



Prepare Your Bike for Technical Inspection

The technical inspection on your bike is a bit like a specialist MOT for race bikes that must be passed before you can race at that meeting. There will be a Technical Inspection at Race School and your bike should be prepared to pass. If there are some minor faults found you will still be allowed out on track as this isn't a "race" day but you will need to get them resolved to pass for your first race weekend. Here is some information to help you prepare.

Do yourself a favour by checking your bike over well in advance of the Race School and any race meeting. This means from top to toe, front to back. Let's face it - you want to know your bike is in its best condition before you get on track.

Make sure your bike is clean as this often reflects a well maintained machine and looks better out on track!

The Technical Officials will be ensuring your bike is safe not only for you to ride but also for everyone else on track. He or she is immensely experienced at technical inspection so listen and respect what they say. They are your friends and are looking after your safety. Take note of their routine so you can check the bike yourself and not have the hassle of failing inspection and then queuing up all over again to be rechecked upon fixing the failures.

Our Technical Officials will pick up on most of the obvious things that may not be correct...the rules state however that the rider is responsible for the condition of the bike, that it complies with the relevant rules and that it's fit for purpose. If a technical inspection fails to spot an error in preparation, a loose bolt for example, or fails to see something on the bike that contravenes your class rules...the original responsibility is still yours. If the inspection fails to spot an illegality...the bike is still illegal. These things may be picked up at other random inspections over a race weekend, under such circumstances a rider risks disqualification.

Things to check:

All of these items are important – even if you are forced to use a road-bike at the Race School, there's a short additional list for road bikes at the end of this section.

Frame & Engine numbers

Firstly, these must be there and not tampered with in any way at all. You will not be allowed to race if these are not present & correct. (Please see the Bemsee Guide to buying secondhand on our website in "Info Center > Downloads > Season Info 2021")

It is your job to fill out the numbers on your technical inspection card which you get with every race entry. You also need to sign the card on the back. If you complete the engine and frame numbers on your online Profile at bemsee.net our system will pre-print the numbers on your technical inspection card for you at every race meeting

All Controls Are Tight

This means everything you touch such as; Clip-ons, grips, levers, throttle, foot pegs, rear sets, gear lever etc.

Throttle

This needs to snap shut when let go.

Kill Switch

Make sure you have one! It must be an on/off switch type, not a push button type and must be easily accessible when your hands are on the handlebars.

Handlebars & Foot Pegs

Anything that sticks out must have a rounded end.

Handlebar Clearance

With your steering on full lock make sure you cannot get your fingers or thumbs caught anywhere between your bars, fuel tank, bodywork or frame. The lock stops can be part of a fairing bracket or the originals but they must be secure and tough enough to do the job.

Numbers

Your numbers are important to the Timekeepers for obvious reasons. They are also important to the Marshal's & Officials if you are upside down in the gravel trap. Of course you also want the spectators to be able to find out who you are when you've just won the last race!

Check the ACU handbook for the correct colour, size & location for the background & the numbers according to your class.

If your bike does not allow a number in the centre at the front of the bike, find out what side of the track the Timekeepers will be sitting so you know where to put your number, left or right side of centre.

Most circuits (Brands Hatch being one) will want them on the off side (right) of the bike, however some (Like Snetterton) will want them on the nearside. If you have a number for the season then put them on both sides to get over this problem.

If you turn up with a fancy shape or style of number that cannot be easily read or no number at all, you will be failed at Technical Inspection and asked to get the correct numbers fitted.

You will always need numbers on the bike when on-track, even on a testday and at the race school – sticky numbers and backgrounds are available from our Paddock Support suppliers who are at every event.

Bodywork

Don't have anything flapping! Make sure all fairings, screens, seat units etc are secured properly where they should be.

Lower Fairing

This has to act as a catch tank (except on two stroke machines) for oil and water so needs to be able to hold fluid, no holes. Even if you are running a "naked" bike you will still need a catch tank.

Rain Light

You'll need a rain light - here's the ACU approved spec...

All motorcycles must have a functioning red light mounted at the rear of the machine to be used in rain or low visibility conditions as instructed by Race Control. The team must ensure that the light is switched on whenever a rain tyre is fitted on the motorcycle and/or when any practice or race is declared "wet" by Race Control.

Lights must comply with the following:

- a) Lighting direction must be parallel to the machine centre line (motorcycle running direction), and clearly visible from the rear at least 15 degrees to both left and right sides of the machine centre line.

- b) Mounted on the seat/rear bodywork approximately on the machine centre line, in a position approved by the Chief Technical Officer. In case of dispute over the mounting position or visibility, the decision of the Chief Technical Officer will be final.
- c) Power output/luminosity equivalent to approximately: 10-15W (incandescent) 0.6-1.8 W (LED).
- d) The switch must be accessible.
- e) Rain light power supply may be separated from the motorcycle main wiring and battery.

OBSERVATIONS FROM RECENT SEASONS...

- You can buy a good, approved unit from our Paddock Suppliers, A&R Racing or Rod Harwin Racing for less than £25 - so forget your idea of a Halfords cycle lamp.
- If you use a unit with directional LED's then ensure the light is pointed in the direction of a following rider - pointing down at the rear tyre doesn't work.
- Mount your light securely using bolts/brackets - we've seen velcro and double-sided tape used. Frankly, if our Tek Officials can just pull the light off, it will fail inspection as it will end up bouncing onto the grass during a race.
- Please - if wet race conditions are declared and announcements have been made to turn your lights on - then do this before you arrive at the Collecting Area. Our staff are there to check you have them working - not to turn them on for you.

No Antifreeze

Your engine must only contain water as coolant because antifreeze is slippery. You have a race bike not a track day bike. If your bike does fall on its side on track and you spill antifreeze when it should be water, you will have a paddock full of riders asking why they aren't getting out on track because the Marshals are cleaning up your antifreeze... you could also potentially incur a fine.

Overflow Bottles

On a road bike you will have quite a few overflow pipes or vent pipes. On a race bike you can't have any hanging down to vent on the track. Everything must go to a bottle or catch tank of some sort. This will include any engine breathers and coolant overflow. A small plastic bottle, properly secured out of the way is best for coolant and also for the engine breather, although most of these are now re-circulated into the air box anyway which is of course fine. A one way valve is suggested for your fuel tank breather.

Brakes

You really don't need to be told this but.....make sure you have enough brake pad material on your brake pads and check them regularly.

The brakes must work! Don't turn up with lever pulling right back to the handlebar when you pull it on and make sure the bike can't be moved when the rear brake is applied. There must be separate lines to each calliper from the master cylinder. Braided hoses are not a requirement but are recommended.

It is now a requirement for you to fit a brake lever guard to prevent accidental brake operation whilst racing.

Bearings

Your bike will be checked all over for play in any of the bearings. Head bearings, wheel bearings, swinging arm bearings, suspension bushes etc. Make sure they are all tight with no play, tight spots or knocks.

Shark Fin

Although you don't need a chain guard (although it is recommended), you do need a "shark fin". This fits on the underside of your swinging arm just in front of your rear sprocket and is intended to stop your fingers and/or toes getting dragged into the rear sprocket by the chain.

Front Forks

A leaking fork seal will fail Technical Inspection. Make sure your forks are in line and not bent.

Lock wire

Any point where oil can escape must be lock wired. This means the oil filler, sump plug and oil filter. You will need to drill holes in the filler plug and the sump plug. As you already have the drill in your hand, drill a hole in one of the close engine bolts heads so you have somewhere to secure the lock wire to.

The easiest way to secure your oil filter is to buy a large jubilee style clip that will go around the oil filter & drill a hole in the tongue of the clip that pokes out once it is done up. You can also, on some engines, position the clip so that it wedges itself against the engine case to prevent the oil filter from coming loose.

Some engines may require other oil way plugs to be wired but generally this is enough to pass Technical Inspection.

Tyres

Again, you don't need telling this but..... make sure your tyres are in good condition, no cracks, bulges or damage anywhere and of course don't turn up with a set of worn out tyres with the chords showing, as if you would!!

Wheels

No cracks, damage or repairs. Wheel weights must be taped over with something like duct tape. Tyre valves should really be metal type although this is not essential. Likewise a metal dust cap is best.

Transponders

These must be fitted and fully charged. Do not fit them to fork legs, they have been known to spin around and impede your steering!

(Not required on Testdays or at the Race School)

Road Bike Set-up for the Race School:

If your timings for the season mean that your race bike isn't yet available at the time of the Race School we are happy to allow you to complete the course on your Road Bike.

Please read the above requirements but also observe the following:

- Remove rear view mirrors and indicators if possible, gaffer tape the holes and associated wires.
- Gaffer tape all breakable glass – front headlamps, rear light clusters.
- Apply a number background and get your allocated numbers on the front and sides of the bike (Sticky numbers & backgrounds are available from the Paddock Suppliers who will be in attendance at the Race School).
- We are happy for you to leave side and centre stands on the bike, we waive the requirement for shark fins, catch bottles and oilway lockwire, please just check the sump plug and oil filler caps are tight and secure.
- Change your radiator coolant to water with **no anti-freeze** please.

Things to Check on Your Clothing:

As well as your machine being checked through Technical Inspection you will also need to have your clothing checked and passed before being cleared to race. The items of clothing that are checked will be:

Leathers

Your one-piece leathers will be checked for wear and in particular any holes and seam damage.

Back Protectors

These are now mandatory – within the suit or worn separately

Helmet

This will be checked for any external damage and an approved ACU GOLD Sticker. The Inspector will also ask you to put the helmet on and secure the strap. They will test to ensure the helmet fits correctly and cannot be removed with the strap secured. It's important to your safety that your helmet is in good condition. If you have any doubts ask the technical officials for a point of view. They are required to "impound" helmets that fail inspection and remove the Gold sticker, these are available to be collected (for what they are worth) at the end of a race meeting.

Gloves

Your gloves must not have any holes or open seams in them.

Dog Tags

You must be wearing your tags around your neck with your name and Date of Birth clearly shown on them.

Boots

Your boots must be in good condition with no faulty zips or holes. Boots are checked that they cover the bottom of your leathers, leaving no exposed skin. If you ride and wear your toe sliders out be warned this can create a hole in this area of the boot and fail Inspection. Toe and knee sliders that include studs that make sparks when in contact with the ground are not allowed.

You've passed....what next....(on race weekends)

Once the machine and clothing Inspectors have signed your Technical Inspection card you will be able to go the Race Office to present the card, sign on and receive your practice pass and program. Remember you **MUST have your Race Licence with you** to sign on in Race Office. It's good practice to keep it in the inside pocket of your leathers if you have one then you don't forget it. When you take your dog tags off at the end of the weekend put them in there too as you only need them when you have your leathers on!

The hints and tips above are to help you with the basics but you should understand the governing rules of Road Racing that are detailed and fully explained in the ACU Handbook.

Once you have seen how it's done, remember it and make it part of your routine before you get to the race meeting.

You should also be looking over your bike every time you come off the track. You are putting your bike through different strains and stresses than they will ever get from road riding.

The revs you will be using are higher which means frequencies and vibrations are higher which can lead to cracks in the most unlikely places as well as nuts and bolts coming loose all over the place.

Don't be afraid to lock wire other nuts and bolts not just the bits you need to. A lot of riders will lock wire their calliper bolts. If nothing else this will ensure you have tightened them up after a wheel change.....

This may seem a lot to remember and check but you will soon get used to what is needed to satisfy the technical team. Most of the items never need to be changed when correct the first time but a regular check is good practice.

.....and remember it is for your own and everyone else's safety that the Technical Officials are there!

A final note:....Friday Testdays

The Club runs testdays on Fridays in front of each race meeting, these you can book onto separately from the meeting.

There is no Technical Inspection to go on-track on a Bemsee Friday testday (or "rider briefings" if you've been used to trackdays), although you are expected to ensure your machine and clothing are in a state of compliance and are fit-for-purpose.

The Technical Inspection Team will "open for business" on Friday afternoons, usually from around 3.30 to enable you to go through inspection then rather than wait until Saturday morning and the Race Office will be open for you to Sign-On for the weekend and also collect hired transponders if you've asked for one.

The Technical Inspection Bay remains open through to around 6pm, so it's possible to do all your Inspections and Sign-On on Friday if you are testing. Once checked and Signed-On you can still continue testing.