

# Using an Air Bypass Valve with Jenvey throttle bodies



## Pointers

When incorporating an air bypass valve into an induction system with individual butterflies, it is important to ensure that the air is evenly distributed between cylinders.

To achieve even distribution we recommend that a suitable distribution manifold (see below) is placed between the bypass valve and the inlet tracts such that the tubes to each cylinder are all of the same length.

The preferred position to introduce the air, particularly if the injector is not aimed directly at the back of the inlet valve, is near to the injector, thus providing optimum conditions for air/fuel mixing.

Positioning the extra air inlet near the bottom of the tract should be avoided to prevent fuel flow-back under certain conditions.

## Methods

Bodies (including Direct-to-Head) which incorporate idle-bypass adjusters may be converted using a standard kit from Jenvey. The kit comprises screw-in fittings to replace the adjusters, an air distribution manifold and 8mm black nylon tubing for connection. The distribution manifold requires a 1/4" BSPP female thread for attachment to the air valve. An adapter is available to convert the manifold to accept 19mm push-on tube.

Twin bodies without idle-bypass adjusters may be converted by carefully drilling through the starter hole provided with a 3.3mm drill.

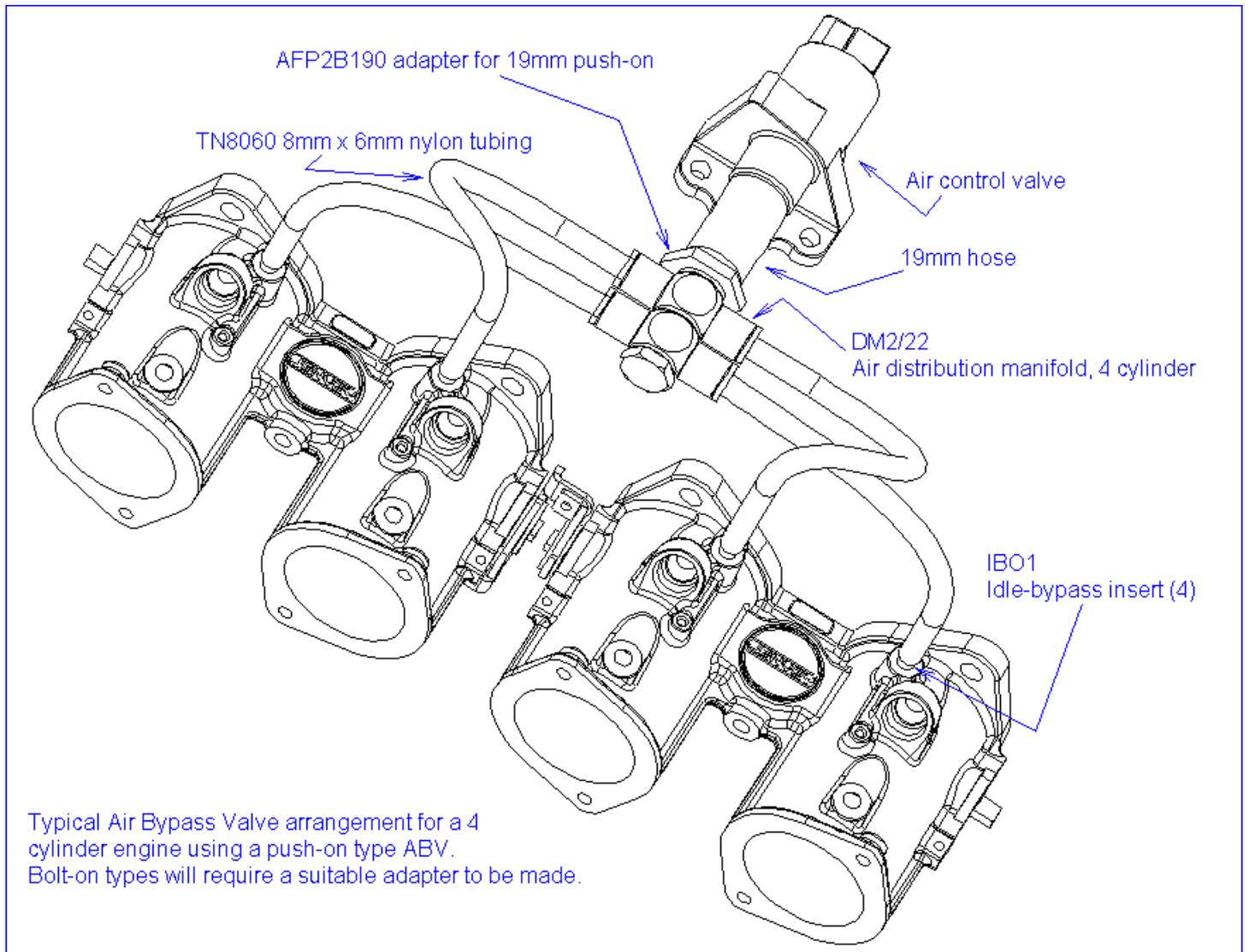
Other bodies (e.g. Single bore) require the manifold to be drilled and tapped to accept suitable fittings (see below) for the 8mm tube. Please see 'Pointers' above for the best position.

## Connecting to the Air Bypass Valve

Some ABVs have a spigot, usually 19mm, to which a hose may be attached. For these use our 19mm push-on adapter to connect the air distributor to the other end of the hose.

Most ABVs are designed to be bolted straight to a manifold and thus require an adaptor plate to be made. Tap this plate, in the appropriate position, with 1/4" BSPP thread to accept the Jenvey distributor.

<b>Parts available from Jenvey Dynamics</b>	<b>Part no.</b>
4 cylinder Twin kit, consisting of; 1 x DM2/22, 4 x IBO1, 2 x TN8060	AVK2T2
6 cylinder Twin kit, consisting of; 1 x DM3/222, 6 x IBO1, 3 x TN8060	AVK2T3
Air distribution manifold, 3 cylinder	DM2/21
Air distribution manifold, 4 cylinder (Use 2 for 8 cyl)	DM2/22
Air distribution manifold, 5 cylinder (Use 2 for 10cyl)	DM3/221
Air distribution manifold, 6 cylinder (Use 2 for 12 cyl)	DM3/222
Adapter - distribution manifold to 19mm push-on	AFP2B190
Idle-bypass insert (per cylinder)	IBO1
Screw-in fitting 1/8" BSPT to 6mm ID tube	AMP1B60
8mm x 6mm black nylon tubing / Metre	TN8060



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