

# **\*TB 9-4940-250-35**

**SUPERSEDED COPY DATED 19 OCTOBER 1973**

**DEPARTMENT OF THE ARMY TECHNICAL BULLETIN**

## **CALIBRATION PROCEDURE FOR HYDRAULIC ACTUATOR TEST STAND, BARKLEY AND DEXTER, MODEL BDL 812121**

Headquarters, Department of the Army, Washington, DC

1 May 1987

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\*This bulletin supersedes TB 9-4940-250-50, 19 October 1973, including all changes.

## SECTION I IDENTIFICATION AND DESCRIPTION

**1. Test Instrument Identification.** This bulletin provides instructions for the calibration of Hydraulic Actuator Test Stand, Barkley and Dexter, Model BDL 812121. TM 9-4940-403-14 &P was used as the prime data source in compiling these instructions. The equipment being calibrated will be referred to as the TI (test instrument) throughout this bulletin.

**a. Model Variations.** None.

**b. Time and Technique.** The time required for this calibration is approximately 3 hours, using the dc and low frequency and physical technique.

**2. Forms, Records, and Reports.** Forms, records, and reports required for calibration personnel at all levels are prescribed by TB 750-25.

**3. Calibration Description** TI parameters and performance specifications which pertain to this calibration are listed in table 1.

Table 1. Calibration Description

| Test instrument parameters | Performance specifications                                  |
|----------------------------|-------------------------------------------------------------|
| Power requirement          | 120 V ac, $\pm 10\%$ ; 60 Hz; 10 A                          |
| Current                    | Range: 0 to 1 A<br>Accuracy: $\pm 3\%$ of FS                |
| Pressure                   | Range: 0 to 400 psi<br>Accuracy: $\pm 3\%$ FS               |
| Flow                       | Range: 0 to 1.7 gpm approximately<br>Accuracy: $\pm 3\%$ FS |
| Voltage                    | Range: 0 to 60 V ac<br>Accuracy: $\pm 3\%$ FS               |

## SECTION II EQUIPMENT REQUIREMENTS

**4. Equipment Required.** Table 2 identifies the specific equipment to be used in this calibration procedure. This equipment is issued with Secondary, Transfer Calibration Standards Set AN/GSM-287. Alternate items may be used by the calibrating activity when the equipment listed in table 2 is not available. The items selected must be verified to perform satisfactorily prior to use and must bear evidence of current calibration. The equipment must meet or exceed the minimum use specifications listed in table 2. The accuracies listed in table 2 provide a four-to-one ratio between the standard and TI.

**5. Accessories Required.** The accessories listed in table 3 are issued as indicated in paragraph 4 and are used in this calibration procedure. When necessary, these items may be substituted by equivalent items, unless specifically prohibited.