

**CLUTCHING - YAMAHA**

**YAMAHA - "YSR" SERIES HELIXES**

The 2017+ Yamaha Sidewinder model comes with a roller secondary. The roller secondary clutch is different than other previous Yamaha models with button secondary, and uses a different helix. We have a wide selection of angles available for tuning. The stock helix when with the stock secondary spring on a Sidewider is close to coil bind (very close to being stacked coil to coil when at full shift of the clutches). Dalton helixes now have more relief depth in the spring pocket.

"YSR" Helix - Standard Angle			Reverse Angle		
Angle			Angle		
YSR 31	YSR 39	YSR 43/35	YSR 32/36	YSR 33/37	YSR 35/39
YSR 33	YSR 39/31	YSR 44/33	YSR 32/38	YSR 34/36	YSR 37/40
YSR 35	YSR 39/33	YSR 44/40	YSR 33/35	YSR 34/38	YSR 37/42
YSR 35/33	YSR 39/35	YSR 45/33	YSR 33/36	YSR 35/37	
YSR 36	YSR 40/30	YSR 45/38			
YSR 36/28	YSR 40/32	YSR 46/32			
YSR 37	YSR 40/36	YSR 46/34			
YSR 37/33	YSR 41	YSR 47			
YSR 37/35	YSR 41/33	YSR 47/41			
YSR 38	YSR 41/35	YSR 50/44			
YSR 38/32	YSR 41/37				
YSR 38/34	YSR 43/33				



**DALTON "Y" HELIX**

- Extensive machining to be light-weight like the OEM castings, but with the attractive strength of solid billet aluminum

"Y" Series Helix - Standard Angle						Reverse Angle			
Angle						Angle			
Y38 / 32	Y46	Y49	Y51 / 36	Y53 / 43	Y56 / 50	Y35 / 40	Y40 / 46	Y44 / 48	Y49 / 53
Y39	Y46 / 34	Y49 / 34	Y51 / 37	Y53 / 45	Y56 / 52	Y38 / 41	Y40 / 50	Y45 / 50	
Y39 / 35	Y46 / 36	Y49 / 36	Y51 / 38	Y53 / 47	Y56 / 54	Y38 / 43	Y41 / 47	Y47 / 51	
Y40	Y46 / 38	Y49 / 39	Y51 / 39	Y53 / 49	Y57 / 39	Y39 / 44	Y43 / 47	Y49 / 51	
Y40 / 34	Y46 / 40	Y49 / 40	Y51 / 40	Y53 / 51	Y57 / 43				
Y40 / 36	Y46 / 42	Y49 / 41	Y51 / 43	Y54	Y57 / 47				
Y40 / 38	Y46 / 43	Y49 / 43	Y51 / 45	Y54 / 40	Y57 / 50				
Y41	Y47	Y49 / 45	Y51 / 47	Y54 / 41	Y58 / 36				
Y42	Y47 / 39	Y49 / 47	Y51 / 49	Y54 / 42	Y58 / 42				
Y42 / 34	Y47 / 40	Y49 / 51	Y52	Y54 / 44	Y58 / 44				
Y42 / 36	Y47 / 41	Y50	Y52 / 38	Y54 / 46	Y58 / 48				
Y43	Y47 / 42	Y50 / 36	Y52 / 40	Y54 / 48	Y59 / 48				
Y43 / 35	Y47 / 43	Y50 / 38	Y52 / 42	Y54 / 50	Y60				
Y43 / 37	Y48	Y50 / 40	Y52 / 44	Y55	Y60 / 40				
Y43 / 39	Y48 / 34	Y50 / 41	Y52 / 46	Y55 / 33	Y60 / 48				
Y43 / 41	Y48 / 36	Y50 / 42	Y52 / 48	Y55 / 45	Y60 / 50				
Y44	Y48 / 37	Y50 / 43	Y53	Y55 / 48	Y61 / 46				
Y44 / 34	Y48 / 38	Y50 / 44	Y53 / 33	Y56 / 36	Y62				
Y44 / 36	Y48 / 39	Y50 / 45	Y53 / 35	Y56 / 38					
Y44 / 38	Y48 / 40	Y50 / 46	Y53 / 36	Y56 / 40					
Y45	Y48 / 41	Y50 / 48	Y53 / 38	Y56 / 42					
Y45 / 37	Y48 / 42	Y51	Y53 / 40	Y56 / 44					
Y45 / 39	Y48 / 43	Y51 / 33	Y53 / 41	Y56 / 46					
Y45 / 41	Y48 / 44	Y51 / 35	Y53 / 42	Y56 / 48					



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**YAMAHA - "R" SERIES HELIXES**

The "R" (radius) series helixes for Yamaha from Dalton features a short duration initial angle, radiuses into what is mostly a straight angle helix (second angle). This style of cut is a favorite of some clutch tuning professionals and is quite effective at controlling initial over-rev while still maintaining the characteristics of a straight helix.

"R" Series Helix - Standard Angle				
Angle				
49R44	51R46	53R41	54R42	54R48
50R42	52R40	53R43	54R43	55R45
50R44	52R42	53R45	54R44	56R43
50R46	52R44	53R47	54R45	56R44
50R47	52R45	53R48	54R46	56R46
51R34	52R46	54R40		



**AAEN HELIX**

**HARDENED STEEL HELIX CAM**

\$199.95-F

Hardened steel cams combined with a steel needle bearing helps to eliminate any sliding friction or flex as found with plastic rollers working against aluminum cams.

ANGLE	PART #	ANGLE	PART #
48	210-12103	52/40	210-12074

**AAEN 4-STAR PRIMARY ROLLER CLUTCH REPLACEMENT ROLLER BEARING**

Sliding friction is eliminated by replacing the sliding buttons with rollers. The 4-Star clutch has four machined roller passages. The four rollers are mounted on a special billet spider designed to run in the roller passages. Smooth clutch engagement, instant speed changes, higher efficiency, less belt wear and cooler running belts are the rewards. The billet cover incorporates an adjustable engagement speed mechanism.

- Rollers eliminate button friction and provide for a super-smooth engagement
- Fits All Yamaha models 1993 and up

210-2001 \$32.95-F

**HARDWARE KIT FOR YVX ROLLER ACTION**

210-12072 \$64.95-H

**DALTON PRIMARY CLUTCH SPRINGS**

238-5110	Black/Silver	@ 2.888" - 41 kg.	@ 1.593 " - 125 kg.
238-5111	Black/Red	@ 2.888" - 48 kg.	@ 1.593 " - 120 kg.
238-5112	Black/Blue	@ 2.888" - 53 kg.	@ 1.593 " - 133 kg.
238-5113	Black/Green	@ 2.888" - 57 kg.	@ 1.593 " - 129 kg.
238-5136	Red	@ 2.888" - 39 kg.	@ 1.593 " - 133 kg.
238-5135	Orange	@ 2.888" - 28 kg.	@ 1.593 " - 132 kg.



**AAEN SECONDARY CLUTCH SPRING**

210-12417 White (longer spring with higher side pretension) Medium Rating Torsion 306 lbs / rev

**DALTON SECONDARY SPRINGS**

TCl #	Color	Torsion Value	# Coils	Wire Dia.	Free Length	@64mm	@49mm	@39mm
238-5140	Red	@8 kg	4.86	5.5 mm	90 mm	22.5 kg	34 kg	45 kg
238-5163	Pink/White	@8.5 kg	4.86	5.7 mm	85 mm	19 kg	29.5 kg	45 kg
238-5162	Black/Orange	@8.5 kg	4.86	5.7 mm	100 mm	31 kg	43 kg	52 kg

++ Dalton Black/Orange (updated version-spring 2018) . The latest version of the DPSS-YBO has only one orange mark on one coil and is set at ten degrees more to equal the same thing as the original. For example, most seem to use the original set at 6-1 or 70 degrees. For the new version you would set the spring at 6-2 or 80 degrees to be the same torsion. The instruction paper that comes with the spring states this as well.

New! Some Sidewinder customers have requested a heavier spring for testing certain applications of very tall gearing or higher load conditions. We have a new option for those interested. Please contact us

## YAMAHA CLUTCH FLY WEIGHTS

### DALTON "QAYA" QUICK ADJUST FLYWEIGHTS

Dalton Quick adjust weights for Yamaha applications. This method of adjustment allows for adding or subtracting mass from the main body of the flyweight without even removing the flyweight from the clutch. Makes for Quick and easy testing and tuning. This series of Quick Adjust uses our "DPYR" curvature that has been very popular on the four stroke models. QAY and DTYA are the same series and curve, etc.



TCI #	MFG#	WEIGHT	DESCRIPTION
	QAY-51	51-58.4 g	Viper/Nitro. This one often for bigger tracks or mixed with some elevation
238-5384	QAY-54	54-61.4 g	Popular with Nitro/Viper/Vector 3 cyl. stock models
	QAY-58	58-65.4 g	Often in RX-1 applications & some stock Apex applications
238-5385	QAY-62	62-69.4 g	Common with Apex applications
	QAY-66	66-73.4 g	Some Yamacharger/Apex applications. Also some stock Sidewinders with some clutch recipes, and often with Sidewinder w/free flowing exhaust/ extra HP
238-5430	QAY-70	70-77.4 g	Often for boosted 180 HP Viper kits etc*, seems to be getting popular on lower version "trail" re-programmed Sidewinders with extra boost
238-5382	DTYA-1	73.6-81 g	This set is now most often used with 240-290 level boosted/re-programmed Sidewinder models, it was also common with common older low boost Apex/RX turbo applications
238-5383	DTYA-2	79-86.4 g	Most common for many boosted RX/Apex applications
238-5387	DTYA-3	84.6-92 g	New heavier base weight for higher boost applications

### DALTON QUICK ADJUST SCREW HARDWARE

238-5391

This pkg of hardware is a replacement pack. They are sold as a pack for each quick adjust individual flyweight. Fits all Dalton Snowmobile quick adjust flyweights. 1/4" UNC with pre applied nylon patch.

- one pkg of 6 assorted for one flyweight



### DALTON "DPY" SERIES FLYWEIGHTS

These are a more aggressive curvature flyweight than 4 stroke models from the factory. These ones have a curvature more similar to the 8DN-20 type curvature, and can be used for tuning either 2 or 4 stroke models. This more aggressive curvature is often used at much less grams than the factory (flatter) curvature- a favorite for quick revving drag applications.

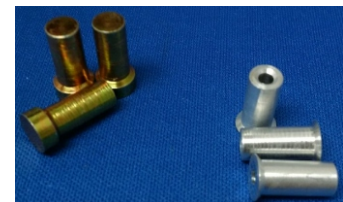
DESCRIPTION	PART #	DESCRIPTION	PART #
64 gram	238-5325	66 gram	238-5326
68 gram	238-5327		



### DALTON YAMAHA FLYWEIGHT RIVETS

These rivets are used to adjust the mass of OEM Yamaha flyweights on the Dalton DPYR series .

TCI #	MFG#	DESCRIPTION
238-5349	DFR-Y	Steel, solid. 3.1 g
238-5347	DFRH-Y	Steel, hollow. 2.4g
238-5395	DFRA-Y	Aluminum, hollow. .85g
238-5348	DFRL-Y	Long, Solid - 3.6g
	DFRX-Y	4.2 g
	DFRB-Y	2.8g black hollow steel
	DFRO-Y	2.1g olive hollow steel



### HEAVY HITTER CLUTCH WEIGHT KITS

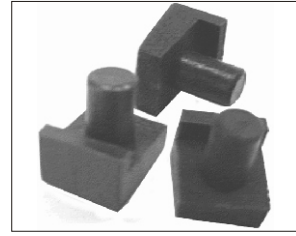
- ISR stock legal, bolt on system with no clutch modifications needed.
- Fully adjustable in the low, mid, and top end takes guess work out of clutching.
- Fully bushed weights are gram matched and have been spin tested at 18,000 rpm to insure reliability.
- Heavy mass at pivot end prevents belt slippage for hard acceleration.
- Low end adjustment possible without removal, mid and top end can be adjusted as fine as .4 grams.
- Base weights offer up to 15 grams of added adjustment, another 4-8 with optional tungsten washers.
- Kits include 3 weights, fasteners, easy to understand installation instructions, and tuning guide.



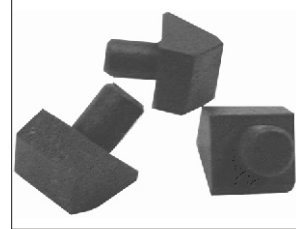
DESCRIPTION	PART #	RETAIL
YVR (90's) - . 8 mm pin 51-52g	207-3001	\$299.95-F
53g - Base weight	207-3011	\$324.95-F

**YAMAHA CAM SLIDER SHOES & ROLLERS**

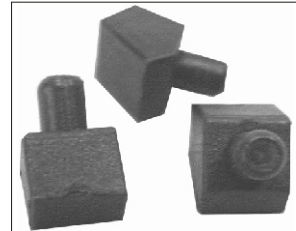
MODEL	YEAR	OEM #	PART #
BR 250, T, TS (Bravo)	82-01	85L-17688-01	03-151-13
EL	1973	801-17688-10	03-151-10
Enticer (ET)	77-91	801-17688-10	03-151-10
Enticer (ET 410)	92-01	8X6-17688-00	03-151-11
EW	72-73	801-17688-10	03-151-10
Excel (EC 340)	81-88	801-17688-10	03-151-10
Excel V (XL 540)	79-80	8X6-17688-00	03-151-11
Excel V 540 (XL V)	85-90	8X6-17688-00	03-151-11
Exciter (EX 340, 440)	78-81	8X6-17688-00	03-151-11
Exciter 570 (EX 570)	87-93	8X6-17688-00	03-151-11
GP	71-78	801-17688-10	03-151-10
GPX	74-75	801-17688-10	03-151-10
GS	75-77	801-17688-10	03-151-10
Inviter (CF300)	86-90	801-17688-10	03-151-10
Mountain Lite 500	2001	8AV-17688-10	03-038
Mountain Max 600, 700	97-02	8AV-17688-10	03-038
Ovation (CF3000)	89-00	85L-17688-01	03-151-13
Phazer (PZ 488)	84-95	8X6-17688-00	03-151-11
Phazerr (PZ488, 500)	96-01	8AV-17688-10	03-038
RX-1, ER, LE	2003	8AV-17688-10	03-038
RX-1 Mountain, LE	2003	8AV-17688-10	03-038
SL	68-74	801-17688-10	03-151-10
SM	73-74	801-17688-10	03-151-10
SR, SW	71-73	801-17688-10	03-151-10
SRV	80-91	8X6-17688-00	03-151-11
SRX	77-81	85L-17688-01	03-151-13
SRX 600, 700	98-01	8AV-17688-10	03-038
SS	70-71	801-17688-10	03-151-10
SS 440	80-83	8X6-17688-00	03-151-11
SSR 440	1978	8X6-17688-00	03-151-11
SX 500	2000	8AV-17688-10	03-038
SX 700 Viper ER, Mountain	2003	8AV-17688-10	03-038
SXR 600, 700	00-02	8AV-17688-10	03-038
SXV 700 Viper	02-03	8AV-17688-10	03-038
Venture 480 (VT 480)	91-00	8X6-17688-00	03-151-11
Ventue 500 (VT500)	97-01	8AV-17688-10	03-038
Venture 600, 700 (VT)	2003	8AV-17688-10	03-038
Viking (VK 540)	88-05	8X6-17688-00	03-151-11
V-Max 500, 600	94-02	8AV-17688-10	03-038
V-Max 540	83-91	8X6-17688-00	03-151-11
V-Max 600 ER	2003	8AV-17688-10	03-038
V-Max 700	97-02	8AV-17688-10	03-038
V-Max 800	95-97	8AV-17688-10	03-038
V-Max 4 750	1992	8X6-17688-00	03-151-11
V-Max 4 750	92-94	8AX-17688-00	03-083



03-151-10



03-151-11



03-151-13



03-038



03-083

**YAMAHA PIVOT BUSHING KIT**

207-5710

\$45.95-F

Sold in a set of 3



**YAMAHA YZP CLUTCH BUTTONS**

03-151-20

\$10.95-J

- Fits Yamaha YZP Clutch 1992-2002
- Yamaha OEM 88X-17635-00
- Kit - 3 nylon sliders



**CLUTCHING - YAMAHA**

**YAMAHA DRIVE CLUTCH SLIDER KIT**

03-151-09



- OEM 8BW-17653-00-00
- Pkg of 6
- Clutch Slider Kit fits many models from 95-06

**YAMAHA JACK SHAFT MOUNTING KITS**

207-9004

- Mount kit for Yamaha JCKYA
- Fits 97-04 SX, SXR, SRX Viper and Mountain models.
- Mount kit includes all need bolts, washers, key, spacers and bearings

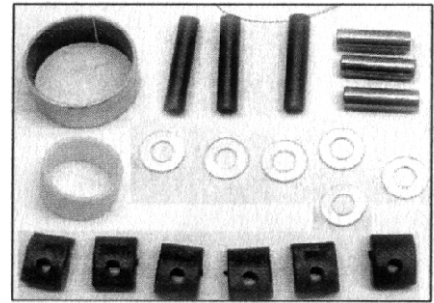
**YAMAHA CLUTCH REBUILD KITS**

**YAMAHA DRIVE CLUTCH REBUILD KIT** 03-153-10

Fits Yamaha YVXX Primary Clutch 1988 - present

KIT INCLUDES:

- 2 steel bushing
- 3 fiber bushing
- 3 black hollow pins
- 3 steel pins
- 6 nylon washers
- 6 cam shoes



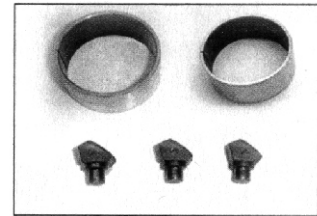
**YAMAHA DRIVEN CLUTCH KIT**

03-153-11

Fits Yamaha YVXC Secondary Clutch 1988 to present (most models)

KIT INCLUDES:

- 2 steel bushings 38 x 42 x 17.5 mm
- 3 cam shoes (03-151-090)

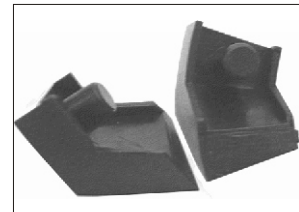


**CAM SLIDER SHOES & ROLLERS**

MODEL	YEAR	OEM #	PART #
<b>BOA-SKI</b>			
All Models	68-74	S6901-005	03-151
<b>JOHN DEERE</b>			
All Models	76-84	AM54278	03-151-19
<b>KAWASAKI</b>			
Drifter 340, 440	79-81	49048-3501	03-151-17
Interceptor 550	1982	49048-3002	03-151-18
Intiguer 440	1978	49048-3501	03-151-17
Intruder 440	78-82	49048-3002	03-151-18
Invader 340, 440	78-81	49048-3002	03-151-18
Inviter 340	1978	49048-3501	03-151-17
LTD 440	80-81	49048-3002	03-151-18
<b>SCORPIAN</b>			
All Models	70-81	86790	03-151
<b>SKIROULE</b>			
All Models	69-76	9052 x 5012	03-151-02
<b>SNO-JET</b>			
All Models	68-74	050144	03-151
Astro 340, 440	76-77	49048-3501	03-151-17
SST 340, 440	75-77	49048-3501	03-151-17
Thunder Jet 440	1975	49048-3501	03-151-17



03-151



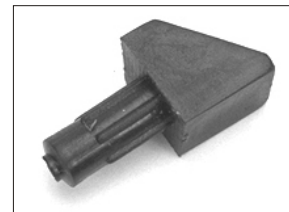
03-151-02



03-151-17



03-151-18



03-151-19