

May 2017

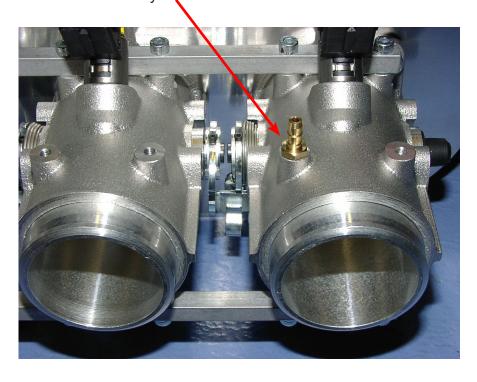
## <u>Throttle Blip on 9A4/9A8 Harness (with Trickshifter timer)</u> <u>With SBD taper throttle bodies</u>

Throttle Blip 4 way sure seal

Pins @ 4 way	Colour	Function
Pin 1	Brown	+12v (1 amp max current drain)
Pin 2	Black	Power Ground
Pin 3	Red	Down shift Signal from Trickshifter
Pin 4	N/A	

### **Important Notes**

When using SBD hayabusa throttle bodies the vacuum take off from the throttle body (arrowed) must be drilled & tapped to accept the brass fitting size M5, to supply enough vacuum for the throttle blip unit to work sufficiently.

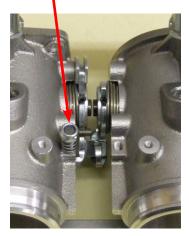


It is vital that the throttle bodies are removed from the engine before any work is carried out on them to ensure that no swarf or dirt is allowed into the engine.

Carefully drill through the vacuum take off shown in the above picture (the end nearest the throttle stop) ensuring that you are drilling at the same angle as the tube otherwise it is possible to drill through the edge of the tube. Then de-burr both ends-blow the metal swarf out of the throttle body using an airline and brake cleaner ensuring that the internals are completely clean, then re-fit to the engine.

# Fitting instructions for Throttle blip actuator On SBD hayabusa throttle bodies

Remove the original throttle stop adjuster and screw the throttle blip actuator in its place to the same adjustment so that the throttles are almost fully closed.







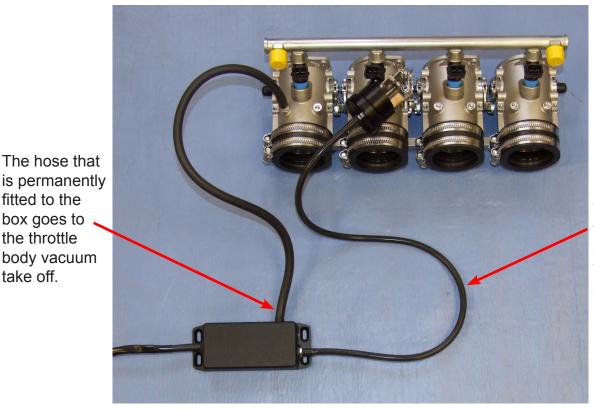
Temporarily fit the supplied stabilising strip to the mounting hole as shown in the picture below, then mark on the strip where you require to drill through in order to bolt to the throttle blip actuator.

Remove the strip and drill a 5mm hole in the position that you have just marked, then re-fit the stabilising strip and tighten all fixing bolts.



With the vacuum blipper installed, operate the blip by hand to its maximum travel, you must ensure the pin does not fall off the lever arm.

If required, carefully bend the lever arm until it contacts the pin through the whole travel of the blipper. Now connect the hoses from the throttle blip control box to the throttle bodies and the actuator



fitted to the

the throttle

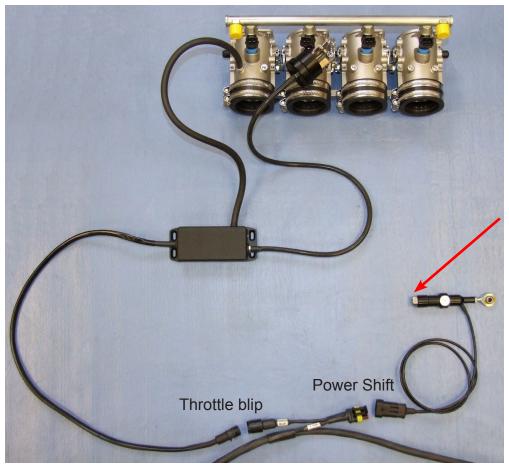
take off.

box goes to

body vacuum

The hose from the silver union goes to supply the throttle blip actuator.

The lengths of hoses supplied are the maximum lengths advisable to use if possible shorten these when fitting.



Comes with M6 thread. which is suitable for most applications, however some cables come with M5 thread in that case you'll need to fit an M5 helicoil or timesert

When the shift rod is triggered on downshift, this starts a timer within the downshift box (not controlled by the ECU). This energises a solenoid within the downshift box that connects the vacuum from the throttle body to the throttle blip actuator causing the actuator to blip the throttle. The timer is nominally 150m.s., this causes the engine revs to rise and allows the gearbox dogs to unlock to permit a gear change.

#### If blip does not occur:

- 1. Vacuum pipes are incorrectly fitted.
- 2. Bleed hole in throttle body is too small allowing insufficient vacuum.

IMPORTANT NOTE: THE THROTTLE BLIP BOX IS PRESET DURING MANUFACTURE AND ADJUSTMENT DESCRIBED BELOW SHOULD NOT BE NEEDED, PLEASE CHECK ABOVE INFORMATION BEFORE ANY OF THE ADJUSTMENTS BELOW AND NOTE YOUR STARTING POINT BEFORE MAKING ANY ADJUSTMENT DETAILED BELOW.

#### Throttle blip is insufficient

Adjuster nut on the external of downshift box is incorrectly adjusted allowing excess vacuum to bleed away and therefore blip is too small. Carefully adjust the adjuster nut a flat at a time to cover the bleed hole until the bleep is sufficient.

#### Throttle blip is last too long

Adjuster nut on the external of downshift box is incorrectly adjusted, bleed hole is covered causing the engine rpm to remain high after downshift. Carefully adjust the nut a flat at a time until the engine revs return to normal after blip.









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