Heritage Throttle body – Fitting Instructions

Cross connection linkage
If necessary shorten the primary or driver lever blade to suit the throttle body mounting centers. Fit the spring clip over both primary and secondary levers and capture with the M4 balance adjusting screw and locking nut.

Balancing throttle bodies
All bodies have been tested and balanced individually on the idle bleeds before leaving the factory so do not adjust the idle bleed screws unless necessary. Where possible kits are fully balanced prior to leaving the Jenvey factory.

1. Check the balance looks good between bodies by visually checking the gaps under the butterfly at idle throttle – adjust on the cross link lever if necessary (undo the hex nut first)
2. Start the engine and set the idle adjuster screw to give a fast idle
3. Starting with the primary body (This is the body with the idle adjuster screw) use your synchrometer to measure the vacuum from both ports.
4. Adjust the idle bleed screw on the port with the highest vacuum to give the same vacuum as the other port
5. Measure the vacuum on both ports of the secondary body and adjust the idle bleed screws on the secondary body until both ports read the same.
6. Adjust the cross link lever grub screw (undo the hex nut first) until the reading on the secondary body match the readings on the primary body.
7. Complete a final check of all of the ports to ensure they haven’t haven’t gone out of balance whilst adjusting the others.

Ideally allow the engine to run through a couple of heat cycles and recheck the balance of the bodies, the balance should then stay set on the bodies.

Full throttle stop
The full throttle stop is usually set slightly below 90 degrees. Many engines give best results at slightly less than the fully open position.
Return springs
The throttle return springs may not be sufficient to compensate for the friction and weight of the pedal and the associated linkage. All systems should be fitted with an additional return spring or CLS3 linkage kit.

Important points to consider
- A heat shield is required on non cross-flow engines such as the Datsun 240Z to protect the wiring cables underneath.
- Wing nut, Brass hex nut and brass slotted screw are for visual appearance only and should not be removed or adjusted.
- Jenvey’s standard linkage will not fit the Heritage Throttle Bodies, a specific linkage is required – CLS3
- Standard air horns will fit.
- Vacuum bosses have been machined on underside but do not break into bore. These can be drilled through if needed. Idle bleed take off’s can be purchased separately from Jenvey - IB01

Injectors
There are various injector options for the DCOE Heritage throttle body. They are fitted with Bosch 350cc injectors as standard which are suitable for a 4 cylinder engine with up to 245bhp. At the point of ordering smaller 250cc injectors or large 550cc injectors can be specified.
Injector looms will be labelled left and right or the left injector will have a red sheath.
- TD250 - Heritage 250 injector upgrade per body
- TD550 - Heritage 550 injector upgrade per body

Fuel System
The recommended fuel system is a return system with very short returnless branches to the throttle bodies.
To help you set up the fuel system, we have created some diagrams. These can be found on our website under The Heritage Throttle Body page on our store.
- Single Pump Setup
- Collector Pot Setup

Throttle position sensor
The TP12 which is built in to the Heritage throttle body housing has been set to 0.92 volts at closed. This can be adjusted from 0.92 volts to 1.08 volts. Loosening the M4 lock nut underneath the body and adjusting the grub screw with a 2.5 hex key. The Heritage TP sensor also has a reduced range compared to our standard sensors.
Throttle position sensor cover also should not be removed as it may affect throttle position idle setting.
Spindle rotation: 82 degrees.

Servicing
Maintenance is not normally required beyond normal adjustment and cleaning. However, if the throttle bodies are dismantled, note the following points;
Be careful not to turn the outside edge of the seal back when refitting.
Only replace bearings and seals with original Jenvey parts. Do not use industrial alternatives.

Use Loctite 243 on the butterfly screws when refitting and torque to 3NM. The projecting screw threads may be deformed for added security but spindle damage may result when the screws are next removed.
When refitting spindle levers, ensure a gap of 0.3 to 0.5mm between the closest part of the lever and the body side when the butterfly is firmly closed. Grease the grub screw and Torque to 1.8NM.

Other items you may require
- Heritage Air Horns - AWHXXx40
- Heritage Linkage Kit - CLS3
- Heritage Banjo Fitting - TBR41
- Heritage Air Horns Filters – ABF6-65
- Heritage Dome Air Filters – ABF4-65
- Fuel Pumps – FP20 / FP30 / FP40