

X3 Primary Clutch Removal Using Service Tool

REQUIRED TOOLS

Clutch Service Took Kit
Screwdriver(s)
T-25, T30 Torx
8,22,24 mm Sockets
M6 Allen Socket
Anti-seize

REQUIRED TOOLS

Clutch Compression Tool
Blue Loctite
Green Scotch Brite
Brake Cleaner
Torque Wrench
Impact

NOTE: Can Am OEM primary bolts are made for one time use, we recommend our EVP XR Series primary clutch bolt. **P/N 404FC0018**





- Step 1: Remove clutch cover and CVT drive belt.
- Step 2: Remove primary bolt using a 22mm socket. Remove primary clutch bolt.
- **Step 3:** Use a primary clutch removal bolt and remove the clutch, move to a clean workspace.
- **Step 4:** Place clutch puller bolt into the primary clutch, hand tighten until its 1 1/2" from the clutch housing. **NOTE:** Put <u>anti-seize</u> on the top of the bolt. This will help NOT damaging the head.
- **Step 5:** Place the service tool onto the primary, hand tighten (6) M6 Allen screws into the clutch basket. Hand tighten the service tool bolt into the clutch until it hits the head of the clutch puller bolt, which has anti-seize on the head. (Figure 1)
- **Step 6:** With an impact and 24mm socket, tighten down the service tool bolt until you hear it pop. This is removing the basket of the clutch from the stationary sheave.
- **Step 7:** Remove the spider from the basket, keep all (6) rubber caps. (Figure 2)
- **Step 8:** Remove the basket from the stationary sheave, and place into a clutch compression tool.







Figure 2





- Step 9: With a sharpie, draw an alignment mark from the spring cap to the spider. This will ensure proper alignment when reassembling. (Figure 3)
- Step 10: With a T-30 Torx, loosen all (6) bolts securing the spring cap.
- **Step 11:** Loosen the clutch compression tool. Remove spring cap and primary spring.
- Step 12: Blow out the primary basket with compressed air. With green scotch brite pads, clean the inner surfaces of both sheaves. Whip down with a clean rag and brake cleaner. (Figure 4)

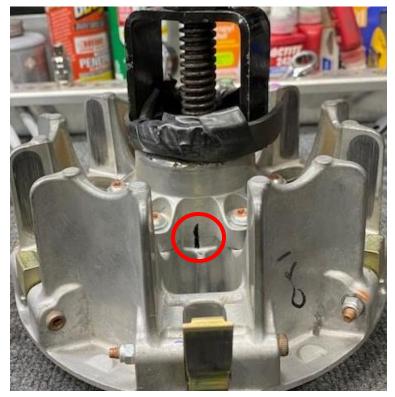


Figure 3



Figure 4



Removing and Installing Weights

Step 1: With an 8mm socket and T-25 Torx, loosen one weight pin at a time.

Step 2: Remove the weight pin, remove the weight. NOTE: OEM weights have (2) bushings, keep these if you ever want to reuse the OEM weights. They are NOT needed for EVP weights. (Figure 5)



Figure 5

Step 3: Install the new EVP weight and reuse the OEM pin and Nylock nut. Tighten down till the pin is snug, we want the weights to move effortlessly.

Step 4: Do step 1-3 for the rest of the weights.

NOTE: Primary clutches need to be perfectly aligned. If you place a gold weight in the clutch, across from it needs to be a gold weight. Same for black weights.

FOR EXAMPLE:

ST-2021RR 3R-91

- 3 Black, 3 Gold
- The EVP cam arms need to be staged as 1 black, 1 gold, 1 black, 1 gold, 1 black, 1 gold.

ST-2021RR 3R-93:

- 4 Black, 2 Gold
- The EVP cam arms need to be staged as 2 black, 1 gold, 2 black, 1 gold.



Reassembling the Primary Clutch

Step 1: Place the basket back into the clutch compression tool. Place the EVP Orange primary spring into the clutch and spring cap. Compress the spring cap and make sure the alignment marks line up. (Figure 6)





Figure 6 Figure 7

- Step 2: Use Blue Loctite on (6) T-30 Torx securing the spring cover. Torque to 9Nm or 80 in-lb.
- **Step 3:** Remove the basket from the clutch compression tool, place basket onto stationary sheave.
- **Step 4:** Place the spider into the basket, make sure all rubber caps are installed before seating. (See figure 7).
- **Step 5:** Place the clutch puller bolt back into the primary clutch and tighten down with a 19mm wrench. This will press the basket back onto the stationary sheave. Remove bolt and install the primary clutch back onto the machine.
- **Step 6:** Torque the primary bolt (22mm) down 89 ft-lb. If you are reusing the OEM bolt, torque the primary down to 89 ft-lb and drive the car 100-200 yards and hit 5,000rpms. Retorque the primary bolt to 89 ft lb. Do this three times.



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Thank you for choosing Evolution Powersports products. If you require further assistance, please call our Tech Support @ (715) 247-3862

Note: This product is exempt from the emission standards and related requirements of 40 C.F.R. § 1051 as provided by 40 C.F.R. § 1051.620, and California law [e.g., vehicle code§§ 27156 and 38391]. This product is sold only for use in connection with EPA certified, purpose-built, nonroad vehicles used solely for closed course, nonroad competition/racing and not used for any recreational purpose or on public highways or right of ways maintained by and open to the public. This product is sold only in connection with machines that do not fall under state and/or federal noise or emission standards/regulations. Purchasers who/that purchase this product represent and warrant that the product is purchased only in connection with EPA -certified, emission-regulations-exempt and noise-regulations-exempt competition/racing vehicles as interpreted under applicable state and/or federal law. Questions: Call Evolution Powersports at (715) 247-3862.