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

- **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 your 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.
DESCRIPTION

The Huck 1054 Double Drive Air Valve was developed for use with Huck 200, 352, 354, or 356 Installation Tools equipped with self-releasing nose assemblies.

When attached to the installation tool, the valve will enable the operator to select either low or high air pressure for double driving fasteners with a flip of the lever.

Double driving is an operation in which the Huckbolt® Fastener is installed in two sequences. The pin is inserted in the hole without collar, and the double driving tool with self-releasing nose assembly is applied to the pintail. The double drive tool is preset to a lower pressure than the pin breaking load. This permits the pin to be drawn into the hole, giving an interference fit, a self-sizing or a self-broaching type of installation. Then the installation tool is removed from the pintail and the collar applied to the pin. The double drive tool is switched to high pressure, and the Huckbolt Fastener is then driven in the usual manner.

INSTALLATION AND OPERATION

The 1054 Double Drive Valve is attached to the Huck 200, 352, 354 or 356 Installation Tool at the air inlet with the arrow stamped on the valve body pointing in the direction of the air flow. To adjust the low pressure, insert a pressure gauge between the valve and the installation tool. Place the Selector Lever of the Double Drive Valve in the low pressure position indicated by the letter “L” on the lever. Loosen the locknut on the Double Drive Valve and then connect to the air supply. Check the chart below for recommended low pressure setting for the fastener to be used. Adjust pressure to recommended setting by turning adjusting screw 100183. When the desired pressure is attained, tighten locknut, thus locking adjusting screw in place.

For operations requiring frequent changing of the low pressure settings for various size fasteners, the pressure gauge may be kept permanently in the line.

For final driving of the fastener requiring high pressure, place the Selector Lever in the high pressure position indicated by the letter “H” on the lever.

RECOMMENDED RANGE OF LOW AIR PRESSURE SETTINGS

<table>
<thead>
<tr>
<th>200, 352 &amp; 356 Tools</th>
<th>Settings</th>
<th>354 Tools</th>
<th>Settings</th>
</tr>
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<tbody>
<tr>
<td>L6 Aluminum</td>
<td>25 - 30</td>
<td>L8 Aluminum</td>
<td>28 - 33</td>
</tr>
<tr>
<td>L6 Alloy Steel</td>
<td>45 - 55</td>
<td>L8 Alloy Steel</td>
<td>45 - 60</td>
</tr>
<tr>
<td>L6 Aluminum</td>
<td>35 - 43</td>
<td>SAL8</td>
<td>33 - 40</td>
</tr>
<tr>
<td>SAL6</td>
<td>40 - 50</td>
<td>L10 Aluminum</td>
<td>38 - 48</td>
</tr>
<tr>
<td>L6 Alloy Steel</td>
<td>50 - 65</td>
<td>L10 Alloy Steel</td>
<td>45 - 60</td>
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<tr>
<td>L8 Aluminum</td>
<td>50 - 65</td>
<td>SAL10</td>
<td>40 - 50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L12 Aluminum</td>
<td>47 - 60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L12 Alloy Steel</td>
<td>45 - 60</td>
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<tr>
<td></td>
<td></td>
<td>SAL12</td>
<td>47 - 60</td>
</tr>
</tbody>
</table>

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GENERAL NOTES

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

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

(2) All parts must be handled carefully and examined for damage or wear. Always replace seals Service Kit P/N 107061 is available to replace needed components when tool is disassembled for any reason. 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.

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

(4) Rub SLIC-TITE TEFLON* thread compound, or equivalent, on pipe threads, to aid assembly and sealing.

DO NOT USE TEFLON TAPE ON PIPE THREADS.

(TEFLON thread compound is available from Huck Manufacturing Co in stick form as P/N 503237.)

*TEFLON is a trademark of E.T. DuPont de Nemours & Co.
CONVERSION FOR 353 TO 354 DOUBLE DRIVE

The 354 Double Drive Installation Tool is a standard 353 Installation Tool with two parts changed. The conversion can be made in a matter of minutes.

Remove the Distributor Valve Return Cylinder 89310 and replace with 102490 Distributor Valve Shift Cylinder. Replace the 84447 Distributor Valve Bushing over the shift cylinder and then thread on the Distributor Valve Shift Button 102491; Only two parts are required, 102490 and 102491.

Install the 1054 Double Drive Air Valve, and follow the operating procedure outlined above. After this procedure, the tool is ready for use with self-releasing noses and double driving. Switch the 1054 Valve Lever to low pressure.

Place the tool and nose assembly on the Huckbolt fastener and pull the fastener into the hole. At this point, due to the reduced air pressure, the tool will not break the pin and the piston will not make a full stroke to trip the front trip valve. Therefore, the nose assembly cannot be released from the pin. This release is accomplished by depressing the shift button on the distributor valve. This will shift the distributor valve and return the collet in the nose. The tool then can be removed from the pintail. Place the collar on the pintail, shift the 1054 Valve Lever to high pressure, and complete the installation of the Huckbolt fastener in the normal manner.

### PARTS LIST

<table>
<thead>
<tr>
<th>REF. NO.</th>
<th>PART NAME</th>
<th>PART NO.</th>
<th>NO. REQ'D.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Lever-Adjusting Screw</td>
<td>100184</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Screw-Adjusting</td>
<td>100183</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Pin-Pivot</td>
<td>500637</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Locknut</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Plate-Pressure</td>
<td>100185</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Spring-Pressure</td>
<td>100186</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Subassembly-Valve</td>
<td>107060</td>
<td>1</td>
</tr>
</tbody>
</table>

NOTE: Service Kit 107061 contains one adjusting spring, diaphragm assembly, diaphragm gasket, valve spring, valve retainer, inner valve assembly and valve cap gasket.
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.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. HUCK MAKES NO OTHER WARRANTIES AND EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES AS TO MERCHANTABILITY OR AS TO THE FITNESS OF THE TOOLING, OTHER ITEMS, NONSTANDARD OR CUSTOM MANUFACTURED PRODUCTS FOR ANY PARTICULAR PURPOSE AND HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH TOOLING, OTHER ITEMS, NONSTANDARD OR CUSTOM MANUFACTURED PRODUCTS OR BREACH OF WARRANTY OR FOR ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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.

Tooling, Part(s) and Other Items not manufactured by Huck.

HUCK MAKES NO WARRANTY WITH RESPECT TO THE TOOLING, PART(S) OR OTHER ITEMS MANUFACTURED BY THIRD PARTIES. HUCK EXPRESSLY DISCLAIMS ANY WARRANTY EXPRESSED OR IMPLIED, AS TO THE CONDITION, DESIGN, OPERATION, MERCHANTABILITY OR FITNESS FOR USE OF ANY TOOL, PART(S), OR OTHER ITEMS THEREOF NOT MANUFACTURED BY HUCK. HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH TOOLING, PART(S) OR OTHER ITEMS OR BREACH OF WARRANTY OR FOR ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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

Alcoa Fastening Systems (AFS) maintains company offices throughout the United States and Canada, with subsidiary offices in many other countries. Authorized AFS distributors are also located in many of the world's industrial and Aerspace centers, where they provide a ready source of AFS fasteners, installation tools, tool parts, and application assistance.

Alcoa Fastening Systems world-wide locations:

**Americas**

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Aerospace Products
Tucson Operations
3724 East Columbia
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520-747-9898
FAX: 520-748-2142

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Aerospace Products
Carson Operations
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900 Watson Center Rd.
Carson, CA 90749
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310-830-8200
FAX: 310-830-1436

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PO Box 8117
8001 Imperial Drive
Waco, TX 76714-8117
800-388-4825
254-776-2000
FAX: 254-751-5259

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FAX: 33-1-34-66-0600


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