



Cylinder cover reconditioning

The cost of replacing damaged and defective components such as cylinder covers can be prohibitive, whilst some are virtually irreplaceable.

PJ Diesel Engineering offers a sound and lasting repair of these components at a fraction of the new replacement cost.

On receipt at our works all components are thoroughly cleaned, degreased and identified with a unique reference number to ensure traceability.

A full inspection report is produced, including photographs, and sent to the customer for approval including recommendations for repair and spares required.

Once approved, the cover is machined ready for welding.

Defective and worn areas are rebuilt with close-grained machineable cast iron, fused perfectly with the parent material.

Strictly controlled pre- and post-heat treatment procedures are individually recorded.

This is followed by precision re-machining of all critical areas to original limits and tolerances, and fitting of new seats, guides and all spares required, carried out in our own state-of-the-art workshops.



Reconditioned cylinder cover



Reconditioned cylinder cover



The cylinder cover is machined after welding



The cylinder cover during the welding proces



Cylinder cover about to be reconditioned





Exhaust valve cage reconditioning

PJ Diesel Engineering provides a complete reconditioning service for valve cages.

We believe that there is no short cut to producing a first class reconditioned product.

We have established the correct welding parameters, pre- and post-heat treatment thereby removing the risk of cracking through use of incorrect materials and procedures.

PJ Diesel's repair procedures are strictly controlled to ensure a quality repair every time.

The seat and landing end of the water-cooled cage is removed - often revealing complete blockage or erosion of the coolant passageways.

We manufacture, at our facility, a **new seat**, which is then stellited on the valve seating face to ensure hardness and heat resistance.

The water resistant passageways are cleared and the nose end is then welded onto the body.

Material analyses are taken to ensure the correct matching material is used for the new end piece.

Finish machining is attended to with equal care. Attention to detail is essentiel - in particular the stellited valve seating and valve cage landing faces leave no margin for error.

The same meticulous attention to detail is applied to the reconditioning of upper and lower components of both cooled and uncooled two-piece valve cages.

Before the exhaust valve cage is complete, we machine the guide bore and fit new valve guides in house.

The exhaust valve cage is then complete, painted, boxed & despatched.



Exhaust valve cage after reconditioning



The valve cage before reconditioning



The new valve seat



The new valve seat mounted before welding