



Stage One Tuning Kit Fitting Instructions

Part Number: MTK998 & MTK1275
Description: Stage One Tuning Kit
Applications: Classic Mini All Carb Models

The first job on the list is to make sure you have disconnected the battery!

Once you have done this you will need to remove the old exhaust system from the car completely. To do this start at the cast manifold and loosen the clamp where the exhaust and manifold meet. Next you need to locate and loosen the other mountings that hold the rest of the exhaust to the car. You should find three mounting points on the car, these are: A bracket to the gearbox, a rubber mount at the front of the rear subframe and another rubber mount at the rear of the rear subframe.

All of these will need to be removed before the standard exhaust can be taken off the car.

The next step is to remove the cast manifold complete with the carb. The air filter assembly needs to come off first, undo the two wing nuts and remove it, you should now have access to the six nuts that hold the cast manifold to the head. This is also a good time to remove the choke and throttle cables from the carb, you can leave them attached to the car itself but move them out of the way. Make sure you don't lose the nipples at the carb end! Next you can undo the nuts holding the cast inlet/exhaust manifold to the cylinder head and remove it completely from the car, but remember to put it somewhere safe. With the cast manifold removed, clean off any old gasket on the surface of the head taking care not to let any of the old gasket enter into the ports.



Now you can start to install the exhaust manifold. Start by placing the new gasket on and then locate this on the two outer most studs on the head and loosely fit the nuts and washers so it doesn't fall off. Remember not to tighten these up at this stage.

The next stage is the alloy Inlet manifold. There are two ways you can do this. You can either fit it to the car bare or install the carb and then fit it to the car. I personally prefer to fit the carb to the inlet manifold first and then install it to the car. With this in mind you will need to remove the carb from the old cast manifold and fit it to the new alloy inlet manifold. Replace any gaskets that have been damaged and fit the new needle and spring.

Depending on which model of carb you have, fit the studs from the old cast manifold into the alloy manifold accordingly, both the 1275 and 998 kits use the same manifold which has four holes to mount the carb. All four are used on the HIF44 carb and only two (diagonally) on the HS4 type carb. With the carb now fitted to the alloy manifold you can now fit the assembly to the head. Once in place on the head the four centre nuts can be fitted to ensure both the exhaust and the inlet manifold are kept in place. Remember don't fully tighten these nuts at this stage as you may need to make an adjustment later!

Now onto the exhaust itself now. Firstly you will need to fit all the new rubber mounting to the rear subframe. Once this has been done the first test fit of the exhaust can start.

The RC40 supplied in the kit comes in two pieces, a front pipe and the rear silencers. Slide the front pipe into the manifold then you can fit the rear silencers to the front pipe. You will now need to hang the rear silencer section onto the new rubber mountings. The front hanger (nearest to the h/brake cable) often catches people out but it's really simple to work out! Put the twisted steel hanger onto the rubber mounting and secure it with a nut. Now undo the D clamp and fit it around the pipe, place the saddle back on the D section and secure the lower half with the nut and washer. The upper half then simply goes through the twisted steel hanger and secured with the nut and washer. The rear most hanger has an extra bobbin installed on the rear subframe and uses the triangular bracket with the lip on to hang the system, again it's easy enough to work out. But just to clarify the D clamp sits over the lip on the bracket and then around the tail pipe section. The last mounting is at the gearbox end of the car. The exhaust manifold is supplied with a strap already attached to it via a clamp, this needs to be fastened to the bracket mounted on the left hand side of gear box.

At this point all the major components should be fitted to the car loosely. The next step is to tighten things up. Starting with the manifolds work your way backwards until you reach the rear of the car. The main point to remember is there should be movement in the exhaust system but it shouldn't be hitting anything! Loosen off the nuts and re-adjust if it does.

The final stage can now be started. Re-attach the choke and throttle cables and install the new air filter assembly. This is done by removing the elbow on the rear off the carb, taking care not to lose the two coarse threaded screws that hold it in place! Clean off any old gasket left behind as you have a new cork gasket with the filter. Dis-assemble the new filter and install the back plate first securing it with the two coarse screws. Now fit the element to the back plate and then the top plate and nut to keep it all together and that's it! You have just fitted a Stage One tuning kit to your Mini...well done!

Re-attach the battery and have a go at starting the car. It should fire up straight away, but it is worth noting that the car may not be running at its best so you will need to make a few checks. look for any air leaks in the system! If any are found these will need to be addressed first! Once you are happy that there are no air leaks present, the carb can be adjusted accordingly. We always recommend getting the car setup properly on a rolling road after a stage one kit has been fitted to ensure you are getting the best performance and driving experience out of the car.

