



# Operating Instructions Model 39300 and 39301 Hydrostatic Test Pump

## Specifications

<b>Dimension</b>	14" ( 5.5cm)L x 10" (3.9cm)W x 12" (4.7cm)H
<b>Weight</b>	35lbs; 16kg
<b>Pump Style</b>	Twin piston, positive displacement
<b>Capacity</b>	4gpm / 15lpm, @60hz; 3.4gpm / 12lpm @ 50hz
<b>Pressure</b>	0 - 300psi (20 bar)
<b>Motor</b>	1/2hp 115/230V, 1725rpm @60hz, 1450rpm@50hz
<b>Lubrication</b>	Chassis Grease
<b>Control</b>	Adjustable pressure relief valve
<b>Gauge</b>	Glycerin filled, 0 - 600psi (40bar)
<b>Inlet Connection</b>	3/4" Female garden hose
<b>Outlet Connection</b>	9/16 - 18 JICF Male
<b>Discharge Hose</b>	1/4" NPT Male x 1-' (3m), 4000psi (266 bar)
<b>Hose Ends</b>	9/16 - 18 JICF Female swivel x 1/4" Male NPT

### Pressure Feed Method: (Preferred Method #1)

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

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 (E) connection on the pump.
3. Open valve and turn supply water on.
4. Purge the pump and pressure hose of all air.
5. Connect output (pressure) hose between pump (B) 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 and purge water line (or vessel) of all air at the highest point of the system. Close valve once air has been purged.
7. With pump running, bring water line (or vessel) to pressure.
8. Watch the gauge (A) while pumping. As you reach the desired pressure; turn the isolation valve (C) to the 'off' position. Motor can now be turned off. If pressure drops off, 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 (listed above).



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## Siphon Method

*Use a clean water source*

1. Fill the water line (or test vessel) to be tested prior to pump connection.
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 pump until you see the water coming out of the outlet, with little or no air mixed with it.

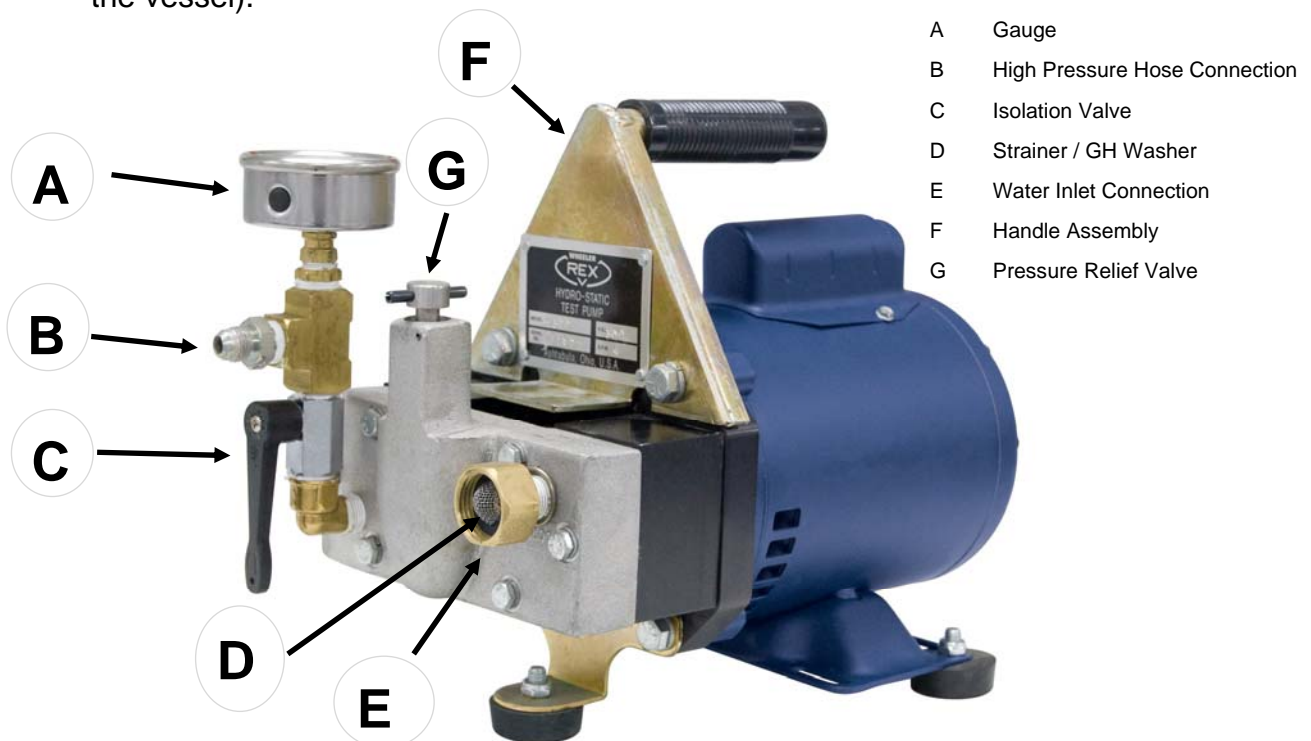
NOTE: This process may take more time than one time to prime the pump.

3. Connect the output hose to the water line. Continue on with steps 5 through 7 in pressure feed method.

## Pre-Setting Your Pump

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

1. Unscrew (counter clockwise direction) pressure relief valve (G) until it stops. (Note: the valve assembly will not come out of the casting body).
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 pressure relief valve (G) (in the clockwise direction) by ¼ turn increments, until you reach the desired pressure.
6. Your test pump is now pre-set. This eliminates over-pressurizing the water line (or the vessel).





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## Troubleshooting Your Pump

Test pressure not being reached:

- Possible air in air in line (or vessel)
  - ◇ Air needs to be purged from system.
  - ◇ Check garden hose strainer-washer (D) for cracks. Make sure to have a good tight seal.
  - ◇ 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.
- Pressure relief valve not adjusted properly.
  - ◇ Turn relief valve clockwise until it stops.
  - ◇ Debris stuck under poppet not allowing proper seating.
    - \* Remove roll pin, relief valve screw, spring and poppet. Inspect for debris in manifold casting.
- Check valve stuck (not allowing water to flow correctly through pump)
  - ◇ Remove cylinder heads and inspect check valves for debris stuck in check valves. Replace check valves if necessary.
  - ◇ Check piston for wear and piston O-rings for wear / cracks. Inspect cylinder heads for piston wear due to worn O-rings. Replace if necessary with Wheeler Rex repair kit PN 39350 (piston and cylinder heads not included in kit). Lightly grease each o-ring when rebuilding.

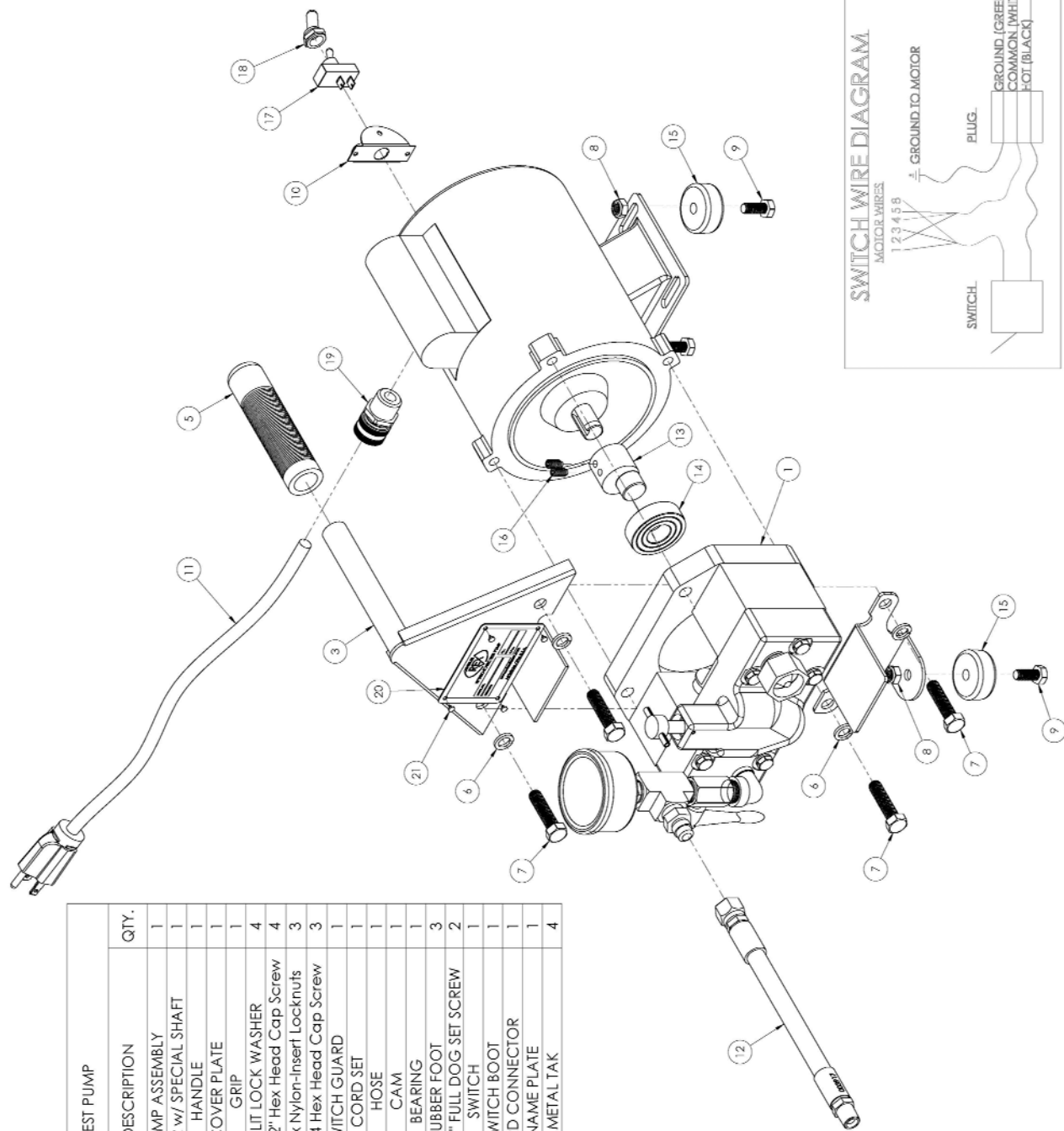
## Pump Maintenance

- Pump 50/50 antifreeze/water solution through pump after each use to lubricate internal parts of pump and to avoid freezing in cold weather.
- Lubricate piston and bearing with moly-lithium grease after every 50 hours of use. (remove handle assembly (F) to access piston and bearing.
- Pump repair kit Wheeler Rex PN 39350
- Suction Hose Wheeler Rex PN 34550

### **CAUTION !!!**

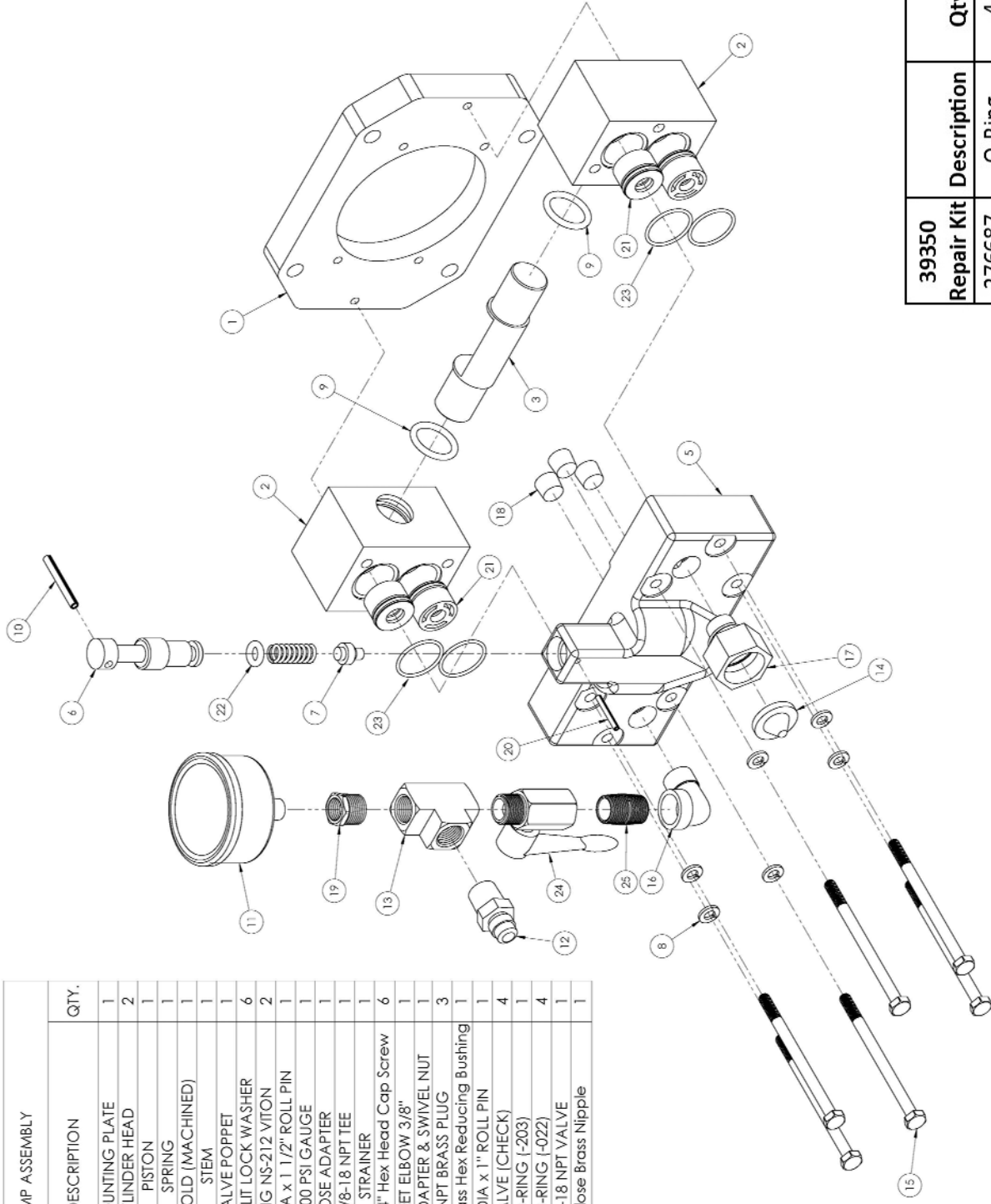
**This pump is designed for water only!!**

The pump is equipped with an adjustable pressure relief valve, 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.



39300 TEST PUMP			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	700792	PUMP ASSEMBLY	1
2	700755	MOTOR w/ SPECIAL SHAFT	1
3	700725	HANDLE	1
4	700756	COVER PLATE	1
5	154	GRIP	1
6	7179	3/8" SPLIT LOCK WASHER	4
7	276122	3/8-16 x 1 1/2" Hex Head Cap Screw	4
8	275857	5/16-18 Hex Nylon-Insert Locknuts	3
9	166	5/16-18 x 3/4 Hex Head Cap Screw	3
10	276362	SWITCH GUARD	1
11	221389	CORD SET	1
12	3917	HOSE	1
13	700724	CAM	1
14	276685	BEARING	1
15	276443	RUBBER FOOT	3
16	276118	1/4-20 x 1/2" FULL DOG SET SCREW	2
17	276143	SWITCH	1
18	276363	SWITCH BOOT	1
19	275716	CORD CONNECTOR	1
20	220874	NAME PLATE	1
21	276203	METAL TAG	4

700792 PUMP ASSEMBLY			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	700721	MOUNTING PLATE	1
2	700722	CYLINDER HEAD	2
3	700723	PISTON	1
4	700758	SPRING	1
5	700718	MANIFOLD (MACHINED)	1
6	700726	STEM	1
7	700738	VALVE POPPET	1
8	275105	1/4" SPLIT LOCK WASHER	6
9	275815	O-RING NS-212 VITON	2
10	275862	3/16" DIA x 1 1/2" ROLL PIN	1
11	36359	0-600 PSI GAUGE	1
12	5614	HOSE ADAPTER	1
13	275923	3/8-18 NPT TEE	1
14	275917	STRAINER	1
15	276686	1/4-20 x 3 3/4" Hex Head Cap Screw	6
16	276701	STREET ELBOW 3/8"	1
17	276767	SWIVEL ADAPTER & SWIVEL NUT	1
18	276376	1/4" NPT BRASS PLUG	3
19	275924	1/4" to 3/8" Brass Hex Reducing Bushing	1
20	276699	1/8" DIA x 1" ROLL PIN	1
21	276698	VALVE (CHECK)	4
22	276688	O-RING (-203)	4
23	276687	O-RING (-022)	4
24	275921	3/8-18 NPT VALVE	1
25	276145	3/8 Close Brass Nipple	1



39350 Repair Kit	Description	Qty
276687	O-Ring	4
276688	O-Ring	1
275815	O-Ring	2



## 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.