

TEST METHOD OF STRETCH AND SET OF TEXTILES AND PLASTICS

Foreword—This reaffirmed document has been changed only to reflect the new SAE Technical Standards Board format.

1. **Scope**—This method of test applies to the measurement of elastic and recovery properties of materials after being subjected to a low-static load.
2. **References**—There are no referenced publications specified herein.
3. **Apparatus Required**
 - 3.1 **Fixtures**—Either of the fixtures shown in Figures 1 and 2 is satisfactory for this test. The fixture shown with the vise grip clamps is preferred because of its speed and ease of operation. (See also Figure 3.)
 - 3.2 **Weight**—A weight is attached to the clamp on the suspended end of the test specimen. The clamp and the weight together shall total 12.25 kg (27 lb) unless otherwise specified.
4. **Test Specimens**—At 21 °C ± 1 °C (70 °F ± 2 °F) and 50% ± 5% relative humidity, cut three test specimens 76 mm x 229 mm (3 in x 9 in) (or as specified) each in both the warp and fill directions. The warp stretch and set is measured on the samples with the long dimension parallel to the warp yarns and the fill stretch, and set is measured on the samples with the long dimension parallel to the filling yarns. In nondirectional materials such as unsupported or nonwoven backed vinyl, one set of samples should have the long dimension cut in the machine direction of the roll, while the other set should be cut in the opposite or cross-machine direction. For woven fabrics such as bodycloth, sidewall, or headlining, the samples should be cut slightly oversized and the yarns unraveled on each side until the 76 mm (3 in) dimension is attained.

Unless otherwise specified, samples shall be taken no nearer the selvage edge than one tenth the width of the material or nearer than 305 mm (12 in) from either end of the roll.

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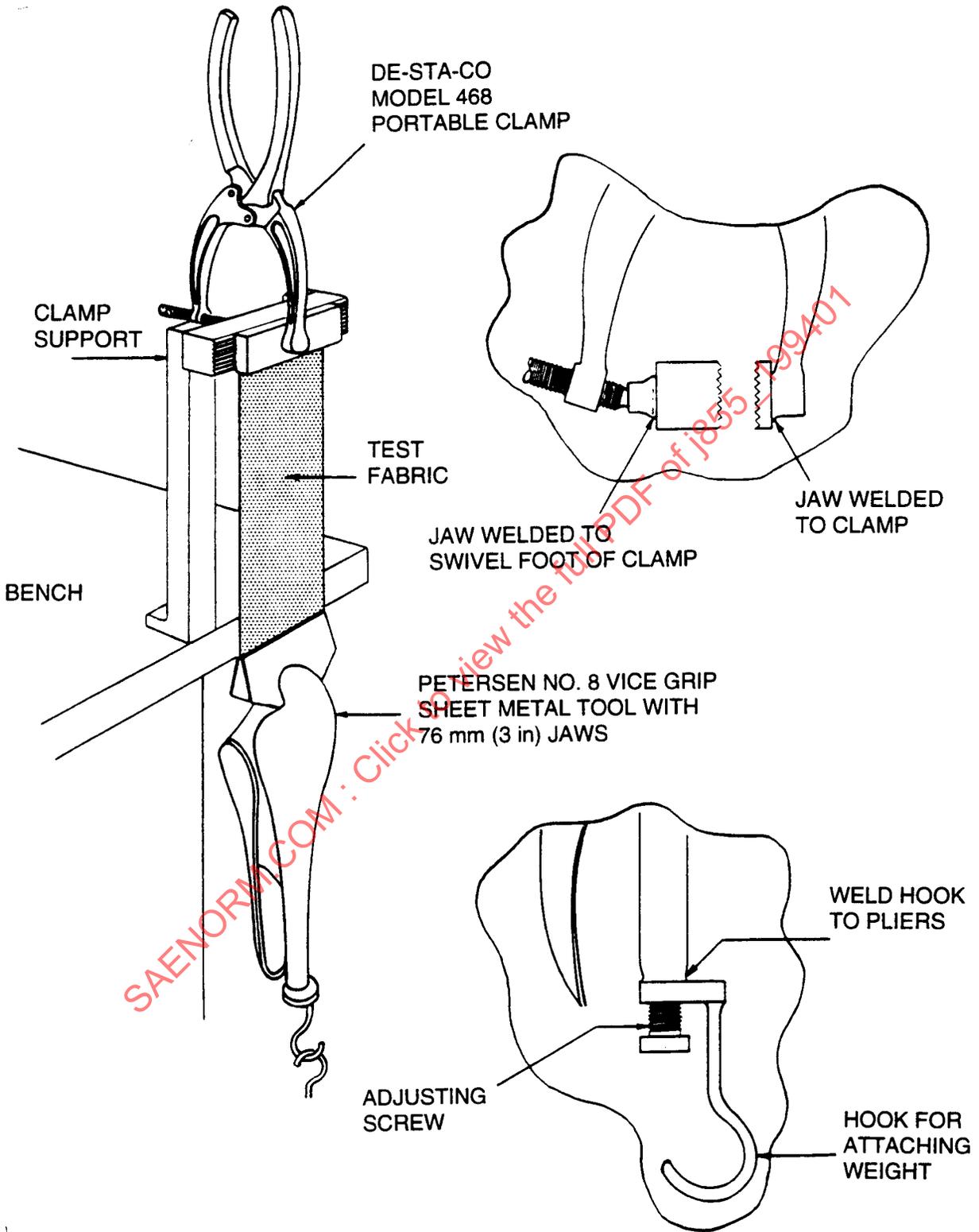


FIGURE 1—CLAMP AND FIXTURE ASSEMBLY FOR STRETCH AND SET OF TEXTILES

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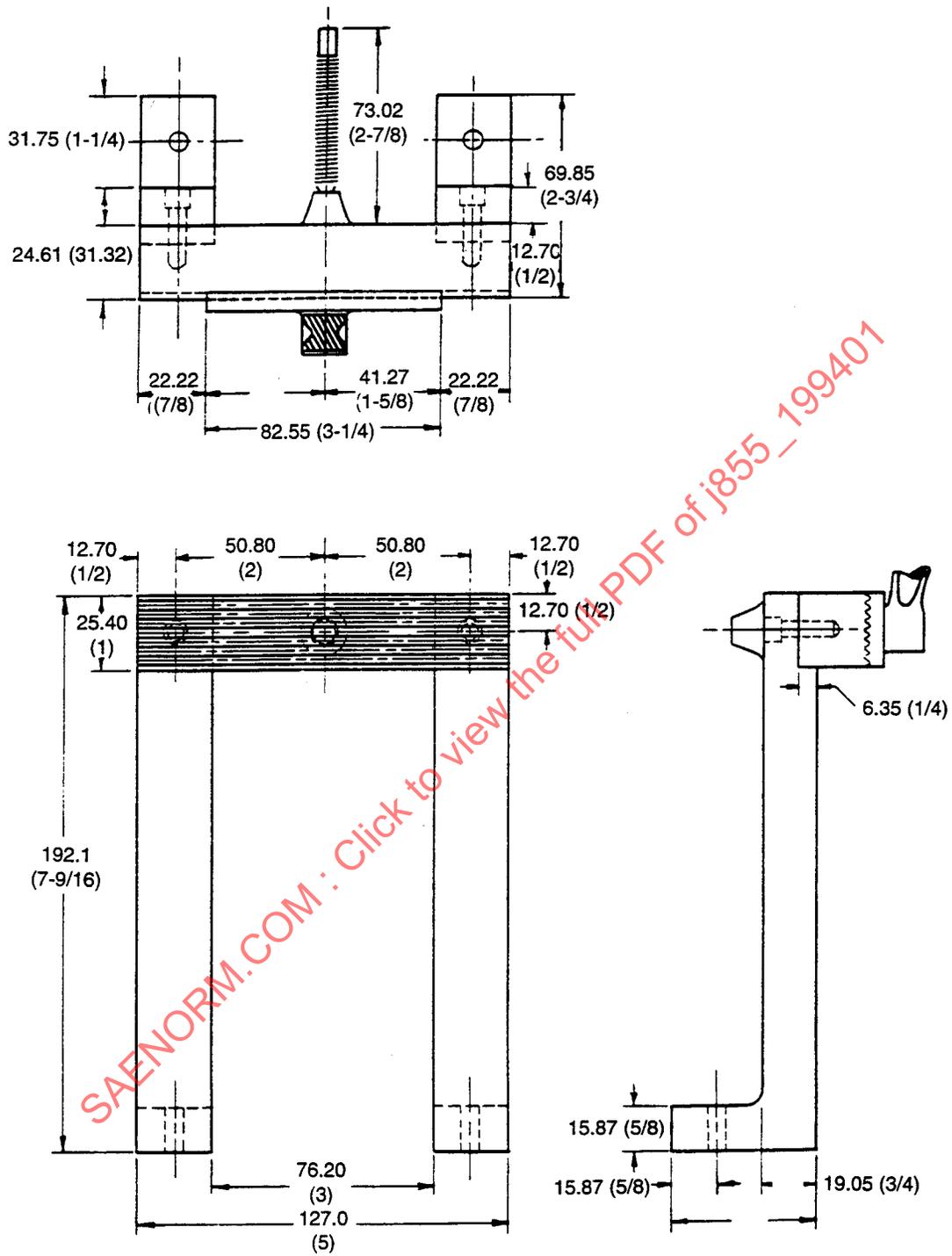


FIGURE 2—STRETCH AND SET APPARATUS

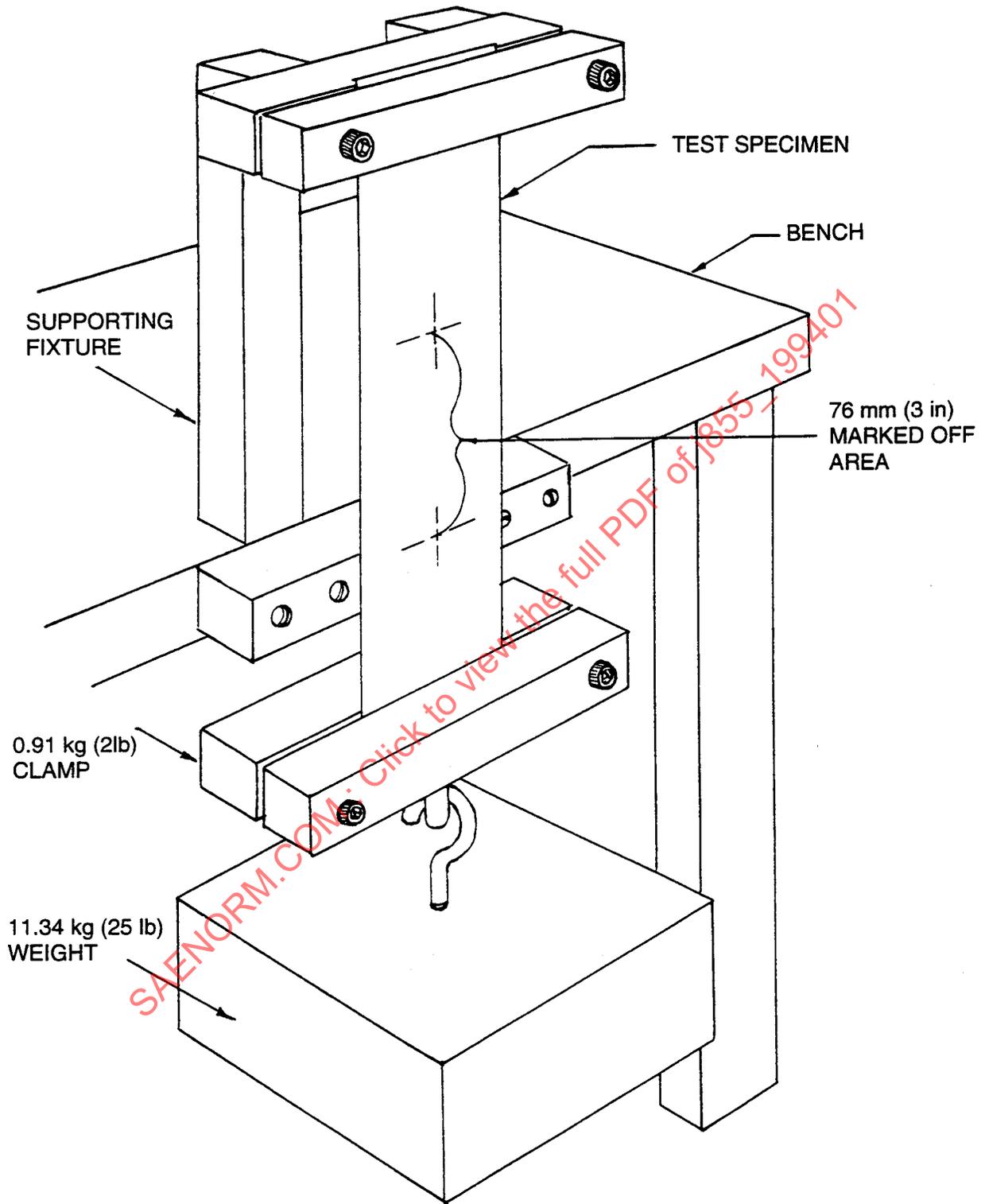


FIGURE 3—DETAIL OF CLAMP SUPPORT