

# Can Am X3 Shift-Tek-P-Clicker Trail Ultimate Clutch Kit

SKU(s): 402FC0096 (Weights Only), 402FC0098 (Ultimate Kit)

#### **INCLUDED PARTS**

41-52 Helix Assembly

Shift-Tek-P Trail Clutch Kit

Shift-Tek Purple Spring

### **REQUIRED TOOLS**

Clutch Service Tool Kit

Screwdriver(s)

13,17,19,22mm Sockets

Impact Driver

6mm Allen Socket

Red & Blue Loctite

**Torque Wrench** 

Torx Sockets

Hammer







# PDrive Clicker Weights with OEM Spring

	Stock	3R-91	3R-93	3R-95	4X100	5X85	P 300
Horsepower	205	219	226	233	255	260	300
Primary Spring	Stock	Stock	Stock	Stock	Stock	Stock	Stock
Engagement RPM	1900	2500	2500	2500	2400	2400	2600
Operating RPM	7400	8000-8100	8000-8100	8000-8100	8000-8100	8000-8100	8400-8600
Hole 1	N/A	(2) 1/4" set screw	(2) 3/8"set screw	(2) 3/8"set screw	(2) 1/4"socket cap screw	(2) 1/4"socket cap screw	(2) Button Head 1/4" with (2) Washer
Hole 2	N/A	(2) 1/4" set screw	(2) 1/4" set screw	(2) 3/8"set screw	(2) 3/8"set screw	(2) 1/4"socket cap screw	(2) Button Head 1/4" with (2) Washer
Pivot Bolt	N/A	1.25"	1.25"	1.25"	1.25"	1.25"	1.25"
Pivot Washer	N/A	2g + 3g	2g + 3g	2g + 3g	2g + 3g	2g + 3g	2g + 3g
<b>Clicker Position</b>	N/A	3	3	3	3	3	3
Assembled Weight in Grams	N/A	88.2g	89.5g	90.6g	92.8g	95.2g	100g
Secondary Spring	N/A	EVP Purple	EVP Purple	EVP Purple	EVP Purple	EVP Purple	EVP Purple
Helix	N/A	41-52	41-52	41-52	41-52	41-52	41-52
Hole on Helix Cap	N/A	Hole 3	Hole 3	Hole 3	Hole 3	Hole 3	Hole 3
Helix Cap Clocking	N/A	(-3) from 0	(-3) from 0	(-3) from 0	(-3) from 0	(-3) from 0	(-3) from 0



\*\***NOTE:** Always install a set screw on both sides of the weight arm. Install the screws with the provided thread locker, making sure the screws are installed with an equal amount of thread engagement.









\*\*Each clicker cam has numbers 1-5. Each number will modify maximum engine RPM by about 100rpm's. All three clickers must be set to the same setting.

\*\*Lower numbers decrease engine RPM in steps of 100 RPM and higher numbers increase in steps of 100 RPM

\*\*Example: Ramp cam is set at position 3 and changed to position 5. So maximum engine RPM is increased by 200 RPM.





# **Removing and Installing Weights & Rollers**

- Step 1: Remove the primary clutch from the crankshaft. Remove the sway bar using a 19mm socket and 21mm open-end wrench. Remove the primary clutch bolt using a 22mm socket. Install the Can-Am clutch puller (875FC0001) using an impact and 19mm socket. You will hear it "POP" off the crank.
- Step 2: Apply some grease to the threads on tools Can Am Primary Clutch Threaded Rod & Handle for Threaded Rod. Thread tool Can Am Primary Clutch Threaded Rod into the clutch until it bottoms out on the governor cup. Install the 3 Arm Primary Compressor Tool onto the towers of the moveable sheave. Install the Center Tool Bushing and 1/4" Nylon Bushing into the 3-Arm Primary Compressor Tool. Compress it with the Handle for Threaded Rod.



Fig 1



Fig 2



**NOTE:** Compress the moveable sheave far enough making it possible to remove the weights.

- **Step 3:** With a T25 socket remove the screws highlighted in the red box. Roller being on top, weight being on the bottom.
- Step 4: Once the screw is removed, thread in Axle Removal Tool from the left side-in. The left side castings are tapered where the axle seats. Hit the Axle Removal Tool with a hammer. Once the axle is past the taper, it will freely pull out. Remove the weight and roller once axle is removed (See figure 4-5)

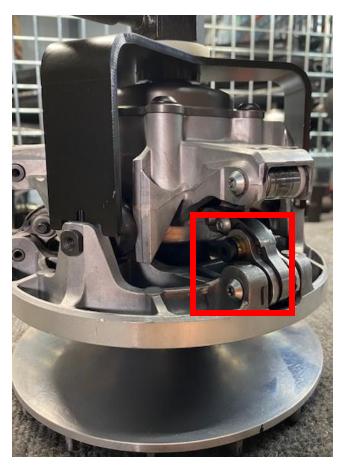


Fig 3





Fig 4

Fig 5

Step 5: Installation will be in reverse order. Slide the axles in from the right side to left. Install the T25 screws and torque to 4 ft-lbs. When tightening the T25 screw, it will pull the axle into the taper. Use a medium thread locker on the T25 screws. Once complete, loosen the handle on the threaded rod and remove all tools from the clutch.



# Installation of the Helix and Spring

- **Step 1:** Remove the secondary clutch with a 17mm socket and impact, mount it into a clutch compression tool. With a sharpie make alignment marks on both sheaves. (Figure 1)
- **Step 2:** Use 13mm socket to take 3 fasteners out of the helix and carefully loosen the spring compression tool to remove tension. (Figure 2)

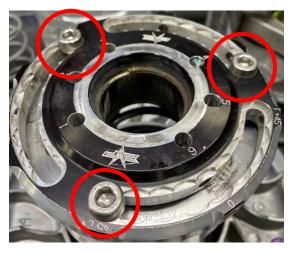


Figure 1



Figure 2

- Step 3: Pull off both sheaves, remove spring cup and spring from the OEM helix.
- **Step 4:** Grab the new helix, make sure the helix cap is adjusted to -45 degrees, if not loosen (3) Allen screws and clock the helix cap. Tighten the (3) Allen screws back down.



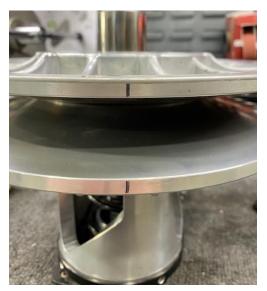






Step 5: Reassemble the secondary clutch on the clutch compression tool in this order: Helix assembly, stock spring in hole 4 (EVP Purple Spring hole 3 or 5 depending on clutch setup sheet), spring cap, both sheaves in alignment. When compressing make sure the rollers are in line with the helix ramps. You may need to adjust with your hands while compressing.





- **Step 6:** Apply Red Loctite onto the threads of the (3) 13mm bolts holding the helix to the sheaves.
- Step 7: Reinstall the clutch on the vehicle and torque secondary bolt to 52 ft-lbs.
- **Step 8:** Install the secondary holding tool onto the secondary, align the tool in between the fins. Allow the handle to rest against the primary bearing.







Step 9: Install the helix wrench into a slot around the Shift-Tek helix cap.



Step 10: Loosen all (3) M6 Allen head cap screws (do not remove). Apply pressure onto the helix wrench. You can now turn the helix cap to add or subtract torsion pressure on the spring. Once complete tighten the (3) M6 Allen head cap screws.







**Step 11:** Remove the helix wrench and secondary holder. Install the belt back onto the clutches. Remove the belt changing tool and spin the secondary a total of 5 times.

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