



# Mack T-10

DE113313

## SPECIFICATIONS

This test is APS CI-4/CI-4 Plus and Mack EO-N Premium Plus 03.

## OBJECTIVE

This test evaluates an oils' ability to minimize cylinder liner, piston ring and bearing wear in engines with exhaust gas recirculation (EGR).

## FIELD SERVICE SIMULATED

Heavy-duty on-highway truck operations after 2002 are simulated.

## TEST FIXTURE

The test engine is a modified Mack E7 E-Tech 460 rated at 460 bhp and 1800 rpm, with EGR.

## TEST PARAMETERS

This is a 300 hour engine test. The first 75 hours are at rated speed and power to generate soot; then, the last 225 hours are over-fueled at peak torque rpm to maximize the wear rates on the rings and liner

## TEST PARTS EVALUATED

Piston ring wear, cylinder liner wear, lead content, oil consumption, and oxidation are evaluated.

## USED OIL ANALYSIS

Used oil analysis includes viscosity @ 100°C, soot, TBN, TAN, lead content, FTIR oxidation

## PASS/FAIL CRITERIA

Pass/fail criteria includes:

FTIR oxidation level, max: 250 Abs/cm<sup>2</sup> min

Oil consumption: 65 gms/HR max

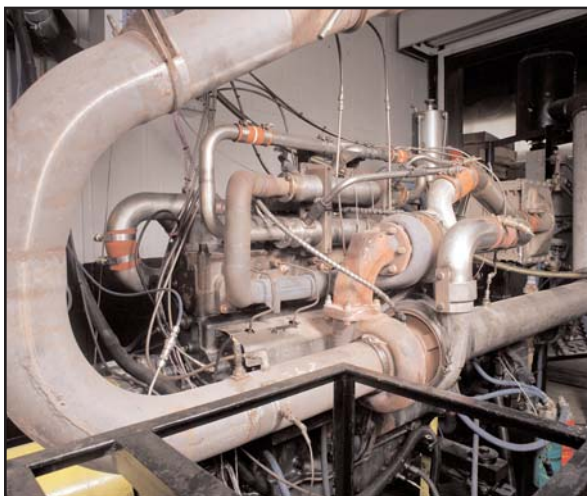
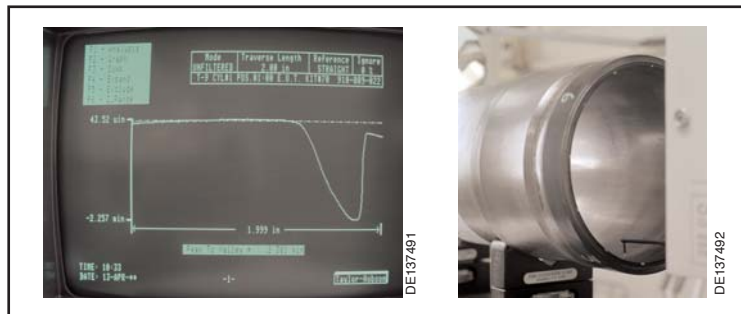
Ring weight loss: 158 mg max

Liner wear: 320 microns max

Used oil lead level: 35 ppm max

TAN: Report

Mack Merits: 1000 min



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