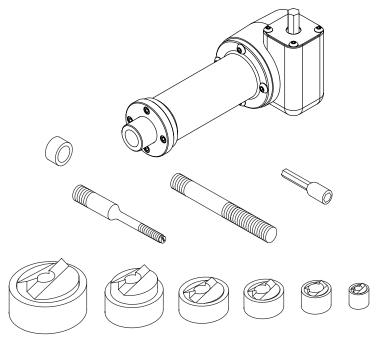


Current Tools™ Knockout Punch Driver

PATER

Model 165 – Punch Driver Model 162 PM – ½" to 2" Model 164 PM – ½" to 4"





Operating, Maintenance, Safety and Parts Manual

11/18



Read and understand this material before operating or servicing any component of the Punch Driver Set. Failure to understand how to safely operate and service this unit may result in serious injury or death.

This manual is free of charge. All personnel who operate or service the Punch Driver Set should have a copy of this manual and read and understand its contents. To request a copy, call or write to the address below. All information, specifications and product designs may change due to design improvements or updates and are subject to change without notice. Current Tools does not assume any liability for damages resulting from misuse or incorrect application of its products.

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SAFETY ALERTS



Safety Alert Symbol

THIS SAFETY SYMBOL is used to call your attention to instructions that concern your personal safety. It means: ATTENTION! BE AWARE! THIS IS AN IMPORTANT SAFETY INSTRUCTION!

Read, understand and follow these safety instructions. Failure to follow these safety instructions may result in injury or death.

A DANGER

Immediate hazards which, if not avoided, WILL result in serious personal injury or death.

WARNING

Hazards or unsafe practices which, if not avoided, COULD result in serious personal injury or death.

A CAUTION

Hazards or unsafe practices which, if not avoided, COULD result in minor personal injury or property damage.

RETAIN SAFETY INFORMATION



This manual should be read and understood by all personnel who operate or service this Punch Driver. Failure to understand how to safely operate and service this unit could result in injury or death. This unit should only be operated or serviced by qualified personnel.

(**) IMPORTANT SAFETY INFORMATION

Follow ALL safety information provided by the manufacturer.

⚠ DANGER NEVER use the punch driver or any of its components near live circuits.

DO NOT continue to operate punch driver after the punch is complete. Doing so could damage the punch driver and cause component failure resulting in serious injury or death.

WARNINGIf the punch driver motion stops before the punching process is completed, DO NOT continue to operate the punch driver. Reverse the drill, disassemble the set-up and determine the cause before continuing.

ALWAYS support the punch driver as the punch is completed. An unsupported punch driver could fall, causing injury.

ALWAYS thread the punch COMPLETELY onto the draw stud to avoid thread failure. If the punch tightens before it is completely threaded onto the draw stud, disassemble the set-up and determine the cause. Then reassemble the set-up.

A WARNING

NEVER attempt to exceed the punching capacity of this knockout set.

Doing so may cause component failure and possibly serious injury or death.

MARNING

NEVER attempt to punch a hole through more than a single layer of material. Doing so may cause component failure and possibly serious injury or death.

A WARNINGNEVER use this punch driver set or any of its components except for its intended purpose.

A ½" cordless drill is sufficient to activate the punch driver. NEVER attempt to apply additional force to the punch driver. Doing so may cause component failure and possibly serious injury or death.

ALWAYS inspect every component of the punch set-up, including the punch driver, punch, die, draw stud and adapter, before each use. Replace any worn or defective parts with Current Tools replacement parts. NEVER use dull punches.

A CAUTION NEVER use any component that has worn or damaged threads.

ALWAYS check to ensure all components are properly assembled before punching.

ALWAYS be aware of pinch points while operating the punch driver. Keep hands away from punch and die during punching operation.

A CAUTION Be aware of moving draw shaft as it exits the end of the gearbox.

ALWAYS keep hair and loose clothing away from rotating or moving parts.

A CAUTION New punches are sharp. Be careful when handling them.

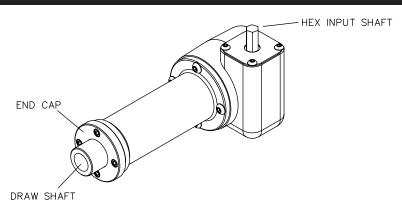
ALWAYS wear safety glasses when punching.

(A) SPECIFICATIONS

Model No.	165	162 PM	164 PM
Weight	7 lbs.	20 lbs.	53 lbs.
Capacity	Punch Driver ONLY	½" to 2" conduit size holes	$\frac{1}{2}$ " to 4" conduit size holes

- Recommended Drill (Provided by end user) ½" cordless drill with a minimum of 18 volts.
- The model #165 Punch Driver is designed to punch up to a 4" conduit size hole in a maximum of 10 gauge (.134 thick) mild steel, and up to a 4" conduit size hole in a maximum of 10 gauge (.134 thick) stainless steel (with punches and dies made to cut stainless steel).
- Current Tools™ Piece Maker™ punches are designed to split the slug into two pieces for easy removal from the die after punch completion.
- Current Tools Punch Driver may be used with Greenlee®* punches, dies and draw studs up to 3". However, when using 3½" or 4" punches & dies, the Current Tools 3/4" x 1/4" draw stud (part # 1580) and 3/2" & 4" die adapter (part#163-766) are required.
- * Greenlee is a registered trademark of Greenlee/Textron.

OPERATING INSTRUCTIONS



- 1. Match the punch, die, draw stud, die adapter (if needed), and spacer as required for the size hole to be punched. (See figures 1a, 1b, 1c on page 7).
- 2. After marking the hole location, drill a hole approximately $\frac{1}{32}$ " to $\frac{1}{16}$ " larger than the draw stud being used.
 - NOTE: **Alternate Method** Drill a $\frac{7}{16}$ " hole to accept the $\frac{3}{8}$ " adapter draw stud (Part # 1581) and use the $\frac{1}{2}$ " punch, die and spacer to increase the hole size to accept the $\frac{3}{4}$ " draw stud (Part #1582). Then, if needed, use 1" punch and die to increase the hole size to accept the $\frac{3}{4}$ " X $\frac{11}{8}$ " draw stud (Part #1580).
- 3. Chuck the \(^3\)\" nut driver (Part #163-14) into the cordless drill and slide onto the hex input shaft. Operate the punch driver until the draw shaft is flush with the end cap.

continued on next page . . .

4. When using the $\frac{1}{2}$ " punch and die, thread the larger end of the $\frac{3}{8}$ " adapter draw stud (Part #1581) into the draw shaft of the punch driver until snug. (See Figure 1A on page 7.)

When using $\frac{3}{4}$ " through 3" punch and die, thread the end of the $\frac{3}{4}$ " draw stud (Part #1582) with the shortest thread length into the draw shaft of the punch driver until snug. (See Figure 1B on page 7.)

When using the $3\frac{1}{2}$ " and 4" punch and die, thread the $\frac{3}{4}$ " X $1\frac{1}{8}$ " draw stud (Part #1580) into the draw shaft of the Punch Driver until snug. (See Figure 1C on Page 7). Then slide the die adapter (Part #163-766) over the $\frac{3}{4}$ " X 1 $\frac{1}{8}$ " draw stud until it rests on top of the end cap.

- 5. Slide the die onto the draw stud with the open end of the die facing away from the punch driver.
- 6. Place the draw stud through the hole you drilled in step 2. Then thread the punch onto the draw stud with the cutting face toward the material to be punched. Thread the punch onto the draw stud until the punch and die are snug against the material.

WARNING

ALWAYS thread the punch COMPLETELY onto the draw stud to avoid thread failure. If the punch tightens before it is completely threaded onto the draw stud. disassemble the set-up and determine the cause. Then reassemble the set-up.

- 7. Complete the punching process by attaching the ½" cordless drill with nut driver (minimum 18 volts recommended) to the hex input shaft of the punch driver.
 - Operate the drill in FORWARD to complete the punch.
 - After the punch is completed, run the drill in REVERSE until the draw shaft is at least flush with the end cap.
 - Unscrew the punch from the draw stud and remove the slug from the die.
 - After unloading the slug, return the draw shaft until it is flush with the end cap.

NOTE: Whether to operate your drill in low or high gear will be determined by hole size, thickness and type of material to be punched, battery strength and voltage of your drill.

AWARNING

- DO NOT continue to operate punch driver after the punch is complete. Doing so could damage the punch driver and cause component failure resulting in serious injury or death.
- If the punch driver motion stops before the punching process is completed, DO NOT continue to operate the punch driver. Reverse the drill, disassemble the set-up and determine the cause before continuing.
- ALWAYS support the punch driver as the punch is completed. An unsupported punch driver could fall, causing injury.

ACAUTION

ALWAYS be aware of pinch points while operating the punch driver. Keep hands away from punch and die during punching operation. Be aware of moving draw shaft as it exits the end of the gear box.

SET UPS

EXPLODED VIEW

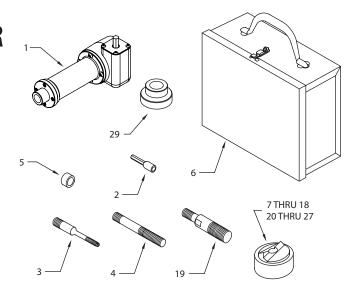
COMPLETED VIEW

3/4" - 1-1/8" DRAW STUD 3/8" - ADAPTER DRAW STUD MATERIAL 3/4" DRAW STUD **PUNCH** 1/2" T DIE 1/2" PUNCH MATERIAL MATERIAL PUNCH SHORT SPACER 3/4" to 1-1/2" DIE SHORT SPACER DIE ADAPTER DIE PUNCH-DRIVER PUNCH-DRIVER PUNCH-DRIVER ROTATION DIRECTION (DRILL FORWARD) (0 ROTATION DIRECTION (DRILL FORWARD) INPUT ROTATION PUN DIRECTION DRI (DRILL FORWARD) (0 (0 INPUT MATERIAL MATERIAL PUNCH PUNCH MATERIAL PUNCH SHORT SPACER 3/4" to 1-1/2" DIE DIE DIE ADAPTER DIE SHORTEST THREAD LENGTH SHORT SPACER DRAW SHAFT FLUSH WITH END CAP 3/4" - 1-1/8" DRAW STUD 3/4" DRAW STUD 3/8" ADAPTER DRAW STUD DRAW SHAFT FLUSH WITH END CAP DRAW SHAFT FLUSH WITH END CAP END CAP END CAP END CAP PUNCH-DRIVER PUNCH-DRIVER PUNCH-DRIVER 0 0 3/4"-3" PUNCH & DIE 1/2' PUNCH & DIE 3-1/2" AND 4" PUNCH & DIE 14 10 1B

7

COMPONENTS

PUNCH DRIVER



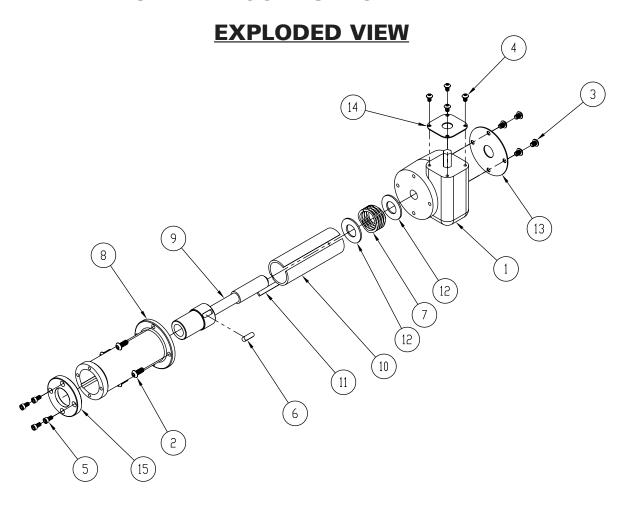
COMPONENTS LIST

ITEM#	CATALOG#	DESCRIPTION	<u>165</u>	<u>162PM</u>	<u>164PM</u>
		Punch Driver			
		Nut Driver (%")			
		3%" Adapter Draw Stud			
		3 4 " Draw Stud			
		Short Spacer			
6	165-5	Carrying Case		1	
		½" Piece Maker™ Punch			
		½" Die			
		3⁄4" Piece Maker™ Punch			
		³ / ₄ " Die			
		1" Piece Maker™ Punch			
		1" Die			
		1¼" Piece Maker™ Punch			
		1¼" Die			
		1½" Piece Maker™ Punch			
		1½" Die			
		2" Piece Maker™ Punch			
		2" Die			
		3/4" X 11/8" Draw Stud			
		2½" Punch			
		2½" Die			
		3" Punch			
		3" Die			
		3½° Punch			
		4" Puncn			
۷٥		Metal Storage Box (not shown).			
29	163-/66	3½"& 4" Die Adapter			1

MAINTENANCE

- 1) The Model 165 Punch Driver gearbox is lubricated from the factory and should not require additional lubrication.
- 2) Monthly Using a good quality MP grease, grease the acme threads on the draw shaft (see exploded view on page 9, Item #9).
- 3) Keep all components clean and free of any debris.

MODEL 165 PUNCH DRIVER



PARTS LIST — Model 165 Punch Driver

TEM #	PART #		DESCRIPTION
1	163-1	1	Gearbox
2	163-3	4	Screw – Button Head Socket ($\frac{1}{4}$ –20 × $\frac{5}{8}$ ")
3	163-10	4	Screw – Button Head Socket ($\frac{1}{4}$ –20 × $\frac{5}{16}$ ")
4	163-11	4	Screw – Button Head Socket (10–32 \times $\frac{5}{16}$ ")
5	163-12	4	Screw – Socket Head Cap (10–32 \times $\frac{3}{8}$ ")
6	163-13	1	Key
7	163-15	1	Wave Spring
8	165-101	1	Housing – Draw Shaft
9	165-102	1	Draw Shaft
10	165-103	1	Bushing – Housing
11	165-104	1	Key
12	165-105	2	Washer
13	165-106	1	Cover – Bottom
14	163-635	1	Cover – Input
15	163-665	1	Cap – Nose