Instruction Manual
Model 970-100
Fill and Bleed Unit
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.
Filling and Bleeding Huck Installation Equipment using the 970-100 Fill and Bleed Unit.

For specific installation tool Filling and Bleeding Instructions refer to applicable Installation Tool Instruction Manual.

Description

The 970-100 Fill and Bleed Unit is a portable, electric powered filling and bleeding unit designed for use with Huck Installation Equipment. The unit provides a fast and efficient means of filling hydraulic fluid and bleeding air from Models 200, 225/245 and 226/246 tools and 970 POWERIG® Hydraulic Unit.

Preparation for Use

Caution

The Fill and Bleed Unit should be drained and cleaned periodically. The elements in the filters should be replaced as required to assure that only clean hydraulic fluid is pumped into the tool.

1. Fill unit with hydraulic fluid DEXRON II*, or equivalent.

2. Connect fill and bleed unit hoses to installation equipment as per applicable Installation Tool Instruction manual or POWERIG Hydraulic Unit Instruction manual.

3. Plug unit into 110 volt, single phase, 50/60 hertz outlet.

* DEXRON II is a trademark of General Motors Corp.
Model 99-100 with Bleed Tube Assemblies

110736-2 Male Coupler
110728-1 Tubing
504391 Connector
504398 Swivel
110779 Adapter
500778 O-ring

Model 200 Bleed Tube Assembly

110736-2 Male Coupler
110728-1 Tubing
504391 Connector
504398 Swivel
101302 Adapter
500772 O-ring

Standard Bleed Tube Assembly
Fig. 2

Model 99-100 with Hood Removed

Parts List for 970-100 Fill and Bleed Unit

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part Number</th>
<th>Qty.</th>
<th>Description</th>
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<td>110778</td>
<td>1</td>
<td>200 Tool Bleed Tube Assembly</td>
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<tr>
<td>2</td>
<td>110777</td>
<td>2</td>
<td>Standard Bleed Tube Assembly</td>
</tr>
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<td>3</td>
<td>110736-1</td>
<td>2</td>
<td>Female Coupler</td>
</tr>
<tr>
<td>4</td>
<td>110727</td>
<td>1</td>
<td>Switch -- on, off, jog</td>
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<tr>
<td>5</td>
<td>110729</td>
<td>1</td>
<td>Electrical Control Cord</td>
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<td>6</td>
<td>111340</td>
<td>1</td>
<td>Suction Line Assembly</td>
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<td>7</td>
<td>111341</td>
<td>1</td>
<td>Discharge Line Assembly</td>
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<tr>
<td>8</td>
<td>111342</td>
<td>1</td>
<td>Return Line Assembly</td>
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<tr>
<td>9</td>
<td>110728-5</td>
<td>1</td>
<td>Tubing to PRESSURE</td>
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<td>110728-6</td>
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<td>Tubing to RETURN</td>
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<td>110724</td>
<td>1</td>
<td>Pressure Gauge Assembly</td>
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<td>12</td>
<td>110719</td>
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<td>Filter</td>
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<td>15</td>
<td>115791</td>
<td>1</td>
<td>Filter Cartridge--Cuno U3F3</td>
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</table>
**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 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.
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Aerospace Products

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520-747-9898

FAX: 520-748-2142

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Waco, TX 76714-8117

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FAX: 254-751-5259

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Kingston, NY 12401

800-431-3091

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