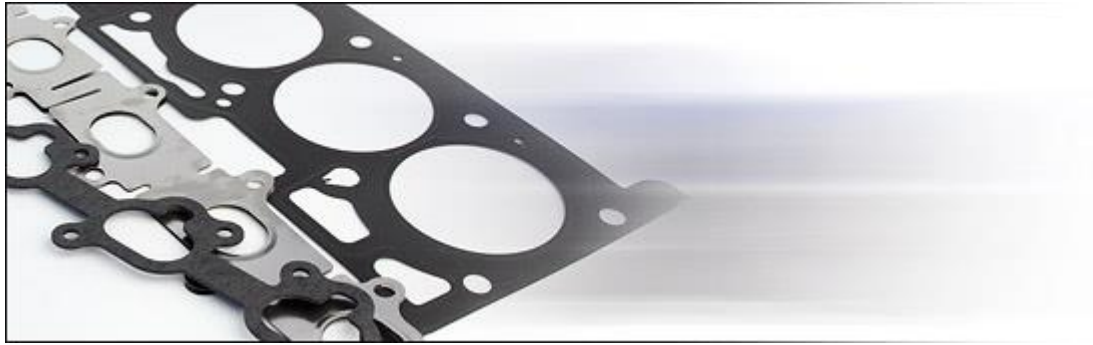


## Gaskets & Kits



### Ford 4.0L 6 Cylinder SOHC and DOHC Gaskets and Kits

Although we have been building high performance engines since 1978, it wasn't until 2004 that we began development work on the Ford 4.0L DOHC 6 cylinder factory turbocharged "Barra" engine. We witnessed numerous catastrophic engine failures after consumers had undertaken simple modifications such as free flowing exhausts and cold air intake systems (to otherwise stock vehicles), so it became apparent there was a need for us to engineer some hard core solutions to address the inherent factory weaknesses.

We have gone to great lengths to design, source, test and approve gaskets and seals for the venerable Ford 6 cylinder engines and package them as complete engine kits, VRS kits as well as making them available individually.

Our full engine gasket kits are totally complete for both turbo and N/A engines and include tried and tested components such as high temp silicon/viton rear main and harmonic balancer seals, SLS metal turbo drain-back gaskets, BF-on oil cooler to block o-ring, etc.



### Complete Gasket kits

#### #306140 - Complete Gasket and Seal Kit

Suit SOHC Ford 6

#### #306150 - Complete Gasket and Seal Kit

Suit DOHC Ford 6 - 3/2003 to 5/2005 (SLS Head Gasket)

#### #306151 - Complete Gasket and Seal Kit

Suit DOHC Ford 6 - 5/2005 to 1/2008 (SLS Head Gasket)

#### #306152 - Complete Gasket and Seal Kit

Suit DOHC Ford 6 - 2/2008 on (SLS Head Gasket)

#### #306153 - Complete Gasket and Seal Kit

Suit DOHC Ford 6 - 3/2003 to 5/2005 (MLS Head Gasket)

#### #306154 - Complete Gasket and Seal Kit

Suit DOHC Ford 6 - 5/2005 to 1/2008 (MLS Head Gasket)

#### #306155 - Complete Gasket and Seal Kit

Suit DOHC Ford 6 - 2/2008 on (MLS Head Gasket)

### Head Gaskets

One of the most maligned components of a turbocharged engine is the head gasket, so we spent a lot of time and effort to R&D a range of different gaskets for DOHC and SOHC Ford 6 cyl engines. A brief overview of the differing construction styles and corresponding applications are as follows:

**SLS – Single Layer Shim.** This is an OE style gasket for use in moderate performance applications. Despite its name, this gasket is actually made of two layers – it features laser welded bands around the combustion chambers, therefore adding a second layer to the main body of the gasket which is constructed from a single layer of shim steel gasket material. It is viton coated and is .015" (.38mm) thick.

**MLS – Multi Layer Shim.** This gasket, as the name implies is made up of 2 complete layers of shim gasket stock, riveted together to form a single gasket. Also being .015" (.38mm) thick, the MLS is used in the same applications as the SLS and performs to similar performance levels.

**O-Ringed Gasket.** This is our latest high performance head gasket design which features stainless steel O-rings, encased in an annealed mild steel cylinder band which is then fitted to a composite gasket body. This type of gasket offers superior sealing to both the SLS and MLS gasket due to the o-rings ability to gain additional purchase into the face of the (alloy) cylinder head when torqued to an iron cylinder block. It is silicon coated for water/oil sealing and is .043" (1.1mm) thick. This gasket will fit with both 12 mm and 14.3 mm head studs.

**Copper Head Gasket.** This style of gasket has been traditionally used in high performance race engines for decades. The annealed copper gasket is sandwiched between one (or two) wire o-rings fitted to the block (and/or) the head. The o-rings "bite" into the gasket to provide a seal. The downside of this type of gasket is the associated o-ringing costs, downtime and a tricky installation procedure; 3 re-torques are required, plus a special silicone sealer is required to seal water/oil passages.

**Fire-Ring Gasket.** This style of gasket uses individual "fire-rings" to seal the combustion chambers. The rings are made from various materials, depending on what the block and head are made of. The rings themselves are made from various materials such as hollow aluminium alloy, Inconel, mild steel or phosphor bronze and fit around the cylinders, held laterally in place either by a groove in the block or by a sheathing "outer" gasket. The principle is simple; once the fire ring gets hot it expands, pushing itself against the cylinder head and the block. This type of gasket seals extremely well and has the ability to maintain a seal even if the head lifts slightly. This style of gasket provides the ultimate in cylinder sealing and is a prerequisite in high boost diesel engines running 120+ psi boost.

**#306160 - SLS Head Gasket**

Suit Ford DOHC 6 cyl .015" (.38mm) compressed thickness

**#306161 - MLS Head Gasket**

Suit Ford DOHC 6 cyl .015" (.38mm) compressed thickness

**#306162 - MLS Head Gasket**

Suit Ford SOHC 6 cyl .039" (1.00mm) compressed thickness

**#306163 – Dead soft Copper Gasket**

Suit Ford DOHC 6 cyl - .027" thick (.7mm)

**#306164 - Dead soft Copper Gasket**

Suit Ford DOHC 6 cyl - .039" thick (1.00mm)

**#306165 - Dead soft Copper Gasket**

Suit Ford DOHC 6 cyl - .050" thick (1.3mm)

**#306166 – MLS Head Gasket**

Suit Ford DOHC 6 cyl .039" (1.00mm) compressed thickness

**#306168 – Stainless wire O-ringed Head Gasket**

Suit DOHC 6 cyl - .043" thick (1.1mm) compressed thickness



**#306169 – Fire ring Head Gasket Kit**

Suit Ford DOHC 6 cyl - .043" thick (1.1mm). Note this gasket has no water passages.

For individual gaskets, please call Atomic direct on 02 8665 5889 or +612 8665 5889 if you are outside Australia.