

TOOLS & EQUIPMENT

southwiretools.com



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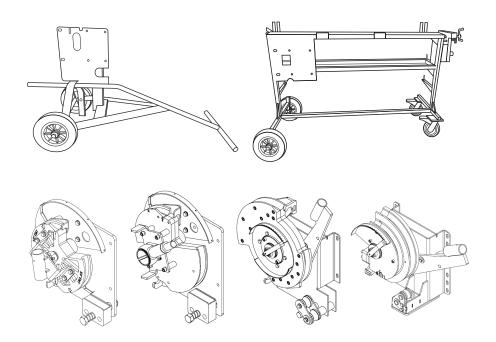
07/17 (EMT, IMC/GRC Conduit Benders)



TOOLS & EQUIPMENT

OPERATING and MAINTENANCE INSTRUCTIONS

MANUAL BENDING PLATFORM EMT, IMC/GRC Conduit Benders





READ AND UNDERSTAND ALL OF THE
INSTRUCTIONS AND SAFETY INFORMATION IN
THIS MANUAL BEFORE OPERATING OR
SERVICING THIS TOOL



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SAFETY ALERT SYMBOLS

These symbols are used to call attention to hazards or unsafe practices related that could result in injury or property damage. The three safety words defined below indicate the severity of the hazard. The message after the signal word provides information for preventing or avoiding the hazard.



DANGER - immediate hazards that if not avoided WILL result in severe injury or death



WARNING - Hazards that if not avoided COULD result in severe injury or death



CAUTION - Hazards or unsafe practices that, if not avoided MAY result in severe injury or death

DESCRIPTION

The EMT, IMC/GRC Manual Bending Platform is a series of mobile bending platforms used for bending and working with EMT sizes ½" through 1-1/4" or IMC/GRC conduit in ¾" and 1" trade sizes. It is non-powered and utilizes a series of ratcheting bending shoes with sufficient leverage for an average-sized operator to easily bend conduit. The bending shoes are mountable to a BENDstation TM Workstation Cart or a BENDdolly™ mobile platform that fits through most standard doorways.

SAFETY

Safety is essential in the use and maintenance of Southwire Tools and Equipment. This instruction manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all safety information provided.

IMPORTANT SAFETY INFORMATION



WARNING

 Read and understand all instructions and safety information in this manual before operating or servicing this tool.





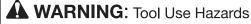




WARNING - Personal Safety Hazards

- Only qualified persons should use the EMT/IMC/GRC BENDstation™ or BENDdolly™ Bending Platforms.
- Wear eye protection, hard hat, cut resistant gloves and safety toe shoes when using this tool.
- Do not use tool when tired or under the influence of drugs. alcohol, or medication.
- Keep body parts and loose clothing away from moving parts.
- Keep hands clear of bending shoe when moving handle.
- Keep all body parts clear of handle's path when tool is not in storage position.
- When using this tool, always follow the safety procedures set forth in this manual as well as all other safety procedures necessary and proper when using tools of this type.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH.



• Use this tool for manufacturer's intended purpose only. Any use other than described in this manual can result in injury or property damage.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH.

IMPORTANT SAFETY INFORMATION

WARNING: Flying debris

• Wear eye protection when using this bender. Failure to wear eye protection could result in serious eye injury from flying debris while bending.

CAUTION: Usage Hazards

- Keep the conduit under control when unloading it from the bender. Conduit may fall and injure the operator or nearby personnel.
- Maintain a firm grip on the handle when bending. Spring back of the conduit may not allow the ratchet to fully engage, causing the handle to spring upward suddenly.
- Inspect the bender before each use. Replace any worn, damaged, or missing items with Southwire replacement parts. Damaged or improperly assembled tools may break and injure nearby personnel

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH

PURPOSE OF THIS MANUAL

This instruction manual is intended to familiarize personnel with the safe operation for the Southwire EMT, IMC and GRC BENDstation™ Workstation or BENDdolly™ Bending Platforms. Keep this manual available to all personnel.

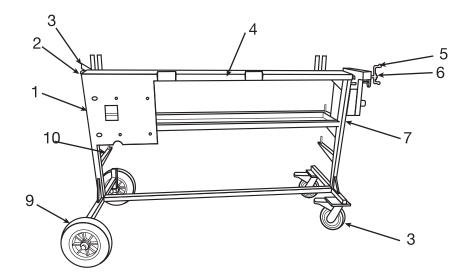
Replacement manuals are available upon request at no charge at www.southwiretools.com

IDENTIFICATION

BENDstation™ Common Cart

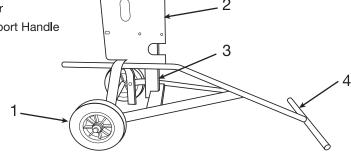
- 1. Bending Shoe Mount Plate
- 2. Conduit Stop
- 3. Conduit Slide
- 4. 60" Ruler
- 5. Speed Vise

- 6. Strut Cutting Holder
- 7. Storage Shelf
- 8. Locking Swivel Caster
- 9. 8" Eco Rubber Wheels
- 10. Conduit Shelves



BENDdolly™ Bending Platform

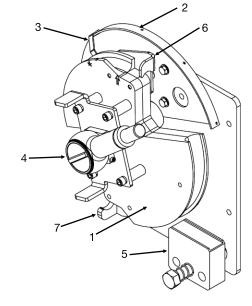
- 1. 8" Eco Rubber Wheels
- 2. Bending Shoe Mount Plate
- 3. Handle Holder
- 4. Platform Support Handle



IDENTIFICATION

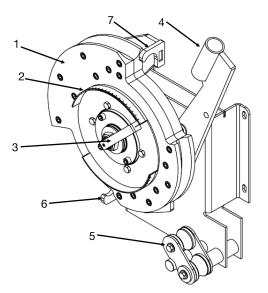
EMT MB1000

- 1. Dual Bending Shoe: 3/4" or 1"
- 2. Protractor
- 3. Protractor Pointer
- 4. Ratchet
- 5. Conduit Slide
- 6. ¾" EMT Conduit Hook
- 7. 1" EMT Conduit Hook



EMT MB1250

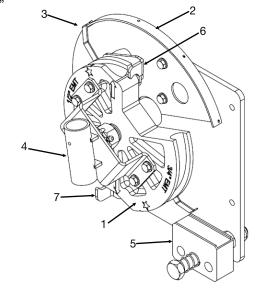
- 1. Dual Bending Shoe: 1' or 1-1/4"
- 2. Protractor
- 3. Protractor Pointer
- 4. Handle Receiver
- 5. Conduit Roller
- 6. ¾" Rigid Conduit Hook
- 7. 1" Rigid Conduit Hook



IDENTIFICATION

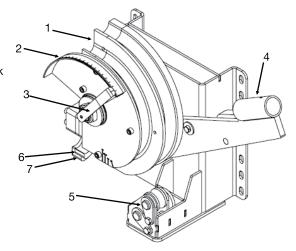
EMT MB750

- 1. Dual Bending Shoe: 1/2" or 3/4"
- 2. Protractor
- 3. Protractor Pointer
- 4. Handle Receiver
- 5. Conduit Slide
- 6. 1/2" EMT Conduit Hook
- 7. ¾" EMT Conduit Hook



IMC/GRC RB1000

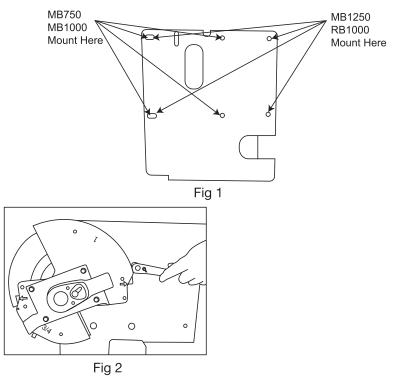
- 1. Dual Bending Shoe: 34" or 1"
- 2. Protractor
- 3. Protractor Pointer
- 4. Handle Receiver
- 5. Conduit Roller
- 6. ¾" Rigid Conduit Hook
- 7. 1" Rigid Conduit Hook



SET UP

EMT, IMC/GRC SHOE SETUP

- 1. Remove box from pallet and set aside. Remove lag bolts securing BENDstation™ Workstation or BENDdolly™ Bending Platform to pallet and lower bending platform to a horizontal plane. Once off the pallet, open box and remove bending shoe.
- 2. To Install EMT MBCCH-750/MBCCH-1000 bending shoe (1), remove bending shoe head and mounting hardware from box and hold mount plate with conduit slide (5) in the bottom right corner. Attach bending shoe (1) to square mount plate on BENDstationTM Workstation or BENDdollyTM Bending Platform. When looking at the BENDstationTM Workstation or BENDdollyTM Bending Platform from the side (flat side of mount plate facing you). Use four left bolt holes to mount MBCCH-750/MBCCH-1000 and use four outer most bolt holes to mount the MBCCH-1250/RBCCH-1000 bending shoe to platform frame (Fig. 1). Attach shoe by using supplied hardware and tighten securely with ratchet and wrench (Fig. 2). Bending shoe (1) may have to be manually turned to gain access to all four bolt holes.



7

SET UP

3. After installation of bending shoe (1) remove bending handle from secured location on the BENDstation™ Workstation or BENDdolly™ Bending Platform and install into ratchet or handle receiver. Align hole in bending handle with hole in ratchet or handle and secure with supplied Allen bolt (Fig. 3).

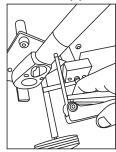


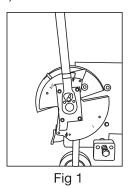
Fig 3

ORIENTATION OF BENDING SHOE

- 1. To switch from the ½", ¾" or 1" Dual Bending Shoe (1) to the ¾", 1" or 1.25" side of Dual Bending Shoe (1).
 - a. Before rotating MBCCH-750 shoe, rotate the Conduit Slide (3) by pulling out and rotating 180 degrees. Release Conduit Slide (3) and allow it to seat on alignment pins. Ensure the Conduit Slide (3) has the high side down as shown in (Fig. 1)
 - b. To rotate the MBCCH-750 shoe, remove handle and rotate shoe so the 3/4" side is facing down. Reinstall handle.
 - c. Before rotating the MBCCH-1000 shoe, rotate the Conduit Slide (3) by pulling out and rotate 180 degrees. Release Conduit Slide (3) and allow it to seat on alignment pins. Conduit Slide (3) should be in the position shown in (Fig. 1).
 - (3) and allow it to seat on alignment pins. Conduit Slide (3) should be in the position shown in (Fig. 1).
 - d. To rotate the MBCCH-1000 shoe, position the ratchet direc tional toggle switch to allow the shoe to rotate around to position the 1" side is facing down (Fig. 1).
 - e. Before rotating the MBCCH-1250 shoe, rotate the Conduit Roller (3) down by flipping the roller to allow access to lower roller.
 - f. To rotate the MBCCH-1250 shoe, position the Handle Receiver (4) all the way forward and apply pressure to handle while manu

SET UP

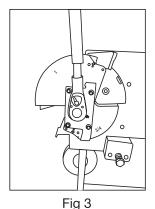
ally turning the shoe until the 1.25" side of shoe is facing down (Fig. 2).

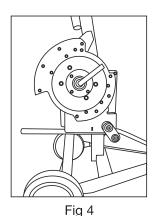


Fia 2

- 2. To switch from the 3/4", 1" or 1.25" Dual Bending Shoe (1) to the ½", ¾" or 1" side of Dual Bending Shoe (1).
 - a. Before rotating MBCCH-750 shoe rotate the Conduit Slide (3) by pulling out and rotating 180 degrees. Release Conduit Slide (3) and allow it to seat on alignment pins. Ensure the Conduit Slide (3) has the high side down as shown in (Fig. 3)
 - b. To rotate the MBCCH-750 shoe, remove handle and rotate shoe so the ½" side is facing down. Reinstall handle.
 - c. Before rotating the MBCCH-1000 shoe, rotate the Conduit Slide (3) by pulling out and rotating 180 degrees. Release Conduit Slide (3) and allow it to seat on alignment pins. Conduit Slide (3) should be in the position shown in (Fig. 3).
 - d. To rotate the MBCCH-1000 shoe, position the ratchet direc tional toggle switch to allow the shoe to rotate around to position the 34" side is facing down.
 - e. Before rotating the MBCCH-1250 shoe, flip the Conduit Roller (3) up to allow access to upper roller.
 - f. To rotate the MBCCH-1250 shoe, position the Handle Receiver (4) all the way forward and apply pressure to handle while manu ally turning the shoe until the 1" side of shoe is facing down (Fig. 4).
- 3. To switch from the 3/4" Dual Bending Shoe (1) to the 1" side of Dual Bending Shoe (1) on RBCCH-1000.
 - a. Both sizes of shoe are on the same side. Insert selected con duit size into appropriate size channel on bending shoe and engage hooks with the conduit.

SET UP



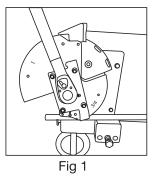


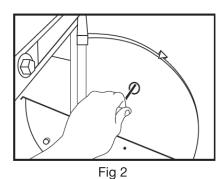
CALIBRATION

MBCCH-750/MBCCH-1000 SHOE PROTRACTOR

- 1. If calibrating the 1/2" on MBCCH-750 or 3/4" on MBCCH-1000 protractor pointer (3), rotate the bending shoe by rotating the shoe manually on the MBCCH-750 head or engaging the ratchet head on the MBCCH-1000 shoe. Rotate the bending shoe until the 1/2" or 3/4" is on the bottom and flip the conduit slide by pulling out on block and rotating clockwise 180 degrees and release (6) High side of the conduit slide should be on the top. Place a piece of 1/2" EMT for the MBCCH-750 or 1/4" EMT for the MBCCH-1000 Then follow steps 3 through 7.
- 2. If calibrating the ¾" or 1" protractor pointer (3), rotate the bending shoe by engaging the ratchet head and rotating the bending shoe until the 1" is on the bottom (1) and flip the conduit slide by pulling out on block and rotating clockwise 180 degrees and release (6) low side of the conduit slide should be at the top. Place a piece of 1" EMT conduit then follow steps 3 through 7.
- 3. Apply pressure to the bending handle making sure it is tight, do not bend the conduit (Fig. 1).

SET UP





- 4. View protractor pointer (3), if it points to zero or desired setting, calibration is finished. If not, continue to step 5.
- 5. Adjust protractor pointer (3) by loosening Allen screw on the bottom of the protractor pointer (3) on the back side of the bender shoe, using a 3/16" Allen wrench (Fig. 2).
- 6. Apply pressure to the bending handle making sure it is tight, but not bending the conduit, then set the protractor pointer to zero or desired adjustment.
- 7. Tighten Allen screw.

MBCCH-1250/RBCCH-1000 SHOE PROTRACTOR

- 1. When calibrating MB1250 Shoe protractor pointer, place a piece of 1" or 1.25" EMT conduit into the bending shoe. Calibration of either the 1" or the 1.25" side of the shoe calibrates both sides.
 - a. Calibration of the 1" pointer, ensure 1" side of the shoe is at the bottom and the conduit roller is in the up position with roller sitting on top of roller support bar. Load conduit into Dual Bending Shoe (1) and Conduit Roller (5) and proceed to step 3.
 - b. For calibration of 1.25" pointer, ensure 1.25" side of shoe is at the bottom and the conduit roller is in the low position by rotating the conduit roller clockwise so the lower roller in acces sible. Load conduit into Dual Bending Shoe (1) and Conduit Roller (5) and proceed to step 3.

SET UP

- 2. When calibrating the RBCCH-1000 shoe protractor pointer, place a piece of ¾ or 1" IMC/GRC conduit into the bending shoe.
- 3. Apply pressure to the bending handle making sure it is tight, do not bend the conduit.
- 4. View protractor pointer, if it points to zero or desired setting, calibration is finished. If not, continue to step 5.
- 5. Adjust protractor pointer by loosening the Allen screw on the front side of the shoe using a 3/16" Allen wrench (Fig. 3).
- 6. Apply pressure to the bending handle making sure it is tight, but not bending the conduit, then set the protractor pointer to zero or desired angle.
- 7. Tighten Allen screw with 3/16" Allen wrench.
- 8. Calibration complete.

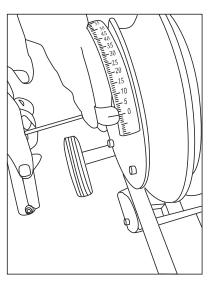


Fig 3

BENDING

EMT CONDUIT BENDING

- 1. Before bending, make sure all caster wheels are in the locked position (if equipped).
- 2. Before bending, ensure BENDstation™ Workstation or BEND dolly™ Bending Platform is on a flat and level surface.
- 3. Choose desired size conduit and place on top of work station (if equipped).
 - a. Use attached 60" ruler by laying conduit above ruler and slide conduit to the far-left side and butt up against conduit stop to make marks at desired lengths (Fig. 1).
- 4. Choose desired bending shoe. Refer to ORIENTATION OF BENDING SHOE.
- 5. Move the handle far enough forward to align conduit hook and the conduit slide so that the conduit fits into shoe hook.
- 6. If bending 1" or larger conduit, utilizing the ratcheting system will allow the operator to use body weight to increase bending force with minimal effort. To utilize this system switch ratchet to enable the bending handle to sit at a 30-degree angle from the ground prior to bending. Switch ratchet (4) again so that pressure can be applied to the bending head in a downward motion.
- 7. Push handle down until it is parallel with the ground, lift the handle to the desired angle and repeat until desired bend angle is show on the protractor.
- 8. When bend is finished, lift handle to a vertical position and twist conduit outward to release from shoe (Fig. 2).

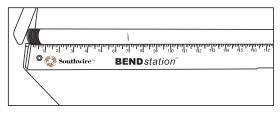


Fig 1

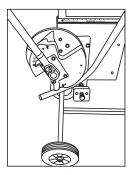


Fig 2

BENDING

IMC/GRC CONDUIT BENDING

- 1. Before bending, make sure all caster wheels are in the locked position (if equipped).
- 2. Choose desired size conduit and place on top of work station (if equipped).
 - a. Use attached 60" ruler by laying conduit above ruler and slide conduit to the far-left side and butt up against con duit stop to make marks at desired lengths (Fig. 1).
- 3. Move the handle all the way forward and push down on the hooks (Fig. 2) to rotates shoe down far enough to align conduit hook and the conduit rollers so that the conduit fits into hook channel (Fig. 3).
- 4. Line up bending mark with front edge of bending hook (Fig. 4) or for CenterLine bends use appropriate degree marks on bending shoe.
- 5. Utilize the ratcheting system to allow the operator to use body weight to increase bending force with minimal effort. To utilize this system, lift up on the ratchet release tab and lift the ratchet handle to lower to a suitable leverage point (Fig. 5). Release tab once desired angle is achieved. Lower ratchet handle to begin the bending process. Continue to ratchet handle up and down while bending the conduit until desired bend angle is reflected on the protractor. Allow for spring back in conduit by adding the spring back rating of the conduit brand to the degree of bend desired.
- 6. When bend is finished, lift handle past the vertical position and twist conduit out to release.
- 7. To reset the shoe for the next bend, lift ratchet handle all the way forward and apply downward force with hand on the front of the shoe hooks (Fig. 6) and shoe will release back to the "0" Degree mark.
- 8. Lower handle to the horizontal position once complete.

BENDING

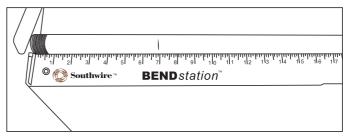
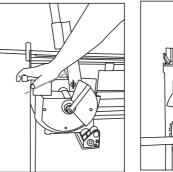


Fig 1



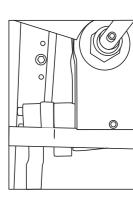


Fig 3

Fig 4

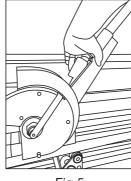


Fig 2

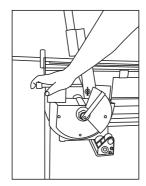


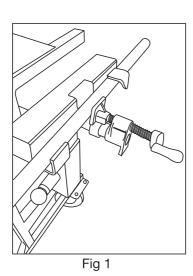
Fig 5

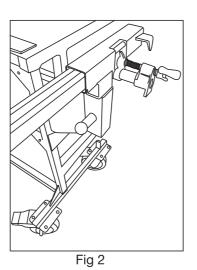
Fig 6

CLAMPING

SPEED VISE FOR CLAMPING AND CUTTING (If Equipped)

- 1. To utilize the speed vise (9) assembly for cutting ½" or 1" EMT conduit. At a 45-degree angle place conduit into conduit holder. Set conduit so that it is parallel with the ground and in the correct position to make desired cut. Tighten the speed vise (9) by cranking the handle until tight. Conduit is now ready to be safely cut (Fig. 1).
- 2. To utilize the speed vise (9) assembly for cutting strut. Place either 7/8" or 1-5/8" strut into strut holder. Place strut in the correct position to make desired cut. Tighten the speed vise (9) by cranking the screw handle until tight. Strut is now ready to be safely cut (Fig. 2).

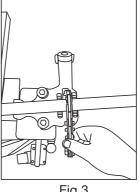




CHAIN VISE FOR CUTTING AND THREADING (If Equipped)

- 1. To utilize the chain vise for cutting and threading of 34" or 1" GRC/IMC conduit, lay conduit across the top of the chain vice.
- 2. Wrap chain over the top of the conduit and secure the side chain teeth into the grooves under bottom of the vise (Fig. 3). Rotate handle clockwise to lock in the conduit. Handle should be tight to ensure the best results for both cutting and threading applications (Fig. 4).

STORAGE



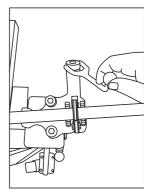


Fig 3

Fig 4

STORAGE

- 1. BENDdolly™ handle storage mount tube in located under Bending Shoe Mount Plate (2) (Fig. 1).
- 2. Insert handle into Handle Holder (3) on BENDdolly™ Cart and align hole in handle with hole in handle holder, secure with supplied pin (Fig. 2).
- 3. With handle in its storage position, Lift up on cross bars of BENDdolly™ Platform until protruding section of the bending handle contacts the ground.
- 4. Vertical storage of bender allows for storage in smaller spaces.

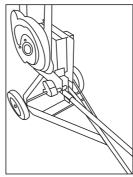
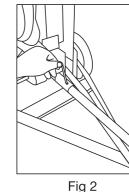


Fig 1



MAINTENANCE

- Periodically check the protractor setting and adjust as necessary.
- Periodic application of a lubricant to the conduit slide rollers and bending shoe can decrease friction while bending.

SPECIFICATIONS

BENDstation™ Common Cart

- Model# BSCC01
- Stock# 64-79-52-01
- Name BENDstation™ Common Cart
- Length -69"
- Width 29"
- Height 38.5"
- Weight 100lbs

BENDdolly™ Bending Platform

- Model# BD-01
- Stock# 64-60-11-01
- Name BENDdolly™ Bending Platform
- Length -55"
- Width 26"
- Height 28.75"
- Weight 60lbs

EMT 1/2" - 3/4" Bending Shoe

- Model# MBCCH-750
- Stock# 64-60-10-01
- Name EMT Head Kit for ½"-3/4" EMT
- Depth 7.60"
- Width 16.13"
- Height 14.87"
- Weight 32lbs

SPECIFICATIONS

EMT ¾" - 1" Bending Shoe

- Model# MBCCH-1000
- Stock# 64-31-67-01
- Name Head Kit for ¾"-1" EMT
- Depth 8.70"
- Width 16.63"
- Height 16.61"
- Weight 49lbs

EMT 1"-1-1/4" Bending Shoe

- Model# MBCCH-1250
- Stock#
- Name Head Kit for 1"-1.25" EMT
- Depth 10"
- Width 12.75"
- Height 15.23"
- Weight 85lbs

GRC/IMC 3/4"-1" BENDING SHOE

- Model# RBCCH-1000
- Stock# 64-31-66-01
- Name Head Kit for ¾"-1" GRC/IMC
- Depth 9.20"
- Width 17.45"
- Height 20.80"
- Weight 80lbs

WARRANTY ON SOUTHWIRE CONTRACTOR EQUIPMENT

What Does This Warranty Cover?

Five-Year Limited Warranty on Contractor Equipment

Under Southwire's Contractor Equipment 5-Year Limited Warranty, Southwire Company, LLC warrants that all Southwire Contractor Equipment will be free from manufacturer defects for a period of five (5) years from the date of the original end user's purchase. However, electrical components and consumable parts such as ropes, blades, dies, draw studs, grips, are excluded from this 5-Year Limited Warranty and are subject to the One -Year warranty terms. Under this 5-Year Limited Warranty, the following are also excluded and Southwire Company, LLC will have no liability for any of the following: normal wear and tear resulting from product use and damage arising out of misuse, abuse, modification, and improper product maintenance. This warranty also does not cover Southwire Contractor Equipment products that have been modified by any party other than Southwire Company, LLC or its authorized third party designee. This 5-Year Limited Warranty is not transferrable to or enforceable by any person other than the product's original end user.

One-Year Limited Warranty on Electrical Components and Consumable Parts (with 5-Year warranty)

Under Southwire's 1-Year Limited Warranty, Southwire Company, LLC warrants that all electrical components and consumable parts such as ropes, blades, dies, draw studs, grips will be free from manufacturer defects for a period of one-year from the date of the original end user's purchase. Under this 1-Year Limited Warranty, Southwire Company, LLC will have no liability for any of the following: normal wear and tear resulting from product use and damage arising out of misuse, abuse, modification, and improper product maintenance. This warranty also does not cover Southwire electrical components and consumable parts that have been modified by any party other than Southwire Company, LLC or its authorized third party designee. This 1-Year Limited Warranty is not transferrable to or enforceable by any person other than the product's original end user.

Exclusion of Incidental, Consequential, Indirect, Special and Punitive Damages

SOUTHWIRE MAKES NO WARRANTY THAT SOUTHWIRE CONTRACTOR EQUIPMENT PRODUCTS WILL BE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE. SOUTHWIRE MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, OTHER THAN THE RELEVANT WARRANTY SPECIFICALLY SET FORTH IN THIS WARRANTY SECTION. SOUTHWIRE WILL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES FOR ANY BREACH OF THIS LIMITED LIFETIME WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Warranty Claim Information/How Do You Get Service?

For all warranty, customer service, and product return authorizations and inquiries, please contact Southwire's Tools & Assembled Products at: Southwire Tools & Assembled Products 840 Old Bremen Road

Carrollton, GA, 30117 Phone Number: 1.855.SW.Tools

- 1. All warranty claims must be approved by Southwire's Tools & Assembled Products Warranty Department prior to return of product. If Southwire determines that a product is defective, Southwire will, at its option, repair or replace defective products or defective product components, free of charge.
- 2. Upon approval, Southwire will issue a Product Return Authorization Form which will include instructions on how and where to return the product. The product serial number and the original date of delivery must be set forth on the Product Return Authorization Form.
- 3. Southwire will cover standard freight charges (Ground Courier Rate) incurred in connection with products that Southwire ultimately determines to be defective.
- 4. All defective components and defective products that Southwire replaces under these Warranties will become Southwire's property and will be retained by Southwire.

Repair Your Product When it is Out of Warranty

Southwire is happy to provide information about where a purchaser can send a product for repair at consumers' own expense, please contact 1.855.SW.tools or visit www.southwiretools.com/tools/home.do for more information about servicing for Southwire Products

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