



# INSTRUCTIONS

-J00699

REV. 10-9-96

Kit Numbers 22155-88R, 22286-86RA, and 22289-86RA

## XR-750 PISTON

### General

This instruction sheet covers the following pistons:

PART NO.	SIZE	DIAMETER
22155-88R	Standard	3.1202 in.
22286-86RA	0.010 in. OS	3.1302 in.
22289-86RA	0.040 in. OS	3.1598 in.

("OS" indicates "oversize" piston)

These pistons are designed for installation in XR-750 engines only.

### Installation

#### CYLINDER LENGTH

#### CAUTION

See illustration. Cylinder length must be as shown for best results and to avoid engine damage. Also, check clearance between piston dome and cylinder head, and clearance between piston and valves before running engine.

1. Measure cylinder length, including thickness of cylinder base gasket and shims, if used.
2. If length is greater than 4.068 in., machine cylinder surface which mates with crankcase to obtain proper length.

#### CAUTION

If cylinders are shortened, make certain that bottom of cylinder liners do not touch each other when installed in crankcase. If cylinder liners touch, machine bottom of cylinder liners to obtain adequate clearance.

3. If cylinder length is less than 4.068 in., the following shims may be used to increase cylinder length:

PART NO.	THICKNESS
16571-77R	0.010 in.
16572-77R	0.015 in.

### PISTON-TO-CYLINDER CLEARANCE

The recommended piston-to-cylinder clearance is 0.004 in., with a break-in period of 30 miles. If time does not permit break-in, increase clearance to 0.0045 - 0.0050 in. Piston sizes/diameters are listed in the **GENERAL** Section above.

### CLEARANCE CHECKS (Piston-to-Head and Valves)

Before running engine, check clearances as follows:

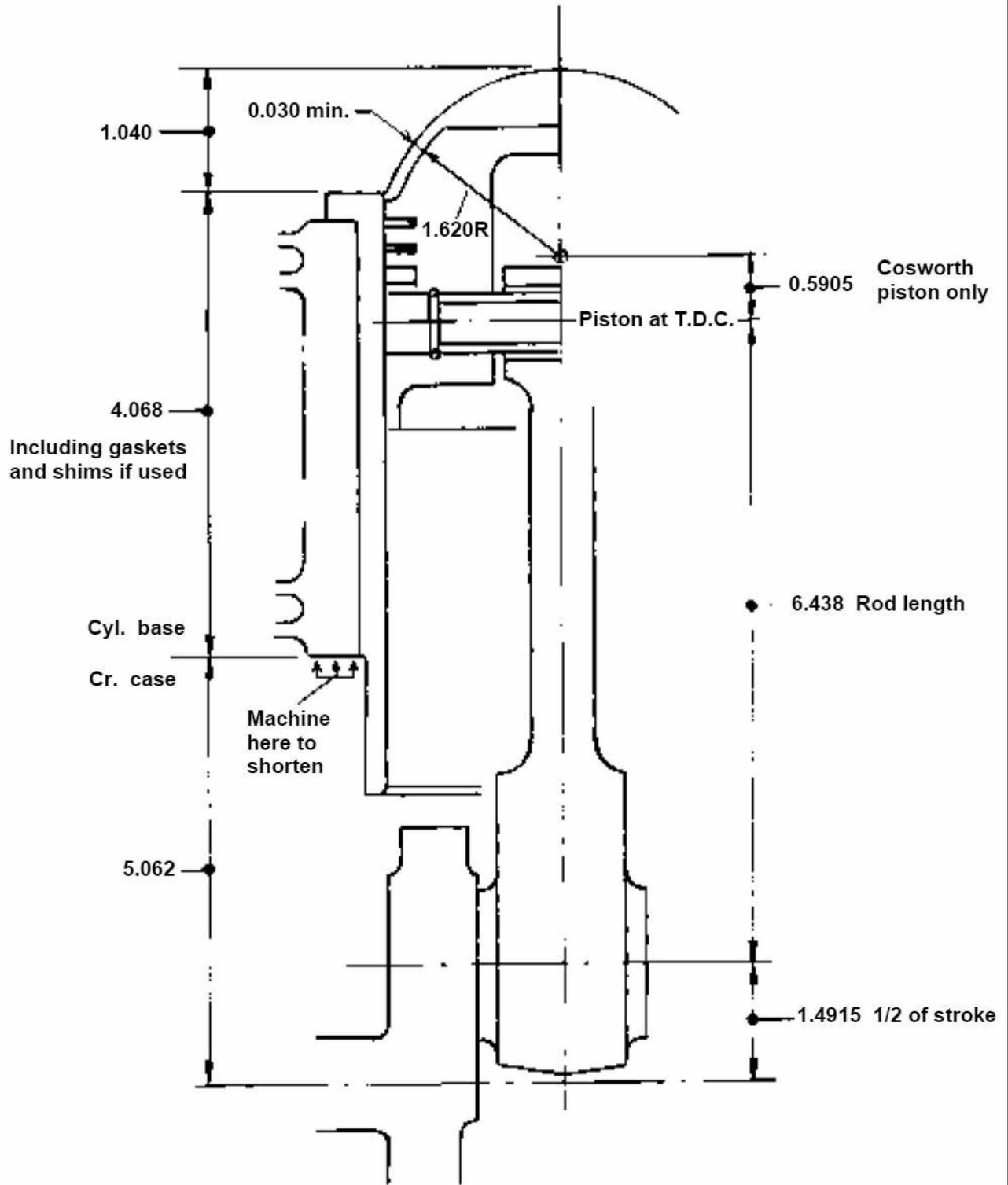
1. Place strips of modeling clay on piston dome and in valve cutouts of pistons.
2. Install cylinder heads; set valve lash at cold clearance as specified for camshafts being used. Both inner and outer valve springs must be installed.
3. Turn engine through two complete revolutions.
4. Remove cylinder heads; check thickness of compressed modeling clay to ensure that the following minimum clearances exist:

CLEARANCE TO BE MEASURED	MINIMUM CLEARANCE
Piston dome-to-head	0.030 in.
Piston-to-intake valve	0.050 in.
Piston-to-exhaust valve	0.060 in.

5. If minimum clearances are not present, add gasket shims under cylinder to correct.

#### NOTE

Best results are obtained with minimum (0.030 in.) clearance between piston dome and head. Try not to exceed 0.040 in. clearance.



All dimensions listed are in inches and are the mean sizes. Tolerances are not listed. It is possible that a longer or shorter cylinder length is required.

XR-750 Piston and Cylinder