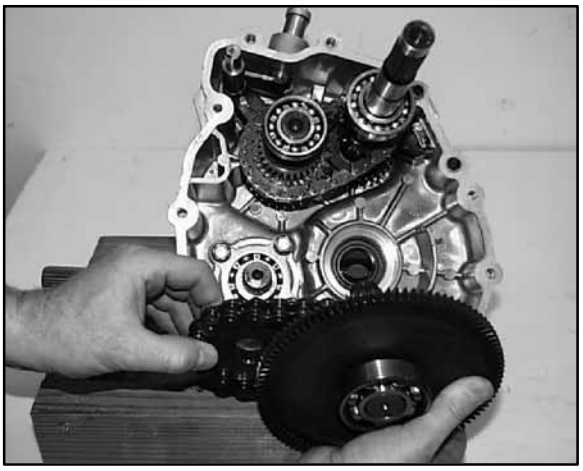
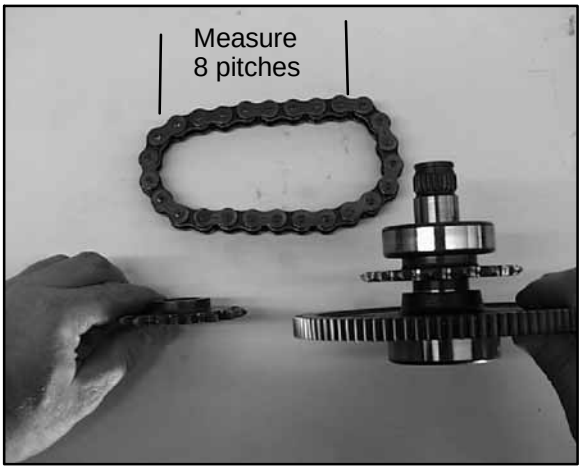
7. Remove output shaft and gear assembly along with sprocket and chain, by tapping on shaft with a soft faced hammer, from the back side of the gear case.



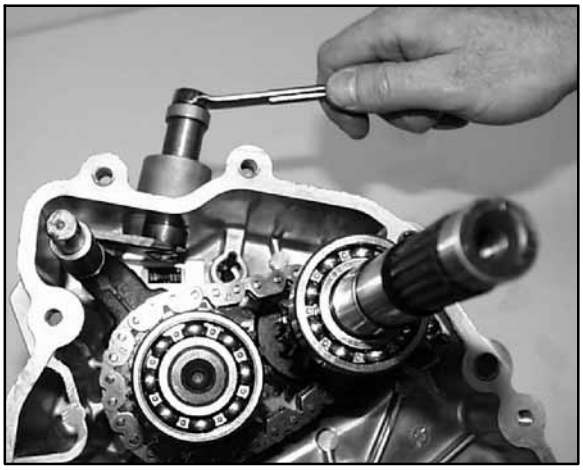
8. Remove roller chain. Note position of sprockets and gear. Stretch chain tight on a flat surface and measure the length of 8 pitches in a minimum of three places on chain. Replace chain if measurement is longer than 5.05" (128.27 mm).



Chain Stretch Limit

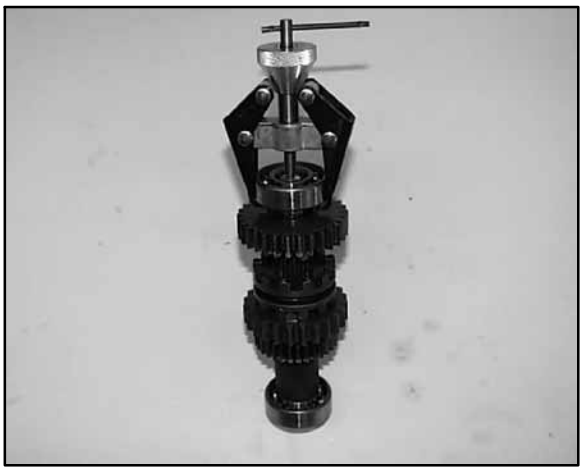
8 pitch length =
5.05" (128.27 mm) Maximum

9. Use a 1/2″ wrench to rotate bell crank and remove shift fork, upper shaft assembly, reverse chain and shaft.

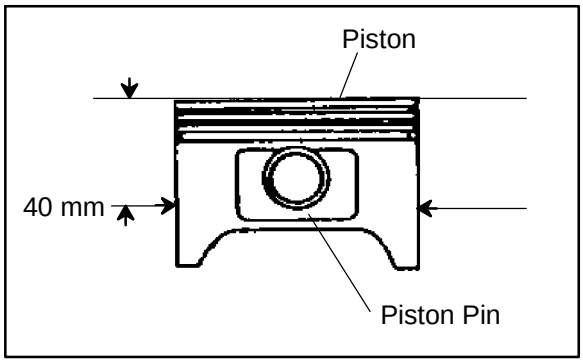


10. Inspect shift fork surface for wear or damage. Replace if necessay.

11. Remove reverse shaft bearing.



PISTON-TO-CYLINDER CLEARANCE



1. Measure piston outside diameter at a point 40 mm down from the top of the piston at a right angle to the direction of the piston pin.
2. Subtract this measurement from the maximum cylinder measurement obtained in Step 5 above.

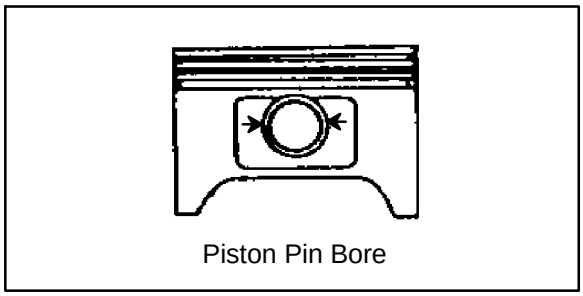
Piston to Cylinder Clearance

Std: .0006-.0018 (.015-.045 mm)

Piston O.D.:

Std: 3.6204-3.6215 (91.970-91.985 mm)

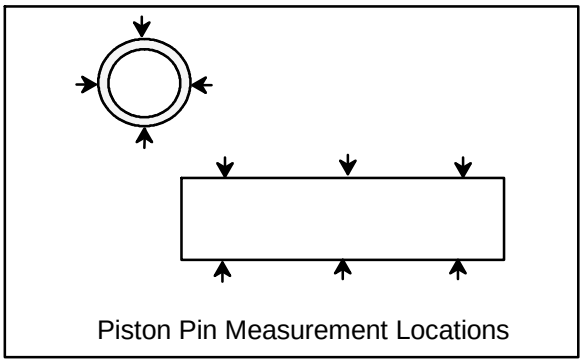
PISTON/ROD INSPECTION


Piston Pin Bore

Piston Pin Bore:

.9055-.9057 (23.0-23.006 mm)

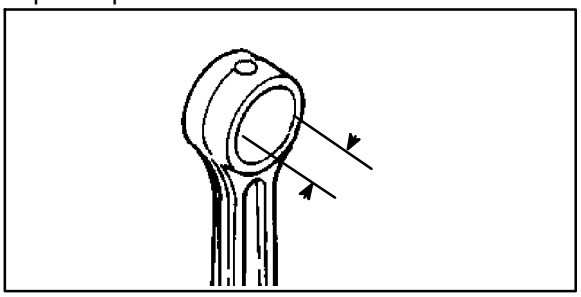
1. Measure piston pin bore.


Piston Pin Measurement Locations

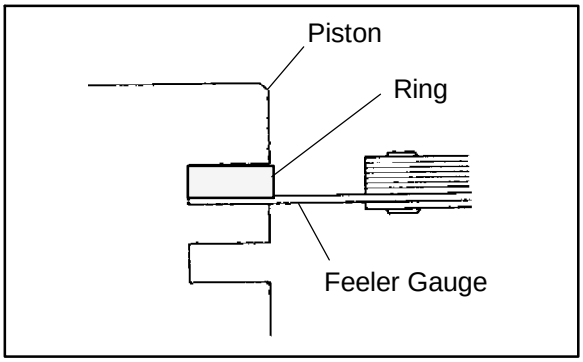
Piston Pin O.D.

.9053-.9055 (22.994-23.0 mm)

2. Measure piston pin O.D. Replace piston and/or piston pin if out of tolerance.



3. Measure connecting rod small end ID.



Piston Ring-to-Groove Clearance

Top Ring Std: .0016-.0031 (.040-.080 mm)
Limit: .0059 (15 mm)
Second Ring Std: .0012-.0028 (.030-.070 mm)
Limit: .0059 (15 mm)

4. Measure piston ring to groove clearance by placing the ring in the ring land and measuring with a thickness gauge. Replace piston and rings if ring-to-groove clearance exceeds service limits.