

## HOW TO CHECK PHASE SEQUENCE (cont'd)

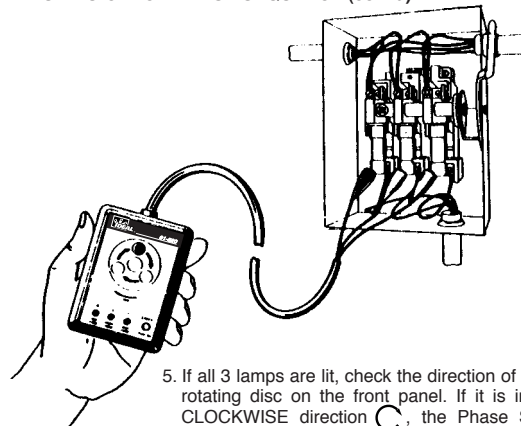





Fig. 3

5. If all 3 lamps are lit, check the direction of the rotating disc on the front panel. If it is in a CLOCKWISE direction , the Phase Sequence is R, S, and T, in order of the lines where the Red, White and Blue clips are connected.  
Release the 'ON' button at conclusion of test.
6. If the rotation of the disc is COUNTER-CLOCKWISE , release 'ON' button and transpose (interchange) the connections of any two clips to the lines.
7. Press the 'ON' button again, making certain that all 3 lamps are lit (no open phases), and check direction of the rotating disc, which will be CLOCKWISE .  
Release 'ON' button at end of test.

## WARRANTY STATEMENT

This tester is warranted to the original purchaser against defects in material and workmanship for two years from the date of purchase. During this warranty period, IDEAL INDUSTRIES, INC. will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction. This warranty does not cover fuses, batteries or damage from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument.

Any implied warranties arising out of the sale of an IDEAL product, including but limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. The manufacturer shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses or economic loss.

State laws vary, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal right, and you may also have other rights which vary from state to state.

## IDEAL INDUSTRIES INC.

Attention: Repair Dept.  
1000 Park Ave.  
Sycamore, IL 60178

<sup>1</sup> The warranty is not applicable if the instrument has been misused, abused, subjected to loads in excess of specifications, has had unauthorized repair or has been improperly assembled or used.



#61-520



## OPERATING INSTRUCTIONS PHASE SEQUENCE AND OPEN PHASE INDICATOR

### PLEASE READ CAREFULLY

Misuse and abuse of these instructions cannot be prevented by any printed word and may cause injury and or equipment damage. Please follow these instructions faithfully and adhere to all standard industry safety rules.

Shown Approx.  
1/3 Actual Size

IDEAL INDUSTRIES, INC.  
Sycamore, IL 60178, U.S.A.  
800-435-0705 Customer Assistance  
www.idealindustries.com  
ND-1714-2

## CONTENTS

### Page

2. Importance of Phase Sequence Indication; Specifications; Packaging
3. Front Panel View
4. How to Check Phase Sequence
5. How to Check Phase Sequence(cont'd.)
6. Warranty; Do's and Don'ts

## IMPORTANCE OF PHASE SEQUENCE INDICATION

Phase Sequence is the order in which the phase voltages come on the system.

If, during repair or maintenance, two lines are transposed (interchanged) from their original positions, the Phase Sequence will be reversed. This, in turn, will reverse the direction of all 3-Phase motors on the system.

This can cause severe personal, property and equipment damage especially where rotating machinery is used for woodworking, metalworking, escalators, elevators, automation, etc.

Hence, when any repairs or maintenance is made on 3-Phase systems, or when paralleling 3-Phase Transformers or 3-Phase banks, the phase sequence of each must be in the same order.

The Model 61-520 is a positive action electrical tester and will indicate both Phase Sequence and Phase Continuity instantly and accurately.

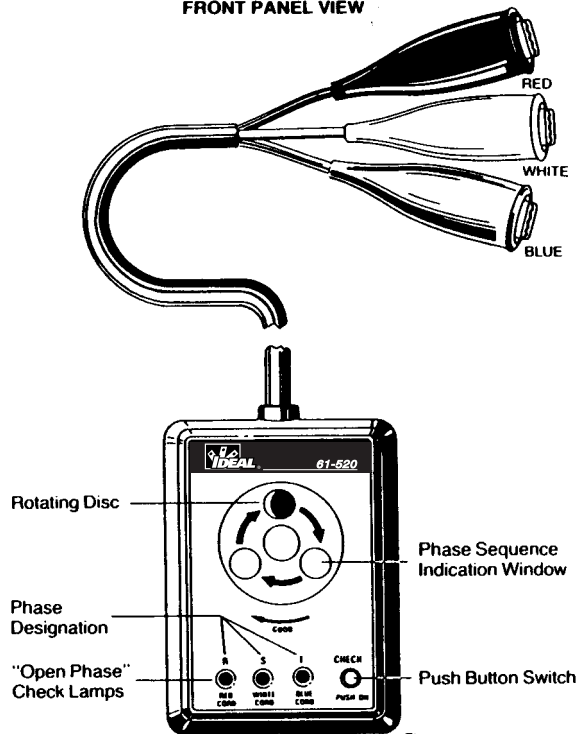
## SPECIFICATIONS

<b>Voltage</b>	- to 600V on 3-Phase Power Source
<b>Duty Cycle</b>	- CONTINUOUS TO 500V 5 MINUTES MAX. FROM 500V TO 600V
<b>Frequency</b>	- 50/60Hz
<b>Insulation Test</b>	- 2,200V AC for 1 minute
<b>Dimensions</b>	- 4.24"L X 3"W X 1.6" D (106X75X40mm)
<b>Weight</b>	- 12 1/2 Oz. (350g.)
<b>Line Cord</b>	- 60"

## PACKAGING

Packed in handy unit box, complete with Pouch, Form ND-1714 Operating Instructions and Warranty Card, all ready to use.

## FRONT PANEL VIEW



Page 3

Fig. 1.

## HOW TO CHECK PHASE SEQUENCE (cont'd)

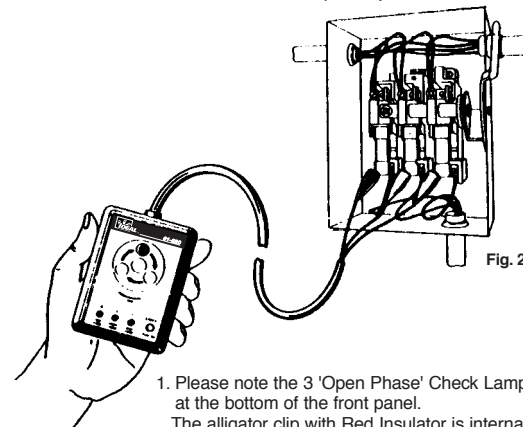


Fig. 2

1. Please note the 3 'Open Phase' Check Lamps at the bottom of the front panel. The alligator clip with Red Insulator is internally connected to the left lamp with Phase Designation 'R'; the White Insulator to the middle lamp with Phase Designation 'S'; the Blue Insulator to the right lamp with Phase Designation 'T'.

2. Connect the 3 alligator clips to the 3-Phase Power source being checked for Phase Sequence. The positions of the clips on the 3 lines is optional.
3. Press the 'ON' button in lower right corner of front panel, keeping it depressed throughout the test.
4. If all 3 lamps are lit, it signifies NO OPEN PHASES and the Phase Sequence can then be checked.

However, if any of the lamps are NOT lit, the Phase Sequence Indicator will not operate. Check to determine cause of the open phase and correct before proceeding with the test.