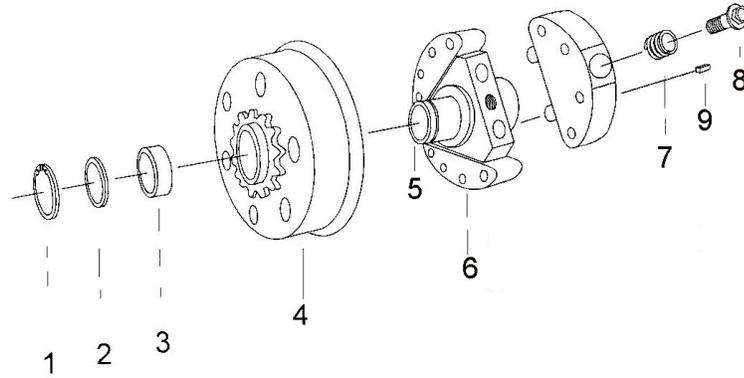


**Rhino II
4 Stroke Clutch**



Item #	Part Number	Description
1	880146	Retaining Ring
2	880137	Outer Thrust Washer, fits 12T and 13T Sprocket
	880136	Outer Thrust Washer, fits 14T to 20T Sprocket
3	880144	Bushing, fits 12T and 13T Sprocket
	880145	Bearing, fits 14T to 20T Sprocket
4	880125	Drum, less sprocket
	880126	Drum with 12T#35 Sprocket
	880127	Drum with 13T#35 Sprocket
	880128	Drum with 14T#35 Sprocket
	880129	Drum with 15T#35 Sprocket
	880130	Drum with 16T#35 Sprocket
	880131	Drum with 17T#35 Sprocket
	880132	Drum with 18T#35 Sprocket
	880133	Drum with 19T#35 Sprocket
	880134	Drum with 20T#35 Sprocket
4A	880152	Sprocket Kit, 12T#35
	880153	Sprocket Kit, 13T#35
	880154	Sprocket Kit, 14T#35
	880155	Sprocket Kit, 15T#35
	880156	Sprocket Kit, 16T#35
	880157	Sprocket Kit, 17T#35
	880158	Sprocket Kit, 18T#35
	880159	Sprocket Kit, 19T#35
	880160	Sprocket Kit, 20T#35
4B	880138	Shim fits between sprocket & retaining ring
4C	880147	Retaining ring for sprocket
4C	880139	Internal thrust washer
5	880140	Drive Hub, fits 3/4" shaft
6	880141	Shoe, each (3 required)
7	880148	Spring, each (3 required) black standard
	880149	Spring, each (3 required) Red optional
8	880142	Stripper bolt (3 required)
9	880143	Key
10	880164	Washer, flat
11	880165	Washer, lock
12	880166	Bolt, 5/16-24
13	880167	Spacer

Rhino II Manual

Foreword

The Rhino II is designed for use with the Clone Kart Engine.

Warning!!! When the engine starts the clutch and chain may spin at high speeds if brake is not applied. **Do not** operate vehicle without proper guards in place. **Do not** attempt to adjust, repair, or lubricate clutch or chain with engine running. Clutch will be hot during and after use therefore allow time to cool before touching or wear appropriate work gloves.

Installation

The clutch is bi-directional therefore it can be mounted inboard with the sprocket facing the engine or outboard.

Steps for inboard installation

1. slide spacer(s) onto crankshaft with chamfer facing engine
2. slide clutch onto crankshaft ... if clutch does not slide freely then sand nicks or burrs from the crank
3. align keyway in clutch with crank keyway .. insert key ...do not force key ... file any burrs from clutch or crank keyway ...Also you may need to sand or file the side of the key a small amount
4. install flat washer, then lock washer , then hex head bolt
5. Tighten hex head bolt to 200 inch pounds

Stall Speed

Stall speed is the RPM that the clutch locks up solid. The Rhino is preset at the factory to engage at about 3600-3800 rpm. Air temp and density as well as age of engine may affect stall speed.

Stall Speed Adjustment

Optional springs p/n 880149 are available to increase stall speed about 150 rpm

Cleaning

Remove clutch from engine when cleaning. Use disc brake spray cleaner for best results. Do not use solvents, gasoline, water, or household cleaners as contamination of the shoes can occur. Wear safety glasses and protective gloves when cleaning and performing maintenance.

Disassembly

1. Remove snap ring and slide drum off drive hub
2. Remove thrust washer from drive hub shank
3. Remove the stripper bolts and springs
4. Remove shoes

Maintenance

For peak performance it is important to clean and apply multipurpose grease to the sprocket bearing and thrust bearing after each race event. Also inspect the following:

Inspect drum for wear and replace if necessary. Replace sprocket when teeth are worn to a point as chain will keep coming off. Replace any bearing that will not spin freely. Replace any washer that is not smooth. Replace shoes when worn over .050". Replace springs when free length is below .475"