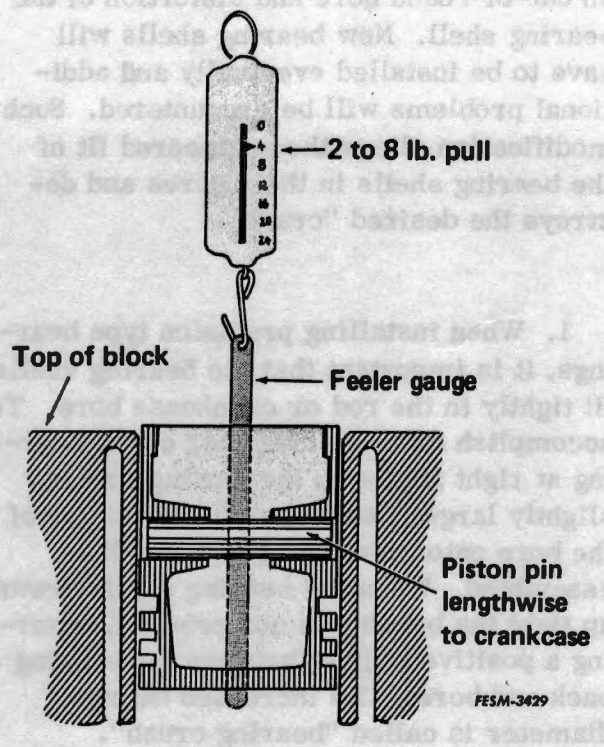
Piston Fit in Bore

Specified piston-to-bore clearance is .0016 to .0024 inch and can be determined using a 1/2 inch wide feeler gauge and a spring-type tension scale (FES 108).

The thickness of the feeler gauge that can be removed with a 2 to 8 pound pull represents the piston-to-bore clearance as outlined in the "Piston Clearance Chart." Clearances should conform to specifications.



PISTON CLEARANCE CHART

Pull in Lbs.	Feeler Gauge Thickness					
	.0015	.002	.003	.0035	.004	.0045
	Clearance in Inches					
2	.0016	.0022	.0033	.0039	.0044	.005
4	.0013	.0018	.0029	.0035	.004	.0046
6	.001	.0015	.0026	.0031	.0036	.0042
8	.0008	.0013	.0023	.0028	.0033	.0038

The chart shows the relationship between the feeler gauge thickness and pounds pull in measuring piston-to-bore clearance. Note that with a given feeler gauge thickness the actual clearance is less than the feeler gauge used when the pound pull is towards the high side of the pound pull range. This is especially true with the thinner feeler gauges.

To determine piston-to-bore clearance proceed as follows:

1. Select a feeler gauge (free of dents or burrs) of one of the thicknesses listed in the chart. Position the feeler gauge in the cylinder bore so that it extends the entire length of the piston 90° from the piston pin location.

2. Invert the piston and install it in the bore so that the end of the piston is about 1-1/2 inches below the top of the cylinder block and the piston pin is parallel to the crankshaft axis.

3. Hold the piston and slowly pull the scale in a straight line with the feeler gauge, noting the pull required to remove the feeler gauge. Check three times and record the average of the three readings obtained. Do not bend or kink the feeler gauge.

4. Refer to the chart to determine the actual clearance. The clearance is shown where the horizontal column indicating pounds pull and the vertical column indicating the thickness of the feeler gauge used intersect.

EXAMPLE: If a .003 inch feeler gauge is used and it takes 8 pounds pull to remove the feeler gauge, the clearance is .0023 inch.