

MODELS 2450 AND 2451 DEAD WEIGHT GAGE

WEIGHT-LOADING TABLE SUBASSEMBLY

Instructions for Reassembly

Note: These instructions are valid for Models 2450 and 2451 Dead Weight Gages having serial numbers higher than, and including No. 16092.

In the Models 2450 and 2451, the stops that limit the axial movement of the piston are located in the weight-loading table subassembly. In this position, the stops may be made stronger than those which are usually attached to the measuring piston. The piston is afforded virtually complete protection from a shock which is transmitted through the weight table assembly.

The elements that make up the weight table subassembly are keyed together in order that their correct relative alignment will be assured. When it is found necessary to disassemble the unit, as on the occasion of periodic re-determination of the mass, the reassembly should be undertaken with care that the alignment keys are properly positioned. If the reassembly is completed according to the instructions which follow, there should be little question about the success of the operation.

Assembly Procedure

Assuming the parts have been thoroughly cleaned with a volatile degreasing solvent and that the mass has been determined, proceed as indicated while referring to the diagram for part numbers and nomenclature. The parts should be handled by whatever means is convenient that will avoid transferring fingerprints to the surfaces. Industrial paper wipers are satisfactory.

1. Invert the table (2450-008) on a clean piece of paper.
2. Place the retaining nut (2450-002-11) in position over the neck of the table.
3. Place the collar (2450-002-6) on the face of the table neck while guiding the small pin into the blind hole in the collar.
4. Insert the table support (2400-002-9) through the collar and into the bore of the table. Rotate the table support until the keyway is in alignment with the key of the table. When in this position, the table support may be inserted to its full depth. The pins and keys are small and may be easily damaged; do not use force.

5. Pick up the entire assembly and hold it in a horizontal position. The assembly can be held in one hand with one finger (insulated with a wiper) pressing the table support firmly in position. With the other hand, move the retaining nut so that the junction of the collar and the neck of the table may be inspected through the breather hole in the retaining nut. If the parts are not properly seated, repeat operations 1 through 4. If they are seated, insert the retaining screw (2450-002-7) and tighten it, at first, only slightly. As the screw is tightened, it should pull up abruptly. If there is a soft or spongy feeling in the tightening action of the screw, the small pin may have slipped out of the hole in the collar.

Reinspect the junction through the breather hole in the retaining nut or repeat the whole operation. When the screw is felt to tighten firmly without softness, pull the screw up tight.