket. Remove the clutch cover. Note the length of the bolts and their location.

2. Once the clutch cover is removed you should be able to see both clutches. Remove the aluminum clutch guard. Remove the bolt that holds the primary clutch (front clutch) on. Pull the clutch off the machine and place on a flat clean surface. Slide the inside plate up and out of the clutch. This should reveal eight clutch rollers.

3. Remove one of the stock rollers and press the center weight out of the roller housing. Press in the new weights, supplied in the kit into the roller housings and place the roller back in the clutch. The weights can only be pushed into the housings one direction, make sure you are pushing it out the right way or damage can occur. Repeat this step for the remaining rollers. ***NOTE: If your kit has two different weights, be sure to place them directly across from each other (or every other one). This keeps the clutch in balance***. Make sure you have all eight of the rollers in the proper place and position. Install the inside plate making sure all the rollers are in the proper location. Place clutch out of the way and start working on the secondary clutch.

4. Remove the bolt that holds the secondary clutch on. Remove the clutch and belt from the machine. Using a spanner wrench or punch and a hammer loosen the large nut holding the secondary spring retainer. **ONLY TURN NUT 1/2 TURN, DO NOT TOTALLY REMOVE NUT. The nut and retainer are under extreme pressure and can cause damage or injury if not removed properly.** Using the compression tool (EPI part #CCT510) carefully compress the spring enough to take the pressure off the nut. Remove the nut and slowly release the pressure off the spring. Remove the spring.

5. Place the EPI spring in the clutch. Place the spring retainer on top of the spring. Set the nut on top of spring retainer, using the compression tool (EPI part #CCT510) carefully compress the spring until the retainer is at the top of the shaft. Rotate the spring retainer so the flat spots line up properly to fully compress the spring. Once the retainer is in place tighten the nut, remove the clutch from the press and torque the nut to 72.5 ft/lbs.

6. Remove the oil drain plug from the motor. If you can, carefully drain the oil into a clean container. You should be able to reuse the oil.

7. Remove the rest of the primary clutch off of the machine. Loosen and remove the front and rear vent lines off of the plastic housing cover. Remove the bolts holding the aluminum clutch housing; keep track of each bolt length and location. Once all the bolts have been removed slowly pull the cover towards you being careful not to damage the gasket. If the gasket is damaged you will need to install a new one. Some oil may leak from the housing when first removed, this is normal. **Note: There is a directional bearing inside the clutch housing that could fall while removing the housing**.

8. Remove the nut (left handed threads usually a 24mm) holding the internal clutch on. Slide the clutch basket off; keep track of which side faces out. Place clutch on a clean work area. Push down slightly on the outside cover and remove the e-clips (c-clamp or large pliers work well). Keeping track of which way they come off remove the round metal plates. This will allow you to see and change the complete spring. Using a spring tool or needle nose pliers remove the stock springs. You might want to leave one stock spring as a reference. Install the EPI springs by inserting the spring into the outer edge first. Using a spring tool or pliers pull on the spring and insert the end into the hole. If you have trouble installing the springs try rotating them. Make sure all the springs are installed correctly and the outside clutch arms are sitting flat. Install the metal plates and the e-clips. You will have to push down on the outside plate to install the e-clips. Slide the clutch basket back onto the machine. Install the nut and torque it to 94 ft/lbs, if it was peened over be sure to peen it back to lock it into position. If the directional bearing came out, replace the bearing on the inner Sprague clutch. The bearing is stamped indicating which side faces out. Make sure to put the bearing on making sure the stamping is facing out, if it did not come out when removing the housing it should be good. Install the gasket and install the aluminum housing. Torque the housing bolts to 7.2 ft/lbs.

9. Bolt on the clutch housing and any other brackets that were removed. Push the back half of the primary clutch back onto the shaft. Put the secondary clutch on; make sure it slides on all the way. Torque the nut to 83 ft/lbs. Thread one of the clutch cover bolts into one of the threaded holes on the side of the secondary clutch. This should spread the clutch sheaves apart. Put the belt in the clutch, there is normally an arrow on the belt that should face towards the rear of the machine.

10. Grab the primary clutch, push the inner part down with your thumbs and hold down as you pick up the clutch. While holding the inner part of the clutch from moving, slide the primary clutch onto the shaft. This should keep the rollers in place. Keep it pushed in until you can install the bolt and spacer. The clutch should slide all the way back easily. If the clutch doesn't seem to go on far enough to tighten the bolt properly (it should slide all the way on so that the splines on the shaft are showing approximately 1/16 of an inch) you might have a roller out of place or the belt might be blocking it. If needed, move the belt up and down to see if the clutch will slide on farther. If the rollers seem out of place take the clutch apart and check roller location. Install the bolt and torque it to 85 ft/lbs. Remove the bolt that was threaded into the secondary clutch.

11. Assemble the clutch cover and gasket. Install the metal foot rest bracket and plastic foot rest.

12. Install oil drain plug. Refill your engine oil to the proper lever according to owners manual. You can reuse your oil if it was clean and was drained into a clean container. Only use manufactures recommended oil for proper engine and clutch operation.

13. Go out and ride your machine. If the performance doesn't seem right double check to make sure everything has been done properly.

14. **EPI** is constantly testing our products. Sometimes there is a need to contact the user with new technical information. To ensure that you are receiving this information visit our web site **EPIperformance.com** to register your clutch kit.

NOTICE: Even with this clutch kit, you should be advised that using substantial throttle when the tires are not able to spin can cause the belt to slip and ***damage may occur***. **EPI** recommends that the transmission be shifted into low range when high load, slower speed situations are encountered. **EPI** is ***not responsible*** for any damage to the drive belt or any other original equipment component.