



# STINGER CLUTCH





Thank you for choosing Premier Performance's STINGER centrifugal clutch. This 4-cycle clutch has been designed to provide the maximum power transmission. A wide range of engagement speeds and sprocket sizes are available through your component's dealer. We hope you enjoy this performance product.


## WARNINGS

 Keep objects away from the clutch, sprocket, chain and all rotating parts. Never contact the clutch with a body part or tool while it is rotating. Contact with the clutch during operation may cause injury.

 Proper guards that cover the chain, clutch and sprocket are necessary for SAE operation. All guards should meet sanctioning body requirements. The user is responsible to have proper guards in place and keep the operator from contacting the clutch during operation.

 Fastening of the clutch to the powered shaft is the responsibility of the user.

 Children require proper supervision when operating powered vehicles.

 Use proper personal protective equipment when working on our clutch. Eye protection should be worn to avoid injury.

## TROUBLE SHOOTING TIPS

With the proper clutch and gear set up you will feel an even pull when coming out of corners and a constant acceleration in the straight-aways.

If your STINGER appears to be slipping, check first to verify the hub and shoe assembly is installed properly. Next make sure your spring choice is not too high for the engine in use.

If your kart accelerates to slowly use a higher gearing ratio to better match your engine's power curve.

If your engine is running too high use a lower gear ratio.


## SET UP

1. Determine Ratio: A high ratio (greater than 1:1) will give more acceleration, but a lower top end speed. A lower ratio (closer to 1:1) will give you less acceleration, but a higher top end speed. Different tracks and conditions require different ratios. Several sprocket sizes are available to accommodate your needs.

2. Determine engagement RPM: Different color springs give different engagement points. Refer to the spring chart on the next page to determine proper spring. Both springs must be the same color. Do not mix springs with set ups.

3. Installation: The clutch hub is directional. It is meant to rotate in one direction and must be installed accordingly. STINGER comes assembled to run inboard (The sprocket of the drum is next to the engine). If you intend to run the clutch in an outboard position (sprocket away from the engine) the clutch must be modified.

1. Remove snap ring
2. Remove clutch cartridge
3. Reverse inside and outside plates
4. Reassemble clutch per drawing on back

4.  Fasten STINGER clutch to engine crank with washer and bolt. Torque should be 225 in-lb (25 N-m)

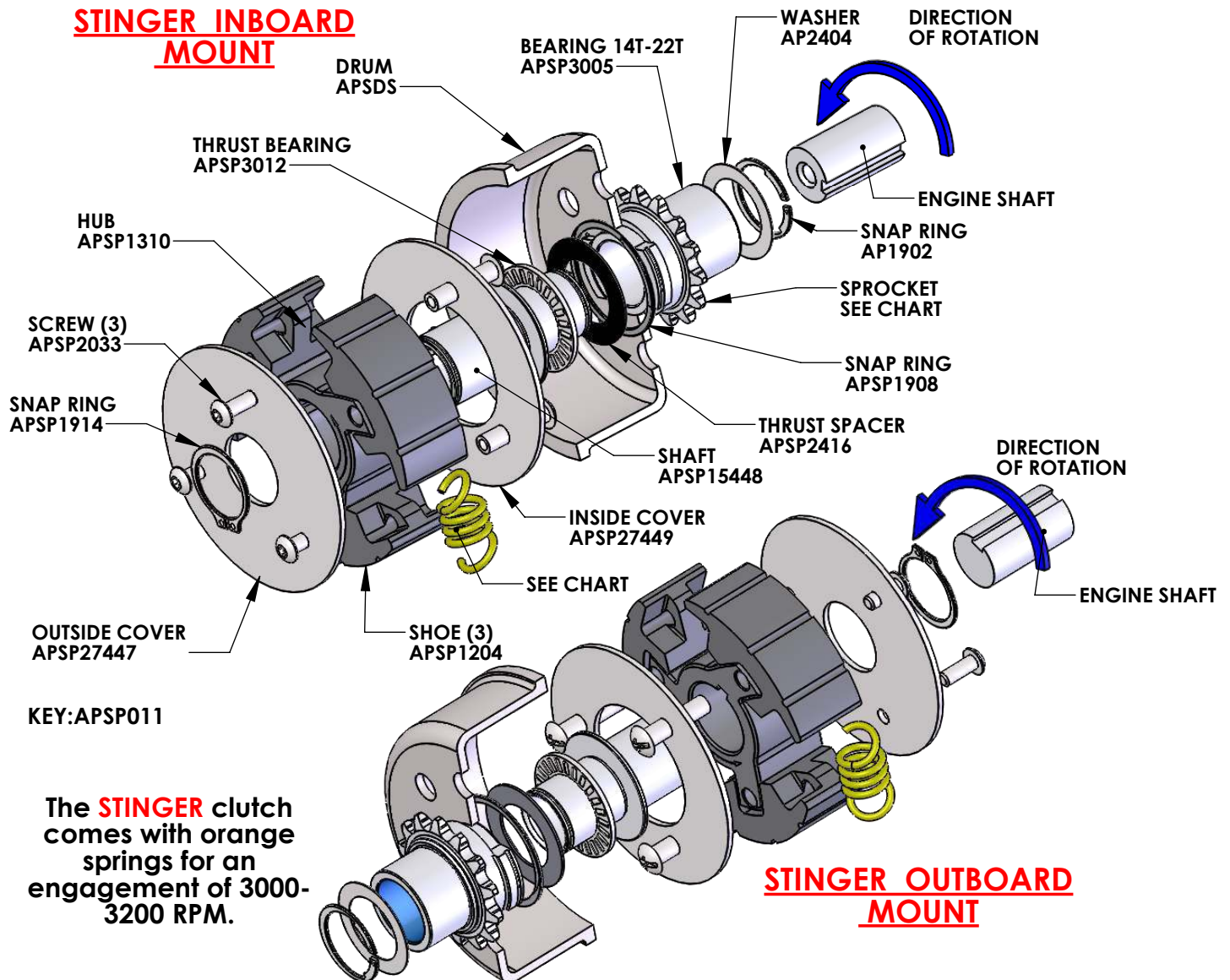
## MAINTENANCE

For best performance keep the clutch friction surface clean from lubricant and dust build up.

To clean the clutch, first remove the cartridge. Apply an aerosol brake cleaner to a rag and wipe off drum and shoe surfaces. Do not use solvents, gasoline, soap or water to clean clutches.

With use, the bearing may require additional grease. Avoid excess amounts of grease. NORAM/Premier recommends Mobil Synthetic Red Grease. Do not get grease on shoe or drum friction surfaces.

## STINGER INBOARD MOUNT



The **STINGER** clutch comes with orange springs for an engagement of 3000-3200 RPM.

## STINGER OUTBOARD MOUNT

SPRING CHART		
COLOR	PART NUMBER	ENGAGEMENT (RPM)
BLUE	APSS51	2700/2900
ORANGE	APSS52	3000/3200
BLACK	APSS53	3300/3500
YELLOW	APSS54	3700/3900
PURPLE	APSS55	4100/4300
WHITE	APSS56	4500/4700
GREEN	APSS57	5000/5200

SPROCKET CHART		
P/N	TEETH	CHAIN
APBSJ12	12	35
APBSJ13	13	35
APBSJ14	14	35
APBSJ15	15	35
APBSJ16	16	35
APBSJ17	17	35
APBSJ18	18	35
APBSJ19	19	35
APBSJ20	20	35
APBSJ21	21	35
APBSJ22	22	35

### NOTES:

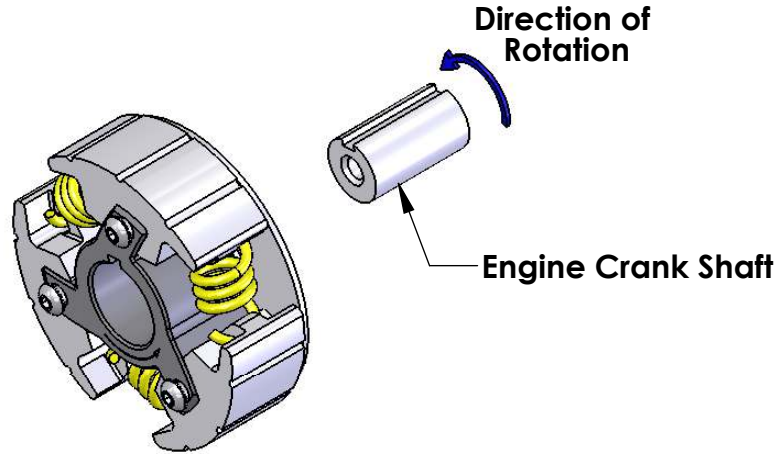


- Clutches come assembled with orange springs
- Never operate the clutch with the drum, snap rings or covers removed. The shoes may become unattached.
- Clutch Mounting Kit APTP34 includes:  
(1) lock washer (1) hat washer (1) spacer (1) engine bolt

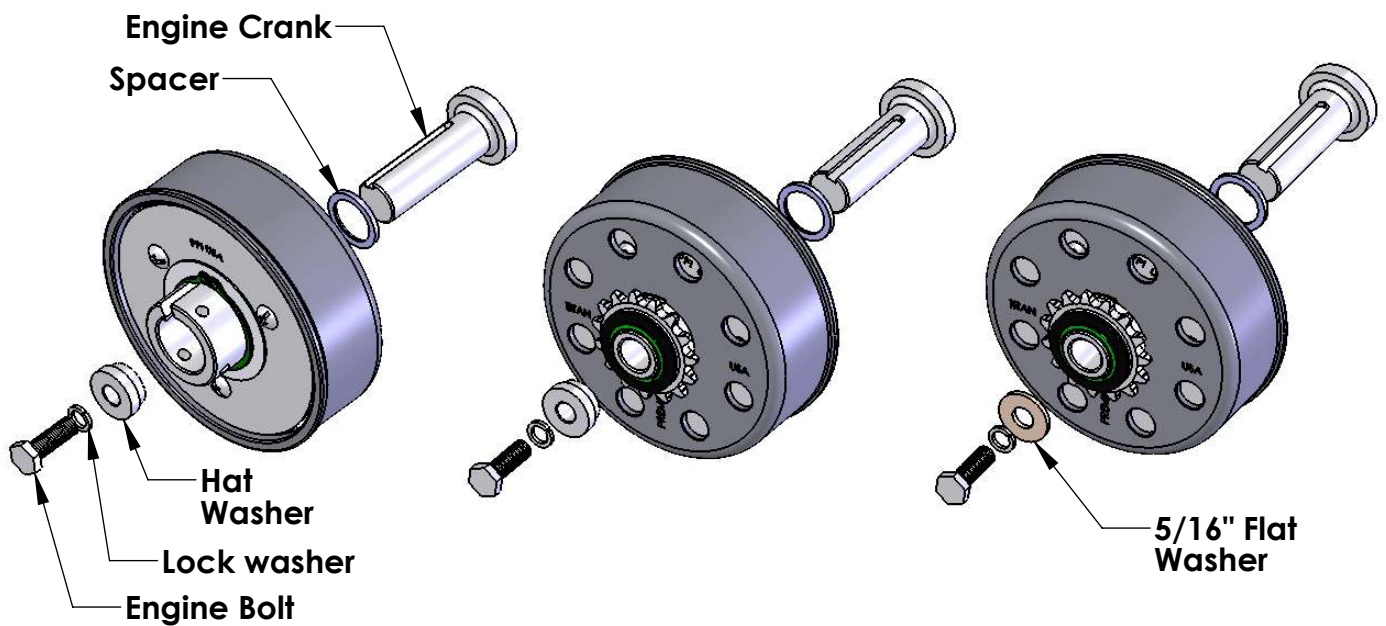
rev 4/26/16



## Stinger Cartridge Orientation



## Mounting Configuration



**NOTE:** Use the hat washer to allow for some axial float. For clutches used on the Briggs 206 engines use the 5/16" flat washer to eliminate axial float.

## **WARNING!!**

1. Never operate clutch without drum in place
2. Secure clutch to engine crank with 5/16-24 Grade 5 bolt tightened to 225 inch-pounds (25NM)
3. Follow all installation instructions

10-2-14