



Aubrey's Farm, Bromsberrow Estate, Ledbury, Herefordshire, HR8 1RZ  
Tel: 01531 650350 Email: Sales@allisport.com



Above - 12 valve HDJ80 fitted with AlliSport manifold adaptor.  
24 valve also available, kit fitting is identical



Above –Detail of position holes to be made for pipe routing.  
Below – Bracket mounting detail.



## **Toyota Land Cruiser 80 series Fitting Notes 12 & 24 Valve**

The AlliSport Intercooler System is designed to be mounted in front of the radiator and behind the grille.

Please read these instructions before attempting to install the kit. Check you have all components and tools necessary before starting. Pipework orientation is critical for a good fit due to lack of space.

The two top mounting points on the Intercooler are for use with the supplied straight stainless-steel brackets. These mount to the top of the bonnet slam panel near the location of the horns.

The top centre mounting point attaches to the rear of the bonnet catch.

The lower threaded boss mounts via the shaped bracket supplied to the captive thread used previously to mount the radiator blind, which must be removed.

Also, to be removed is the centre bonnet catch support as this is replaced by the intercooler itself.

The alloy pipes are labelled starting from "A" at the inlet manifold through to "G" at the turbo.

Pipe "B" is fitted with a bracket to secure the pipe to the fan cowl.

Pipe "G" of the 24-valve kit has a boost take off.

Please note that 24 valve kits include an oval steel EGR blanking plate to be fitted to the exhaust manifold end of the EGR system. All other EGR components may be removed.

Two holes need to be cut through the bulkhead below the headlights as per the pictures. It is good practice to line these holes to reduce the chance of the hoses chaffing through vibration.

It should not be necessary to remove the batteries and battery trays to allow pipe installation.

There is an optional boost adjuster to allow the turbo boost pressure to be increased. This is fitted into the small rubber pipe leading to the wastegate actuator and is designed to bleed off a metered amount of air. This should be checked with a boost gauge to ensure excessive boost is not created. Ideal boost is 12-14psi, excessive boost will cause the warning light to illuminate and eventually cause damage.

Finally, the fuel mixture must be altered to compensate for the more efficient mixture created by the Intercooler system. This is ideally adjusted at the internal compensator part of the pump which can be set to maximum, or otherwise at the mixture screw which is at the rear of the fuel pump. Adjustment here is achieved by turning clockwise by approximately  $\frac{1}{2}$  a turn. An experienced person should ascertain the final settings. These are based on original factory settings with a healthy injection pump and correct timing etc. This kit is not designed to overcome any underlying faults which may have reduced performance.

## Kit content

- Intercooler
- Oval plate (**24v kit only**)
- 2x straight brackets
- 1x bent “spoon” bracket
- 1x M8 x 16 Hex set
- 1x M8 Spring washer
- 1x M8 Flat washer
- 5x M6 x 16 Hex set
- 10x M6 Flat washer
- 5x M6 Nyloc nuts



- 18x 40-60mm hose clips
- 3x Straight silicone connectors
- 4x 90° silicone bends
- 2x 45° silicone bends
- 7x Alloy pipe kit

