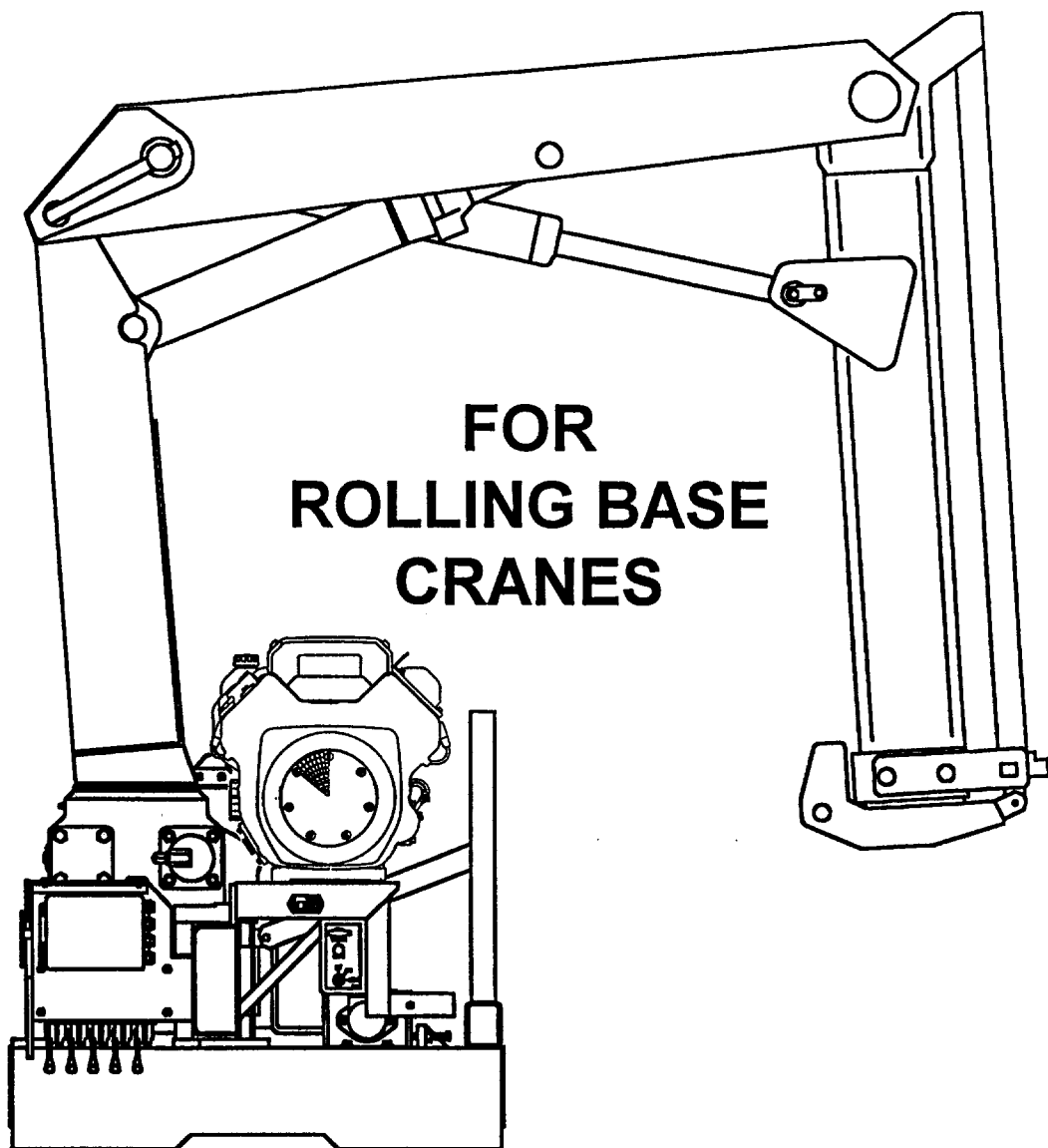


HIAB 710

Operator's Manual



FOR
ROLLING BASE
CRANES

Cargotec, Inc.
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Swanton, Ohio 43558
1993

FOREWORD

This Operator's Manual deals with your new crane. Take the time to read it through - it will be time well spent. The manual contains a short description of the crane together with instructions on its operation and maintenance. If you wish to ensure long life for your crane, you should carefully carry out all maintenance instructions.

However, all servicing, apart from lubrication and minor repairs that you can attend to yourself, should be entrusted to the well-trained personnel of your dealer's service shop.

We reserve the right to introduce, without notice, changes in data, equipment and in the instructions for maintenance and other servicing jobs.

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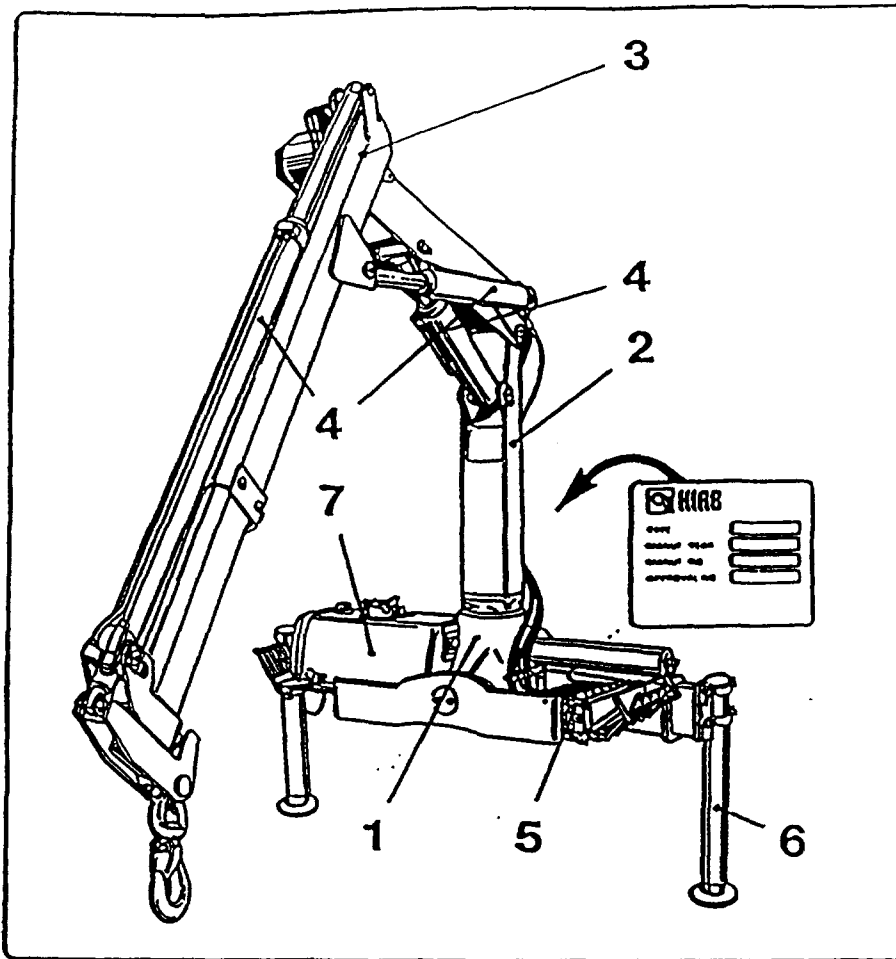
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*** These pages reference wet line applications only !**

Section 1. GENERAL DESCRIPTION



GENERAL DESCRIPTION

The HIAB 710 is a compact, all hydraulic vehicle crane in the 54,000 ft-lb capacity class, specially adapted for hook and attachment service.

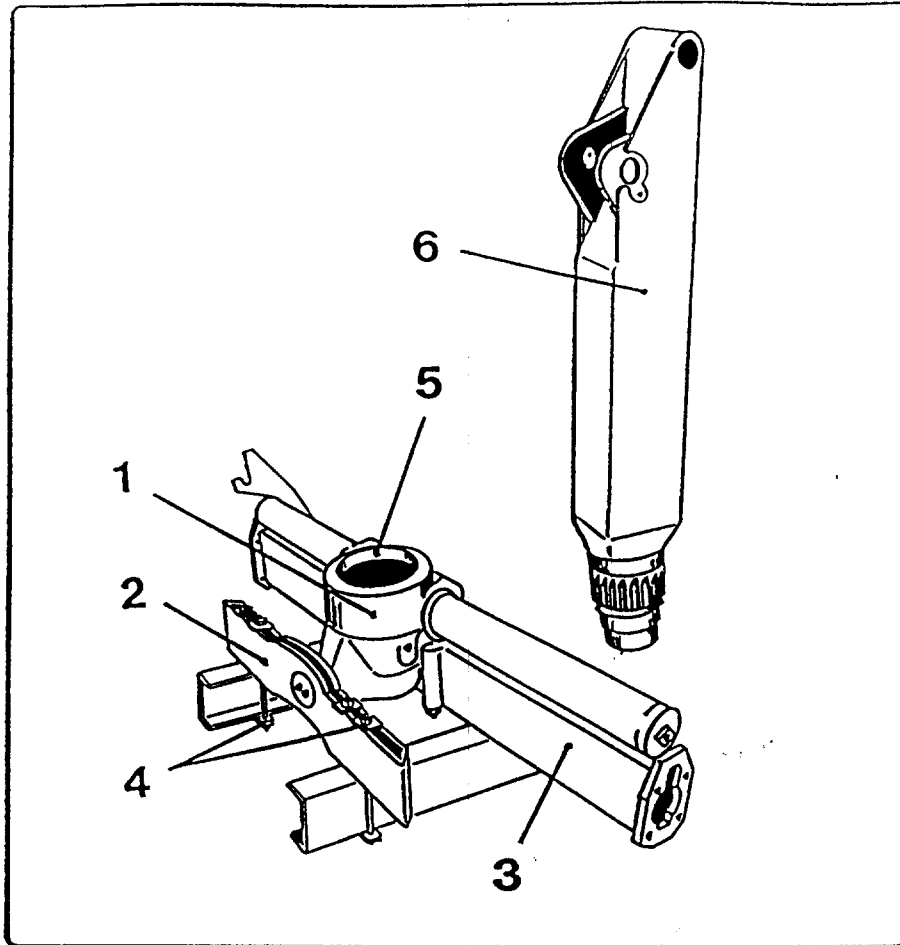
The crane comes in the following versions:

HIAB 710-1 with a hydraulic outreach of 17'5", and HIAB 710-2 with a hydraulic outreach of 23'7".

The main crane components are:

1. Base with slewing system
2. Body
3. Boom system
4. Hydraulic cylinders
5. Valve system
6. Support legs
7. Oil tank

Your crane's type and serial number can be found on the name plate.



BASE WITH SLEWING SYSTEM

The crane base is in the form of a casting and comprises an upper and a lower body bearing, a slewing system and a three point bridge.

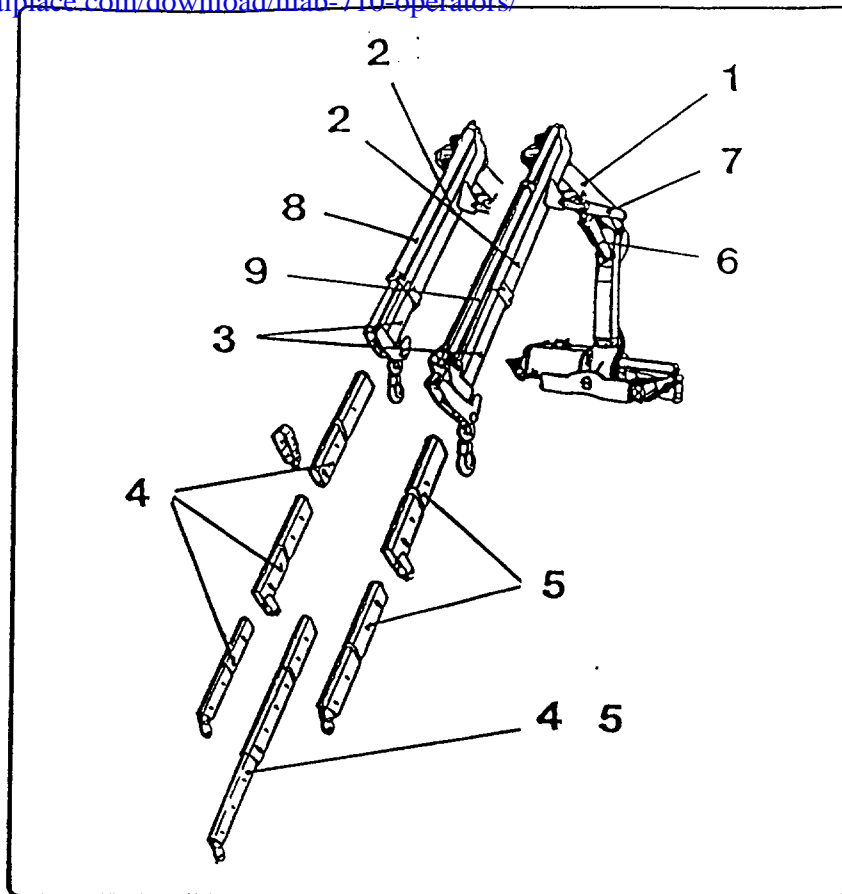
The guide pad on the rack consists of a lubrication free bearing. The outrigger-leg beam is bolted to the crane by 8 stud bolts.

1. Base
2. Three-point bridge
3. Outrigger-leg beam
4. Frame fastening
5. Body bearing

BODY

The body is an all-welded, box design with a cast column welded to its lower end. The body can be easily lifted out of the base once the catch has been released. The catch is locked on the base.

6. Body



BOOM SYSTEM

The boom system consists of an inner boom, an outer boom and an extension. The extension is single in the case of the -1 version and double telescopic in the case of the -2 version.

The outer boom and hydraulic extension are hexagonal sections, and the extensions run on lubrication free adjustable slide pads that bear against two opposing oblique surfaces. This arrangement provides exact guidance of the extension without backlash.

1. Inner boom
2. Outer boom
3. Hydraulic extension
4. Manual extension -1
5. Manual extension -2

HYDRAULIC CYLINDERS

The hydraulic cylinders are double acting; the extension cylinder for the 710-2 is telescopic in addition. The inner boom and outer boom cylinders are fitted with check valves which lock the booms in the event of a hose failure.

6. Inner boom cylinder
7. Outer boom cylinder
8. Extension cylinder -1
9. Extension cylinder -2