



## Turbocharger Warranty Inspection Report

Customer		Customer Ref		Date	
Part No	49173-07508	Job Number		Serial No	
<b>Reason For Return</b>	"turbo shaft has broken"				
Actuator	No Visible signs of damage				
Compressor Housing	Profile rubbed				
Turbine Housing	Profile rubbed				
V Clamps/Clamps	OK				
Compressor Wheel	Blades rubbed and damaged				
Turbine Wheel Assy	Sheared at turbine end prior to bearing journal, journals scored/worn/discoloured				
Bearing Housing	Bearing journals scored				
Journal Bearing/s	Scored and worn				
Piston Ring/s T'end	Missing due to turbine wheel assy being sheared off				
Piston Ring/s C'end	Badly damaged				
Thrust Bearing	Heavy wear, scored, cracked, heavy carbon deposits				
Backplate/Insert	Worn/discoloured				
O' Ring Brg Hsg	Heavy carbon deposits				
O' Ring Comp Hsg	OK				
Retaining Ring/s	Worn				
Thrust Flinger/Collar	Scored/worn/discoloured				
Thrust Washer/s	Scored/worn/discoloured				
Thrust Spacer	N/A				
Anti-rotation Pin	N/A				
Shaft Nut	No Visible signs of damage				
Nozzle Ring Assy	N/A				
Heat Shield	Damaged due to sheared turbine wheel				

### Conclusion:

This application is notorious for having lubrication issues, the engine requires more intensive cleaning than a 'normal service' before fitting a replacement turbo, if extensive work isn't carried out, the replacement turbo will fail prematurely due to the blocked oilways in the engine.

This turbo has all the indications of a marginal lubrication problem, this is shown by the scoring/wear/discolouration on the internal parts (see photographs)

Inspected By: PA

Warranty Accepted

Warranty Rejected

X