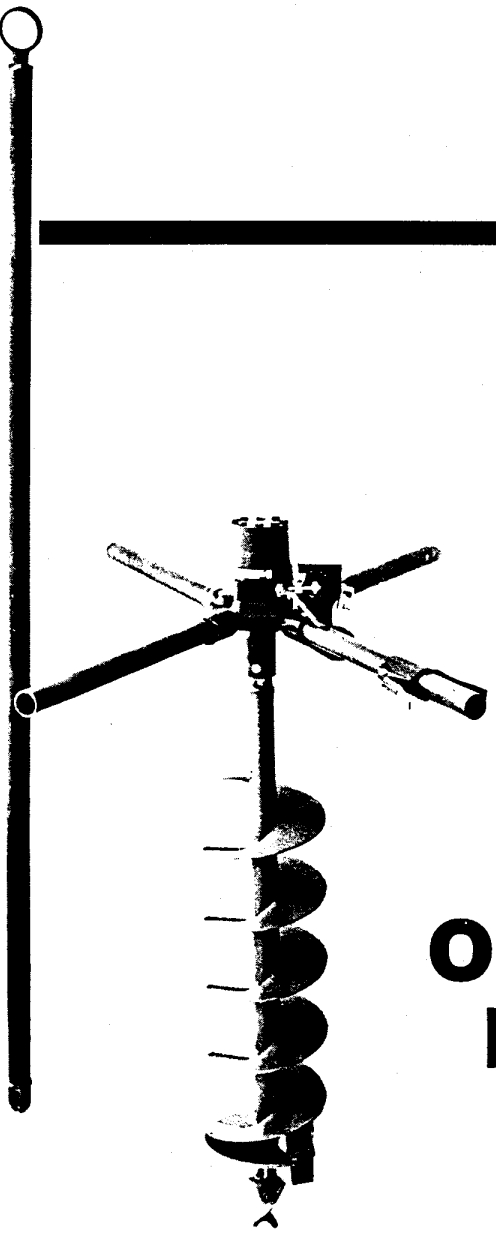
EA08
EARTH AUGER



Safety, Operation and Maintenance Manual

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23493 10/93

SAFETY PRECAUTIONS

Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the tool and hose.

These safety precautions are given for your safety. Review them carefully before operating the tool and before performing maintenance or repairs.

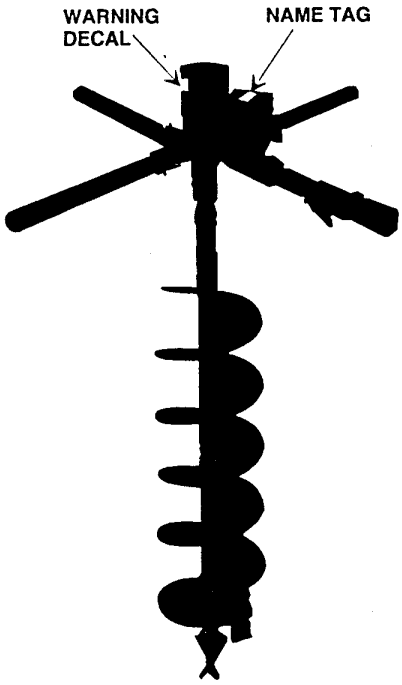
Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 3.

GENERAL SAFETY PRECAUTIONS

The EA08 Earth Auger will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the earth auger and hose before operation. Failure to do so could result in personal injury or equipment damage.

- Establish a training program for all operators to ensure safe operation.
- Operators must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions, or underground utilities.
- Do not operate the earth auger unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, ear and head protection, leg protection, gloves, snug fitting clothing, and safety shoes at all times when operating the earth auger.
- Never use the earth auger near energized transmission lines. Know the location of buried or covered services before starting work.
- Never wear loose clothing that can get entangled in the working parts of the earth auger.
- Do not overreach. Maintain proper footing and balance at all times.
- Do not inspect or clean the earth auger while the hydraulic power source is connected. Accidental engagement of the earth auger can cause serious injury.
- Always connect hoses to the earth auger's hose couplers before energizing the hydraulic power source. Make sure all hose connections are tight.
- Do not operate the earth auger without first installing the torque tube.
- Do not remove the earth auger from a hole until it has completely stopped turning.
- Always operate the earth auger at full throttle.
- To avoid personal injury or equipment damage, all earth auger repair, maintenance and service must only be performed by authorized and properly trained personnel.

TOOL STICKERS AND TAGS



A flow and pressure sticker is attached to the auger at the location shown. Never exceed the flow and pressure levels specified on this sticker.

WARNING

Failure to observe and take the following actions could result in injury to the operator or other personnel. Make sure that prior to operation of the tool that the following safety precautions have been taken.

A. Make sure that all of the hydraulic tool hoses are clear of the rotating auger.
B. The torque tube must be anchored and secured at both ends.
C. The hydraulic tool on/off valve must be in the neutral position.

WARNING DECAL

STANLEY STANLEY HYDRAULIC TOOLS
MILWAUKIE, OREGON U.S.A.

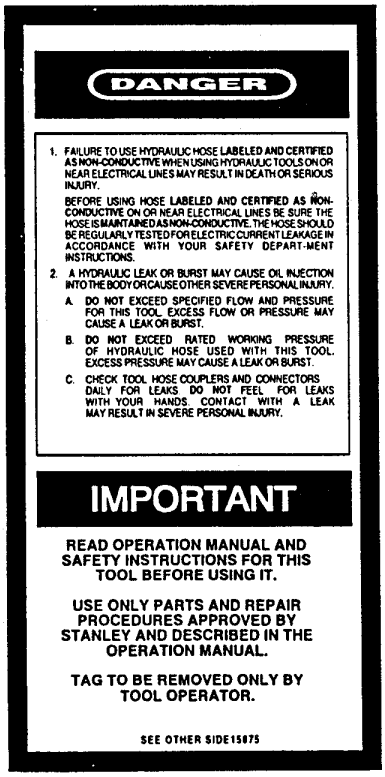
Model No. EA08 Serial No.

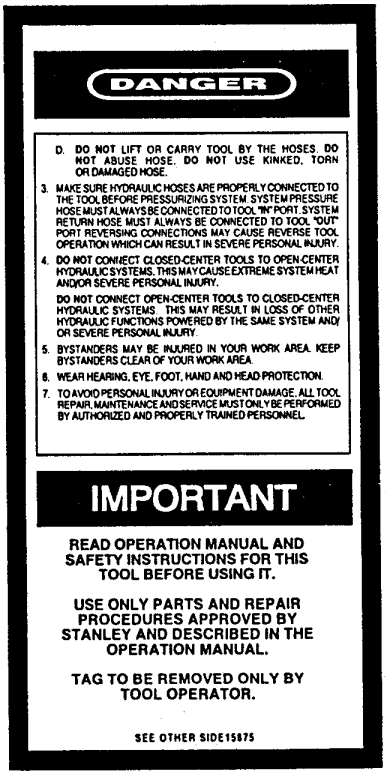
NAME TAG

The information listed on stickers and tags must be legible at all times. Always replace stickers that have become worn or damaged. Replacements are available from your local Stanley distributor.

SAFETY TAG

The safety tag at right is attached to the earth auger when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the earth auger when not in use.





SAFETY SYMBOLS

Safety symbols are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.

DANGER

This safety symbol may appear on the tool. It is used to alert the operator of an action that could place him/her or others in a life threatening situation.

⚠ WARNING

This safety symbol appears in these instructions to identify an action that could cause bodily injury to the operator or other personnel.

IMPORTANT

This safety symbol appears in these instructions to identify an action or condition that could result in damage to the tool or other equipment.

Always observe safety symbols. They are included for your safety and for the protection of the tool.

LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

EQUIPMENT PROTECTION AND CARE

IMPORTANT

In addition to the Safety Precautions on pages 1 thru 3 of this manual, observe the following for equipment protection and care.

- Always store the tool in a clean, dry space, safe from damage or pilferage.
- Always keep critical tool markings, such as labels and stickers, legible.
- Always replace hoses, couplings, and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Always use hoses that have a fluid resistant inner surface and an abrasive resistant outer surface. Whenever near electrical conductors, use clean hose labeled and certified non-conductive.
- Make sure all couplers are wiped clean before connection.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling hydraulic tools. Failure to do so can result in damage to the quick couplers and cause overheating of the hydraulic system.
- Earth Auger repair should only be performed by authorized and trained service personnel.

HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

Hydraulic hose types authorized for use with Stanley Hydraulic Tools are as follows:

❶ Labeled and certified non-conductive

❷ Wire braided (conductive)

❸ Fabric braided (not certified or labeled non-conductive)

Hose ❶ listed above is the only hose authorized for use near electrical conductors.

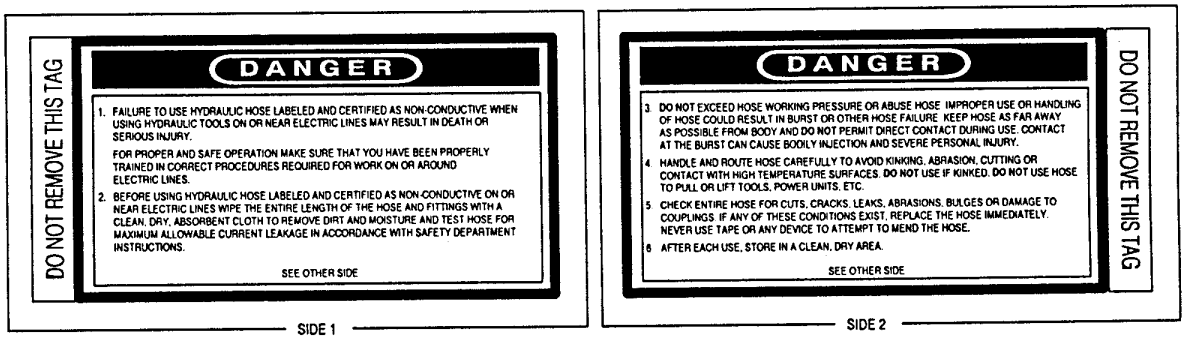
Hoses ❷ and ❸ listed above are **conductive** and **must never** be used near electrical conductors.

To help ensure your safety, the following DANGER tags are attached to all hoses purchased from Stanley Hydraulic Tools. DO NOT REMOVE THESE TAGS.

If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag can be obtained at no charge from your Stanley distributor.

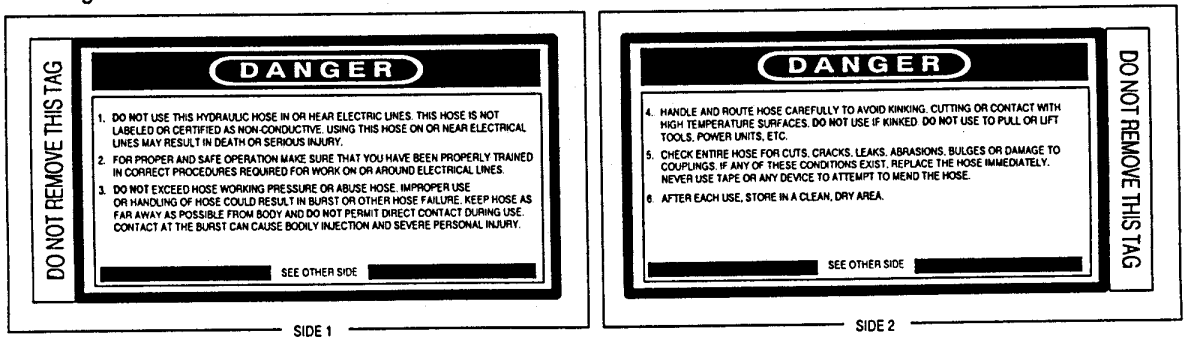
❶ CERTIFIED NON-CONDUCTIVE

This tag is attached to all certified and labeled **non-conductive** hose.



❷ AND ❸ WIRE- AND FABRIC-BRAIDED (NOT CERTIFIED OR LABELED NON-CONDUCTIVE)

This tag is attached to all **conductive** hose.



HOSE PRESSURE RATING

The rated working pressure of the hydraulic hose **must be equal to or higher than** the relief valve setting on the hydraulic system used to power the earth auger.

HYDRAULIC SYSTEM REQUIREMENTS

- The hydraulic system should provide a flow of 7-9 gpm/26-34 lpm at an operating pressure of 2000 psi/140 bar. Recommended relief valve setting is 2100 psi/145 bar.

- The hydraulic system should not have more than 100 psi backpressure measured at the tool end of the operating hoses. The system conditions for measurement are at maximum fluid viscosity of 400 ssu/82 centistokes (minimum operating temperatures).

- The hydraulic system should have sufficient heat rejection capacity to limit the maximum fluid temperature to 140° F/60° C at the maximum expected ambient temperature. The recommended minimum cooling capacity is 5 hp/3.73 kW at a 40° F/22° C difference between ambient temperature and fluid temperature.

- The hydraulic system should have a minimum of 25 micron full-flow filtration. It is recommended that filter elements be sized for a flow of at least 20 to 30 gpm/75 to 113 lpm for cold temperature startup and maximum dirt holding capacity.

- The hydraulic fluid used should have a viscosity between 100 and 400 ssu/20 and 82 centistokes at the maximum and minimum expected operating temperatures. Hydraulic fluids of petroleum base with antiwear and non-conductive properties and viscosity indexes over 140 meet the recommended requirements over a wide range of operating temperatures.

- The recommended hose size is 0.500-inch/12 mm I.D. to 50 ft/15 m long and 0.625-inch/16 mm I.D. minimum up to 100 ft/30 m long.

OPERATION

PREOPERATION PROCEDURES

CHECK POWER SOURCE

1. Using a calibrated flow meter and pressure gauge, make sure the hydraulic power source develops a flow of 7-9 gpm/26-34 lpm at 2000 psi/ 140 bar.

2. Make certain that the power source is equipped with a relief valve set to open at 2100 psi/140-155 bar maximum.

3. Make certain that the power source return pressure does not exceed 250 psi/17 bar.

CONNECT HOSES

1. Wipe all hose couplers with a clean lint-free cloth before making connections.

2. Connect the hoses from the hydraulic power source to the couplers on the earth auger or earth auger hoses. It is a good practice to connect return hoses first and disconnect them last to minimize or avoid trapped pressure within the earth auger motor.

Note: If uncoupled hoses are left in the sun, pressure increase inside the hoses might make them difficult to connect. Whenever possible, connect the free ends of the hoses together.

3. Observe the "IN" and "OUT" port lettering on the valve block to ensure that the hydraulic flow is in the proper direction. The "IN" port lettering indicates the inlet (pressure) side.

CHECK CUTTING BLADE

1. Check the earth auger blade's cutting edge frequently. If the blade becomes dull, simply reverse it and use the other side of the cutting edge.

2. If the outside of the cutting blade wears even with the earth auger "flighting," replace it or re-build it using a hard surfacing rod. It is very important to reduce earth auger flighting wear and damage. The point of the cutting blade should be replaced anytime it loses its cutting edge (Figure 1).

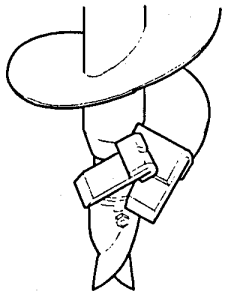


Figure 1. Cutting Blade Point.

ATTACHING THE EXTENSION (TORQUE) TUBE

The extension (torque) tube is attached to the anchor weldment as shown in figure 2. Be sure to use the cotterless clevis pin provided with the unit. Make sure the pin is pushed through both holes in the anchor weldment.

The opposite end of the tube can be connected to a solid object, such as the bumper of a truck, ground stake, ect.

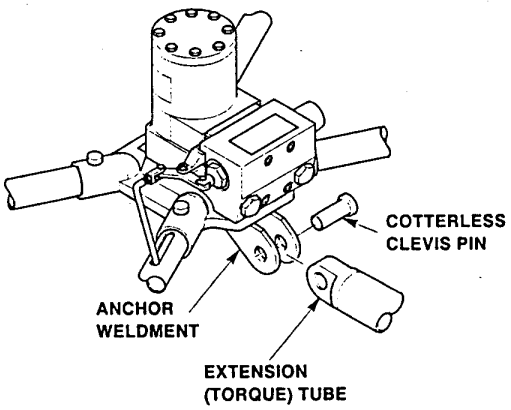


Figure 2. Attaching the Extension (torque) tube.

EARTH AUGER OPERATION

1. Observe all safety precautions.

2. Insert the earth auger's bit blade into the coupler located opposite the motor. Secure the cutting blade to the coupler using the clevis pin and cotter pin.

3. Grasp the handle so your left index finger and thumb can operate the throttle levers. Use your index finger for forward rotation and your thumb for reverse rotation.

4. Using your right hand, grasp the right handle bar and then position the earth auger so it is perpendicular to where you intend to dig.

5. Have your helper grasp the two remaining handle bars and then stand with feet spread and clear of the auger's cutting blade.

6. Start the auger rotating by pulling in on the throttle lever. Note: When digging in soft soil, apply a slight lift to the auger. When digging in hard soil, apply an adequate amount of down pressure, but not enough to stall the auger.

7. After reaching the desired depth, lift the auger straight out of the hole. Always release the throttle lever before the auger cutting blade reaches the top of the hole.

COLD WEATHER OPERATION

If the earth auger is to be used during cold weather, preheat the hydraulic fluid at low power source speed. When using the normally recommended fluids, fluid should be at or above 50°F/ 10°C (400 ssu/82 centistokes) before use.

Damage to the hydraulic system or pump motor seals can result from use with fluid that is too viscous or thick.

SERVICE INSTRUCTIONS

Good maintenance practice keeps the earth auger on the job and increases its service life.

The most important maintenance practice is to keep the hydraulic fluid clean at all times. Contaminated hydraulic fluid causes rapid wear and/or failure of internal parts.

Follow the procedure contained in the HYDRAULIC SYSTEM REQUIREMENTS section of this manual to ensure peak performance from the earth auger.

Never disassemble the earth auger unless proper troubleshooting procedures have isolated the problem to an internal part. then, disassemble the earth auger only to the extent necessary to replace the defective part. KEEP CONTAMINANTS SUCH AS DIRT AND GRIT AWAY FROM INTERNAL PARTS AT ALL TIMES.

Always determine and correct the cause of the problem prior to assembly. Further wear and earth auger failure can result if the original cause is not corrected.

PRIOR TO DISASSEMBLY

- Clean the exterior of the earth auger.
- Obtain Seal Kit, part number 23494 to replace all seals exposed during disassembly. Note the orientation of the seals before removing them. Install new seals the same way they were removed.

Note: For orientation of the parts identified in the following procedures, refer to the parts location at the end of this manual.

EARTH AUGER DISASSEMBLY

1. Remove the torque tube from the earth auger.
2. Remove the cotter pin and clevis pin securing the auger bit to the earth auger. Carefully remove the auger bit.
3. Remove the two handles opposite the valve.
4. Place the earth auger on a suitable flat surface with the motor facing to the left.
5. Remove the shoulder screw (47) securing the pivot arm to the pivot.
6. Remove the four 3/8-16 UNC x 1 1/2-inch capscrews securing the motor and valve to the base.
7. Place the motor and valve in a soft-jaw vise.
8. Remove the pivot pin and retaining ring securing the pivot arm to the spool.
9. Remove the two 10-24 UNC x 3/8-inch capscrews securing the spool cap and collar to the valve. Remove the spool cap and collar.
10. Carefully remove the 10-24 UNC x 3/8-inch capscrew and flatwasher.
11. Remove the spring and spring washers.
12. Remove the adapter (44).
13. Unscrew the seal cap from the valve. Remove the quad ring and o-ring from the seal cap.
14. Carefully slide the spool from the valve.
15. Unscrew the remaining seal cap. Remove the quad ring and o-ring from the seal cap.
16. Unscrew the hollow hex head o-ring plug and remove the ball retainer, spring, and ball.
17. Remove the remaining three o-ring plugs, if necessary.
18. Remove the four 5/16-18 UNC x 2 1/4-inch capscrews securing the valve to the adaptor plate. Remove the two o-rings.
19. Remove the four 5/16-18 UNC x 3/4-inch capscrews securing the adaptor plate to the motor. Remove the two o-rings.

PRIOR TO ASSEMBLY

- Clean all parts with a degreasing solvent.
- Obtain Seal Kit, part number 23494 to replace all seals exposed during disassembly. Install new seals the same way they were removed.

• Apply clean grease or o-ring lubricant to all parts during assembly. Note: For orientation of the parts identified in the following procedures, refer to the parts location at the end of this manual.

1. Lubricate and replace the two o-rings inside the motor openings. Secure the adaptor plate to the motor using four 5/16-18 UNC x 3/4-inch capscrews.

2. Lubricate and replace the two o-rings inside the valve openings. Secure the valve to the adaptor plate using four 5/16-18 UNC x 2 1/4-inch capscrews.

3. Place the ball, and ball retainer against one end of the spring and then install them inside the valve. Install the remaining ball retainer and then secure all parts using the hollow hex head o-ring plug.

4. Lubricate and replace the remaining three o-ring plugs.

5. Lubricate and install a new quad ring and o-ring on one of the seal caps. Screw the seal cap into the valve at the trigger handle.

6. Carefully slide the spool into the valve and through the seal cap.

7. Lubricate and install a new quad ring and o-ring on the remaining seal cap. Screw the seal cap into the valve.

8. Install adapter (44) onto triangle end of spool.

9. Install a flatwasher and spring over the spool.

10. Secure the spring to the spool using a flatwasher and 10-24 UNC x 3/8-inch capscrew.

11. Install the collar and spool cap over the spool and then secure using two 10-24 UNC x 3/8-inch capscrews.

12. Secure the pivot arm to the spool using the pivot pin and retaining ring.

13. Remove the motor and valve from the vise. Secure the motor and valve to the base using four 3/8-16 UNC x 1 1/2-inch capscrews.

14. Secure the pivot arm to the pivot using the shoulder screw.

15. Replace the two handles.

16. Install the auger bit into the coupler and then secure it using the clevis pin and cotter pin.

17. Install the torque tube.

TROUBLESHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem.

When diagnosing faults in operation of the earth auger, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the earth auger as listed in the table. Use a flow meter known to be accurate. Check the flow with the hydraulic fluid temperature at least 80°F/27°C.

PROBLEM	CAUSE	REMEDY
Earth auger cutting blade does not turn.	No hydraulic fluid flow or pressure.	Turn on power unit and check that 7-9 gpm/26-34 lpm at 2000 psi/140 bar is available at the earth auger.
	Defective couplers.	Check the couplers by connecting them together with the hydraulic power supply operating and with the control valve in the "ON" position. The power supply should operate without "loading" from the couplers.
Poor earth auger performance.	Hydraulic flow reversed.	Check that the hoses are correctly connected to the valve ports. The female coupler should be connected to the "IN" port. The return fluid must never flow through a revering valve.
Poor earth auger performance.	Improper hydraulic fluid flow.	Check that 7-9 gpm/26-34 lpm at 2000 psi/140 bar is available at the earth auger.

SPECIFICATIONS

Weight (Less Auger and Torque Tube)	40 lbs/18.1 kg
Height (W/O Auger Bit)	10-1/4 in./26 cm
Width (Across Handle)	48 in./122 cm
Pressure	1500-2000 psi/105-140 bar
Flow Range	7-9 gpm/26-34 lpm
Porting	-8 SAE o-ring

NOTE

Weights, dimensions, and operating specifications listed are subject to change without notice. Where specifications are critical to your application, please consult the factory.

WARRANTY

Hand held tools and their parts are warranted against defects in materials and workmanship for a period of 12 months from the date of purchase, except for cutting parts, steels and other parts not manufactured by Stanley (such as impact mechanisms, alternators, regulators and hoses).

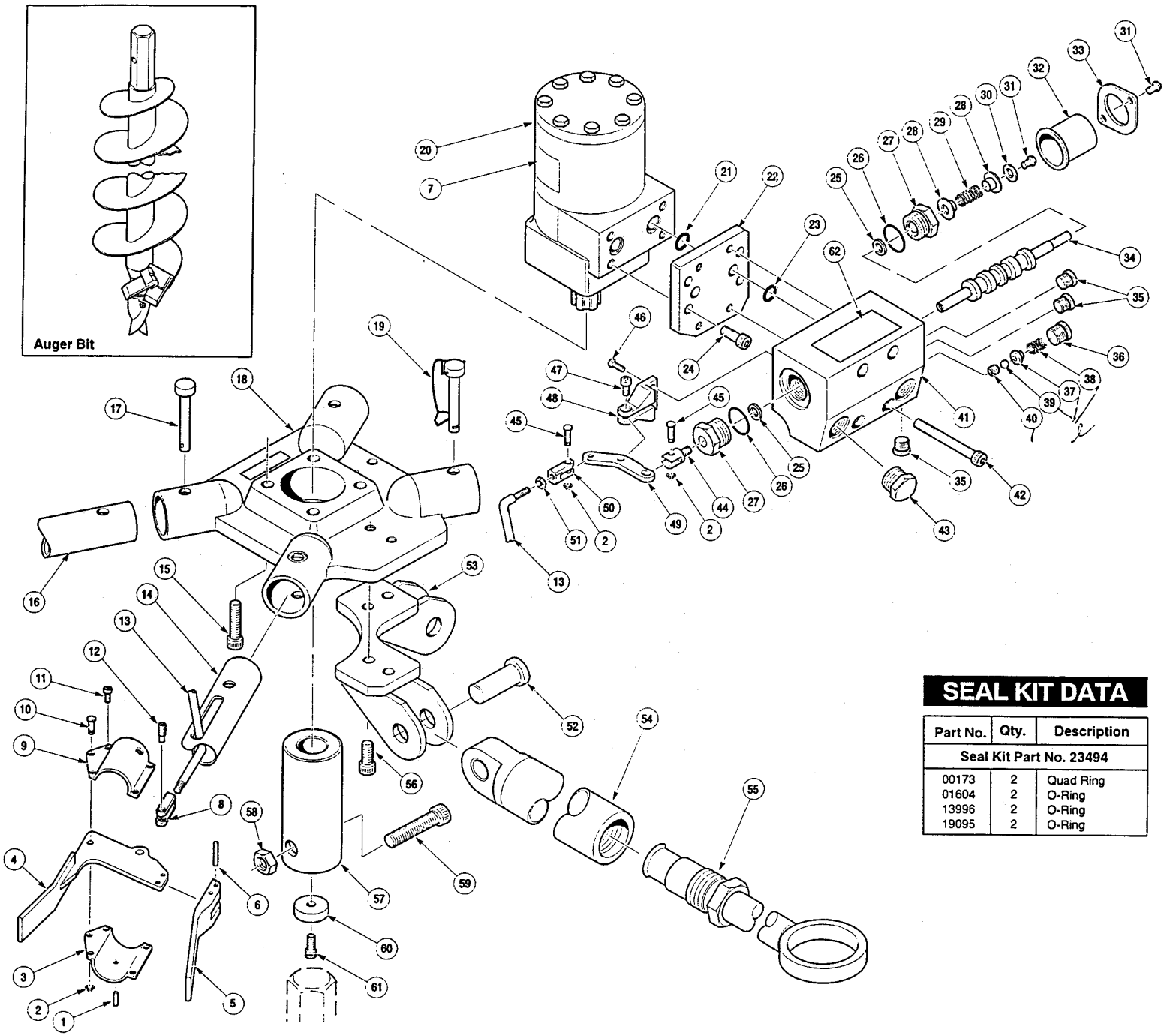
The Warranty Registration Card packed with the tool must be filled out and returned to Stanley upon receipt of the tool.

Stanley reserves the right to replace or repair only those parts which under our examination prove to have been defective at the time of purchase.

Shipping charges are pre-paid by the customer unless otherwise authorized by Stanely.

The warranty is void if maximum flow and pressure ratings are exceeded.

There is no other warranty expressed or implied.



SEAL KIT DATA

Part No.	Qty.	Description
Seal Kit Part No. 23494		
00173	2	Quad Ring
01604	2	O-Ring
13996	2	O-Ring
19095	2	O-Ring

PARTS LIST

Item No.	Part No.	Qty.	Description
1	22673	1	Roll Pin, 1/8 - 1/4
2	22672	3	Retaining Ring
3	22750	1	Bottom Clamp Assy
4	22581	1	Lever
5	22583	1	Lever
6	00285	2	Roll Pin, 1/8 - 5/8
7	24206	1	Decal Warning
8	22585	1	Swivel
9	22749	1	Top Clamp Assy
10	22593	1	Lever Pin
11	03870	4	Capscrew, 10 - 24UNC
12	22590	1	Modified Set Screw
13	22587	1	Rod
14	22576	1	Handle
15	01458	4	Capscrew, 3/8 - 16UNC x 1.500 HSH
16	21174	3	Handle
17	21195	2	Cotterless Clevis Pin
18	21175	1	Base
19	21186	2	Snapper Pin
20	21179	1	Motor
21	19095	2	O-Ring, 5/8 x 13/16 x 3/32 -114 90D ⊙
22	21172	1	Adaptor Plate
23	13996	2	O-Ring, 1/2 x 11/16 x 3/32 -112 90D ⊙
24	02688	4	Capscrew, 5/16 - 18UNC x .750 LG HSH
25	00173	2	Quad Ring, 3/8 x 1/2 x 1/16 -012 ⊙
26	01604	2	O-Ring, .755 x .949 x .097 -910 R17 ⊙
27	22904	2	Seal Cap
28	24578	2	Spring Washer
29	21188	1	Spring
30	03014	1	Flatwasher, #10
31	19212	3	Capscrew, 10 -24UNC x .375 LG HSBH
32	21184	1	Spool Cap
33	21171	1	Collar
34	21173	1	Spool
35	350041	3	SAE O-Ring Plug -4 HSH
36	08104	1	SAE O-Ring Plug -6 HSH
37	21178	1	Ball Retainer
38	21189	1	Spring
39	15966	1	Ball, 9/32 Diameter
40	21212	1	~~Ball Seat~~ PIPE PLUG
41	21168	1	Valve Block
42	00667	4	Capscrew, 5/16 - 18UNC x 2.250 LG HSH
43	06345	2	Plastic Plug
44	22591	1	Adaptor
45	22592	2	Pivot Pin
46	22671	2	Capscrew, 10 - 24UNC x 1/2 HSBH
47	21180	1	Shoulder Screw
48	22588	1	Pivot
49	22589	1	Pivot Arm
50	22586	1	Rod End
51	00089	1	Hex Nut, 10 - 24UNC
52	21181	1	Cotterless Clevis Pin
53	21165	1	Anchor Weldment
54	21198	1	Extension Tube Weldment
55	21207	1	Tube Assy
56	21182	4	Capscrew, 3/8 - 16UNC x .875 LG HSH
57	21163	1	Coupler
58	20228	1	Nut, 1/2UNC, Nylock
59	03059	1	Capscrew, 1/2UNC x 2 3/4
60	21196	1	Washer
61	02446	1	Capscrew, 1/4 - 20UNC x 5/8 HSH
62	23139	1	Name Tag EA08

NOTE: Use Part Number and Part Name when ordering.

⊙ Denotes Part in Seal Kit

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