

Mustard Bikes AIS/PAIR/KLEEN (SMOG) System removal kit.

Thank you for purchasing this quality product from Mustard Bikes.

This Smog removal kit allows the removal off the motorcycles AIS system installed for emissions reasons. Benefits off this are improved exhaust flow, minor weight savings, a cleaner and less cluttered engine area, a more stable A/F reading for more precise tuning on a Dyno and the elimination of backfiring or "popping" with aftermarket exhausts.

The following are some basic instructions to help you install your block off plates. Please note that these instructions are universal and that the process to access the cylinder head will be different on each individual make and model bike. While components may differ in appearance to what is shown here, the air injection system generally works the same way across all models and use a similar basic layout. The installation process of the block off plates themselves remains the same. It is recommended that you read these instructions before attempting installation. Online forums, while helpful chall could pake he used alongside those instructions. Using online information instead of

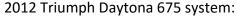
It is recommended that you read these instructions before attempting installation. Online forums, while helpful, should only be used alongside these instructions. Using online information instead of these instructions may mean you miss important information relevant to this product.

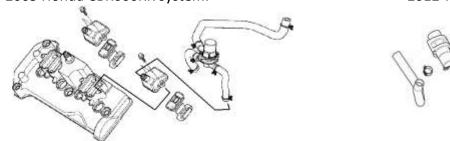
If you are unfamiliar with your motorcycle it may be necessary to consult a workshop manual. The whole install should take around 2 to 3 hours depending on your ability and experience, however if you do not feel confident or are uncertain of your ability installing this product, it is recommended that you have a mechanic install them for you.

Make sure you have adequate room to work, suitable quality tools and all parts and supplies needed. You will need to purchase some gasket sealer such as RTV silicone and some blue Loctite to complete installation.

The following are some example of the AIS system found on different models:

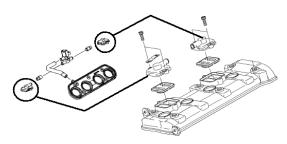
2005 Honda CBR600RR system:







2005 Kawasaki ZX10R system:



- 1. <u>Gain access to your cylinder head cover.</u> The process for this will differ from bike to bike. You will need to gain enough access to work on the cylinder head cover. Often this will mean removing your tank, airbox and left and right fairing. In some case loosening or removing the radiator is beneficial. Following the owner's manual or workshop manual instruction on changing spark plugs or air filter will often give you the best process to gain sufficient access.
- 2. Locate the AIS valves and ancillaries on your engine. On most motorcycles this will be on the cylinder head of the motorcycle as shown in the examples on page 1. On some motorcycles the AIS valves will be located on the front or sides of the cylinder head. In cases where there are multiple cylinder heads such as on V-twins or V4's there will be at least 1 valve on each cylinder head or cylinder head cover. Inline fours will have 2 or 4 valves, Inline triples 2 or 3 and inline twins 1 or 2 valves.
- **3.** Remove the AIS valves. Remove the tubes from the valve covers and remove the covers by undoing the bolts holding the cover in place. Once the cover is removed, remove the valve internals. Sometimes this will be a single valve per cover, on some models it will be two, such as the Honda components shown below. It is important that the internal valves are removed when using Mustard Bikes block off plates.



- **4.** <u>Prepare the block off plates.</u> Clean the mating surface where the original cover mounted with a rag and some solvent. Make sure the solvent has evaporated before fitting the plates. Check the orientation and fitment of your block off plates. Some block off plates may appear to be symmetrical but actually have a slightly uneven shape or different radius corners. Make sure the plates fit flush and don't leave any gaps.
- **5.** <u>Fit the block off plates.</u> Smear a thin layer of RTV gasket sealer on the outside edges of the block off plates. Avoid using too much gasket sealer, only a small amount is needed. Install the block off plates in place of the original valve covers using the bolts provided. Be sure to use blue Loctite on the bolts. **Make sure the block off plates have seated properly, do not start your motorcycle**.

6. Remove the AIS system Solenoid. Locate the AIS solenoid by following the tubes that were connected to the AIS valve covers. Disconnect the electrical plug from the AIS solenoid from the main wiring harness. If this causes your bike to display a FI warning light on your dash when the ignition is turned on you may need to leave the AIS solenoid connected. Often the FI light can be fooled by use of a suitable resistor or electrical circuit. Online forums for your specific model bike may offer a solution if you wish to remove the solenoid completely. If no FI light is displayed tape up the electrical plug with some electrical tape to prevent the plug accumulating dirt.

The following picture shows the Honda CBR600RR solenoid and AIS plumbing. Your bikes solenoid will look similar but may not be identical:



- **7.** Remove AIS system plumbing. Along with the solenoid remove all plumbing and bracketry associated with the AIS system from the bike. This may sometimes include a charcoal canister. One of the hoses will be connected to the motorcycles airbox.
- **8.** <u>Plug the airbox.</u> In order to maintain optimal performance the connection point for the hose connected to the airbox should be capped with the provided plug using a cable tie or a strong adhesive. The cap provided, while suitable for most, may not fit your motorcycles. In this case a suitable plastic plug should be sourced from our local hardware store (rubber chair tips are ideal) or a section of hose should be cut from the AIS system and crimped closed with a cable tie to seal the airbox.
- **9.** <u>Reassemble your motorcycle.</u> Reassemble all parts on the motorcycle in the reverse process to removal. Consult your owner's manual or workshop manual if in doubt.
- **7. Do not start the motorcycle.** Do not start your motorcycle until the gasket sealer has had time to cure. Consult the packaging of your sealant for curing time. Once sealant has cured start the motorcycle and check everything is working properly.

Congratulations! If all went well your Mustard Bikes block off plates are now installed.

If you have any problems with installation feel free to contact us at help@mustardbikes.com for any queries.

Disclaimer:

This install guide is just that, a guide only. Mustard Bikes take no responsibility if you screw up. Mustard Bikes takes no responsibility for any damage caused to any persons or property through the use of this product.

These block off plates remove emission control systems. This may be illegal for road use in your place of residence. Please check with local authorities before installing.



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