

TO: Service Locations

FROM: Technical Support Development

SUBJECT: **MBE 4000® Valve Failure Analysis**

ISSUE

MBE 4000 engines may suffer severe engine damage due to improper valve lash, either from lack of maintenance or maladjustment. Excessive valve lash causes a specific failure of the valve at 110 +/- .5 mm. Failures identified as a result of lack of maintenance or maladjustment are not subject to warranty reimbursement.



REQUIRED ACTION

Valve lash settings must be checked and adjusted at specific intervals throughout the life of the engine. Damage resulting from excessive valve lash may be identified as a non-warrantable failure.

Check and record valve lash prior to disassembly; if this type of failure is found, request proof of tune-up from customer before proceeding with repair.

Proper valve lash maintenance intervals and adjustment settings for MBE 4000 are as follows:

Mileage			Engine Hours (Severe Service)	Valve Type	Adjust To
Severe Service	Short Haul	Long Haul			
First at 20,000 mi (32,000 km) and every 40,000 mi (64,000 km) thereafter	First at 30,000 mi (48,000 km) and every 60,000 mi (96,000 km) thereafter	First at 50,000 mi (80,000 km) and every 100,000 (160,000 km) thereafter	600 then every 1200 thereafter	Intake	0.016 in. (0.40 mm)
				Exhaust	0.024 in. (0.60 mm)

EPA04 MBE 4000 Maintenance Intervals and Valve Lash Specifications

Mileage			Engine Hours (Severe Service)	Valve Type	Adjust To
Severe Service	Short Haul	Long Haul			
First at 20,000 mi (32,000 km) and every 40,000 mi (64,000 km) thereafter	First at 30,000 mi (48,000 km) and every 60,000 mi (96,000 km) thereafter	First at 60,000 mi (96,000 km) and every 120,000 mi (193,000 km) thereafter	600 then every 1200 thereafter	Intake	0.016 in. (0.40 mm)
				Exhaust	0.024 in. (0.60 mm)

EPA07 MBE 4000 Maintenance Intervals and Valve Lash Specifications

Please refer to the appropriate service manual for additional information.

CONTACT INFORMATION

Please contact the Detroit Diesel Customer Support Center at 313-592-5800 or email csc@detroitdiesel.com if you have any questions.