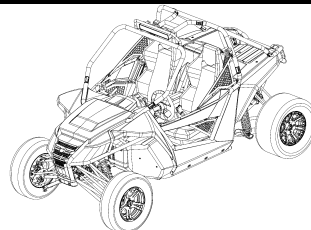


Arctic Cat® Wildcat

Installation Instructions - Service Parts

Drive Clutch Spider Removal Kit

(p/n 0444-281)

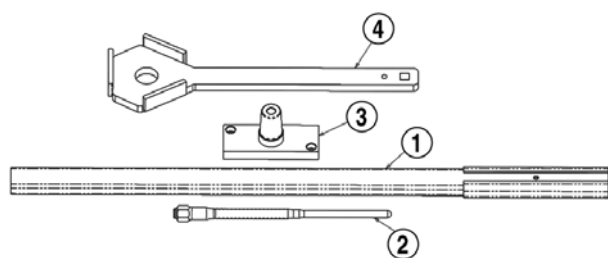


■ **NOTE:** Read these Installation Instructions thoroughly before beginning the installation process. Retain these Installation Instructions for future reference.

Application: Specific Wildcat models with the Rapid Response Team Drive Clutch

Kit includes:

Ref. No.	p/n	QTY	DESCRIPTION
1	0744-037	1	Handle Extension
2.	0744-080	1	Clutch Puller
3	0544-021	1	Clutch Holder
4	0544-022	1	Spider Removal Tool
N/A	0453-861	1	Instruction

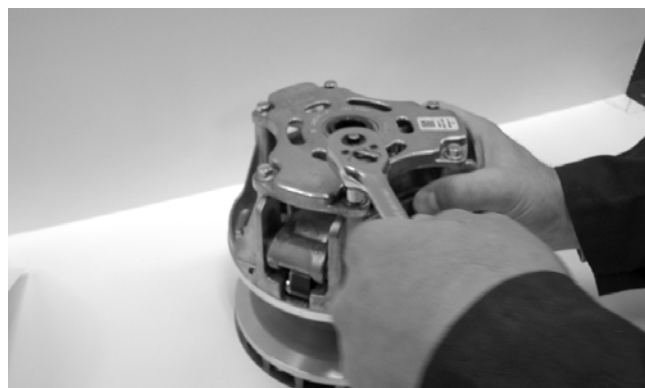


■ **NOTE:** Refer to the appropriate Arctic Cat Wildcat Clutch for more detailed instructions.

Disassembling

■ **NOTE:** Note the timing marks (X) on the cover, spider, and movable sheave. These must be aligned when assembling the drive clutch for balance purposes.

1. Loosen the machine screws securing the cover. Remove every other cap screw from the cover; then while firmly holding the cover, remove the three remaining screws equally.



WC659

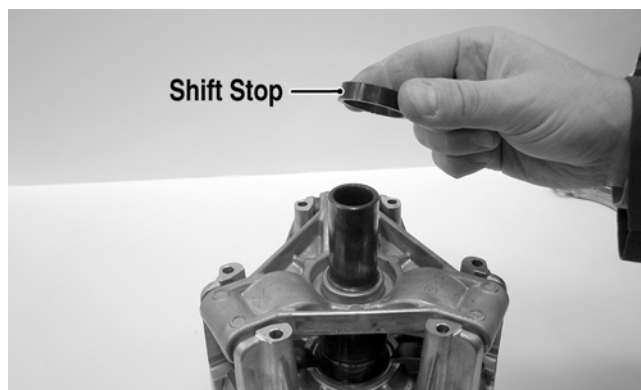


WC658

2. Remove the cover, spring, and nylon shift stop.



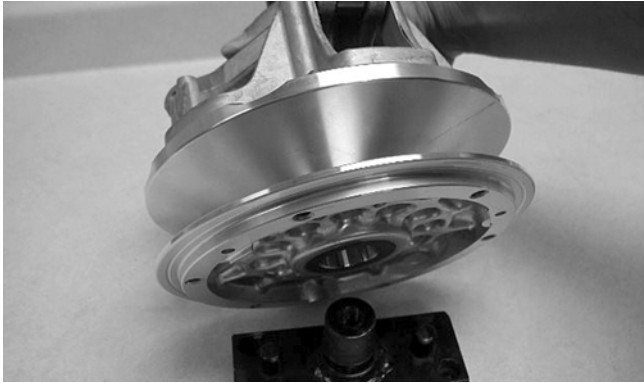
WC657



WC656A

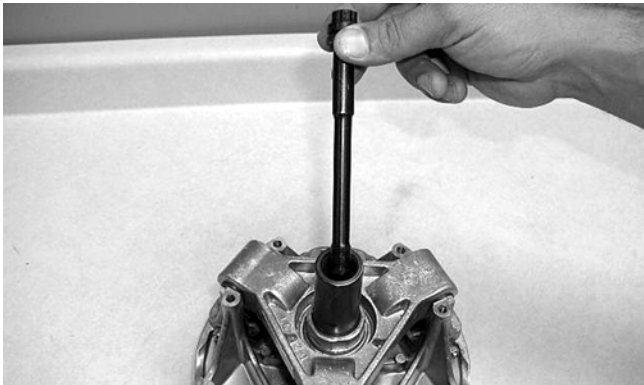
3. Remove the windage plate; then position the drive clutch over an appropriate clutch holder.

■ **NOTE:** The holder should either be secured in a vise or bolted to a sturdy work bench.



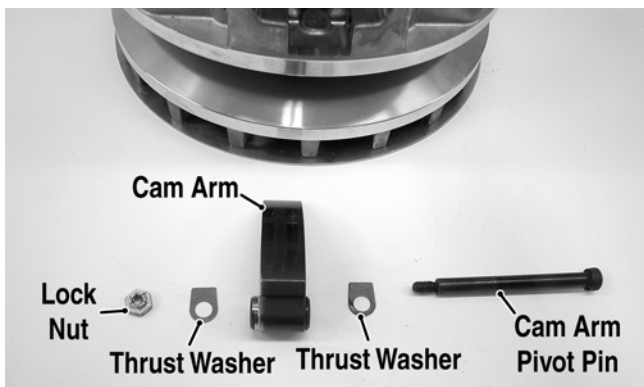
FC083

4. Secure the drive clutch to the holder using the clutch bolt and washer. Tighten clutch bolt to 50 ft-lb.



FC084

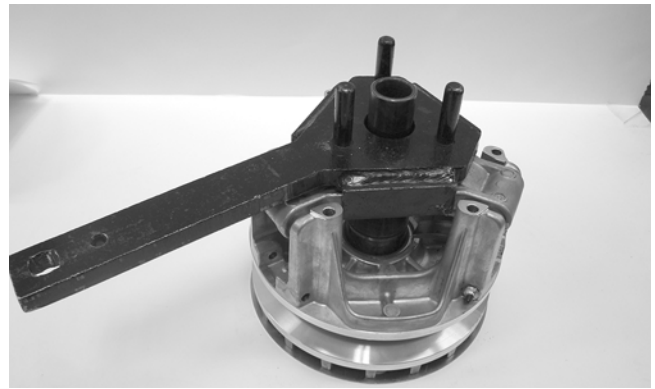
5. Remove the lock nuts from the cam arm pivot pins; then remove the pins and account for six thrust washers and three cam arms.



WC651A

6. Using a small torch, heat the threaded area of the spider. Place an appropriate spider removal tool over the heated spider and break the spider loose by turning it clockwise (left-hand threads).

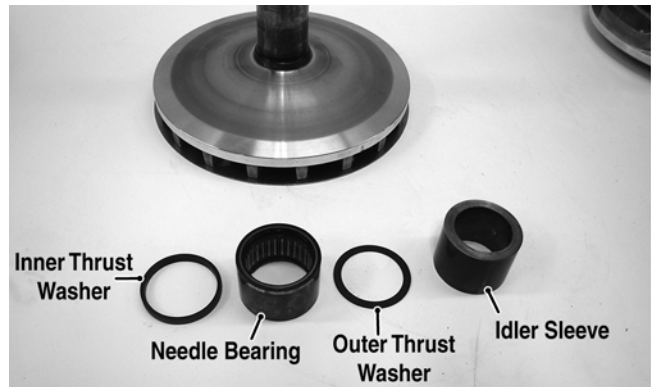
■ **NOTE:** If the spider cant be loosened with the spider removal tool, slide Handle Extension onto the removal tool for added leverage.



WC650

■ **NOTE:** Applying heat to the spider threaded area will aid in clutch disassembly. The heat will loosen the Loctite used during assembly.

7. Free the drive clutch from the clutch holder, using the clutch puller.
8. Remove the spider, idler sleeve, needle bearing, and thrust washers from the fixed drive sheave hub.



WC647A

■ **NOTE:** The spider is a non-serviceable component. If damaged or worn parts are found, the clutch assembly must be replaced.



MS405

Cleaning and Inspecting

■ **NOTE:** If any components other than flyweights, pins, spring, needle bearings, rollers, and thrust washers are damaged or worn, clutch replacement is necessary.

1. Using parts-cleaning solvent, wash grease, dirt, and foreign matter off all components; dry with compressed air.

■ **NOTE:** If the needle bearing is washed, re-pack the bearing with hi-temp molybdenum wheel bearing grease.

2. Remove any drive belt dust accumulation from the stationary sheave, movable sheave, and bushings using parts-cleaning solvent only.

CAUTION

Do not use steel wool or a wire brush to clean components having a bushing; damage to the bushing will result.

3. Inspect stationary sheave, movable sheave, spider, and cover for cracks or imperfections in the casting.
4. Inspect the cam arm pins for wear or bends.
5. Inspect the bushing in the cover for wear, damage, or cracks.
6. Inspect the bushing in the movable sheave for wear, damage, or cracks.
7. Inspect the spring for cracking or twisting.
8. Inspect all threaded areas for any cracked or stripped threads.
9. Inspect the roller bushings for damage or fraying.
10. Inspect the needle bearings for missing needles or torn or missing seals.
11. Inspect the stationary sheave and shaft for damage or wear.

Assembling

⚠ WARNING

Never reuse the lock nuts on the cam arm pins.

1. Place the cam arms, thrust washers, and cam arm pivot pins (pivot pin heads opposite direction of rotation) into the moveable drive sheave and secure with new lock nuts. Tighten to 48 in.-lb.

■ **NOTE:** The drive clutch rotates clockwise.

2. Align the spider and movable sheave timing marks; then making sure the cam arms are properly positioned, drop the spider into position in the moveable sheave.

CAUTION

Failure to align the spider and movable sheave timing marks will cause drive clutch to be out of balance resulting in clutch and crankshaft damage.

3. Place the stationary sheave onto the clutch holder and secure with the clutch bolt. Tighten bolt securely.

■ **NOTE:** The spider removal/installation tool has been designed with a 18 inch handle to add extra torque when using a torque wrench that is only capable of 150 ft-lb. Using a 1/2 inch drive torque wrench set at 150 ft-lb, you will achieve 265 ft-lb at the spider when using the torque wrench and the tool.

4. Place the movable sheave, spacer washers, and spider into position on the stationary sheave hub. Make sure all threads are clean and free of oily residue. Apply Loctite Primer #7471 and allow to dry per instructions; then apply red Loctite #277 to the threads of the stationary sheave and spider. Tighten the spider to 265 ft-lb.



WC641

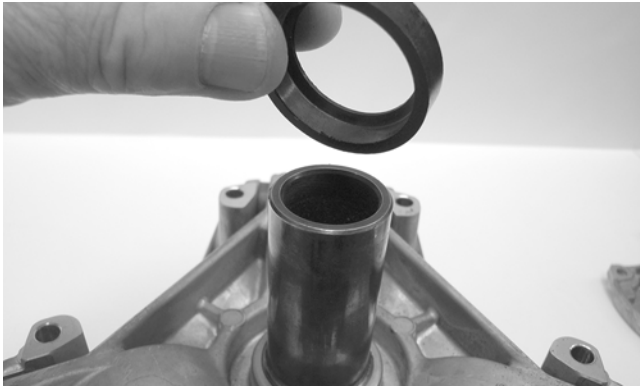


WC642

■ **NOTE:** Allow the Loctite to cure at room temperature for 24 hours.

■ **NOTE:** Grasp the moveable sheave and lift it upward; then release it. It must move freely and not bind at any point.

5. Place the shift stop into position with the relief towards the spider; then install the spring.



WC655

CAUTION

Install the shift stop cam with the relief facing down or severe engine damage could occur.

6. Align the match marks (X) and install the clutch cover and secure with six cap screws. Tighten using a criss-cross pattern to 120 in.-lb.



WC653A

