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Starting Line Products, Inc.

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RZR 900 SLP Clutch Kit Installation Instructions

Clutch Removal

A-1. Jack up the rear of the RZR until the driver side rear suspension is at full droop and the rear tire is off the ground. Place a jack stand under the frame, making sure the RZR is securely positioned on the jack stand and remove jack.

A-2. Remove driver side rear wheel.

A-3. Remove the lower bolt holding the driver side rear shock. Pull back on lower portion of shock to dislodge it from the trailing arm while retaining the two shock spacers and two O-rings that may fall off the shock. Let the shock hang to the outside of the trailing arm. (Refer to illustration #1)

A-4. Remove all clutch cover retaining screws and remove clutch cover from the RZR.

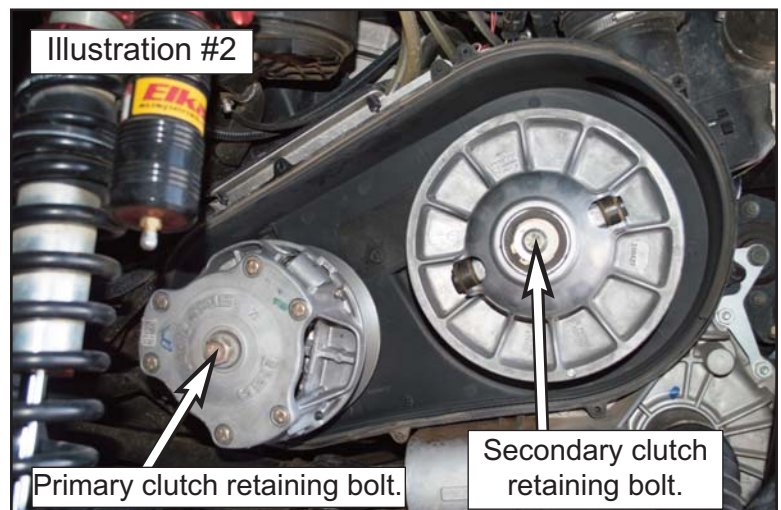
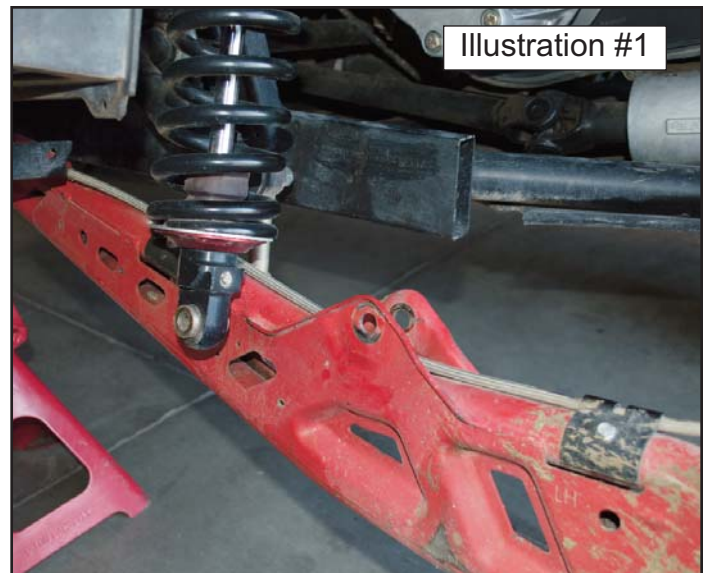
A-5. Clean out the clutches and clutch cover with compressed air.

A-6. Remove the belt from the RZR. Refer to "Belt Removal" for more information.

A-7. Remove secondary clutch retaining bolt. (Refer to illustration #2) Having the RZR in gear will help with bolt removal. Slide secondary clutch off splined shaft and remove from RZR.

A-8. Remove primary clutch retaining bolt. (Refer to illustration #2) A clutch holding tool (SLP #20-202) is recommended to hold the primary clutch stationary.

A-9. Thread a primary clutch puller (SLP #20-136) into the center of the primary clutch. Hold the primary clutch using a clutch holding tool (SLP #20-202) and tighten the clutch puller with a breaker bar



until the clutch pops loose from the tapered shaft. (Refer to illustration #3) Remove clutch from RZR and remove clutch puller from clutch.

Hint: A small amount of grease on the clutch puller threads and end that pushes on the crankshaft will help in the primary clutch removal process.

Primary Clutch Disassembly/Assembly

B-1. Mark the cap, spider, movable sheave and stationary sheave in relation to each other on the primary clutch. (Refer to illustration #4)

B-2. Compress the primary clutch by hand or with a clutch press tool (SLP #20-204) and loosen the six cap bolts until the cap can be removed from the clutch and set aside. (Do not remove bolts from the holes in the cap)

B-3. Remove stock primary spring. This spring will not be re-used.

B-4. Remove pins holding weights in the primary clutch. Inspect pins and replace if they are worn.

B-5. Remove weights from clutch. These stock weights will not be re-used.

B-6. Check movement of cap and movable sheave for sticky spots which could be caused from a bad bushing. Check rollers visually and by feel to make sure they roll freely and do not show any wear. Check bearing on main shaft to verify that it rolls freely and shows no signs of excess heat (blueing). Check the clutch sheaves for excessive wear and replace clutch if hairline cracks are found. Specialized clutch rebuild tools and replacement parts are available from SLP or clutches can be sent directly to SLP for clutch rebuild services. Inquire for more information.

B-7. Using SLP setup sheet, install recommended tuning fasteners and washers into 900 Rooster weights. (See illustration #5) Always use the supplied thread locker on the fasteners and make sure they are seated to ensure they will not come loose in operation and potentially damage your drive clutch. Do not install more than one thick and one thin washer on the green 2.5g or silver 0.8g fasteners. If using the red 3.5g fastener, you can use up to two thick washers and one thin washer for a total of 7 grams per hole. **The red 3.5g fastener MUST be installed with washers.** Torque Rooster weight fasteners to **20-25 in/lbs (2.26-2.82 Nm)**.



Illustration #3

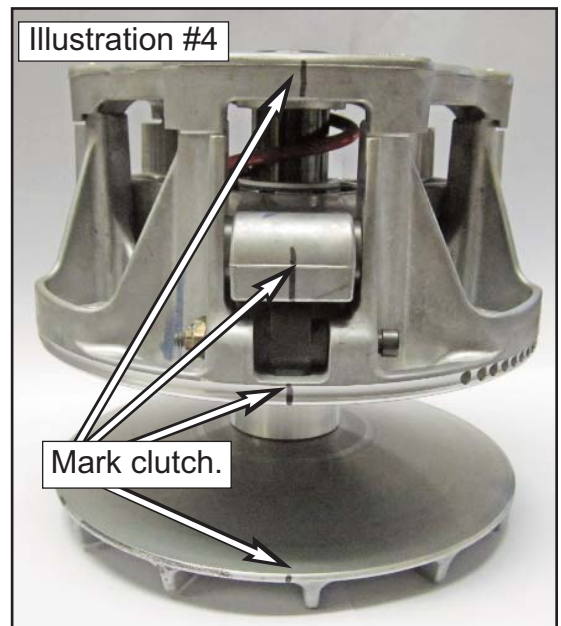


Illustration #4

Mark clutch.

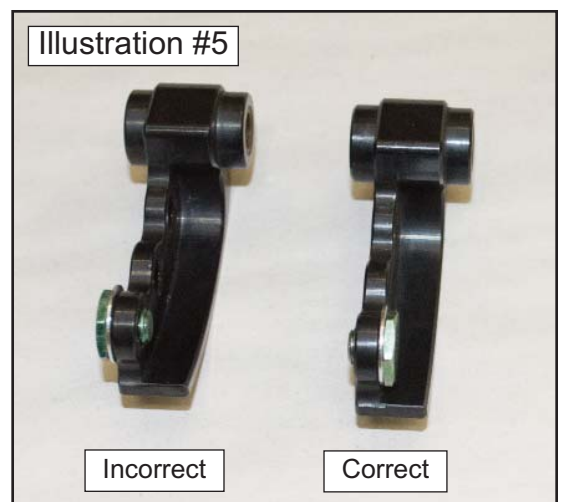


Illustration #5

Incorrect

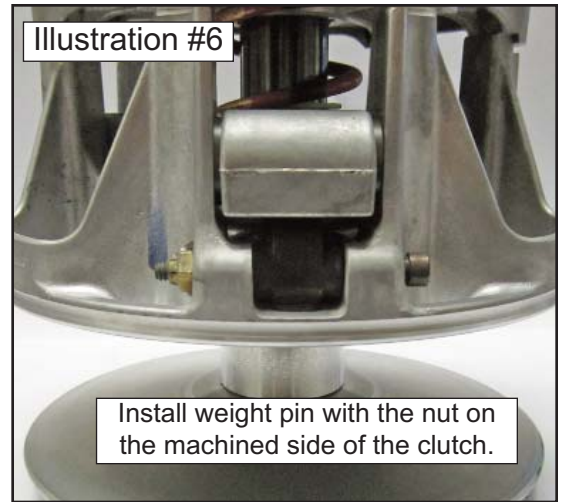
Correct

B-8. Check stock weight pins for wear before installation. Pins should be straight and smooth from shouldered head to threads. If wear is found, discard stock pins and replace with hardened pins and new lock nuts (SLP# 40-437).

B-9. Install Rooster weights into clutch and tighten weight pins with self-locking nuts and torque to 20 in/lbs (2 Nm). (Refer to illustration #6 for proper weight pin orientation)

B-10. Install SLP primary spring.

B-11. Line up marks made on B-1. Compress cap to movable sheave and start all six cap bolts. In a star pattern, tighten each bolt a little at a time until the cap is seated against movable sheave of clutch. Torque cap bolts evenly to **100 in/lbs. (12 Nm)**



Tied Secondary Clutch Disassembly/Assembly

C-1. Remove the four T25 torx head screws that hold the helix into the Tied secondary clutch.

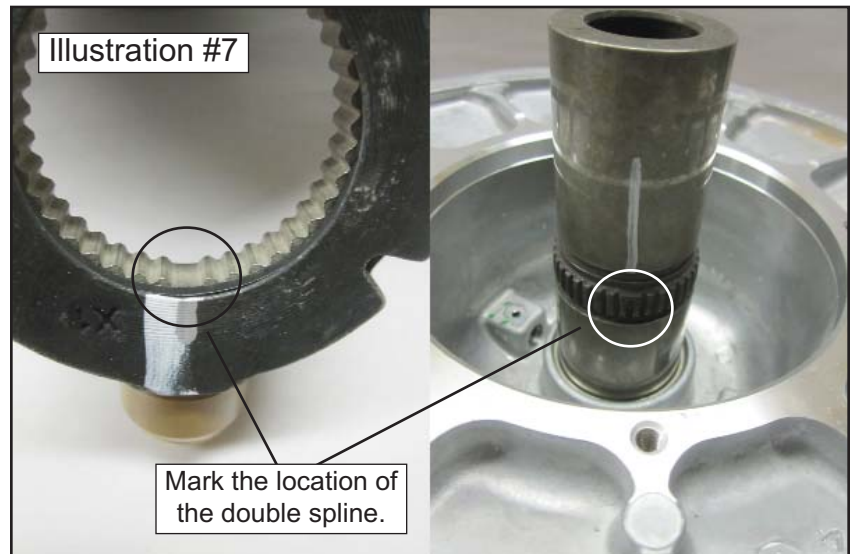
C-2. Remove helix. This stock helix will not be re-used.

C-3. Compress the roller assembly using a spring compressor (SLP #20-173) or clutch press tool (SLP #20-204) and remove the snap ring located directly above the roller assembly. Then remove the roller assembly and stock secondary spring. The stock spring will not be re-used.

C-4. Compress roller assembly and SLP secondary spring into Tied secondary clutch using a spring compressor (SLP #20-173) or clutch press tool (SLP #20-204). Install snap ring into groove above roller assembly.

Hint: The roller assembly and shaft have a double spline that has to line up for installation. It is easiest to mark the exact location of this double spline on the roller assembly and shaft before assembly. (Refer to illustration #7)

C-5. Line up the X on the new helix with the X on the Tied clutch and drop the helix into place. (Refer to illustration #8) Install the T25 four torx head screws and torque to **8-12 ft/lbs (10.9-16.3 Nm)**.



Clutch Installation

D-1. Use brake clean and a clean rag to clean the tapered shaft on the RZR and the tapered mating surface of the primary clutch before installation.

Important Note: Remove any glazing on the clutch sheaves using a red scotch bright pad. Clean the sheaves of both clutches with dish soap and hot water. Scrub the belt using dish soap and hot water. Let completely dry before installation.

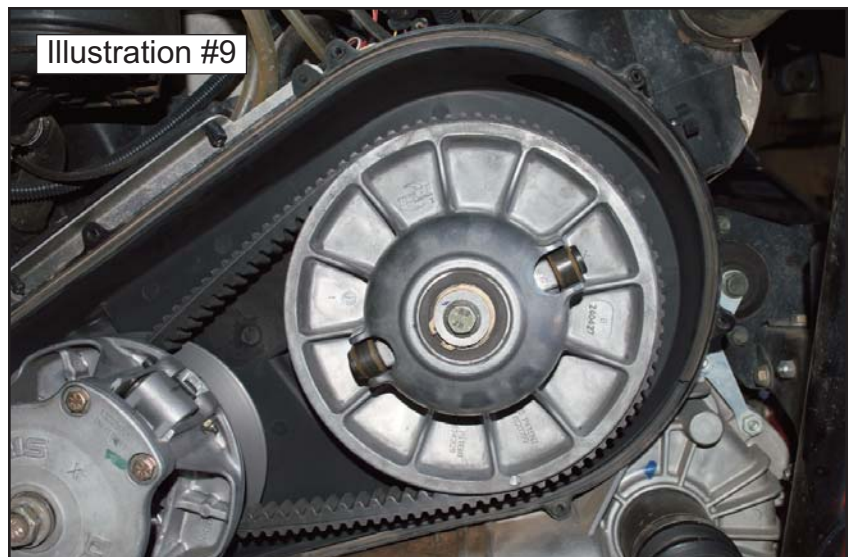
D-2. Install primary clutch onto the tapered shaft of the RZR. Hold the primary clutch using a clutch holding tool (SLP #20-202) and torque the primary clutch retaining bolt to **96 ft/lbs (130 Nm)**. Once this is done loosen the retaining bolt and torque the bolt once more to **96 ft/lbs (130 Nm)**.

D-3. Install Tied secondary clutch on the splined shaft of the RZR making sure the clutch is completely seated on the shaft. Using the stock secondary retaining bolt and washer, torque the retaining bolt to **40 ft/lbs (54 Nm)**.

Hint: Having the RZR in gear will help with aligning the splines.

D-4. Install the belt. (SLP recommends **Polaris Belt #3211148** for proper operation)

D-5. Make sure the RZR is in Park and then rotate the secondary clutch by hand until the belt is at full ride height in the secondary clutch. (Refer to illustration #9)



D-6. Install clutch cover making sure stock cover seal is in place. Torque cover retaining screws to **48 in/lbs (5 Nm)**.

D-7. Replace lower shock mount O-rings and spacers on shock (Refer to illustration #10). Pivot shock back into mounting location on top of trailing arm.

D-8. Install lower shock mounting bolt. Torque to **70 ft/lbs (95 Nm)**.

D-9. Install driver side rear wheel. Torque lug nuts in a star pattern to **45 ft/lbs (61 Nm)**.

D-10. Jack the rear of the RZR up and remove jack stand.

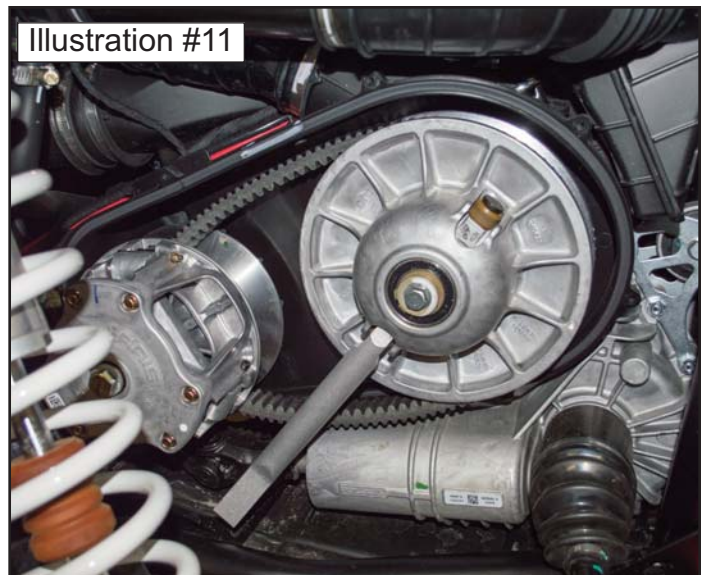


Belt Removal

E-1. Mark drive belt direction of rotation. (Belt is normally positioned so that the part number can be easily read)

E-2. With the RZR in "Park" rotate Tied clutch so that one of the outer rollers is positioned at an eight O'clock position. Using belt removal/installation tool found in stock 900 tool kit or SLP belt removal/clutch compression tool #20-217, place into Tied clutch in the location directly above the roller (Refer to illustration #11).

E-4. Cam tool so that it compresses the Tied clutch. Lift upward on the belt while pulling it over the top of the secondary clutch sheave.



Belt Installation

F-1. With the RZR in "Park" rotate Tied clutch so that one of the outer rollers is positioned at an eight O'clock position.

F-2. Loop the belt around the primary clutch with the belt direction of rotation in the correct orientation. (Belt is normally positioned so that the part number can be easily read)

F-3. Using belt removal/installation tool found in stock 900 tool kit or SLP belt removal/clutch compression tool #20-217, place into Tied clutch in the location directly above the roller (Refer to illustration #11).

F-4. Cam tool so that it compresses the Tied clutch.

F-5. Push the belt into the secondary clutch starting with the top and moving clockwise.

F-6. Remove belt removal/installation tool.

F-7. Rotate Tied clutch counter clockwise until belt is at full ride height in the Tied clutch. (Refer to illustration #9)