



# Operating Instructions Models 33100 and 33101 Hydrostatic Test Pumps

## Specifications

<b>33100</b>	
DIMENSIONS:	16" (40cm) L x 22" (55cm) W x 18" (45cm) H
WEIGHT:	87 lbs., 39.5 kg
PUMP:	Triplex Plunger: Positive Displacement Inlet & outlet: ½" NPT Capacity: 1gpm, 7 lpm Pressure: Maximum pressure 1000psi (68bar) Operating Speed: 1725rpm Lubrication: Continuous oil bath, 30W non-detergent Hydraulic Oil – filled to mark on sight glass Shaft Size: 5/8" hollow
MOTOR:	1hp , 115/230V, 1ph, 60hz, 1725rpm
CONTROL:	Adjustable pressure relief valve
GAUGE:	Glycerin filled, 0-2000psi (136 bar)
DISCHARGE HOSE:	½" x 10' (3m), 2000psi (136 bar)



<b>33101</b>	
DIMENSIONS:	16" (40cm) L x 22" (55cm) W x 18" (45cm) H
WEIGHT:	87 lbs., 39.5 kg
PUMP:	Triplex Plunger: Positive Displacement Inlet & outlet: ½" NPT Capacity: 1gpm, 7 lpm Pressure: 0 – 1000psi, (68bar) Operating Speed: 1725rpm Lubrication: Continuous oil bath, 30W non-detergent Hydraulic Oil - filled to mark on sight glass Shaft Size: 5/8" hollow
MOTOR:	1hp, 220V, 1ph, 50hz, 1725rpm
CONTROL:	Adjustable automatic pressure relief
GAUGE:	Glycerin filled, 0-2000psi (136 bar)
DISCHARGE HOSE:	½" x 10' (3m), 2000psi (136 bar)



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## Pressure Feed: (Preferred Method #1)

This is typically a residential water source with about 40 to 60psi.

1. Fill the water line (or test vessel) to be tested prior to pump connection.
2. Connect water supply hose to the garden hose inlet (A) connection on the pump.
3. Turn supply water on to feed pump.
4. Purge the pump and pressure hose of all air.
5. Connect output (pressure) hose between pump connection (C) and water line (or vessel) being tested. (Water line or test vessel should be pre-filled with water before the test pump is attached.)
6. Turn pump on.
7. Purge water line (or test vessel) of all air at the highest point of the system.
8. Bring water line (or rest vessel) to pressure. Watch the gauge (D) while pumping. When the desired pressure is achieved, turn the isolation valve (B) to the "off" position. The pump can now be turned off. If pressure drops, there is a leak in the line.

## Gravity Feed Method: (Preferred Method #2)

This method requires a tank with a water outlet at the bottom. The water tank's outlet should be level with or above the level of the water inlet connection on the pump. This allows water to flow naturally into the test pump. Follow the "Pressure Feed Method" steps 1 through 8.

## Siphon Method

*Use a clean water source*

1. Fill the water line to be tested.
2. Fill the intake hose (WR PN #34550 - not supplied with pump), with water, then quickly place the hose into a bucket and turn pump on. (The unit is self-priming once primed.) Continue to run pump until you see the water coming out of the outlet, with little or no air mixed with it.
3. Connect the output hose to the water line. Continue on with steps 6 through 8 in Pressure Feed Method.



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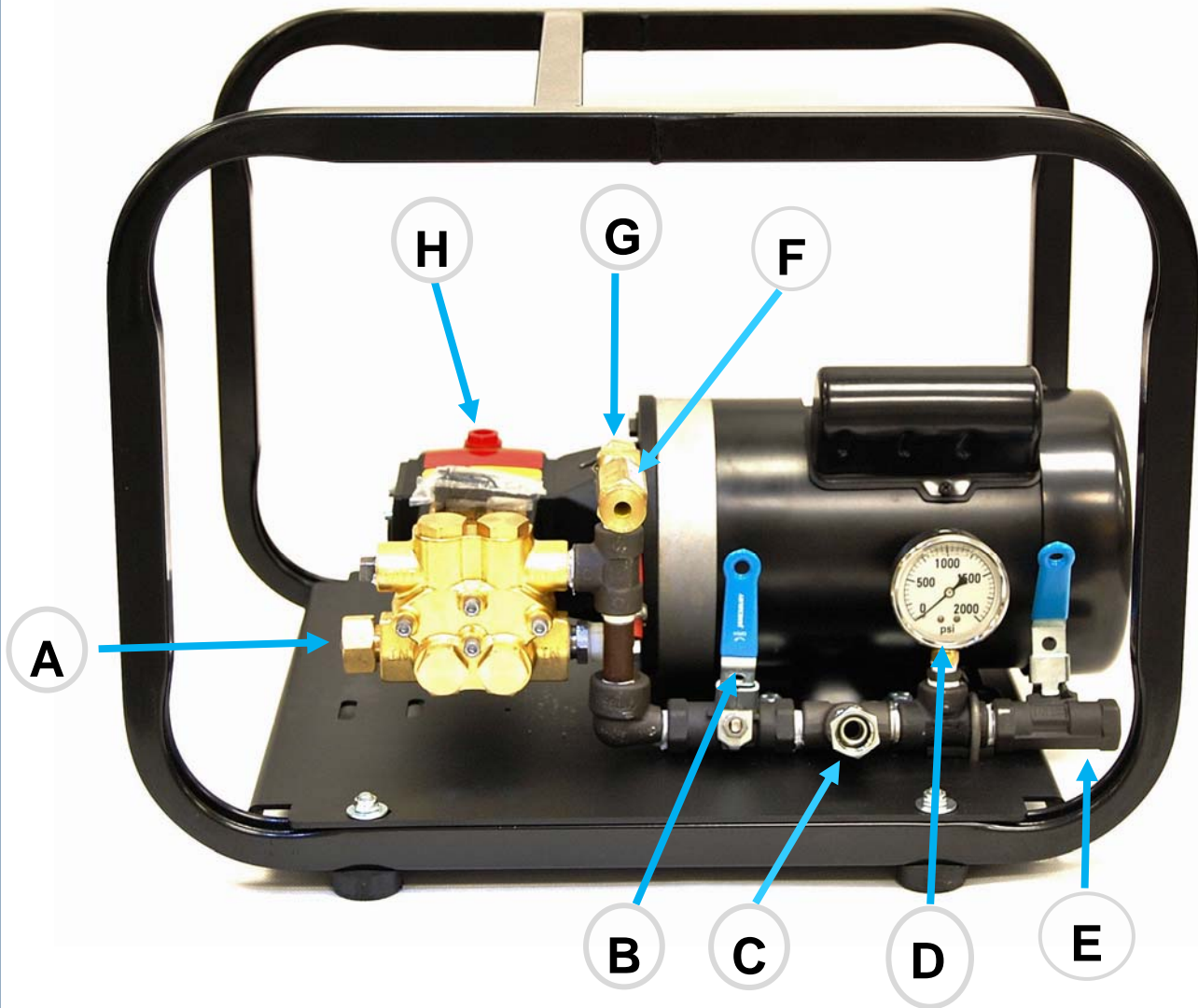
## Pre-Setting Your Pump

*Your pump can be pre-set to a specific pressure easily by adjusting the pressure relief valve.*

1. Loosen the jam nut (G), then unscrew (counterclockwise direction) the pressure relief valve knob on pressure relief valve (F) a few turns. (Test pump comes pre-set at 1000psi). Be sure not to unscrew the relief valve all the way. Parts can be easily lost.
2. Add a ball valve (not supplied with pump) to the end of the high pressure hose.
3. Follow steps 2 through 4 from the 'Pressure Feed Method'.
4. As water is flowing out of the high pressure hose, turn the ball valve to the off position.
5. Slowly start turning the knob on the pressure relief valve (F) (in the clockwise direction) by  $\frac{1}{4}$  turn increments, until you reach the desired pressure. Tighten the jam nut (G) when finished.
6. Your test pump is now pre-set. This eliminates over-pressurizing the water line (or the vessel).



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A	Garden Hose Inlet
B	Isolation Valve
C	High Pressure Hose Connection
D	Gauge
E	Pump Valve
F	Pressure Relief Valve
G	Jam Nut
H	Oil Cap / Dipstick



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## Troubleshooting Your Pump

Test pressure not being reached:

- Possible air in line (or test vessel).
  - ◊ Air needs to be purged from system.
  - ◊ Remove pump from system and follow steps 1 thru 6 of the "Pre-Setting Your Pump" section.
  - ◊ If using the Siphon Method and not getting pressure, try the 'Pressure Feed' or 'Gravity Feed Method' to ensure water is getting into the pump.
  - ◊ Check strainer / O-Ring for cracks (A). This is inside garden hose connection
- Pressure relief valve not adjusted properly.
  - ◊ Turn relief valve counterclockwise and watch for change in pressure.

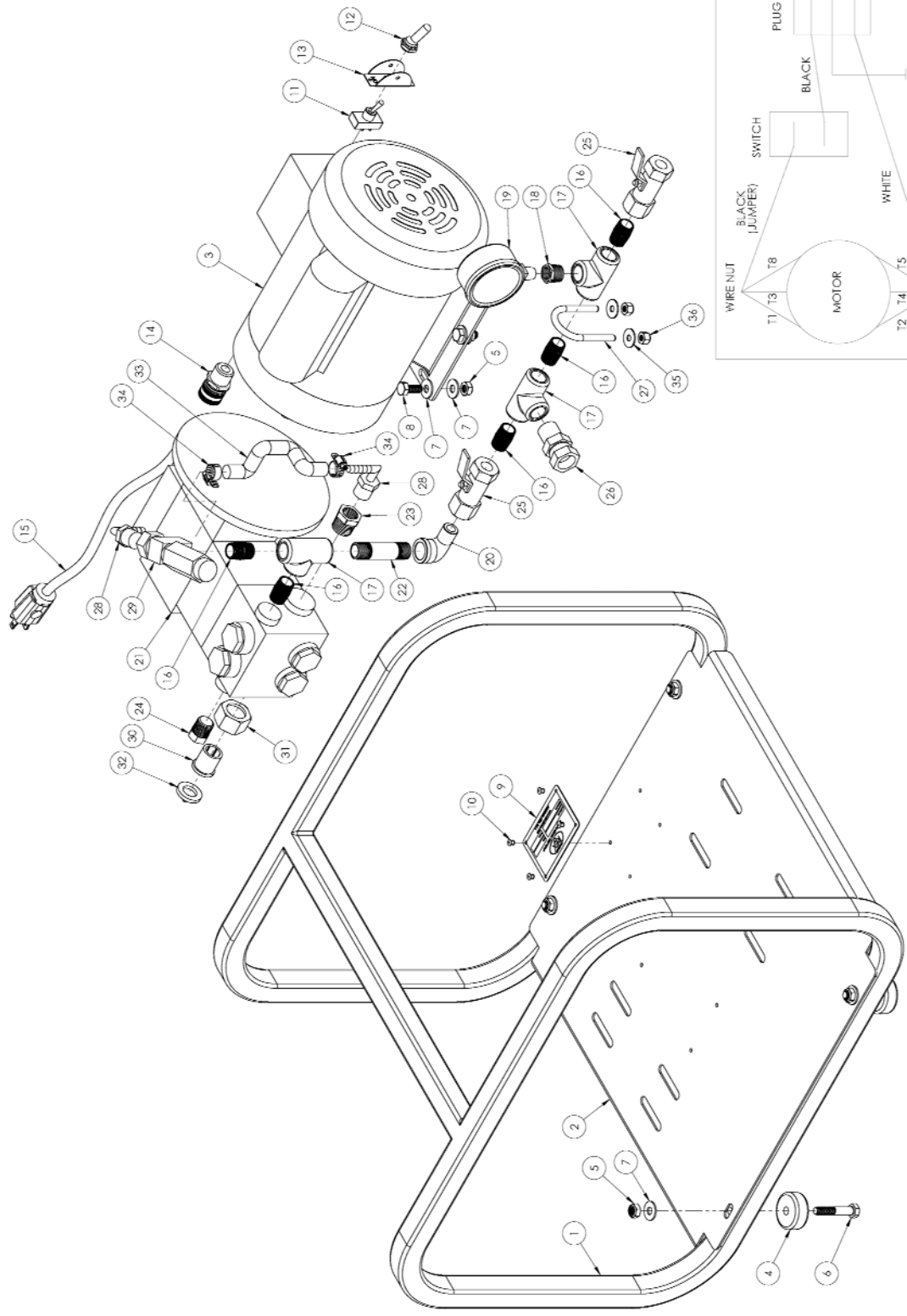
## Pump Maintenance

- Pump 50/50 antifreeze/water solution through pump after each use to lubricate internal parts of pump and to avoid freezing in cold weather.
- Check strainer O-Ring (A) for cracks prior to each use..
- Before running the pump, check the oil level using the dip stick. Refer to the recommended lubrication marked on the crank case of the pump.
- Hypro pump - change oil every 500 ours of operation
- Pump seal kit Wheeler Rex PN 34053.
- Discharge Valve Kit Wheeler Rex PN 34052.
- Suction Hose Wheeler Rex PN 34550.

### **CAUTION !!!**

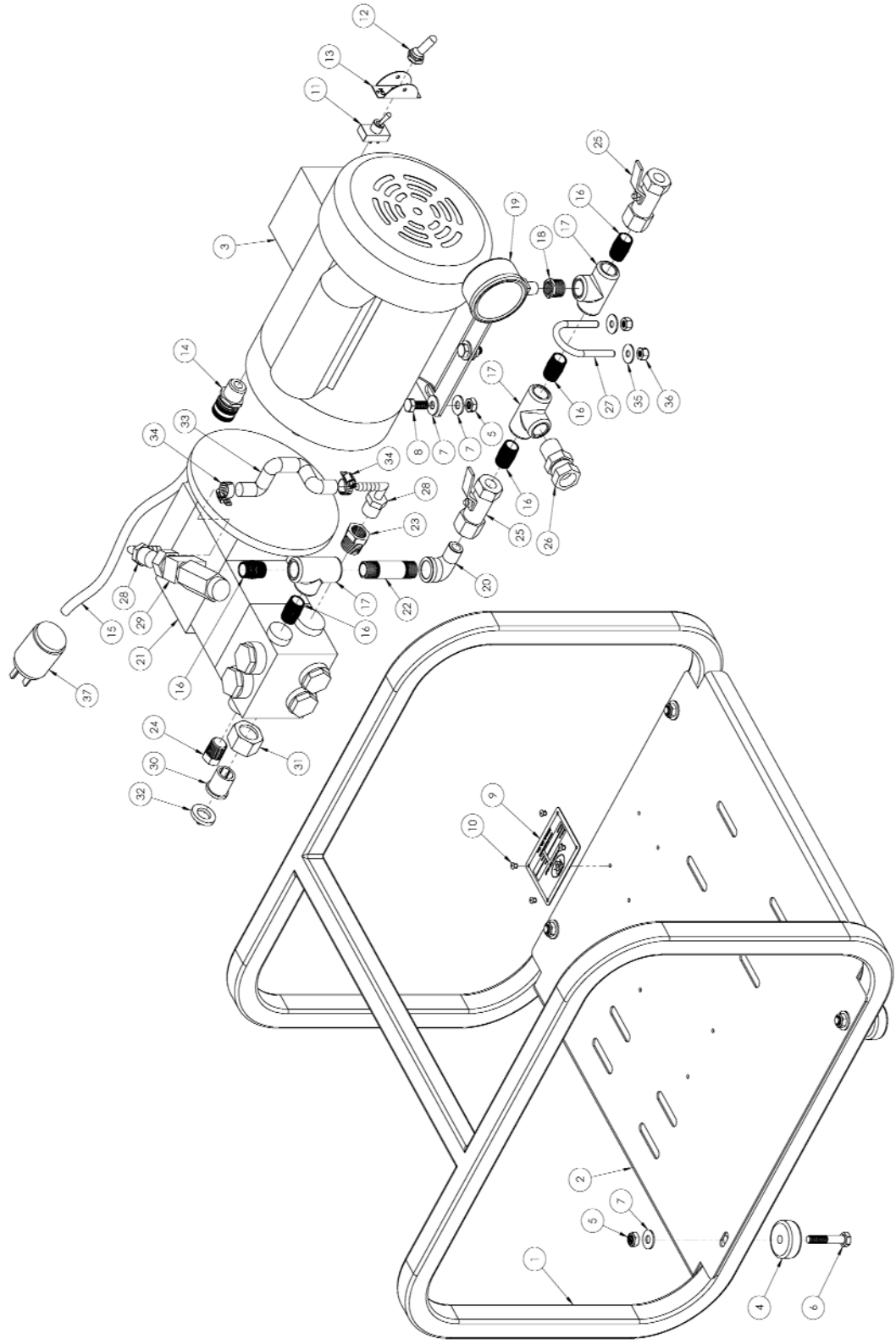
**This pump is designed for water only!!**

The pump is equipped with an adjustable pressure relief valve (F), which helps protect the system from being over pressurized. It can be preset by plugging the end of the hose. Turn the adjusting knob clockwise to increase pressure and counterclockwise to decrease.



# 33100 Parts

<b>33100 Hydrostatic Test Pump</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	700800	SMALL PUMP CAGE	1
2	700797	BASE PLATE	1
3	276351	MOTOR	1
4	276443	RUBBER FOOT	4
5	275857	5/16-18 HEX NYLON INSERT LOCKNUTS	8
6	275639	5/16-18 x 1 3/4" HHCS	4
7	275685	5/16" FLAT WASHER	12
8	166	5/16-18 x 3/4 HEX HEAD CAP SCREW	4
9	220874	NAME PLATE	1
10	275543	POP RIVET, STAR 4-2AAD	4
11	276143	SWITCH	1
12	276363	SWITCH BOOT	1
13	276362	SWITCH GUARD	1
14	275716	CORD CONNECTOR	1
15	221389	CORD SET	1
16	275866	3/8 CLOSE STEEL NIPPLE	5
17	275863	3/8" FS 2000 LB TEE	3
18	5613	3/8" to 1/4" HEX REDUCING BUSHING	1
19	275676	GAUGE-2000 PSI	1
20	275865	3/8" x 90 DEG STREET ELBOW	1
21	276350	PUMP	1
22	275171	3/8 x 2 1/2" PIPE NIPPLE	1
23	276722	1/2 X 3/8 BUSHING	1
24	275768	3/8" HEX-HEAD PLUG	1
25	276700	1/2" VALVE	2
26	276345	3/8 NPT x 1/2 HOSE SWIVEL ADAPTER	1
27	275637	U-BOLT	1
28	276348	3/8 x 5/16 90 DEG HOSE BARB	2
29	276361	RELIEF VALVE	1
30	275918	SWIVEL ADAPTER	1
31	275925	SWIVEL NUT	1
32	275917	STRAINER	1
33	700317	5/16 ID HOSE	1
34	275497	HOSE CLAMP	2
35	276540	1/4" FLAT WASHER	2
36	275426	1/4-20 ESNA STOP NUT	2
37	220577	HIGH PRESSURE HOSE ***NOT SHOWN***	1
38	275718	SEALING LOCK NUT ***NOT SHOWN***	1
39	276601	WIRE NUT ***NOT SHOWN***	2
40	275782	RING TERMINAL ***NOT SHOWN***	1
41	275471	RING TERMINAL ***NOT SHOWN***	1



# 33101 Parts



### 33101 HYDROSTATIC TEST PUMP

Item	Part No	Description	Qty
1	700800	SMALL PUMP CAGE	1
2	700797	BASE PLATE	1
3	276372	MOTOR 1HP, 220V, 50Hz	1
4	276443	RUBBER FOOT	4
5	275857	5/16-18 HEX NYLON INSERT LOCKNUTS	8
6	275639	5/16-18 x 1 3/4" HHCS	4
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33	700317	5/16 ID HOSE	1
34	275497	HOSE CLAMP	2
35	276540	1/4" FLAT WASHER	2
36	275426	1/4-20 ESNA STOP NUT	2
37	275661	PLUG, 220V	1
38	220577	HIGH PRESSURE HOSE ***NOT SHOWN***	1
39	275718	SEALING LOCK NUT ***NOT SHOWN***	1
40	276601	WIRE NUT ***NOT SHOWN***	2
41	275782	RING TERMINAL ***NOT SHOWN***	1
42	275471	RING TERMINAL ***NOT SHOWN***	1



## 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 warranties 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.



Wheeler Rex ▪ 3744 Jefferson Road ▪ Ashtabula, Ohio 44005  
Tel: 800-321-7950 or 440-998-2788 ▪ Fax: 440-992-2925  
wheeler@wheelerrex.com ▪ www.wheelerrex.com