

20

09

Clutch Components for ATVs

Polaris
Suzuki
Kawasaki
Arctic Cat
Can-Am/BRP
Yamaha



Clutch Components for Snowmobiles

Arctic Cat
Polaris
Yamaha
Ski Doo

Dalton Industries

www.daltonindustries.com

Shipping

Canada
Call (902) 897 3333 for current shipping rates to Canadian destinations via Fedex or Expresspost.

United States
Unless otherwise specified we will prepay and charge the shipment via Federal Express or Expresspost. Some restrictions may apply.

Please Note: AtlanticTime Zone is 1 hour later than Eastern Time Zone.

In stock orders processed by 2:00 pm AST will be shipped the same day.

How Can I Order Dalton Clutch Components ?

Order Dalton parts through your local dealership.

ANY real dealership can order from Dalton Industries or one of our wholesale distributors. If your favorite dealership is not currently listed in our files, please have them contact us so we can arrange the best purchasing option with them. Often we can verify that they are a factory dealership and help them with the most reasonable ordering process the same day. Your dealership can have parts for you within a few days...just about any time...
.....anywhere!

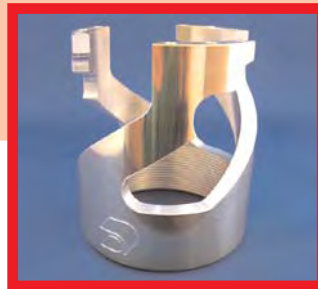
Dealers :

There is suggested retail pricing and a current list of the major wholesale distributors on our website: www.daltonindustries.com

Phone (902) 897 3333
Fax (902) 897 6254 (24 hours)
Email info@daltonindustries.com (24 hr.)

**If you're into clutch tuning, racing,
and winning, you already know...**

Adjustability...



Precision...

Innovation...



www.daltonindustries.com

Dalton Quality Clutch Components for Snowmobiles

Arctic Cat Polaris Yamaha Ski-Doo



Arctic Cat

Arctic Cat helixes for models with reverse driven, roller or button clutch.
(Pre '05 models with non ACT secondary clutch, also some 05-06 firecats with chaincase)

Dalton helixes are relieved for more overdrive, they are totally machined inside and out for perfect roundness. They have taller points so they work well in the oversized driven clutch used by many drag racers.

												Reverse (Backward Cut)
36	47 / 45	51 / 49	54 / 38	56 / 32	57 / 47	58 / 53	60 / 46	62 / 46	64 / 46	66 / 52		
38	48	52	54 / 40	56 / 34	57 / 48	58 / 54	60 / 48	62 / 48	64 / 48	66 / 54		
38 / 32	48 / 36	52 / 32	54 / 42	56 / 36	57 / 49	58 / 55	60 / 50	62 / 50	64 / 50	66 / 56		
39	48 / 38	52 / 34	54 / 44	56 / 38	57 / 50	58 / 56	60 / 51	62 / 51	64 / 52	66 / 58		
40	48 / 40	52 / 36	54 / 45	56 / 40	57 / 51	59	60 / 52	62 / 52	64 / 54	66 / 60		40 / 46
40 / 38	48 / 42	52 / 38	54 / 46	56 / 42	57 / 52	59 / 39	60 / 54	62 / 54	64 / 56	66 / 62		44 / 46
41	48 / 44	52 / 40	54 / 48	56 / 44	57 / 53	59 / 49	60 / 56	62 / 55	64 / 58	68 / 34		47 / 49
42	49	52 / 42	54 / 50	56 / 46	57 / 54	59 / 50	61	62 / 56	65 / 30	68 / 36		47 / 52
42 / 37	49 / 45	52 / 44	54 / 51	56 / 48	57 / 55	59 / 51	61 / 36	62 / 57	65 / 37	68 / 38		48 / 56
43	49 / 47	52 / 46	54 / 52	56 / 50	58	59 / 52	61 / 38	62 / 58	65 / 38	68 / 40		48 / 58
43 / 34	50	52 / 48	55	56 / 51	58 / 30	59 / 53	61 / 41	62 / 60	65 / 40	68 / 42		49 / 53
44	50 / 32	52 / 49	55 / 42	56 / 52	58 / 33	59 / 54	61 / 45	63 / 45	65 / 48	68 / 46		49 / 54
44 / 36	50 / 36	53	55 / 45	57	58 / 34	59 / 55	61 / 47	63 / 47	66 / 30	68 / 48		49 / 59
44 / 40	50 / 38	53 / 36	55 / 46	57 / 34	58 / 36	60	61 / 49	63 / 49	66 / 32	68 / 50		50 / 56
45	50 / 40	53 / 38	55 / 47	57 / 36	58 / 38	60 / 25	61 / 50	63 / 51	66 / 34	68 / 52		52 / 56
45 / 40	50 / 42	53 / 40	55 / 48	57 / 38	58 / 40	60 / 30	62 / 30	63 / 53	66 / 35	68 / 53		53 / 55
45 / /41	50 / 44	53 / 47	55 / 49	57 / 39	58 / 42	60 / 33	62 / 32	64 / 30	66 / 36	68 / 54		55 / 58
46	50 / 46	53 / 49	55 / 50	57 / 40	58 / 44	60 / 34	62 / 33	64 / 32	66 / 38	68 / 56		55 / 60
46 / 34	50 / 47	53 / 50	55 / 51	57 / 42	58 / 46	60 / 35	62 / 34	64 / 36	66 / 40	70 / 40		55 / 62
46 / 36	50 / 48	53 / 51	55 / 52	57 / 43	58 / 48	60 / 36	62 / 36	64 / 38	66 / 42	70 / 42		56 / 61
46 / 38	51	54	55 / 53	57 / 44	58 / 49	60 / 38	62 / 38	64 / 40	66 / 44	70 / 44		
46 / 40	51 / 45	54 / 34	56	57 / 45	58 / 50	60 / 40	62 / 40	64 / 42	66 / 46	70 / 54		
47	51 / 47	54 / 36	56 / 28	57 / 46	58 / 52	60 / 42	62 / 42	64 / 44	66 / 48			
	51 / 48	54 / 37	56 / 30			60 / 44	62 / 44		66 / 50			

All Dalton helixes for this clutch are designated by "A" for the part number, eg. A 55 / 52

Snowcross/ stepcut style helixes for Arctic driven

In the past few years we have cut many custom helixes for racers using this type of cut. The following have a straight initial angle of short duration followed by either a straight angle, or a progressive curve.

SX027 (57 / 52-50)	A 56 / 40	A 60 / 40
SX95 (55 / 49)	A 56 / 53-49	A 60 / 44-38
SX25 (55 / 52)	A 56 / 53-51	A 60 / 54-49
SX27 (57 / 52)	A 56 / 64-36	A 60 / 56-50
SX47 (57 / 54)	A 57 / 50-46	A 62 / 54-44
44 / 62-52	A 57 / 54-51	A 64 / 56-53
53 / 60-40	A 58 / 52-44	
54 / 65-37	A 58 / 52-49	
	A 58 / 53-46	
	A 58 / 55-52	



Helixes for the Arctic "ACT Drive"

Many Arctic Cat models now feature the new style secondary clutch. All Dalton helixes for this model are designated by "C".

New Progressive Cut Helixes for the New Arctic Cat Driven Clutch

We now offer a selection of PROGRESSIVE cut helixes for the "new" ACT drive. The regular helixes for ACT Drive from the factory, as well as our above "C" listing are done with a distinct step style of cut, using a short duration first angle. Some dag racers prefer a full progressive curve. The following with this style of cut are designated by the prefix "C" and the suffix "P".

Available Angles- OEM Style

C 32	C 46 / 34
C 34	C 46 / 36
C 36	C 46 / 38
C 36 / 34	C 46 / 40
C 38	C 46 / 44
C 38 / 36	C 46 / 60-48
C 38 / 36-34	C 46 / 40-34
C 40	C 46 / 40-36
C 40 / 32	C 46 / 42-38
	C 47 / 43-39
C 40 / 34	C 47 / 44-41
C 40 / 36	C 48
C 42	C 48 / 36
C 42 / 32	C 48 / 38
C 42 / 34	C 48 / 39
C 42 / 36	C 48 / 40
C 42 / 38	C 48 / 42
C 44	C 48 / 44
C 44 / 28	C 48 / 46
C 44 / 30	C 48 / 42-38
C 44 / 34	C 48 / 43-39
C 44 / 36	C 48 / 44-38
C 44 / 38	C 48 / 44-40
C 44 / 40	C 49 / 43
C 44 / 41-39	C 50
C 45 / 38-36	C 50 / 36
C 46	C 50 / 38

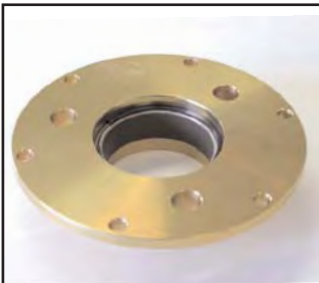
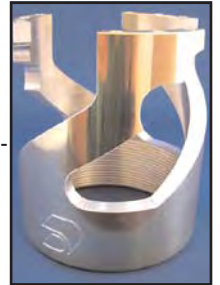
C 50 / 40-38	C 58 / 50
C 50 / 44-36	C 58 / 55-52
C 50 / 40	C 59 / 51
C 50 / 42	C 60 / 36
C 50 / 44	C 60 / 38
C 51 / 39	C 60 / 42
C 52 / 36	C 60 / 44
C 52 / 38	C 60 / 50
C 52 / 40-38	C 60 / 54
C 52 / 40	C 60 / 55
C 52 / 42-40	C 62 / 38
C 52 / 42	C 62 / 49
C 52 / 44	C 62 / 52
C 52 / 48-36	C 62 / 56
C 52 / 48-38	C 64 / 36
C 53 / 46	C 64 / 38
C 54 / 32	C 64 / 42
C 54 / 36	C 66 / 36
C 54 / 38	C 66 / 40
C 54 / 40	C 68 / 36
C 54 / 42	C 68 / 38
C 54 / 44	C 70 / 33
C 56 / 36	C 70 / 37
C 56 / 38	C 70 / 38
C 56 / 40	C 72 / 36
C 56 / 42	Reverse
C 56 / 44	(Backward
C 58 / 36	Angle)
C 58 / 38	C 40 / 44
C 58 / 40	C 40 / 48
C 58 / 42	C 40 / 50
C 58 / 44	C 44 / 48
C 58 / 49	C 48 / 58

Available Angles- Dalton ACT Progressive

C 36 / 34P	C 44 / 34P	C 48 / 42P	C 54 / 42P
C 38 / 36P	C 44 / 36P	C 48 / 44P	C 54 / 44P
C 40 / 32P	C 44 / 38P	C 50 / 36P	C 56 / 40P
C 40 / 34P	C 44 / 40P	C 50 / 38P	C 56 / 42P
C 40 / 36P	C 44 / 41P	C 50 / 40P	C 56 / 44P
C 40 / 38P	C 46 / 34P	C 52 / 38P	C 58 / 38P
C 42 / 30P	C 46 / 36P	C 52 / 40P	C 58 / 40P
C 42 / 32P	C 46 / 38P	C 52 / 42P	C 58 / 42P
C 42 / 36P	C 46 / 40P	C 54 / 38P	C 58 / 44P
C 42 / 38P	C 48 / 38P	C 54 / 40P	C 60 / 40P
C 42 / 40P			
C 44 / 32P			

New "C" type for ACT driven with electronic reverse system.

Some '09' and newer Arctic Cat stroke models have the electronic reverse system and require a notch in the ramp for the reverse. These are still the earlier style adjustable "C" helix models that require a DHC-100 cover kit, or a '05' type Arctic adjustable cover and hardware to use on the newer sleds that came with a cast one piece helix. All models with the notch for electronic reverse system are designated "CR" followed by the angle. If it is a progressive type cut it would be designated by the suffix "P" after the part number.



Arctic Billet Helix Cover

DHC-100 The helix on some of the '06 and newer Arctic Cat models with the new ACT secondary is now a cast / one piece version. We still use our same billet helixes as we did on the first direct drive models. In order to use the billet helix on these models it is necessary to use a helix cap from a '04 - '05 Arctic model with the ACT secondary (and associated hardware) or this Dalton

Billet cover. This kit, part # DHC - 100, comes with a billet cover, complete with bushing and the necessary hardware to install our billet "C" helixes on newer versions of the clutch. Only one kit is necessary as it can be transferred to any Dalton "C" helix you choose for future tuning.

Available Angles

OEM Style Cut		CR Progressive Cut	
CR 34	CR 46 / 40	CR 40 / 36P	CR 48 / 42P
CR 36	CR 46 / 40-36	CR 42 / 36P	CR 50 / 36P
CR 38	CR 46 / 42-38	CR 42 / 38P	CR 50 / 38P
CR 40	CR 48 / 38	CR 42 / 40P	CR 50 / 50P
CR 40 / 34	CR 48 / 40	CR 44 / 34P	CR 52 / 38P
CR 40 / 36	CR 50 / 36	CR 44 / 36P	CR 52 / 42P
CR 42	CR 50 / 38	CR 46 / 36P	CR 54 / 40P
CR 42 / 36	CR 52 / 38	CR 46 / 38P	
CR 42 / 38	CR 54 / 42	CR 46 / 40P	
CR 44		CR 48 / 38P	
CR 44 / 38	Reverse		
CR 46 / 34	Angle		
CR 46 / 36	CR 40 / 44		
CR 46 / 38	CR 40 / 48		
	CR 38 / 44		
	CR 38 / 46		

Requests for custom angles not listed require prepaid deposit, and a 10 working day minimum. Programming charges will apply.



Billet Quick Adjust Cam Arms

('04 & up Arctic Cat fixed pin drive clutch only)

DaltonPro patented Quick Adjust Cam Arms allow you to adjust the weight of the main body of the flyweight without even removing the flyweight from the drive clutch. Turn each flyweight to the top position and you can add or subtract mass from the flyweight body by use of the supplied allen wrench. A great convenience in tuning newer Arctic models with the fixed pin clutch. These flyweights offer up to 7.5 grams of adjustability.

HD/QACA – LW	63.5 – 71g
HD/QACA – 1W	67.5 – 75g
HD/QACA – 2W	73.5 – 81g
HD/QACA – 3W	80 – 87.5g
HD/QACA – 4W	83.5 – 91g
HD/QACA – 5W	86.5 – 94g
HD/QACA–4A (4 arm set–	67.5 g)
HD/QACA–4B (4 arm set–	73.5 g)

Notched Quick Adjust

(High engagement)

H/DQACA-1WN
H/DQACA-2WN
H/DQACA-3WN

Dalton DPA (Bushed) Pre-'04 Arctic Cat/Comet flyweights

Get the best from your big twin! High quality billet steel, gram matched, professional heat treating and blackening process

Simple and effective, DaltonPro clutch weights are CNC machined from high quality billet steel and are designed for today's high torque engines. No modification of the cam arm or drive clutch is necessary, as they are produced specifically to fit each brand of clutch.

Arctic/Comet and pre 2004 (bushed, non-fixed pin_ Available in: 62.5, 64, 66, 68, 70, 72.5, 74, 76, 78 gram. (Dalton prefix DPA. eg.-DPA62.5)
Notched 48N, 62.5N, 63.5N, 70N



Flyweight Replacement Bushings

DRB-001 OEM quality replacement bushing for all DPA, DPP, Arctic, Polaris, and Comet, flyweights. (Set of three)

Dalton DPA-W (wide) series Flyweights)

Fixed Pin (04 and newer Arctic)
Most of the newer cat models feature the new "fixed pin" drive clutch. DaltonPro flyweights are not simply the old narrow arctic style with a set screw added to lock to the pin. These weights are the newer "wide" style and the grams correspond with the production weights from the factory. Available in: 66, 68, 72, 73.5, 75, 78, 83, 85, 87.5 (DPA-W. eg.- DPA 87.5-W)
Available in notched weights (DPA-W-N) for racing application. All notched weights are .5 g less total mass than DPA-W listed above.



Clutch Pullers

DaltonPro Clutch Pullers are accurately machined from super tough 17-4 series stainless steel.

- DCP-D** All snowmobiles 96-06 with 9 tower or 6 tower design
- DCP-H** 07 and up models with new Arctic 4 cam arm clutch (check application at dealer)
- DCP-G** Arctic ATV-650 V-Twin model only



Drive and Driven Clutch Springs for Arctic Cat

DaltonPro clutch springs are manufactured from high quality chrome silicon wire to exacting tolerances, stress relieved and shot peened for long lasting durability. We also stock D&D, and Cutler



Polaris/ Arctic Primary Springs

	Part #	Pre-load @2.5"	Pre-load @2.375"	Pre-load @1.375"	Total force @1.25"
Dalton black/red-white	DPPS-B/RW	147 lb.	153 lb.	290 lb.	310 lb.
Dalton red/black	DPPS-R/B	150 lb.	165 lb.	300 lb.	320 lb.

D&D Primary

Teal-185/295
Green-195/295
Black-190/330
Orange-170/305
Blue-170/265
Yellow-160/290
White-135/330
Red 170/330

D&D Secondary

Black-LIGHT
Silver-TO
Purple-HEAVY

CPC Secondary

Black/white-LIGHT
Blue/white-TO
Red/white-HEAVY

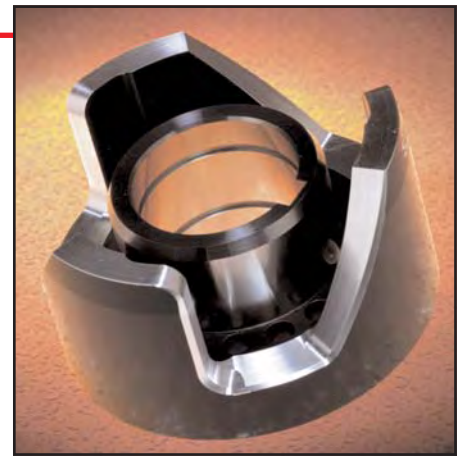
CPC Primary

Purple/white-180/320

D&D Secondary Springs ACT Drive

Tan	110 / 320
Maroon	130 / 340
Gold	180 / 360





Ski -Doo Helixes (non RER)	34	46 / 40	49 / 43	52 / 42	54 / 48
	36	46 / 42	49 / 47	52 / 44	54 / 50
Dalton's helixes for the Ski-Doo	38	46 / 44	50	52 / 45	54 / 52
DSA models feature a stainless	40	47	50 / 34	52 / 46	55 / 43
steel hub, closer tolerances,	40 / 36	47 / 37	50 / 36	52 / 48	55 / 45
better corrosion resistance and	40 / 38	47 / 39	50 / 38	52 / 50	55 / 47
a hard coated outer surface.	41	47 / 41	50 / 40	53	55 / 49
Note: These models for the DSA	42	47 / 42	50 / 42	53 / 36	55 / 52
(non RER) secondary clutch are	42 / 36	47 / 44	50 / 44	53 / 39	56
designated by the letter "s"	42 / 38	48	50 / 46	53 / 41	56 / 38
before the angle number.	42 / 40	48 / 30	50 / 47	53 / 42	56 / 40
*Please confirm the application	43	48 / 32	50 / 48	53 / 43	56 / 42
and order with proper part num-	44	48 / 34	51	53 / 45	56 / 44
ber. Eg:S 52 / 48	44 / 30	48 / 36	51 / 39	53 / 47	56 / 46
* There are some year/model	44 / 36	48 / 38	51 / 41	53 / 50	56 / 48
applications from Ski-Doo/BRP	44 / 38	48 / 40	51 / 43	54	56 / 50
that use the torsion spring DSA	44 / 40	48 / 42	51 / 45	54 / 36	56 / 52
secondary clutch that DO have	45	48 / 44	51 / 49	54 / 38	57 / 42
electronic reverse. We do not	45 / 39	48 / 46	52	54 / 40	57 / 44
have helixes available for these	46	49	52 / 34	54 / 42	57 / 47
models. It is important that you	46 / 34	49 / 37	52 / 36	54 / 44	57 / 49
confirm your model application.	46 / 36	49 / 39	52 / 38	54 / 46	57 / 51
	46 / 38	49 / 41	52 / 40	54 / 47	58 / 40

58 / 44	Reverse Cut Angles	48 / 54
58 / 46		50 / 54
58 / 48	36 / 46	43 / 45
58 / 50	38 / 48	43 / 47
58 / 51	40 / 43	44 / 47
58 / 52	40 / 44	45 / 48
	40 / 46	45 / 49
	40 / 48	46 / 52
	42 / 44	47 / 50
	42 / 48	47 / 54
	42 / 52	48 / 52

RER (Electronic Reverse) Helix

(For 03-06 button, non-roller clutch only)

These helixes fit many of the electronic reverse models like the popular REV platform. Now even more angles to choose from.

Note: These model helixes designated by the letters "RS" before the angle from the part number. Eg.RS 46 / 42. These helixes do not fit models with the newer roller clutch like the REV "X" package models.

RS 38	RS 45	RS 48 / 42	RS 50 / 48	RS 54 / 40
RS 38 / 36	RS 45 / 42	RS 48 / 44	RS 51 / 45	RS 54 / 44
RS 40	RS 46	RS 48 / 46	RS 51 / 47	RS 54 / 46
RS 40 / 34	RS 46 / 40	RS 49	RS 52	RS 54 / 48
RS 40 / 36	RS 46 / 42	RS 49 / 45	RS 52 / 34	RS 54 / 50
RS 42	RS46/44-38	RS 50	RS 52 / 36	RS 56 / 38
RS 42 / 34	RS 47	RS 50 / 32	RS 52 / 38	RS 56 / 44
RS 42 / 36	RS 47 / 30	RS 50 / 34	RS 52 / 42	RS 56 / 46
RS 42 / 38	RS 47 / 37	RS 50 / 36	RS 52 / 44	RS 58 / 42
RS 43	RS 47 / 40	RS 50 / 40	RS 52 / 46	
RS 44	RS 47 / 42	RS 50 / 42	RS 52 / 48	Reverse
RS 44 / 33	RS 47 / 44	RS 50 / 44	RS 52 / 50	Cut
RS 44 / 36	RS 48	RS 50 / 45	RS 53 / 40	RS 47 / 50
RS 44 / 38	RS 48 / 36	RS 50 / 46	RS 53 / 45	RS 47 / 52
RS 44 / 40	RS 48 / 40	RS 50 / 47	RS 53 / 47	

Roller Clutch Electronic Reverse Helixes

These helixes fit Ski-Doo models that have the 05-07 roller secondary clutch and electronic reverse like the Rev-"X" models and the 1000 cc twin cylinder models.* These are for the roller clutch only.

HR36	HR42/28	HR44/33
HR38	HR42/30	HR44/36
HR40	HR42/32	HR44/38
HR40/28	HR42/34	HR46
HR40/32	HR42/36	HR46/26
HR40/34	HR42/38	HR46/28
HR40/36	HR43/25	HR46/34
HR42	HR44	HR46/36
HR42/22	HR44/24	HR47/33
HR42/24	HR44/27	HR48
HR42/26	HR44/30	HR48/24



HR48/30	HR50	HR50/44
HR48/32	HR50/32	HR50/45
HR48/34	HR50/33	HR51/45
HR48/36	HR50/36	HR53/42
HR49/33	HR50/40	

Note: Dalton helixes for this application are designated by the prefix "HR" before the angle for the part number. Eg.HR 42 / 28.



New Clutch Tool for '08 Ski-Doo XP Helixes

DCT-CQ Dalton Compression tool for the new QRS clutch on Ski-Doo "XP" series. After removing the clutch from the new XP this compression tool makes helix and secondary spring changes easy.



Dalton Billet Helix for Ski-Doo XP Models ('08 and up)

Dalton now produces Billet CNC machined helixes for the new QRS secondary clutch found on the new 08 XP chassis from Ski-Doo. Many straight and multi angle cuts available. Angle geometry is the same as factory for easy comparison and tuning. These XP model helixes are designated by the prefix "Q". Available Angles:

Q 38	Q 46/32	Q 50
Q 39	Q 46/34	Q 50/32
Q 40	Q 46/36	Q 50/34
Q 41	Q 46/38	Q 50/36
Q 42	Q 46/40	Q 50/38
Q 42/38	Q 46/42	Q 50/40
Q 42/40	Q 47	Q 50/42
Q 43	Q 47/39	
Q 44	Q 47/44	Reverse
Q 44/33	Q 48/36	Angles
Q 44/36	Q 48/38	Q 40/44
Q 44/38	Q 48/40	Q 42/46
Q 44/40	Q 48/42	
Q 44/42	Q 49	

* It's important the dealer confirms your model application before ordering.



DaltonPro Ultimate Stainless Pins for Ski-Doo TRA Drive Clutch
14.5g- 25g*
DPAP-US

Heat Treated 17-4 stainless outer housing. CNC machined for exact fit. This high strength material

and process provides a hard, corrosion-free surface. It also offers much better machinability and a smoother surface than some other exotic metals often used to achieve higher gram increments. A better surface finish can result in longer life for roller bushings when using big grams. Weight adjustable 14.5-25g*.. With these pins the weight is always centralized for balance, and not loaded to one end. Fully clicker adjustable. Many adjustable pins above 21 g must remain in #4 or higher for clearance of the governor cup. DaltonPro ultimate stainless pins can be used in any clicker position allowing much more flexibility when clutch tuning. Full year warranty.

Quite possibly the only set of pins you'll ever need.

SHD-27 Optional SHD insert for up to 27 g available. Pure tungsten insert, set of three .

HD-22/24 Also now available is an additional set of 6 tungsten alloy inserts to give you more fine tuning increments of exactly 22 and 24 g.

DPAP-OH Stainless outer housings only, set of three.



Clutch Ramps for Ski-Doo TRA 3, TRA 5

These new ramps are manufactured by Dalton and are heat treated and black oxide finished.

DTR-1 has been very popular on the new Mach Z twin when used with our BRUTE ARMS for trail applications.

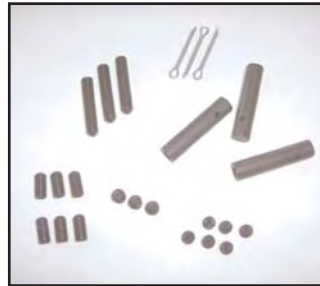
DTR-3 is very similar to the 419 ramp available from Ski-Doo Race shop.

DTR-1A is similar to DTR-1 but has a slightly higher engagement.

DTR-2 is a ramp that has been flattened out at the tip for aggressive upshift on the top end.

DaltonPro Brute Arms for the TRA5 Drive Clutch

DPT5-BA The new Ski Doo 1000 cc Twin comes from the factory with heavy steel lever arms in the drive clutch. At the request of many clutch tuners, Dalton has produced the new Brute Arms. These 60 gram arms are built from high strength 70 75 alloy billet aluminum. Many reports claim this combination allows for the use of more flexible pin weight combinations and increases tuning options.



Stainless" pin kit, it is DaltonPro quality:

- Accurate machining.
- High quality alloy steel billet is hardened and tempered to our specification.
- Sets a new level of quality for pins in this price range.

DaltonPro Midweight Premium Pin Kit for Ski Doo Drive Clutch

14.5g-20.4 grams DPAP-MP

This kit offers DaltonPro quality in a very cost effective package and still offers full use of clicker adjustability with up to 20.4 grams. Although it may not offer the extreme flexibility and corrosion resistance as our "Ultimate



Ski-Doo Primary Springs

	Part #	@ 2.9"	@ 1.6"
Dalton purple	DPSS-PL	195 lb.	295 lb.
Dalton white	DPSS-W	235 lb.	360 lb.
Dalton grey	DPSS-GY	205 lb.	328 lb.
Dalton red/green	DPSS-RG	225 lb.	385 lb.



Dalton Secondary Clutch Springs for Ski-Doo

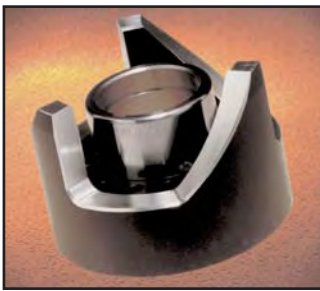
RER Secondary- designed for increased backshifting, more flexible tuning on RER models, the initial load (2.9") falls between the black (03 stock REV) and purple (02 stock MX) RER secondary springs.

	Load@ 2.9"	Load@ 1.6"	Load@ 61mm	Load@ 35.2mm
Dalton Red (RER) DPSS-R	165 lb.	300 lb.	210 lb.	305 lb.



Primary Clutch Puller

DCP-E
 Fits most ski Doo models with TRA clutch 93-06 (except 583 engines and smaller). Replaces OEM part #5290224



Helixes for Polaris

Hundreds of angles available! Daltons helixes for Polaris (with prefix "P") are progressive cut and start at one angle progress to another. All helixes for Polaris have stainless steel spline hub for durability and corrosion resistance. Hard coating on outside wear surface for less wear.

32	42 / 34	46 / 40			
33	42 / 36	46 / 42			
34	42 / 38	46 / 44			
34 / 30	42 / 40	47			
34 / 32	43	47 / 35	50 / 34	53 / 38	56 / 46
35	44	47 / 37	50 / 36	54 / 32	56 / 48
36	44 / 30	47 / 39	50 / 38	54 / 34	56 / 50
36 / 32	44 / 32	48	50 / 40	54 / 35	58 / 32
37	44 / 34	48 / 32	50 / 42	54 / 36	58 / 34
38 / 32	44 / 36	48 / 34	50 / 44	54 / 38	58 / 36
38 / 34	44 / 38	48 / 36	51 / 35	54 / 40	58 / 38
39	44 / 40	48 / 38	51 / 36	54 / 42	58 / 40
39 / 33	45	48 / 40	51 / 37	54 / 44	58 / 42
39 / 35	45 / 33	48 / 42	51 / 39	54 / 46	58 / 44
40	45 / 34	48 / 44	52 / 32	54 / 48	60 / 34
40 / 32	45 / 37	49	52 / 34	55 / 36	60 / 36
40 / 34	45 / 39	49 / 35	52 / 36	56 / 32	60 / 38
40 / 36	45 / 44	49 / 37	52 / 38	56 / 34	
40 / 38	46	49 / 39	52 / 40	56 / 36	
41	46 / 32	49 / 41	52 / 42	56 / 38	32 / 36
41 / 35	46 / 34	50	52 / 44	56 / 40	34 / 38
42	46 / 36	50 / 30	52 / 46	56 / 42	39 / 44
42 / 32	46 / 38	50 / 32	53 / 36	56 / 44	

New PR Models

These "PR" radiused models are built like the factory "R" series that came on many models of Polaris snowmobiles. They have a short duration first angle, radiused into what is mostly a straight angle helix (or a progressive last portion in cases of 3 angles listed). With these "PR" models you'll usually see the distinct first angle of short duration.

PR 45 / 36	PR 48 / 36
PR 45 / 39	PR 48 / 38
PR 46 / 36	PR 48 / 38-32
PR 46 / 38	PR 48 / 38-34
PR 46 / 38-34	PR 48 / 38-35
PR 47 / 37	PR 48 / 40-36
PR 47 / 39	PR 50 / 30
PR 47 / 39-36	PR 50 / 36
PR 47 / 42-36	PR 50 / 37
PR 47 / 44-36	PR 50 / 38

PR 50 / 38-32	PR 54 / 34
PR 50 / 38-34	PR 54 / 36
PR 50 / 39-32	PR 54 / 38
PR 50 / 39-34	PR 54 / 39-34
PR 50 / 39-36	PR 54 / 40
PR 50 / 40-34	PR 56 / 36
PR 50 / 40-36	PR 56 / 38
PR 50 / 42-34	PR 56 / 40
PR 50 / 42-36	PR 56 / 40-32
PR 50 / 42-38	PR 56 / 40-36
PR 52 / 36	PR 56 / 42-36
PR 52 / 37	PR 58 / 38
PR 52 / 38	PR 58 / 40
PR 52 / 40	PR 58 / 40-38
PR 52 / 40-36	PR 60 / 40-38
PR 52 / 42-34	
PR 52 / 42-36	

Requests for custom angles not listed require prepaid deposit, and a 10 working day minimum. Programming charges will apply.

Polaris Clutch Puller Applications

	Dalton Part #	OEM Part #
All ATV (85-07)	DCP-A	2870506
All snowmobiles through '98 (except domestic twins)	DCP-A	2870506
97-99 domestic twins (500, 600, 700cc)	DCP-B	2871855
00-07 domestic twins	DCP-C	2872085
99-03 440 XC Edge	DCP-C	
99-03 700/800 XCR	DCP-C	

Dalton's Quick Adjust Cam Arms for Polaris

Dalton's patented Quick Adjust Cam Arms are now available for Polaris models. This method of adjustment allows you to add or subtract mass from the main body of the flyweight without even removing the weights from the drive clutch. Like having many sets of flyweights in one kit.



Available base weight sets:

QAP 1	58-65.5g	QAP 3	66-73.5g
QAP 2	62-69.5g	QAP 4	70-77.5g



NEW P 2 Driven Clutch

This new P2 driven clutch is available from Polaris for 09 on only a few trail models. At the time of this printing we're in R&D. Watch our website for developments on this new helix from Dalton.

DaltonPro Clutch Weights for Polaris

Get the best from your late model Polaris! High quality billet steel, gram matched, professional heat treating and blackening process. DaltonPro flyweights are made from highest quality materials specifically to fit the Polaris drive clutch. Available in 68, 70, 72.5, 76, 78, 80 g. Dalton flyweights for Polaris are designated by "DPP". Eg DPP-80



Polaris/Arctic Primary Springs

Part #	Pre-load @2.5"	Total force @1.25"
Dalton black/red white	DPPS-B/R/W	147 lb. 310 lb.
Dalton Red/Black	DPPS-R/B	150 lb. 320 lb.

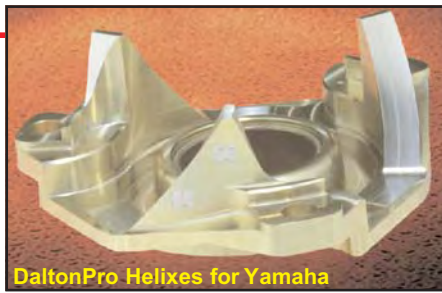
Dalton Secondary Springs for Polaris

	Wire Dia.	Load @2.5"	Total force @1.375"
Dalton black/red-silver	DPSS-B/R/S	.187 44 lb.	77 lb.
Dalton black/red-blue	DPSS-B/R/BL	.192 48 lb.	86 lb.

OEM Polaris (for reference only)

Polaris silver/blue	.183	42 lb.	75 lb.
Polaris blue	.192	29 lb.	64 lb.
Polaris blue/orange	.192	56 lb.	90 lb.

NOTE: Polaris blue (.192) wire has more torsion force than the Polaris silver/blue. Polaris silver/blue has more side pressure than Polaris blue, but less torsion. *Dalton black/red-silver has slightly more torsion and side pressure than Polaris silver/blue **Dalton black/red-blue has more side pressure but the same torsion force as Polaris blue.



DaltonPro Helixes for Yamaha

Extensive machining to be lightweight like the OEM castings, but with the attractive strength of solid billet aluminum.

Available Angles:	48 / 41	50 / 48	53 / 43	58 / 36
	45 / 39	48 / 42	51	53 / 45
38 / 32	45 / 41	48 / 43	51 / 36	53 / 47
39	46	48 / 44	51 / 37	53 / 49
39 / 35	46 / 34	49	51 / 38	53 / 51
40	46 / 36	49 / 34	51 / 39	54 / 40
40 / 34	46 / 38	49 / 36	51 / 40	54 / 41
40 / 36	46 / 40	49 / 39	51 / 43	54 / 42
40 / 38	46 / 42	49 / 41	51 / 45	54 / 44
41	46 / 43	49 / 43	51 / 47	54 / 46
42	47	49 / 45	52	54 / 48
42 / 34	47 / 39	49 / 47	52 / 38	55
42 / 36	47 / 40	49 / 51	52 / 40	55 / 45
43	47 / 41	50	52 / 42	55 / 48
43 / 35	47 / 42	50 / 36	52 / 44	56 / 36
43 / 37	47 / 43	50 / 38	52 / 46	56 / 38
43 / 39	48	50 / 40	52 / 48	56 / 40
44	48 / 34	50 / 41	53	56 / 42
44 / 34	48 / 36	50 / 42	53 / 36	56 / 44
44 / 36	48 / 37	50 / 43	53 / 38	56 / 46
44 / 38	48 / 38	50 / 44	53 / 40	56 / 48
45	48 / 39	50 / 45	53 / 41	57 / 43
45 / 37	48 / 40	50 / 46	53 / 42	57 / 50

Yamaha "R" Series Helixes

Available "R" style

The "R" (radius) series helixes for Yamaha from Dalton features a short duration initial angle, radius- es 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.

49R44	52R45	54R44
50R42	52R46	54R45
50R44	53R41	54R46
50R46	53R43	54R48
50R47	53R45	55R45
51R34	53R47	56R43
51R46	53R48	56R44
52R40	54R40	56R46
52R42	54R42	
52R44	54R43	

New DaltonPro Quick Adjust Cam Arms for Yamaha

Our new Patented Quick adjust weights for Yamaha 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.



ing. This Quick Adjust series uses our "DPYR" series curvature, very popular on 4 stroke models. With Yamaha models it's important to know that the necessary "grams" needed for an application can vary widely because of the variety of flyweights and curvatures on the market. Example: The QAY -62 is often used at 64-68 g on normally aspirated Apex applications (based on chosen springs and helixes, etc.)

<u>Available base wts:</u>	<u>Boosted applications:</u>
QAY-54 54-61.4g	DTYA-1 73.6-81g (common for low boost, high altitude longtracks)
QAY-62 62-69.4g.	DTYA-2 79-86.4g (most common for most boosted applications)

DaltonPro Flyweights for Yamaha

DPY 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. Available in 53, 55.5, 57.5, 60, 62,64, 66, 68 gram.

DPYR Series The DaltonPro DPYR series uses a curvature that is slightly less aggressive than our DPY flyweights. This new curvature allows more "untucked" mass at the point of belt contact and allows for the use of more total flyweight mass than many aggressive flyweights. These



four stroke oriented flyweights can offer quicker acceleration while still maintaining excellent low speed belt grip. **Uses factory Yamaha mass rivets for adjustable tuning.** Typical applications use 58 to 62 g base weights on RX/Apex applications, while many turbocharged tuners use the 70 and 74 g base weights in configurations up to 8 g total mass. **Available base weights: 58 62,66,70,74.** Note: These weights still use a more aggressive curvature than factory RX weights. As many tuners know, the total mass required of a flyweight is dependant on the curvature and the location of mass, and comparing grams to other weights is irrelevant sometimes.

Yamaha Flyweight Rivets

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



- DFR-Y Steel, solid 3.1 g
- DFRH-Y Steel, hollow 2.4g
- DFRA-Y Aluminum, hollow .85g
- DFRL-Y Long, solid 3.6 g



Replacement Bushing DRB-002 For DPY, DPYR, QAY, DTYA, and Yamaha flyweights. (Set of three)



Yamaha Primary Springs

DaltonPro springs are manufactured from high quality chrome silican wore to exacting tolerances, stress relieved, and shot peened for long lasting durability.

Part #	Pre-load @ 2.888"	Total force @ 1.593"
Dalton black/silver	DPPS-B/S	41 kg 125 kg
Dalton black/red	DPPS-B/R	48 kg 120 kg
Dalton black/blue	DPPS-B/BL	53 kg 133 kg
Dalton black/green	DPPS-B/G	57 kg 129 kg
Dalton red	DPPS-R	39 kg 133 kg
Dalton orange	DPPS-O	28 kg 132 kg

Yamaha Secondary Spring

Dalton red DPSS-YMR

This new DaltonPro secondary spring has the same torsional force as the silver secondary spring from Yamaha, but has 1/2" longer free length for slightly more side force.

Primary Clutch Puller

	Dalton Part #	Yamaha Part #
Yamaha (All YPZ/YXR)	DCP-F	Y501882



Ramp Grinding Block

DCT-GB

The DaltonPro ramp grinding block is compatible with all brands.



Clutch Pullers

DaltonPro Clutch Pullers are accurately machined from super tough 17-4 series stainless steel.

Flyweight Bushing Tool

DCT-BT

The flyweight bushing tool makes installation and removal of flyweight bushings easy. (Arctic Cat, Polaris, Yamaha)



Clutch Spring Tester

DCT-ST

A critical tool for serious clutch tuners. This compression spring tester can be mounted in any drill press, and used to compare engagement pre-load and full shift load at any specified height.



Yamaha Helix Replacement Bushing

DHB-Y

An OEM quality replacement bushing for all Yamaha helixes. Sold individually

Digital Gram Scale

J 200 XV

Many professional tuners of snowmobile and automatic ATV's use gram scales to achieve balanced total mass after adding or subtracting flyweight grams. This durable, portable scale is a favorite proven performer with the following features:

- 200 g capacity x 0.01 g increments
- Stainless steel tray with lid
- 4 key operation
- Compact 3"x 4.75" size
- Large red backlit display
- Comes with calibration weight



New Clutch Tool for '08 Ski-Doo XP Helixes

DCT-CQ Dalton Compression tool for the new QRS clutch on Ski-Doo "XP" series. After removing the clutch from the new XP this compression tool makes helix and secondary spring changes easy.

Available Clutch Puller Applications

Polaris

All ATV (85-08)

All snowmobiles through '98

(except domestic twins)

97-99 domestic twins (500, 600, 700cc)

00-07 domestic twins

99-03 440 XC Edge

99-03 700/800 XCR

Arctic Cat All models 96-08 (except 07 4 post)

ATV AC650 V Twin 4X4 only

07 F1000, Jaguar and models with four cam arms

Ski-Doo

TRA all through (92-04) EXCEPT 583 engine and smaller.

Yamaha

All YPZ/YXR

Kawasaki (ATV)

All 360,400,650,700 automatics 1999 & up

Dalton

OEM

Part

Part

DCP-A

2870506

DCP-A

2870506

DCP-B

2871855

DCP-C

2872085

DCP-D

0644207

DCP-G

0444-161

DCP-H

0644-446

DCP-E

5290224

DCP-F

Y501882

DCP-G

57004429

Dalton Quality Clutch Components for ATV's

Kawasaki Can/Am Arctic Cat Polaris Suzuki Yamaha

If you're into clutch tuning, racing, and winning, you already know.

We do our best to provide the ultimate in quality for riders who care about performance and want to get the most out of their equipment. Our extensive testing and exacting production standards create some of the best clutch tuning components in the industry.



Chad George / FUNCO Racing takes flight in his Kawasaki Teryx. This factory supported Kawasaki race team helped put Kawasaki's new Teryx RUV at the front of the CORR off-road series for the 2008 season. We're very proud that Chad used Dalton's new DUV K750TX fully adjustable clutch kit and overdrive mods .

See page 13 for more info about our outstanding new clutch kit and cover for the Kawasaki Teryx.



The Warnert Racing Factory Can/Am Team used our DBO 650 kit in their successful 2007 WSPA series. They very graciously sent us a Can/Am Team plaque and a letter thanking us for being a part of their season.

See page 15 for details on our DBO 650 kit for the Can/Am Outlander.

New Kits for '08 Brute Force 750 EFI 4x4

The new Brute 750 has a new primary clutch with improved "wide bushing" design. The DaltonPro clutch kit for the newer model is available in two configurations based on the rider's application priority. Kits are interchangeable by adding or subtracting a spring. Both kits feature the same set of Dalton's patented Quick Adjust Cam Arms.

Ultimate Belt Grip Optional mass placement location for total grams means more accurate calibration for specific application.



08 and up Brute Force 750 EFI 4x4

Will not fit 05-07.
For Stock or oversized tires to 27" - Adjustable for altitude and tire size

DK 750 E This kit is designed specifically to fit the new style drive clutch on the '08 750 Brute Force with the wide bushing. Improved acceleration and backshifting under load. Makes high range more useful at low speeds.

This kit offers flexibility to tune your clutch to rider preference and conditions. Two different primary springs are included to allow for preferred engagement rpm.

This kit incorporates the use of Dalton's patented Quick Adjust Cam Arms. This system allows adding or subtracting of the mass to the main body of the flyweights without removing the weights from the drive clutch. Quick adjust feature means you can have a preferred set up for stock tires, altitude, or oversized tires quicker if you ride under varying circumstances or change tire sizes. No puller is required for most typical flyweight gram changes, as the base weight stays in the clutch during gram adjustment. Baseline set ups are included for most typical situations. The stock secondary spring on the 750 Brute is different than Prairie models and is sufficient for most trail applications for this tire size range and does not effect top speed (although it is well known that oversize tires DO hurt both acceleration and speed, proper clutch recalibration can help recover from those losses). If you are running 28" or larger tires for mud application use part # DK 750 EBT or order optional secondary spring DPSS-AQ.

Did you know?...The BF 750 engine is a different configuration than previous Prairie Models. The BF 750 has its own new stock secondary spring that's heavier than what comes on Prairie versions. The stock secondary spring on the BF 750 is sufficient for most typical trail applications.

FAQ- How will a clutch kit affect top end speed?

Very little. The major thing to remember when clutching ATVs is that changing clutch components changes the rate of shift on the CVT system during the "clutching phase". The clutching phase is when the belt travels from low ratio to high ratio (high ratio is when the belt is to the top of its travel on the front motor clutch). The goal is to control the shift RPM properly during this clutching phase. On most ATVs this "clutching phase" is over in a distance of approximately 500-800 ft.-when the belt is fully shifted, it is fully shifted.

There are a few situations where slightly different spring pressures will allow it to stay in high ratio easier on certain types of terrain, but effect on top mph is minimal.

Ultimate RPM Control The extreme flexibility of this kit makes it easy to adapt to different RPM requirements of big bore kits, camshafts, altitude etc.

Ultimate Adjustability DaltonPro Quick Adjust Cam Arm Flyweights are like having multiple sets of flyweights all in one set! The quick adjust feature allows adding or subtracting grams in the threaded passage through the main body of the flyweight while the weight is still in the drive clutch.



08 and up Brute Force 750 EFI 4x4

28" and larger tires (will not fit 05-07 model years)

DK 750 EBT Designed for the new '08 750 Brute Force with the newer wide bushing drive clutch. This kit was developed to help recover losses incurred from installing large aggressive tires and mud conditions with 28" and larger sizes. Improved belt grip, throttle response, acceleration and backshifting under load helps low end power for the big tires in mud situations.

This kit uses the same patented Quick Adjust Cam Arm set as the kit for smaller tires sizes (DK 750 E) so the kits can be interchangeable by the use of the stock or supplied secondary spring. The use of the DaltonPro Quick Adjust weights (cam arms) means you can add or subtract mass in the flyweights while they remain in the drive clutch. Base line set up instructions included for most common applications.

These kits are **NOT for use on the Teryx** utility vehicle. Do not assume it is a similar application because of similar engine size. The requirements of the cvt system are very different in that application. These kits **will NOT fit the 05-07** model year 750 Brute Force.



05-07 Brute Force 750 4x4

For 05 07 models only

DK750 BF This sport-oriented clutch kit for the powerful Brute Force 4x4 offers improved acceleration and throttle response. Increased belt grip offers a more usable high range at lower speeds. This kit contains a "mass adjustable" flyweight system making it

flexible for clutch tuning. The flyweights total mass and location of mass can be adjusted by means of removable rivets. Instructions are included, complete with a baseline setup for both stock and oversized tires.



08 Teryx 750 RUV

DUV K750 TX This new Dalton kit is designed specifically to fit the 08 750 Kawasaki Teryx RUV. It was developed to improve acceleration and back shift performance in a variety of conditions and also to help recover performance lost from installing large aggressive tires and mud conditions. Improved acceleration and back shifting under load. Also offers flexibility to tune your clutch to rider preference and conditions while still maintaining maximum belt grip.

Like having many clutch kits in one !

This kit uses Dalton's patented "Quick Adjust Cam Arms" which allow you to add or subtract mass from the main body of the flyweight without even removing the weight from the clutch, making for quick and easy adjustment for tire sizes, operating conditions, and changes in rpm requirements from internal engine mods, etc. Although the Teryx is calibrated fairly well for the totally stock machine, there is still improvement even to a stock machine. Our kit is very adaptable to mods/ changes you may do the vehicle in the future, and you can adjust it to maximize the power delivery to the ground in many different changes, mods and situations. It is like having MANY clutch kits in one!

It comes with optional components and complete tuning and instruction manual to accurately set up your CVT system for stock tire, oversized tires, high elevation, or even modded engines.

Overdrive Clutch Cover for Teryx

DCC102 The new Kawasaki Teryx RUV has a newer version and different drive clutch than any other or previous Kawasaki ATV models. This clutch requires different (wider with different curvature) flyweights, and the shift dimensions are different as well. Dalton's new billet aluminum overdrive clutch cover was built specifically for this Teryx model, and allows more belt travel for increased top end speed. This component offers increase of 4-5 mph by simply bolting it on in place of the existing cover plate on a stock Teryx primary clutch. No machining or modification of the drive clutch is necessary and you can go back to stock at any time. Premium billet aluminum

Extensive field testing was completed on this vehicle with both stock and different tire sizes and applications, including testing with modified engines and racing applications such as CORR off-road series with a factory Kawasaki backed team. Also, we field tested typical bolt-on modifications so that we have a good background on the machine and its uses.



More about this Model

The Teryx TUV is calibrated very differently from the factory than the 4x4 ATV models. It's a much heavier vehicle than a regular ATV, it's often used with two people on board, and loaded with more weight. This even required different final drive gearing and CVT clutch tuning from the factory. Even in stock form, it uses stock flyweights with a much different profile and curve, as well as the flyweight starting position different than found on ATV models. Through field testing, we found that when using any of our typical ATV clutch products (especially flyweights) that were applicable to Prairie/Brute models we could do simple timed runs etc. using these and get decent results in simple drags, but belt heat was higher and not acceptable. We designed new flyweights for this application specific to this model that has its own new curvature,

position of mass, and our "quick adjust" system. These flyweights were designed to work in conjunction with the new springs also developed for this model.

The stock secondary spring on the 750 Teryx is different than Prairie/Brute Force models. It is a larger diameter and uses different retaining cups and different load rating dimensions. We developed a new secondary spring that is diverse enough, when used in this kit, to cover many applications. Although it is well known that oversized tires DO hurt both acceleration and speed, this kit can help bring your Teryx back to life after installing aggressive mud tires.

This one premium clutch kit offers flexibility for all tire sizes, and offers accurate cvt calibration for mods and add-ons to your vehicle in the future. Full set-up instructions are included in the manual for most common tire sizes and modifications including engine mods.

FAQ: Will this kit add top speed?

No, not alone. Clutch calibration (flyweights, springs) control the "rate of shift of the belt" during the clutch phase. This vehicle has quite low final drive gearing, and the belt has gone all the way through its shift phase (belt is as high as it can go in the primary/motor clutch) in a very short distance of a few hundred feet at wide open throttle. Once the belt is to the top of the primary, it is to the top. After the belt is fully shifted, the clutch components are not controlling speed or rpm. We do have a new version of our billet overdrive clutch cover that is specific to the Teryx drive clutch. See part # DCC 102 below.



construction & design offers increased strength, better cooling, lighter weight.

Our premium adjustable clutch kit (above) can get you up to speed quicker offering more accurate shift characteristics for different applications, but this O/D cover allows the belt to shift further and can allow more top speed, and a more rigid, cooler drive clutch. Together they're a great combination to get the best from any modified machine!

This component is for race applications and contains no engine brake bearing and the KEBC system must be disabled.

Clutch Kits for Kawasaki

The powerful Kawasaki 650 and 700 V-twin engine format is used in many ATV models: The Prairie 650 / 700 Prairies and 650 Brute Force models, the Suzuki Twin Peaks, and the Arctic Cat 650 V-2 4X4. Similar engine design has made clutching somewhat similar, however, things like dry weight, tire size and weight, transmission calibration and, in the case of the V-Force, different ignition and valve timing, have created slightly different required shift characteristics.

Our field testing has resulted in the following options:



Kawasaki 650/700 Prairie, Brute Force 650i Models

Stock, 0-2000' elevation, tires up to 26"

DK650/700S This combination of a new, slightly heavier secondary spring and our plain/white primary spring has resulted in better belt grip and an increase in bottom and mid-range throttle response

and acceleration. Better belt life, improved backshifting for off trail situations have made this kit very popular. For use with 25"-26" tires

Oversized tires 27-28"

DKA 6570MT This kit combines our popular plain/purple secondary spring with a new primary spring that has slightly higher fully compressed load rating. This combination has proven most effective for the above applications. It's also the best choice for **High Altitude** applications. For more aggressive acceleration and higher engagement (race applications), some prefer to add our black/white spring Part #DPSS-B/W to the above 4x4 clutch kits.



See page 22 for more optional secondary springs for case specific applications. The DPSS-AQ (Aqua) is popular with the 28" and bigger tires for mud applications.

DPSS-O/BL The optional orange/blue primary spring is sometimes used with the plain/purple secondary springs provided in the above kits for specific applications and rider preferences. It's slightly higher engagement than the Plain/white or the blue, and has a stronger fully compressed load rating. Some riders at higher elevations, and /or extreme mud tires prefer its characteristics. Use of this spring often results in a slight loss of top speed when used with stock tire sizes.



Primary clutch pullers DCP-G. (All V twin models except Teryx) Required for proper belt removal on all V twin models.

For 08 Teryx Utility Vehicle DCP-J (For Teryx only) (See clutch tuning- page 15.)



Billet Clutch Covers for Kawasaki

Non Engine Brake

DCC-101 This clutch Cover is CNC machined from aircraft quality billet aluminum and is hard anodized for a durable surface. It offers more strength, lighter weight, and better cooling for the Kawasaki KFX 700 V-Force drive clutch. It comes complete with bushing. Faster revs, better cooling, more belt travel, this component is most effective on modified machines with dual exhaust, etc. that operate at a higher rpm. See components page 14.

KFX 700 V-Force



DK700V The DaltonPro V-Force clutch kit includes a new primary spring and our new billet steel flyweights specifically designed for the KFX 700 and offers increased acceleration and better belt life. Can be used for stock machines or with twin

pipes. (When this kit is used on modified models with twin pipes, porting, etc. to increase hp, further gains can be achieved by adding our billet overdrive clutch cover, for race applications only. Part # DCC 101. (See clutch tuning -page 14.) Some racers prefer our new optional orange/blue primary spring (DPSS-O/BL) for sand and race applications.

DPSS-AQ (Aqua) Optional secondary clutch spring for Kawasaki V-twin models.

A nice addition to the DK 750 BF clutch kit when using 28" and bigger tires in mud applications. Stiffer initial load rating means slower upshift, better belt grip and better low speed response in mud conditions with bigger tires. A slight loss in top speed can sometimes be associated, but provides a nice boost for larger tires in mud applications



DPSS-V (Violet) Optional secondary spring for Kawasaki V-twin models

This secondary spring option was designed for use with some of today's super sized mud tires. Mud specific 30"-32" tires can be hard on many parts of an atv, including the belt and cvt system. This spring will lose top speed but will keep you in lower ratio in the thick gumbo mud.



Kawasaki Secondary Springs

	Part #	@2.5"	@1.25"
Dalton Plain/Purple	DPSS-P/PL	51 kg.	103 kg.
Dalton Aqua	DPSS-AQ	61 kg.	112 kg.
Dalton Violet	DPSS-V	51 kg.	120 kg.
Stock secondary spring on Prairie/ KFX 700 models (yellow)		44 kg.	98 kg.
Stock secondary spring on the BF 750 4x4 ATV model only (purple)		36 kg.	111 kg.

Note these secondary springs for Kawasaki models are load-rated in kilograms (kg).

2006-'09 for stock or oversized tires – Altitude adjustable.



Can – Am 800 HO, 800 R Outlander 4x4

DBO 800 Improved bottom to mid range acceleration without sacrificing top speed. A new flyweight with a new curvature was designed specifically for this 800cc Outlander model. These new flyweights can be set up for different applications. You can set up this system for: improved acceleration with stock tires re-calibration to help recover losses from oversized tires, or to help control up shift at higher elevations. Baseline set up guide included for most common applications.

Can-Am 800 Renegade

DBO 800 R The 800 Renegade is not only a lighter weight vehicle than the Outlander, it also has smaller stock tires. The 800R kit for this model comes with the same base flyweights as the Outlander kit, but has different rivets, calibrations, and set up instructions for 25" and 26"(aftermarket) tire sizes. To use the DBO 800 kit on a Renegade with Stock Tires, order the optional rivets part # DFRL-Y. A Renegade with 27" or larger tires can be treated as an Outlander with respect to clutch calibration.



Can-Am/BRP 650 Outlander 4x4

Our DBO 650 kit used by the Warnert Racing Factory Can-Am team in their successful 2007 WPSA Series.

DBO 650 This new clutch recalibration for the CAN-AM 650 Outlander 4x4 offers flexible tuning options for stock or oversized tires and high elevations. Improved acceleration, throttle response and backshifting with no loss of top speed when set up properly for your application. This kit uses a different adjustable base weight than the 800 cc kits.



2007-2009 Can/Am Outlander and Renegade 500 HO 4X4 (oversized tires/ high elevation)

DBO 500 The 500 Can/Am is calibrated well for stock tires at low elevation. Dalton's new clutch kit was developed to help recover

losses incurred from installation of oversized tires on this model. This clutch re-calibration renders a great improvement in acceleration and helps with back shifting to proper ratio when under load conditions. It creates better belt grip for oversized tires. Improvement in throttle response brings performance back to acceptable levels after the addition of the heavier tires. This kit also works well to re-calibrate the shift pattern for higher elevations, even with stock tires.

The new "baby V-twin" comes from factory with flyweights that are well suited to its application, and re-calibrations are accomplished with the use of new springs, an optional engagement spacer for use with the stock primary spring and-or the provided primary spring (depending on the application and tire sizes used), and a new secondary spring that was developed specifically for this model. The use of this kit does not compromise top speed when used as instructed for the proper application.

DFR Series Flyweight Rivets

For information on available extra, or optional mass rivets for use in ATV applications, see the chart on page 23.



Can-Am/ BRP Outlander 400 03 & up 400HO 4x4, 0 – 3000' elevation, stock or oversized tires

DBO 400 Improved acceleration, belt grip; low speed throttle response & pull in the mid-range with no loss of top speed. This kit includes adjustable engagement (stall speed) RPM and the flyweights (levers) can be set up for stock or oversized tires.

Optional primary spring for DBO 650, DBO 800 & DBO 800R clutch kits

DPPS-TN (Tan) Our popular kits for Can-Am 650 and 800 models come with the Green/Yellow primary spring for maximum acceleration and backshifting. Tan primary spring still has the load rating required to work with the supplied adjustable flyweights in the kit, but has a lower engagement rpm.





Arctic Cat 500i 4x4
03 & up oversized tires

DSA 500 MT Our heavier secondary spring has already proven to prolong belt life and help with bottom end response on these models. Now, in addition to that we have assembled a complete clutch kit including new rollers for the primary

clutch. This complete clutch recalibration helps recover power lost from oversize mud tires.

Arctic Cat 500 auto / 07-08 Moose Tracker 4x4

DMT 500C (New version with complete roller assemblies) A new kit that contains complete drop in roller assemblies. This kit is designed to re-calibrate the shift pattern to help recover some of the



losses from installing oversized tires. Bottom and midrange acceleration and performance are greatly improved. Also aids in performance when operating at higher elevations. This kit can be used with stock or oversized tires, however, when used with stock tires at low elevation it can cause a slight loss of top speed.



Arctic Cat 650 V Twin 4x4
Stock & oversized tires 27-28"

DKA 6570MT This kit combines our popular plain/purple secondary clutch spring with the blue primary. This cost-effective combination has proven most effective for the 650 V twin. Stock flyweights are best for most applications on this model and we prefer not to sell

you more than what you need. The engagement speed of this kit is only very slightly more than stock, so it maintains excellent characteristics for slow speed maneuvering.



DPSS-AQ
The DPSS-AQ (Aqua) secondary spring is popular with the 28" and bigger tires for mud applications. For more case-specific info on Kawasaki/ Arctic V-twin models, see the Kawasaki secondary springs chart, page 5.



DPSS-O/BI Extreme Mud Tires
This optional primary spring has slightly higher engagement than the Blue spring in the DKA6570MT kit, but also has stronger compressed load rating. Works well with some of the new extreme mud tires in 28" and up. Using this spring with smaller tires may result in a slight loss of speed.



AC 700 EFI 4x4, 06 & up, 1 cyl. only. Suzuki engine model only

DSK 700EF Improved acceleration and backshifting and maintains more consistent RPM under load conditions. A new secondary spring and roller weights developed specifically for this model. This clutch recalibration kit works well to help recover the dramatic losses resulting from oversized tires on this model. It can, however, be used with stock tire sizes as well for situations requiring better low speed/midrange response and

performance (e.g: mud/work). Use with stock tires may result in a minimal loss of top speed. There is no increase in engagement (stall) speed rpm so this kit still works well for low speed maneuverability like rock crawling, etc. It also helps restore power loss from higher elevations



AC 700EFI
Suzuki engine model only
DSK 750C This new version of our proven DSK700EF kit now comes with "complete roller assemblies." Complete rollers means quicker, easier installation, and a new wear surface at the time of installation. Improved acceleration, backshifting and throttle response. More consistent

rpm under road conditions. Can be used with stock or oversized tires.*for extreme mud tires, eg 29.5" and bigger Kit# DSK750 HAC is recommended -Also fits 05-07 Suzuki King Quad 700EFI, 06-07 Arctic 700 EFI 4x4 (Suzuki engine model ONLY)



DSK750 HAC
A kit designed for increased acceleration and backshifting when using big mud tires. Also aids in recovery of power lost at high elevations (above 4000 ft) with moderate typical trail tires. Not for use with stock tires at low elevation.* For stock to 28" tires at low elevation use kit # DSK750 C. Also fits 05-07 Suzuki King Quad 700EFI 4x4, 06-07' **Arctic Cat 700EFI** 4x4 (Suzuki engine model ONLY).

Primary clutch puller Required for proper belt removal on V twin models. The Dalton Kawasaki puller is part # DCP-G. (See clutch tuning- page 23)

Clutch Kits for Arctic Cat



2005 ONLY, single cyl. only oversized tires.

DA 650-H



All model years, single cyl. only oversized tires.

DA 650-HC

Arctic Cat 650/700 H-1 4x4

Arctic H-1 Engines only

DA 650 HC The popular Arctic H-1 is calibrated fairly well for general use with stock tires, but oversized tires have a very negative effect. Many performance enthusiasts are well aware of the fact that even slightly bigger or heavier tires can substantially hurt acceleration and speed performance. The addition of this cost effective weight roller insert kit for the primary drive clutch helps recover some of that lost power. '06 and newer models **MUST** use the DA 650 HC kit with completed roller assemblies, as the plastic on the factory rollers are not removable.

This kit is intended to help with re-calibration for oversized tires. If installed on a unit with stock tires, it does show some gain in acceleration but slight loss of top speed. It also aids in restoration of power lost at higher altitudes.



FAQ- What about internal engine mods?

Internal engine mods, like cylinder head porting, compression, big bores and especially camshafts of higher lift/ longer duration, can definitely change the engine characteristics and sometimes the clutching could be changed even further to optimize performance. Our kits are designed around stock/mildly modded ATV's. Quite often, when stepping into extensive engine mods, you may have to do your own field testing to optimize your clutching.



Prowler XT Utility Vehicle

The Prowler XT side by side utility vehicle was designed for a very wide variety of uses. The stock tires are 26" radials, but a very light weight style of tire, and and the fronts are still 8" wide like many of the common 25" tires on ATV's. Our testing showed that given the intended use, the stock clutching was well calibrated for these tires.

'06 only Prowler XT- oversized tires **DUV-A650**

For use only on the '06 model with older (compression spring) secondary clutch.



'07-'08 Prowler XT -oversized tires **DA 650 HC**

For '07 & newer 650/700 Prowler models (with new torsion style secondary clutch) use part # DA-650 HC for large tires and high altitude applications.



The addition of oversized tires definitely hurt the performance of the Prowler. It is common and getting well-known that vehicles with oversized tires can never be as quick as ones with lighter/smaller stock tires. Many, however, need the better mud performance and ground clearance offered by aggressive big wheel kits. The use of this cost effective new roller kit helps restore some of that lost rpm and performance. Also helps with high altitude operation. Note: For use with oversize tires only. Not for use with stock tires at low elevations (0-3000') This kit can be used for stock or oversized tires above 3000' elevation.

Clutch Kits for Polaris



Polaris Sportsman 500 EFI

06 and up fuel injected models w/EBS
0- 3000' Oversized tires only
DBW500EF

A cost-effective kit designed to help restore some of the acceleration lost from installing bigger tires.

Some notes on this model

This new 500 fuel injected model is indeed somewhat different than previous 500 HO models. Aside from having fuel injection, it also uses a new primary drive clutch that starts off in a lower ratio, and uses a different belt compound. Testing showed that when using stock tires, the clutch calibration from the factory was satisfactory and no adjustment was necessary.

Oversized tires, as usual, did show a significant loss of performance, speed, and acceleration. This kit will help bring your bike back to life after installing those bigger, heavier tires, and also improve belt grip and throttle response. Top speed on this model is slower with big tires than with stock tires, and it will remain the same (within 1-2 mph) with this kit installed. This kit is NOT for use with stock tires at low elevations.

Polaris Sportsman 800 EFI

2006, 2007 models

Stock Tires – If you intend to stay with stock tires on the new 800 EFI 4x4, we have found it is very well calibrated in stock form for most conditions. If our testing does not show significant gains in belt grip, acceleration or speed / backshifting without negative trade offs somewhere else in the powerband, we prefer to simply use the stock calibration. There is nothing wrong with the fact that it has good clutch calibration from the factory. This model performs very well considering its total dry weight and stock tire size / configuration. Sometimes clutch set ups that “feel” better are simply NOT better when properly field tested.



Oversized Tires **DPPS – O/BL**

The stock 800 EFI comes with 26" tires. If you choose to switch to heavier, more aggressive 26" w/10" wide fronts and most 27" tires, the 800 will perform better by simply adding our Orange/ blue (part # DPPS-O/BL) primary spring. For all 28" & up tires use complete kit (Part# DP 800EXT) - We simply prefer to not sell you more than what you need.



Extreme Tires **DP800EXT**

Extreme mud tires. This clutch recalibration kit is designed for the serious mud runners and those using larger aggressive mud tires, (28" and up). For use on stock machine – 0-3000'. May cause slight loss of top speed

Polaris Sportsman 700 EFI

2004.5 and up, 0-2000', stock tires only
DP700E

Our initial testing showed the EFI 700 to work quite well in stock form. It did, however, have room for improvement. We designed a new primary spring and a custom-ground set of billet flyweights for this application, achieving much better belt grip in high range, less hitting of the rev limiter in loose conditions and more consistent RPM control with no loss of top speed. This kit engages right off idle just like the stock clutching and although drag racing results only show a slight advantage with this kit installed, (approx. one bike length in 400 ft.) high range is much more effective at lower speeds.



Big wheel kit **DP700 EBT**

Proper clutch re-calibration is critical when oversized tires are added on the EFI 700. This kit drastically improves low speed belt grip and throttle response to bring your big Sportsman back to life.



To upgrade the stock tires kit to the Big Tire Kit, the following parts can be purchased individually.

DPSS -B (Black secondary clutch spring),
DPS-SW (Spacer washer)



Polaris Sportsman 700 2002-2004

DBW 700

Our most popular for the SP 700 was designed around the same objective as our successful DBW 500 kit. Great all around tail performance, with an emphasis on bottom and mid-range acceleration and improved belt grip. This

kit works well to restore power loss from bigger tires, and is a favorite even with stock tires. (This kit often results in loss of 1-2 mph on top speed when used with stock tires.) -includes billet DaltonPro flyweights, new primary spring, new secondary spring. Designed for use with stock helix, stock or oversized tires.

DP700A

More aggressive acceleration for **high performance riders**. Includes set of billet steel DaltonPro flyweights, a different primary spring, and billet helix. Kit was designed for use with the gearing and rotational mass related to stock tires, and in fact can benefit from using lighter weight wheels and tires (not larger than stock size). **Not** for use with oversized tires.



Clutch Kits for Polaris



Sportsman 600

2003-04
DPSS-P/W.(Optional spring-stock tires)

Our testing of the new SP600 showed that this quad was very well calibrated "out of the crate" in stock form. Our new **Dalton plain/white** primary spring has only slightly

higher initial load, but slightly lower finish load than the stock primary spring. Use of the plain/white primary spring keeps the engine in a better part of its power curve all the way through the shift pattern. Better bottom/mid acceleration with 1 mph gain on top end resulted. For stock tire application.

DBW600-Oversized Tires

With stock tires, our testing has shown this model to be quite well calibrated in stock form. With the addition of oversize mud tires, our heavier Dalton EBS black secondary spring was used in conjunction with our plain/white primary spring. We now package this popular combination in kit form, complete with instructions. The result is better belt grip and acceleration, along with much better throttle response and backshifting. When used with stock tires this kit may cause a slight loss of top speed (1-2 mph). Works well with high altitude applications.



Sportsman 500 HO

2001-05
DBW 500
(Bottom-mid-range for use with stock or oversized tires) Our most popular kit for the 500HO, it is designed to increase belt grip and acceleration, without losing top speed with stock tires. This kit also works well to restore lost power resulting from bigger tires. Engagement is only slightly higher than stock. Includes billet steel DaltonPro flyweights, new primary spring, new secondary spring. Designed for use with the stock helix, and with stock or oversized tires.



DP 500A

More aggressive acceleration for **high performance riders**. Includes a set of billet steel **DaltonPro flyweights**, a different **primary spring**, and a **billet helix**. Designed for use with the gearing and rotational mass related to **stock tires**, and in fact can benefit from using lighter weight wheels and tires (not larger than stock size). **Not for use with oversized tires.**



Sportsman 500

(with EBS) 1998-2000

DP 500 SP

Improved belt grip and bottom to mid acceleration without loss of top speed. This kit works well with stock 25" or 26" tires. This kit is NOT for use with larger than 26" tires

DBT 500 SP Improved belt grip and bottom to mid acceleration. This kit was designed to get big tires turning in heavy mud applications and correct the shift ratio for larger tires.

Polaris 500 Scrambler

1999-2004

DSC500

Includes our billet flyweights, a new primary spring, a new secondary spring, and a custom billet helix. Improved belt-grip, throttle response and bottom to mid acceleration without loss of top speed. Designed for stock tires (0-2000 ft. altitude).



Sportsman 400

2001-2004, non EBS

DP 400 SP Improved belt grip and bottom to mid acceleration without loss of top speed. This kit works well with stock 25" or 26" tires

DBT 400 SP Improved belt grip and bottom to mid acceleration. This kit was designed for extreme mud applications and to correct the shift pattern for larger, more aggressive tires (27" or 28").

Ranger XP Utility Vehicle

2005-07 700 EFI only

DUV - P7XP

The Ranger XP often exhibits over rev during its shift phase on typical hard packed trail surfaces at times even bumping the rev limiter prematurely during acceleration. This kit includes a new primary spring and a set of flyweights that were ground specifically for this application. Better belt squeeze and quicker upshift / acceleration in mid range.- For stock tires sizes only.



Dalton Industries designs and manufactures our own helixes, flyweights, etc. Helixes have stainless steel spline hub, flyweights are CNC machined from billet steel, heat treated and designed specifically for each application. DaltonPro springs are manufactured to OUR specifications and come with a lifetime warranty against breakage.

Clutch Kits for Suzuki



Suzuki King Quad 450

DSK 450 This new kit for the 450 King Quad increases throttle response and acceleration with no loss of top speed when set up correctly for your application. This is an adjustable kit and contains various combinations of complete drop-in roller assemblies (plastic outer housing included) for easy installation set up guide included for stock tires, oversize tires or altitude.

Suzuki Vinson 500 4x4 (03 and up)



DSA 500MT

Our heavier secondary spring has already proven to prolong belt life and help with bottom end response on these models. Now, in addition to that we have assembled a complete clutch kit including new rollers for the primary clutch. This complete clutch recalibration helps recover power lost from oversize mud tires.

Suzuki Vinson 500 4x4, 07/08 Moose Tracker (import) 500 Auto

New kit with complete drop-in roller assemblies



DMT 500C A new kit that contains complete drop-in roller assemblies. This kit is designed to re-calibrate the shift pattern to help recover some of the losses from installing oversized tires. Bottom and midrange acceleration and performance are greatly improved. Also aids in performance when operating at higher elevations. This kit can be used with stock or oversized tires, however, when used with stock tires at low elevation it can cause a slight loss of top speed.

Suzuki Twin Peaks 4X4



700 V-twin model, 0"-2000" elevation, tires 25-26"

DK 650/700S

This combination of new slightly heavier secondary spring and our plain/white primary spring, has resulted in better belt grip and an increase in bottom and midrange throttle response and acceleration. Better belt life and improved backshifting for off trail situations have made this kit very popular. For use with 25"-26" tires

Oversized tires 27-28"



DKA 6570MT This kit combines our popular plain/purple secondary spring with a new primary spring that has slightly higher fully compressed load rating. This combination has proven most effective for the above applications. This kit is also the best choice for **High Altitude** applications. For more aggressive

acceleration and higher engagement (race applications), some prefer to add our black/white spring Part #DPPS-B/W to the above V-twin 4x4 clutch kits.



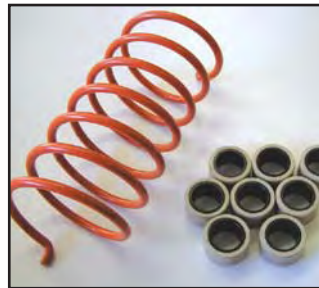
Suzuki King Quad 700 EFI 4X4 (05 and up)

DSK700EF

Improved acceleration and backshifting and maintains more consistent RPM under load conditions. A new secondary spring and roller weights developed specifically for this model. This clutch recalibration kit works well to help recover the dramatic losses resulting from oversized tires on this model. It can, however, be used with stock tire sizes as well for situations requiring

better low speed/midrange response and performance (e.g: mud/work). Use with stock tires may result in a minimal loss of top speed. There is no increase in engagement (stall) speed rpm so this kit still works well for low speed maneuverability like rock crawling, etc. It also helps restore power loss from higher elevations

Suzuki 750 King Quad 4x4



DSK 750 C

This new version of our proven DSK700EF kit now comes with "complete roller assemblies." Complete rollers means quicker, easier installation, and a new wear surface at the time of installation. Improved acceleration, backshifting and throttle response. More consistent rpm under road conditions.

Can be used with stock or oversized tires. For extreme mud tires, eg 29.5" and bigger Kit# DSK750 HAC is recommended. 06-07 Arctic 700 EFI 4x4 (Suzuki engine model ONLY)

DSK 750 HAC

A kit designed for increased acceleration and backshifting when using the big mud tires. Also aids in recovery of power lost at high elevations (above 4000 ft) with moderate typical trail tires. Not for use with stock tires at low elevation.

For stock to 28" tires at low elevation use kit # DSK750 C. Also fits

05-07 Suzuki King Quad 700EFI 4x4, 06-07 Arctic Cat 700EFI 4x4 (Suzuki engine model ONLY).

Clutch Kits for Yamaha



Yamaha 660 Grizzly 4X4

Oversized tires

DBW 660Y

Installation of larger tires results in taller gearing, heavier rotating mass, and a drastic negative effect on the performance of this model. This kit is designed to help restore that lost power, and bring your **Big Tire Grizzly** back to life. It was designed for use with oversized tires. Dalton does not currently recommend or offer a clutch kit for this model with stock tires.



Yamaha 700 Grizzly 4x4

07 and up 700EFI oversized tires/ altitude

DBW 700 Y

A very cost effective method to help minimize the performance losses from installing oversized tires. This combination of different weight rollers for the drive clutch is a variable tuning kit and can be set up for different oversized tire/ altitude applications. There is no increase in engagement (stall) rpm, so this kit still works well for low speed manoeuvrability like rock crawling, etc.

Some Notes on this Model

The new Yamaha Grizzly 700 4x4 is a new improved version of its 660cc predecessor. Although the 686cc engine is not substantially larger or more powerful, it certainly has improved torque, throttle response and smoothness as a result of the electronic fuel injection (EFI). In stock form, the factory clutch calibration is fine for the supplied 25" tires and no recalibration is necessary for the stock tires.

Many consumers prefer the ground clearance and traction advantage of larger, more aggressive mud tires. Most, however, are not prepared for the amount of performance lost by installing bigger tires. Installing larger, heavier tires on this model does have a drastic negative effect on acceleration performance.

Although an ATV with oversized tires can never be as quick as one with light weight stock tires, this kit can help recover some of the losses and breath some life back into your Grizzly. On the previous 660 models we have always included a new heavier secondary spring for the rear pulley. The new 700 model, however, comes from the factory with its own new heavier secondary spring that has proven satisfactory.

Your ATV Model Not Listed Here?

Proper clutch calibrations take time and testing to prepare. Although we may not have every model or application completed, we are continuously doing R&D on new models and applications.

Some ATV's and off-highway vehicles come from the factory with better CVT calibrations for intended use than others, thus you will see a wide variation of components included in some of our kits. As new projects are completed, they will always be listed as soon as they become available on www.daltonindustries.com.

Clutch Tuning Components, Tools and Accessories



Billet Overdrive Clutch Covers for Kawasaki

Non-Engine Brake **DCC-101**

CNC machined from aircraft quality billet aluminum and hard anodized for a durable surface. It offers more strength, lighter weight, and better cooling for the Kawasaki KFX 700 V-Force drive clutch. It comes complete with bushing. Faster revs, better cooling, more belt travel, this component is most effective on modified machines with dual exhaust, etc. that operate at a higher rpm.



Replacement Bushing

DCC-RB Replacement bushing for Dalton DCC 101 overdrive clutch cover. Can also be used to replace worn bushings on the factory drive clutch cover.

Billet Overdrive Clutch Covers for Teryx

DCC 102 The new Teryx RUV has a newer version and different drive clutch than any other or previous Kawasaki ATV models. It requires different (wider with different curvature) flyweights, and the shift dimensions are different as well. Our new billet aluminum overdrive clutch cover is built specifically for this Teryx model, and allows more belt travel for increased top end speed offering increase of 4-5 mph by simply bolting it on in place of the existing cover plate of a stock Teryx primary clutch. No mod of the drive clutch is necessary and you can revert to stock any time. Premium billet aluminum construction and design offers increased strength, better cooling and lighter weight. Our premium adjustable clutch kit (DUV K750TX, page 13) can get you up to speed quicker and offer more accurate shift characteristics for different applications, but this O/D cover allows the belt to shift further allowing more top speed, and a more rigid, cooler drive clutch. Together they're a great combination to get the best from any modified machine.



This component is for race applications and contains no engine brake bearing and the KEBC system must be disabled.

ATV Helixes- Polaris

Billet aluminum stainless steel spline hub, hard anodized. You can have DaltonPro quality for your Polaris ATV.

Polaris

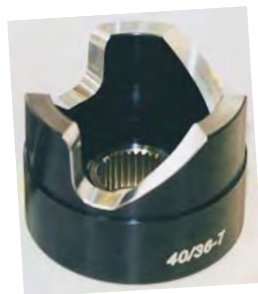
DAP 38/34
DAP 40/34
DAP 40/36
DAP 40/38
DAP 42/36
DAP 42/38
DAP 42/40
DAP 44/38
DAP 44/40
DAP 44/36
DAP 46/36
DAP 46/40
DAP 46/42
DAP 48/40

Polaris W/EBS

DEP 38/34
DEP 38/35
DEP 39/35
DEP 40/35
DEP 40/36
DEP 40/38
DEP 42/36
DEP 42/38
DEP 46/40

Polaris W/EBS SP600 & SP700

DEP 38/34-7
DEP 38/35-7
DEP 40/35-7
DEP 40/36-7
DEP 42/36-7
DEP 46/40-7



These helixes are common on many models, but not for use on some Polaris ATV models that use the TEAM style secondary clutch. Be sure to consult your dealer service manual.



Dalton ATV Primary Springs

Dalton springs are made from the highest quality stock, stress relieved and shot peened for long lasting durability.

Part #	@2.5"	@2.0"	@1.25"
Polaris and Kawasaki			
Dalton plain/white	DPPS-PW 10 lbs.	60 lbs.	114 lbs.
Dalton blue	DPPS-BL 3 lbs.	60 lbs.	155 lbs.
Dalton orange/blue	DPPS-O/BL 25 lbs.	76 lbs.	167 lbs.
Dalton black/white	DPPS-B/W 45 lbs.	82 lbs.	143 lbs.
Dalton black/orange	DPPS-B/O 56 lbs.	91 lbs.	157 lbs.
Dalton amber	DPPS-AM 10 lbs.	73 lbs.	189 lbs.
Dalton red/yellow/silver	DPPS-R/Y/S 15 lbs.	90 lbs.	225 lbs.

Can-Am/ BRP

Dalton black/yellow	DPPS-B/Y 45 lbs.	120 lbs.
Dalton green/yellow	DPPS-G/Y 67 lbs.	160 lbs.
Dalton tan	DPPS-TN 55 lbs.	155 lbs.

Note the above primary springs are load-rated in "lbs" as some of them are used for both Polaris and Kawasaki models.

ATV Secondary Springs

	Part #
Suzuki Vinson/Arctic Cat 500 Auto	DPSS-P/Y
Yamaha 660 Grizzly	DPSS-P/PK
Polaris (EBS only)	DPSS-B
Polaris (non EBS)	DPSS-B/R/S
Suzuki King Quad	DPSS-O
Can Am Green	DPSS-GN
Can Am Bronze	DPSS-BZ

Kawasaki Secondary Springs	Part #	@2.5"	@1.25"
Dalton Plain/Purple	DPSS-P/PL	51 kg.	103 kg.
Dalton Aqua	DPSS-AQ	61 kg.	112 kg.
Dalton Violet	DPSS-V	51 kg.	120 kg.
Dalton Silver (Teryx only)	DPSS-S	86 kg.	155 kg.

Stock secondary spring on Prairie/ KFX 700 models (yellow)	44 kg.	98 kg.
Stock secondary spring on the BF 750 4x4 ATV model only (purple)	36 kg.	111 kg.
Stock secondary spring on Teryx	77 kg.	144 kg/

Note these secondary springs for Kawasaki models are load-rated in kilograms (kg).



Olav Aaen's Clutch Tuning Handbook

Latest Edition

This book by Olav Aaen helps you get the maximum performance from your drive belt system with in-depth chapters on CVT clutch theory and testing. It covers tuning and servicing for both ATV and snowmobile CVT belt drive systems.

Clutch Tuning Components, Tools and Accessories



ATV Clutch Weights (Polaris)

DP90 DaltonPro DP90 series flyweights were designed specifically to fit the P-90 ATV type drive clutch. No washer or shims needed to maintain belt side clearance. Billet steel, heat-treated, they come complete with bushings for longer pin life. Available in gram increments 48g+



ATV Clutch Weights (Kawasaki)

DPK The DPK series of Dalton flyweights was designed to fit the Kawasaki ATV drive clutch. Better distribution of mass allows for excellent belt grip on the bottom end, while maintaining top rpm. Now available in more base gram

increments. These weights are adjustable by use of mass rivets (DFR-Y). The DPK series does not fit the '08 BF 750 model or Teryx utility. These models use a new improved drive clutch on the engine.

Dalton's Patented Quick Adjust Cam Arms

DPKA-65 Designed for the new '08 Brute force 750 EFI with the new style wide pin drive clutch. Our new QACA flyweights allow you to fine tune to perfect shift rpm for your specific application. Dalton's "Quick Adjust" feature allows you to add or subtract weight from



the main body of the flyweights without removing the flyweights from the clutch itself. There is also a rivet system to change the "zone" of the weight, but much of the gram mass can be adjusted with the threaded passage that can be adjusted without removal. For '08 and newer "wide pin" style drive clutch only, NOT for use on Teryx RUV as we've developed special weights for that application. (See ATV Clutch Kits)



ATV Clutch Flyweights (Can-Am/ BRP)

DBO Built specifically for the Can-Am drive clutch. Each model application is considered independently during testing. We have various flyweight models for the Can-Am ATV's. Various

curvatures, location of mass, and total mass make the flyweights often case specific. It's often wrongly assumed that flyweights are compared only by grams of total mass.



Compression Spring Tester

DCT ST A Critical tool for the serious clutch tuner, this compression spring tester can be mounted in any drill press, and used to compare engagement pre-load and full shift load at any specified height.

Flyweight Replacement Bushings



DRB-001 Replacement bushing for DP90

Polaris and Comet flyweights (set of 3)

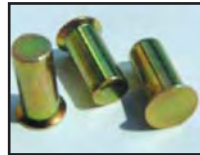
DRB-003 Replacement bushing for

DPK/Kawasaki ATV flyweights (set of 4)

DRB-003A Replacement bushing for new style DPKA series and factory wide series weights in '08 and newer 750 EFI and Teryx type (set of 4 wide)

DRB-004 Replacement bushing for DBO flyweights (set of 4)

DRB-005 Replacement bushings for DBO series (set of 3)



Flyweight Rivets

These rivets are used to adjust the mass on OEM Yamaha snowmobile flyweights. They can also be used for, and are included in some of our kits for, Kawasaki and Can-Am ATV's to adjust total mass of the flyweights for applications.

Dalton Part #		Yamaha Part #
---------------	--	---------------

DFRL-Y	3.6 g (long solid)	90261 06034-00
DFR-Y	3.1 g (solid)	90261 06019-00
DFRH-Y	2.4 g (hollow)	90266 06002-00
DFRA-Y	0.85 g (aluminum)	90266 06001-00

Digital Gram Scale

J 200 XV Many professional tuners of snowmobile and automatic ATV's use gram scales to achieve balanced total mass after adding or subtracting fly weight grams. Durable, portable scale is a favorite proven performer with the following features:

- 200 g capacity x 0.01 g increments
- Stainless steel tray with lid
- 4 key operation
- Compact 3"x 4.75" size
- Large red backlit display
- Comes with calibration weight



Clutch Pullers

DaltonPro Clutch Pullers are accurately machined from super tough 17-4 series stainless steel and heat-treated to our specifications.

Available Clutch Puller Applications	Dalton Part #	OEM Part #
--------------------------------------	---------------	------------

Polaris All ATV (with flyweight clutches) 85-08	DCP-A	2870506
Arctic Cat AC650 4x4 w/ V-twin engine, 04-06	DCP-G	2871855
Kawasaki ATV models, All 360,400,650,700 and 750 automatics 1999 & up. Not Teryx .	DCP-G	57001429
2008 Teryx Utility Vehicle (For Teryx only)	DCP-J	57001-1711



Have fun, get the most out of your equipment and your recreational time, but please don't drink alcohol while operating your bike or sled. Help preserve our freedom to enjoy the great outdoors by respecting land-owners' rights and by protecting nature.

Left: Testing the 08 Brute Force EFI on Dalton's closed course test track. See page 12 for results.



Dalton Industries Limited

355 Viny Road, Truro, NS

B2N 4K2 Canada

Phone: (902) 897 3333

Fax: (902) 897 6254

Email info@daltonindustries.com

Distributed by:

www.daltonindustries.com