Instruction Manual

Model 115

Manual Installation Tool

Makers of Huck®, Marson®, Recoil®
Brand Fasteners, Tools & Accessories

06-28-2004
Form HK254
SAFETY

This instruction manual must be read with particular attention to the following safety guidelines, by any person servicing or operating this tool.

1. Safety Glossary

- **Product complies with requirements set forth by the relevant European directives.**
- **Read manual prior to using equipment.**
- **Eye protection required while using this equipment.**
- **Hearing protection required while using this equipment.**

**WARNINGS** - Must be understood to avoid severe personal injury.

**CAUTIONS** - show conditions that will damage equipment and or structure.

**Notes** - are reminders of required procedures.

**Bold, Italic type and underlining** - emphasizes a specific instruction.

2. Huck equipment must be maintained in a safe working condition at all times and inspected on a regular basis for damage or wear. Any repair should be done by a qualified repairman trained on Huck procedures.

3. Repairman and Operator must read manual prior to using equipment and understand any Warning and Caution stickers/labels supplied with equipment before connecting equipment to any primary power supply. As applicable, each of the sections in this manual have specific safety and other information.

4. See MSDS Specifications before servicing the tool. MSDS Specifications are available from you Huck representative or on-line at www.huck.com. Click on Installation Systems Division.

5. When repairing or operating Huck installation equipment, always wear approved eye protection. Where applicable, refer to ANSI Z87.1 - 1989

6. Disconnect primary power source before doing maintenance on Huck equipment.

7. If any equipment shows signs of damage, wear, or leakage, do not connect it to the primary power supply.

8. Make sure proper power source is used at all times.

9. Never remove any safety guards or pintail deflector.

10. Never install a fastener in free air. Personal injury from fastener ejecting may occur.

11. When using an offset nose always clear spent pintail out of nose assembly before installing the next fastener.

12. If there is a pinch point between trigger and work piece use remote trigger. (Remote triggers are available for all tooling).

13. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, eliminating downtime, and in preventing an accident which may cause severe personal injury.

14. Never place hands between nose assembly and work piece.

15. Tools with ejector rods should never be cycled with out nose assembly installed.

16. When two piece lock bolts are being used always make sure the collar orientation is correct. See fastener data sheet of correct positioning.
GENERAL PRECAUTIONS

During disassembly and assembly, take the following precautions to avoid damaging tool or components:

(A) A clean, well-lighted area should be available for servicing the tool. Special care must be taken to prevent contamination of tool.

(B) Use soft materials, such as brass, aluminum or wood, to protect the tool when applying pressure. Only standard hand tools are required. Brass drifts, wood blocks, a vise with soft jaws and an arbor press will prevent damaging tool.

(C) Apply continuous strong pressure, rather than sharp blows, to disassemble or assemble a component. An arbor press provides steady pressure to press a component in or out of an assembly.

(D) Never continue to force a component if it "hangs-up" due to misalignment. Reverse the procedure to correct misalignment and start over.

(E) Smear LUBRIPLATE* 130AA, or equivalent lubricant, on mating surfaces to facilitate assembly and to prevent damage.

(Lubriplate 103AA is available in a tube as Part Number 502723, from Huck Manufacturing Company.)

* LUBRIPLATE is a trademark of Fiske Brothers Refining Co.

(F) All parts must be handled carefully and examined for damage or wear. Components should be disassembled and assembled in a straight line without bending, cocking, or undue force. Disassembly and assembly procedures outlined in this manual should be followed.
### Parts List for 115 Hand Tool

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<thead>
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<th>REF. NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>NO. REQ'D.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>100003</td>
<td>Nut - Nose Retaining</td>
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<tr>
<td>2</td>
<td>100005</td>
<td>Plate - Nose Retaining</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>100006</td>
<td>Sleeve - Holder</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>500597</td>
<td>Ring Retaining - Bearing (Waldes Truarc #5000-125)</td>
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<tr>
<td>5</td>
<td>100320</td>
<td>Race - Bearing</td>
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<tr>
<td>6</td>
<td>502506</td>
<td>Ball - Steel 5/32&quot; Diameter</td>
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<tr>
<td>7</td>
<td>100014</td>
<td>Spindle - Pull</td>
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<tr>
<td>8</td>
<td>100002</td>
<td>Housing</td>
<td>1</td>
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<tr>
<td>9</td>
<td>500599</td>
<td>O-Ring (1-1/4&quot; I.D. x 1-1/2&quot; O.D. x 1/8&quot; C.S.) (ARP 568-218)</td>
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<tr>
<td>10</td>
<td>100010</td>
<td>Screw Spindle Assembly</td>
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<tr>
<td>11</td>
<td>100004</td>
<td>Plate - Housing Cover</td>
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<td>12</td>
<td>500598</td>
<td>Ring - Retaining - Housing Cover Plate (Waldes Truarc #5000-231)</td>
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<tr>
<td>13</td>
<td>100013</td>
<td>Stop - Spindle</td>
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<tr>
<td>14</td>
<td>500596</td>
<td>Ring - Retaining - Spindle Stop (Waldes Truarc #5100-75)</td>
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<tr>
<td>15</td>
<td>100007</td>
<td>Handle</td>
<td>1</td>
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</table>
DESCRIPTION

The Huck Model 116 Installation Tool is a sturdy, manually-operated tool designed to install Huckbolt* Fasteners and Huck Blind Fasteners (except CKL & MLS) in 1/8" through 3/8" diameters.

Entirely operated by hand power, the Model 115 Tool is ideally suited to field applications where pneumatic or hydraulic power is not available.

Incorporated into the design is a proven, frictionless ball screw that requires only minimum operator effort to develop maximum pull.

INSTALLED NOSE ASSEMBLIES

The Huck Nose Assemblies used on Huck Model 353 Installation Tools (see Nose Assembly Data Chart) may be installed directly on the Model 115 in the following manner:

1. Remove retaining nut, #1, plate, #2, and sleeve, #3.
2. Insert any small diameter rod through the hole in the threaded end of the housing, #8, and down into the hole in the pull spindle, #7. This will prevent the pull spindle from rotating while the nose assembly collet and lock collar are being screwed on.
3. Screw on nose assembly collet and lock collar and tighten with collet wrench #89121.
4. Stake lock collar to spindle, on one side only, with punch #84212.
5. Replace sleeve, #3, over the collet and into the threaded end of the housing, #8. Insert nose assembly outer anvil into the sleeve.
6. Slide plate, #2, over nose assembly outer anvil until it rests on the outer anvil lug. Finally install nose retaining nut, #1, over outer anvil and tighten hand tight.

NOTE:
The Huck Model 352 Tool Nose Assemblies can also be used on the Model 115 through the use of a simple adapter, Huck Part No. 102463 (See Nose Assembly Data Sheet #102468 for parts list and assembly instructions).

OPERATION

1. Install nose assembly on Tool. (Use #102463 Adapter, if necessary).
2. Place nose assembly over pintail of Huck Fastener to be installed.
3. Attach wrench, specified, on protruding end of Tool's screw spindle assembly.
4. Turn screw spindle in CLOCKWISE direction until pintail breaks, and fastener is installed.
5. Reverse ratchet wrench and turn screw spindle COUNTER-CLOCKWISE until nose assembly is completely ejected from the installed fastener.
6. Continue turning screw spindle, COUNTER-CLOCKWISE until spindle returns to starting position.

TO DISASSEMBLE

Although the Huck Model 115 Hand Tool normally does not require maintenance to the point of complete disassembly, such steps are described below:

1. Unscrew nose assembly retaining nut, #1, being careful not to drop nose assembly plate, #2, which fits just inside the retaining nut.
2. Remove adaptor sleeve, #3.
3. Using external Truarc pliers No. 2 remove plate retaining ring, #14, and slide off spindle stop, #13.
4. With internal Truarc pliers No. 5 remove plate retaining ring, #12, and plate, #11, will fall free when tool is turned over. CAUTION: Screw spindle nut contains loose ball bearings. Do not remove from spindle.
5. Using spindle nut wrench 100560 to straddle the screw spindle nut, unscrew the nut and the entire screw spindle assembly, #10, can then be removed from the housing.
6. Remove retaining ring, #4, with internal Truarc pliers No. 3. This will free the pull spindle, #7.
7. When removing pull spindle, take care not to separate the thrust bearing balls, #6, from the races, #5.

TO ASSEMBLE

1. Assemble thrust bearing races, #5, with 21 balls, #6, using Lubri-plate or similar lubricant.
2. Slide the entire bearing assembly, #5 and 6, over the pull spindle, #7, to rest on the inner head of the spindle.
3. Install pull spindle and bearing assembly in pull socket of screw spindle assembly, #10, and install retaining ring, #4.
4. Coat threads of screw spindle assembly with Lubri-plate or similar lubricant and install screw spindle assembly in housing #8. Tighten screw spindle nut with wrench 100560.
5. Insert nut plate, #11, and install retaining ring, #12, in groove in housing.
6. Slide stop plate, #13, over end of screw spindle and secure in place with retaining ring, #14.
7. Using ratchet wrench, turn screw spindle in until it stops in starting position.
8. Assemble sleeve, #3, in nose end of housing, #8, plate, #2, in place in nose assembly retaining nut, #1, and screw nut onto housing.

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LIMITED WARRANTIES

Tooling Warranty: Huck warrants that tooling and other items (excluding fasteners, and hereinafter referred as "other items") manufactured by Huck shall be free from defects in workmanship and materials for a period of ninety (90) days from the date of original purchase.

Warranty on "non standard or custom manufactured products": With regard to non-standard products or custom manufactured products to customer's specifications, Huck warrants for a period of ninety (90) days from the date of purchase that such products shall meet Buyer's specifications, be free of defects in workmanship and materials. Such warranty shall not be effective with respect to non-standard or custom products manufactured using buyer-supplied molds, material, tooling and fixtures that are not in good condition or repair and suitable for their intended purpose.

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Huck's sole liability and Buyer's exclusive remedy for any breach of warranty shall be limited, at Huck's option, to replacement or repair, at FOB Huck's plant, of Huck manufactured tooling, other items, nonstandard or custom products found to be defective in specifications, workmanship and materials not otherwise the direct or indirect cause of Buyer supplied molds, material, tooling or fixtures. Buyer shall give Huck written notice of claims for defects within the ninety (90) day warranty period for tooling, other items, nonstandard or custom products described above and Huck shall inspect products for which such claim is made.

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The only warranties made with respect to such tool, part(s) or other items thereof are those made by the manufacturer thereof and Huck agrees to cooperate with Buyer in enforcing such warranties when such action is necessary. Huck shall not be liable for any loss or damage resulting from delays or nonfulfillment of orders owing to strikes, fires, accidents, transportation companies or for any reason or reasons beyond the control of the Huck or its suppliers.

Huck Installation Equipment

Huck International, Inc. reserves the right to make changes in specifications and design and to discontinue models without notice.

Huck Installation Equipment should be serviced by trained service technicians only.

Always give the Serial Number of the equipment when corresponding or ordering service parts.

Complete repair facilities are maintained by Huck International, Inc. Please contact one of the offices listed below.

Eastern
One Corporate Drive Kingston, New York 12401-0250
Telephone (845) 331-7300 FAX (845) 334-7333

Canada
6150 Kennedy Road Unit 10, Mississauga, Ontario, L5T2J4, Canada.
Telephone (905) 564-4825 FAX (905) 564-1963

Outside USA and Canada
Contact your nearest Huck International Office, see back cover.

In addition to the above repair facilities, there are Authorized Tool Service Centers (ATSC’s) located throughout the United States. These service centers offer repair services, spare parts, Service Parts Kits, Service Tools Kits and Nose Assemblies. Please contact your Huck Representative or the nearest Huck office listed on the back cover for the ATSC in your area.
A Global Organization

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