

How Two's, Buy a SW20 3S-GE & 3S-GTE

Posted by slipsliderg - 2010/05/14 23:46

The following is a guide I gave one of the lads and I have decided it may be two valuable to get lost on the forum.

So I am posting it here for future reference, This is a guide to buying A SW20 N/A, it is in no way a replacement for bringing a mechanic with you, in fact it may help a mechanic look at specific areas to give you a better report on a cars condition.

I have built up this knowledge in my head from years of surfing countless MR2 web-sites and seeing related problems on my car and others.

This list is not exhaustive and I welcome all comments additions etc. I have taken info from the other members as well, you know who you all are :)

To brief you all, the starting comments are related to an English import.

As the clocks are MPH I would think it's a English import, therefore prone to rust problems, check:

Condition of drop links, the link bar between the ARB and the suspension strut, any knocking noises etc,
Leaking exhaust.

Rust on the underside of the doors.

Rust on the sills.

Rust on the jacking seam.

Bubbling on the paint work along the bottom of the car.

A lot of rust remarks I know but, I just don't like the idea of cars run for a long time in England. The SW20 is not prone to rust but the English ones I have seen are riddled with it.

Check for knocking on the suspension strut top mounts.

Check inside oil filler cap for any emulsion.

Check all fluid levels and quality. Coolant, oil, g/box oil, brake fluid, washer bottle.

Check Aerial operation.

Check to see the fog lights working, you have to take out the whole fog light to change a bulb but the original screws that toyota used seize and they can often have to be drilled out so if they arnt working make sur ethe dealer changes the bulbs for you,

If your getting a T-Bar ask if theres any leaks, or sit in the car and ask them to hose it down, no kidding, just do it.

Check for wear on the brake discs, i.e. if there is an excessive lip on the outside diameter of the disc. Get the garage to replace them.

Start the car from completely cold and listen for any knocking sounds in the engine, Also be on the listen for this when taking off at junctions at slow speed; high engine load moments. If the engine is warmed up when you get there, that is normally alarm bells time.

It is not unusual to get a tapping/ticking type noise from the cams/shims when the car is cold, this should go once the oil get up to temperature.

Check exhaust, no blue smoke or black/brown smoke on start up or when revving or driving.

Take the car for a spin, watch the temp needle, once up to operating temperature turn on the heat full blast, if the gauge drops rapidly almost to the bottom then the heater core was probably not vented correctly. This could be due to frontal damage or a previously blown engine. The SW20 is very hard to bleed air out of when the radiator has been replaced or coolant removed for any reason (head gasket etc), some people give up to the cars detriment.

Drive the car for a couple of miles then get out and with the back of your hand check the temperature of the rims in the centre, MR2's are fond of seizing brake callipers when they haven't been used all the time. If any of the rims are hotter than other it will probably be this issue. Easy fix for the garage as well.

During the test drive, get the car above 4500 rpm and try gear changes 2nd to 3rd, 3rd to 2nd, 3rd to fourth, fourth to third. As some gearbox oils can cause issues with the synchro's on Toyota g/boxes and people don't know about it when they change the oil.

When test driving the car and it is at proper temperature and it is safe to do so, drive the engine to the red line you should notice the following if you are watching for them.

At 4500 ACIS comes on, basically a shorter inlet tract to the inlet valve and thus upping the engine output.

At 5500 you may notice another increase up to the rev limit, of circa 7200rpm. These tests are purely to make sure the induction and fuelling are working ok. Be wary doing these tests as the car will be above the speed limit quicker than you think.

As a norm if I was purchasing from garage, I would ask them to do the following work as part of the purchase.

Full service using Toyota parts.

New brake pads.

New brake fluid flushed thru the system.

Change the timing belt or open the cover to allow a mechanic you know to check the condition of the belt, should be change around 70k miles. Ask for the original one back and the receipt for the new one, as evidence it was done, it is not an easy job to do.

Change the gearbox oil.

Current NCT certificate.

Now the most important note, I excluded one item on purpose & this is it, are you listening.

Tires, get good tires, don't let the garage buy, them get them yourself, go with respected brand names such as.

Toyo proxies

Goodyear Eagles

Bridgestones

Falkens 452's (don't get 512's)

Seriously don't mess about with the tires and always keep the rears wider than the fronts. Ask here, ask any where MR2 related, unless you want to pay in body parts (both types) make sure your tires are a good brand and suitable for MR2's (this board and other boards will advise you).

Now that I have scared you out of buying a MR2, and yet you still going ahead to purchase one, welcome to the rewarding world of cheap mid engine driving and welcome to the club.

If you are going to look at one tell us about it and you will have volunteers to come look with you, or let you take a spin in a good one so you know how they should feel on the road.

Long may she wear, keep her between the ditches, with the shiny side up.
May the road rise to greet you, and may the wind be at your back. B)

And some more info from Spanky & Olly on the MR2OC

Spanky wrote:

Olly from mr2oc also produced a checklist to be used when looking at a car. I thought I may as well add to this post so that potential buyers in Ireland can get all required info from one thread :yes:

Bodywork:

- Check all panel gaps.
- Stand at front and back corners and scan down each side of the car – especially ¼ panels.
- Check panels for evidence of respray and different colours underneath.
- Check under car for signs of crash damage.
- Check radiator at front for signs of leakage and damage.
- Check wheel arch lining is present and secure.
- Check lining under car is present and secure.
- Check condition of discs.
- Check frunk for lining, tool kit, spare wheel.
- Check rust on underside of the doors and wheel arch lips.
- Check for rust/bubbling around t-bar area when panels are off (look under the rubber seals).
- Check t-bar roof – condition of rubber seals. Tight fitting windows and t-bars?
- Check tyres for even wear on each tyre and across all four tyres.
- Check VIN plate in frunk. Should start with SW20 for a turbo and JT163SW20 for an n/a.

Interior:

- Check every switch (does ariel work?)
- Air con engages and is cold?
- Heaters hot?
- Relevant warning lights all light up with ignition on?
- Fog lights work (and steer)?
- Fog lights on dash come on?
- Folding mirrors both fold and adjust?
- All dash illuminating lights work?
- Hand brake holds?
- Check seats adjust including all lumbar levers.
- Check cable releases for frunk, bonnet, boot and fuel cap.
- Check date label is on seatbelts and also check the date.
- Any evidence of damp carpets in cabin and in boot.

Engine bay:

- Check radiator cap. Should be able to see coolant. Any oil visible?
- Check for ECU error codes.
- Start engine – do all dash lights go out except handbrake?
- Temp should reach ½ way.
- Fans should come on. When they do, check radiator for leaks.
- Check halfway underneath the car for any leaks when engine is on.
- Smooth idle below 1000rpm when warm?

- Signs of leaks around engine bay or underneath?
- Check oil level and condition.
- Check under oil cap for mayo.
- Is downpipe cracked or blowing?
- Condition of air filter.

When driving:

- Any rattles or knocking at idle?
- Clonks over bumps from suspension or other source?
- Bearings grind while turning?
- LSD grinding while turning?
- Brake hard – check ABS works.
- Brakes squeal?
- Check brakes don't vibrate when applied lightly.
- Full boost to the redline?
- Check boost in all gears including 4th from 20-70mph+.
- Temp stays at ½ way even after full acceleration?
- Steering wheel wobble?
- After driving, check discs. Is one hotter than the rest?

Other areas:

- Check service history.
- Does the history relate to the current engine?
- Any written proof of mileage to the car i.e. certificate / check MOTs?
- Proof of clutch change.
- Proof of cambelt change.
- Proof of when brakes were changed.
- If a turbo, what boost is the car running at. If over 1.0bar (15psi), do the mods support it?
- Evidence of regular servicing – check dates.
- Any names or addresses so you can phone previous owners?

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Re: How Two's, Buy a SW20 3S-GE

Posted by Quandry - 2010/05/15 09:22

Great idea Ray, KC+1!

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Re:How Two's, Buy a SW20 3S-GE

Posted by doc84 - 2010/05/15 11:16

Solid advice!!! +1

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Re:How Two's, Buy a SW20 3S-GE

Posted by mnixon - 2010/05/15 12:51

Very well put, Ray

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Re:How Two's, Buy a SW20 3S-GE

Posted by Spanky - 2010/05/15 16:55

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Re:How Two's, Buy a SW20 3S-GE & 3S-GTE

Posted by slipsliderg - 2010/05/15 22:24

Cheers for the info spanky, and thanks for the KC's all. hope it helps somebody out in the future.

Re: How Two's, Buy a SW20 3S-GE & 3S-GTE

Posted by dwdave - 2011/04/06 10:20

great advice have just saved it all on my phone if ever going to look at mr2 which i do plan to get t bar.
will run through the list. cheers

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