



## INSTALLATION AND TUNING GUIDE

### FUSION KAWSAKI H2 SECONDARY CLUTCH

**PART NUMBER(s):** *FUSION H2 SEC*

#### TOOLS NEEDED

- 1/2" Drive Impact Gun
- 19mm - 1/2" Drive Impact Socket
- Torque Wrench (100Ft/Lbs)
- Anti seize or moly grease
- Vorhees vise or long 3/8 round bar to hold clutch while torquing

The following is required for secondary disassembly only

- KWI Helix twist tool
- KWI Threaded rod



#### ESTIMATED INSTALL TIME

45 MINUTES

**We are not responsible for any damage caused during installation. Follow these steps carefully to prevent damaging your clutch.**

#### **IMPORTANT NOTES- PLEASE READ**

- 1. Your clutch is a balanced assembly when you receive it. All parts are individually balanced. The balancing is done with the balance screws on the back of the sheave. There MAY or MAY NOT be screws installed. DO NOT REMOVE THE BALANCE SCREWS FOR ANY REASON.**

## Installation Steps:

### 1. Remove Belt Cover:

- Remove the bolts securing the CVT cover. Lift the cover off and set it aside. To get the cover out its easiest to push the vehicle in neutral backwards about 10 feet to spread the rear end apart. Then remove the cover by moving the cover forward then outward and up towards the drivers compartment.

### 2. Remove Secondary Clutch and CVT Belt:

- Using the proper tool, remove your belt.
- **CAUTION THE SECONDARY BOLT HAS LEFT HAND THREADS!!** Use a 19mm socket to safely remove the Secondary clutch bolt and slide the secondary clutch from the gearbox shaft.

### 3. Prepare gearbox shaft:

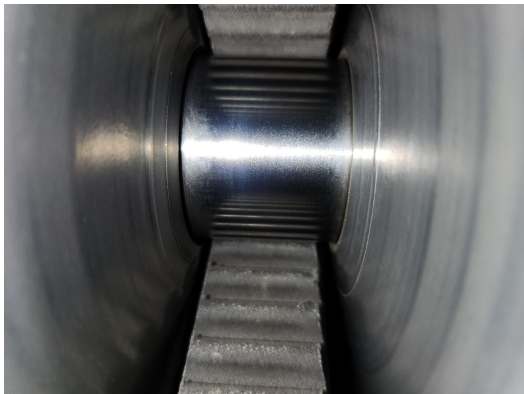
- **Carefully wind the float spring on the shaft- SEE INSTALL VIDEO FOR PROPER TECHNIQUE**
- **Lubricate gearbox shaft and splines with a light coat of MOLY or RED AND TACKY GREASE. This is to ensure the clutch floats smoothly.**

### 4. Install Secondary clutch, CVT Belt:

- Slide your new FUSION secondary clutch on the shaft making sure splines engage and its fully seated.
- Install your KWI KWIK LOC billet spacer and secure with the supplied retaining bolt. Torque Clutch Retaining Bolt to: 100 ft-lbs. Make sure the clutch slides freely in and out on the shaft.
- Slide your KWI KWIK LOC belt tool into the slot with the rollers facing the Groovix and lift the handle to open the secondary clutch.
- Install a NEW drive belt and remove the KWIK LOC belt tool.
- Rotate the secondary several times by hand to tension belt.

### 5. Check Belt centering:

- **\*\*This procedure verifies the car shifts smoothly forward, neutral and reverse. The goal is to make sure the secondary clutch does not spin at idle.**
- Start car and rev it just until the belt starts to rotate a bit. Shut the car off. Using a camera phone look at the primary bearing between the belt and see if it is centered. See photo on the left below. If needed install one or more included shims on the bolt to move the belt away from the motor. See photo on the right below

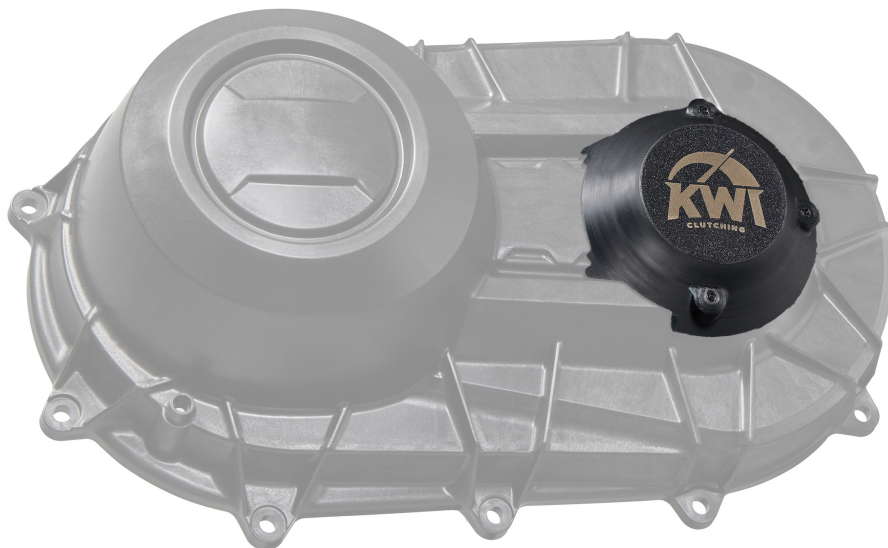


Belt is only riding on the bearing and not touching either sheave. Its not necessary to be perfectly centered- just cant touch either sheave... or the secondary may spin quickly causing hard shifting F-N-R



**Final Steps:**

6. **Install clutch cover cap**
  - Cut a hole in the Kawasaki cover as shown in photo.
  - Place the KWI cap on the cover and drill thru the screw holes down into the cover using a 1/16" drill.
  - Remove cap, install red magnets in cover and blue magnets on housing with supplied screws- snap cover in place.
7. **Re-Install clutch cover:**
  - Put the clutch cover back on using factory screws.
8. **Test Drive:**
  - Drive the vehicle and check for proper operation and full throttle RPM, adjust if necessary.



**Secondary disassembly and assembly:**

- Use a compression tool such as the KWI Threaded Rod thru the secondary clutch Inner sheave and helix assy to hold the spring pressure.
- Remove the 3 helix bolts.
- Use the KWI Helix Twist Tool to hold the twisted helix of the rollers and then carefully unscrew the compression tool to slowly relax the spring pressure.
- Reassemble the secondary clutch by twisting helix past the rollers and compress using the compression tool. Install the Helix bolts with blue Loc-Tite and torque to 40 ft-lbs.

The spring twist chart is under the setup chart- if you need to adjust the secondary heres the deal

- The goal is to run with between 35 and 60 degrees of twist.
- The more the degrees of twist the higher the RPM will go and the quicker the clutch will backshift BUT the belt temp will go up and the belt stress will be MUCH higher.

FUSION H2 SECONDARY SETUP CHART			
TUNE	Secondary spring / Helix	Belt Recommendation	Full throttle RPM at 55mph
STOCK	DR3 GROOVIX- KWI DARK BLUE/PINK secondary spring Hole #3	KWI FUSION 52R4740 or Kawasaki KRX OEM BELT = HIGH SPEED BELT  POLARIS 5211122 BELT = 15% gear reduction ROCK CRAWLER BELT (USED WITH FUSION SECONDARY ONLY)	8800 RPM +/- 100 RPM )
E85/RACE GAS			
Race car 35's			

KWI CLUTCHING FUSION SECONDARY HELIX TWIST	
KWI CLUTCHING GROOVIX	
BLACK/GREEN AND DK BLUE/PK SEC SPRG	
Hole (CCW)	Degrees
1	60
2	5
3	35

**PARTS INCLUDED**

PART DESCRIPTION	QTY	OEM PART #	OUR PART #
FUSION H2 SECONDARY CLUTCH	1	—	-
SECONDARY CLUTCH BOLT	1	—	-
KWIK LOC BILLET SPACER	1	—	-
FLOAT SHIMS	3	—	-
CLUTCH COVER CAP KIT	1	—	-

**LIABILITY STATEMENT**

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