

EW A 411

CALIBRATION INSTRUCTIONS

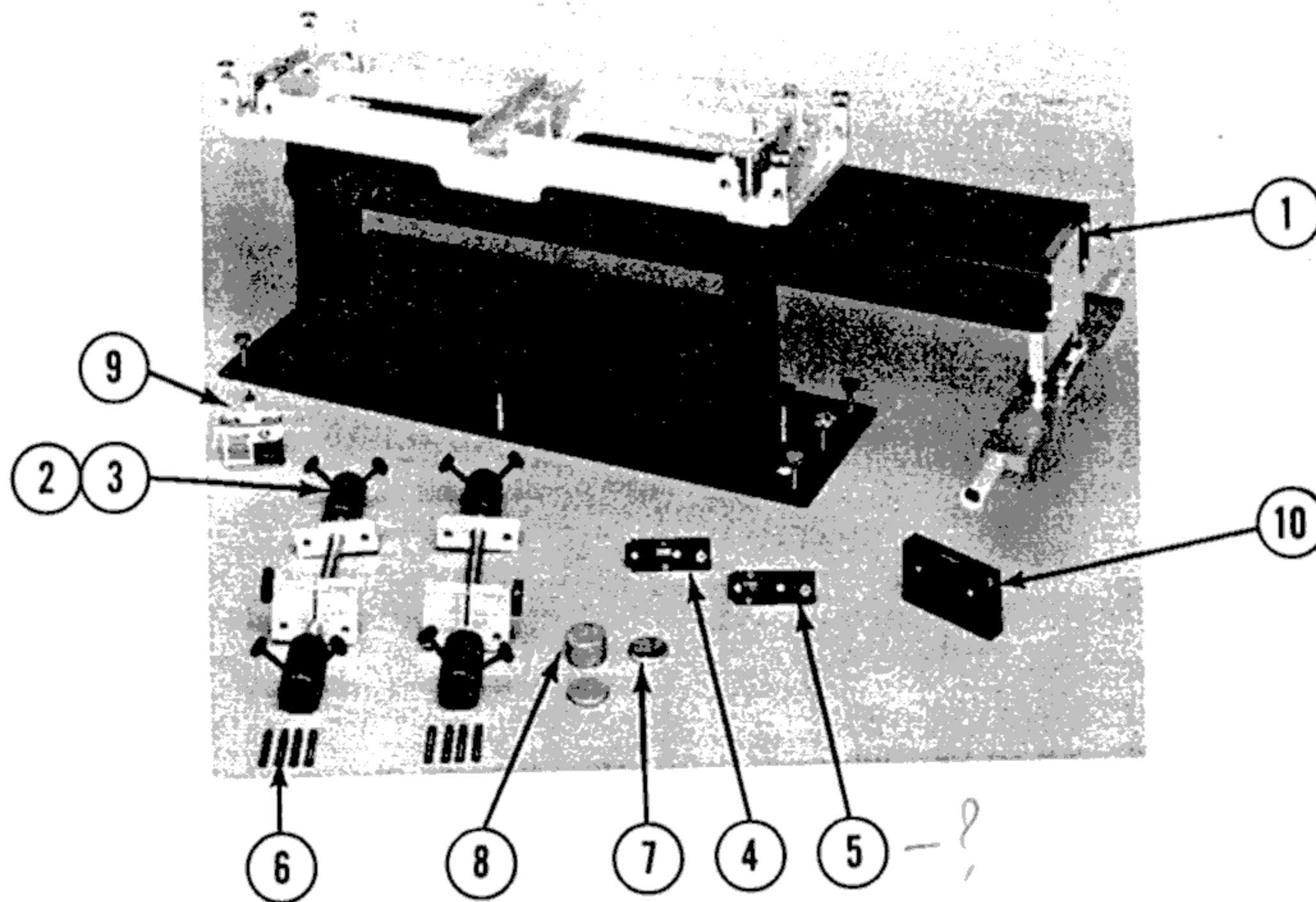
DSP100/DSP200 SENSORS

optical wheel aligners

with 111 series aligners

HUNTER
Engineering Company

Calibration Fixture and Kit Components



ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	221-518-1	Calibration Fixture (<i>modified</i>) *
2	1	97-289-1	Left Calibration Shaft Assembly
3	1	97-290-1	Right Calibration Shaft Assembly
4	1	163-73-1	Prism Lens (A-B)
5	1	163-74-1	Prism Lens (C-D)
6	8	135-13-2	Dowel Pin
7	2	121-72-2	Camber Spacer **
8	1	121-71-2	Caster Spacer **
9	1	148-20-2	Lubricant **
10	1	221-141-2	Level **

* If the calibration fixture does not resemble the above photo use calibration kit 20-868-1 for modification.

** Parts of calibration fixture kit 221-158-1 necessary for calibrating the DSP-100 sensors.

General Information

Calibration must be completed prior to operation of the sensors. Failure to successfully complete the calibration procedure will inhibit all of the alignment functions of the system.

The calibration data for the sensors is stored in the sensors. Replacement of the circuit board that stores this information will require recalibration.

Sensors are calibrated in sets and the sensors must be kept in sets. For example, the front sensors of one set cannot be used with the rear sensors of another set unless "zero" calibration is performed on the new set.

A calibrated set of DSP 100 sensors can be used with an H111, J111, K111, L111 or M111 console.

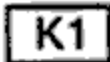
CAUTION

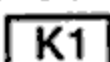
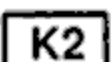
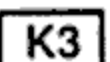
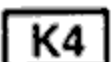
The prisms used for calibrating optical sensors must be kept clean to avoid inaccurate calibration. A fingerprint, a piece of dirt, or a coating of dust may result in inaccurate calibration. Use an ammonia based glass cleaner with a CLEAN soft tissue or cotton swab to clean the prisms. Clean the prisms before every use.

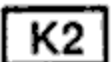
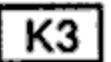
The calibration procedures must be followed carefully. Accurate calibration will not be obtained if the procedure is rushed.

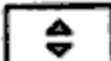
Using "Softkeys"

The softkey pad located below the CRT provides operator control of the aligner. These softkeys are identified as follows:

- | | |
|---|--------------------|
|  | K1 softkey |
|  | K2 softkey |
|  | K3 softkey |
|  | K4 softkey |
|  | Menu shift softkey |

Four labels that appear at the bottom of each CRT display are referred to as the softkey labels. These labels indicate the operation that the unit will perform when the corresponding  ,  ,  or  softkey is pressed.

The green squares between  and  labels indicate how many levels of menus are available. There may be up to five levels of menus. The larger green square indicates level of the menu currently displayed.

The menu level is changed by pressing the menu shift softkey,  . When this softkey is pressed, the menu labels will change to the next level down. If the last menu level is currently displayed, the next step will be to the first menu level.

Throughout this manual, the statement **Press "Softkey Name"** indicates the label above the softkey to press. If the required label is not on the current menu, the menu shift softkey must be pressed to change menu levels until the desired softkey is found.

Preparing The Calibration Fixture

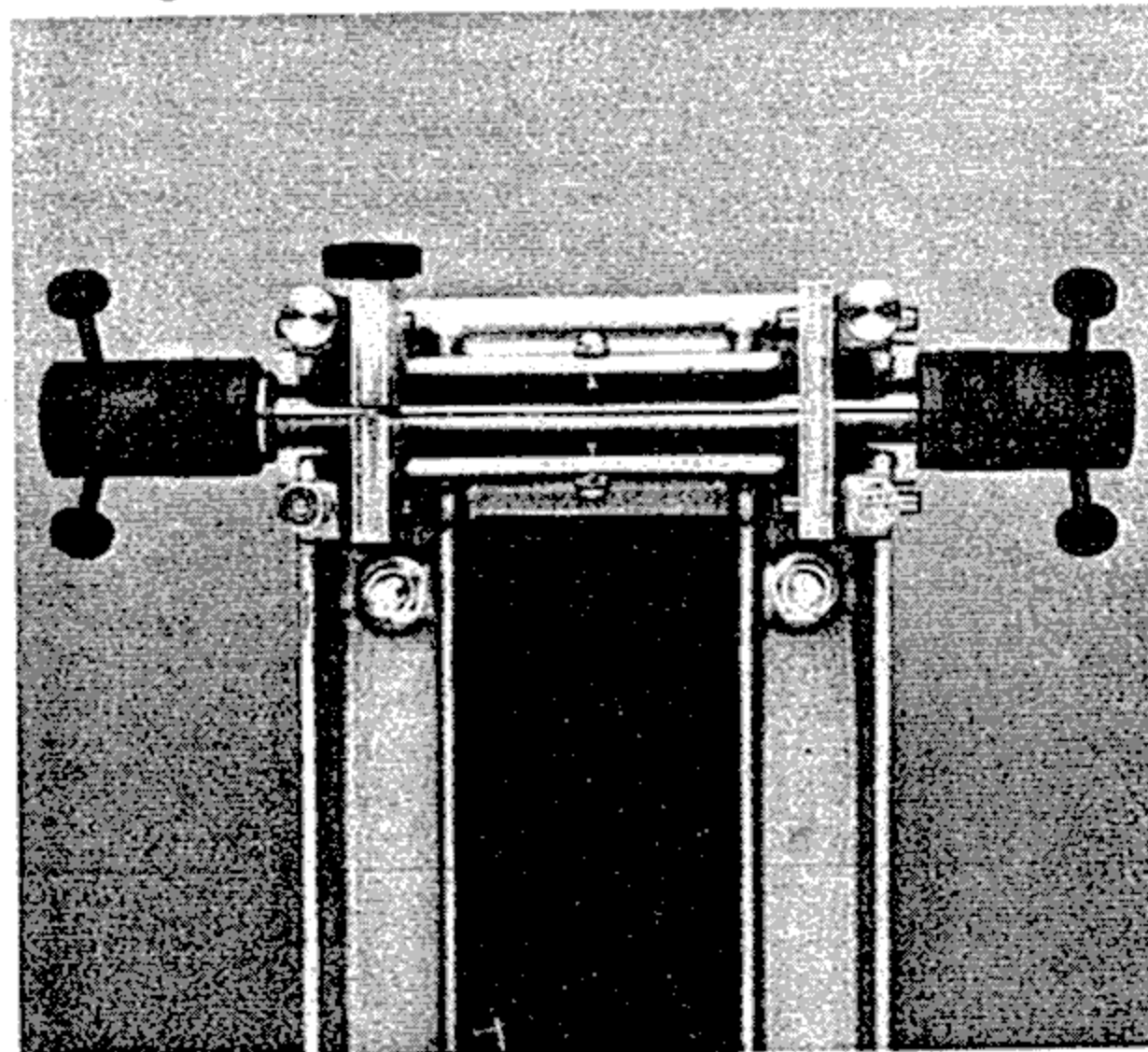
Modify the calibration fixture for the sensors that are to be calibrated. Refer to *Modification Instructions For Calibration Fixture*, form 3678T.

The calibration fixture must be placed on a reasonably level, smooth, solid, stable surface throughout the calibration procedure. A section of the runway of the lift rack is recommended.

CAUTION

Failure to use a proper surface during calibration can result in inaccurate calibration. Do NOT use a table which wobbles.

Place the front and rear calibration shaft assemblies in the "V" notches of the aluminum casting as shown below:



Make sure the spring loaded thrust washers (one on each shaft) are both located on the same side of the fixture. Either side may be used. Make sure the adjustment knobs for the shaft leveling blocks face toward the outside of the fixture.