



INSTALLATION AND TUNING GUIDE

CAN AM QRSX PRIMARY CLUTCH

PART NUMBER(s): QRSX

**WE ARE NOT RESPONSIBLE FOR ANY DAMAGES.
BE VERY CAREFUL TO NOT DAMAGE YOUR CLUTCH
DURING THIS PROCESS.**

TOOLS NEEDED

- T30 TORX
- KWI Splitter plate
- Primary clutch puller
- 19mm 1/2" drive impact socket
- 5/16 or 8mm Socket
- 17mm socket
- Torque Wrench
- Clutch Belt removal tool
- Blue Locktite

ESTIMATED INSTALL TIME

75 MINUTES

Primary clutch removal and installation

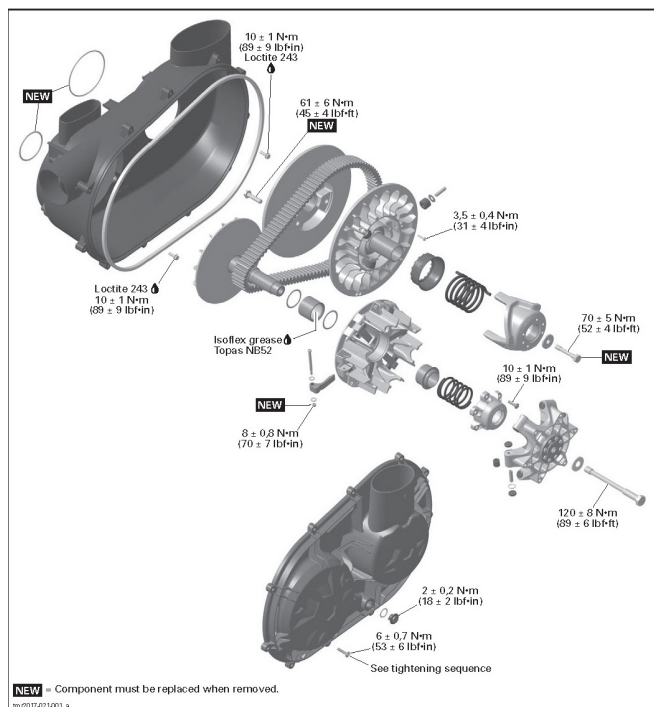
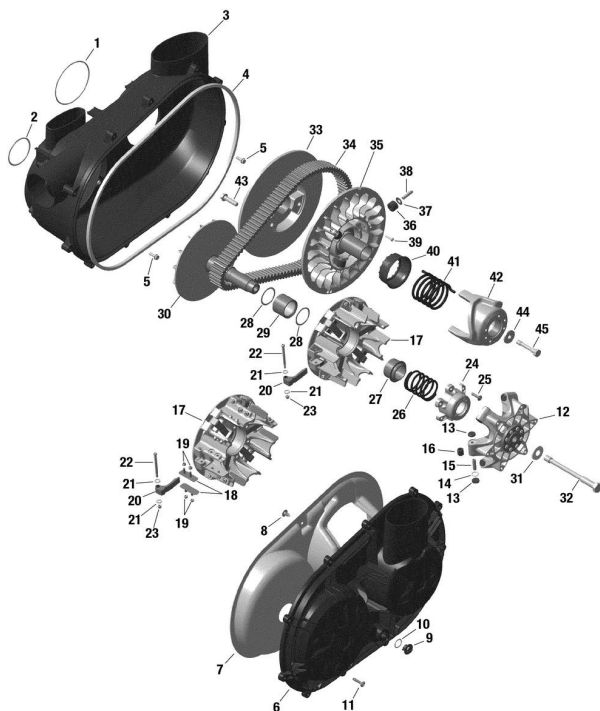
Reference diagrams on page 2



NOTE: No component marking is required before disassembly.

Primary clutch replacement

- 1) Remove belt box cover. (T30 Torx)
- 2) Remove CVT belt. (Clutch Belt removal tool)
- 3) Remove primary clutch bolt. (22mm - 1/2" Drive Impact Socket)
- 4) Thread primary clutch puller all the way in by hand and tighten with impact wrench until the primary clutch pops off of the shaft. (KWI PUL1 clutch puller or equivalent)
- 5) Remove Primary clutch from vehicle.
- 6) Properly calibrate the clutch weights with magnets in accordance with the KWI Setup Chart for your vehicle.
- 7) Clean crankshaft and KWI QRSX taper with brake cleaner or acetone to remove all oil, grease and dust.
- 8) Install your new KWI QRSX primary clutch, secure with primary clutch bolt and torque to bolt manufacturer specs. (Torque Wrench)



THE FOLLOWING IS ONLY REQUIRED IF YOU NEED TO INSTALL A GROOVIX OR CHANGE THE SECONDARY SPRING

Removing and installing secondary clutch

- 1) Remove belt box cover. (T30 Torx)
- 2) Remove CVT belt. (Clutch Belt removal tool)
- 3) Remove secondary clutch bolt. (17mm or 7/8" - 1/2" Drive Socket)
- 4) Secondary clutch will slide off shaft.
- 5) (KWI Float Mod) Reinstall secondary clutch in accordance with the KWI Fload Mod Instructions.
- 6) (No KWI Float Mod) Align splines and slide secondary clutch on shaft.
- 7) Secure secondary clutch on crankshaft by torquing the secondary clutch bolt to bolt manufacturer specs.(17mm -1/2" Drive Socket)(Torque Wrench) Use a long 1/4" or 3/8" extension thru the helix and spring to hold secondary while torquing.
- 8) Reinstall CVT belt and belt box cover.

Secondary clutch disassembly and reassembly

- 1) Remove secondary clutch. (See "Removing and installing secondary clutch")
- 2) Clamp welded nut end of threaded rod in a suitable vise. Place puller cup (without puller cup bolt) over
- 3) threaded rod.
- 4) Place secondary clutch over threaded rod with helix facing down Turn nut in to compress helix slightly and take tension off of helix bolts. Remove 3 helix bolts.
- 5) While holding sheaves from turning (by hand) and helix from turning (with a long 1/4 or 3/8 extension inserted thru helix and spring) turn nut out to relax spring tension. Disassemble clutch as required. (22mm or 7/8" - Wrench)
- 6) Install the secondary movable and fixed sheaves together on the threaded rod with the helix
- 7) Install the OEM helix or KWI GROOVIX with the spring clocked as specified in the Tuning Chart on Page 3. The GROOVIX Hole #1 is marked by a dot then count up in a clockwise direction per the photo. The GROOVIX helix uses equally spaced holes and does not correlate to the OEM holes.
- 8) Install the large compression washer then nut on the threaded rod until it starts to compress the spring.
- 9) Using a KWI Helix twist tool or a long 1/4 or 3/8 extension inserted thru helix and spring. Hold the sheaves from turning while you rotate the helix CLOCKWISE until the legs clear the rollers. Tighten the threaded rod nut and compress the helix spring.
- 10) Install the 3 helix bolts using BLUE Locktite and torque to spec.

MAGNET RPM ADJUSTMENT

This requires the cam arms be removed from the clutch. The weight of the added magnets affects RPM. The more magnets that are installed the lower the RPMS will be. 2 magnets will change full throttle RPM approx 75 RPM

- 1) Remove the cam arms from the clutch. (SEE "Primary clutch disassembly and reassembly" ABOVE)
- 2) Reinstall the cam arms and tighten to spec.

KWI DX3 clutch kit

There are 2 holes in the AO cam arms to place magnets- you can place magnets in either hole but magnets MUST be distributed so that the clutch is balanced. Make sure opposing arms have identical magnet configurations to maintain clutch balance. Do not overfill magnet slots (**FLUSH IS FULL**)!

Model / Tune / Tire Size	# of Magnets per weight	Primary spring	Secondary spring / Helix / hole	Full throttle RPM at 55mph
1000 / Stock / 28"	3	KWI Blue/ Orange	KWI Black/Green secondary spring with stock helix in hole #4 or optional KWI DR3 GROOVIX helix in hole #2	6700 RPM +/- 100 RPM
1000 / Stock / 32"	1		KWI Black/Green secondary spring with stock helix in hole #6 or optional KWI DR3 GROOVIX helix in hole #5	
1000 / Stock / 35"	0		KWI Black/Green secondary spring with stock helix in hole #6 or optional KWI DR3 GROOVIX helix in hole #5	
1000 / 93 Octane Tune / 28"	4		KWI Black/Green secondary spring with stock helix in hole #4 or optional KWI DR3 GROOVIX helix in hole #2	
1000 / 93 Octane Tune / 32"	2		KWI Black/Green secondary spring with stock helix in hole #6 or optional KWI DR3 GROOVIX helix in hole #5	
1000 / 93 Octane Tune / 35"	0		KWI Black/Green secondary spring with stock helix in hole #6 or optional KWI DR3 GROOVIX helix in hole #5	

CAN AM QRSX PRIMARY CLUTCH PARTS INCLUDED

	PART DESCRIPTION	QTY	OEM PART #	OUR PART #
	AO RC ADJUSTABLE CAM ARM	6	—	AO RC
	BLUE / ORANGE PRIMARY SPRING	1	—	BLU/ORG
	MAGNET PACK	1	—	MAGNETS

LIABILITY STATEMENT

As defined by the Magnuson-Moss warranty Act. Do not install any performance parts or services unless you have the technical ability to properly set-up the entire machine to compensate for the installation of those parts. The necessary work and expertise needed to install different product varies. Instructions, where provided, are given to assist in installation only; they are not a substitute for mechanical experience in setting up racing vehicles. References to performance gains, reliability, ease of installation, etc. are based on our and outside customer's experiences. This is not a guarantee of similar performance in every installation. While we sell proven products, in the end it's up to the individual to make the most of the product. Kris Werth Inc. d.b.a. KWI Clutching or its associated corporations are not responsible for any personal or property damages caused by this product. Kris Werth Inc. d.b.a. KWI Clutching or its associated corporations assumes no responsibility for damage or injury of any kind because of misuse, improper installation or improper application of any parts in anyway, by any person. Contact your local dealer to schedule installation of this kit if you are not a qualified ATV or UTV mechanic. USE OF PRODUCTS. BUYER SHALL USE, AND REQUIRE ITS EMPLOYEES, CONTRACTORS, AND AGENTS TO USE, ALL AVAILABLE SAFETY PRECAUTIONS, IN ADDITION TO ANY SPECIFICALLY SET FORTH IN ANY MANUALS, MATERIAL SAFETY DATA SHEETS, TECHNICAL DATA SHEETS, INSTRUCTION SHEETS, IF ANY, FURNISHED BY SELLER (OR AVAILABLE FROM RAW MATERIAL SUPPLIERS) RELATING TO SELLER'S PRODUCTS. IF BUYER DOES NOT RECEIVE ANY REQUIRED MATERIAL SAFETY DATA SHEETS FOR ANY PRODUCT FROM SELLER, BUYER WILL REQUEST THEM FROM SELLER. IF BUYER FAILS TO STRICTLY OBSERVE EACH AND EVERY ONE OF THE OBLIGATIONS SET FORTH IN THIS SECTION 22 OR IF BUYER'S USE OF ANY OF SELLER'S PRODUCTS IS IN VIOLATION OF ANY STANDARD OR RULE OF THE AMERICAN NATIONAL STANDARDS INSTITUTE OR OCCUPATIONAL HEALTH AND SAFETY ACT, OR OTHER APPLICABLE WORKPLACE LAW, REGULATION, OR STANDARD, BUYER WILL INDEMNIFY, DEFEND, AND HOLD HARMLESS SELLER AND SELLER AND ITS EMPLOYEES, OFFICERS, DIRECTORS, AGENTS, AFFILIATES, SUCCESSORS AND ASSIGNS FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS, DAMAGES, ACTIONS, AND CAUSES OF ACTION, AS WELL AS ANY AND ALL LIABILITY, LOSS, OR EXPENSE OF ANY KIND, INCLUDING REASONABLE ATTORNEYS' FEES ARISING FROM, CONNECTED WITH OR IN ANY WAY PERTAINING TO ANY SUCH FAILURE BY BUYER. NOTIFICATION. BUYER SHALL NOTIFY SELLER PROMPTLY, AND IN ANY EVENT WITHIN 30 DAYS, AFTER ANY ACCIDENT OR FAILURE INVOLVING SELLER'S PRODUCTS THAT RESULTS IN PERSONAL INJURY OR DAMAGE TO PROPERTY AND SHALL COOPERATE FULLY WITH SELLER IN INVESTIGATING AND DETERMINING CAUSES OF SUCH ACCIDENT OR FAILURE. ATTORNEYS' FEES AND COSTS. BUYER WILL PAY SELLER'S REASONABLE ATTORNEYS' FEES AND OTHER COSTS AND EXPENSES FOR ANY LEGAL OR EQUITABLE ACTION UNDERTAKEN BY SELLER TO ENFORCE THESE TERMS OR THE PROVISIONS OF ANY SUPPLY AGREEMENT.