

Congratulations on your purchase of the MRN Carbon plenum, see below installation instructions for fitting. This installation requires some basic mechanical knowledge, please read these instruction completely prior to starting the job and if you are not confident please seek professional advice/installation.

Tools required:

- E10 socket
- 7mm socket
- Torx T30
- Pliers
- Large flat screwdriver
- 1) Remove engine cover
 - a. Remove luggage net and carpet over engine compartment
 - b. Remove and retain the 5x T30 bolts securing the engine cover
 - c. Lift out cover
- 2) Disconnect the AOS breather lines
 - a. Squeeze the 2x connectors as shown below and pull away to separate



- b. It is recommended to remove the whole hose assembly to give better access
- 3) Remove the rearmost OEM link pipe with TB and convoluted pipe
 - a. Loosen the hose clamp that secures the convoluted OEM hose to the MAF (Mass Air Flow sensor), retain this clip for reinstallation
 - b. Loosen the 4 hose clamps that secure the rear connector to the 2x inlet manifolds shown below



- c. Remove the 10mm nut that secures the inlet snout to the bracket adjacent to the engine hoist bracket
- d. Slide the 2x rubber connectors circled above outwards as far as they will go
- e. Gently lift out the OEM inlet snout until access is available to do the following:
 - i. Disconnect the Electrical plug to the OEM Throttle body
 - ii. Disconnect the vacuum line that operates the flap below the main tube
 - iii. Using pliers move the clamp to disconnect the large vacuum line fitted to the underside of the throttle body The assembly should now lift out of the car
- f. Using the same process used in step 3b you can lift out the front most like tube, there is a vacuum line to be disconnected under this part also.
- 4) Additional parts to remove
 - a. Remove the rubber mount that supported the OEM inlet snout
 - b. Remove and retain the OEM engine hoist bracket secured by the 2x E10 fasteners. Keep this bracket and fasteners in case engine removal is required at a later date
 - c. Remove the small plastic vacuum lines right back to the solenoid valves that are clipped to each inlet manifold
 - d. Remove the P-Clip secured by the E10 fastener from the black convoluted oil breather hose, flip the p-clip 180° and reinstall it.
- 5) In your MRN Carbon Inlet kit you will find 2x small rubber caps, fit these to blank off where you removed the hoses from the solenoids mentioned in 4c
- 6) Take the MRN Carbon plenum and place it between the OEM inlet manifolds then slide all 4x rubbers over the plenum. There is a raised plastic part in the OEM inlet manifolds to indicate the rubbers are in the correct location. It is imperative to make sure all 4 rubbers are seated correctly on both the OEM inlet manifold and the MRN carbon plenum prior to tightening the hose clamps as any air leak will cause issues. Once you are confident the hoses are installed correctly go ahead and tighten the hose clamps.
- 7) Fit the vacuum line to the underside of the MRN Carbon plenum and secure using the OEM clamp
- 8) Fit the new 82mm Throttle body.
 - a. Connect the electrical plug to the throttle body
 - b. Ensure the supplied O-Ring is seated correctly into the plenum
 - c. If your car is manual gearbox move your cables to the position shown in the picture below
 - d. Make sure the throttle body is in the correct orientation (see picture below) then using the fasteners provided secure the throttle body to the plenum.



- 9) Fit the silicone hose from the MAF to the new throttle body using the hose clip provided and the clip retained from 3b. The white MRN logo on the hose faces down and goes to the MAF. It is imperative to make sure both ends are seated correctly on the throttle body and the MAF prior to tightening the hose clamps as any air leak will cause issues. The underside of the MAF can be seen from the underside of the car.
- 10) Reinstall the AOS breather line previously removed in 2a/2b. There is a blanking plug included in the kit that must be fitted to the left side hose. These connection are a tight fit and require some lubrication to fit. There should be an audible 'click' when the connections are fully secure
- 11) Reinstall the engine cover and associated parts from step 1

Installation is now complete but your car will need to adapt to the new larger throttle body, do not be alarmed if your car does not run well to begin with!! We have found that it takes a minimum of 50miles of driving for the car to recalibrate itself to the new parts fitted and increased air flow. Sometimes a CEL (Check Engine Light) and warning will be present after installation, as long as there are no air leaks these will mostly just need a reset after some driving and won't return. It is possible that this modification can highlight a poor condition MAF sensor so please consider this. For maximum gains we recommend your car is remapped by a competent tuner.

If you have any issues please don't hesitate to contact us via the website, we hope you enjoy your purchase and drive safely!