

## The mkiv Supra Owners Club What to check when buying a Supra

## <u>Introduction</u>

Originally this guide was posted on the mkiv Supra Owners Club web site (<a href="www.mkivsupra.net">www.mkivsupra.net</a>) as a series of separate posts in a thread, so I decided to bring them all together into one simple download. This guide details what to check when buying a Supra. If you are interested in the difference between Supra models then please check out our "Guide to the Supra" which can be found by following the above link.

Please remember that this is only a guide and even if a Supra passes all the checkpoints below it may still be worthwhile getting an independent garage or vehicle inspector to give the car a once over to make sure everything is in order.

## What should I check when looking at a Supra to buy?

- □ When you first get there, ask to see the logbook and match up the chassis number. If there is anything questionable here, walk away. Don't wait for excuses.
- Open the bonnet and carefully put your hand down to the exhaust manifold to see if the car has been run recently. If it's cold, ask the owner to start the car up while you're at the back and look at the exhaust. A small puff of blue smoke is OK, but anymore than a puff and walk away. If it's cold, expect some white smoke. It shouldn't be excessive though. If the car is warm, it should only give a small blue puff at worst.
- □ If cold, the engine should start and idle at about 1200rpm for about 2 minutes and then drop to 1000rpm for another couple of minutes, finally dropping to 700rpm after another couple of minutes. The engine should idle smoothly and purr happily with no misfires or rattles. The flywheel can rattle on manuals, but this should go if you press the clutch down, indicating a new clutch/flywheel is on the cards.
- □ Let the car warm up and continue to stand behind the car checking for smoke.
- □ Now move to the front of the car and with the bonnet open listen for any bad noises. Noticeable injector ticking is normal.
- □ Look into the driver-side front air duct and you should see the stock inter-cooler. For a Japanese car it shouldn't be corroded, but may be dented. Look around here and inside the main bumper opening for over spray and/or accident damage.
- □ Look under the rear of the car. You should be able to see most of the exhaust system, check for undercarriage dents/scrapes. Again look for any over spray/accident damage.

- □ When checking under the car also look for leaks, but don't be alarmed by an oily sludge on the transmission and differential. That's a greasy undercoating that Toyota has applied. Check for fresh oil leaks, and check the rear CV joint boots for cracks.
- □ Look to see if all the little plastic panels and parts under the car all line-up, and are attached, and that paint is not where it shouldn't be. Cracked under trays are not uncommon so don't be alarmed. Spend a fair amount of time on the ground, don't be afraid to get a little dirty. Also all the major body panels have the original VIN number visibly stuck on them, make sure they are all still there and are the right number. Look for missing, non-original, or out of place fasteners. All these things are possible signs off a collision.
- ☐ If possible, look at the spot where the car normally parks. Check for fresh oil puddles or spots. If they say their other car caused the spot, don't believe them if it's a clean 1-2 year old car they are blaming it on.
- □ Check the wheel rims, inside and out, for curb rash or bent rims.
- Check for excessive and/or uneven wear on the tires. Also check for cheap or missmatched tires.
- Check for signs of rust in the wheel arches.
- □ Check the condition of all the exposed rubber on the suspension joints.
- All the panel gaps should be pretty much the same and all openings should open and close with ease. Supra bonnets and boots do get a little play when pushed so don't panic too much if the bonnet can move a couple of mm or the boot rubbers are shot. Take a look down the flanks of the car. This should show up any body imperfections and car park dents in the doors.
- □ Walk all around the car, and look at each panel at different angles. Looks for small dents and dings, and make sure the paint matches all around.
- □ Make sure the rear hatch opens and closes fine and that is stays up on it own.
- □ Make sure it still has the spare tire, jack and wrenches, owners' manual, and targa wrench.
- □ Check around all the glass to see if it has been replaced. Check the manufacturer information on the glass to see if they are all the same.
- □ Check the headlamps for cracks, moisture or fogging/yellowing. Expect them too be fogged/yellowed if it has plastic headlights.
- □ Check all of the fluids. Make sure the fluid isn't terrible. Open the oil fill cap, and look inside for sludge build-up. You shouldn't see any.
- □ Find out what oil the use, and how often. Don't trust their answer unless they have receipts.
- Ask them if they have had any work done to it. If they have owned it for several years, and say they have done nothing to it, don't take that as being a completely good thing.
- □ Ask if it has ever had modifications, and what.
- ☐ Inside the car do the usual checks on pedal rubbers for excessive wear and steering wheel wear.

Now go back and watch the tailpipe. Have someone blip the throttle while you watch for smoke. Let it idle between the blips.
Now do the same but have them bring the engine up to 5000rpm or so.
Make sure the power steering is smooth and quiet.
Make sure all the exterior lights work.
Make sure to test every last switch in the car to make sure it works; power windows, locks, indicators, light switch, courtesy lights, power seat, cruise control, everything. Use all the functions on the A/C and make sure they all work. Go from HOT to COLD A/C and make sure its getting very hot and very cold. If it has a factory alarm then make sure the key-fobs work.
Now have a friend follow behind you in another car while you go for a test drive. Have them watch for smoke while you drive.
Put it into 2nd gear, let the engine speed drop to about 1500rpm, and then stomp on the accelerator, and stay on it till redline, then let off the accelerator. Your friend should be watching for "grey/blue smoke". Just grey/black smoke is ok.

□ Your job while at full throttle in 2nd is making sure the turbos boost smoothly. Make sure you can feel full boost by 4000rpm or near it, and that you don't hear any bad noises. Slight turbo whistle/whine is OK, and if it has an after market intake it will be more

□ When you drive the car, the first turbo should be noticeable as a whistle, and the 2nd turbo should come in at 3800-4000rpm. You shouldn't be able to hear either turbo at high rpm. The engine should be louder! It's normal to get a slight hesitation as the 2nd turbo

Use all the gears in the transmission, and make sure it shifts fine. If it is a 6spd then it will feel and sound clunky and this is normal. If the transmission makes "ball bearings in a can" noises at idle or low speeds then that is the 2-piece sprung flywheel and is also

□ Smoke at cold start-up, pulling away from a standstill or throttle blipping from idle is valve stem seals. Smoke under boost, or after letting off of boost, or maybe when revving full throttle, is turbo seals. Smoking for no good reason, or if it doesn't stop pretty quickly

□ While driving with the windows down, listen for clicking or popping noises coming from outside the car. A POP when starting or stopping, or making a sharp low speed turn (maybe up a hill), is the drivers side engine mount. A clicking sound under initial mild acceleration or deceleration, that lasts for only a second or two then stops, and sounds exactly the same regardless of speed, is the rear upper control arm bushings. A clicking

Make sure the brakes work smoothly and reasonably quietly. When coming to a stop take

☐ If you can, get up to 100mph and apply the brakes consistently down to about 40mph. You should feel no judder from the wheels or pedal. The Japanese brakes warp easily.

noticeable.

normal.

is piston rings.

comes in but it should be very minor.

that changes with speed is wheel bearings.

■ Make sure the car tracks straight on flat roads.

your hand slightly off the wheel and make sure it stays straight.

A creaking	noise	from	the	boot	when	turning	up	hill	means	it	needs	new	rubber	boot
bumpers.														

- ☐ If it's an aerotop, rattling from above you means the targa is loose. Make sure the targa bolts loosen, and tighten back down smoothly and make sure the targa wrench is there.
- ☐ If you can really smell the exhaust when coming to a stop then it has no cats.
- ☐ If when flooring it, the car pulls smoothly till ~4000rpm, and then rockets forward, then it's BPU and not stock. If you can hardly feel a change over from the 1st turbo to both, then it's stock.
- □ If you are still happy after checking all the above then ask if you can take the car to a mechanic that you trust to get it professionally checked. If the owner refuses this then be very suspicious.
- Once you have viewed the car make sure to record the correct license plate and VIN marks. Then use a vehicle checking system like the one offered by the AA to make sure the car doesn't have any unwanted history. http://www.aacardatacheck.com/car-data-check/

## The End

And that's about it. This file was created on the 8<sup>th</sup> May 2006 by mawby.