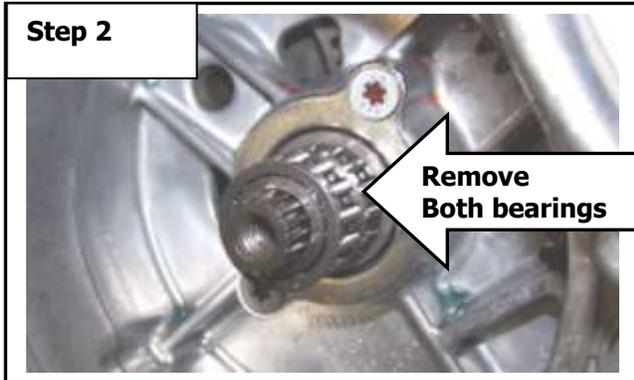


P.N. 920360 Triple Grip Clutch Manual  
KTM 50 SX Jr & Sr 2009-21 Husqvarna TC50 2018-21 GasGas MC50 2021

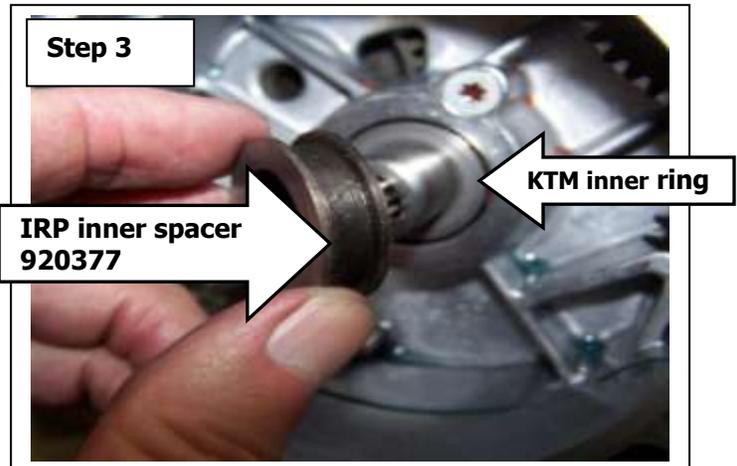
Factory KTM clutch covers from 2013-21 do not require modification  
Older bikes from 2009-12 require purchase of an after market cover or a KTM OEM cover from a 2013 to 2021 bike.

**Step 1 Remove Clutch Cover and KTM clutch**

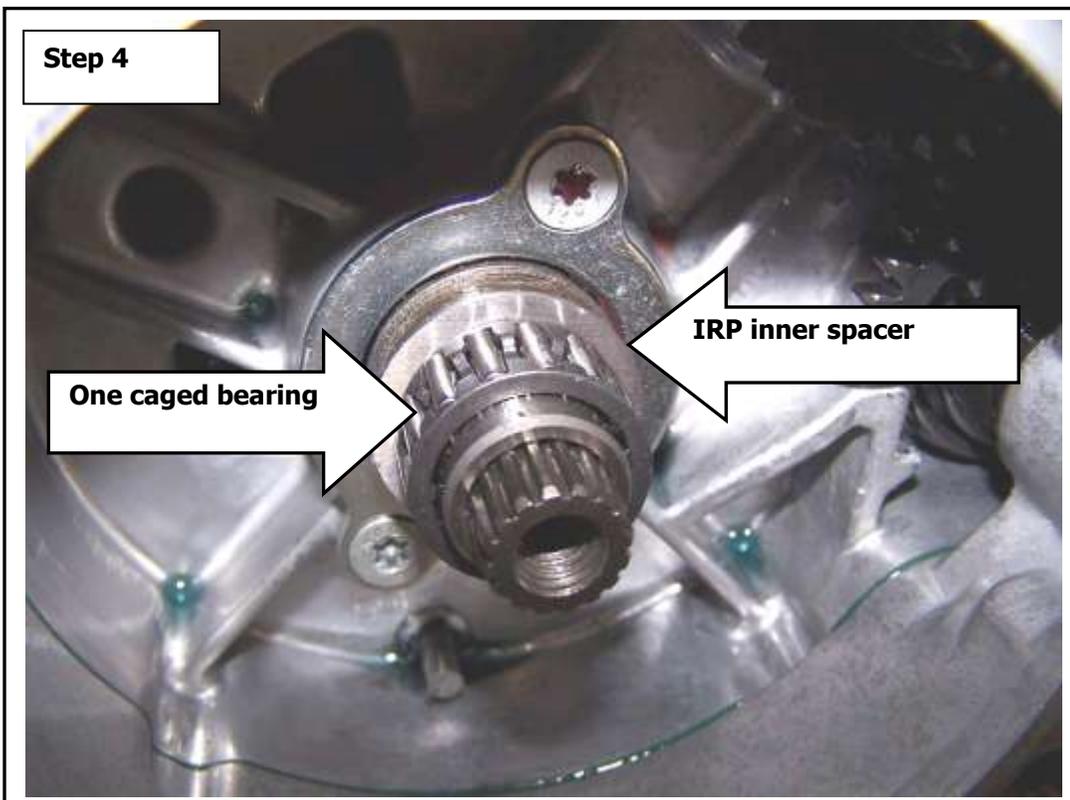
**Step 2 Remove the 2 bearings from inner ring  
Leave inner ring on shaft ...save bearings**



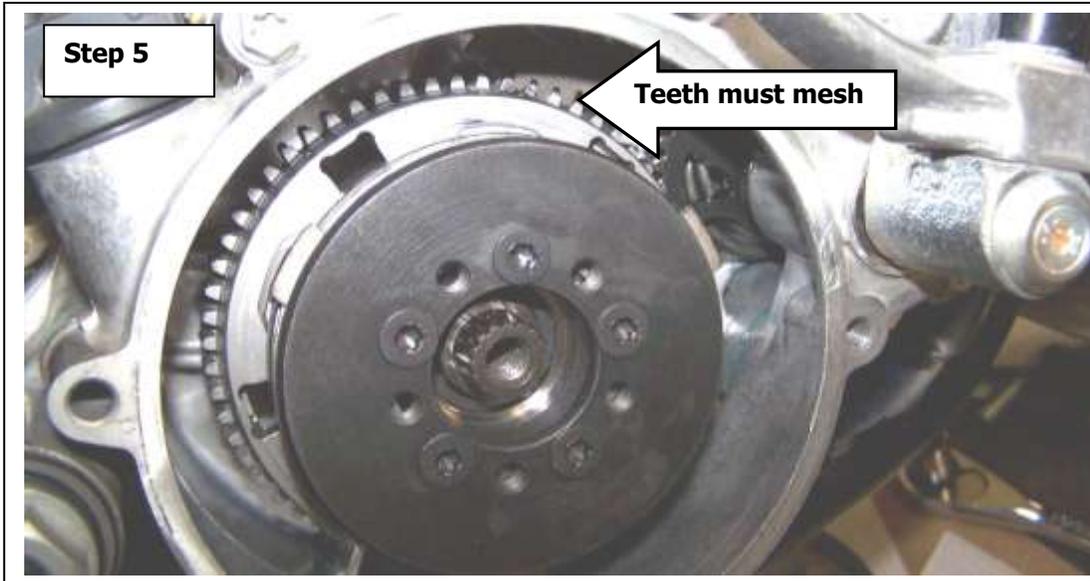
**Step 3 Slide IRP Inner Spacer P/N 920377 onto KTM inner ring**



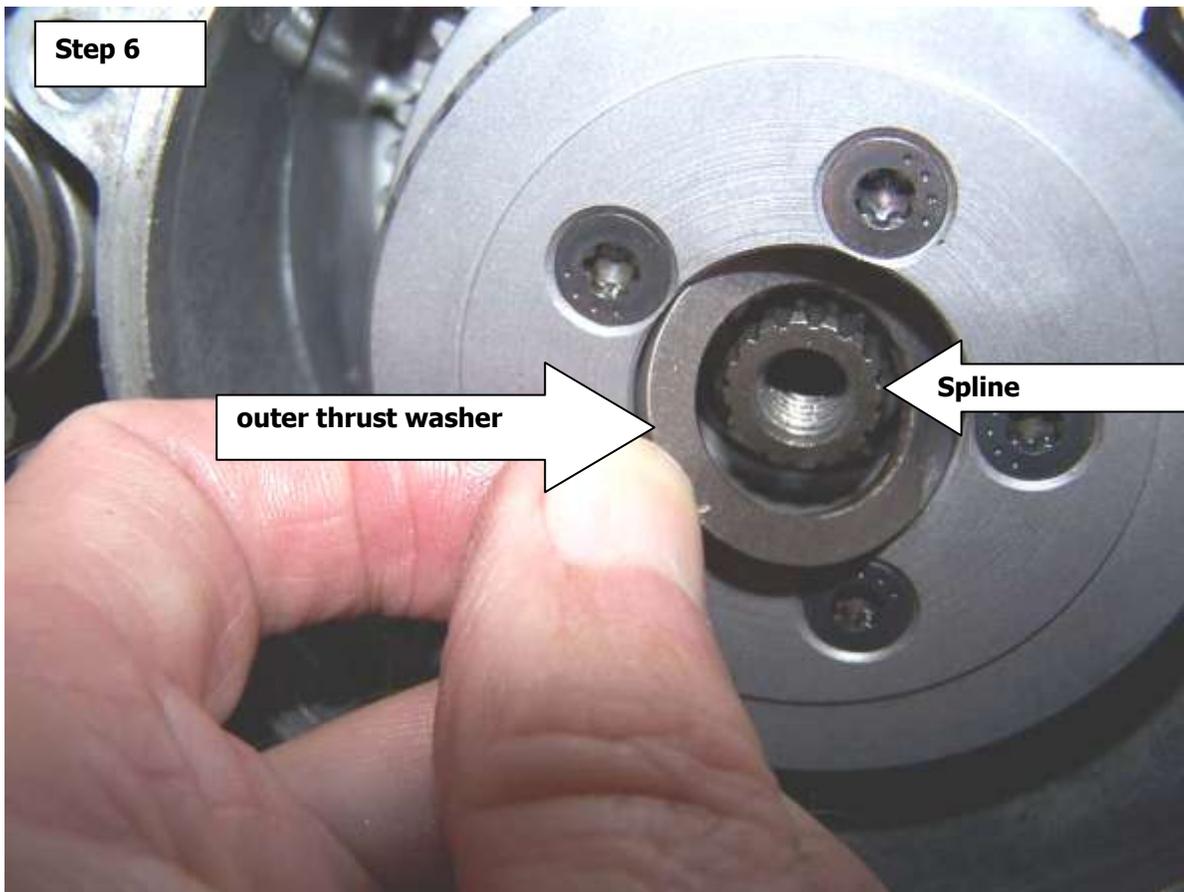
**Step 4 Install ONLY ONE of the caged bearings onto KTM inner ring.**



**Step 5. Install clutch drive assembly onto bearing Note: Teeth must mesh for clutch to go on until it contacts inner spacer**

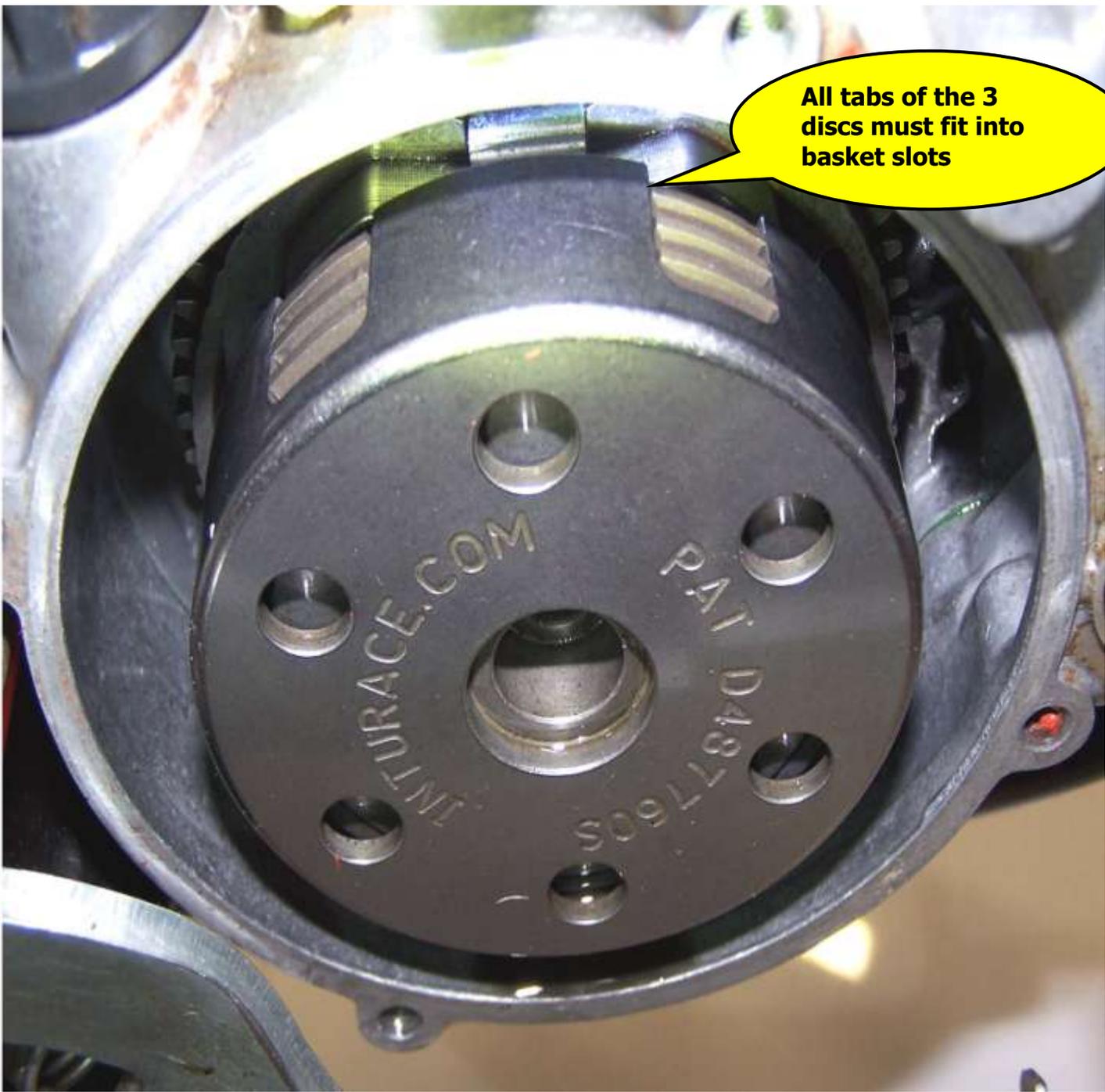


**Step 6 Install outer thrust washer P/N 920378 over spline of transmission shaft... washer must also go over the KTM inner ring**



**Step 7 Install basket onto spline Note: Align the tabs on the friction discs with the drum slots.... failure to align tabs with basket will not allow basket to fit properly onto spline VERY IMPORTANT Tip: lift the tabs from the bottom with small screwdriver and wiggle the basket clockwise and counterclockwise to make it easier to align friction discs in basket and insure basket is onto spline When all three disks are aligned properly the basket will fit completely onto the spline of the shaft Failure to align tabs on all 3 disks can cause the drum to break when bolt is tighten.**

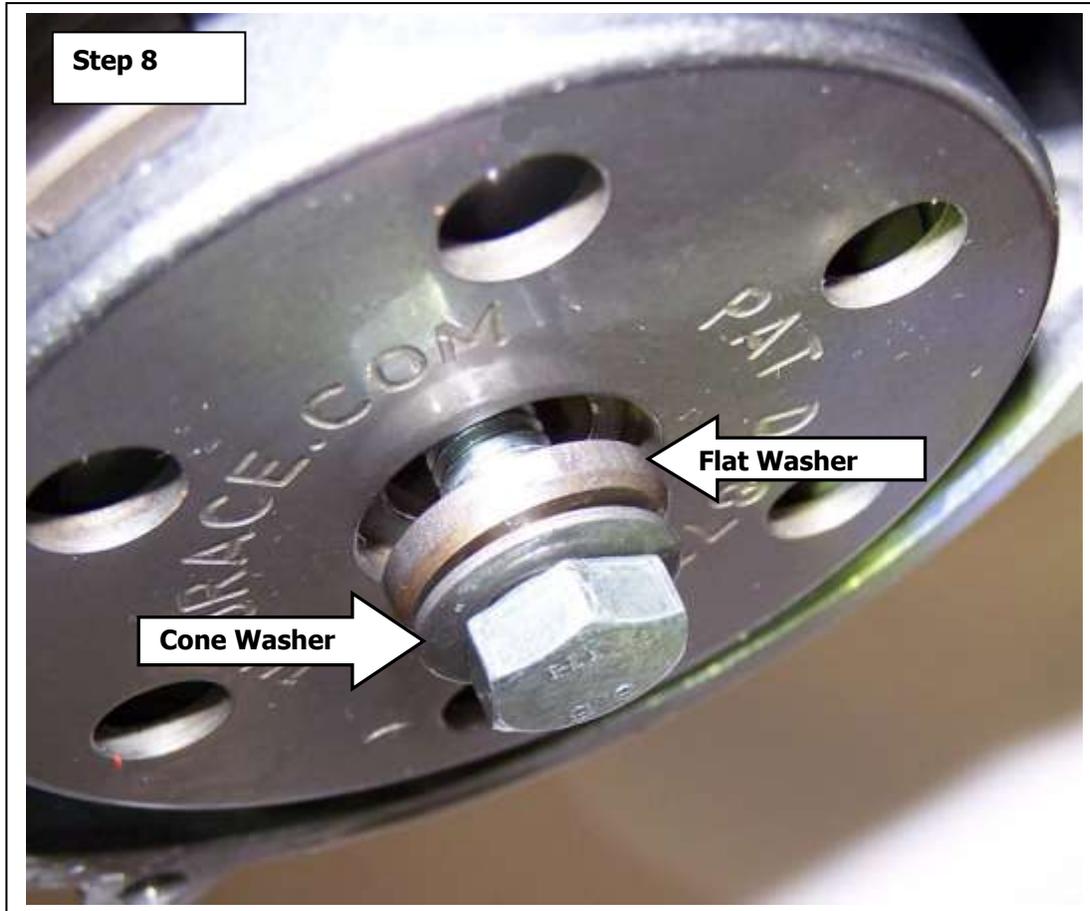
**Step 7**



**All tabs of the 3 discs must fit into basket slots**

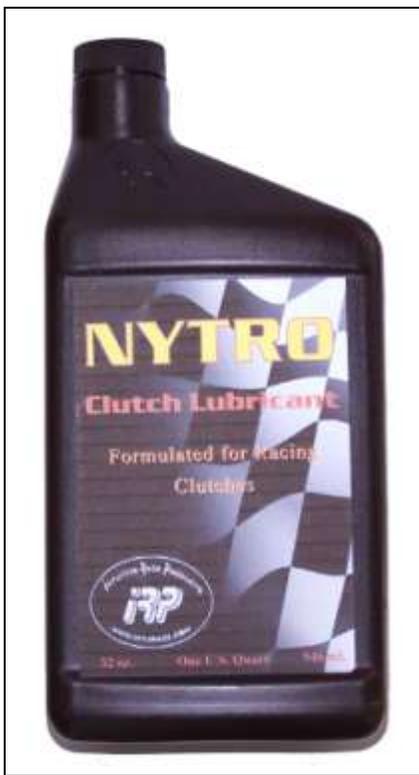
**Step 8** Apply blue loctite to hex head bolt and install with cone washer and flat washer into shaft.  
**Note:** the flat washer and cone washer are made to fit inside the counterbore of the basket..the cone washer helps the bolt from working loose... do not use any substitute washer with an outside diameter over .785"/19.93MM as it will not fit into the counterbore and the head of the bolt will hit the OEM cover...

**Tighten the bolt to 18 ft lbs/25Nm ... if using impact wrench use the lowest setting ...**



**Step 9** Install clutch cover making sure the O ring for the cover is in place  
Make sure to put in drain plug and tighten and install brake spring

**Step 10** Add clutch oil 10-12 OUNCES



For best performance use *IRP NYTRO Clutch Oil or semi-synthetic ATF* Note: *This clutch is smaller than the factory clutch therefore more oil is needed to cover disks properly for maximum heat transfer . 2013 -19 Cover is deeper and requires **350 ML** of oil or 10-12 ounces. If using IRP cover add 375ML of oil **with Triple Grip clutch DO NOT use gear oil or pure synthetic oil!***

#### **STALL SPEED**

Stall speed is the RPM that the clutch locks up solid. In racing stall speed is often referred to "slipping" the clutch. Adjusting the clutch for more slip is actually raising the stall speed. Or when adjusting for less slip the stall speed of the clutch is lowered. The trick is to adjust the stall speed at /or slightly below the peak torque of the engine.

The power band of the 50cc 2-cycle engine is very narrow therefore proper clutch adjustment is necessary for maximum performance. A clutch that locks-up below the power band will cause the engine to bog and performance will be sluggish. A clutch that locks up above the power band is (over slipping). A clutch that is over slipping will cause power to be wasted in the form of heat. Excessive heat may also warp clutch components or damage engine.

The IRP is engineered from the factory with the stall speed setting at about 9600 rpm that is very close to optimum with a stock pipe. **INSTALL THE CLUTCH WITH THE FACTORY SETTING** before making any changes. *This will give you a baseline to work from and the clutch most of the time will not require adjustment for many hours.*

## New Specs for 2019-21

### How to adjust the clutch.

The clutch comes with adjustable screws installed. Follow the chart below if changing stall speed is necessary. A tachometer is required to obtain accurate data.

Retainer Height	APPROXIMATE STALL SPEED
.238"/6.04MM	9,800
.248"/6.29MM	9,600
.255"/6.35MM	9,400

This chart is only a guideline. Exact stall speed adjustment will vary from engine to engine and other factors such as air density and air temperature and exhaust system design. A tachometer must be used to perform an accurate test.

### Stall Speed Adjustment

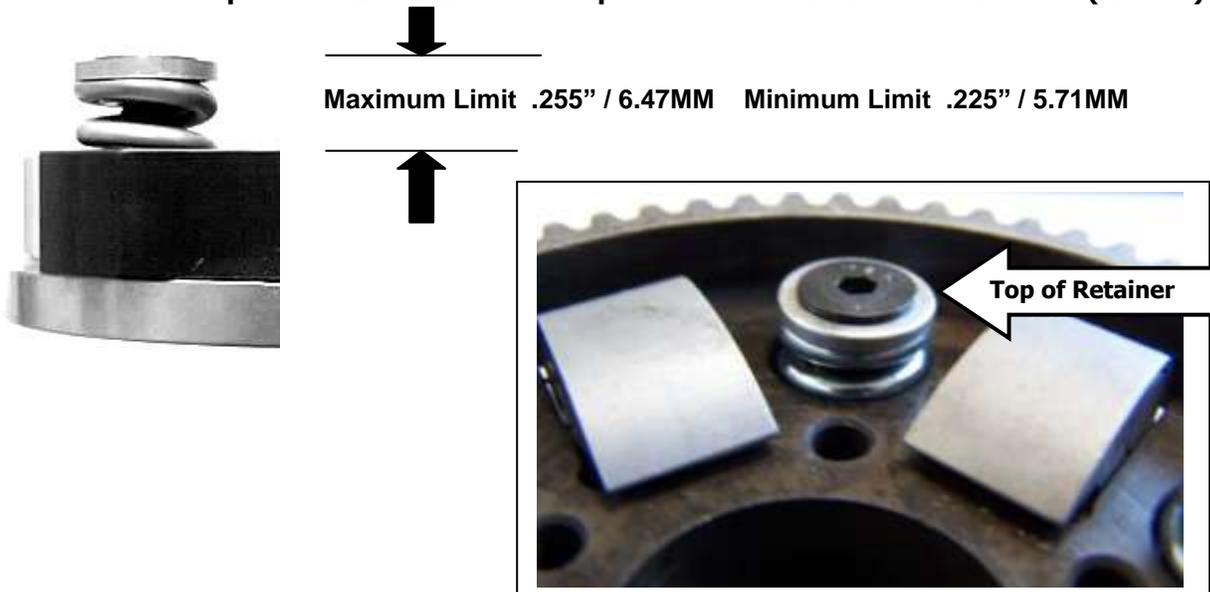
The clutch comes from the factory pre-adjusted at .248" for an approximate stall speed of about 9,600 rpm. That matches torque curve of engine. If you want to experiment with stall speed you can raise or lower stall speed of the clutch. Clutch must be removed from engine for adjustment

For higher stall speed turn all 5 flat head screws CW "clockwise" 1/4 turn per test session.

For lower stall speed turn all 5 flat head screws CCW "counter-clockwise" 1/4 turn per test session.

Do not exceed adjustment limits below. Note: 1/4 turn of the screw is .008" / .21MM

Measure from top of the RETAINER to the top of the drive hub as shown below. (Arrows)



P6

**Warning! Do not go below the minimum adjustment limit as stall speed will be above 10,200. Then the bike will not accelerate properly and the clutch will overheat.**

## Maintenance

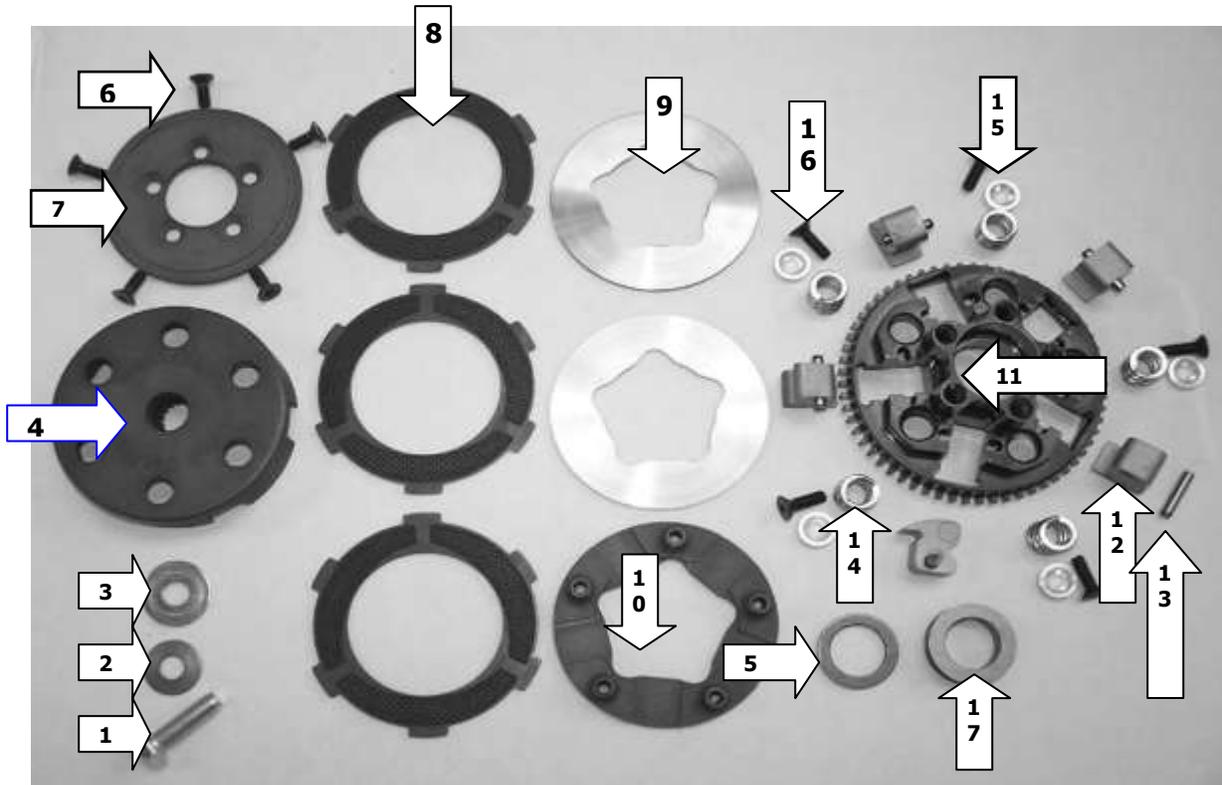
Racing causes extreme wear and tear on the clutch therefore it is important to inspect clutch for wear after 25 hours. Frictions normally last between 25 and 50 hours and up to 100 hours .

Check all parts for cracks or excessive wear and replace if necessary.

Check floaters for warp. Replace if warped or worn more than .005" / .13MM replace. Color brown or blue OK

Check each friction disk for wear. Replace when worn below .090" / 2.28MM thick or glazed. ( Very important)

For best performance new friction discs always out perform worn disks.



Patent D487,760S

Item #	Part #	Description	Units Required
1	920379	Bolt M8 x 25	1
2	920202	Cone Washer	1
3	920203	Flat Washer .775" OD	1
4	920381	Basket	1
5	920378	Outer Thrust Washer	1
6	920206	Screw,flat head T-25 Torx 10-32x 1/2,ea	5
7	920207	Fixed Plate	1
8	920383	Friction Disk, carbon fibre each	3
9	920209	Floater Plate	2
10	920210	Pressure Plate	1
11	920382	Geared drive hub	1
12	920384	Lever, each	5
13	920213	Dowel Pin,each	5
14	920233	Spring,each .091"	5
15	920215	Retainer,each	5
16	920216	Screw, 10-32 x 5/8 Flat head,each	5
17	920377	Inner spacer	1
	920361	Rebuild Kit (3 frictions 2 floaters 5 springs)	Optional
	920219	Clutch Spanner Wrench	Optional
	920391	Cover, billet	Optional
	920898	IRP Nytro Clutch Lubricant 1 qt	Optional