



01756 793521

BETA PARTS, CLOTHING & ACCESSORIES



2019 SSDT BETA SURVIVAL GUIDE

For SSDT riders 'on confirmation of entry' please telephone Gary (01756 793521) to sign on for our back up service or e mail him at spares@beta-uk.com and inform him of your riding number and which bike and engine size you will ride and also your address and credit card details (Do not send credit card details via email) There is no charge for the service, only if you use any parts.

You must sign on with us before you go to the SSDT. Please do this as soon as you receive your riding number.

We supply spare parts, tools, compressors etc to help service your bike at the SSDT. Below are some helpful tips designed for people riding in the SSDT or you may find some things helpful anyway. These are modifications that we make to our own bikes. A lot of these things apply only to riders competing in the SSDT. Obviously, these are only guidelines, you must prepare your bike fully.

EACH YEAR WE EXPERIENCE PROBLEMS FROM RIDERS WHO DO NOT BOTHER TO DO THE JOBS LISTED BELOW. SOME THINGS MAY SEEM UNIMPORTANT BUT THEY ARE ALL THERE FOR A REASON.

The SSDT committee have decided that they will be stricter regarding us helping you with your bike so make sure you are able to carry out the work yourself.

Try to prepare your bike fully 2 weeks before so you are prepared well in advance. It is very difficult for us to do work on the Sunday before as we have a lot of riders to look after. Test your bike on the road for a minimum of one hour before arriving to the SSDT.

If your bike is over one year old or has done a previous SSDT I advise checking the main bearings especially if the engine has a wining noise, this is not essential but if you are unsure get somebody experienced to listen to your bike, also change radiator hoses, head insert "O-ring", head gasket and water pump impellor. If you have had your bike from new, then this work is not critical as you will know the history of the bike. If you do not know the history, then this is worth checking.

FRAME

TYRES. New. We recommend Michelin X11 tyres which hold their pressure which is essential during the SSDT. Make sure you are able to repair both front and rear punctures.

LOCKTIGHT. Do not use on M5 screws or small screws you need to remove. M6 up is OK. M5 "hexagon" headed screws are OK to lock tight. Lock tight rear disc bolts, stand bolts, gear lever, rear sump bolts, kick start + kick start countersunk bolt.

Silencer "bottom" mounting bolts-replace with hexagon bolts as shown in photo below and check each day. We have these.



01756 793521

BETA PARTS, CLOTHING & ACCESSORIES



BOLTS. Check all accessible bolts to ensure they are tight. Check these regularly.

BRAKE PADS. New front and rear. Check you have a little play in the rear brake rod. The piston must return fully to its off position, the rear brake can stick on if this is not correct. **IMPORTANT. Put a good cable tie round the rear brake rod "clip".**

Grease the pins, which hold the pads in place. If the allen key fit is not good REPLACE.

KILL BUTTON 14-19 EVO. You can remove the lights but do not remove the main wiring loom as the fan is wired through the wiring loom.

CHAIN. Must be new or nearly new. Do not use a chain unless you know the quality is good and make sure you can get a half link if required, a standard Beta chain is very good quality. Keep the links you remove, as they may be useful in the future. You can get half links for a standard Beta chain which may be required.

CHAIN SLIPPER PAD/ TENSIONER PAD. New, unless the bike is quite new. Put a "lock nut" on the back of the top chain slipper bolt. 2014-19 only.

SPROCKETS. New or nearly new.

LINKAGE KNUCKLE. Check for free play in the swinging arm and inspect the linkage knuckle to make sure it is not damaged/cracked. Under normal conditions they do not crack but worth checking. Remove and grease all bolts and bearings. Do not over tighten the link arm bolts as you can pull the head off the bolt. If you are using a shock different to standard contact us directly.

FRONT FENDER TAPE. Very important. Run some gorilla tape (this is stronger than standard duct tape) down the back of each side of the front fender, about 2cm out of the side of the back of the fender. This helps to prevent the radiator clogging with mud.

We have also available a guard "shown below" which fits on the bottom of the radiator which prevents mud from getting into the rad. This works really well and definitely should be fitted. £13.50 available from us.



RADIATOR. IMPORTANT.

Throughout the event and especially after every moor crossing remove the radiator cover and clean. Do not touch or rub mud into the radiator, the radiator is very fragile so do not touch. You can blow out with the airline when you return to the start, same again do gently as you can damage the radiator. Every year we have riders retire because they do not do this. The radiator cover is designed to keep mud out of the radiator but it does not work well on the road. Remove when you are on a long road stretch. Make sure you do not lose the cover. To fill the Evo coolant



01756 793521

BETA PARTS, CLOTHING & ACCESSORIES



correctly put the front wheel (0.5-1.0 meter) high as it fills better. Fill full, the Evo will always push a little coolant out to find its level then it should be fine. Take your bike up the road for a run and make sure the fan is working correctly.

WE CANNOT STRESS HOW IMPORTANT IT IS TO KEEP THE RADIATOR CLEAN; THE BIKE CANNOT COOL ITSELF IF IT CANNOT GET AIR. IF YOU DO NOT DO THIS THERE IS A GOOD CHANCE YOU WILL NOT FINISH THE EVENT. ALL THE EXPERIENCED RIDERS KEEP THEIR RADIATOR CLEAN AND NORMALLY HAVE NO PROBLEMS. MAKE SURE YOUR BIKE HAS A 1.4 RADIATOR CAP. THIS IS IMPORTANT.

VERY IMPORTANT.

Evo all models. Reroute header tank pipe as shown. If you have cooling problems, you will get a warning before damage is done. This will indicate the radiator is full of mud, you are going too fast on the road or there is a problem with the fan.



FAN

We have available a connector so if your fan thermostat fails you simply follow the wires out of your thermostat and connect them together using the connector shown. You can push these together with your fingers,



Electrical adaptor to wire the fan live if the fan wiring/thermostat fails. Available from us. Get before the event. This is very good to carry.

AIR FILTER. Make sure your air filter is in good condition. Check air box bleed screw is working correctly and you can remove easily. Attach some clear pipe and block the end. This is excellent if conditions are bad as you can see if water is in the air box without removing the air filter. It is tricky to make but very worthwhile.

Evo. Seal any holes where water and mud can come from the rear wheel and also where the silencer connects to the sub frame. We have also used the foam shown in the diagram for 5+ years now. This will prevent water from the front wheel finding its way into the air box, which happens when you ride down the tracks. This is where most water enters the air box. Do NOT use normal foam or seal with tape as the air box must breathe. This is reticulated foam which allows the air box to breathe as it has air pockets running through the foam but will stop water from entering the air box. This is available from us already cut to shape - £6.00. The bike can breathe through the vents in the rear fender but the blue foam will stop water/mud from getting to the air filter. We also run sikoflex/tiger seal "silicone does not stick" down the left and right subframe, spray the bottom of your rear fender so the silicon sticks to the



01756 793521

BETA PARTS, CLOTHING & ACCESSORIES



subframe and not the fender. This makes a really good seal where the fender seals against the sub frame. Also tape the air box LID to prevent any water passing through.

Evo 2013-19



AIR BOX DRAIN MOD.

This mod is useful when conditions are bad as you can see from the clear pipe if you have any water in your air box before it can cause a problem. To fit insert the red right angled part into your air box drain hole facing to the left hand side of the bike and secure using the nut provided. Lock tight to make sure the nut cannot come loose. Also silicone round the nut to smooth the surface so allowing any water to run into the hole easily. The end with the removable drain simply sits down on the sump allowing you to reach easily if required. £12.00.



STAND. Make sure it works well because you must have a stand all week for the parc ferme. When the stand is down do not put your body weight on the bike to start. Lock tight stand bolts and check every day. If the stand returns automatically remove the M6 bolt behind the stand bracket. Check your stand bracket is not cracked as these can be weak. We recommend re welding if you find a crack as this will be stronger than standard.

FUEL PIPE. IMPORTANT.

Check it is not touching the cylinder and not bent so the fuel can flow correctly. Fit an in line fuel filter. IMPORTANT. On the Evo 2015-19 I recommend running the pipe right round the carb or routed up towards the fuel tank so the pipe does not kink. Make sure it is not near the exhaust.

SPOKES. Check each day.

REAR SILENCER. 2T Evo. If the bike is noisy fit new packing. Change the silencer rubber bobbin if more than 1 year old (Pre 2015 only). Do not lift your bike from the silencer as that is what breaks the bobbin.

SUMP. Remove sump plate and press back to its original position if it is stressed or bent towards the engine.

RADIATOR HOSES. If yours is more than 1 year old I advise changing the radiator hoses, do not over tighten clips.



01756 793521

BETA PARTS, CLOTHING & ACCESSORIES



SUSPENSION. Set up as per handbook.

FUEL TANK. Not available on 2017-19 model as the regulator is fitted behind the front light/number board.

We have some customers that are concerned about the fuel capacity of the Evo so we have a solution for them or for any trials bike. Below is a photo of an extra fuel tank for the Beta Evo for events like the SSDT. It holds an extra 1.1 litres of fuel. Standard tank capacity, Rev-3 2T -3.0 litres, Evo 09-12 2.6 litres and 2013-17 2.9 litres of fuel. The extra fuel tank uses a siphon system, which draws the fuel from the extra tank first. It is very easy to fit to any trials bike and fits very neatly onto the bike. For most riders I think this is a good modification. Make sure the pipes are the same as the photo with the pipe from the raised connector with nut goes to the fuel cap breather.

They are available from us about £50.00 + VAT.

This cannot be fitted to a 2017-18 bike as the regulator is positioned behind the front number board.



ELECTRICAL CONNECTORS 2017/19 EVO.



Separate all connectors and make sure they are pushed together correctly. Secure with small cable ties or tape.

ENGINE 2T

CLUTCH. As long as it does not slip in the high gears it should be fine. If it is starting to slip, change before the event. Make sure you have some free play in the lever.

GEARING. If your main objective is to finish the SSDT we would strongly recommend gearing your bike up. If you are slow on the moors it helps you to make up some time on the road/track sections and also does not put as much stress on your engine. Try to use for as long as possible before the SSDT. Evo 09-13 2T use 13-41. Evo 14-19 use 12-42. This basically makes your first gear a touch lower than your original second but giving you the advantage of a high top gear. This is a BIG advantage. Most riders use this gearing for the SSDT. 4 stroke keep standard 11-42. Gearing is personal so test well before the event. The main objective is to make first gear comfortable for you so your sixth gear is as high as possible helping you on the road/tracks. Some riders use 1 tooth higher on the front as a compromise which is 11-42 on a current Evo. You must test but remember the SSDT sections are very straight line compared to most events.

KICKSTART AND KICKSTART RETURN BOLT.

This is located under the exhaust on the top left hand side of the engine. Check it is tight.

ENGINE OIL. New. Check every day during the event using the oil window, check oil window is tight. We recommend changing the engine oil half way through the week as your bike will do a lot of miles.

STARTING 2T. 9 times out of 10 an Evo 2T starts best with choke and no throttle. If this does not work try no choke and full throttle

Coil 2T. We have had some bikes earth out when the coil wires rub through on the frame or the plastic cover wears and allows the connector to earth on the frame. We recommend putting some silicone on the connector and adding some tape to prevent this happening.



REGULATOR 2017-19 EVO.

We recommend fitting a front number plate as shown before you arrive to the event so when you receive your SSDT riding number you can simply fit to the outside of the number plate you have fitted. This will be much easier than fitting to the SSDT number board especially if the weather is bad. Gary has a kit with bolts and nuts and a P Clip to hold the mapping switch. If you want to remove the mapping switch and leave your bike in the standard setting which we recommend you use at the SSDT Gary also has a connector which simply plugs into the mapping switch connector leaving the bike in the standard/soft setting. Kit £5.00.



ENGINE 4T ONLY

VALVES. As per the handbook. They should be checked after 10 hours use and then every 60 hours. If they are not checked it can make the bike difficult to start. Do not arrive to the SSDT without doing this; this is something we cannot do at the event.

CAMSHAFT DRIVE GEAR. Check and lock tight the bolts with green lock tight. This must be checked on all 4T bikes before the SSDT. Torque to 10 Nm. You can do the valves at the same time

OIL PUMP COVER 4T. We also advise carrying a spare oil pump cover and a spare oil window.



01756 793521

BETA PARTS, CLOTHING & ACCESSORIES



STARTING 4T. The bike will not start any better if you try to kick-start too hard. It starts the easiest if you use smooth progressive strokes. Kicking too hard (aggressively) can break the kick-start gear. This is only under extreme situations. If the 4T will not start when hot. Hot start out, fuel tap pointing upwards. Smooth kick with no throttle or just taking the slack out of the cable. If after 4-5 kicks it does not start it is probably flooded. No hot start, fuel tap in normal position pointing up. Use half to full throttle and it will start. **IMPORTANT:** Use the hot start when the bike will not start normally. If the bike has been on its side or you have some problems to start use the hot start and open the fuel tap so it is facing down but with NO THROTTLE. If this fails, full throttle with no hot start.

CARB 4T. There is a filter above in inlet fuel valve on the 4T which you should check/clean whilst you are cleaning the rest of the carb. There is a small screw to remove to take out. Also, on the left side of the carb at the bottom is a drain screw which you cannot use easily as the rear silencer is in the way. A really good mod is to weld a nut to the screw so you can remove when the exhaust is in place. This allows you to drain your carb very easily if there is any water inside.

ROAD LEGAL. Please make sure your bike is road legal, taxed, insured, rear number plate that you can read from the rear, horn, and speedo. Remember you are only insured for the event and the parade on Sunday if you are using the event insurance. Gary has a rear number plate bracket if required which is designed round the Evo rear fender.

RIDING CLOTHING. Basically this is down to you. I personally have found the best system is to carry a small rucksack with some lightweight waterproofs you can put on if the weather gets bad. If you set off in full waterproofs you can guarantee it will be hot all day and vice versa if you don't. With this you have the best of both worlds. I usually wear my normal riding clothing, gortex socks, top and bottom waterproofs if required, warm waterproof gloves for the road, spare set of gloves. Goggles/face mask. Test all equipment well before to make sure it is comfortable and "waterproof".

TOOLS TO CARRY. Same again this is just the basics. Check that you have not forgotten anything. Tools to remove both wheels. 1 front tube, this will repair a front puncture and a rear punctures in an emergency if the tyre came off the rim. Repair strips if the rear tyre splits. Pump and air bottles to inflate tyre. Recommended to always carry a small pump just in case you run out of air bottles. Change a tyre with the tools you are going to carry to make sure they work. With the rear tyre always try to repair first with tyre repair strips, only use a tube if these do not work. If you are putting a tube in the rear wheel only take off one side of the tyre so you only have to seal one side when repaired. Spare spark plug and plug key. Throttle cable. Split link. Tools to remove carburettor. Tyre pressure gauge. Small brush which can go in your pocket to clean radiator.

DAILY CHECK LIST. Every day.

Air filter, disc bolts "rear mainly", footrest bracket bolts, kick-start bolt, gear lever bolt "increase slot if closed when tight", chain tensioner is straight, chain tension "DO NOT OVERTIGHTEN AS THIS CAN CAUSE THE CHAIN TO BREAK, coolant – check in the morning when the bike has cooled down, pinch the rad hose, if you can see coolant it is fine, gear box oil (check in window), brake pads, spokes all OK, stand bolts, rear sump bolts, silencer top and bottom bolts.

STOP WATCH WITH COUNTDOWN TIMER. I cannot stress how important this is. During the event you have your running time. Some days the majority of riders end up getting short of time. You do not have time to work out how much time you have remaining. If you have a watch with a countdown you can set the complete running time including lunch stop and the last control back into Fort William and you always know how much time you have remaining. For the good riders you can calculate your time better so you can spend more time looking at the sections. This can be the difference between you losing time or not and even finishing in time or not. I have used a Casio G-Shock for 10 years and it has been perfect.



01756 793521

BETA PARTS, CLOTHING & ACCESSORIES



TEST.When you have finished your bike take it for 10/20 miles up the road and test in some sections, this will make sure everything is working well before you start.

EACH YEAR WE EXPERIENCE PROBLEMS FROM RIDERS WHO DO NOT BOTHER TO DO THE JOBS LISTED. SOME THINGS MAY SEEM UNIMPORTANT BUT THEY ARE ALL THERE FOR A REASON. IT IS SO DISAPPOINTING WHEN A RIDER RETIRES DUE TO A SMALL MECHANICAL PROBLEM. THE THINGS LISTED ARE THERE TO TRY AND PREVENT THAT HAPPENING.

IMPORTANT: IF YOU RETIRE OR HAVE PROBLEMS PLEASE INFORM US AND THE ORGANISERS AS OTHERWISE, WE PRESUME YOU ARE STILL OUT THERE SOMEWHERE.

If you have any concerns, please contact us.