



015-ACMTX16

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Performance Standards”

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SLP MTX™ Weights

For 2016-19 Arctic Cat models with Rapid Response Primary Clutch

Kit Contents:

- (3) MTX™ Weight (Part # dependent on kit part number)
- (1) One gram tuning rivet six pack (#40-90)
- (1) Two gram tuning rivet six pack (#40-91)
- (1) Three gram tuning rivet six pack (#40-92)
- (6) Weight spacer (#40-209)
- (1) SLP spider spacer (#40-208)
- (2) 0.020” spider shim (#5210752)
- (1) 0.030” spider shim (#5210753)
- (1) Instruction (#015-acmtx16)

Specialized Tools Required for Install

- Clutch Puller (#20-186)
- Clutch Holding Tool (#20-202)
- Clutch Press Tool (#20-204)
- Clutch Holding Fixture (#20-197)
- Spider Nut Tool (#20-146)
- Spider Tool (#20-301)

MTX™ weights allow you to run heavier per weight than you would normally run with OEM weights. These weights are adjustable by adding weight via rivets (up to 6 grams per weight) to achieve desired peak rpm. They also have a much higher heel height than stock weights which tightens up belt to sheave clearance. *Spider shimming is required.*

Primary Clutch Removal

1. Remove belt.
2. Remove primary clutch retaining bolt. A clutch holding tool (SLP #20-202) is recommended to hold the primary clutch stationary.
3. Thread the primary clutch puller (SLP #20-186) 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. Remove clutch from sled 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.

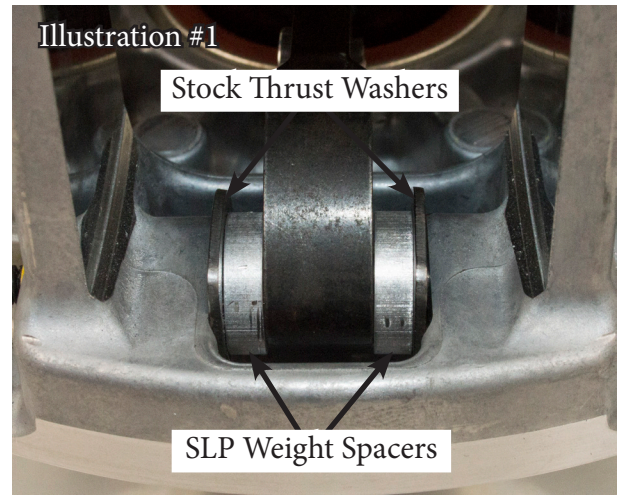
Primary Clutch Dissassembly / Assembly

4. Compress the primary clutch 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.
5. Remove stock primary spring.

6. Remove weight pins, weights and thrust washers from primary clutch.
7. Install desired tuning rivets into the MTX™ Weights. Refer to MTX™ Tuning Rivet Adjustment section for installation information. For tuning recommendations, refer to SLP stage kit instructions or inquire.
8. Install the MTX™ weights into the primary clutch using one SLP weight spacer along with one stock thrust washer on each side of the weight. (See illustration #1)

Helpfull Hint: The stock thrust washers can only be installed one direction. The large radius edge of the thrust washer should face the center shaft of the primary clutch. It is easiest to start the weight pin and add one component at a time.

9. Torque weight pins to **50 in/lbs (5.6Nm)**.
10. Place primary clutch onto clutch holding fixture (SLP #20-197) and secure using using knurled nut.



11. Heat spider jam nut and spider near the threads to 250 degrees to break thread locker loose.
12. Remove spider jam nut using jam nut tool (SLP #20-146). Remove spider using spider tool (SLP #20-301).
13. The stock spacer located under the spider will be replaced with included SLP spider spacer #40-208 (See illustration #2). Belt to sheave side clearance should be adjusted to .010" to .020" with MTX™ weights in place. Too much belt to sheave side clearance will result in poor clutch performance and lower top speed. Too little belt to sheave clearance will result in belt squeal or the sled trying to creep at an idle. MTX™ weights have a much higher heel height than stock weights which tightens up belt to sheave clearance. Provided shims will be added above the SLP Spider Spacer under the spider to adjust for proper belt to sheave clearance (add shims to increase belt to sheave clearance subtract shims to decrease it, not all shims will be used in most cases).

14. Once belt to sheave clearance is correct, apply a small amount of Red Loctite #262 to the threads of the spider. Line up the "X" on the spider with the "X" on the movable sheave. Torque spider to **280-300 ft/lbs (380-406Nm)**.

15. Apply a small amount of Red Loctite #262 to the threads of the spider jam nut. Torque spider jam nut to **290-330 ft/lbs (394-447Nm)**.



16. Place primary spring into clutch. Line up the "X" on the primary clutch cap with the "X's" on the spider and movable sheave. Compress cap to movable sheave with a clutch press tool (SLP #20-204) 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 **120 in/lbs (13.5Nm)**.

Primary Clutch Installation

17. Use brake clean and a clean rag to clean the tapered shaft on the sled and the tapered mating surface of the primary clutch.

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, then rinse with hot water. Let completely dry before installation.

18. Install primary clutch onto the tapered shaft of the sled. Hold the primary clutch using a clutch holding tool (SLP #20-202) and torque the primary clutch retaining bolt to **51ft/lbs (69Nm)**.

19. Install belt and set belt deflection to **1 1/8" - 1 1/4" (28.5-31.8 mm)**.

MTX™ Tuning Rivet Adjustment

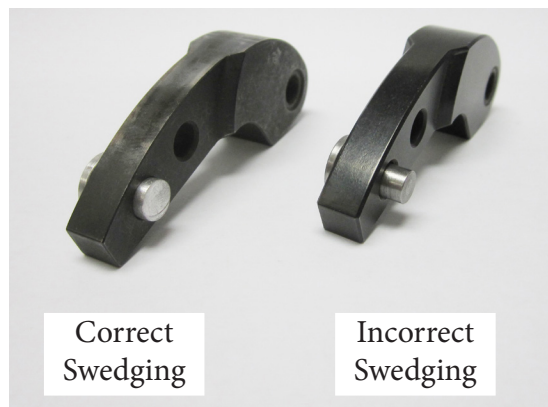
Important Note: Use safety glasses when installing or removing tuning rivets.

MTX™ weights allow you to run heavier per weight than you would normally run with OEM weights. MTX™ weights are adjustable by adding weight via rivets (up to 6 grams per weight) to achieve desired peak rpm. There are three different sets of tuning rivets, 1 gram MTX aluminum rivet, 2 gram MTX hollow steel rivet, and 3 gram MTX solid steel rivet. The outer hole in the MTX™ weight will have the most effect on peak rpm. Weight should be added to the outer hole if peak rpm is 100 rpm or more above target rpm. The inner hole in the weight will have somewhat less effect on peak rpm and should be used for fine tuning peak rpm.

Rivet Installation

Option 1: Swage rivets into place using the SLP MTX Rivet Set/Removal Tool (#20-155). Make sure rivet is swaged far enough to clear spider when installed in the clutch.

Option 2: Swage rivets into place using a hammer and anvil keeping weight parallel with anvil surface. Make sure rivet is swaged far enough to clear spider when installed in the clutch.



Rivet Removal

Option 1: Remove rivets by pressing through the rivet head and pushing the body of the rivet from the weight using the SLP MTX Rivet Set/Removal Tool (#20-155).

Option 2: Remove rivets by center punching the rivet and drilling through rivet head using 7/32" drill bit. Using a flat nosed pin punch (3/16") punch the remainder of rivet through hole in weight.

Note: Do not grind heel of weight to increase engagement. Use additional spring pre-load to increase engagement.