



X3 Ultimate Shift-Tek Clutch Kits

SKU(s): ST-205 (402FC0002), ST-225 (402FC0003), ST-235 (402FC0004), ST-250 (402FC0005), ST-275 (402FC0006), ST-320 (402FC0007)

REQUIRED TOOLS

Clutch Service Tool Kit
Screwdriver(s)
T-25 Torx
Magnet
6mm Allen Socket

REQUIRED TOOLS

1/2" Impact						
8,13,17,19,22mm Sockets						
Torque Wrench						

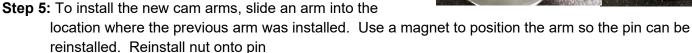
SHIFT-TEK ADVANCED CLUTCH KIT PART NUMBER	. EVP TUNE	ENGINE POWER LEVEL	USE	PRIMARY SPRING	WEIGHTS	SECONDARY SPRING	HELIX	HELIX HOLE POSITION	SPRING ROTATION
ST-205	17-21 STAGES 1-3R, 2020 RR STAGE 1		SAND OR TRAIL	EVP ORANGE	2 BLACK, 4 GOLD	STOCK	EVP 35- 45	4	0
ST-225	17-21 STAGES 3RWi-5RWi, 2020RR STAGES	205-220 HP	SAND OR TRAIL	EVP ORANGE	3 BLACK, 3 GOLD	STOCK	EVP 40- 50	4	0
ST-235	17-21 Stage 4RWI-X85 2020 RR STAGES 3R- 3RWi	210-235 HP	SAND OR TRAIL	EVP ORANGE	4 BLACK, 2 GOLD	STOCK	EVP 40- 50	4	0
ST-250	2020RR STAGES 4RWi- X85	235-250 HP	SAND OR TRAIL	EVP ORANGE	6 BLACK	STOCK	EVP 40- 50	4	0
ST-275	2017-2020 STAGE 6 GT & DM/DS 280	250-275 HP	SAND OR TRAIL	EVP ORANGE	3 ADJUSTABLE, 3 GOLD	STOCK	EVP 35- 45	4	0
ST-320	2017-2020 STAGE 6 GT & DM/DS 320	275-320 HP	SAND OR TRAIL	EVP ORANGE	3 ADJUSTABLE, 3 BLACK	. STOCK	EVP 35- 45	4	0



NOTE: For all Stage Cam arms must be installed in the correct location to maintain the balance of the clutch. Please note the instructions for the various stages below.

General OEM cam arm removal and installation:

- Step 1: Remove clutch cover and belt
- **Step 2:** For OEM cam arm removal, use a T25 Torx bit on one end of the pin and an 8mm socket on the other and remove the nut.
- Step 3: Remove the pin.
- Step 4: Use a screwdriver to open the sheaves and a magnet to retrieve the cam arm SEE PICTURES BELOW– be careful to save the washers that are installed on both sides of the arm these will be needed if you ever use the stock weights again. They are NOT needed for the installation of the EVP weights.



CAM ARM BREAKDOWN

ST-180-

4 gold weights

The EVP cam arms need to be staged as 1 stock, 2 gold, 1 stock, 2 gold

ST-205

2 Black 4 Gold

The EVP cam arms need to be staged as 1 black, 2 gold, 1 black, 2 gold

ST-225:

3 Black 3 Gold (Staggered)

The EVP cam arms need to be staged as 1 black, 1 gold, 1 black, 1 gold, 1 black, 1 gold

ST-235

4 Black 2 Gold

The EVP cam arms need to be staged as 1 gold, 2 black, 1 gold 2 black

ST-250

6 Black

The EVP cam arms will replace all the arms

ST-275

3 Adjustable 3 Gold

The EVP cam arms will be staged as 1 adjustable, 1 gold, 1 adjustable, 1 gold, 1 adjustable, 1 gold, 1 adjustable





The adjustable weights will have 2 3/16 set screws in hole (1) as shown in the weight kit

ST-320

3 Adjustable 3 Black

The EVP cam arms will be staged as 1 adjustable, 1 black, 1 adjustable, 1 black, 1 adjustable, 1 black, 1 adjustable. The adjustable weights will need (4) 1/4" set screws in each weight.

Stock Turbo Tunes: Shift RPMS 7900-8100

Big Turbo Tunes (Stage 6): Shift RPMS 8000-8300

SHIFT TEK HELIX INSTALL

- **Step 1:** Using the 17mm socket remove the secondary clutch from the vehicle.
- **Step 2:** Use the spring compression tool and align the clutch so you can get to the fasteners securing the helix.
- Step 3: Use 13mm socket to take 3 fasteners out of the helix and carefully loosen the spring compression tool to remove the stock helix
- **Step 4:** Install new helix with the billet end cap at -45 adjustment. This will make installing the helix easier as there will be less rotational tension. Insert the spring tab on the #4 hole in the end cap and make sure the other end of the spring is properly seated in the hole on the clutch sheave. Use the clutch service tool to compress the spring while making sure the helix is rotated clockwise so the helix ramp goes over the clutch roller. (See picture to right)



Helix must be rotated clockwise so the ramp will clear the roller.



INSTALLATION INSTRUCTIONS

- **Step 5:** Install the fasteners securing the helix in place using red Loctite.
- Step 6: Reinstall the clutch on the vehicle and torque secondary bolt to 52 ft-lbs.
- Step 7: Using the Can Am belt changing tool with EVP non-marring tip reinstall belt, spin secondary to get belt back to the top of the clutch
- Step 8: Before removing the belt changing tool, apply a small amount of pressure to EVP helix cover and loosen the (3) 6mm Allen screws enough to clear the machined grove
- **Step 9:** Put the EVP sheave holder between the fins on the secondary clutch and use a screwdriver to rotate the helix cover clockwise to desired tension. Use the 6mm Allen to tighten the screws back down. (See picture to right)



EVP sheave holder.

Screwdriver used for changing the tension on the secondary spring.



INSTALLATION INSTRUCTIONS

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.