

# INSTRUCTION MANUAL Hydraulic Installation Tools





## EC Declaration of Conformity Manufacturer: Huck International, LLC, Industrial Products Group, 1 Corporate Drive, Kingston, NY, 12401, USA **Description of Machinery:** Models 2600, 2620, 2624, & 2630 families of hydraulic installation tools and specials based on their designs (e.g. PR####). **Relevant provisions complied with:** Council Directive related to Machinery (2006/42/EC) British Standard related to hand held, non-electric power tools (ISO 11148-1:2011) **European Representative:** Rob Pattenden, Huck International, Ltd. Unit C Stafford Park 7, Telford Shropshire TF3 3BQ, England, United Kingdom Authorized Signature/date: I, the undersigned, do hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s). Signature: Full Name: Robert B. Wilcox Position: **Engineering Manager** Location: Huck International, LLC d/b/a Alcoa Fastening Systems Kingston, New York, USA Date: 03/09/2013 (September 3, 2013)

Declared dual number noise emission values in accordance with ISO 4871			
A weighted sound power level, LWA: 89 dB (refere Uncertainty, KWA: 3 dB	nce 1 pW)		
A weighted emission sound pressure level at the w (reference 20 µPa) Uncertainty, KpA: 3 dB	vork station, LpA: <b>78</b> dB		
C-weighted peak emission sound pressure level, L (reference 20 µPa) Uncertainty, KpC: 3 dB	pC, peak: <b>119</b> dB		
Values determined according to noise test code ISO 15744, using as basic standards ISO 3744 and ISO 11203. The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.			
Declared vibration emission values in accordance with EN 12096			
Measured Vibrations emission value, a:	<b>.40</b> m/s <sup>2</sup>		
Uncertainty, K:	<b>.02</b> m/s <sup>2</sup>		
Values measured and determined according to ISC EN 1033	O 28662-1, ISO 5349-2, and		

Test data to support the above information is on file at Alcoa Fastening Systems, Industrial Products Group, Kingston Operations, Kingston, NY, USA.

# **CONTENTS**

EU DECLARATION OF CONFORMITY
SAFETY
SPECIFICATIONS
PRINCIPLE OF OPERATION
PREPARATION FOR USE
MAINTENANCE
TOOL DISASSEMBLY
TOOL ASSEMBLY
TOOL HEAD ASSEMBLY DRAWINGS
Hydraulic Hose Assembly Drawing
KITS & ACCESSORIES
TROUBLESHOOTING14
STICKER LOCATIONS

### **Alcoa Fastening Systems**

## **SAFETY INSTRUCTIONS**

### GLOSSARY OF TERMS AND SYMBOLS:

- Product complies with requirements set forth by the relevant European directives.
- **READ MANUAL** prior to using this equipment.
- EYE PROTECTION IS REQUIRED while using this equipment.
  - HEARING PROTECTION IS 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.

- I. GENERAL SAFETY RULES:
- A half hour long hands-on training session with qualified personnel is recom-1. mended before using Huck equipment.
- 2. Huck equipment must be maintained in a safe working condition at all times. Tools and hoses should be inspected at the beginning of each shift/day for damage or wear. Any repair should be done by a qualified repairman trained on Huck procedures
- 3. For multiple hazards, read and understand the safety instructions before installing, operating, repairing, maintaining, changing accessories on, or working near the assembly power tool. Failure to do so can result in serious bodily injury.
- Only qualified and trained operators should install, adjust or use the assembly 4. power tool
- Do not modify this assembly power tool. This can reduce effectiveness of safety 5. measures and increase operator risk.
- Do not discard safety instructions; give them to the operator. Do not use assembly power tool if it has been damaged. 6
- 7.
- Tools shall be inspected periodically to verify all ratings and markings required, and 8. listed in the manual, are legibly marked on the tool. The employer/operator shall contact the manufacturer to obtain replacement marking labels when necessary. Refer to assembly drawing and parts list for replacement.
- q Tool is only to be used as stated in this manual. Any other use is prohibited.
- 10. Read MSDS Specifications before servicing the tool. MSDS specifications are available from the product manufacturer or your Huck representative.
- 11. Only genuine Huck parts shall be used for replacements or spares. Use of any other parts can result in tooling damage or personal injury.
- 12. Never remove any safety guards or pintail deflectors.
- 13. Never install a fastener in free air. Personal injury from fastener ejecting may occur.
- 14. Where applicable, always clear spent pintail out of nose assembly before installing the next fastener.
- 15. Check clearance between trigger and work piece to ensure there is no pinch point when tool is activated. Remote triggers are available for hydraulic tooling if pinch point is unavoidable.
- 16. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle or to bend or pry the tool. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, eliminating downtime, and preventing an accident which may cause severe personal injury.
- 17. Never place hands between nose assembly and work piece. Keep hands clear from front of tool.
- 18. Tools with ejector rods should never be cycled with out nose assembly installed.
- 19. When two piece lock bolts are being used always make sure the collar orientation is correct. See fastener data sheet for correct positioning.

### **II. PROJECTILE HAZARDS:**

- Risk of whipping compressed air hose if tool is pneudraulic or pneumatic. 1
- Disconnect the assembly power tool from energy source when changing inserted 2. tools or accessories.
- Be aware that failure of the workpiece, accessories, or the inserted tool itself can 3 generate high velocity projectiles.
- 4 Always wear impact resistant eye protection during tool operation. The grade of protection required should be assessed for each use.
- 5 The risk of others should also be assessed at this time.
- Ensure that the workpiece is securely fixed. 6.
- 7. Check that the means of protection from ejection of fastener or pintail is in place and operative.
- 8. There is possibility of forcible ejection of pintails or spent mandrels from front of tool

### **III. OPERATING HAZARDS:**

- 1. Use of tool can expose the operator's hands to hazards including: crushing, impacts, cuts, abrasions and heat. Wear suitable gloves to protect hands.
- 2. Operators and maintenance personnel shall be physically able to handle the bulk, weight and power of the tool
- 3. Hold the tool correctly and be ready to counteract normal or sudden movements with both hands available
- 4 Maintain a balanced body position and secure footing.
- 5. Release trigger or stop start device in case of interruption of energy supply.
- Use only fluids and lubricants recommended by the manufacturer. 6
- Avoid unsuitable postures, as it is likely for these not to allow counteracting of nor-7 mal or unexpected tool movement.
- If the assembly power tool is fixed to a suspension device, make sure that fixation 8. is secure.
- 9. Beware of the risk of crushing or pinching if nose equipment is not fitted.

#### **IV. REPETITIVE MOTION HAZARDS:**

- 1. When using assembly power tool, the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
- 2. When using tool, the operator should adopt a comfortable posture while maintaining a secure footing and avoid awkward or off balanced postures.
- 3. The operator should change posture during extended tasks to help avoid discomfort and fatique.
- If the operator experiences symptoms such as persistent or recurring discomfort, 4. pain, throbbing, aching, tingling, numbness, burning sensations or stiffness, these warnings should not be ignored. The operator should tell the employer and consult a qualified health professional.

#### V. ACCESSORIES HAZARDS:

- 1. Disconnect tool from energy supply before changing inserted tool or accessory.
- 2. Use only sizes and types of accessories and consumables that are recommend-
- ed. Do not use other types or sizes of accessories or consumables.

#### VI. WORKPLACE HAZARDS:

- 1. Be aware of slippery surfaces caused by use of the tool and of trip hazards caused by the air line or hydraulic hose.
- 2. Proceed with caution while in unfamiliar surroundings; there could be hidden hazards such as electricity or other utility lines.
- 3. The assembly power tool is not intended for use in potentially explosive environments
- Δ Tool is not insulated against contact with electrical power.
- Ensure there are no electrical cables, gas pipes, etc., which can cause a hazard if 5. damaged by use of the tool.

#### VII. NOISE HAZARDS:

- 1. Exposure to high noise levels can cause permanent, disabling hearing loss and other problems such as tinnitus, therefore risk assessment and the implementation of proper controls is essential.
- 2. Appropriate controls to reduce the risk may include actions such as damping materials to prevent workpiece from 'ringing'.
- Use hearing protection in accordance with employer's instructions and as required 3. by occupational health and safety regulations
- Operate and maintain tool as recommended in the instruction handbook to prevent an unnecessary increase in the noise level.
- 5 Select, maintain and replace the consumable / inserted tool as recommended to prevent an unnecessary increase in noise.
- If the power tool has a silencer, always ensure that it is in place and in good working order when the tool is being operated.

#### VIII. VIBRATION HAZARDS:

- 1. Exposure to vibration can cause disabling damage to the nerves and blood supply to the hands and arms.
- 2. Wear warm clothing when working in cold conditions and keep hands warm and dry.
- 3. If numbness, tingling, pain or whitening of the skin in the fingers or hands, stop using the tool, tell your employer and consult a physician.
- 4. Support the weight of the tool in a stand, tensioner or balancer in order to have a lighter grip on the tool.

### X. HYDRAULIC TOOL SAFETY INSTRUCTIONS:

- 1. Do not exceed maximum pressure setting stated on tool.
- 2. Carry out a daily check for damaged or worn hoses or hydraulic connections and replace if necessary.
- Use only clean oil and filling equipment. 3
- Power units require a free flow of air for cooling purposes and should therefore be 4. positioned in a well ventilated area free from hazardous fumes.
- 5. Ensure that couplings are clan and correctly engaged before operation.
- 6. Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- 7 Be sure all hose connections are tight.
- Wipe all couplers clean before connecting. Failure to do so can result in damage 8. to the quick couplers and cause overheating.

# **SPECIFICATIONS**

### **POWER SOURCE:**

Huck POWERIG Hydraulic Unit

### HOSE KITS:

Use only genuine HUCK Hose Kits rated @ 10,000 psi working pressure.

### MAX OPERATING TEMP:

125° F (51.7° C)

### MAX FLOW RATE:

2 gpm (7.6 l/m)

#### WEIGHT:

2624, 2624-15: 17.5 lbs (7.94 kg) 2624HS, 2624-PT: 24 lbs (10.9 kg) 2630, 2630RR: 22.43 lbs (10.17 kg)

### MAX INLET (PULL) PRESSURE:

7,400 psi (510 BAR)

### MAX RETURN PRESSURE:

**2624 series:** 3,200 psi (*221 BAR*) **2630 series:** 2,600 psi (*180 BAR*)

### PULL CAPACITY:

**2624 series:** 30,356 lbs (*135.03 kN*) @ 6,500 psi (*448 BAR*) **2630 series:** 48,614 lbs (*216.2*) @ 6,500 psi (*448 BAR*)

### STROKE:

**2624 series:** 1.687 in. (4.28 cm) **2630 series:** 1.906 in. (4.84 cm)

### HYDRAULIC FLUID:

ATF meeting DEXRON III, DEXRON IV, MERCON, Allison C-4 or equivalent specifications.

Fire resistant hydraulic fluid may also be used, and is required to comply with OSHA regulation 1926.302 paragraph (d): "the fluid used in hydraulic power tools shall be fire resistant fluid approved under schedule 30 of the US Bureau of Mines, Department of Interior, and shall retain its operating characteristics at the most extreme temperatures to which it will be exposed."



## PRINCIPLE OF OPERATION

### When the trigger is

depressed, a solenoid operated valve in the POWERIG® directs pressurized hydraulic fluid through the PULL hose to the front side of the piston, and allows fluid on the RETURN side to flow back to the tank (Fig 1a). The piston and nose assembly collet moves rearward installing the fastener. When the piston reaches the end of the PULL stroke, it uncovers flats on the rear end of the Dump Valve. These flats are designed to provide a passage for hydraulic fluid from the PULL side to the RETURN side of the piston, unloading or "dumping" the pressurized fluid back to the tank (Fig 1a).



When the trigger is released the solenoid is de-energized and the valve directs pressurized fluid to the rear

side of the piston and allows fluid on the PULL side to flow back to the tank (Fig. 1b). This causes piston and collet to move forward and pushes the nose assembly and tool off the swaged (installed) fastener. When the piston reaches the end of the return stroke, pressure is built up, causing the POWERIG<sup>®</sup> to shut off, completing the cycle.

## **PREPARATION FOR USE**



### WARNINGS: Read full manual before using tool.

A half-hour training session with qualified personnel is recommended before using Huck equipment.

When operating Huck installation equipment, always wear approved eye and ear protection.

Be sure there is adequate clearance for the operator's hands before proceeding.



CAUTION: Do not let disconnected hoses and couplers contact a dirty floor. Keep harmful material out of hydraulic fluid. Dirt in hydraulic fluid causes valve failure In Tool and In POWERIG Hydraulic Unit.



CAUTION: Do not use TEFLON<sup>®</sup> tape on pipe threads. Pipe threads may cause tape to shred resulting in tool malfunction. (Slic-tite<sup>®</sup> is available in stick form as Huck P/N 503237.)

A

WARNING: Huck recommends that only Huck Powerig Hydraulic Units be used as a power source for Huck installation equipment. Hydraulic power units that deliver high pressure for both PULL and RETURN, AND ARE NOT EQUIPPED WITH RELIEF VALVES ARE SPECIFICALLY NOT RECOMMENDED AND MAY BE DANGER-OUS.

### POWER SOURCE CONNECTIONS

Coat hose fitting threads with a non-hardening Teflon<sup>™</sup> thread compound such as Slic-tite.<sup>™</sup> (Slic-tite is available from Huck as part number 503237.)

1. Use Huck POWERIG<sup>®</sup> Hydraulic Unit, or equivalent, that has been prepared for operation per applicable instruc-

tion manual. Check both PULL and RETURN pressures, and adjust to pressures given in **<u>SPECIFICATIONS</u>**.

- 2. First, turn hydraulic unit to OFF, and then, disconnect power supply from unit. Connect tool's hoses to Powerig unit.
- 3. Connect tool switch electrical cord to hydraulic unit.
  - WARNING: Be sure to connect Tool's hydraulic hoses to POWERIG Hydraulic Unit before connecting Tool's switch control cord to unit. If not connected in this orderand <u>disconnected in the reverse</u> <u>order</u>, severe personal Injury may occur.
- 4. Connect hydraulic unit to power supply. Turn unit to ON. Hold tool trigger depressed for 30 seconds; depress trigger a few times to cycle tool and to circulate hydraulic fluid. Observe action of tool and check for leaks. Turn unit to OFF.
- 5. Select nose assembly for fastener to be installed. Disconnect tool's control switch electrical cord from hydraulic unit; disconnect unit from power supply. Attach nose assembly to tool.
- Reconnect hydraulic unit to power supply. Reconnect tool's switch control cord to unit. Check operation of nose assembly; install fasteners in test plate of correct thickness with proper size holes. Inspect installed fasteners. If fasteners do not pass inspection, see TROUBLESHOOTING to locate and correct tool malfunction.



## MAINTENANCE

Any time Cylinder is replaced, or if Stickers on tool become worn, damaged, or unreadable, new Stickers must be ordered. Sticker locations and part numbers can be found in **<u>STICKER LOCATIONS</u>** section of this manual.



### **CAUTIONS:**

- Consult MSDS before servicing tool.Keep dirt and other material out of
- Keep dirt and other material out of hydraulic system.
- Separated parts most be kept away from dirty work surfaces.
- Dirt/debris in hydraulic fluid causes
  Dump Valve failure in Tool and in POW-ERIG® Hydraulic Unit's valves.
- Always check tool assembly drawing for the proper direction of the flats on

See <u>SPECIFICATIONS</u> for fluid type. Dispose of fluid in accordance with local environmental regulations. Recycle steel, aluminum, and plastic parts in accordance with local lawful and safe practices.

### **PREVENTIVE MAINTENANCE**

NOTE: For supplementary information refer to TROUBLESHOOTING, Parts Lists, and DISASSEMBLY

AND ASSEMBLY procedures in this manual.

CAUTION: Do not use TEFLON<sup>®\*</sup> tape on pipe threads. Pipe threads may cause tape to shred resulting in tool malfunction. (Slic-Tite is available in stick form as Huck P/N 503237.)

CAUTION: Always replace seals, wipers, and back-up rings when tool is disassembled for any reason.

### SYSTEM INSPECTION

Operating efficiency of the installation tool is directly related to performance of the complete system, including the tool with nose assembly, hydraulic hoses, trigger and control cord, and POWERIG. Therefore, an effective preventive maintenance program includes scheduled inspections of the system to detect and correct minor troubles.

- 1. Inspect tool and nose for external damage.
- 2. Verify that hydraulic hose fittings and couplings and electrical connections are secure.
- 3. Inspect hydraulic hose for signs of damage or aging. Replace hoses if damaged.
- .4. Inspect tool, hose, and POWERIG during operation to detect abnormal heating, leaks, or vibration.

### **POWERIG MAINTENANCE**

Maintenance instructions and repair procedures are in the appropriate POWERIG Instruction Manual.

### **TOOL MAINTENANCE**

At regular intervals, depending on use, replace all Orings and back-up rings in the tool. Spare Parts Kits should be kept on hand. Inspect cylinder bore, piston and piston rod and unloading valve for scored surfaces, excessive wear or damage, and replace as necessary.

### **NOSE ASSEMBLY MAINTENANCE**

Daily cleaning of the nose assembly is recommended. This can usually he accomplished by dipping nose assembly in mineral spirits, or other suitable solvent, to clean jaws and wash away metal chips and dirt. If more thorough cleaning or maintenance is necessary, disassemble the nose assembly. Use a sharp pointed "pick" to remove imbedded particles from the pull grooves of the jaws.

*Slic-tite* is a registered trademark of LA-CO Industries, Inc. *TEFLON* is a registered trademark of E. I. du Pont de Nemours and Company



Use a fine India stone to remove any nicks or burrs from diameter A and leading edge, to prevent damage to O-ring.

## **DISASSEMBLY**

**For component identification, see Figures 8-12.** *NOTE:* The following procedure is for complete disassembly of tool. Disassemble **only** components necessary to replace damaged O-rings, Quad-Rings, Back-up Rings, and worn or damaged components.



Always use soft jaw vice to avoid damage to WARNING: Be sure to disconnect tool's electric control trigger system from Hydraulic Unit before disconnecting tool's hoses from unit. Before any maintenance is done, DISCONNECT IN THIS ORDER (RECONNECT IN THE OPPOSITE ORDER) to avoid possible severe personal injury.

tool.

- 1. Disconnect electrical or air connector from Powerig. Uncouple tool hydraulic hoses.
- 2. Remove nose assembly.
- 3. Unscrew coupling nipple and coupling body. Drain hydraulic hoses into container. Discard fluid.
- 4. Push rearward on Piston until remaining hydraulic fluid is drained into container. Discard fluid. **NOTE:** Do not remove hydraulic hoses from tool unless replacing hoses. If it is necessary to remove hoses, uncover hose fittings by sliding plastic shrouds back.
- NOTE: Use the following steps only if the Switch, Wire or Connector needs repair. Remove Retaining Nut and Locking Ferrule from Strain Relief. Loosen Setscrew. Remove Trigger Switch. Loosen and remove two wires from the switch. Remove cord from tool. Disassemble electrical connector (110686).
- Models 2624, 2624-15, 2630, 2630RR: Remove End Cap's Retaining Ring, Cover Plate, and Locking Disk.
   Model 2624HS, 2624-PT: Remove Screws, Retainer, and Locking Disk.
- 7. Insert Hex Key 126981 (shipped with tool) into End Cap (*Figure 2*). Using a wrench, unscrew End Cap from Cylinder.



- Models 2624, 2624-15, 2630, 2630RR: Remove O-Ring and Back-up Ring from End Cap.
   Model 2624HS, 2624-PT: Remove O-Ring and Back-up Ring from Front Gland, and Retaining Ring, Washer, Polyseal, and Wiper Seal from End Cap.
- 9. Remove Dump Valve from rear of Cylinder.
- 10. Slide Spacer over Piston and thread on Piston Assembly Tool. Using a press push Front Gland and Piston assemblies out of the back of the Cylinder. *(Figure 3)*



- 11. Remove Piston Assembly Tool and Spacer.
- 12. Slide Front Gland off of Piston. Remove Wiper, Wiper Housing, Back-up Ring, O-Ring, and Polyseal from Front Gland.
- 13. Remove GLYD Ring from Piston (Figure. 5).
- 14. Models 2624, 2624-15, 2630, 2630RR: Hold Piston in a vise with soft jaws and remove Ejector Gland/Cartridge Assembly with Hex Key 122048
- 15. <u>Models 2624, 2624-15, 2630, 2630RR:</u> Remove Ejector Rod, Wiper, and all seals from Gland/Cartridge.



## **A**SSEMBLY

For component identification, see Figures 8-12. NOTE: Clean components with mineral spirits or similar solvent. Inspect for wear/damage and replace as necessary. Replace all seals of disassembled components. Use O-Rings, Quad-Rings and Back-up Rings iin Service Parts Kit 2624KIT (2624, 2624-15), 2624HSKIT (2624HS, 2624-PT), or 2630KIT (2630, 2630RR). Smear LUBRIPLATE 130AA or PARKER-O-LUBE on rings and seals and mating parts to ease assembly. Assemble tool giving care not to damage rings or seals.

- 1. <u>Models 2624, 2624-15, 2630, 2630RR</u>: Assemble all Seals, Washers, Wipers, Rings, and Ejector Rod into Ejector Gland/Cartridge.
- Models 2624, 2624-15, 2630, 2630RR: Hold Piston in a vise with soft jaws and install assembled Ejector Gland/Cartridge Assembly. Use Hex Key 122048 to tighten.



- 3. Thread Piston Assembly Tool onto Piston (*Figure 5*). <u>Note: Do not install Spacer.</u>
- 4. Install GLYD Ring onto Piston (Figure 5).
- 5. Install Polyseal, O-Ring, Back-up Ring, Wiper Housing and Wiper into Front Gland *(Figure 5)*.
- 6. Lubricate Piston Assembly Tool and Piston, then slide assembled Gland over Piston Assembly Tool onto Piston (*Figure 5*).
- 7. Thread Piston Insertion Tool into the back of the Cylinder (*Figure 6*).
- 8. Using a press, push Piston and Front Gland Assemblies into back of the Cylinder. (*Figure 6*)
- 9. Remove Piston Assembly Tool from the front of, and Piston Insertion Tool from the rear of the Cylinder.
- 10. From the rear of Cylinder, install Dump Valve with the *four flats facing the rear of the tool*.



 Install O-Ring and Back-up Ring on End Cap. <u>Models 2624HS, 2624-PT:</u> Install Back-up Ring, O-Ring, Wiper Seal, Polyseal, Washer and Retaining Ring into End Cap. (*Figure 7*)



- 12. Insert Hex Key into the End Cap. Using a wrench, thread the End Cap into the back of the Cylinder and tighten (*Figure 2*).
- Models 2624, 2624-15, 2630, 2630RR: Install Locking Disk, Cover Plate and Retaining Ring. Models 2624HS, 2624-PT: Install Locking Disk, Retainer, and Screws.
- 14. If removed, reinstall Electrical Connector.
- 15. **NOTE: If switch or wire were removed, replace** *as follows:* Slide Retaining Nut and Ferrule onto Electrical Wire. Feed Wire through Handle and pull out through Trigger Switch hole. Attach Wires to Trigger Switch and push assembly back into the Handle. Tighten Setscrew to hold Trigger Switch in place. Slide Ferrule into Strain Relief Housing, then thread and tighten Retaining Nut.
- 16. If removed, install one hydraulic Hose in Handle port marked "P" and one in port marked "R".



CAUTION: Do not use TEFLON<sup>®</sup>\* tape on pipe threads. Pipe threads may cause tape to shred resulting in tool malfunction. (Slic-tite is available in stick form as Huck P/N 503237.)

17. Install Coupler Nipple 110438 (PULL pressure side) and Coupler Body 110439 (RETURN pressure side) on hoses.

# ASSEMBLY DRAWING 2624, 2624-15



# ASSEMBLY DRAWING 2624HS & 2624-PT



Alcoa Fastening Systems

# ASSEMBLY DRAWING 2630 & 2630RR



12

# HOSE ASSEMBLY



# KITS AND ACCESSORIES

### SERVICE KITS:

SERVICE KITS:		
2624, 2624-15 - 2624KIT		
2624HS, 2624-PT - 2624HSKIT		
2630, 2630RR - 2630KIT		
ASSEMBLY TOOL KITS:		
2624 & 2624HS Assembly Tool Kit	-	123110-9
Includes: (Fig. 3 & 6))		
Spacer	-	123112-7
Piston Assembly Tool	-	123111-7
Piston Insertion Tool	-	121694-2624
2630 Assembly Tool Kit	-	123110-13
Includes: (Fig. 3 & 6))		
Spacer	-	123112-9
Piston Assembly Tool	-	123111-9
Piston Insertion Tool	-	121694-2630
Accessories:		
Ejector Gland Hex Key	- 12	2048
2624, 2624-15		
End Cap Hex Key	- 12	6981
Remote Trigger (All Models)	- 12	3381-24
<b>3333333333333</b>		

### **Suspension Brackets**

2624 series

Now available for the 2600 style tools are Suspension Bracket Assemblies which enable a user to install fasteners with increased ergonomic flexibility. Each Bracket Assembly contains the Bracket and Hardware as shown in the figure below.

- 127400-2624



## **TROUBLESHOOTING**

Always check the simplest possible cause of a malfunction first (example: a loose or disconnected trigger line). Then proceed logically and eliminate each possible cause until the defect is found. Where possible, substitute known good parts for suspected defective parts. Use the following steps as an aid in troubleshooting.

### 1. Tool fails to operate when trigger is pressed.

- a. Inoperative POWERIG® Hydraulic Unit. See applicable instruction manual.
- b. Loose electrical connections.
- c. Damaged trigger assembly.
- d. Loose or faulty hose coupling.

### 2. Tool operates in reverse.

a. Reversed hose connections between hydraulic unit and tool.

### 3. Tool leaks hydraulic fluid.

a. Defective tool O-rings or loose connections at tool.

### 4. Hydraulic couplers leak fluid.

a. Damaged or worn O-rings in Coupler Body Coupler

### 5. Hydraulic fluid overheats.

- a. Unit not operating properly. See units manual.
- b. Unit running in reverse (918; 918-5 only). See unit's manual.
- 6. Tool operates erratically and fails to install fastener properly.
  - a. Low or erratic hydraulic pressure. Air in system.
  - b. Damaged or worn Piston O-ring in tool.
  - c. Excessive wear on sliding surfaces of tool parts.

# 7. Pull grooves on fastener pintail stripped during PULL stroke.

- a. User not sliding anvil completely onto fastener pintail.
- b. Incorrect fastener grip.
- c. Worn or damaged jaw segments.
- d. Metal particles in jaw grooves.
- e. Excessive sheet gap.

### 8. Collar of fastener not completely swaged.

- a. Improper tool operation. See No. 6.
- b. Scored anvil.

### 9. Tool "hangs up" on swaged collar of fastener.

- a. Improper tool operation. See No. 6.
- b. RETURN pressure too low.
- c. Not enough collar lubricant.
- d. Nose assembly not installed correctly.

### 10. Pintail of fastener fails to break.

- a. Improper tool operation. See No. 6.
- b. Pull grooves on fastener stripped. See No. 7.
- c. PULL pressure too low.

### 11. Nose will not release broken pintail.

a. Nose assembly not installed correctly.

# STICKER LOCATIONS

The 2600 series tools come labeled with important stickers which contain safety and pressure settings information. It is necessary that these stickers remain on the tools and are easily read. If stickers become damaged or worn, or if they have been removed from the tool, they must be replaced. The part numbers are shown in the drawing below.



## **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 WAR-RANTIES 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 MANUFAC-TURED PRODUCTS FOR ANY PARTICULAR PUR-POSE AND HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDI-**RECTLY, 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 DAM-AGES.

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 MANU-FACTURED 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 CONDI-TION, DESIGN, OPERATION, MERCHANTABILITY OR FITNESS FOR USE OF ANY TOOL, PART(S), OR OTHER ITEMS THEREOF NOT MANUFAC-TURED BY HUCK. HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDI-RECTLY, ARISING FROM THE USE OF SUCH TOOLING, PART(S) OR OTHER ITEMS OR BREACH OF WARRANTY OR FOR ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAM-AGES.

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.

### <u>Eastern</u>

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

### 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.

# Alcoa Fastening Systems

## One Great Connection<sup>sm</sup>

## 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 Aerospace centers, where they provide a ready source of AFS fasteners, installation tools, tool parts, and application assistance.

## Alcoa Fastening Systems world-wide locations:

### <u>Americas</u>

Alcoa Fastening Systems <u>Aerospace Products</u> <u>Tucson Operations</u> 3724 East Columbia Tucson, AZ 85714 800-234-4825 520-747-9898 FAX: 520-748-2142

#### Alcoa Fastening Systems <u>Aerospace Products</u> <u>Carson Operations</u> PO Box 5268 900 Watson Center Rd. Carson, CA 90749 800.421.1459

800-421-1459 310-830-8200 FAX: 310-830-1436

### Alcoa Fastening Systems Industrial Products Waco Operations

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

For The Long Haul, The Future of Fastening Technology, The Future of Assembly Technology, The Future of Tooling Technology, and Tools of Productivity are service marks of Huck International. Huck provides technical assistance regarding the use and application of Huck fasteners and tooling.

NOTICE: The information contained in this publication is only for general guidance with regard to properties of the products shown and/or the

Alcoa Fastening Systems Industrial Products Kingston Operations 1 Corporate Drive Kingston, NY 12401 800-278-4825 845-331-7300 FAX: 845-334-7333

### Alcoa Fastening Systems Industrial Products Latin America Operations Avenida Parque Lira. 79-402 Tacubaya Mexico, D.F. C.P. 11850

C.P. 11850 FAX: 525-515-1776 TELEX: 1173530 LUKSME <u>Far East</u>

Alcoa Fastening Systems Industrial Products Australia Operations 14 Viewtech Place Rowville, Victoria Australia 3178 03-764-5500 Toll Free: 008-335-030 FAX: 03-764-5510

### <u>Europe</u>

### Alcoa Fastening Systems Industrial Products United Kingdom Operations Unit C, Stafford Park 7 Telford, Shropshire England TF3 3BQ 01952-290011 FAX: 0952-290459

### Alcoa Fastening Systems <u>Aerospace Products</u> <u>France Operations</u> Clos D'Asseville BP4 95450 Us Par Vigny France 33-1-30-27-9500

FAX: 33-1-34-66-0600



means for selecting such products, and is not intended to create any warranty, express, implied, or statutory; all warranties are contained only in Huck's written quotations, acknowledgements, and/or purchase orders. It is recommended that the user secure specific, up-to-date data and information regarding each application and/or use of such products.

HWB898 1003-5M



### © 2003 Alcoa Fastening Systems