

# OPERATING MANUAL

## SPECIFICATIONS:

Displacement 2180 cc

Bore 92 mm

Stroke 82 mm

Compression Ratio 7.8 to 1

Bearing Sizes:

Rod STD

Main STD

Fuel Requirement 91 Octane Min.

Reduction Drive Ratio \_\_\_\_\_

## TORQUE SPECIFICATIONS:

Engine Case Nuts:

Large .....30 ft. lbs.

Small .....15 ft. lbs.

Cylinder Head Nuts:

8mm .....18 ft. lbs.

10mm .....23 ft. lbs.

Rocker Arm Nuts .....15 ft. lbs.

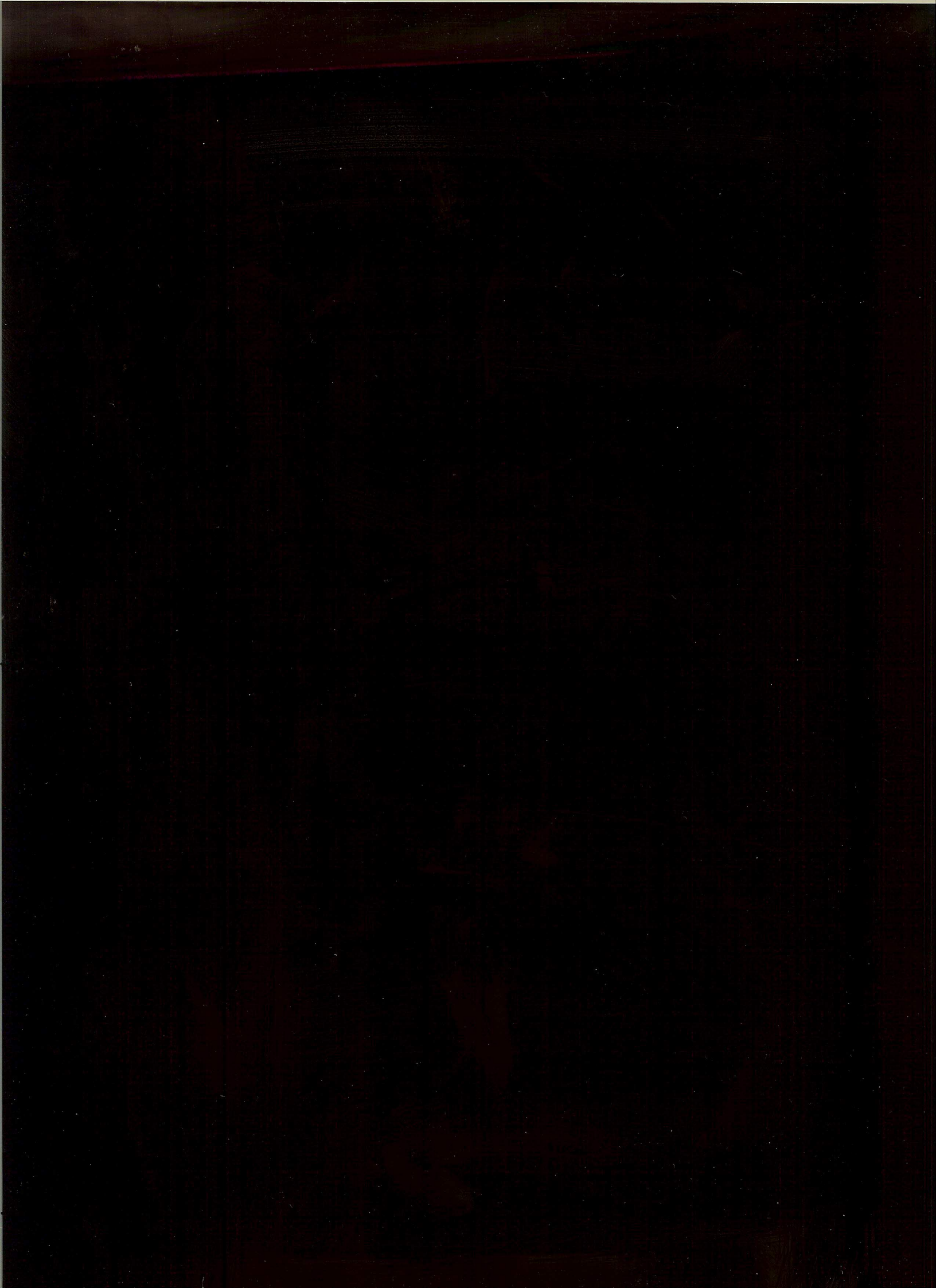
Connecting Rod Nuts .....25 ft. lbs.

## TIMING SPECIFICATIONS:

26 Degrees BTC

Valve Clearance - .005 intake

Valve Clearance - .007 exhaust



**ASSEMBLY INSTRUCTIONS:**

**MAGNETO:**

Rotate engine until number one (1) cylinder is on top dead center (TDC). Impulse mag until number one (1) wire fires. Red mark on mag should align with red mark on mag drive. Align chisel mark on mag with chisel mark on back plate. This is the correct timing.

**INTAKE MANIFOLD:**

Slip 90-degree pipes onto intake "Y", then slip 90-degree elbows onto cylinder head. Tighten all hose clamps. Intake "Y" bolts to two bolts in accessory case.

**NORMAL ENGINE OPERATING LIMITATIONS:**

Cruise R.P.M.....	2800 to 3200 R.P.M.
Maximum R.P.M. ....	3600 R.P.M.
Minimum Oil Temperature .....	160 degrees F.
Maximum Oil Temperature .....	230 degrees F.
Minimum Oil Pressure at Cruise.....	23 P.S.I.
Maximum Oil Pressure at Cruise.....	70 P.S.I.
Cylinder Head Temperature at Cruise .....	350 to 375 degrees F.
Maximum Cylinder Head Temperature .....	450 degrees F.
Exhaust Gas Temperature at Cruise.....	1250 degrees F.
Maximum Gas Temperature .....	1400 degrees F.

