

Duragauge® Pressure Gauge

DU/PI-61C

DURAGAUGE MOVEMENT REPAIR

This is the third in a series of Product Information Pages dedicated to the new design riveted pillar Duragauge movement. In concert with this product improvement, we are taking the opportunity to restate Ashcroft's long-standing policy relative to the inadvisability of repairing gauge movements.

We all know a gauge user will occasionally disassemble a movement, which showed signs of wear and replace some of the parts. That was easy to do with the old screwed on top plate, but it is impossible to do with the new riveted assembly.

Replacing a worn pinion or segment of a gauge movement will not necessarily make that movement as good as new. Our experience has repeatedly shown that if either the pinion or the segment is worn to the point where it is no longer usable, then the bearings on the pinion and segment shaft¹ and the bearing holes in the top and bottom plate, are most likely worn. Even slight wear in the bearing area will result in increased center distance and greatly accelerated subsequent wear. If the movement is worn, the link and link screws are probably also worn and should be replaced at the same time. A movement, therefore, which has been subjected to vibration or pulsation, and then repaired by replacing a pinion and segment, will most likely subsequently fail after a short time.

In addition, from time to time, minor changes are made in the parts of the movement which might cause non-interchangeability with older parts. In our factory, we can control and balance stock so that this non-interchangeability is not a problem, but in the field, there is no way to identify the specific design of a component or judge whether a new part will operate correctly – even if the assembly appears to be all right, it may fail quickly because of a dimensional or form difference.

In summary, we have always recommended and continue to recommend, that rebuilding and repairing movements should be not considered but that the complete movement and linkage should be replaced, with a new Ashcroft movement.