# **N**ICOPRESS®

# MODEL 5512 BATTERY POWERED COMPRESSION TOOL

**INSTRUCTION No. 5512** 



# THE NATIONAL TELEPHONE SUPPLY COMPANY

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#### I. SAFETY AND WARNING REMINDERS

**NOTE:** THE *NICOPRESS*<sup>®</sup> BATTERY OPERATED COMPRESSION TOOL IS DESIGNED TO BE USED WITH *NICOPRESS*<sup>®</sup> SLEEVES. SPLICING ANY OTHER ITEMS SHOULD NOT BE ATTEMPTED, AS IT MAY CAUSE DAMAGE TO EQUIPMENT AND/OR INJURY TO PERSONNEL.

- 1. Carefully read, understand and follow all instructions in this manual and on the tool before attempting to operate the equipment.
- 2. Always wear safety eye protection at all times.
- 3. Keep fingers out of pinch areas during operation.
- 4. Always point the tool away from other people.
- 5. If the tool is stored for an extended period at a temperature of less than 25° F (-5°C), the tool should be allowed to return to room temperature to ensure smooth operation Use the tool only after it has been at room temperature for 1 hour.
- 6. Do not drop the tool. Dropping the tool may damage the hydraulic circuit and result in the tool not functioning correctly.
- 7. Keep the head and ram clean and free of debris. Solvents can be used to clean the head, but should not be used on the plastic body. Use soap and water to clean the body.

#### PRECAUTIONS FOR THE NBP-1 BATTERY CARTRIDGE:

- 1. Do not short circuit the contacts or expose the cartridge to water, oil or solvents.
- 2. Do not disassemble or attempt to repair the battery cartridge or dispose of in a fire.
- 3. Do not drop or otherwise abuse the battery cartridge.
- 4. Do not leave the cartridge in locations where it will be exposed to a temperature greater than 140°F (60°C) for an extended period
- 5. For long term storage beyond 2 months, it is recommended the battery cartridge be stored without being recharged and should only be recharged closer to the time of use.

#### PRECAUTIONS FOR THE NC-1 CHARGER:

- 1. This charger is for charging battery cartridge NBP-1 only. Do not use the charger for any other devices.
- 2. Allow battery cartridges to cool before charging.
- 3. Charge batteries at an ambient temperature of 50°-95°F (10°-35° C). Charging time is approximately 50 to 60 minutes for the NBP-1.
- 4. Never short circuit the output terminals.
- 5. Do not expose the charger to water, oil or solvents.
- 6. Do not disassemble, attempt to modify, drop or otherwise abuse charger.

#### II. SPECIFICATIONS AND FEATURES

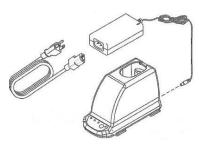
- 1.Output Force 12 ton
- 2. Weight 18 lbs. with Battery
- 3. Size 16"L x 10.5"H x 3.5"W

#### **FEATURES**

- 1. 180 Degree Rotating Head
- 2. Fully Enclosed Weather Resistant Housing.
- 3. Accepts Nicopress 12 ton compression dies.
- 4. Molded Plastic Case with Die Compartment.

# **III. OPTIONAL ACCESSORIES**





BATTERY CARTRIDGE NBP-1

BATTERY CHARGER NC-1

Battery Cartridge (NBP-1), two included with tool.

Battery type: Lithium Ion Voltage: 15.2V DC Rated current: 3.0 Ah

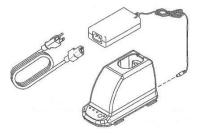
Charge time: 50 to 60 min.

Battery Charger (NC-1), one included with tool

Input voltage: 120 or 240 VAC single phase

#### **IV. OPERATING INSTRUCTIONS**

#### **CHARGING THE BATTERY**



- 1. Insert the plug end into a 120V power source. The POWER indicator lights up green with power.
- 2. To charge a drained battery, insert the battery into the charger. The READY indicator flashes green with 90% charge and solid green when fully charged. The charging will be completed in approximately 50 to 60 minutes.
- 3. The CHARGE/FAULT indicator shows amber when the battery is charging, or flashing amber if the battery is too hot to be charged and must cool to room temperature before charging.
- 4. The CHARGE/FAULT indicator shows a battery fault with a quick flashing amber.

#### ATTACHING THE BATTERY CARTRIDGE

- 1. While pressing the latch, pull out the battery cartridge. To replace the battery cartridge, push the new cartridge firmly into place.
- 2. After inserting a battery cartridge, check that it is securely in place by pulling gently. Do not press the latch when pulling the cartridge.



#### ADVANCE AND RETRACT ROCKER SWITCH

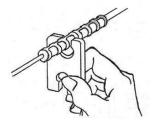
- 1. The ram advances when the forward arrow on the rocker switch is pressed, and will stop and hold when the rocker is released.
- 2. To retract the ram, push the reverse arrow on the rocker switch. Press and hold the rocker switch to retract the ram all the way.

#### V. PROPER CRIMPING

- 1. Select the appropriate compression die set for the connector and cable being used. All Nicopress Series 12 Dies can be used with this tool.
- 2. Insert a die half into the C-head by sliding it while pressing the release pin.
- 3. Press the rocker switch to advance the ram until the die release pin is accessible. Then insert the other half of the die into the ram while pressing the die release pin.
- 4. Press the rocker switch to advance the ram so the connector is held between the dies.
- 5. Insert the wire into the splicing sleeve.
- 6. Press the rocker switch until the compression is completed. A series of clicks will be heard, followed by a release in pressure when completed.
- 7. If the dies fail to close, it will be due to:
  - the tool being used for some application for which it was not designed.
  - the pressure not building up because of a depleted battery.
  - the dies being the incorrect size.
- 8. Press the rocker switch to retract the ram. The ram continues to retract while the rocker switch button is pressed. The ram stops when it reaches the lower end.
- 9. Remove the cable from the tool and check the crimp with the gauge.

#### **USE OF CRIMP GAUGE**

When using the gauge, it should be held so that it contacts the compressed portion of the sleeve at right angles to the fins (flash). The compressed portion of the splice should enter the gauge easily.

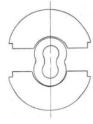


#### WIRE ROPE SPLICING

Because of the many variations in wire and fiber rope design and construction, it is recommended that all wire rope assemblies be pull tested prior to use.

It has been determined through pull testing that an eye splice using *NICOPRESS*<sup>®</sup> copper, copper plated and stainless steel oval sleeves will hold military specification aircraft cable to its breaking strength, when the cable is made to military specifications MIL-DTL-83420M, dated 02/17/09 for cable constructions 3x7, 7x7, 7x19 and Federal Specification RR-W-410F dated 12-06-2007 for cable construction 6x19 IWRC. These test results were achieved using *NICOPRESS*® sleeves crimped with *NICOPRESS*® tools.

Splices in wire rope are made by compressing two wires together inside a sleeve. To compress the sleeve properly, position the sleeve between the crimping dies with the long axis of the sleeve aligned with the crimping action of the dies.



#### LAP SPLICES

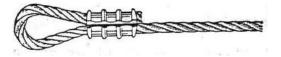
When the ends of two pieces of wire rope or both ends of the same rope are spliced together, this splice is called a lap splice. Usually two sleeves are needed to develop a splice equal to the breaking of the wire.

To make a proper lap splice, pull the ends of the rope through both sleeves. Be sure to leave a space between the sleeves to allow for extrusion of the sleeves during crimping and approximately 1/16" to 1/8" space between sleeves after crimping. The sleeve length, after crimping, can be found in *NICOPRESS* Catalog No. 4 for Oval Sleeves. The ends of the wire should extend approximately 1/16" beyond the edge of the crimped sleeves.



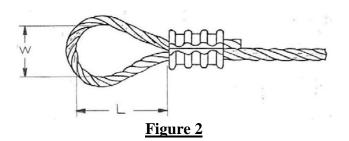
#### **EYE SPLICES**

Eye splices are formed by pulling one end of the wire or fiber rope through the oval sleeve and looping it back to form an eye (Figure 1). Line up the sleeve between the crimping dies with the long axis perpendicular to the crimping action of the dies. The splice is made by the two wires being compressed together inside the sleeve.



#### Figure 1

Because of the many different types of wire rope, there can be no formula governing the exact size of loop to use. It is suggested that the length of the loop be approximately twice the width (Figure 2).



All wire rope assemblies should be pull tested prior to use to assure proper tensile strength.

# **COMPRESSION DIE CHART FOR WIRE ROPE SPLICING**

# **Oval Sleeves**

Cable Size	Oval Sleeve	Compression Die/# of	Cable Size	Oval Sleeve	Compression Die/# of
Cable Size	Stock #	Presses Required	Cable Size	Stock #	Presses Required
	18-11-B4	12-OVAL-B4 (1)		18-8-F2	12-OVAL-F2 (2)
	28-11-B4	12-OVAL-B4 (1)		28-8-F2	12-OVAL-F2 (2)
3/64	428-1.5-VB4	12-OVAL-B4 (1)	7/32	428-7-F2	12-OVAL-F2 (2)
	168-1.5-VB4	12-OVAL-B4 (1)			
	188-1.5-VB4	12-OVAL-B4 (1)			
	18-1-C	12-OVAL-C (1)		18-10-F6	12-OVAL-F6 (2)
	28-1-C	12-OVAL-C (1)		28-10-F6	12-OVAL-F6 (2)
1/16	428-2-VC	12-OVAL-C (1)	1/4	428-8-VF6	12-OVAL-F6 (2)
	168-2-VB4	12-OVAL-B4 (1)		168-8-VF2	12-OVAL-F2 (2 ovlp)
	188-2-VC	12-OVAL-C (1)		188-8-VF6	12-188-VF6 (2)
	18-2-G	12-OVAL-G (1)		18-13-G9	12-OVAL-G9 (3)
	28-2-G	12-OVAL-G (1)		28-13-G9	12-OVAL-G9 (3) 12-OVAL-G9 (3)
3/32	428-3-VG	12-OVAL-G (1)	5/16	428-10-VG9	12-OVAL-G9 (3) 12-OVAL-G9 (3)
	168-3-VC	12-OVAL-C (1)		188-10-VG92	12-VG92 (4)
	188-3-VG	12-188-VG (1)		188-10-VG92	12-1092 (4)
	18-3-M	12-OVAL-M (1)	3/8	18-23-H5	12-OVAL-H5 (4)
	28-3-M	12-OVAL-M (1)		28-23-H5	12-OVAL-H5 (4)
1/8	428-4-M	12-OVAL-M (1)		428-12-VH5	12-OVAL-H5 (4)
	168-4-VG	12-OVAL-G (1)		188-12-VJ8	12-OVAL-J8 (5)
	188-4-VM	12-188-VM (1)			` ′
	18-4-P	12-OVAL-P (2)	7/16	18-24-J8	12-OVAL-J8 (5)
	28-4-P	12-OVAL-P (2)		28-24-J8	12-OVAL-J8 (5)
5/32	428-5-VP	12-OVAL-P (2)		428-14-VJ8	12-OVAL-J8 (5)
	168-5-VM	12-OVAL-M (1)		188-14-VK8	12-OVAL-K8 (6)
	188-5-VP	12-188-VP (2)			
	18-6-X	12-OVAL-X (2)	1/2	18-25-K8	12-OVAL-K8 (6)
	28-6-X	12-OVAL-X (2)		28-25-K8	12-OVAL-K8 (6)
3/16	428-6-VX	12-OVAL-X (2)		428-16-VK8	12-OVAL-K8 (6)
	168-6-VP	12-OVAL-P (3)		188-16-VM1	12-188-VM1 (4)
	188-6-VX	12-188-VX (2)			

# **Stop Sleeves**

Cable Size	Stop Sleeve Stock #	Compression Die/# of Presses Required		
3/64	871-12-B4	12-OVAL-B4 (1)		
1/16	871-1-C 878-2-VC 871-1-Q*	12-OVAL-C (1) 12-OVAL-C (1) 12-1-Q (1)		
3/32	871-17-J 871-3-Q* 878-3-J	12-J (1) 12-1-Q (1) 12-J (1)		
1/8	871-18-J 878-4-J	12-J (1) 12-J (1)		
5/32	871-19-M 878-5-M	12-1M (1) 12-1M (1)		
3/16	871-20-M 878-6-M	12-1M (1) 12-1M (1)		
7/32	871-22-M	12-1M (1)		
1/4	871-23-F6 878-8-VF6	12-OVAL-F6 (2) 12-OVAL-F6 (2)		
5/16	871-26-F6 878-10-VF6	12-OVAL-F6 (2) 12-OVAL-F6 (2)		
3/8	871-27-F6	12-OVAL-F6 (2)		

# COMPRESSION DIE CHART FOR SYNTHETIC & FIBER ROPE SPLICING

#### **Oval Sleeves**

	Cable Size	Oval Sleeve Stock #	Compression Die/# of Presses Required	Cable Size	Oval Sleeve Stock #	Compression Die/# of Presses Required
	1/16	1700-C	12-OVAL-C (1)	5/16	1700-G3	12-1700-G3 (4 ovlp)
Γ	1/8	1700-M	12-1700-M (1)	3/8	1700-H5	12-1700-H5 (4)
	3/16	1582-P	12-1582-P(1)	1/2	1700-J8	12-1700-J8 (6)
ſ	1/4	1700-X	12-1700-X (2)	<u> </u>		

# TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION	
MOTOR RUNS, BUT THE TOOL JAWS WILL NOT ADVANCE	Insufficient Hydraulic Oil	Consult Factory for Repair Service	
NOT ADVANCE	Air Block in Hydraulic System	Invert tool to allow air to rise towards the top of the oil bladder	
	Defective Hydraulic Circuit	Consult Factory for Repair Service	
MOTOR RUNS, TOOL JAWS ADVANCE BUT	Insufficient Hydraulic Oil	Consult Factory for Repair Service	
WILL NOT BUILD PRESSURE	Defective Suction Valve or Bypass Cartridge	Consult Factory for Repair Service	
MOTOR WILL NOT RUN AT ALL	Defective Battery	Charge or Replace Battery	
	Bad Contact or Loose Battery Connections	Check all Connections and Wires	
	Misaligned Switch	Check to Make Sure that Switch is Properly Aligned with Trigger	
		Consult Factory for Repair Service	
TOOL JAWS WILL NOT RELEASE	Tool Did Not Complete a Full Cycle and Bypass	Press Trigger and allow Tool to Bypass. Then Release Tool Jaws.	
	Connector is Jammed in Tool Jaws	Press and Hold Release Trigger While Prying Tool Jaws Apart.	
	Release Trigger is Bent or Misaligned	Consult Factory for Repair Service	

#### **MODEL 5512 WARRANTY**

The 5512 Battery Tool with the NBP-1 battery has a 5 year warranty. NICOPRESS reserves the right to determine all warranty claims. Failure due to misuse, abuse or repairs attempted by anyone other than NICOPRESS, render this warranty null and void. A repaired or reconditioned battery operated hydraulic tool carries a one year warranty.

#### REPAIR AND WARRANTY CLAIMS

Call a NICOPRESS Authorized Distributor stating the tool's purchase date and problem description. You will be given a Return Goods Authorization No. to assure that your merchandise will be properly handled upon receipt. Non-warranty repairs are handled using the same procedure. Repairs exceeding 50% of the cost of a new tool will be advised before repairs are made.

PLEASE RETAIN FOR YOUR RECORDS

# Purchaser's Name Address City, State, Zip Tool Model Number Serial Number Date Purchased From

#### **FACTORY MAINTENANCE SERVICE**

A factory maintenance reconditioning service is available beyond the warranty period to accommodate normal tool wear. Contact your authorized distributor for additional information and details.

# THE NATIONAL TELEPHONE SUPPLY COMPANY

5100 Superior Avenue, Cleveland, Ohio 44103

Phone: 216-361-0221 Fax: 216-361-3111 <u>www.nicopress.com</u> 01.10

#### **MODEL 5512 WARRANTY**

#### HOW TO GET SERVICE UNDER THE TERMS OF THE LIMITED WARRANTY

#### Return your product directly to a NICOPRESS authorized distributor.

Call a NICOPRESS Authorized Distributor stating the tool's purchase date and problem. You will be given a Return Goods Authorization Number to assure that your merchandise will be properly handled upon its receipt.

CAUTION: Make sure the product is packaged adequately so as to prevent damage or loss during transit. The shipment must be prepaid and we recommend that it be insured. A cover letter indicating the reason for the return should be included in order to facilitate repairs.

# SEND THIS PORTION WITH ANY TOOL WHEN REQUESTING REPAIRS, WARRANTY OR RECONDITIONING WORK.

#### PLEASE CALL OR FAX A NICOPRESS DISTRIBUTOR

Nicopress RGA No				
Distributor				
Address				
City		State	Zip	_
Tool Model				
Serial No				
Warranty Claim	_ Repair Only	Estimate Requi	ired: Yes _	No
Problem Description:				
Customer Name:				
Phone ( )				
Address				
City		State	Zip	_