

# MBC+A(Anticipator) Setup Instructions



**Key**

BPC= Boost Pressure Control (APC Solenoid)

MBC= Manual Boost Controller

APR= Air Pressure Regulator

TB= Throttle body

CW= Clockwise

CCW= Counterclockwise

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# Installing the Mounting Plate to the Car



The mounting plate is shipped to you with the MBC and APR mounted and connected at the "Y" Connector. The APR is shipped to you closed, so when adjusting later in the process, you will be rotating the APR bonnet clockwise after pulling the bonnet out to unlock it. This will be explained later in the directions.



Locate the existing hole at the front of the car as shown, as this will be used to mount the plate to the car. Place the mount underneath the hole and the bolt goes through the hole then through the top of the plate and nut\* underneath which is attached to the mount.

\*The Nut is attached to the plate by epoxy or hot glue, neither of which is strong enough to hold when you torque the bolt down. It is used to help with fitment of the bolt onto the nut as it is a tight spot to do so.

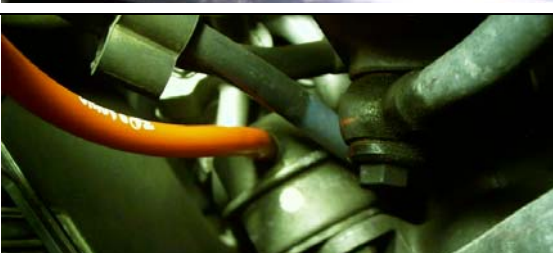


When the mount is secured it will look like this and now you can attach the WG hose.



Being that the mounting plate goes straight down towards the waste gate actuator, it is best to replace the WGA stock hose. Disconnect the hose going to the waste gate actuator and remove it from the rubber harness that attaches the three stock hoses. Put this hose away for safekeeping should you want to return the car to stock.

Attach the 6" supplied hose coming from the MBC+A outlet off the "Y" connector to the waste gate actuator.

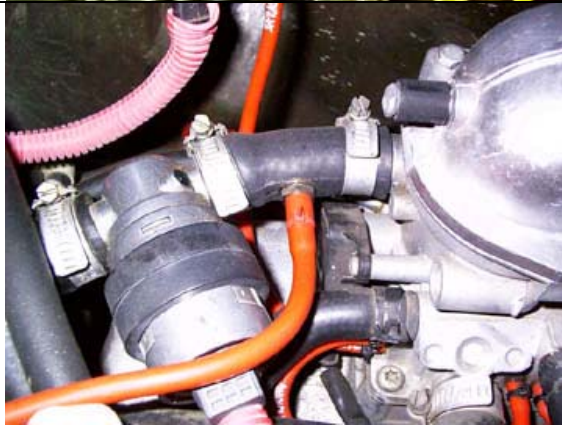


Connect the supplied hose to the "Y" Connector and then to the WGA. (the red hose in the picture)

# Installing the Throttle Body Boost Tap



Remove the Plastic cover plate at the throttle body and locate the Hose between the throttle body and the Idle Air Control, which is circled in red. Loosen the two clamps and gently remove the hose. Keep the original hose to be able to return to a stock state.



Insert the new hose\* with the pressure tap hose barb and tighten clamps. \*\*You may need to trim the hose to fit it correctly between the TB and the IAC. Each car is slightly different so they are made on the large side to accommodate all cars.

Attach the supplied vacuum line and secure it with a zip tie.

\*The new hose is slightly smaller ID than the stock hose between the TB and IAC. It takes a little persuasion to get it on the IAC side. You can use a very small amount of grease to help slip it onto the IAC.



Route the vacuum line over to the hardpipe that runs along the valve cover and, using supplied zip ties run it along the hard pipe.



Continue routing the Vacuum Line as shown



It is best to go under the air box to the front of the car to where the mounting plate is. Be careful it is not too loose that it rubs against the serpentine belt. Use multiple zip ties where the hose leaves the hardpipe to ensure that it is secured well so not to come unattached and come in contact with the serpentine belt.

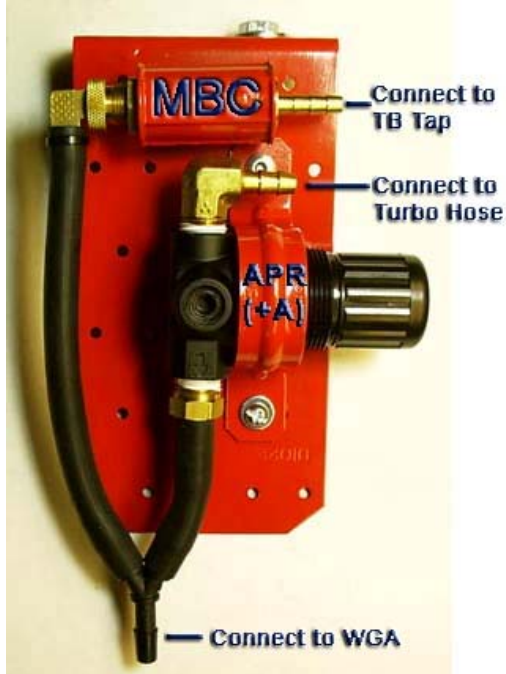
Replace the throttle body cover.

## Connecting the hoses to the MBC+A



For T-5 Engines, this is your Boost Pressure Control Valve (BPC) or also known as the APC solenoid. There are three hoses attached to it. This illustrates where each hose goes to or comes from. The front hose, labeled turbo, comes from the turbo compressor. The middle hose goes to the waste gate actuator. The third hose goes back to the air intake before the turbo. This third hose will not be disturbed.

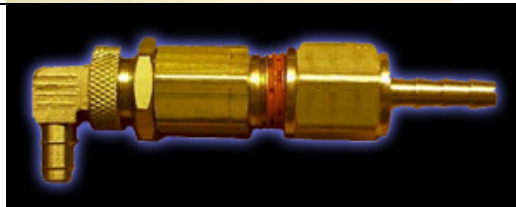
DO NOT CUT ANY OEM HOSES.



Take the hose that you just routed from the Throttle body Tap and connect it to the MBC Inlet. (See next picture for reference)

Take the hose off the BPC coming from the turbo and connect it to the APR Inlet. (If you find the hoses hard to remove from the BPC, take a flat screwdriver and push down from the top of the hose to push the hose off the nipple. Pulling on it makes it harder to remove)

Because you disconnected the hose at the WGA earlier in the process when mounting the plate, now disconnect the other end of the WG hose from the BPC. And remove it from the car.



Just for reference, the MBC inlet is the straight hose barb. This is connected to the hose from the throttle body tap.

The MBC outlet is the elbow hose barb which get connected to the hose leading to the WGA.



Take the 3" inch long piece of supplied vacuum hose and plug off the two hoses you just removed from the BPC to keep the BPC clean should you ever want to return the car to stock or decide to use a modified ECU that requires the use of the BPC.



The final setup / product will look similar to this.

# Time to Drive and Tweak

The Kit is sent to you with The Air Pressure Regulator (APR) fully closed so that you can first adjust your MBC setting.

Take the car out for a drive and get the MBC setting where you like it. Increase boost by turning the top on the MBC clockwise and locking the jamb nut t the desired setting. Most people want the maximum amount of boost possible so adjust to where you experience a fuel cut (sudden jerking of the car) and then readjust your MBC by backing it off some. Once you are happy with the setting you can now move onto the APR.

The APR adjusts by pulling the bonnet out to unlock it. By turning it CLOCKWISE(CW), you increase the air pressure going through the APR. By turning it COUNTERCLOCKWISE(CCW), you decrease the air going through. Push the adjustment bonnet back in to secure the setting.

Start with the APR closed (fully counter clockwise) so that no air gets through the APR, gradually open up CW the APR in increments allowing more air each run. When you start to notice that boost is decreased, decrease the setting a notch or so by turning it back CCW. At this point, you will be sending enough air to the waste gate line without making it open prematurely. At this point you should be noticing that boost is maximum without overshoots. The boost needle goes to its highest place and stays there until you let off the gas.

**The original MBC adjustment was set to accommodate the pressure overshoots of the MBC. With the MBC+A, these pressure overshoots are avoided. When you have the overshoots eliminated, you can then increase the MBC setting to take advantage of higher boost. This increase is not major, but you will feel it!**

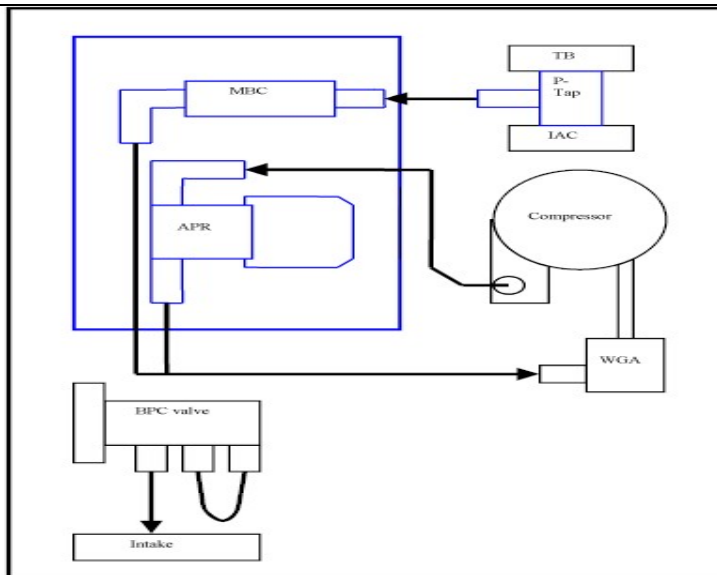


Diagram of the Complete Setup.





## Disclaimer:

The use of a SMBC or MBC is very safe in many applications. You must research and evaluate the use of these devices on your own model/year/engine etc. The MBC will work well where any MBC could be safely used. When increasing boost; the engine must be in good mechanical condition, a true synthetic oil and good filters should be used, plugs must be in good shape and the heat range might need to be changed (cooler), premium fuel must be used, keep fuel injectors and combustion chambers clean (Techron Concentrate suggested), as a rule of thumb - one needs to have a low restriction intake and exhaust when increasing boost pressures, it might be foolish to increase boost pressures with a stock intake and exhaust setup.

Lean air fuel mixtures at higher boost pressures and air flows can lead to knocking and damage. If you hear any knocking, get off the throttle and reduce boost immediately. Learn what can be done with your vehicle. A MBC may be all that you need for more power, but some applications would require larger injectors or greater fuel pressures. Study and find out what works and what does not. You may need to install a fuel-air meter to monitor the AF ratios. Some well known applications need none of that, but you need to know these details for your self.

You are your own warranty. We are not responsible for what happens to your engine or drive train when increasing boost pressure.

## Adding the Washer inside MBC to increase boost pressure If needed.

	<p>If you find that you have maxed out the MBC and you are not reaching max boost or need a little more, you can add the washer included in the kit to the MBC. <b>ONLY DO THIS IF YOU HAVE SCREWED THE MBC ALL THE WAY IN AND ARE STILL NOT REACHING MAXIMUM BOOST WITHOUT FUEL CUTS.</b></p>
	<p>Take apart the MBC and you will find the spring and ball inside.</p>
	<p>Take the top part of the MBC (90 degree elbow side)</p>
	<p>Insert the washer inside the top and carefully put the MBC back together. The spring tension is now increased so you might have to turn down the MBC setting from where it was before.</p>

