

ROLLS-ROYCE

AUTOMOTIVE DIESELS

STANDARD SPECIFICATION

TYPE Turbocharged 4-stroke, direct injection compression ignition engine

CYLINDERS 6 vertical in-line, liquid cooled

BORE 5.125 in. (130.175 mm.)

STROKE 6 in. (152.4 mm.)

CAPACITY 742.64 cu. in. (12.17 litres)

COMPRESSION RATIO 13.5:1

RATING

BS AU 141a: 1971, 305 h.p. (227.4 kw.) gross at 2100 r.p.m. (maximum torque 850 lbf.ft. (1156 Nm) at 1200 r.p.m. DIN 70020, 300 p.s. at 2100 r.p.m. (maximum torque 116.8 kgm. at 1200 rev/min.)

ROTATION Anti-clockwise, viewed on fly-wheel

FUEL SYSTEM Injection equipment includes feed pump with hand priming lever. Jerk-type injection pump, pressure lubricated with all speed governor, boost control device. Low inertia injectors

LUBRICATION SYSTEM Gear type oil pump. Oil cooler and full flow filters. Front or rear drop sump.

COOLING SYSTEM Centrifugal pump with thermostatically controlled flow. Cab heater connections

FLYWHEEL To suit automotive clutches

FLYWHEEL HOUSING No. 1 S.A.E.

TURBOCHARGER Inward flow turbine, pressure lubricated, rear or centre mounted

INDUCTION SYSTEM Manifold with tuned port length

EXHAUST Horizontal outlet from turbocharger

FAN 26 in. (660 mm.) diameter, puller

STARTER 24 volt electric

ALTERNATOR 24 volt, 720 watt

CONNECTIONS for lubricating oil pressure, coolant temperature and tachometer

AIR COMPRESSOR Gear driven, flange mounted 15 cu.ft./min. (0.42m³/min.) nominal capacity

NET DRY WEIGHT 2508 lb. (1137 kg.) approx.

OPTIONAL EQUIPMENT

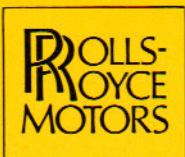
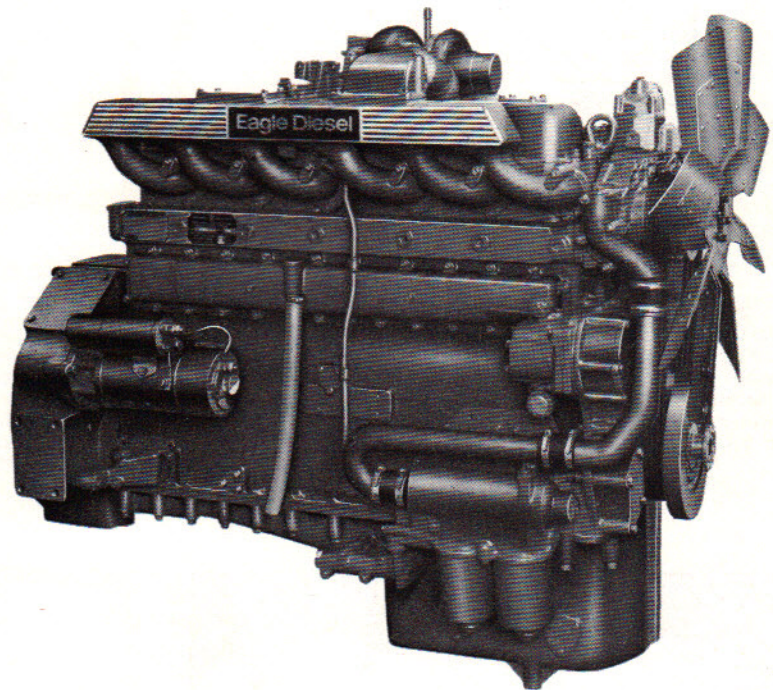
HYDRAULIC STEERING PUMP

ALTERNATOR CONTROL BOARD, supplied loose

EXHAUST BRAKES

CROSSOVER CONTROLS

Eagle 305 Mk III Diesel Engine



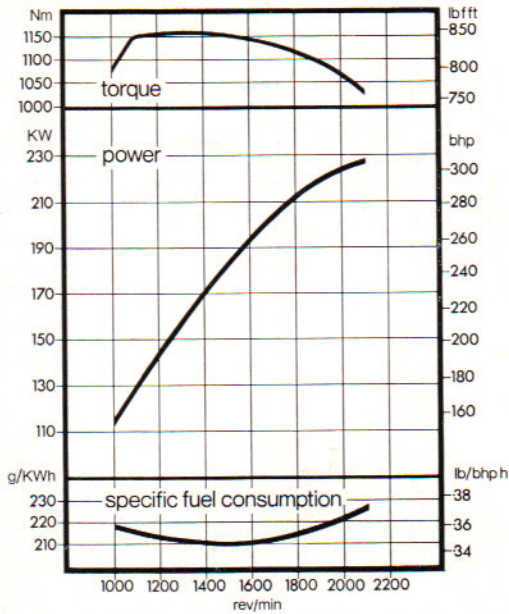
Diesel Division

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ROLLS-ROYCE

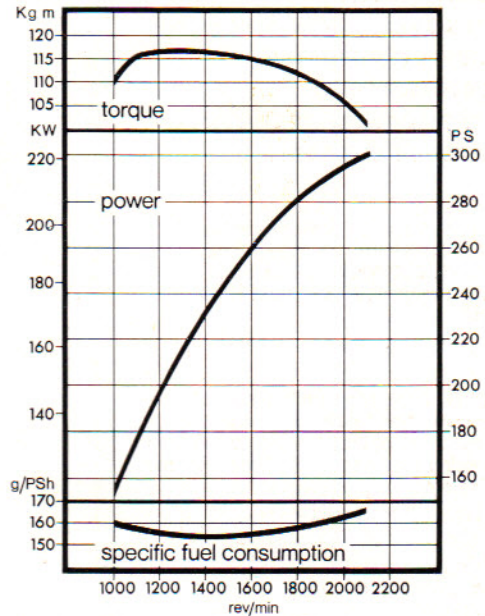
EAGLE 305 Mk III



BS AU 141a : 1971 POWER CURVE

Test Conditions :

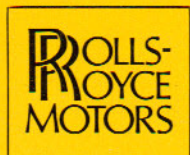
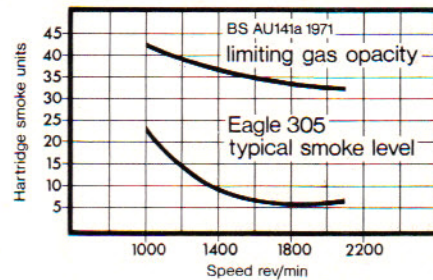
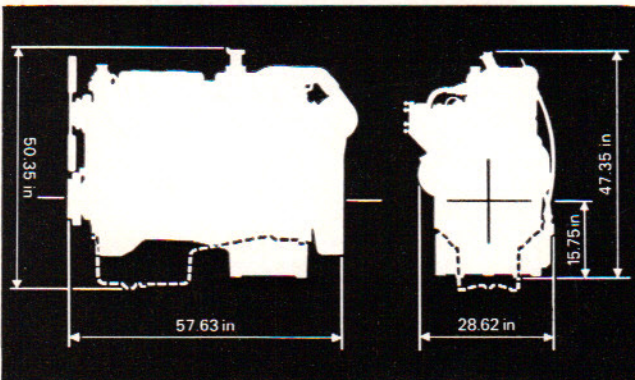
Air inlet restriction at maximum power 10" (254mm) H₂O
 Exhaust back pressure at maximum power 2" (51mm) Hg
 Barometric pressure 760mm Hg (101.5 kN/m²)
 Air temperature 20°C
 Alternator and air compressor in unloaded condition
 Fuel to BS.2869 Class A1



DIN 70020 POWER CURVE

Vehicle Installed Condition :

Air inlet restriction at maximum power 10" (254mm) H₂O
 Exhaust back pressure at maximum power 2" (51mm) Hg
 Barometric pressure 760mm Hg (101.5 kN/m²)
 Air temperature 20°C
 26" (660mm) fan at 1.07 x engine speed
 Alternator and air compressor in unloaded condition
 Fuel to BS.2869 Class A1



Diesel Division

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DIESEL DIVISION
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