

BETA SSDT 2011.

For SSDT riders 'on confirmation of entry' please telephone Gary/Beta UK (01535 655970) to sign on for our back up service and inform him of your number and which bike you will ride and also your address and credit card details. You must sign on with us before you go to the SSDT.

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 with regard to us helping you with your bike so make sure you are able to carry out the work yourself.

Try to prepare your bike 2 weeks before so you are prepared well in advance.

TYRES. New.

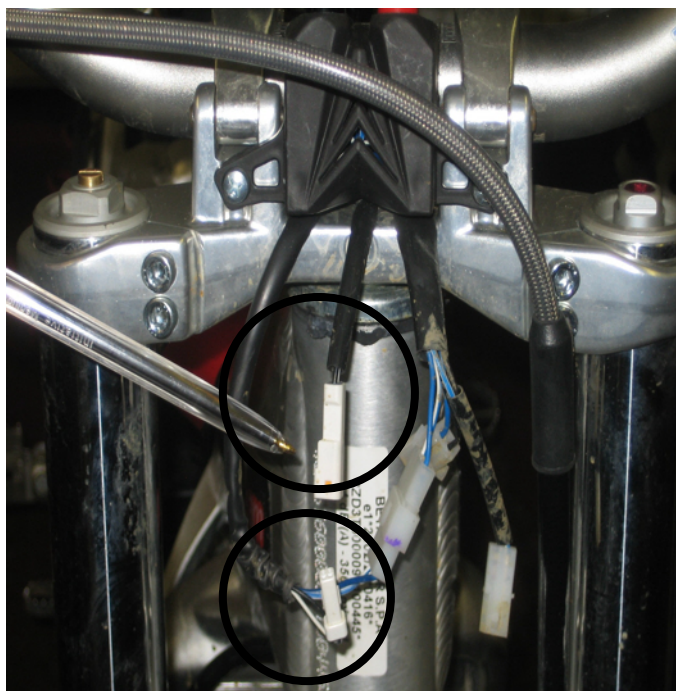
BOLTS. Check all accessible bolts to ensure they are tight. Check disc bolts and lock tight using green lock tight, do not over tighten. Check these regularly. Do not locktight small bolts as it makes it very difficult to remove them if required.

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.**

Grease the pins, which hold the pads in place. If the allen key fit is not good REPLACE. Check that the pipe, which runs from the rear brake master cylinder to the fluid reservoir is free and not trapped. Pre 2011 bikes + 4T.

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.

KILL BUTTON. Evo only. Remove standard kill button and cut off the "bottom" white block connector as ringed in the diagram below and tape up. Remove standard kill switch assembly. To fit a aftermarket kill switch connect the two wires to the two wires that you are left with after cutting off the connector, it does not matter which way round they go, do not earth the kill button as it is earthed through the wiring loom.. **THIS IS IMPORTANT.**



MUD FLAP. Very important. Fit well before so you know it works correctly. Prevents mud from clogging up the radiator. A good mod is also to run some duct tape down the back of each side of the front fender, about 2cm. You can also make a mud flap from tape, which works well as it is flexible. Fit so nuts are under the mudguard as sometimes they can flick off the radiator cover.

THROUGHOUT THE EVENT AND ESPECIALLY AFTER EVERY MOOR CROSSING PULL OFF THE PLASTIC RADIATOR COVER AND BANG ON SOMETHING TO CLEAN OUT. Do not rub mud into the radiator. You can blow out with the airline when you return to the start. Every year we have riders retire because they do not do this. I CANNOT STRESS HOW IMPORTANT IT IS TO DO THIS; THE BIKE CANNOT COOL ITSELF IF IT CANNOT GET AIR.

FAN. Take your bike up the road for a run and make sure the fan is working correctly. **If you do remove any wiring from your bike please contact us. Do not remove any electrical boxes or change any wiring without speaking to us. The fan is wired through the lighting wires on a standard bike (Rev-3 ONLY).** Also when you check the coolant it should be so you can just see in the bottom of the header tank, do not fill full as it has to expand. During the week if you squeeze the hose quickly and you can see radiator fluid this is fine.

GEARING. If your main objective is to finish the SSDT I 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. Rev-3/Evo 2T use 13-41. 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.

CHAIN. Must be new or nearly new. Do not use a chain unless you know the quality is good, a standard Beta chain is very good quality. Keep the links you remove, as they may be useful in the future

CHAIN SLIPPER PAD/ TENSIONER PAD. New.

REAR WHEEL SEAL. Pre 2011. Remove rear tyre and clean with brake/contact cleaner and put a small line of sikaflex (NOT SILICONE) round the rim where the rim tape meets the rim at both sides and wet your finger to smooth a little, leave overnight for sikaflex to dry. Do not pump straight up or it will not work. This is an important modification for the SSDT. You can get sikoflex from a car motor factors. Make sure tyre is tubeless. Even if your tyre is not leaking this is a good modification. Do not remove the rim tape unless you have to as they are very hard to fit.

**Do not start or arrive to the SSDT with a rim which is leaking.
AGAIN.**

Do not start or arrive to the SSDT with a rim which is leaking.

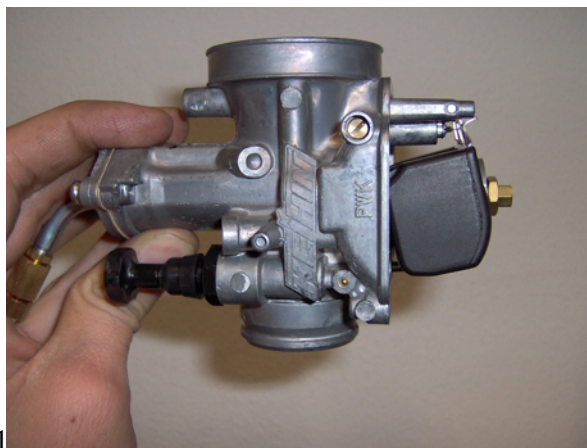
SPROCKETS. New or nearly new.

CARB.

Extra rubber boot where top goes into carb or seal with silicone stops water going down from the top. You have a breather pipe on each side of the carb. Where the pipe turns down about 2cm from the carb put a small slit in the pipe. This helps the carb to breathe when the bike is facing downhill. This is done as standard on the 2010 Evo 2T.

To check the float level of the Keihin PWK carburetor follow this procedure:

1. Open the float chamber



2. Hold the carburetor like in the picture 1

Picture 1

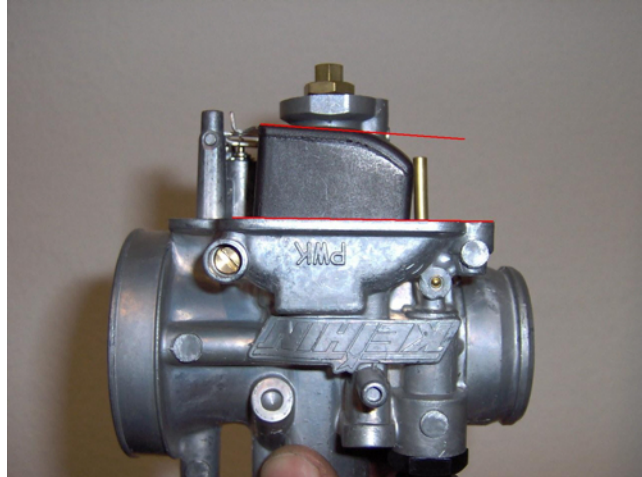
3. Start turn it in anticlockwise direction and stop immediately when the float assy closes the fuel valve needle. Look at picture 2



Picture 2

4. The float level is correct if the plan surface over the float assy is parallel to the float chamber division plan. See the two red lines in the picture 2.

5. It's important to avoid putting carburetor in vertical position, otherwise the weight of the float assy compresses the spring into the fuel valve needle and the position will look incorrect. See picture 3 the two red lines are not parallel in this position but the level is correct



The measurement is 19mm between the two red lines.

REAR BRAKE ROD CLIP. Put a good cable tie round to stop the clip from flicking off or a 6mm bolt and locknut.

AIR FILTER. Make sure your air filter is in good condition. Pre 2011. Make sure you have a bleed grommet on the bottom of your air box incase you fill the air box with water. Available from us. Use a 13mm drill to fit. This is useful if we have a really wet year and you drown your bike, it makes it easy to get the water out of the air box if required or to check if any water has gone in. It is also useful on the 4T because if the bike has been on its side engine oil can run into the air box, which makes it smoke. It is good to let this out.

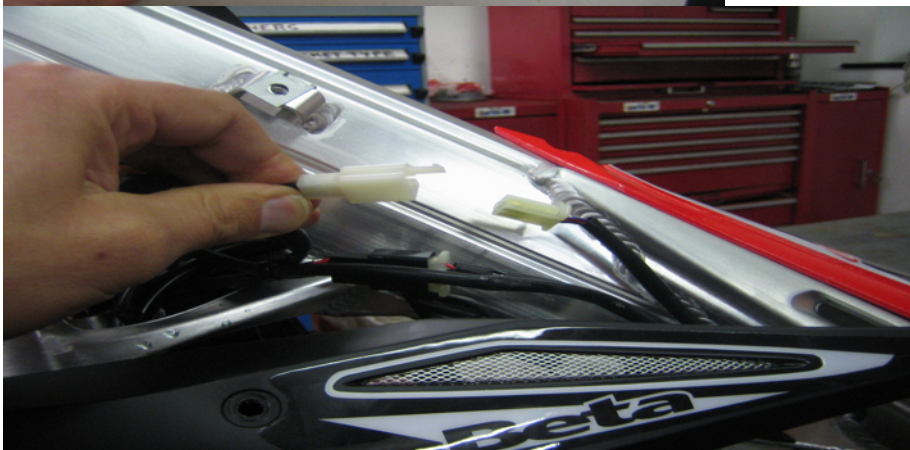


A lot of 2006/2007/2009 riders wished they had done this modification.

Evo. Seal at each side of the air filter with silicone and any small holes up from the rear wheel especially where the silencer connects to the sub frame. Block the vents up on the rear fender with tape (2009 only). We have also just tested with the foam as shown in the diagram. This will prevent water from the front wheel finding it's way into the air box, which happens when you ride down the tracks. 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. 2011 only requires the foam and it is sealed already and has a drain from standard..



THERMOSTAT/SENDER. If your thermostat fails you must join the two connectors so you bypass the thermostat. Carry a small clip to join. You can locate the block connector behind the black left frame protector. Photo enclosed. We have a small part which you should carry which makes this very easy.



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. Locktight stand bolts.

ENGINE OIL. New. Check every day during the event using the oil window, check oil window is tight. 4 stroke we recommend changing the engine oil half way through the week.

SPOKES. 2011 spokes need checking more than the previous models.

REAR SILENCER. 2T only. If the bike is noisy fit new packing.

SUMP. Remove sump plate and press back to it's original position if it is stressed.

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

TOP DOWNTUBE BOLTS. Remove and lock tight.

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

SUSPENSION. Set up as per handbook.

STARTING EACH MORNING. 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. 4T is the same from cold, choke and no throttle, when hot just take the slack out of the cable. If it does not start in 5 kicks try no choke and a "touch" of throttle. If that does not work panic and then go and see Gary.

LINKAGE. Evo. Remove and grease and lock tight all bolts. Check daily.

FUEL TANK. Enclosed are details of the Evo fuel tank. We can supply an extra tank, which you must use so you have sufficient fuel.

We have some customers that are concerned about the fuel capacity of the new 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 and the Scott. It holds an extra 1.1 litres of fuel. The Rev-3 2T held 3 litres of fuel and the Evo holds 2.6 litres of fuel. With the extra tank fitted the Rev-3 would have 4.1 litres and the Evo 3.7. 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 mod for the Rev-3 also. 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. http://www.motomerlin.org.uk/category/Fuel_Tanks,l.html



Evo 4T

STARTING.

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. To start the 4T from hot.

Smooth kick just taking the slack out of the throttle. If after 4-5 kicks and it does not start.

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 it's 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.

Check mixture screw which is located under the carb. It runs better at 4 turns out from fully closed. Unless you have the correct tool you must remove the carb to do this.

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 locktight the bolts with green locktight. This must be checked on all 4T bikes. Torque to 10 Nm.

GEAR LEVER SHAFT. 4T only.

I would advise putting extra weld on the gear lever shaft. If you hit the gear lever hard on a rock it can break the weld and would result in a retirement. With extra weld it eliminates this. We have had no Evo bikes break this but I think it is worth doing.

OIL PUMP COVER.

We suggest that you replace the front 2 bolts with dome headed one's so they are not as venerable. We also advise carrying a spare oil pump cover and a spare oil window.

RIDING CLOTHING. Basically this is down to you. I personally have found the best system is to carry a small rucksack with some 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 I have not forgotten anything. Tools to remove both wheels. 1 front tube, this will repair both front and rear punctures in an emergency. Repair strips if the rear tyre splits. Pump and air bottles to inflate tyre. I always carry a small pump just incase I 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. 1 helpful tip, if you are putting a tube in the rear wheel only take off 1 side of the tyre so you only have to seal 1 side when repaired. Spare spark plug and plug key. Throttle cable. Split link. Tools to remove carburettor. Tyre pressure gauge.

DAILY CHECK LIST.

Every day.

Air filter, disc bolts, footrest bracket bolts, middle exhaust bracket bolts, Rev3 only, kick-start bolt, gear lever bolt., chain tensioner is straight, chain tension, gear box oil (check in window), brake pads, spokes all OK. Evo linkage 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.

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.

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