

Original engine condition checklist

Look down into the oil filler with a torch and compare the colour with this check list.

Silver Alloy surfaces -- Sounds like a new engine

Brown tarnished -- Very low mileage,

Dark brown -- Perhaps higher mileage, but well cared for.

Black -- Getting poor, a full rebuild/replacement should be considered.

Black Coated & becoming dense -- Very poor condition, A rebuild is normally required

Black and very sludgy -- Dead on its feet.

Below is what is normally required when replacing or upgrading to a 4.0 or 4.6 litre engine.

Replacement or upgrade to 4.0 or 4.6 **short engine.**

This is the minimum requirement that is to be considered if your engine is brand new.

New 4.0 litre short engine	£1695.00
New 4.6 litre short engine	£1950.00
Head bolts new	£ 45.00
Tappets and all gaskets required	from £ 95.00
Exchange surcharge	£ 200.00

Additional parts to be considered if your engine falls into the Dark Brown category (as above) and should be considered essential if it falls into any of the lower categories.

Pair of rocker shafts and rocker arms	£ 100.00
New oil pump base and gears up to '93 (pre serpentine type)	£ 100.00
New oil pump and timing cover '93 on (serpentine)	from £ 175.00
If the replacement engine is for pre 96 applications then the following will be required. 4.0/4.6 installation kit (required on pre Gems engines)	£ 25.00

Replacement or upgrade to 4.0 or 4.6 long engine.

New 4.0 litre long engine	£2950.00
New 4.6 litre long engine	£3250.00
Exchange surcharge	£ 200.00
New oil pump base and gears up to '93 (pre serpentine type)	£ 100.00
New oil pump and timing cover '93 on (serpentine)	from £ 175.00
If the replacement engine is for pre 96 applications then the following will be required. 4.0/4.6 installation kit (required on pre Gems engines)	£ 25.00

Additional power upgrades – for economy and fast road use (Long engine options only)

Stage 1 additional 15-20% efficiency and torque	add	£ 600.00
Stage 3 as stage 1 with slightly higher torque figures with additional Emphasis on extended rev range and BHP output	add	£1100.00

Ignition and chipping upgrades

See additional information as supplied or refer to the below web links.

GEM's ECU chipping – www.v8engines.com/carbs-4.htm - 1996 V8 on

Hotwire ECU chipping – www.v8engines.com/carbs-2.htm - 1990 to 1996 V8

Mallory distributors – www.v8engines.com/electrics-1.htm - 1970 to 1996 V8

Magnecor plug leads – www.v8engines.com/electrics-2.htm - Relevant to all models

A&R Power amp – www.v8engines.com/electrics-1.htm#Poweramp – 1970 to 1996 V8