

Wheeler-Rex

Model 68115 / 681150 / 681155

Portable Power Drive and Rising Stem Operator

Operating Instructions and Repair Parts List



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Some Operating Hints

The 68115 features a new of type safety control switch. It combines the reversing switch with a trigger type engaging switch in a manner that the operator cannot reverse the direction of rotation without first releasing the trigger switch.

The operation of this switch is very simple, to change the direction of rotation of the machine, simply release the trigger switch and then slide the reverse switch to either the forward or reverse position. The machine is then ready for normal operation by depressing the trigger switch.

Care in Servicing

The 68115 power drive is an “on the job” tool. It is designed for everyday use and for trouble-free operation. The frame is made of high strength cast aluminum alloy.

Lubrication

The bearings in the motor are of the sealed type and are lubricated. No additional lubricant is required.

Gears

The gear housings on the 68115 power drive are extra large and should normally contain enough grease for the life of the tool. However, should the tool be subjected to severe usage, provision has been made through two grease fittings to supply additional lubricant. One of these is on the gear case cover, just ahead of the motor, which supplies the reduction gears and the other is at the side of the frame for lubricating the worm gear.

The grease originally supplied in the tool is a special hi-temperature grease No. 1 consistency, readily obtainable from any of the major oil companies.

Care of the Motor

The motor brushes should be inspected at least once a year, according to the usage of the machine. Always be sure to see that the brushes are returned to their original side and the position from which they were taken. This can be done by marking the brush with a red pencil before it is removed, to indicate the side from which it is taken.

Be sure to keep the motor clear of dust and dirt by cleaning it with an air hose from time to time.

Caution

Your 68115 is designed to give satisfactory service with ordinary treatment. Do not drop as this may cause damage.

Other products available to use with the 68115 power drive.

3

10696 Adapter for 12R Drop Head Dies



10709 1" Square Female Adapter



21389 Safety Adapter Assembly



13968 Rising Stem Torque Adapter



10709 Hydrant Nut



Telescoping Valve Keys

Quick disconnect pull pins make adjustments fast and easy. Both a manual handle and a 1" square power adapter are included. 2" square female drive fits most standard valves.

Available as:

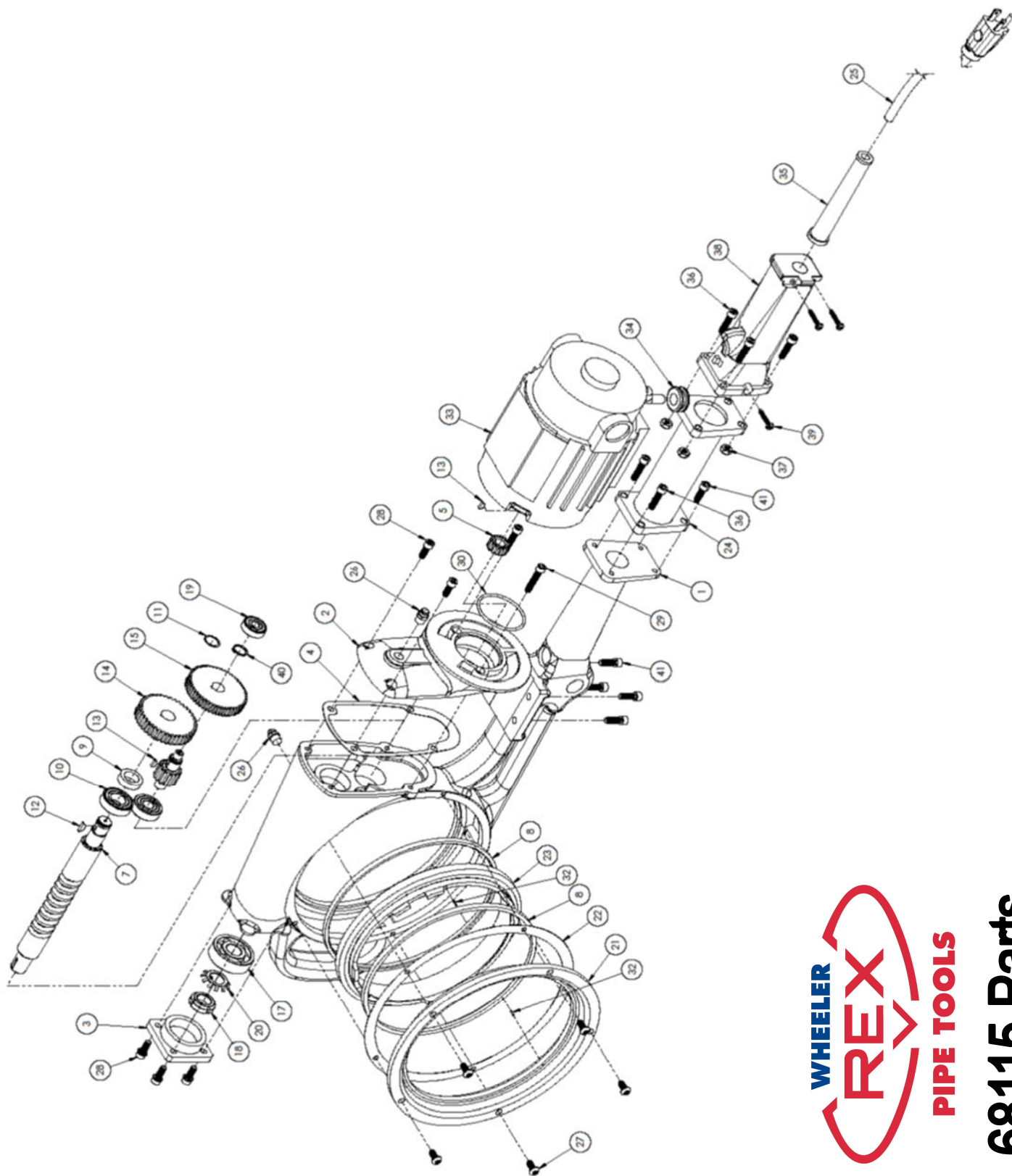
8806 6 Foot Telescoping Valve Key

8808 8 Foot Telescoping Valve Key

88024 2 Foot Extension

Extends your 8806 to 8808

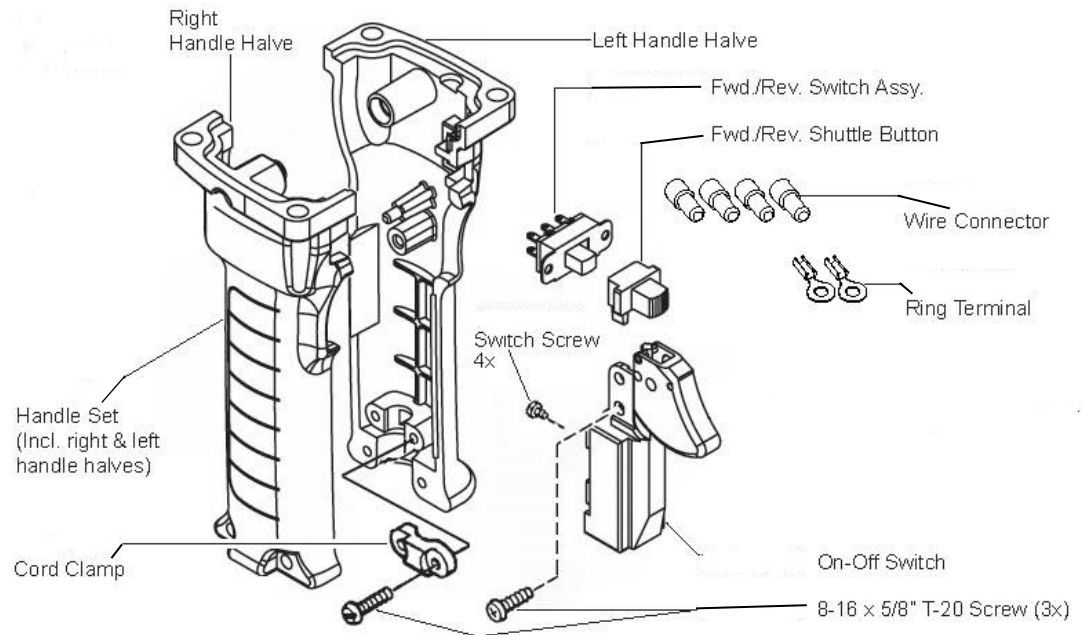




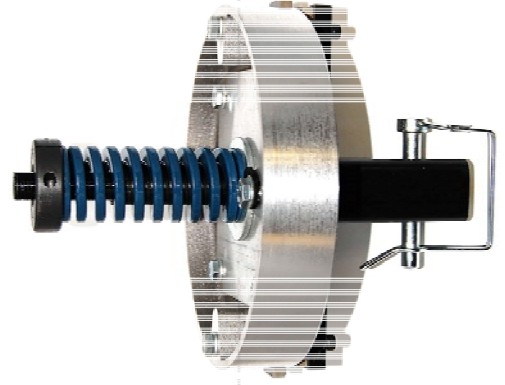
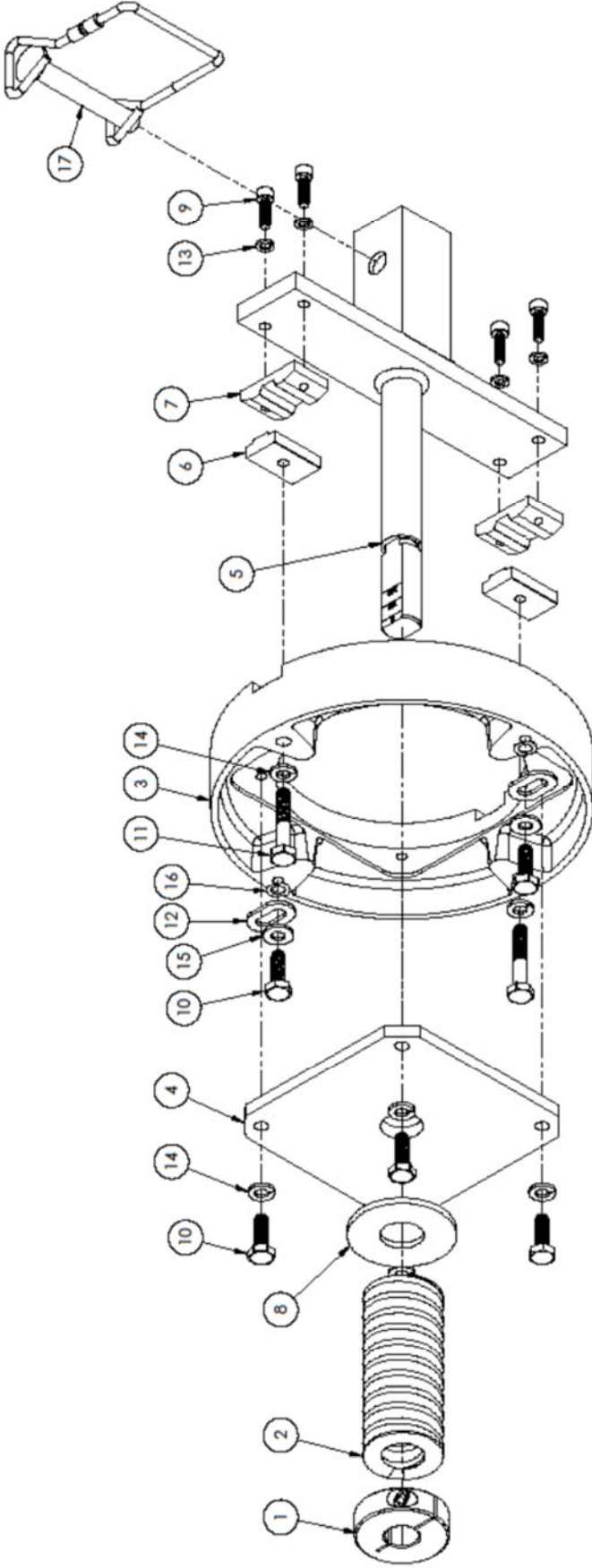
68115 Parts

Item	Part No	Description	Qty
1	19711	FRAME - POWER DRIVE (MACHINING)	1
2	10361	GEAR COVER (MACHINING)	1
3	10360	BEARING CAP	1
4	10424	GASKET	1
5	10354	MOTOR PINION	1
6	10356	PINION SHAFT	1
7	10358	WORM	1
8	10364	WEAR RING	2
9	10365	SPACER	1
10	10391	BEARING	1
11	11106	RETAINING RING	1
12	10385	WOODRUFF KEY NO. 3, USA STD 404	1
13	10384	WOODRUFF KEY NO. 213	2
14	10357	SPUR GEAR	1
15	10355	INTERMEDIATE GEAR	1
16	10389	BEARING	1
17	10388	BEARING	1
18	11435	LOCK NUT	1
19	10390	BEARING	1
20	5854	BEARING LOCK WASHER, W03	1
21	10362	WORM GEAR COVER	1
22	10420	GASKET	1
23	10359	WORM GEAR (MACHINING)	1
24	700953	POWER DRIVE HANDLE EXTENSION	1
25	221389	CORD SET	1
26	275488	GREASE FITTING	2
27	276651	1/4-20 x 1/2" STAINLESS STEEL BHCS	9
28	275021	1/4-20 x 5/8" SOCKET HEAD CAP SCREW	2
29	275715	1/4-20 x 1 1/4" SHCS	2
30	10419	-136 O-RING (BUNA)	1
31	908095	1/4-20 x 1/4" CUP POINT SET SCREW	2
32	10386	3/16 DIA x 1 1/2" ROLL PIN	2
33	15690	MOTOR 1/2 HP, 115 V	1
34	10767	GROMMET-RUBBER	1
35	276820	CORD PROTECTOR 44-76-0140	1
36	1903	1/4-20 x 1" SHCS	6
37	729	1/4-20 THIN ESNA NUT	4
38	277147	HANDLE & SWITCH KIT	1
39	276804	8-16 x 1 SLOTTED TORX HEAD 06-82-7326	3
40	11107	STEEL RETAINING RING	1
41	4181	1/4-20 x 3/4" SHCS	6

Handle Assembly for Power Drive

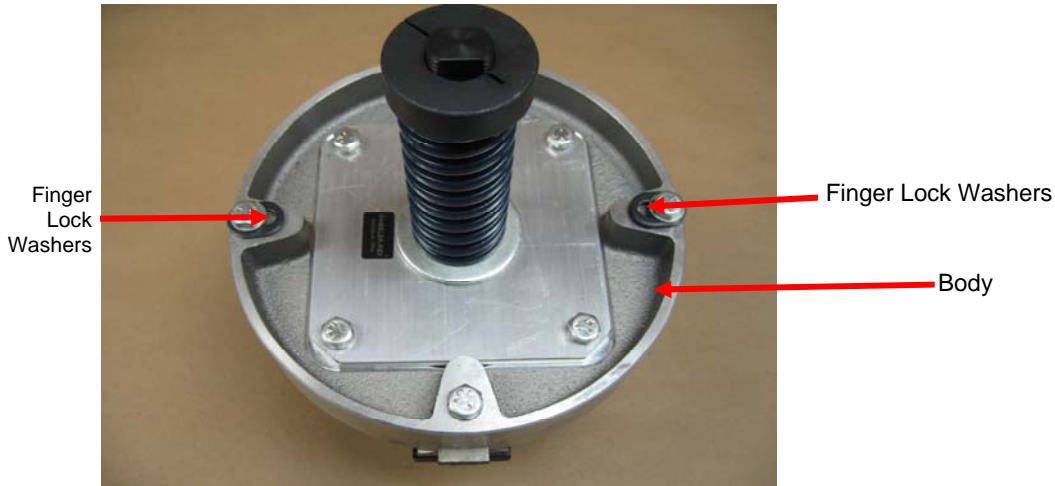


Handle assembly sold complete. No separate parts provided. This drawing is for information only.

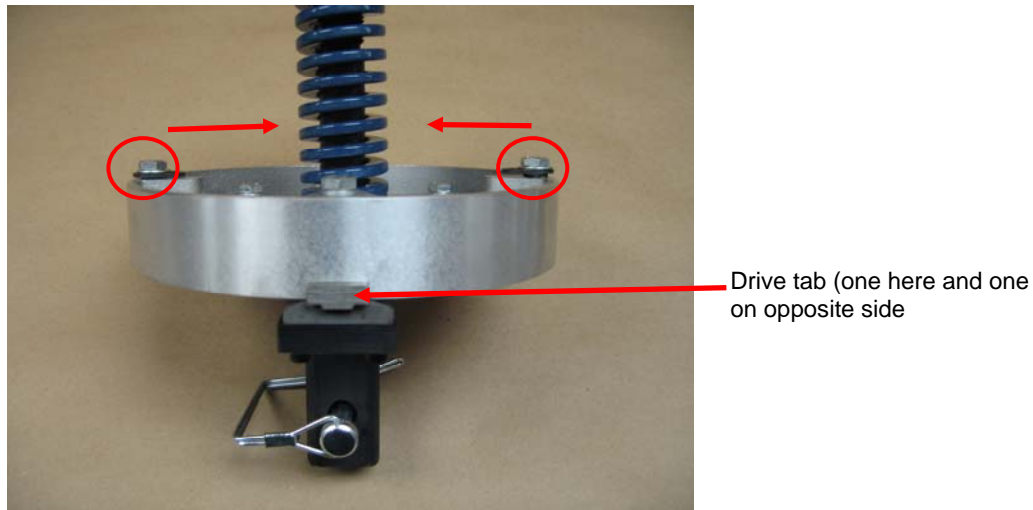


Item	Part No	Description	Qty
1	12952	ADJUSTING NUT	1
2	15575	SPRING	1
3	700984	ADAPTER MACHINED	1
4	700997	ADAPTER PLATE	1
5	13965	SQUARE DRIVE	1
6	12948	PAWL	2
7	12949	RATCHET DOG	2
8	276129	3/4 WASHER	1
9	275070	#10-24 x 5/8" SHCS	4
10	560081	1/4-20 x 3/4" HHCS	6
11	276819	1/4-20 x 1 3/8" HHCS	2
12	11274	FINGER LOCK WASHER	2
13	275104	#10 SPLIT LOCK WASHER	4
14	275105	1/4" SPLIT LOCK WASHER	6
15	10713	3/16" FLAT WASHER	2
16	5306	SPRING WASHER	2
17	276093	COTTERLESS HITCH PIN	1

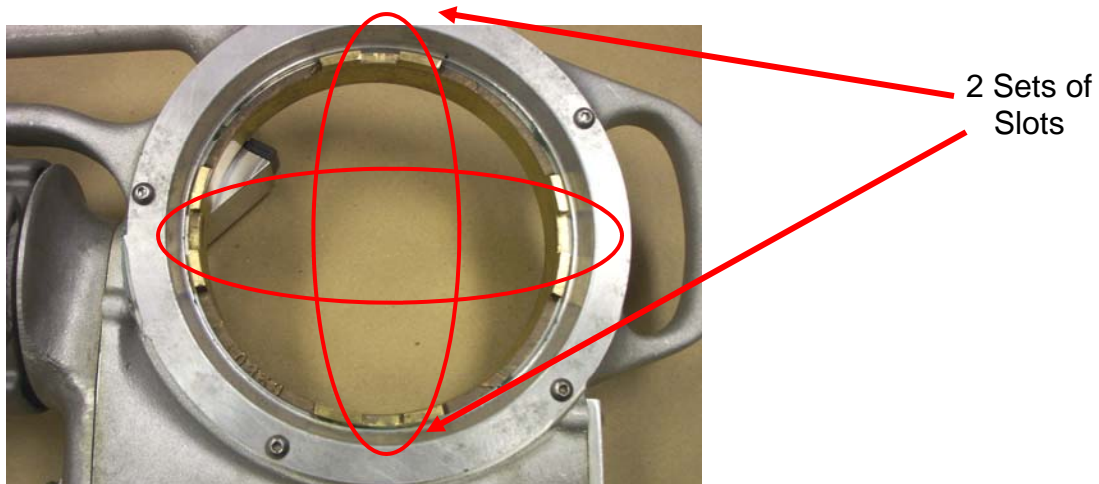
Attaching the 21389 Safety Adapter Assembly



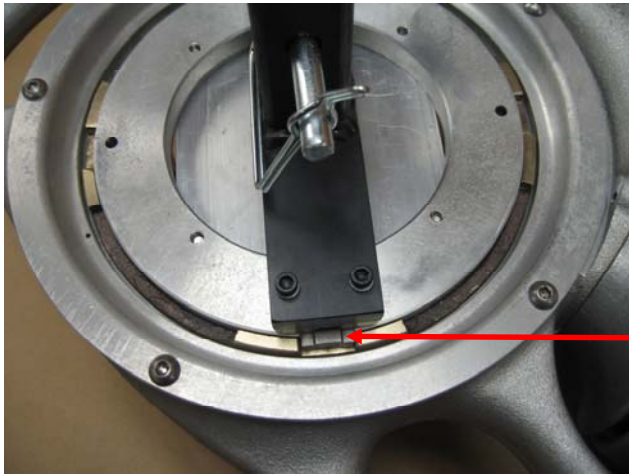
21389 Rising Stem Torque Adapter
Make sure the finger lock washers are inside of the body



There are two (2) drive tabs on the unit.

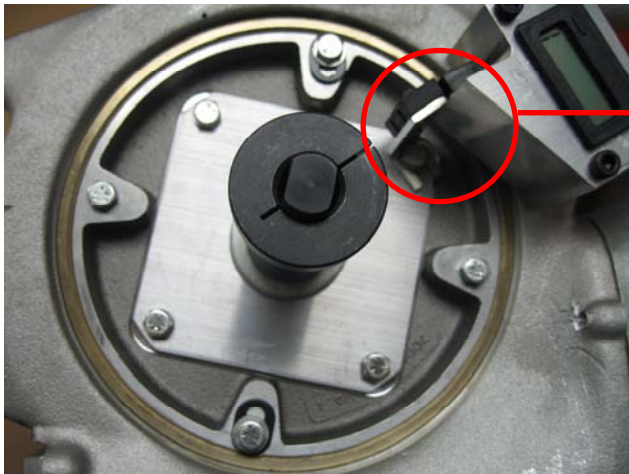


This is the bottom view of the 68115 Power Drive. There are two (2) sets of slots located on the bottom drive gear.



Drive Tab - shown properly located in drive gear slots

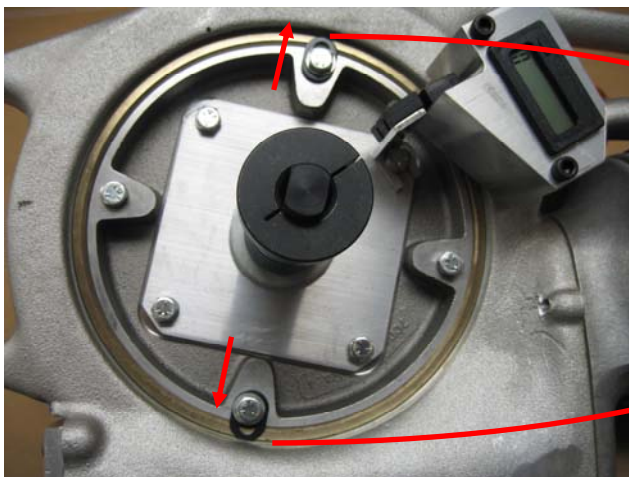
With the power drive & torque adapter upside down, place the torque adapter inside of the power drive. Drive tabs should be properly placed in the drive gear slots of the 68115 Power Drive.



See Page 14 for proper spacing of counter magnet

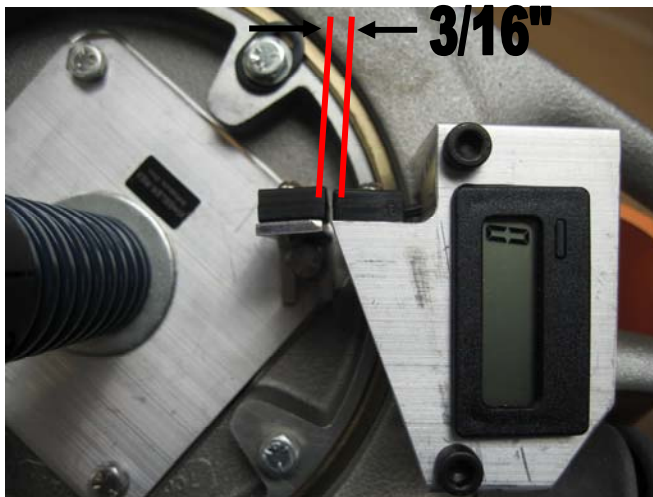
See Page 28 for proper alignment of counter magnet

Flip the Power Drive over with the torque adapter inside of the drive gear.



Lock Washers

Push the "Finger Lock Washers" out over the drive gear. This keeps the 21389 torque adapter attached to the 68115 Power Drive.



Check for proper clearance between the Counter (located on the Power Drive) and the counter magnet (located on the torque adapter. There should be 3/16" gap between the counter and the magnet.



Stem has engraved graduations of
50 ft lbs increments.
Side 1 shown



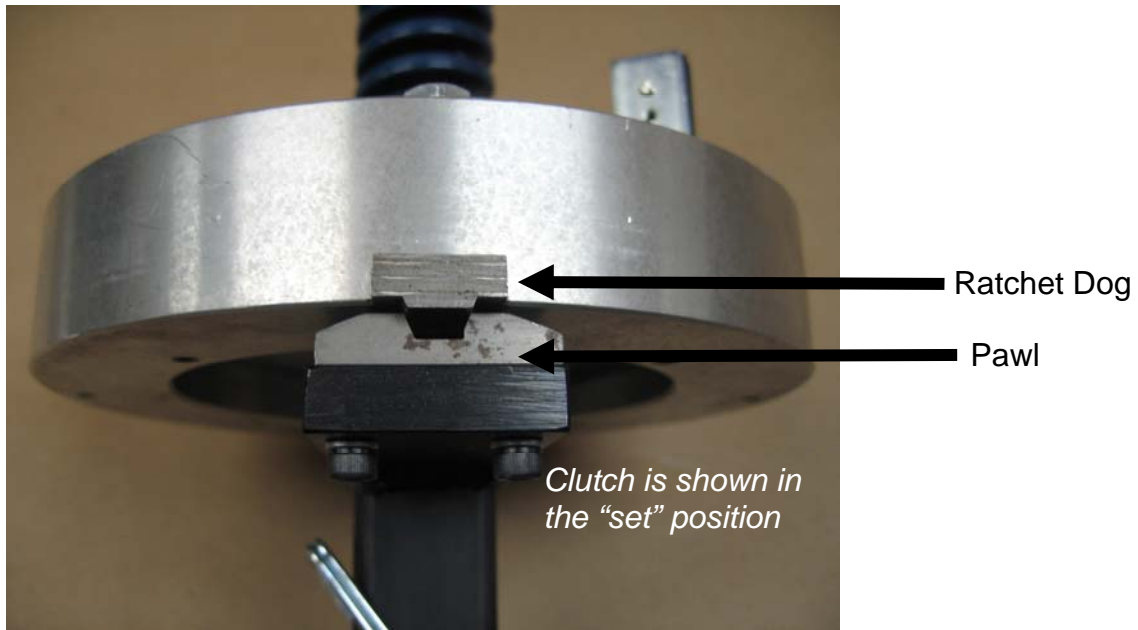
Stem has engraved graduations of
50 ft lbs increments.
Side 2 shown



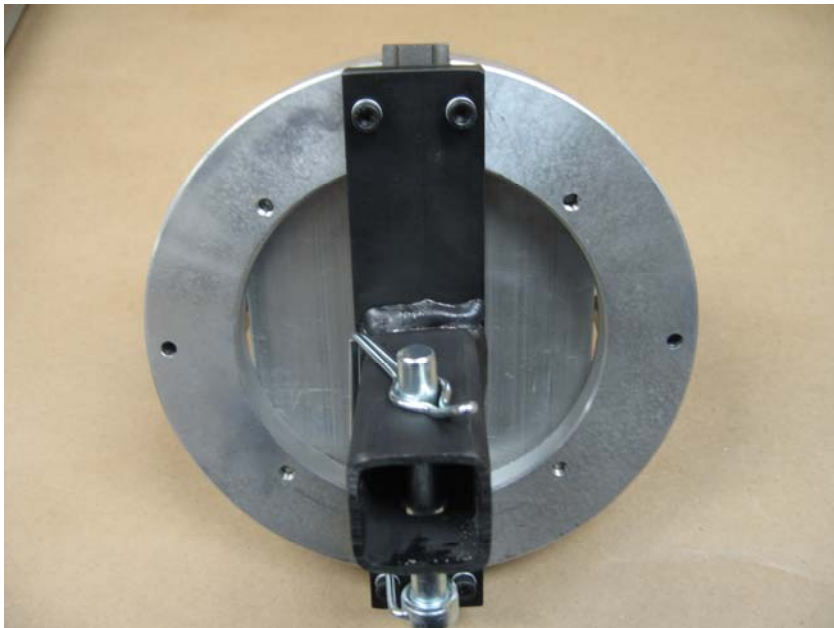
Collar Screw - tighten

Loosen collar screw with a 3/16" Allen wrench (*not provided*)

Back the adjusting collar off to start with minimal tension on the spring. Clutch will “pop” as the drive gear turns in either direction. To increase the torque, turn the adjusting collar clockwise. Slowly increase the adjusting collar until there is enough torque to turn the valve without having the clutch slip. If the clutch has slipped, make sure it is re-set before increasing the torque.



The Ratchet Dog and Pawl are wearable items. Be sure to inspect these before each use. Replace when the corners are rounded and worn.



Clutch shown in the set position



Clutch shown in the "popped" position



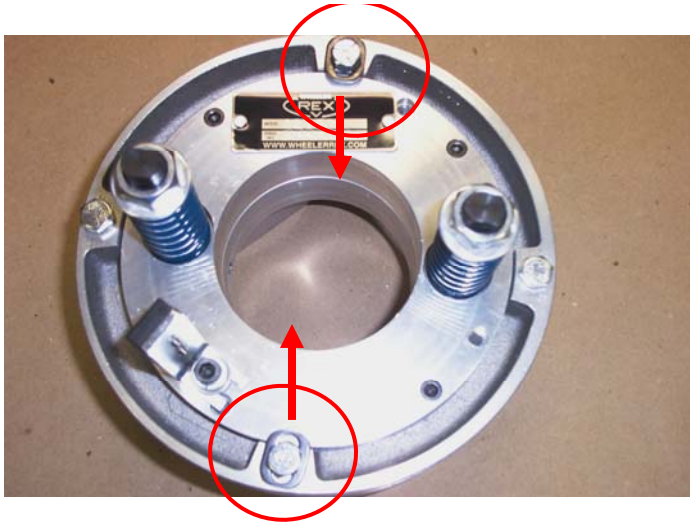
Turn the collar to increase the torque



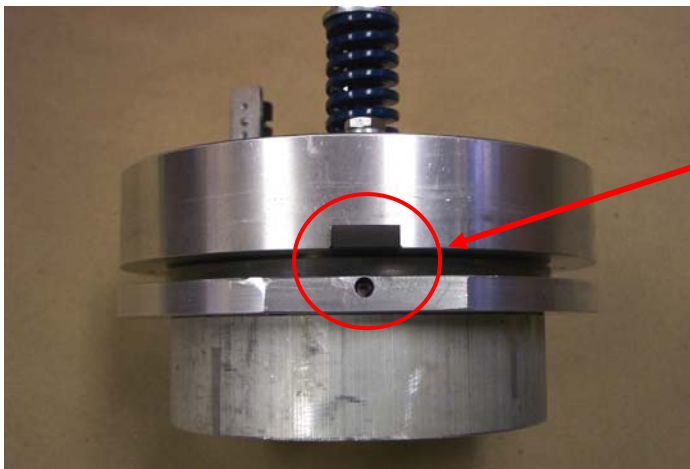
Collar Screw

Tighten the collar screw with the Allen wrench once desired torque has been met. If this collar screw is not tightened before use, it may vibrate loose and the torque may change and the collar screw may be lost.

Attaching the 13968 Rising Stem Torque Adapter

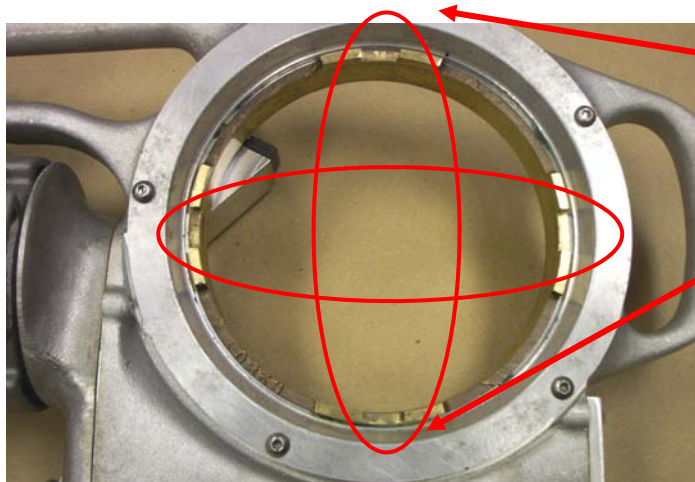


13968 Rising Stem Torque Adapter
Note the position of the "Finger Lock Washers"



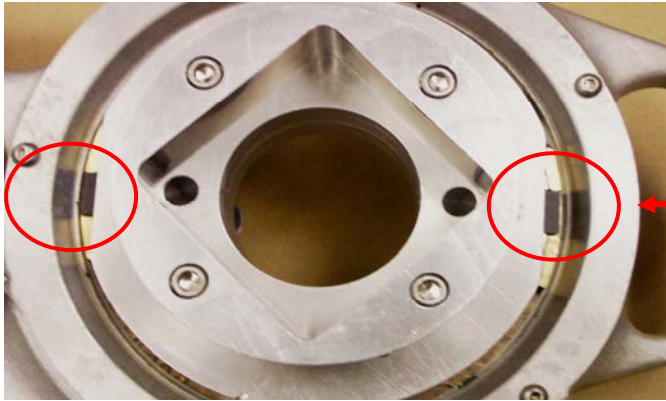
Drive Tabs

There are two (2) drive tabs on the unit.



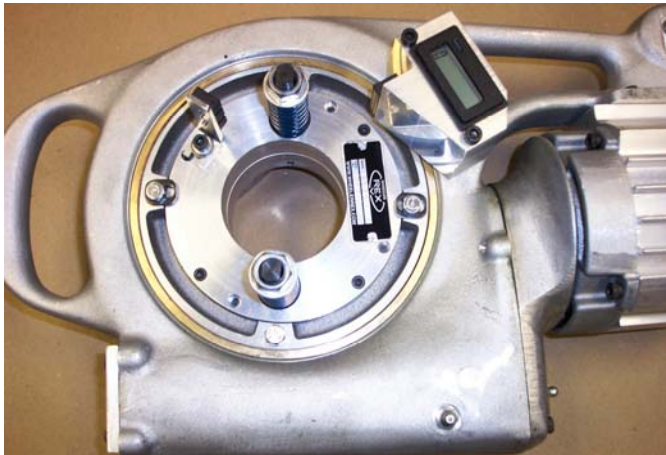
2 Sets of Slots

This is the bottom view of the 68115 Power Drive. There are two (2) sets of slots located on the bottom drive gear.

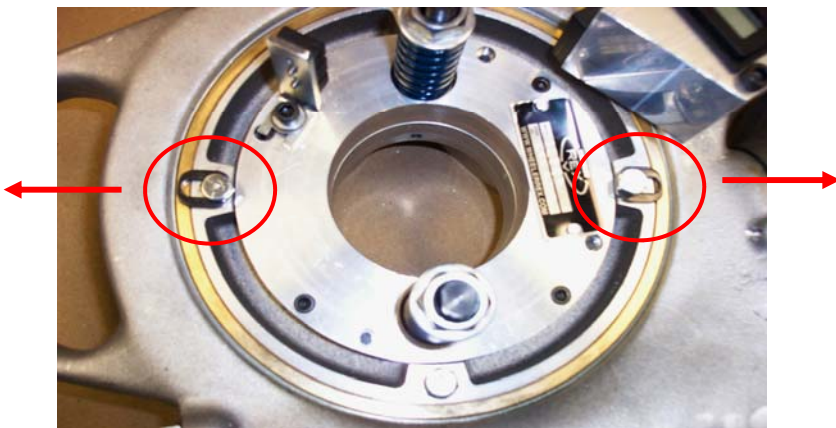


Tabs shown properly located in drive gear slots

With the power drive & torque adapter upside down, place the torque adapter inside of the power drive. Drive tabs should be properly placed in the drive gear slots of the 68115 Power Drive.

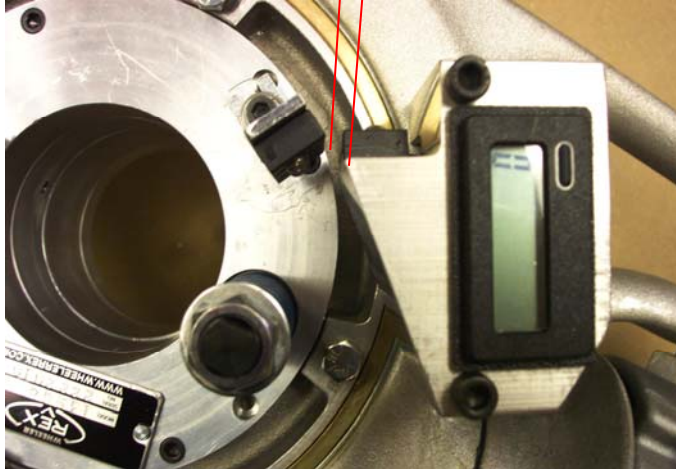


Flip the Power Drive over with the torque adapter inside of the drive gear.



Push the "Finger Lock Washers" out over the drive gear. This keeps the 13968 torque adapter attached to the 68115 Power Drive.

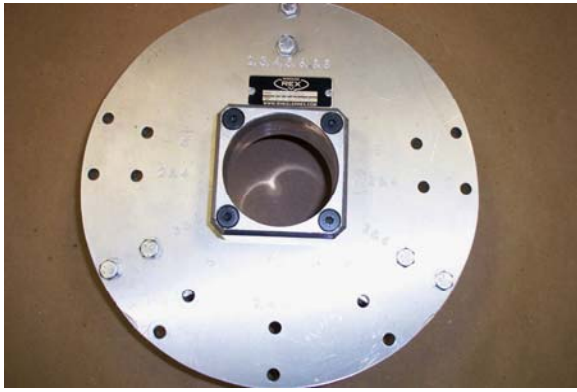
→ ← **3/16"** 15



Check for proper clearance between the Counter (located on the Power Drive) and the counter magnet (located on the torque adapter). There should be 3/16" gap between the counter and the magnet.

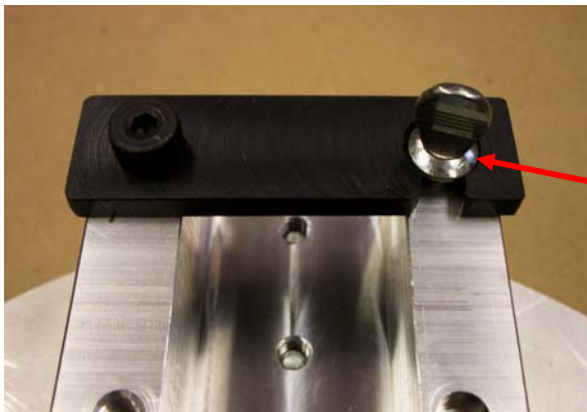
Rising Stem Hand Wheel Adapter

16



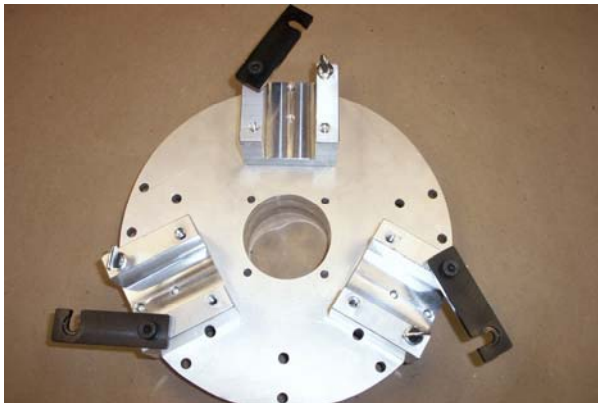
13970 Rising Stem Hand Wheel Adapter

Adapter plate has many holes to fit different hand wheel spoke configurations.

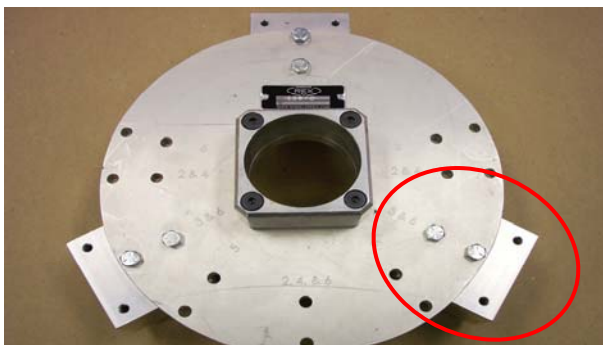


Thumb Screw
Seat

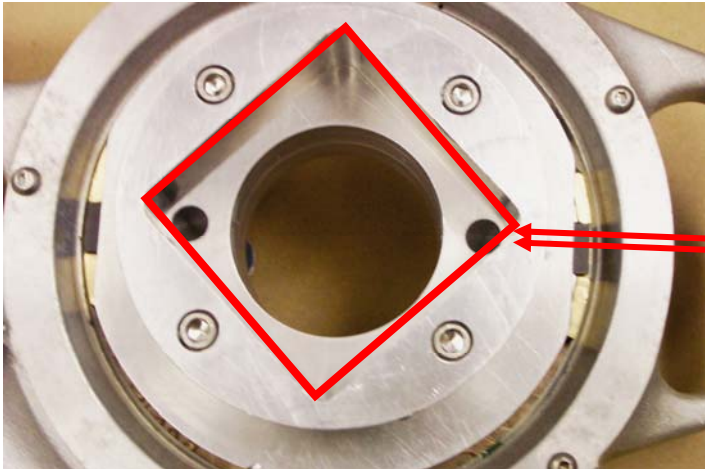
Swing clamp with thumb screw. Loosen thumb screw enough to allow swing clamp to move freely. When attached on hand wheel, make sure thumb screw is properly seated in the swing clamp groove.



Bottom view with swing clamps open.
Swing clamps can be installed to swing from either direction.

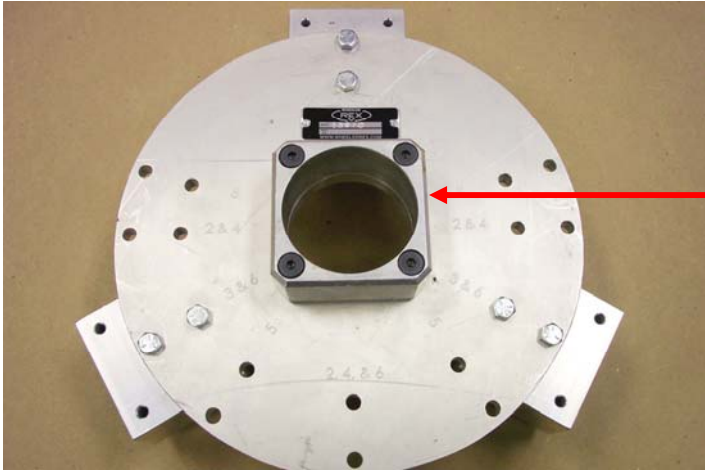


Brackets can be turned around to accommodate larger hand wheels.



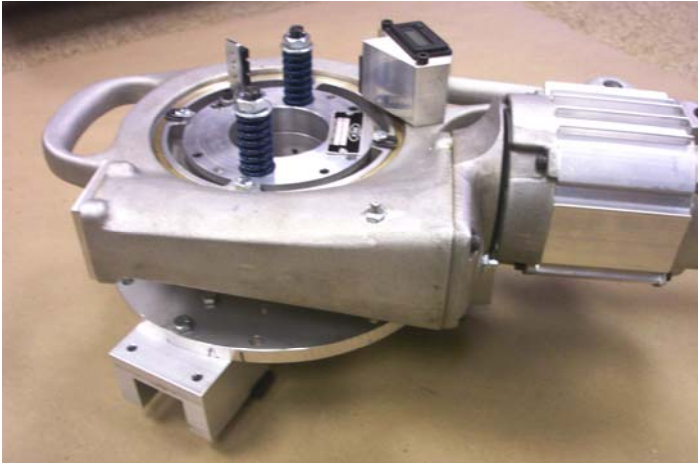
Female

Female square drive, located on the torque adapter.



Male

Male square drive, located on the hand wheel adapter.



Power drive with torque adapter placed on the hand wheel adapter.

Adjusting the Torque

18

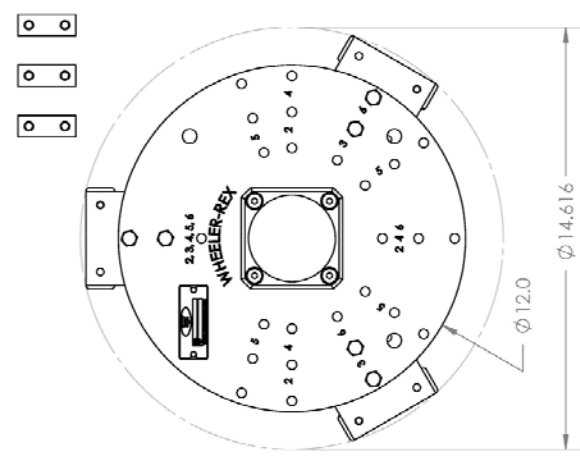
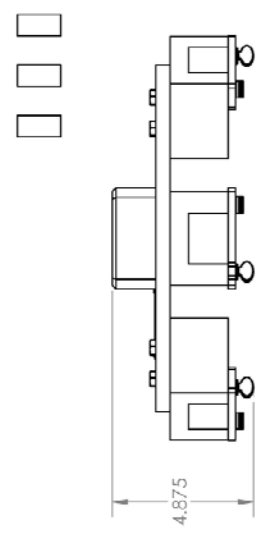
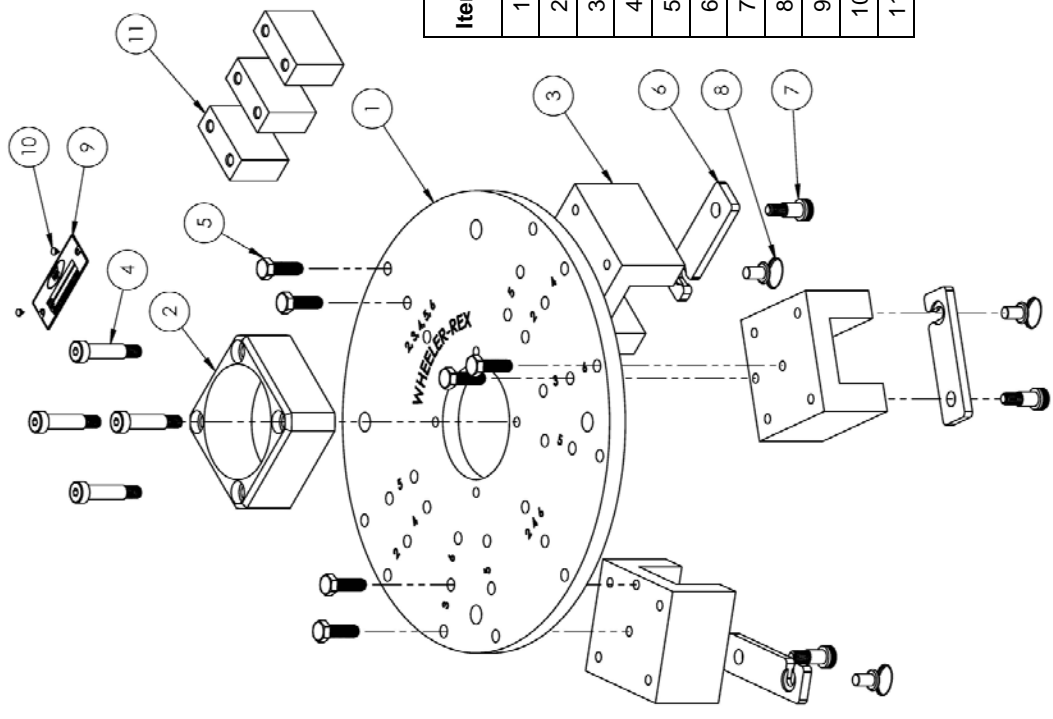


Each control road has numbers stamped on both sides of it. The numbers are 50 ft/lb increments. The top of the nut should be level with the line scribed on the control rod



Back each adjusting nut off to start with minimal tension on each spring. Clutch will “pop” as the drive gear turns either direction. To increase the torque, simply turn the nut clockwise with a 3/4” box wrench. Adjust each nut equally. Slowly increase each nut until there is enough torque to turn the valve. You want to have just enough torque to drive the valve without having the clutch slip.

NOTE: Even though the drive gear turns, the counter will not count until there is enough torque to drive the valve wheel.

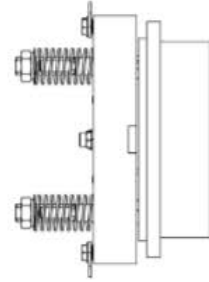
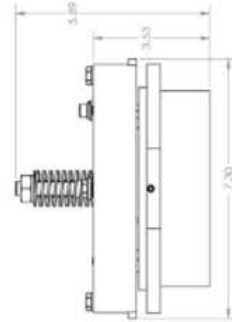
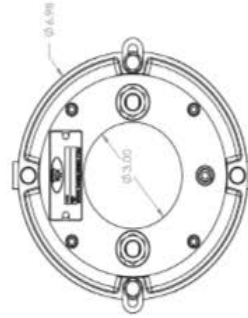
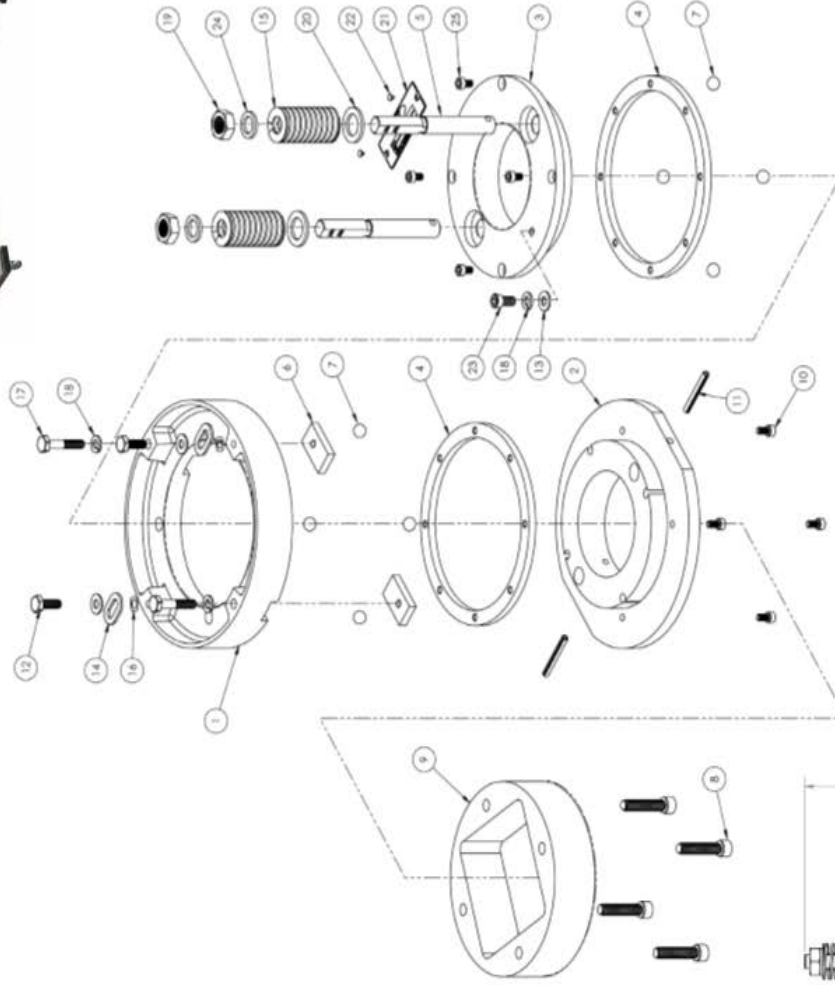


Item	Part No	Description	Qty
1	701242	PLATE	1
2	701244	MALE DRIVE ADAPTER	1
3	701246	SPOKE DRIVER	3
4	277102	3/8 DIA x 1 1/4 LONG SHOULDER BOLT	4
5	1020	5/16-18 x 1" HEX HEAD CAP SCREW	6
6	701247	SWING CLAMP	3
7	275952	SHOULDER SCREW 3/8 x 1/2" LONG	3
8	6511	THUMB SCREW	3
9	701159	SMALL NAME PLATE	1
10	276203	METAL TAB	2
11	701306	PADDLE	3



3744 Jefferson Rd., Ashtabug, OH 44005
 DESCRIPTION:
 RISING STEM HAND WHEEL ADAPTER
 PART NO. 13970

Item	Part No	Description	Qty	Item	Part No	Description	Qty
1	701250	CENTER RING	1	21	701159	SMALL NAME PLATE	1
2	701249	LOWER RING	1	22	276203	METAL TAK	2
3	701251	UPPER RING	1	23	277109	1/4-20 x 1/2" LONG SHCS	1
4	701248	WEAR RING	2	24	277122	SHIM WASHER	2
5	701252	CONTROL ROD	2	25	277106	#10-32 x 5/16" LONG SHCS	4
6	701253	DRIVE TAB	2				
7	277105	CHROME BALL	8				
8	275047	5/16-18 x 1 1/2" SHCS	4				
9	701243	DRIVE ADAPTER, FEMALE	1				
10	277121	#10-32 x 3/8 SHCS	4				
11	275862	3/16" DIA x 1 1/2" ROLL PIN	2				
12	560081	1/4-20 x 3/4" HHCS	2				
13	10713	3/16" FLAT WASHER	3				
14	11274	FINGER LOCK WASHER	2				
15	277104	SPRING	2				
16	5306	SPRING WASHER	2				
17	276819	1/4-20 x 1 3/8" HHCS	2				
18	275105	1/4" SPLIT LOCKWASHER	3				
19	4117	1/2"-20 HEX JAM NUT	2				
20	277103	SHIM WASHER	2				



68115 / 681150 / 681155 Power Drive - Counter Adding 701061 electronic counter assembly

1. Remove set screws



2. Replace with digital counter assembly and the two socket head cap screws.

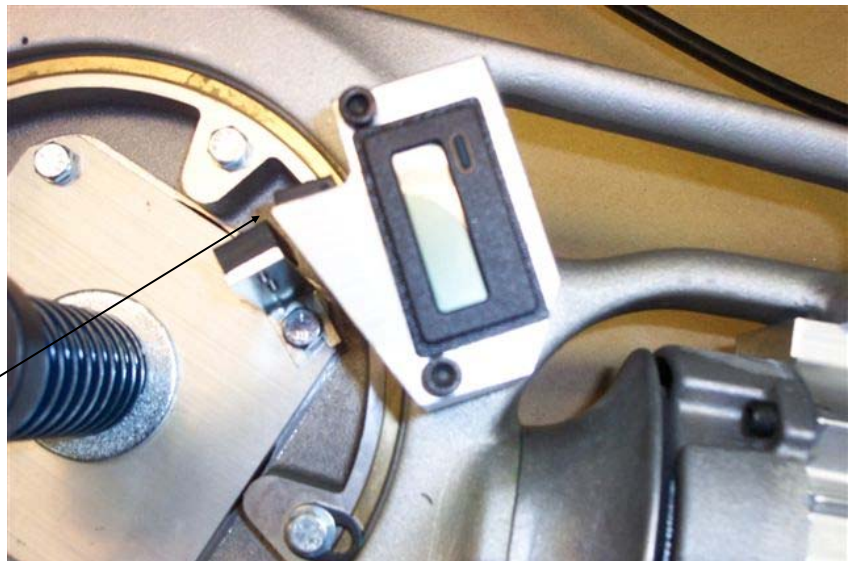
Screws

**Mechanical
Counter
Assembly**



3. Magnet bracket should be positioned with approximately 3/16" gap between its self and the sensor that is fastened to the digital counter bracket. Make sure to watch the magnet bracket on the first turn that it does not "crash" into the digital counter bracket.

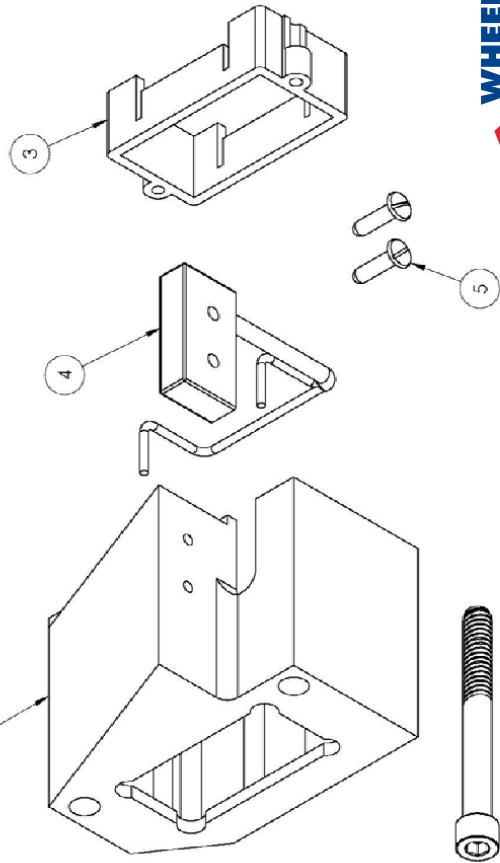
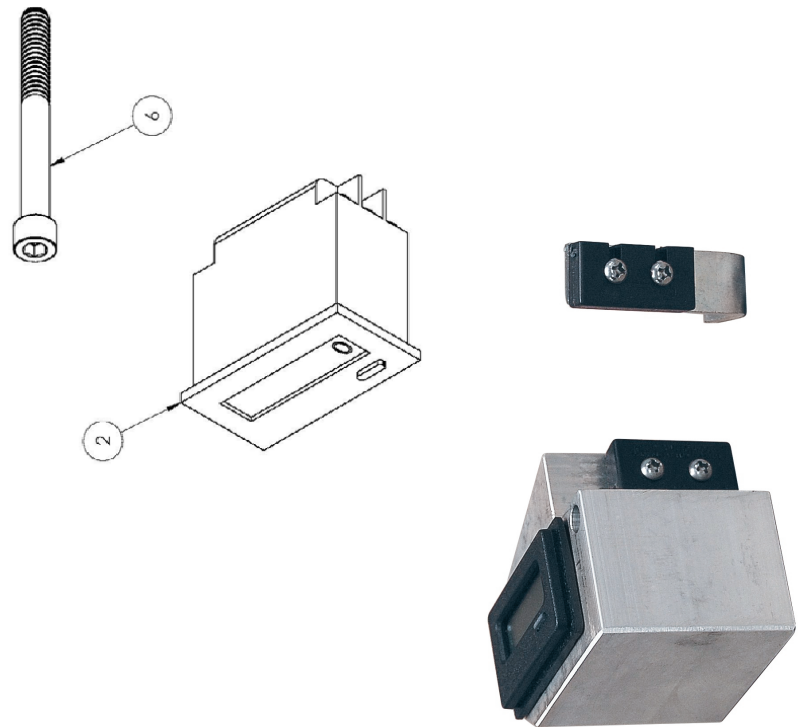
3/16" Gap



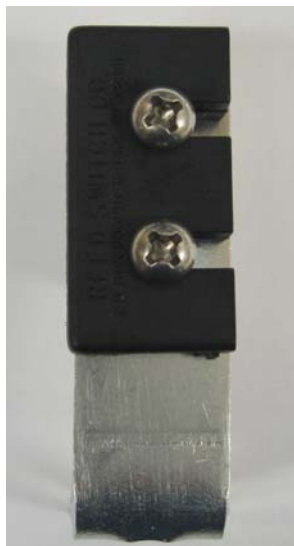
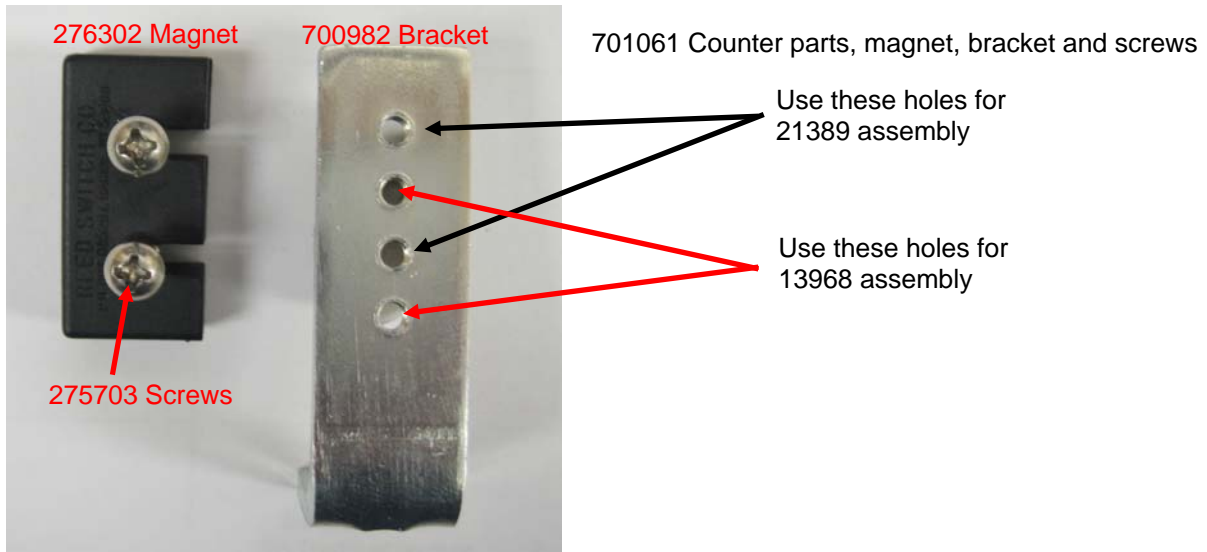
701061 COUNTER ASSEMBLY			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	700982	ELECTRICAL COUNTER BRACKET	1
2	276303	ELECTRICAL COUNTER	1
3	276303	CLIP (PART OF ELECTRICAL CTR)	1
4	276301	SENER	1
5	275703	#6-32 x 1/2" Pan Head Machine Screw	4
6	275280	1/4-20 x 2 1/2" LONG SHCS	2
7	700988	MAGNET BRACKET	1
8	276302	MAGNET	1
9	560081	1/4-20 x 3/4" HHCS	1
10	277112	FEMALE TERMINAL **NOT SHOWN**	2
11	277127	MALE TERMINAL **NOT SHOWN**	2

NOTE:
CONNECT 277127 MALE TERMINAL TO BOTH BLACK & WHITE WIRE ON DIGITAL COUNTER
CONNECT 277112 FEMALE TERMINAL TO BOTH BLACK & WHITE WIRE ON SENSOR
SEE PRINT #276303 FOR WIRE DIAGRAM SPECS

Note: Item Numbers 2 and 5 are one complete assembly (electrical counter and clip)



Magnet Adjustment for 21389 Safety Adapter Assembly and 13968 Rising Stem Torque Adapter

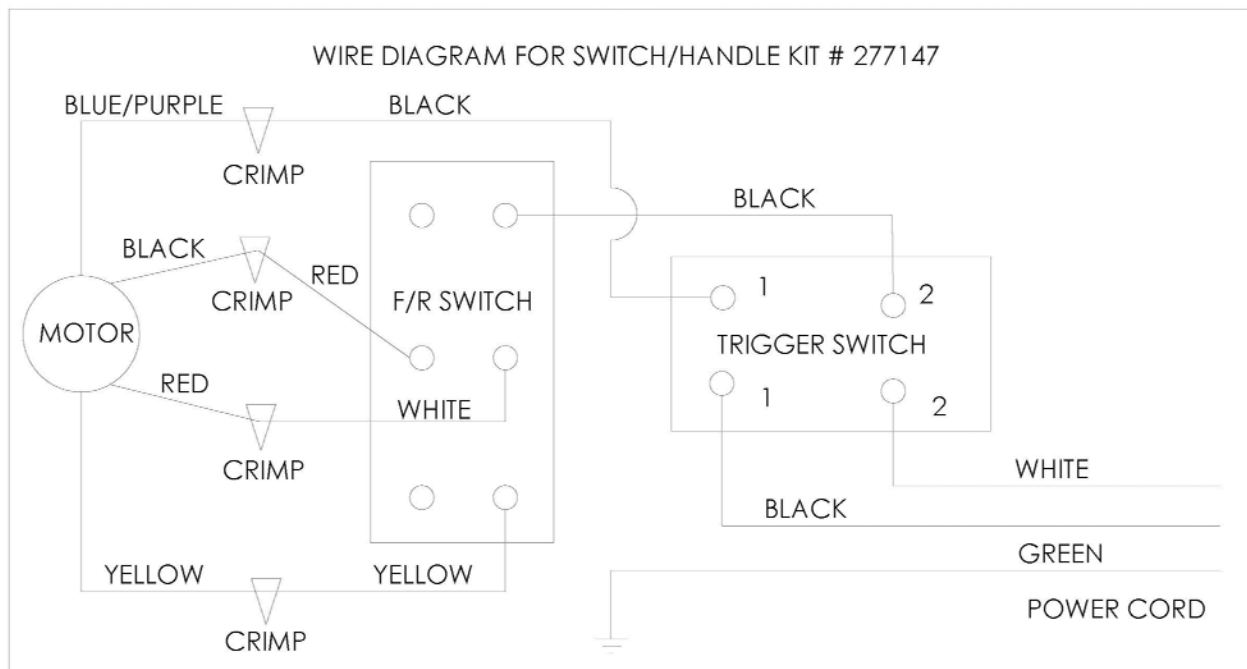
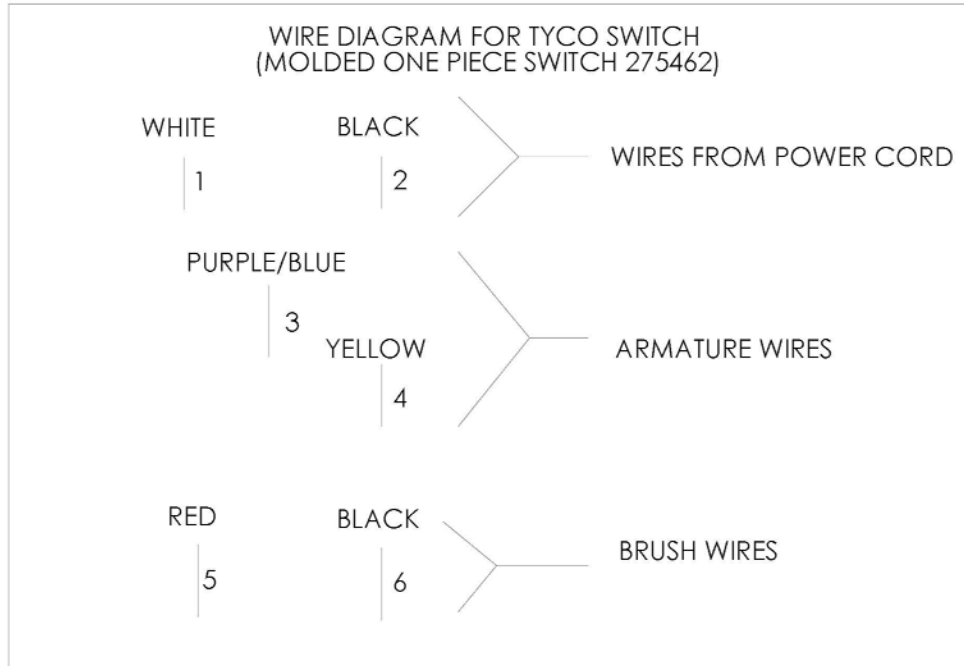


Correct position for use with 21389 Safety Adapter Assembly



Correct position for use with 13968 Rising Stem Torque Adapter

Wiring Diagrams





WHEELER-REX LIMITED LIFETIME WARRANTY

WHEELER-REX covers its products with a Limited Lifetime Warranty, with exception of pipe threading machines which have a Limited Three Year Warranty (including electric motors). Warranties from manufacturers of components used in our products may pre-empt the Wheeler-Rex warranty. Wheeler-Rex warrants against defects in material or workmanship. To take advantage of this warranty, the complete product must be delivered prepaid to Wheeler-Rex or any WHEELER-REX AUTHORIZED SERVICE CENTER. No tools are to be returned to the factory without receiving prior authorization. Obviously, failures due to misuse, abuse, or normal wear and tear are not covered by this warranty. **NO OTHER WARRANTY, WRITTEN, OR ORAL, APPLIES. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.** No employee, agent, dealer, or other person is authorized to give any warranty on behalf of Wheeler-Rex. Warranted products will be repaired or replaced at our option, at no charge and returned to you via prepaid transportation. Such replacement or repair is the exclusive remedy available from Wheeler-Rex. Wheeler-Rex is not liable for damage of any sort, including incidental and consequential damages. Some U.S.A. states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Form # 1031

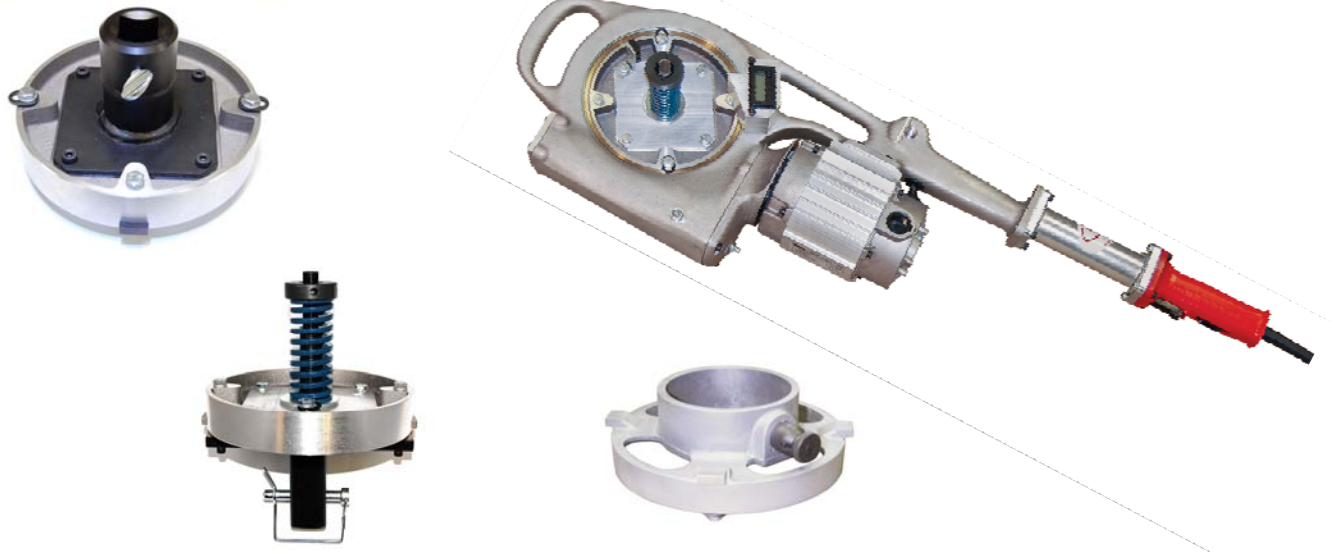
WARNING

GENERAL TOOL OPERATION WARNINGS

FOR ALL TOOLS-

1. **Keep Guards in Place** and in working order.
2. **Remove Adjusting Keys and Wrenches** from tool before turning it on.
3. **Keep Work Area Clean.** Cluttered areas and benches invite accidents.
4. **Avoid Dangerous Environment.** Don't use power tools in damp or wet locations. Keep work area well lit. Don't expose power tools to rain.
5. **If you must use an electric tool in a damp or wet location;** make sure it is plugged into a circuit which is protected by a ground fault interrupt.
6. **Keep Children Away. ALL VISITORS SHOULD BE KEPT A SAFE DISTANCE FROM WORK AREA.**
7. **Store Idle Tools** in dry, high, or locked-up place out of reach of children.
8. **Don't Force Tool.** It will do a better and safer job at the rate for which it is designed.
9. **Use Right Tool.** Don't force a small tool or attachment to do the job of a heavy-duty tool.
10. **Wear Proper Apparel.** No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
11. **Use Safety Glasses.**
12. **Don't Abuse Cord.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
13. **Secure Work.** Use clamps or vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
14. **Don't Overreach.** Keep proper footing and balance at all times.
15. **Maintain Tools Properly.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories. Equipment operators must have proper maintenance & instruction sheets. Be sure the tool operator reads and understands this information. If you don't have current maintenance and instruction sheets, contact the factory & we will supply them at no charge.
16. **Disconnect Tools** when not in use; before servicing; when changing accessories such as dies, cutters, etc.
17. **Avoid Accidental Starting.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
18. **Outdoor Use Extension Cords.** When tool is used outdoors, use only extension cords suitable for use outdoors and so marked.
19. **Wear Ear Protection** if exposed to long periods of very noisy shop operations.
20. **Do not operate** tools while under the influence of alcohol, drugs or medication.

68115 / 681150 / 681155 Portable Power Drive



Lightweight and powerful!! Designed to drive geared cutters and groovers, operate valves and power many other applications. Can also thread pipe and conduit 1/8" through 6" pipe.

- ◆ Favorite Power drive of all craftsmen
- ◆ Built for years of trouble-free service
- ◆ Long handle reduces user fatigue
- ◆ Torque arm absorbs threading torque
- ◆ Operates on standard lighting circuits
- ◆ Adapters for all popular threaders

Specifications:

- Electric motor: 1/2hp universal, 115V, 25-60hz, AC/DC reversible
- Gearing: Oversized worm gearset for maximum life. All gears grease lubricated, ball bearing mounted.
- Switches: Separate on-off and reverse switches for greater reliability.
- Power Cord: Heavy Duty oil resistant 3-wire #14 power cord, 9' with 3 prong grounding plug.
- Frame: Solid one-piece aluminum for strength and durability
- Output Speed: 22rpm
- Weight: 38lbs - Model 68115 45 lbs - Model 681150 62 lbs - Model 681155

Threading Pipe

Grasp the handle in the right hand and the end handgrip in the left hand. The face of the die head should be toward the operator.

Place the drive on the pipe as you would in handling a hand operated die head. Lift the handle to a vertical or nearly vertical position.

With the palm of the left hand against the face of the die head, CENTER the die segments against the end of the pipe.

Continue to move the handle down to a position where the elbow is straight and stiff and the shoulder held low so that the weight of the operator can be placed squarely above the handle. The stance of the operator should be at a right angle to the machine.

NOTE: When using quick-opening die heads, apply hand pressure to the face of the stock and switch on power simultaneously to set dies.

With the heel of the left hand firmly against the head, bring the right hand down sharply (see drawing next page) causing the segments to bite into the pipe.

Now tighten set screws (work holders) before beginning the threading operation.

Operating the 68115 on the Pipe

Beginning the Thread

Place the control switch in the forward or threading position. Hold oil can in left hand. Right hand should be firm on the handle and the power switch of the tool. Press power switch ON and cut threads applying oil as needed. Because the 68115 cuts and threads faster continuously, less oil is required.

Finishing the Thread

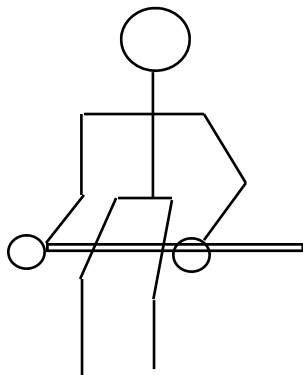
Approaching the end of the thread, be careful that the thread is not run onto the pipe far enough to lock the head of the die stock. If the die stock is allowed to lock, release the power switch immediately. Locking may not only damage die stock, but may strip gears of the drive.

When thread is completed, shut off power. Then place the control switch in neutral and then move to Reverse Position. Turn on power and back the dies off to a normal starting position.

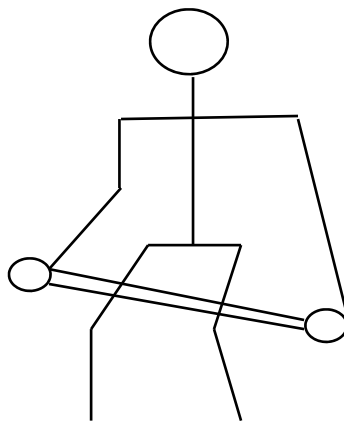
Before taking tool off of the pipe, rest control switch to Neutral or Forward position.

Some Operating Hints

Keep Elbow straight - Weight on Handle



Wrong



Right

Do not allow elbow to bend. Before turning on power, shove the handle down so that the elbow is straight and the weight of the operator squarely above the handle. This rule is especially true when threading larger pipe.



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