

1-800-325-6138



# **NEX-GEN**

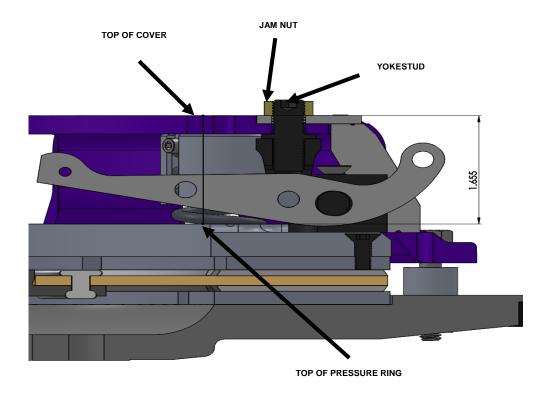
Long Style
Clutch Assembly
10"
3 and 6 Lever
Single Disc

### **Installation**

- 1. Remove transmission assembly per shop manual.
- 2. Inspect input shaft splines for wear or damage.
- 3. Remove old clutch and flywheel from crankshaft.
- 4. Inspect flywheel mounting surface for contamination or damage.
- 5. Remove NexGen clutch and disc assembly from flywheel.
  - a. Clutch cover is MUCH EASIER to take on and off if the studs are loosened with an Allen wrench before taking off and on. Tighten with Allen before tightening the 12 point nuts.
  - b. When unbolting clutch be careful not to lose the .010"shim (3), .020" shim (2), and cover spacer.
- 6. Install new pilot bearing in flywheel.
- 7. Install new flywheel. Replace the factory flywheel bolts if recommended by manufacture or if you're unsure of bolt type or condition. Torque them per shop manual. (**Caution**: over tightening of Flywheel bolts may result in crankshaft damage and oil leaks at the rear main seal.)
- 8. Install the alignment tool in the clutch disc (the disc can be installed facing either direction). Install the alignment tool completely into the pilot bearing.
- 9. Position the clutch assembly on flywheel
  - a. Using an Allen wrench tighten the six (6) mounting studs
  - b. Install and tighten the six (6) 12 point nuts in a star pattern to 25-30 ft.-lbs.
- 10. Remove disc alignment tool.

### Set-Up

- 1. Measure through cover hole to check ring height. Nominal dimension is 1.655". A measurement of 1.650" 1.665" is acceptable.
  - a. Base pressure with ring height at 1.655" is 336 lb.
  - b. Spring free length=1.750"
  - c. Rate=220 lb./in
  - d. Solid height .850"
  - e. 1 turn=13.75 lbs.
  - f. Max turns=9
  - g. Levers with no weights are in a neutral position (little or no load will be applied)
- 2. After use before taking the clutch out measure cover to pressure ring. Take this number minus 1.655" and remove that amount of shims to compensate for wear.
  - a. Disc is .330 thick and heat shields are .200 thick
- 3. Lever can be adjusted down by loosening jam nut and adjust yoke stud as needed
  - a. Levers must be no more than .015 variance in height



- 4. When setting the release bearing the levers must travel  $\frac{1}{2}$ " for the clutch to release
- 5. Reinstall transmission assembly taking caution not to hang transmission on the clutch disc or forcing splines into clutch disc. It is also recommended to put transmission in gear before installation. This will aid in the spline alignment by being able to turn the input shaft with the output shaft, or by slightly rocking the transmission back and forth.

Available for 10", 10.5", and 11 inch; 3 and 6 lever

# **NEX-GEN**

## **Long Style Clutch Assembly**

The new NEX-GEN clutch assembly features patented technology that allows for even distribution of applied pressure while utilizing materials and designs to increase heat dissipation, allowing for better consistency and tuning options.

### PATENTED THRUST/WEAR PLATES



Thrust and wear pads have also been integrated into the new design to strengthen and provide more durability. This feature works in conjunction to the hardened stands, and is designed into the cover to allow for consistent wear and to allow the aluminum cover to work with the aluminum pressure ring while providing extreme durability.

#### **ROTATIONAL SEGMENTED HEAT SHIELDS**



In addition to the cooling fans, rotational segmented heat shields have also been added. With the rotation of the grooves, the Nex-Gen encourages better heat release that will work in conjunction to the cooling fins. A segmented heat shield rather than a one-piece heat ring allows for better expansion and contraction through the surface, providing a greater long term flat surface to work with, which increases consistency.

#### **COOLING FINS**



One of the key design features of the Nex-Gen long style is better heat dissipation with built in cooling fans. By utilizing the forged aluminum cover side profile and cutting CNC machined fins, the new design is able to allow additional heat release with rotation of the engine, which allows for better wear, better consistency and overall ability to perfect the tune up.

### **ADJUSTABLE LEVER HEIGHT**



With threaded yokes and thrust plates we are able to provide the ability to easily change the lever height on each location while keeping the profile low and accessible. This allows for the counterweight of the clutch to come in more quickly or more slowly depending on the application's needs. Each clutch assembly will have dyno tested information for exact plate load pressures for each additional gram per 100 rpm.