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## **Installation Instructions**

# **MTC MULTI-STAGE LOCKUP**

Your MTC lockup is designed to be installed on top of the pressure plate.

- 1) If your kit came with new static springs, install those in your modified pressure plate.
- 2) If you already know how much shim you need to run, if any, install those on the “leg” of the lockup. If you are unsure, we suggest try using the unit without any shims to begin with.
- 3) Install your lockup next. Make sure that the lockup bottoms-out (on the legs of the hub) when the bolts are tightened.
- 4) Refer to your user guide to adjust the lockup to pressure plate distance.
- 5) Always check for clearance issues prior to starting up your bike. After starting the bike, it is smart to take the clutch cover back off and inspect for rubbing or clearance issues.

## **MULTI-STAGE USER GUIDE**

- 1) The lockup should have .100 - .125” clearance between the flat surface of the arm and the hardened button installed in the pressure plate. To check this, you can hold the arm parallel to the button and measure with a feeler gauge. This measurement is controlled by your clutch pack thickness. You may need to alter the pack thickness to achieve the .100 - .125” measurement.
- 2) **DO NOT** adjust the screw on the top of the finger to get the .100 - .125” measurement. These screws have a paint stripe on them. They are preset and should never need adjustment. If you have already turned them, here is what you should do. Remove the set screw and clean it thoroughly with brake cleaner. Clean the hole as well. Apply a couple of drops of red thread locker to the screw and reinstall. After installing the screws, flip the lockup over.
  - a. On a 5 arm lockup, adjust the screw until the arm is level with the bottom surface of the lockup unit.
  - b. The 6 arm unit should be adjusted using a straight edge. Place the straight edge on 2 arms on opposite sides (1&4, 2&5, 3&6). Adjust the screw until the straight edge sits flat on both arms.

It should be noted that the flat head screw won't necessarily be tightened against the lockup itself. This is normal and the reason for using thread locker.

- 3) If you want to get aggressive with the clutch lever, you will need to soften up your static pressure. The biggest cause of burnt plates is riding the lever too far. Use the shims in your lockup kit to increase static spring pressure.

- 4) The static spring pressure controls the first 10-15 feet your bike moves. If you are having problems on the launch, try changing your static spring pressure. Example, if you spin the tire instantly or wheelie, take static out. If it seems lazy, add static.
- 5) The small springs included with your lockup are to adjust when the arms apply. The lower the number, the softer the spring, the sooner the arms will apply. The higher the numbers, the stiffer the springs, the later (further down track) the arms will apply. Free length of multi-stage springs are #3 .935, #5 .990, #7 1.040, #9 1.083, #11 1.134, #13 1.192 (measurements are taken in inches).
- 6) Keep equal weight on all the arms. If you add or remove weight, do it to all of the arms.
- 7) To run a lockup, you will need to run either an air shifter or electric shifter.
- 8) Should you require any additional support, please feel free to call us or email us at [ClutchSupport@mtceng.com](mailto:ClutchSupport@mtceng.com).

**If you have a ZX12, this additional section is for you:**

- 1) There is an extension for your shift shaft included with your kit. This can be identified as the aluminum tube 3/8" x 1.5" long, with a hole about 1/2 way through one end.
- 2) Install this over your existing shift shaft. The shift shaft is in the lower left hand corner of your clutch case. The shaft will slide on without much effort. Failure to install this part could result in your bike failing to shift.
- 3) Refer to additional instructions to properly set your clutch free play.

**If you have a V-ROD, this additional section is for you:**

- 1) Install your clutch pack and inner hub with buttons installed.
- 2) Next, install the static springs included with your kit. For the V-Rod, we recommend putting any shims in the bottom of the hub then placing the springs on top of the shims. A 0.075 shim per spring is recommended to start.
- 3) Next, place the lifter plate over the springs and install the retaining ring.
- 4) Install the release plate with the bearings and the extended contact button.
- 5) Place the lockup over the lifter plate and install the bolts.
- 6) Be sure to check for any possible clearance issues.
- 7) Refer to the Multi-stage user guide for proper setup.