



Current Tools

FOR THE PROFESSIONAL ELECTRICIAN

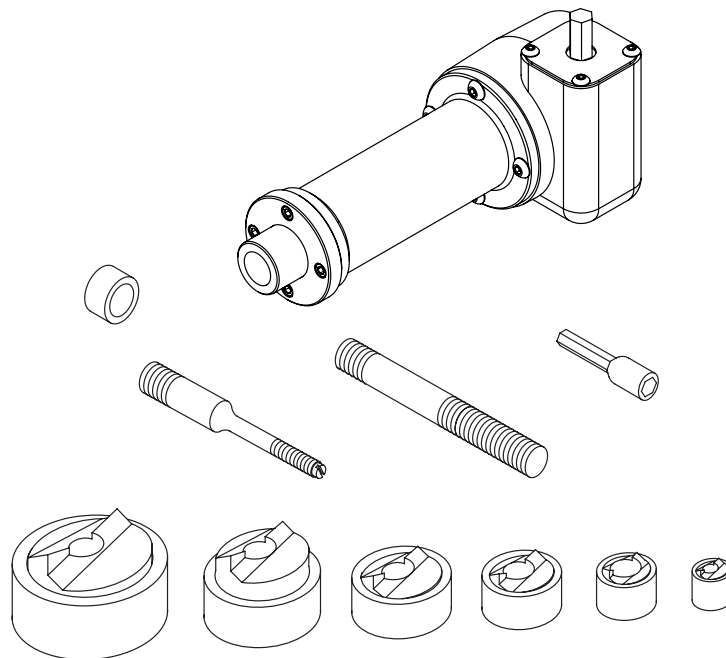
Current Tools™ Knockout Punch Driver



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.

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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.



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.



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.

⚠ WARNING

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.

⚠ WARNING

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.

⚠ WARNING

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

⚠ 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.

⚠ WARNING

NEVER attempt to exceed the punching capacity of this knockout set. Doing so may cause component failure and possibly serious injury or death.

⚠ WARNING

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.

⚠ WARNING

NEVER use this punch driver set or any of its components except for its intended purpose.

⚠ WARNING

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.

⚠ CAUTION

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.

⚠ CAUTION

NEVER use any component that has worn or damaged threads.

⚠ CAUTION

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

⚠ CAUTION

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

⚠ CAUTION

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

⚠ CAUTION

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

⚠ CAUTION

New punches are sharp. Be careful when handling them.

⚠ CAUTION

ALWAYS wear safety glasses when punching.

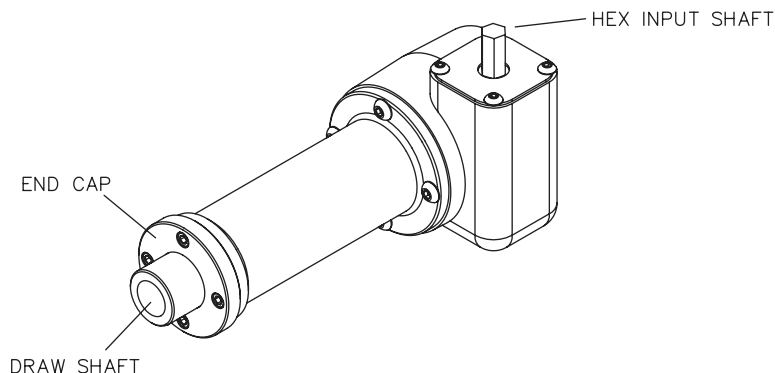
SPECIFICATIONS

Model No.	165	162 PM	164 PM
Weight	7 lbs.	20 lbs.	53 lbs.
Capacity	Punch Driver ONLY	1/2" to 2" conduit size holes	1/2" to 4" conduit size holes

- Recommended Drill – (Provided by end user) – 1/2" 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 3 1/2" or 4" punches & dies, the Current Tools 3/4" x 1 1/8" draw stud (part # 1580) and 3 1/2" & 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 1/32" to 1/16" larger than the draw stud being used.

NOTE: Alternate Method — Drill a 7/16" hole to accept the 3/8" adapter draw stud (Part # 1581) and use the 1/2" punch, die and spacer to increase the hole size to accept the 3/4" draw stud (Part #1582). Then, if needed, use 1" punch and die to increase the hole size to accept the 3/4" X 1 1/8" draw stud (Part #1580).

3. Chuck the 3/8" 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 . . .

OPERATING INSTRUCTIONS *continued . . .*

4. When using the 1/2" punch and die, thread the larger end of the 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 3/4" through 3" punch and die, thread the end of the 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 1/2" and 4" punch and die, thread the 3/4" X 1 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 3/4" X 1 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 1/2" 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.

WARNING

- 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.

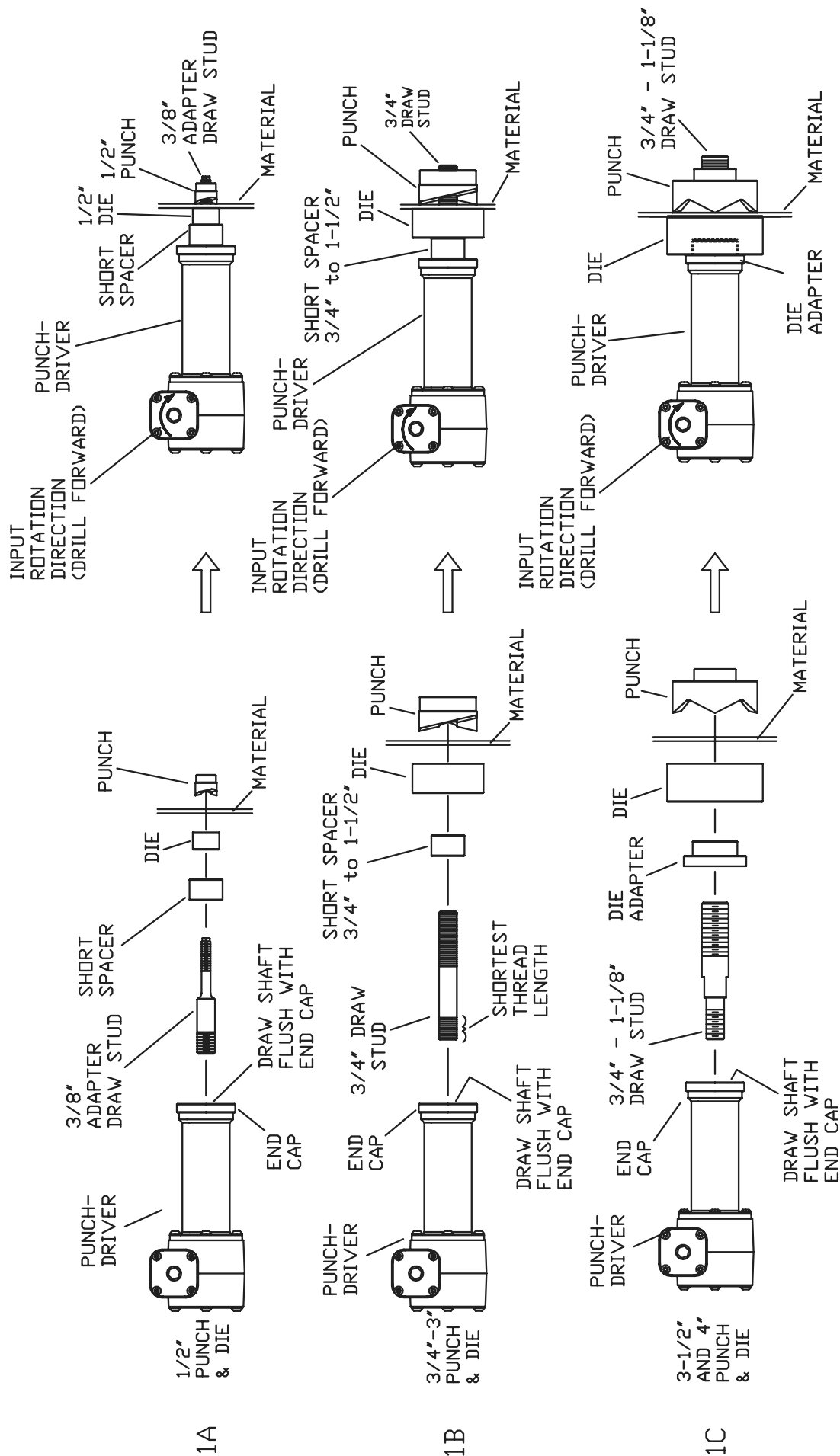
CAUTION

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

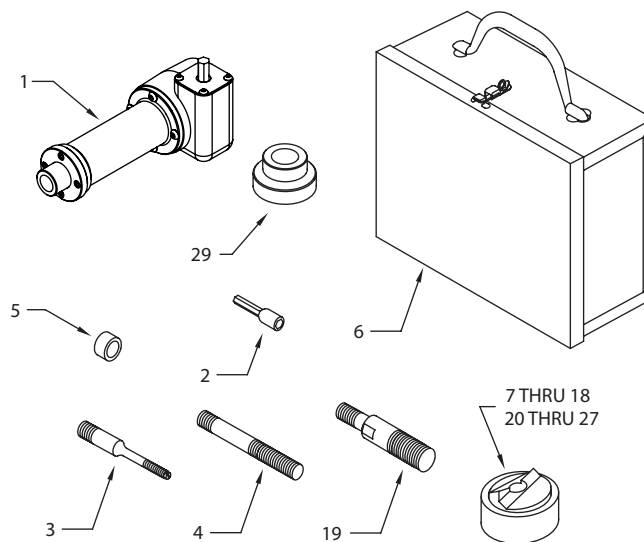
EXPLODED VIEW

COMPLETED VIEW



COMPONENTS

PUNCH DRIVER



COMPONENTS LIST

ITEM#	CATALOG#	DESCRIPTION	165	162PM	164PM
1.....	165.....	Punch Driver.....	1.....	1.....	1.....
2.....	163-14.....	Nut Driver (3/8").....	1.....	1.....	1.....
3.....	1581.....	3/8" Adapter Draw Stud.....	1.....	1.....	1.....
4.....	1582.....	3/4" Draw Stud.....	1.....	1.....	1.....
5.....	1553.....	Short Spacer.....	1.....	1.....	1.....
6.....	165-5.....	Carrying Case.....	1.....	1.....	1.....
7.....	1524.....	1/2" Piece Maker™ Punch.....	1.....	1.....	1.....
8.....	1525.....	1/2" Die.....	1.....	1.....	1.....
9.....	1526.....	3/4" Piece Maker™ Punch.....	1.....	1.....	1.....
10.....	1527.....	3/4" Die.....	1.....	1.....	1.....
11.....	1528.....	1" Piece Maker™ Punch.....	1.....	1.....	1.....
12.....	1529.....	1" Die.....	1.....	1.....	1.....
13.....	1530.....	1 1/4" Piece Maker™ Punch.....	1.....	1.....	1.....
14.....	1531.....	1 1/4" Die.....	1.....	1.....	1.....
15.....	1532.....	1 1/2" Piece Maker™ Punch.....	1.....	1.....	1.....
16.....	1533.....	1 1/2" Die.....	1.....	1.....	1.....
17.....	1534.....	2" Piece Maker™ Punch.....	1.....	1.....	1.....
18.....	1535.....	2" Die.....	1.....	1.....	1.....
19.....	1580.....	3/4" X 1 1/8" Draw Stud.....	1.....	1.....	1.....
20.....	1566.....	2 1/2" Punch.....	1.....	1.....	1.....
21.....	1567.....	2 1/2" Die.....	1.....	1.....	1.....
22.....	1568.....	3" Punch.....	1.....	1.....	1.....
23.....	1569.....	3" Die.....	1.....	1.....	1.....
24.....	1570.....	3 1/2" Punch.....	1.....	1.....	1.....
25.....	1571.....	3 1/2" Die.....	1.....	1.....	1.....
26.....	1572.....	4" Punch.....	1.....	1.....	1.....
27.....	1573.....	4" Die.....	1.....	1.....	1.....
28.....	1501.....	Metal Storage Box (not shown).....	1.....	1.....	1.....
29.....	163-766.....	3 1/2" & 4" Die Adapter.....	1.....	1.....	1.....

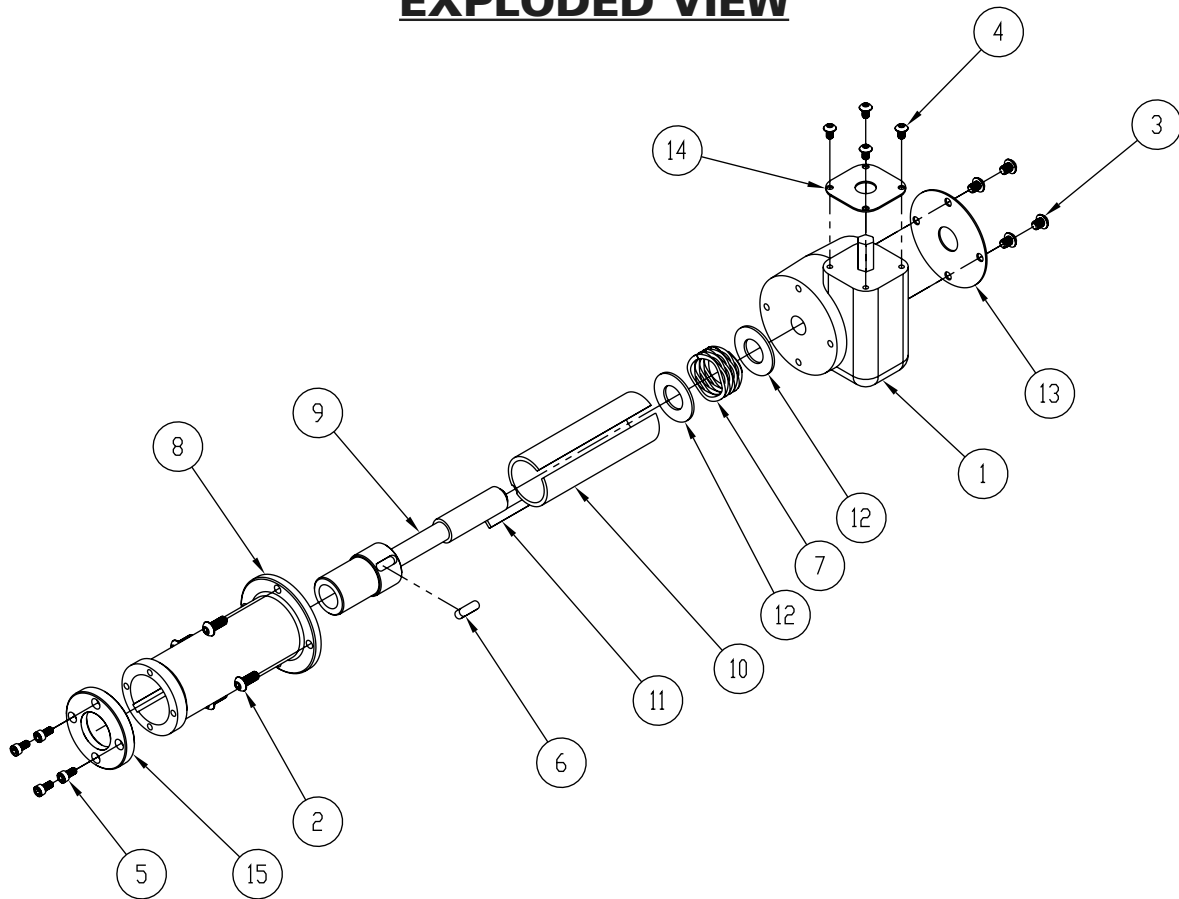


MAINTENANCE

- 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

EXPLODED VIEW



PARTS LIST — Model 165 Punch Driver

<u>ITEM #</u>	<u>PART #</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1	163-1	1	Gearbox
2	163-3	4	Screw – Button Head Socket ($\frac{1}{4}$ –20 \times $\frac{5}{8}$ ")
3	163-10	4	Screw – Button Head Socket ($\frac{1}{4}$ –20 \times $\frac{5}{16}$ ")
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