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Installation Manual

Model 6005-1

Mechanical Spiral Sensor

Revision Initial

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1. Introduction

The Model 6500 Inclinometer Casing is used with the Model 6000 and Model 6100 Inclinometer Probes. It has four grooves oriented @ 90 degrees designed to guide the wheels of the probe and keep them oriented in a known direction. The casing may become twisted during installation. This is more likely the longer the casing. In the following will be found descriptions of the, mechanical spiral sensor, and how they can be used to perform a spiral survey of the inclinometer casing grooves. The information from the spiral survey can be entered into spreadsheet software, so that directions of maximum tilt or inclination can be correctly oriented at any point along the casing.

2. Spiral survey using the mechanical spiral sensor Model 6005-1

The Model 6005-1 Spiral Sensor is shown in figure 2. It comprises a flat plate that is designed to fit in opposite grooves of 2.75″ (Model 6500) Inclinometer Casing. To this flat plate are attached sectional orientation rods that enable the plate to be positioned at any depth within the casing. A pointer attached to the orientation rods is positioned over a protractor scale clamped to the top of the casing and reveals instantly the orientation of the casing grooves, at the position of the flat plate, relative to the direction of the grooves at the top of the casing. This amount of spiral is noted and entered into the appropriate software program.

A 1/16th” braided, plastic coated aircraft cable, attached to the flat plate can be used to lower and raise the plate and orientation rods inside the casing.

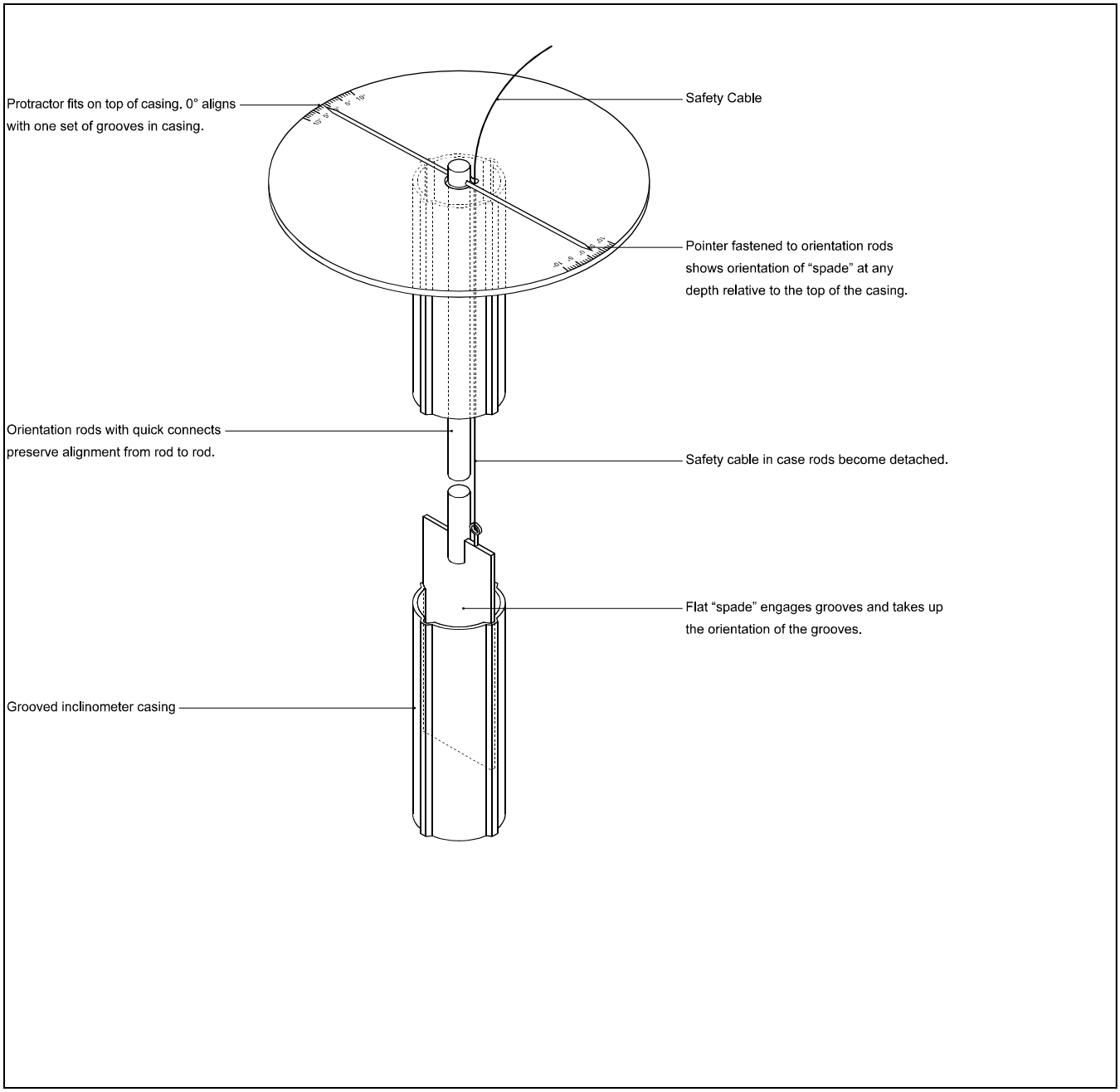

Figure 1 The Model 6005-1 Mechanical Spiral sensor