

OPERATORS' GUIDE

REL-IND-10.5 S/A HYDRAULIC DIELESS INDENT TOOL



CAUTION

DO NOT OPERATE TOOL
WITHOUT CRIMP IN PLACE
SERIOUS TOOL DAMAGE AND/OR
PERSONAL INJURY MAY RESULT

WARNING



All information found in this guide must be read and understood before use or testing of this tool.

Failure to read and understand these warnings and safe handling instructions could result in severe personal injury and or death.

RELIABLE EQUIPMENT & SERVICE CO., INC.

301 Ivyland Road • Warminster, PA 18974 • USA
Phone: 215-357-3500 • Fax: 215-357-9193

MODEL: _____

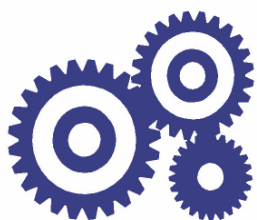
MAX. PRESSURE: _____

SERIAL NO.: _____

YEAR: _____

NOTICE

Sizes, weights and tool specifications listed in this manual are subject to change without notice. Please consult factory for information and updates.



RELIABLE EQUIPMENT & SERVICE CO., INC.

REL-IND-10.5 Manual 0* -1)

DISTRIBUTED BY

REGISTRATION

UPON RECEIPT OF THIS TOOL, COMPLETE THE REGISTRATION BELOW.

COMPANY _____

ADDRESS _____

PHONE _____ FAX _____

SERIAL NUMBER _____

DATE OF PURCHASE _____

DEALER NAME _____

CAUTION

The information in this manual is intended to guide the user in the use and application of this tool. It is not intended as a substitute for proper training and experience in safe work practices for this type of equipment.

Consult your supervisor or safety personnel if you have any questions regarding the safe operation of this tool.

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WARNING

Inspection & Testing requirements may vary in accordance with the working guidelines established by each utility or contractor.

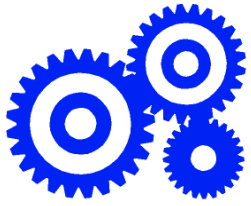
For your own safety, ensure that you fully comply with all safe operation guidelines required by your employer.



THIS SYMBOL INDICATES ITEMS OF EXTREME IMPORTANCE.

Safety of user and others may be in jeopardy if these instructions are not read and understood.

If you have any questions regarding the information found in this manual please contact **RELIABLE EQUIPMENT** at 800-966-3530 or FAX 215-357-9193.



RELIABLE EQUIPMENT & SERVICE CO., INC.

REL-IND-10.5

HYDRAULIC INDENT TOOL



Dipped Insulation,
High Pressure Coupler
& Protective Shrink



REL-IND-10.5

10.5 TON, HIGH PRESSURE, HYDRAULIC INDENT TOOL

Operate from any 10,000 psi hydraulic source. Features a wider opening than comparable indent tools. (2-3/16 in.)

Crimp up to 750 MCM Al. and 800 MCM Cu.

Protective dipped Insulation and Shrink Wrap.



301 Ivyland Road • Warminster, PA 18974
Phone: 800-966-3530 • Fax: 215-357-9193
Visit us on the web at www.Reliable-Equip.com

SPECIFICATIONS

System	High Pressure Hydraulic
Force	10.5 Tons
Pressure	10,000 PSI (690 bar)
Couplers	3/8 NPT Female
Capacity	4/0 to 750 Al., 800 Cu.
Jaw Opening	2-3/16 in. (5.56 cm)
Length	12-3/16 in. (30.96 cm)
Weight	9.0 lbs.

For more information related to custom tool designs contact your regional RELIABLE representative.



WARNING

BEFORE USING THIS TOOL, READ THE WARNINGS and the recommended practices described in this manual. Failure by the operator to read and fully understand these warnings will leave this person unqualified to use and operate this tool. Property damage, severe personal injury, and/or death could result by not following these warnings.

These warnings will appear in appropriate locations when they are pertinent to the particular subject being shown. Read each one carefully and follow them strictly.



Eye Protection

WARNING

Always wear eye protection to avoid injury from flying debris or hydraulic oil leaks. Failure to do so can result in serious personal injury.



Skin Irritation

WARNING

Hydraulic oil may cause irritation. Use care to prevent contact with skin. In case of accidental contact, wash affected area immediately



Hard Hat

WARNING

Always wear a hard hat to avoid injury from falling debris. Failure to do so can result in serious personal injury.



Foot Protection

WARNING

Always wear foot protection. Failure to do so can result in serious personal injury.



Hearing Protection

WARNING

Always wear hearing protection, to avoid hearing loss due to long term exposure to high noise levels.



Protective Gloves

WARNING

Always wear protective gloves Failure to do so can result in serious personal injury.



WARNING

SAFE OPERATION & CARE

USE THIS TOOL FOR ITS INTENDED PURPOSE ONLY
Any other use can result in personal injury or property damage.

INSPECT TOOL BEFORE USE. Replace any worn, damaged or missing parts. A damaged or improperly assembled tool may malfunction, injuring operator and/or nearby personnel.

INSPECT HYDRAULIC HOSES AND COUPLINGS before each use. Repair or replace if any cracking, leakage, wear or damage is found. Worn or damaged hoses may fail resulting in personal injury or property damage.

CLEAR WORK AREA of all bystanders and unnecessary personnel before operating this tool.

KEEP ALL PARTS OF THE BODY AWAY FROM MOVING PARTS.

Failure to observe this warning could result in serious injury.



WARNING

HYDRAULIC POWER SUPPLY

DO NOT attempt to make any changes to any of the component parts or accessories when connected to the power source.

DO NOT adjust, inspect, or clean tool while the tool is connected to the power source. The tool could accidentally start up and cause serious injury.

DO NOT lock the tool in the On Position. In an emergency, serious damage or injury could occur during the time required to stop the tool.



WARNING

OIL INJECTION INJURY

Hydraulic oil or fluid under the skin is a serious injury. Oil under pressure can penetrate the skin and may cause dismemberment or loss of life. Seek medical assistance immediately if such an injury should occur.

Always wear safety gloves, eye protection and all required safety equipment when operating or handling this tool.

DO NOT use fingers or hands to attempt to locate a leak.

DO NOT handle hoses or couplers while system is pressurized.

NEVER open or service the system before depressurizing.



WARNING

HOSES AND FITTINGS

There exists the potential for shock in using anything other than certified nonconductive hoses and hydraulic oil with dielectric properties, when using system components near energized electrical lines. Failure to recognize these conditions could cause electrocution.

Hoses and fittings used with this tool must comply with S.A.E. J1273 which covers recommended practice for selection, installation, and maintenance of hose and hose assemblies. The **correct hoses and fittings are available from your supplier.**

WARNING: Failure to comply with these warnings could result in severe bodily injury.



WARNING

UNIT/HOSE CONNECTIONS

ALWAYS DISCONNECT pump/power source and move toggle switch to **OFF** before connecting or disconnecting any components.

ALWAYS DEPRESSURIZE hydraulic system, before slowly disconnecting this unit or any of the systems components.

ALWAYS TIGHTEN couplings completely. Loose or improperly tightened couplings will not allow fluid to pass through the hose creating a blockage in the supply or return line.

ALWAYS INSPECT HOSES AND CONNECTORS before connection to tool. Replace or repair if any leakage is evident. Leakage is a sign of deterioration in component parts. Worn or leaking parts must be repaired or replaced, or tool damage or severe injury could result.



WARNING

Operation/Safety methods may vary in accordance with the working guidelines established by each utility or contractor.

For your own safety, ensure that you fully comply with all safe operation guidelines required by your employer.



WARNING

ELECTRICAL SHOCK HAZARD

Always wear and use the necessary clothing, equipment and safety practices to protect against electrical shock. Failure to follow these rules can result in serious personal injury or death.



WARNING

COMPRESSION DANGER

This manual hydraulic crimping tool can injure and/or disable.
KEEP ALL PARTS OF THE BODY AWAY FROM MOVING PARTS.

Failure to observe this warning could result in serious injury



WARNING

ELECTRICAL SHOCK HAZARD

Always wear and use the necessary clothing, equipment and safety practices to protect against electrical shock. Failure to follow these rules can result in serious personal injury or death.



GENERAL SAFETY



USE ALL APPROPRIATE AND APPLICABLE PERSONAL SAFETY EQUIPMENT as required by the operating company.

INSPECT TOOL BEFORE USE. Replace any worn, damaged or missing parts. A damaged or improperly assembled tool may injure operator and/or nearby personnel.

KEEP ALL PARTS OF THE BODY AWAY from moving parts of the tool.

KEEP HANDS OUT FROM BETWEEN CRIMPING NODES AT TOOL HEAD.

ALL BODY PARTS SHOULD BE OUTSIDE DANGER ZONE PRIOR TO COMPRESSION.

MAKE SURE there is no person in close proximity to you or the tool who could be injured by any operation being performed, tool malfunction or flying debris.

DO NOT OVEREXTEND your position by overreaching or unbalancing the footing necessary to maintain physical control of your body and the tool.

ALWAYS MAINTAIN a firm grip on the tool to avoid loss of control during an operation, causing property damage, serious injury or death.

USE THIS TOOL FOR THE MANUFACTURERS' INTENDED PURPOSE ONLY.

OBSERVE CLOSELY ALL OF THE SAFETY RULES FOR A PARTICULAR JOB CLASS

Operation/Safety methods may vary in accordance with the working guidelines established by each utility or contractor. Ensure that you fully comply with all safe operation guidelines required by your employer.

**FAILURE TO HEED THESE WARNINGS COULD RESULT IN
PROPERTY DAMAGE, SERIOUS PERSONAL INJURY OR DEATH.**

OPERATION

Read entire manual prior to using this tool. Refer to all SafetyCautions and Warnings. **Observe all safety precautions and procedures required by the operating company.**

1. Before crimping, ensure that subject is within the capacity listed for the tool. (see page 4)

Use only with approved in-line sleeves designed for use with a dieless indent tool.

WARNING: Crimping standard “H” Frame (Double Open Groove) connectors may cause tool damage and void warranty.

2. Ensure that 10,000 psi power source is turned **OFF** and valve is in **OFF** position.

3. Connect to a power source. (Refer to page 7 UNIT/HOSE CONNECTION)

A power source with an audible “Pop Off” type relief valve is recommended.

4. Ensure that Indent nib is fully retracted.

6. Place Indent Tool around the connector/conductor assembly.

7. Position subject at a 90° angle to the tool compression head.

KEEP HANDS AND ALL BODY PARTS AWAY FROM COMPRESSION OPERATION

8. Turn power source “ON”.

9. Activate control valve to advance compression nib up to subject. **Check tool alignment.**

7. Continue to advance until “pop off” is felt or heard and full pressure has been obtained.

8. Return source to the “OFF” position and allow compression nibs to retract completely.

9. Repeat procedure as required by compression sleeve rotating indent 90° at each step.

10. Visually inspect crimp for correctness.



WARNING

BEFORE USING THIS PRODUCT READ THE SAFETY WARNINGS and recommended practices described in the manual. Failure by the operator to read and fully understand the warnings will leave this person unqualified to use and operate the tool.

Failure to observe all warnings and instructions could result in property damage, severe personal injury, and/or death.



CAUTION

Operation and safety methods may vary in accordance with the guidelines established by each utility. For your safety, ensure that you fully comply with all safe operation guidelines established by your respective power utility. REL-SM

DANGER



The user should be properly trained in the correct procedures required for work on or around electrical lines.



NOTE: Keep Label Set clean and legible. Replace decals when necessary.

DAILY MAINTENANCE

The life, reliability, and safety of the tool is dependent on proper use and maintenance.

STORE THE TOOL PROPERLY . . . Before storing tools release pressure so that the crimping nib fully retracts. This protects the operating ram from moisture and condensation.

NOTE: When the tool has been stored for extended period of non-use, the tools should be activated approximately every 3 weeks to keep o-rings and seals lubricated.

Clean and inspect all surfaces including head, ram, body and coupler.

Particularly avoid joint compounds from building up on the crimping nib.

Inspect for wear and damage. Worn or damaged parts may malfunction during operation, causing more extensive damage to the tool and/or severe injury to the operator or bystander.

All parts must be replaced with new parts if signs of wear or damage are evident.

Check relief valve pressure setting regularly, using the optional pressure gauge. (Optional - may be purchased from Reliable Equipment or your local Reliable representative).

Valve should be adjusted or replaced by a trained service technician if necessary.

DO NOT MAKE ADJUSTMENTS TO THE TOOL . . . There are no adjustments on this tool which can be made in the field. If a tool becomes inoperative and the instructions in this booklet do not correct the malfunction have the tool serviced by RELIABLE EQUIPMENT or an authorized service provider.

Keep Label Set clean and legible. Replace decals when necessary.

GENERAL MAINTENANCE

This tool requires well-trained experienced personnel for major repairs, adjustments or maintenance. **Complete disassembly is not recommended. Return the unit to an authorized dealer for total disassembly and/or repair.** It is suggested that tools requiring repairs be returned to Reliable Equipment for correction unless overall local conditions are adequate and service training has been provided. Reliable Equipment is set up to provide quick maintenance and overhaul service. Contact your Reliable Equipment representative if service is required.

All maintenance or disassembly should take place on a flat, clean work surface covered with towels or wipers so as to have a clean space for the disassembled parts.

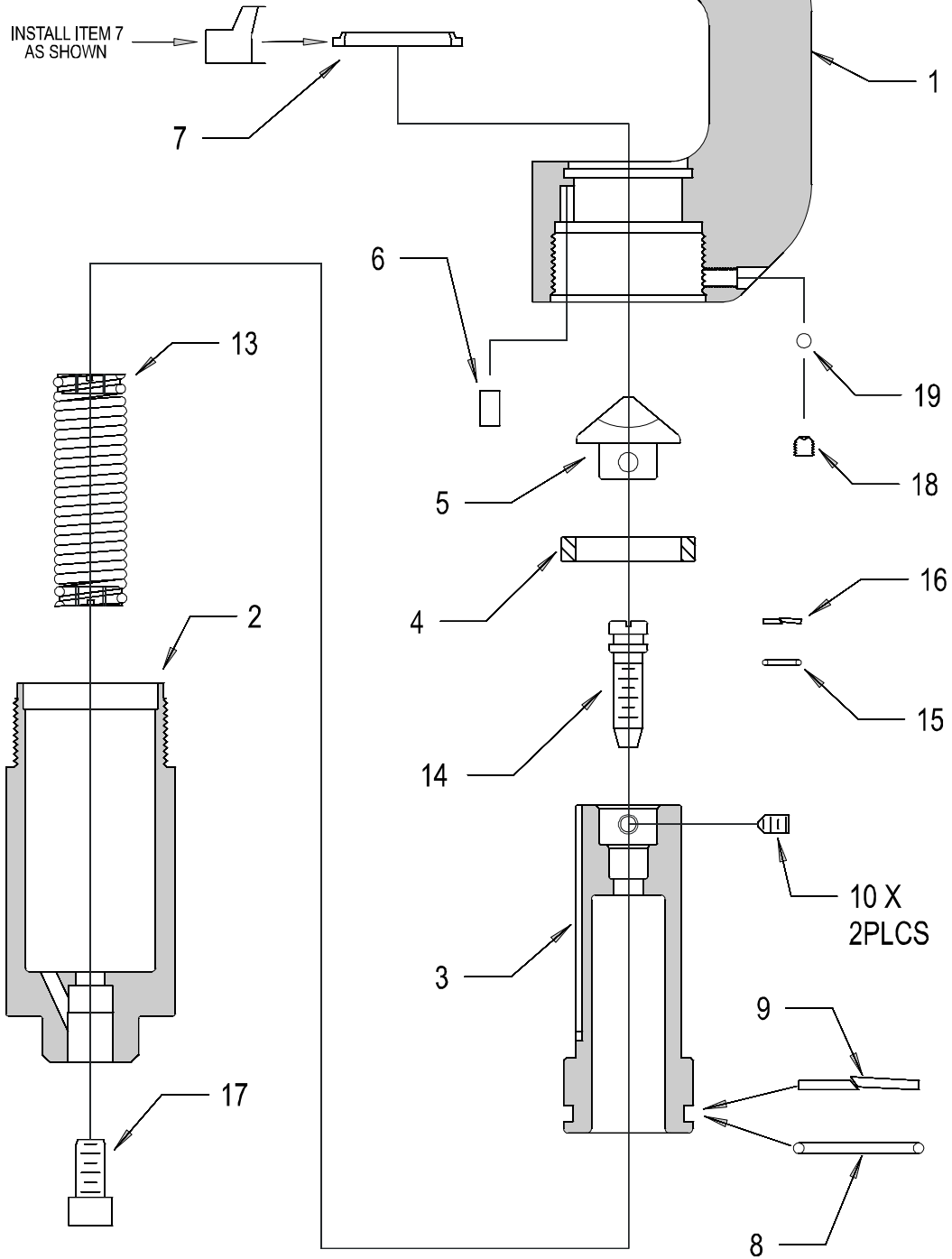
Inspect each part during disassembly for wear, scratches, and cuts. Discard the worn or damaged parts and replace with new factory authorized parts.

O-rings are sensitive to sharp edges. Inspect closely for cuts or damage. A small cut will cause a leak. When assembling or disassembling O-rings, use hydraulic fluid as a lubricant to help disassembly or installation.

NOTICE: When disposing of hydraulic fluid, parts or components observe all federal, state, and local guidelines.

IF YOU HAVE QUESTIONS REGARDING THE REPAIR AND MAINTENANCE OF THIS TOOL CONTACT RELIABLE EQUIPMENT OR YOUR RELIABLE EQUIPMENT REPRESENTATIVE.

REL-IND-10.5 INDENT TOOL ASSEMBLY



REL-IND-10.5 DIELESS INDENT TOOL PARTS

ITEM	PART #	QTY	DESCRIPTION
1	R50001	1	CRIMP HEAD
2	R50002	1	OUTER CYLINDER
3	R50003	1	RAM
4	R50004	1	COLLAR
5	R50005	1	DIE
6	R50006	1	KEY
7	R50007	1	* WIPER
8	R50008	1	* O'RING
9	R50009	1	* BACKUP RING
10	R28021	2	SET SCREW, M6 X 10
13	R50013	1	SPRING ASSEMBLY
14	R28010	1	BOLT, SPRING SEAL
15	R28011	1	* O-RING, SEAL BOLT
16	R28012	1	* B/U RING, SEAL BOLT
17	R35021	1	SCREW
18	R20287	1	SET SCREW
19	R21022	1	3/16 DIA NYLON BALL
*	R50050		SEAL KIT (* ITEMS)



**RELIABLE EQUIPMENT
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Maintenance Records

Date	Parts or Service Required

