



2wd Mid-Motor shaft drive conversion kit

Instruction Manual v1.1



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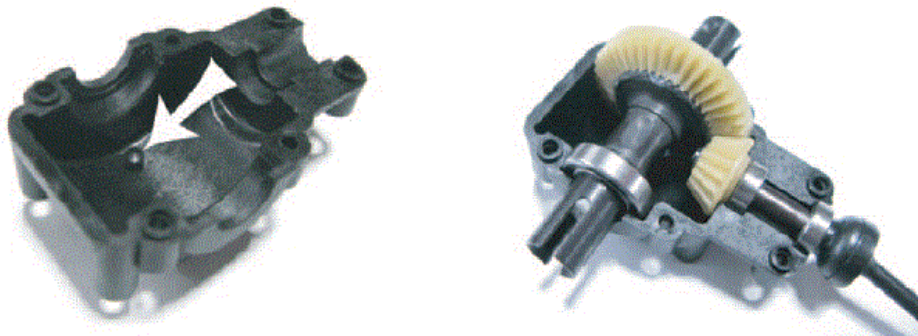
Thankyou for purchasing the X6-S conversion kit from X-Factory UK....

The conversion is based on the front end geometry of the X-Factory X6 cubed 2wd mid motor buggy, but utilises the rear suspension and centre shaft drive transmission from the popular Associated B44.2 model. (B44 and B44.1 models can be used, but will require extra parts in order to complete your model).

Front End Please dis-assemble the front end from your X6 Cubed (if you are starting with a used one) and set aside as one assembled piece. The X6 Cubed manual can be found and downloaded online on the X-Factory website for this part of the build if required. Re-assemble to your X6-S in the same manner as the X6 Cubed.

Rear End Please follow the instruction manual of the B44.2 with regards to the assembly of the rear suspension assembly. Once more the manual can be found and downloaded online on the Associated website for this part of the build.

PLEASE NOTE - the differential on the X6-S is fitted in the "reverse" direction to the B44.2 instructions, in order to do so, please carefully remove the small pip inside the lower transmission case, this is essential to ensure your car does not go backwards!! Please see images below.

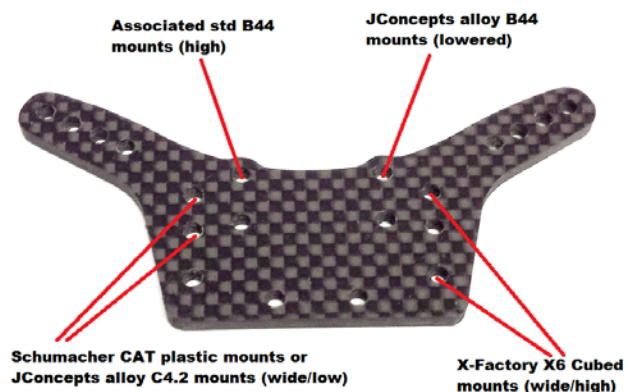


Centre Drive Assembly The centre bulkhead and motor mount assembly from the B44.2 are mounted the opposite way around on the X6-S (so the motor sits at the rear left as opposed to front right on the B44.2). The motor mount is at the rear and the centre bulkhead is at the front. The complete slipper assembly is inserted with the slipper nut facing rearwards, this also prevents the slipper from working loose in normal use. The slipper can be adjusted from either above or from below via the slot provided in the chassis. Please be sure that your slipper shaft assembly fits easily inbetween the centre bulkhead and motor mount, if it is tight, you may need to remove one of the top hat shims that AE recommend and replace with a shallower thickness spacer to allow for correct and proper slipper adjustment.

Main Chassis Assemble the alloy chassis posts to the chassis with 4-40 x 3/8" countersunk head screws, then place the lower front top deck pieces to the upper side of the top deck supports and chassis posts. Secure to the top deck supports with two 4-40 x 3/8" cap or button head screws. Place the chassis top deck spacers (DMS203) over the hole directly above the lower chassis posts. Attach the upper front bulkhead to the centre bulkhead assembly with two 4/40 x 3/8" countersunk screws, then place two 4/40" x 3/4" countersunk screws through the upper front top deck - passing through the top deck spacers and lower front top deck - then threading into the chassis posts below.

Final Assembly Assemble Carbon Fibre aerial mount to your chosen side (left or right), your receiver can mount either side or behind the servo if preferred. ESC is mounted behind the motor, we suggest routing your RX wire along the side of the chassis and placing the cable inside some heatshrink, this can then be attached to the chassis if required with CA glue for a neat and tidy install. Assemble the battery posts to the chassis in the provided holes, your "Shorty" type LIPO battery will sit snugly inside the milled recess in the chassis, secure with the Carbon battery strap using either 4/40 x 1/2" countersunk screws or thumbscrews/nuts of your choice as you prefer. We strongly suggest thread-locking both the posts and screws to prevent them from coming loose in use. Trim body and wing to suit and attach via the rear B44 mount on the rear tower and for the front we suggest using either the 4/40 body mount screw from Associated (AS6929) mounted to the front top plate or velcro attached to the side of the carbon chassis stack that mounts the front end.

Rear Shock Tower If you are using the Level 2 conversion or have purchased the optional "Multi-Mount"(DMS202) you have the option of using a wide choice of wing mounts from various leading brands, this allows for either wide or narrow wing mounting options and high or low level wing settings. (See image below)



Final assembled centre section

Spare Parts List - X6-S

Conversion kits

DMS200	X6-S Carbon chassis conversion set - level 1 (X6 Cubed)
DMS201	X6-S Carbon chassis conversion set - level 2

Bodyshell, Wing and Decals

DMS199	X6-S logo vinyl precut decal sheet
XF8024	Cab forward body, wing and window mask set
XF8101	High Downforce rear wing
XF8103	Medium Downforce rear wing

Chassis Parts

AS9709	Centre transmission bulkhead
AS9719	Rear body mount
AS9800	FT alloy motor mount complete set
AS9801	FT alloy cam motor mount only
AS9802	Blue alloy motor mount clamp only
AS9803	Blue alloy motor mount CAM only
AS9913	Centre bulkhead cover and antenna mount - plastic
DMS194	CarbonFlex main chassis plate
DMS195	Carbon fibre front lower top decks (pr)
DMS196	Carbon fibre front upper top deck
DMS198	Carbon fibre battery strap
DMS203	Alloy front upper top deck spacers - pr
XF1002	Graphite chassis nose piece
XF1400	Alloy front top deck support - 1 pc
XF1401	RMWB Black alloy front top deck supports - pr
XF1533	Carbon Fibre nose bridges - pr
XF1534	Carbon Fibre nose bridge spacers - pr
XF1535	Carbon Fibre nose bridge lower stiffeners - pr
XF1536	Carbon Fibre nose bridge upper stiffeners - pr
XF6801	Alloy 4-40 x 1" top deck stand offs
XF6802	Alloy 4-40 x 0.875" battery strap posts
XF9001	Carbon fibre antenna mount

Front Suspension and Steering

AS7922	30 Degree Castor blocks - pr
AS89007	Steering servo horn ring - blue
AS9180	Servo horn set
AS9562	Front bumper
AS9563	Front bulkhead
AS9566	Front top plate
AS9568	Front shock tower - plastic
AS9578	Front wishbones - pr
AS9622	Front hinge pin set - outer
AS9640	Steering bolts (pr)
AS9659	Steering rack set
AS9880	Front steering blocks - 12mm hex type
JC2135	12mm aluminium clamping front wheel hexs
JC2158	Blue alloy steering bellcranks
JC2169	Steel front axles - 12mm hex type
JC2181	Rib and Wedge ballcup assortment
JC2182	4-40 ballstuds 4-40 x 0.200" (6)

JC2183	4-40 ballstuds 4-40 x 0.300" (6)
JC2184	4-40 ballstuds 4-40 x 0.400" (6)
JC2237	Blue aluminium ballstud and hub washers
JC2280-1	Blue aluminium front suspension brace
JC2280-2	Black aluminium front suspension brace
L1069	Punisher - 3mm x 2.00" titanium turnbuckles
L3006	Titanium hinge pin set - inner
XF1241	RMWB Black alloy servo mounts
XF6205	1/8 x 1/4 sealed bearings - steering (4)
XF6803	Alloy 4-40 x 0.406" front chassis posts

Rear Suspension

JC2182	4-40 ballstuds 4-40 x 0.200" (6)
JC2183	4-40 ballstuds 4-40 x 0.300" (6)
JC2184	4-40 ballstuds 4-40 x 0.400" (6)
AS7933	Bearing crush tubes
AS7996	Posilock QS driveshaft pin retainer
AS8828	Roll bar ballcup set
AS9714	Rear shock tower mount - plastic
AS9716	Rear hinge pin set - inner and outer
AS9718	Rear mini bumper
AS9726	Rear chassis plate/wishbone hanger set
AS9729	Wing mounts, standard - narrow fitting
AS9754	Rear CVA dogbones
AS9755	Rear CVA wheel axles
AS9764	Rear wishbones - pr
AS9780	Rear anti roll bar set - thick and thin
AS9864	Alloy 0 degree rear hub carriers
AS9872	Plastic aluminium rear hub towers
AS9904	Carbon 3mm rear tower - narrow wing mount only
JC2091	12mm aluminium clamping rear wheel hexs
JC2237	Blue aluminium ballstud and hub washers
L1069	Punisher - 3mm x 2.00" titanium turnbuckles
XF3500	Wing mounts, standard - wide fitting

Transmission

AS1654	Solid drive pins
AS2330	Locking diff nut - ball diff
AS3903	Input drive pinion gear - ball diff
AS3911	Diff outdrive shims
AS3914	Main diff and input gears - ball diff
AS3919	Input shaft pins and hardware
AS6573	Diff thrust washers and bolt - ball diff
AS6574	5/64" thrust balls
AS6579	Diff rings - pr
AS6582	Diff spring - ball diff
AS7381	Driveshaft CVA coupler and pin
AS7485	Slipper plate
AS7486	VTS V2 slipper spring
AS7996	CVA pin retainer
AS91175	VTS slipper clutch complete
AS91176	VTS slipper housing

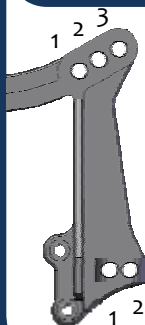
AS91177	VTS slipper pads	<u>Option Parts</u>	
AS91178	VTS slipper plate	AS7990	Aluminium front bulkhead
AS91179	VTS outer slipper hub	AS91170	High Torque rear slipper pads (2)
AS9603	Slipper Pad - rear (2)	AS9567	Graphite front top plate
AS9711	Centre drive bearing inserts	AS9579	Graphite front wishbones
AS9733	Transmission case set	AS9592	20 Degree Castor blocks - pr
AS9734	Ball diff outdrives - pr	AS9710	Blue aluminium centre trans bulkhead
AS9736	Slipper spring retainer	AS9776	Rear chassis ballast weight
AS9740	Slipper nut	AS9784	Blue aluminium rear tower mount
AS9741	Slipper nut O-ring	DMS173	CarbonFlex front tower only for alloy mounts
AS9742	Centre drive cup and O-ring	DMS202	Carbon Fibre "Multi Mount" 4mm rear shock tower (X6-S)
AS9910	Slipper shaft and spacer	EX1191-BLK	Black thumbscrews
AS9911	Centre drive CVA bone	EX1191-DB	Dark Blue thumbscrews
JC2098	Silent Speed 81 tooth spur gear	EX1368-B	Blue alloy V2 rear hub carriers - vertical ballstud
VR3011	DUO 3/16 x 3/8 rubber sealed bearings (10)	JC1155	Clear chassis protective sheet (2)
XF6200	3/16 x 3/8 bearings - wheels and transmission	JC2075	Blue aluminium 8/32 locking wheel nuts
XF6203	3/8 x 5/8 diff outdrive bearings	JC2076	Black aluminium 8/32 locking wheel nuts
XF6204	3/16 x 5/16 inner diff bearings 2	JC2097	Silent Speed 78 tooth spur gear
XF6206	3/16 x 1/2 bearing (centre drive and outer rear hub)	JC2099	Silent Speed 84 tooth spur gear
XF6500	3/32" Carbide diff balls	JC2138	Wing mounts lowered, alloy - narrow fitting
<u>Hardware</u>		JC2160-1	Blue aluminium battery thumbscrews
AS6299	1/8 E Clips	JC2160-2	Black aluminium battery thumbscrews
AS6932	4-40 x 5/16 cap head screws	JC2165	Carbon Fibre alloy rear hub towers - A, B and C
AS7673	4-40 x 5/16 flat head countersunk screws	JC2169T	Titanium front axles - 12mm hex type
AS7738	4/40 x 7/8 cap head screws	JC2193	Carbon Fibre 4mm front shock tower
AS9765	4-40 x 7/16 flat head countersunk screws	JC2225	Fin titanium turnbuckles set
AZ0008	HD ballend dust covers	JC2242	Blue alloy centre bulkhead cover
JC2157	3mm or 4-40 plastic nuts (28 pcs)	JC2264	Carbon fibre steering rack - ballraced
JC2237	Blue aluminium ballstud and hub washers	JC2321-1	Alloy wing mounts - blue - wide mounting
XF6001	4-40 x 3/8 cap head screws	JC2321-2	Alloy wing mounts - black- wide mounting
XF6002	4-40 x 1/2 cap head screws	L12006	Super Duty - titanium turnbuckle set with ballends
XF6003	4-40 x 5/8 cap head screws	L7107	Titanium broached ballstuds - short (2)
XF6004	4-40 x 3/4 socket head screws	L7108	Titanium broached ballstuds - medium (2)
XF6006	4-40 x 3/4 cap head screws	L7109	Titanium broached ballstuds - long (2)
XF6022	4-40 x 3/8 flat head countersunk screws	L7304	Titanium quick tune shock mounts - TLR Big Bore shocks
XF6023	4-40 x 1/2 flat head countersunk screws	L7342	Titanium quick tune shock mounts - AE Big Bore shocks
XF6024	4-40 x 5/8 flat head countersunk screws	VR3001	3/32" Ceramic diff balls (12)
XF6025	4-40 x 5/8 flat head countersunk screws	VR3004	5/64"/2mm Ceramic thrust balls
XF6042	4-40 x 3/8 button head screws	XF9501	Carbon Fibre aluminium rear hub towers
XF6043	4-40 x 1/2 button head screws	<u>Spare Parts Key</u>	
XF6053	2-56 x 1/8 button head screws	AS - Associated parts	
XF6055	2-56 x 5/16 cap head screws (4)	DMS - DMS Partz parts	
XF6075	RMWB Black alloy 8-32 wheel nuts	EX - Exotek parts	
XF6076	RMWB Black alloy 4-40 mini lock nuts	JC - JConcepts parts	
XF6077	RMWB Black alloy 4-40 lock nuts	L - Lunsford parts	
XF6080	No.4 washers (anti squat)	VR - Vampire Racing parts	
XF6081	RMWB Black no4 countersunk washers	XF - X-Factory parts	
XF6310	Bodyclips (6)		
XF6311	Nylon wing washers (6)		
XF6450	3/16 axle shims		
XF6642	M3 x 6mm button head screws (motor)		



Driver: _____ Date: _____

Track/Event: _____

Front Suspension



Ballstud Washers

Ride Height: _____

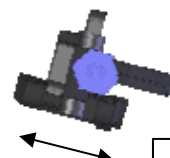
Camber: _____° Toe: _____°

Ackerman: ☐ Forward ☐ Back

Axles: ☐ Trailing ☐ Inline

Caster Block:

☐ 20° ☐ 25° ☐ 30°



Bumpsteer Washers

Position:
☐ Fwd ☐ Back

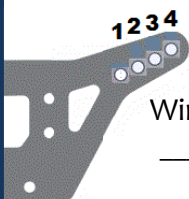
Front Shocks

Type	Spring	Piston	Oil
AE BB			
TLR BB			
Other			

Shock Length: _____

Limiters: Inside _____ Outside _____

Rear Suspension



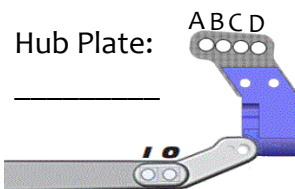
Wing Mounts

Wide Narrow

Wing Type

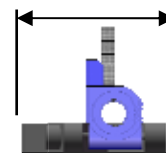
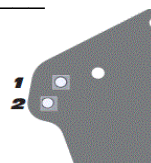
Ride Height: _____

Camber: _____ Anti Squat: _____



Hub Plate: _____

Ballstud washers:-



Hub Position:
☐ Back ☐ Mid ☐ Fwd

Anti Roll Bar: _____

Rear Shocks

Type	Spring	Piston	Oil
AE BB			
TLR BB			
Other			

Shock Length: _____

Limiters: Inside _____ Outside _____

Weight

Centre: _____

Front: _____

Rear: _____

Total Weight: _____

F/R Bias: _____ / _____

Tyres and Electrics

Tyres: Front _____ Rear _____

Inserts: Front _____ Rear _____

ESC: _____ Servo: _____ Slipper: VTS / AVID / Double Disc / Flywheel Weight

Battery: _____ Motor: _____ Gearing: P _____ / S _____

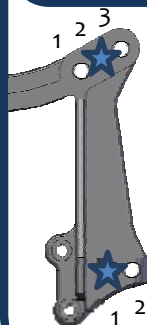
Notes: _____



Driver: Ed Kerry Date: 23/03/2014

Track/Event: High grip Carpet

Front Suspension



Ballstud Washers
2.5mm

Ride Height: 18mm

Camber: -1° Toe: 1° out

Ackerman: ☒ Forward ☐ Back

Axles: ☒ Trailing ☐ Inline

Caster Block:

☐ 20° ☐ 25° ☒ 30°



Bumpsteer
Washers
2mm

Position:
☒ Fwd ☐ Back

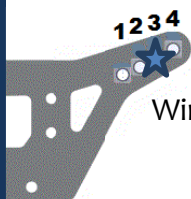
Front Shocks

Type	Spring	Piston	Oil
AE BB	Losi Black	1.6mm	45
TLR BB			
Other			

Shock Length: _____

Limiters: Inside 2 Outside 0

Rear Suspension



Wing Mounts
B44.2

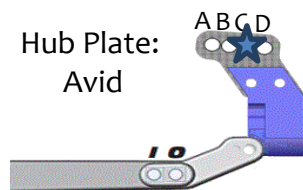
Wide Narrow

Wing Type
X-Factory

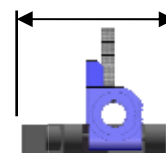
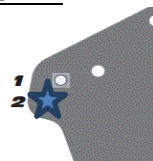
Ride Height: 19mm

Anti Roll Bar: N/A

Hub Plate:
Avid



Ballstud washers:-
3mm



Hub Position:
☒ Back ☐ Mid ☐ Fwd

Rear Shocks

Type	Spring	Piston	Oil
AE BB	Losi Red	1.7mm	35
TLR BB			
Other			

Shock Length: _____

Limiters: Inside 1 Outside 0

Weight

Centre: 40grs

Front: 45g

Rear: _____

Total Weight: _____

F/R Bias: _____ / _____

Tyres and Electrics

Tyres: Front: cut staggers Rear mini pin

Inserts: Front: Ballistic Buggy Rear: Ballistic Buggy

ESC: Vampire SR1+ Servo: Vampire Slipper: AVID

Battery: Vampire Motor: Vampire 6.5T Gearing: P23 / S 81

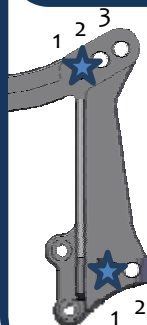
Notes: Durango Gear Diff with 3000w oil



Driver: Kevin Hunt Date: 23/03/2014

Track/Event: Kidderminster MAM series

Front Suspension



Ballstud Washers
1.5mm

Ride Height: 20mm

Camber: -1° Toe: 1° out

Ackerman: ☒ Forward ☐ Back

Axles: ☐ Trailing ☐ Inline

Caster Block:

☐ 20° ☐ 25° ☒ 30°



Bumpsteer
Washers
2mm

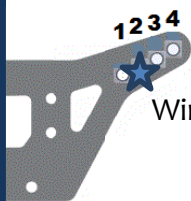
Position:
☒ Fwd ☐ Back

Front Shocks

Type	Spring	Piston	Oil
AE BB	AE Blue	AE 1.6mm	TLR 37.5
TLR BB			
Other			

Shock Length: _____

Rear Suspension



Wing Mounts
B44.2 kit

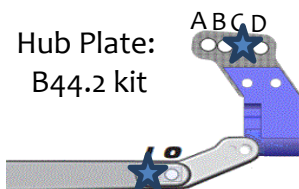
Wide Narrow

Wing Type
B44.2 Kit

Ride Height: 20mm

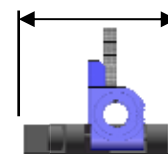
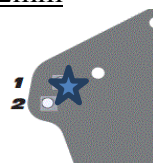
Camber: -1° Anti Squat: Kit B44.2

Anti Roll Bar: AE black



Hub Plate:
B44.2 kit

Ballstud washers:-
2mm



Hub Position:
☒ Back ☐ Mid ☐ Fwd

Rear Shocks

Type	Spring	Piston	Oil
AE BB	AE white	AE 1.7mm	TLR 32.5
TLR BB			
Other			

Shock Length: _____

Weight

Centre: _____

Front: 18g

Rear: 60grams

Total Weight: 1493g

F/R Bias: _____ / _____

Tyres and Electrics

Tyres: Front: yellow cut staggers Rear Ballaistic Buggy White minispike

Inserts: Front: None Rear: Ballistic Buggy White

ESC: Vampire SR1+ Servo: Spectrum Low profile Slipper: VTS

Battery: Vampire Shorty Motor: Vampire V2 6.0T Gearing: P22 /S Kit

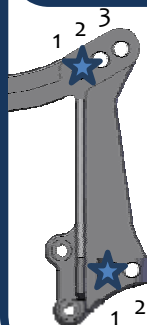
Notes: Team SR front bumper, ball diff



Driver: Kevin Hunt Date: 06/03/2014

Track/Event: Silverstone Winter series Rd6

Front Suspension



Ballstud Washers
1.5mm

Ride Height: 16mm

Camber: -1° Toe: 1° out

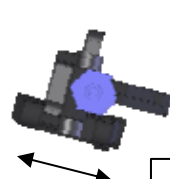
Ackerman: ☒ Forward ☐ Back



Axles: ☐ Trailing ☐ Inline

Caster Block:

☐ 20° ☐ 25° ☒ 30°



Bumpsteer
Washers
2mm

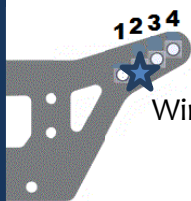
Position:
☒ Fwd ☐ Back

Front Shocks

Type	Spring	Piston	Oil
AE BB	TLR black	AE 1.6mm	TLR 45
TLR BB			
Other			

Shock Length: _____

Rear Suspension



Wing Mounts
B44.2 kit

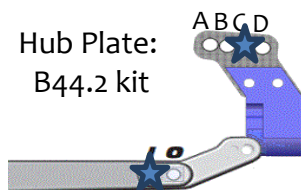
Wide Narrow

Wing Type
B44.2 Kit

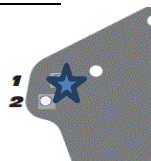
Ride Height: 16mm

Camber: -1° Anti Squat: Kit B44.2

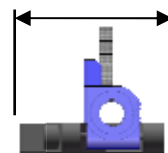
Hub Plate:
B44.2 kit



Ballstud washers:-
2mm



Anti Roll Bar: AE black



Hub Position:
☒ Back ☐ Mid ☐ Fwd

Rear Shocks

Type	Spring	Piston	Oil
AE BB	AE white	AE 1.7mm	TLR 37.5
TLR BB			
Other			

Shock Length: _____

Weight

Centre: _____

Front: _____

Rear: _____

Total Weight: 1493g

F/R Bias: _____ / _____

Tyres and Electrics

Tyres: Front: yellow cut staggers Rear Yellow mini spikes

Inserts: Front: None Rear: Ballistic Buggy White

ESC: Vampire SR1+ Servo: Spectrum Low profile Slipper: VTS

Battery: Vampire Shorty Motor: Vampire V2 6.0T Gearing: P22 /S Kit

Notes: Team SR front bumper, ball diff