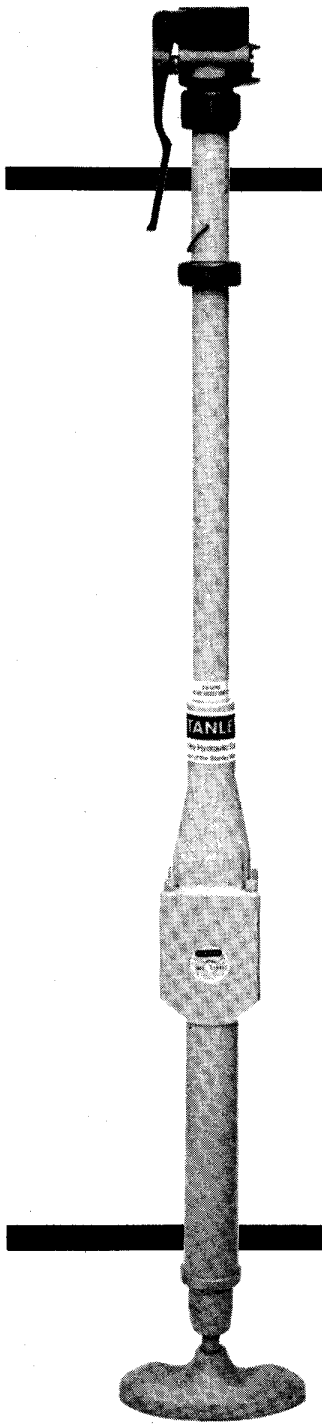
TA52
HYDRAULIC TAMPER



Safety, Operation and Maintenance Manual

STANLEY®

helps you do things right

05453 U.S.A. 4/89R

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 4.

GENERAL SAFETY PRECAUTIONS

The TA52 Hydraulic Tamper 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 tamper and hose before operation. Failure to do so could result in personal injury or equipment damage.

- Operators must start in a work area without bystanders. Flying debris can cause serious injury.
- Establish a training program for all operators to ensure safe operation.
- The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, ear and head protection, and safety shoes at all times when operating the tamper.
- Know the location of buried or covered services before starting your work.
- Without the use of non-conductive accessories, this tool is not for use near energized lines. Failure to comply with this warning could result in serious personal injury.
- Use care when handling the tamper. Do not carry the tool by the hoses.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- Do not overreach. Maintain proper footing and balance at all times.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Always connect hoses to the tool hose couplers before energizing the hydraulic power source. Be sure all hose connections are tight.
- Do not operate the tool at oil temperatures above 140° F/60° C. Operation at higher temperatures can cause higher than normal temperatures at the tool which can result in operator discomfort.

TOOL STICKERS AND TAGS

The safety related stickers and tags attached to the tamper prior to shipment from the factory are shown below.

The pressure and flow rates specified must never be exceeded. All stickers and tags must be read and understood prior to operating the tool.

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

CAUTION

3-9 GPM/11-34 LPM
DO NOT EXCEED 2000 PSI/140 BAR

■**DO NOT** EXCEED SPECIFIED FLOW OR PRESSURE. ■USE CLOSED-CENTER TOOL ON CLOSED-CENTER SYSTEM. ■USE OPEN-CENTER TOOL ON OPEN-CENTER SYSTEM. ■CORRECTLY CONNECT HOSES TO TOOL "**IN**" AND "**OUT**" PORTS. ■IMPROPER HANDLING, USE OR MAINTENANCE OF TOOL COULD RESULT IN A LEAK, BURST OR OTHER TOOL FAILURE. ■CONTACT AT A LEAK OR BURST CAN CAUSE OIL INJECTION INTO THE BODY. ■ FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS PERSONAL INJURY. 03783

GPM /PRESSURE STICKER

RED HOSE IS PRESSURE SIDE

PRESSURE HOSE STICKER

The safety tag at right is attached to the tamper 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 tamper when not in use.

DANGER

1. FAILURE TO USE HYDRAULIC HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.

   BEFORE USING HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** ON OR NEAR ELECTRIC LINES BE SURE THE HOSE IS **MAINTAINED AS NON-CONDUCTIVE**. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CURRENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.
2. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
   A. **DO NOT** EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
   B. **DO NOT** EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY A CAUSE LEAK OR BURST.
   C. CHECK TOOL, HOSE, COUPLERS AND CONNECTORS DAILY FOR LEAKS. **DO NOT** FEEL FOR LEAKS WITH YOUR HANDS. CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE 15875

DANGER

D. **DO NOT** LIFT OR CARRY TOOL BY THE HOSES. **DO NOT** ABUSE HOSE. **DO NOT** USE KINKED, TORN OR DAMAGED HOSE.

3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURIZING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CONNECTED TO TOOL "**IN**" PORT. SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL "**OUT**" PORT. REVERSING CONNECTIONS MAY CAUSE REVERSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INJURY.
4. **DO NOT** CONNECT CLOSED-CENTER TOOLS TO OPEN-CENTER HYDRAULIC SYSTEMS. THIS MAY CAUSE EXTREME SYSTEM HEAT AND/OR SEVERE PERSONAL INJURY.

   DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY.
5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.
6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE 15875

HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

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

1. Labeled and certified non-conductive
2. Wire braided (conductive)
3. Fabric braided (not certified or labeled non-conductive)

Hose 1 listed above is the only hose authorized for use near electrical conductors.

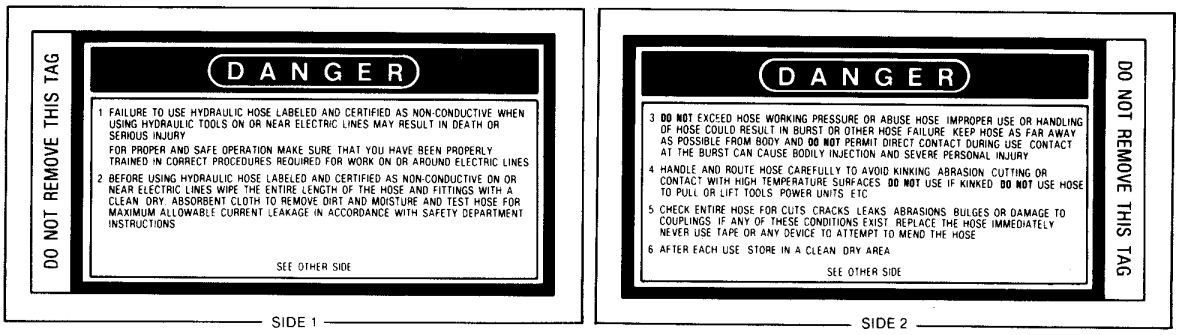
Hoses 2 and 3 listed above are **conductive** and **must never** be used near electrical conductors.

To help ensure your safety, the following DANGER tags are attached to all hose 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 may be obtained at no charge from your Stanley distributor.

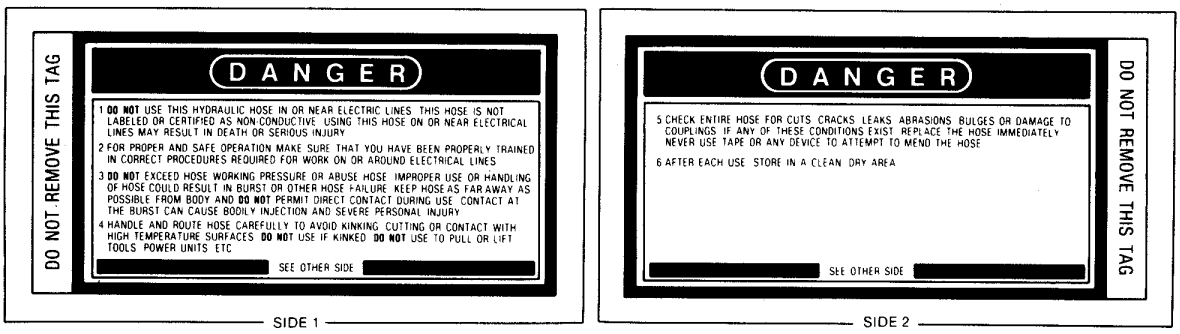
1 CERTIFIED NON-CONDUCTIVE HOSE

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



2 AND 3 WIRE- AND FABRIC-BRAIDED (NOT CERTIFIED OR LABELED NON-CONDUCTIVE) HOSE

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 hydraulic tamper.

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.

IMPORTANT

In addition to the Safety Precautions on pages 1 thru 4 of this manual, observe the following for equipment protection and care.

- Always store an idle tamper in a clean dry space, safe from damage or pilferage.

- Operate the tool within its rated capacity. Do not expect a small tamper to do the job of a heavy duty tamper such as the TA57.

- Do not use the tool for applications for which it was not designed.

- Never operate a tamper without holding it against the work surface.

- Always keep critical tool markings, such as labels and warning stickers legible.

- Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. The hydraulic supply hoses must have a minimum working pressure rating of 2500 psi/175 bar.

- All hoses must have an oil resistant inner surface and an abrasive resistant outer surface. Whenever near electrical conductors use **clean** (nonmetallic braid) nonconductive hose.

- Tool repair should be performed by experienced personnel only.

- 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 may result in damage to the quick couplers and cause overheating of the hydraulic system.

- Do not attempt to compact broken concrete or asphalt rubble. Tampers are intended for compactable materials only.

- Closed center systems must be flow limited using inline flow controls or flow limited as a result of system controls.

HYDRAULIC SYSTEM REQUIREMENTS

- The hydraulic system should provide a flow of 3-9 gpm/11-34 lpm at an operating pressure of 1000-2000 psi/70-140 bar. Recommended relief valve setting is 2100-2250 psi/145-155 bar.

- The system should not have more than 250 psi/17 bar 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 oil 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 oil temperature.

- The hydraulic system should have a minimum of 25 micron filtration. It is recommended that filter elements be sized for a flow of at least 30 gpm/114 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. Petroleum base hydraulic fluids with antiwear properties and a viscosity index over 140 will meet the recommended requirements over a wide range of operating temperatures.

- The recommended hose size is .500 inch/12 mm I.D. up to 50 ft/15 m long and .625 inch/16 mm I.D. minimum up to 100 ft/30 m.

PREOPERATION PROCEDURES

CHECK POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 3-9 gpm/11-34 lpm at 1000-2000 psi/70-140 bar.

2. Make certain that the hydraulic power source is equipped with a relief valve set to open at 2250 psi/155 bar maximum.

CONNECT HOSES

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

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

3. Observe the flow indicators stamped on hose couplers to ensure that the oil flow will be in the proper direction. The female coupler on the tool is the inlet coupler. See illustration in PARTS LIST section for tool port identification.

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

OPERATING PROCEDURES

TOOL OPERATION

1. Observe all safety precautions.

2. Place the tamper on the surface to be compacted.

3. Squeeze the trigger to start the tamper.

⚠ WARNING

The tamper will rise quickly when first turned on. Do not stand over or place any part of your body on top of the tamper. Wear safety shoes.

Note: Partially depressing the trigger allows the tool to run at a slow speed, making it easier to start or control.

4. Guide the tamper using both hands. One on the on-off valve trigger and the other at the tapered section at the end of the handle tube.

5. When backfilling a deep hole, compact (tamp) the backfill after a maximum of 6 inches/15 cm of material is added to the hole. This will ensure maximum compaction of the filled hole and minimize any setting that may occur.

SERVICE INSTRUCTIONS

PRIOR TO DISASSEMBLY

- Clean exterior of tool.
- Obtain Seal Kit, (Part Number 02030), for no-valve models, or (Part Number 02032), for valve-in-handle models, so you can replace all seals exposed during disassembly. Note orientation of seals before removing them. Install new seals in the same way.

Note: Refer to Parts List Illustration for location of parts.

TO REMOVE THE HANDLE ASSEMBLY

1. Place the tamper in a vise with soft jaws, clamping on the large flat faces of block and tube assembly with the handle assembly to the right and the trigger on the valve-in-handle models in the up position.
2. No valve Models.
   a. Remove the four oval head capscrews securing the hose guides to the handle and remove the guides.
   b. Remove the four 5/16-18 x 1-1/4 inch/ 32 mm long capscrews and washers securing the handle tube to the lower assembly and separate assemblies.
   c. Remove the hose assembly from two fittings on the lower assembly and pull hose out of the handle assembly.
3. Valve-in-handle Models.
   a. On mid-valve models, **(View D),** remove the four flat head screws securing the valve body to the handle tube and pull the valve body away from the handle assembly.

      On mid-valve models remove the eight capscrews securing the upper handle tube to the valve body and hose guides. Slide the upper handle tube off to access the upper hose assemblies.

   b. On end-valve models, **(View C),** place a wrench across the flat portion of the on-off valve body, slide the protective cover off of the retaining nut and loosen the nut with a 2-1/8 inch wrench.

      Pull the valve body away from the handle assembly.

   c. On all models, remove the four 5/16-18 x 1-1/4 inch/32 cm long capscrews and washers securing the handle assembly to the lower assembly and slide the handle off over the tubes or hoses.
   d. Remove the oil tubes or hoses and fittings as required.

TO DISASSEMBLE THE VALVE ASSEMBLY

1. On mid-valve models, **(View D),** remove the button head machine screw from the end of the on-off spool. Drive the 5/32 x 1 inch/4 mm x 25 mm roll pin from valve body assembly and pull the valve spool with the trigger attached out of the spool bore. Drive out the 1/8 x 7/8 inch/3 mm x 22 mm roll pin to remove the spool from the trigger. Slide the spring off of the spool.

Carefully remove the o-rings from the valve spool bore using o-ring service tools.

2. On end-valve models, **(View C),** drive the two 5/32 inch/4 mm diameter roll pins out of the trigger. Then remove the trigger, spring and valve spool from the valve body.

Carefully remove the o-rings from the valve spool bore before using o-ring service tools.

TO DISASSEMBLE THE LOWER ASSEMBLY (VIEW A)

1. Remove the 7/16-20 x 1-1/2 inch/38 mm long capscrew and lockwasher securing the tamper shoe to the piston. Tap on the top of the tamper shoe with a soft face hammer to remove it from the piston taper.

If the tamper shoe is not removed easily as above, thread the retaining screw three fourths of the way in and tap on its head with a hammer while pulling on the shoe.

2. Loosen the jam nut and unscrew the nose from the block and tube assembly.
3. Remove the spacer, cushion and all seals from the nose.

To access the piston seal on current nose design, remove the canned wiper seal using an oil seal puller, screw driver or bearing puller.

Remove the felt washer and rod seal using o-ring service tools.

4. Pull the piston assembly from the block and tube assembly. The front sleeve and thrust bridge washer will be removed with the piston assembly.

5. Remove the back sleeve and oil tube from the block and tube assembly by using service tool Part Number 01120 or a length of 3/8-16 Redi-Bolt threaded into the end of the oil tube.

Note: Remove the flow sleeve by placing a hooked tool into the 5/16 inch holes in the lower end of the sleeve. Be careful to avoid damage to bore.

6. To remove the forward/reverse spool from the block and tube assembly, remove the two retaining rings and end caps using a 1/4-20 capscrew as a puller. The forward/reverse spool should be free in its bore, but may require a push to remove.

Note: The insert pressed into the block and tube assembly for the forward/reverse spool is not serviceable. It should be tight in its bore with the slot on either end perpendicular to the block and tube center line.

TAMPER REASSEMBLY

PRIOR TO REASSEMBLY

- Clean all parts with a degreasing solvent.
- Inspect all parts for obvious wear and damage.
- Ensure that all seals exposed during disassembly are replaced. Refer to the parts list at the back of this manual for the applicable repair and seal kit.
- Apply clean grease or o-ring lubricant to all parts during reassembly.
- Refer to the parts list at the back of this manual for parts location.

REASSEMBLY

Lower Assembly (View A)

1. Inspect all parts for excessive wear or damage.

2. Install one 1-1/4 inch O.D. x 1/16 inch o-ring, end cap and retaining ring in one side of the block and tube assembly. Install the forward/reverse spool and the remaining o-ring, end cap and retaining ring from the opposite side.

Note: Spool should move freely in its bore without binding.

3. Place the block and tube assembly in a bench vise with soft jaws and clamp on the large flat faces of the block.

4. If the flow sleeve is still in position on the roll pin in the bottom of the block and tube assembly bore, proceed to step (5). If the flow sleeve has shifted position or has been removed, it must be repositioned using service tool Part Number 01949 Sleeve Installation Wrench.

Insert the flow sleeve into the block and tube assembly slotted end first. Note position of the doweling hole in the end of the flow sleeve and the pin in the bottom of the block and tube bore. Align these features as the flow sleeve is inserted.

Place the projection on the end of service tool Part Number 01949 Sleeve Installation Wrench in the slot on the end of the face of the flow sleeve. Push the flow sleeve into place, rotating back and forth as required to align the pin, until the groove in the installation wrench is flush with the end of the block and tube assembly.

IMPORTANT

Do not force the flow sleeve into place or attempt further assembly without the flow sleeve in the proper position.

5. Insert the oil tube (small end first) into the counterbored end of the back sleeve. Loosely thread Part Number 01120 Tamper Sleeve Tool into the oil tube thread. Place a new o-ring into the groove on the end face of the oil tube and retained with grease. Replace the two oil control seals in the grooves of the back sleeve (grooves with multiple holes).

Slide this entire assembly into the flow sleeve, and remove the Tamper Sleeve Tool by pushing firmly as you rotate it counterclockwise.

6. Insert the piston(tapered end first) into the large end of the front sleeve. (The four grooves on the front sleeve O.D. are towards the large end of the piston.)

Insert this assembly into the flow sleeve using your fingers to push the front sleeve into place. (The hollow end of Part Number 01120 Tamper Sleeve Tool may be used to push the front sleeve into place.)

7. Install the bridge, washer (beveled side out) over the piston and against the front sleeve and flow sleeve faces.

8. Replacing the piston seals in the nose.

A. On the former nose design, press the canned wiper seal (lip side out) into the counterbore on the tapered end of the nose until flush with the end.

Insert the white cup seal (lip side out) into the seal counterbore on the threaded end of the nose. Place the black back-up ring (not split) on top of seal followed by the steel spacer washer, 1/8 inch x 1 I.D./3 mm x 25 mm I.D. o-ring and cushion, chamfered/notched side out.

B. On the current nose design install the black rod seal (lip side first) into the seal groove in the I.D. of the tapered end. Install the gray split backup washer in the outside end of the seal groove.

Note: This washer fits in the small counterbore within the rod seal.

Install the felt washer in the counterbore on the tapered end followed by the canned wiper seal (lip side out). The wiper seal is to be pressed flush with the end of the nose.

Place the steel spacer washer, 1/8 x 1 inch/3 mm x 25 mm I.D. o-ring and cushion, chamfered/notched side out, into the counterbore on the threaded end.

9. Install the 1/16 inch x 1-3/4 inch I.D./1.5 mm x 44.5 mm I.D. o-ring in the outside groove of the nose.

10. Install the nose, as assembled above, over the piston and screw into the block and tube assembly and tighten securely.

11. Replace the jam nut and tighten securely.

12. Install the tamper shoe on the piston rod and secure with the 7/16-20 x 1-1/2 inch/38 mm long capscrew.

Valve Assembly

1. Mid-valve Tampers **(View D).**

   a. Replace the o-rings within the spool bore.

   b. Attach the valve spool to the trigger using a 1/8 x 7/8 inch/3 mm x 22 mm roll pin.

   c. Place the valve spring over the valve spool and lubricate its O.D.

   d. Push the valve spool through the trigger side of the valve body bore, and secure the trigger to the valve body with a 5/32 inch diameter x 1 inch/4 mm x 25 mm roll pin through the trigger pivot.

   e. Depress the trigger and place a small drop of #242 Loctite on the thread of the button head machine screw and tighten securely into the valve spool.

IMPORTANT

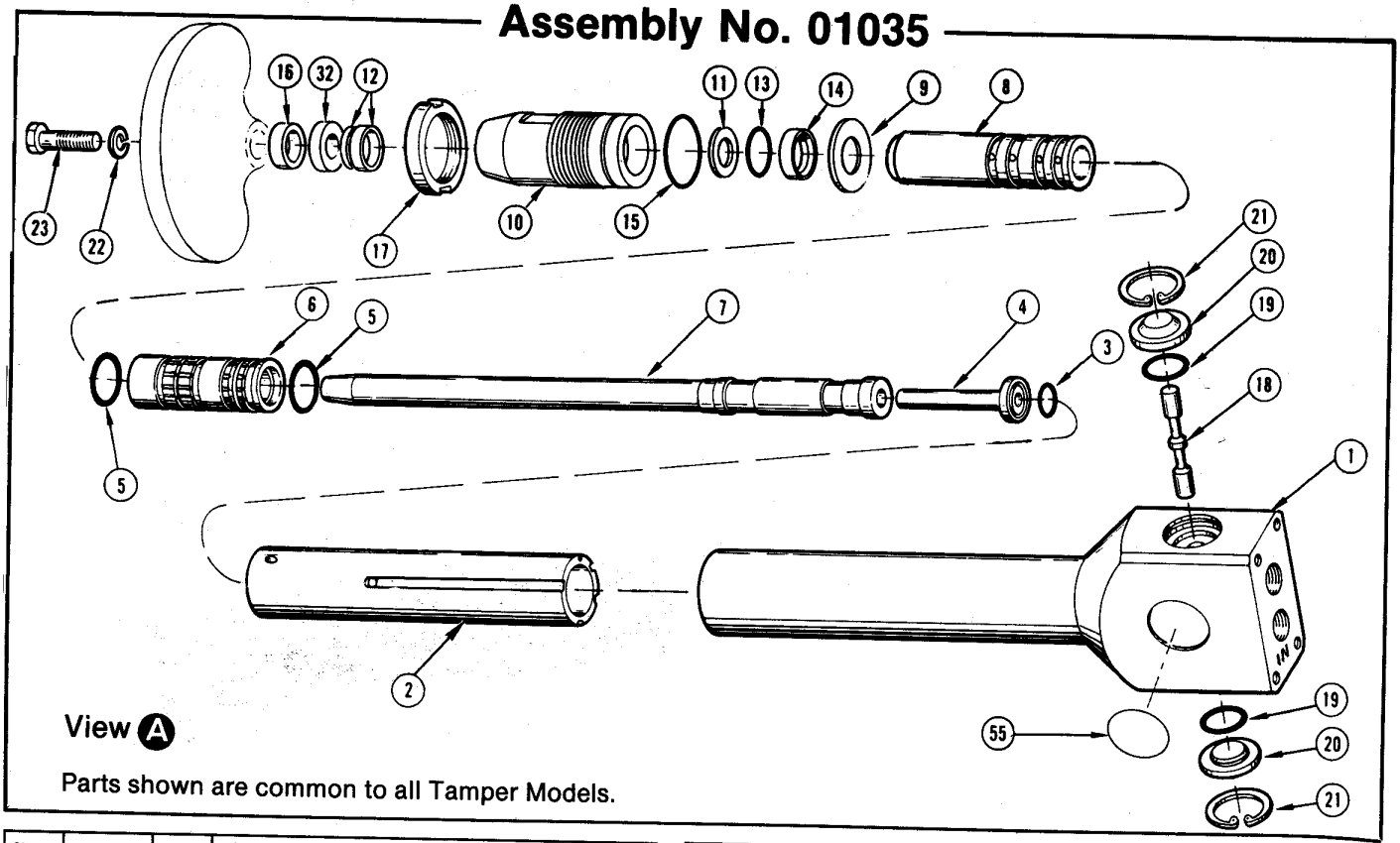
Do not allow Loctite on the outside diameter of the valve spool.

2. Valve-in-handle Tampers **(View C).**

   a. Replace the o-rings within the spool bore.

procedures continued on page 13

Assembly No. 01035



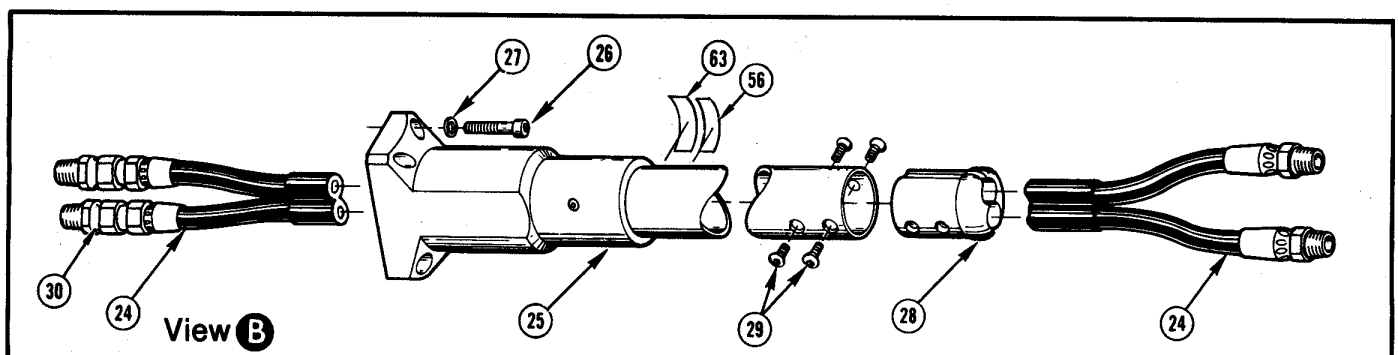
View A

Parts shown are common to all Tamper Models.

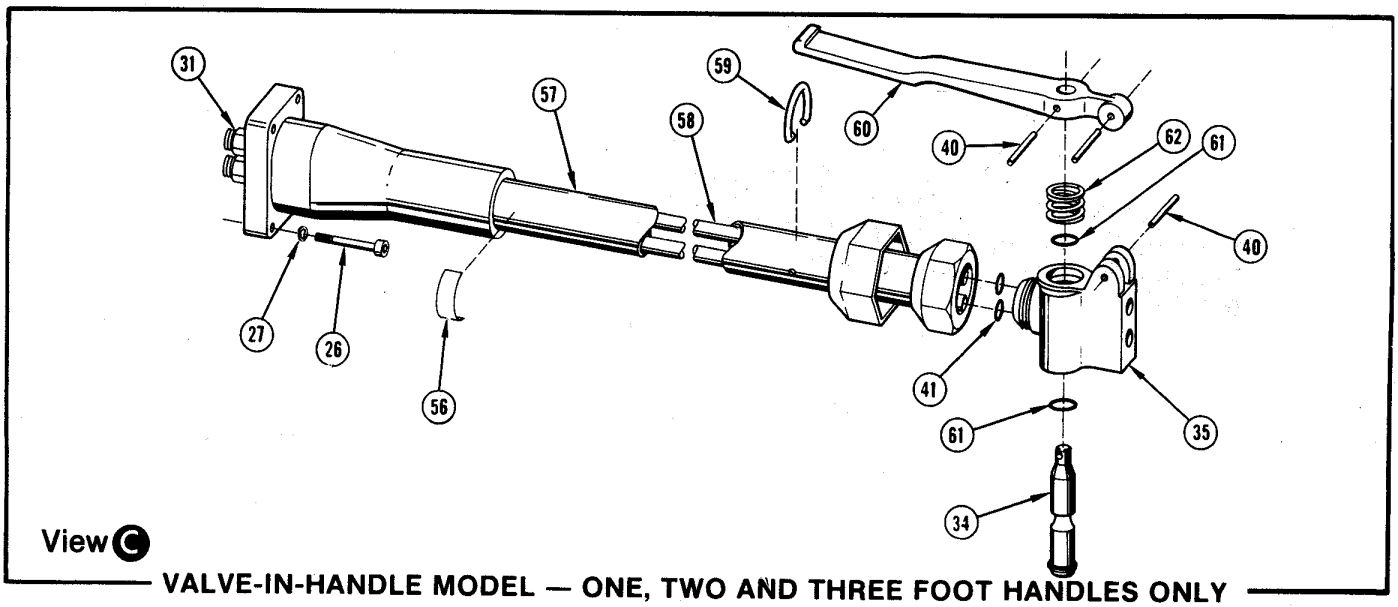
Item No.	Part No.	Qty.	Description
	01035	1	Lower Tamper Assembly
1	01785	1	Block and Tube Assembly
2	01036	1	Flow Sleeve
3	00940	1	O-Ring, 1/16 x 7/8 ID (90 Duro) ⊙
4	00806	1	Oil Tube
5	00956	2	Seal-Oil Control ⊙
6	00927	1	Back Sleeve ●
7	00841	1	Piston Assembly
8	01037	1	Front Sleeve ●
9	01038	1	Thrust Bridge Washer
10	08426	1	Nose ●
11	00810	1	Spacer
12	00830	1	Rod Seal (2 pc.)
13	00834	1	O-Ring, 1/8 x 1 ID (90 Duro) ⊙
14	00823	1	Cushion
15	01262	1	O-Ring, 1/16 x 1-3/4 ID ⊙
16	15016	1	Wiper ⊙
17	01795	1	Nut, Jam-Special
18	00819	1	Spool Forward/Reverse
19	00941	1	O-Ring, 1/16 x 1-1/8 ID (90 Duro) ⊙
20	01096	2	Cap, Valve End
21	00837	2	Ret. Ring, Internal 1-3/4
22	00825	1	Lockwasher, 7/16
23	00845	1	Capscrew, 7/16-20 x 1-1/2
24	00836	1	Dual Hose, 8 ft. with Ftgs.
	01230	1	Dual Hose, 10 ft. with Ftgs.
	02233	2	Hose Assembly — 10 ft. — Wire Braid
25	01350	1	Handle Assembly — 2 ft.
	01352	1	Handle Assembly — 3 ft.
	01354	1	Handle Assembly — 5 ft.
	03469	1	Handle Assembly — 2 ft. — Valve
	03470	1	Handle Assembly — 3 ft. — Valve
	03471	1	Handle Assembly — 1 ft. — Valve
26	00144	4	Capscrew, HSH 5/16-18 x 1-1/4
27	00145	4	Lockwasher, 5/16 High Collar
28	00900	2	Hose Guide
29	02487	4,10*	Capscrew, 1/4-20 x 1/2 Hex Soc. Flat Hd.
30	00946	2	Fitting, 3/8 Tube O.D.
31	01236	2	Fitting, 1/2 tube to 3/8 NPT Male
32	08434	1	Felt Washer

Item No.	Part No.	Qty.	Description
33	01284	2	Tube Retainer — Rubber
34	04480	1	Valve Spool, O.C.
	04481	1	Valve Spool, C.C.
35	04897	1	Valve Body Assembly
36	03480	1	**Valve Assembly** (Consists of Items 38 thru 49)
37	01955	1	**Valve Body Assembly** (Consists of Items 38 and 39)
38	01664	1	Foam Insulation
39	01227	1	Heat Shrink
40	00114	1	Roll Pin, 5/32 x 1
41	00175	2	O-Ring, 1/16 x 1/2 ID (90 Duro) ⊙
42	00669	2	Quad Ring, 1/16 x 1/2 ID ⊙
43	01192	1	Bail
44	01196	1	Spool
45	01198	1	Trigger
46	01226	1	Spring
47	01228	1	Roll Pin, 1/8 x 7/8
48	01347	1	Machine Screw, 3/8-24 x 1/2 Hex Soc Button Hd
49	01292	2	Oil Tube
50	03470	1	Handle Assembly — 3 ft.
51	00855	2	Adapter Fitting, 3/8 SAE to 3/8 Tube
52	01703	1	Handle Tube — Upper
53	01701	1	Dual Hose — 5 ft.
	02232	2	Hose Assembly — 5 ft. — Wire Braid
54	03475	2	Capscrew, 5/16-18 x 1/2 Hex Soc Flat Hd.
55	02732	1	Name Tag
56	03783	1	GPM Sticker
57	04528	1	Handle Assembly — 2 ft.
	04574	1	Handle Assembly — 1 ft.
	07737	1	Handle Assembly — 3 ft.
58	04527	2	Oil Tube — 2 ft.
	07738	2	Oil Tube — 3 ft.
	04573	2	Oil Tube — 1 ft.
59	04533	1	Bail
60	04525	1	Trigger
61	07627	2	O-Ring, 5/8 x 3/4 x 1/16
62	04097	1	Spring
63	05512	1	**Sticker — Red Hose is Pressure**

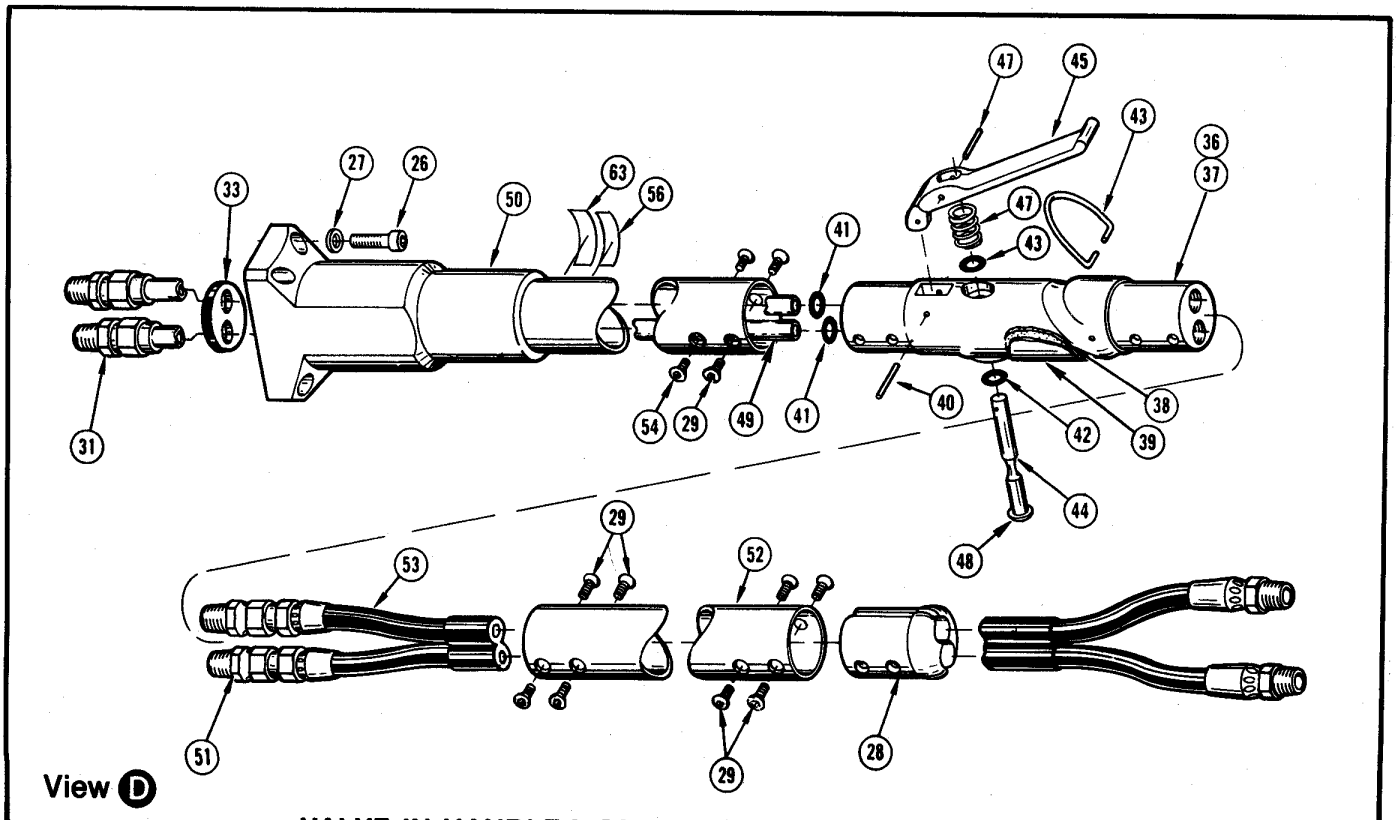
NOTE: Use Part Number and Part Name when ordering. ● Denotes Part in Repair Kit. ⊙ Denotes Part in Seal Kit. * HVM only.



NO VALVE MODEL — TWO, THREE AND FIVE FOOT HANDLES



VALVE-IN-HANDLE MODEL — ONE, TWO AND THREE FOOT HANDLES ONLY



VALVE-IN-HANDLE MODEL — FIVE FOOT HANDLE ONLY

REPAIR AND SEAL KIT DATA

NO VALVE
Repair Kit Part No. 02029

Part No.	Qty.	Description
01037	1	Front Sleeve
08426	1	Nose
00927	1	Back Sleeve
Seal Kit Part No. 02030		
07245	1	Rod Seal
00831	1	Wiper Seal
00834	1	O-Ring
01262	1	O-Ring
00940	1	O-Ring
00941	2	O-Ring
00956	2	Oil Control Seal
15016	1	Wiper
07242	1	Back-Up Washer
00830	1	Seal
08434	1	Felt Washer
06533	2	O-Ring
14891	1	Seal

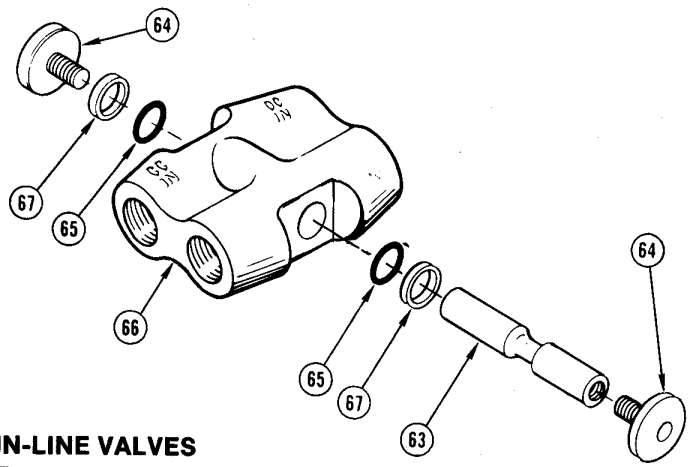
VALVE-IN-HANDLE
Repair Kit Part No. 02031

Part No.	Qty.	Description
01037	1	Front Sleeve
08426	1	Nose
00927	1	Back Sleeve
Seal Kit Part No. 02032		
07245	1	Rod Seal
00831	1	Wiper Seal
00834	1	O-Ring
01262	1	O-Ring
00940	1	O-Ring
00941	2	O-Ring
00956	2	Oil Control Seal
00175	2	O-Ring
00669	2	Quad Ring
15016	1	Wiper
07242	1	Back-Up Washer
00830	1	Seal
08434	1	Felt Washer
07626	2	O-Ring
06533	2	O-Ring
14891	1	Seal

03474 Valve Seal Kit Part No. 01495

Part No.	Qty.	Description
00175	2	O-Ring
00669	2	Quad Ring

OPTIONS



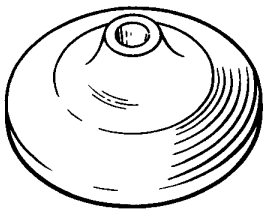
Illus. Index No.	01000 Valve Part No.	08040 Valve Part No.	Qty. Per Unit	PART NAME
63	00804	08036	1	On-Off Valve Spool
64	01003	08037	2	Button
65	00018	00016	2	O-Ring
66	00817	08038	1	Valve Block
67	—	08041	2	Back-Up Ring

08040, VALVE-SEAL KIT — P/N 11591

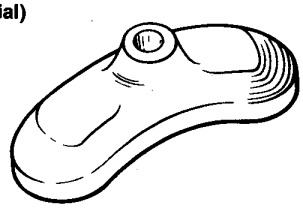
Part No.	Qty.	Description
00016	2	O-Ring
08041	2	Back-Up Ring

IN-LINE VALVES

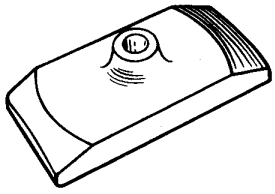
ROUND SHOE
Part No. 00840 (6 inch/152 mm Dia. Standard)
Part No. 01849 (4 inch/101 mm Dia. Special)



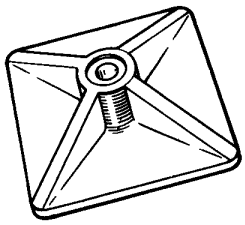
KIDNEY SHOE
Part No. 00833



RECTANGULAR SHOE
Part No. 01070
(4 x 8 inch/10 x 20 cm)



SQUARE SHOE
Part No. 01081
(8 x 8 inch/20 x 20 cm)



TAMPER FEET

GROUND ROD DRIVER

Part Number 01020 (1.050 Dia. Bore)

b. Insert the valve spool assembly (small end first) through the valve body, from the side opposite the trigger.

c. Place the valve spring on the valve spool projecting through the trigger side, followed by the trigger.

d. Align the trigger with the corresponding holes in the valve body using a 1/8 inch or 5/32 inch/3 mm or 4 mm diameter punch, and drive the 5/32 inch/4 mm diameter roll pins into place.

Handle Assembly, Oil Tubes and Valve Assembly

1. No Valve Tampers **(View B).**

   a. Insert the hose assembly through the tube end of the handle assembly, female fittings first.

   b. Attach the hose assembly to the fittings on the block and tube assembly, attaching the hose painted red to the port marked "IN".

   c. Attach the handle assembly to the block and tube assembly with four 5/16-18 x 1-1/4 inch/32 mm long capscrews and washer.

   d. Install hose guides and secure with the four oval head screws.

2. Mid-valve Tampers **(View D).**

   a. Insert plain ends of oil tubes into the tube fittings on the block and tube assembly and secure.

   b. Install the handle assembly over the oil tubes and secure to the block and tube assembly with four 5/16-18 x 1-1/4 inch/32 mm long capscrews and lockwashers.

   c. Place rubber tube retainer over the oil tubes. Make sure the tubes are not twisted.

   d. Install new o-rings in the oil tube ports of the valve body.

   e. Insert the valve assembly into the handle assembly making sure the oil tubes slide into the valve body ports.

Note: The oil tube port opposite the trigger should connect the tube marked "IN" at the block and tube assembly.

   f. Secure the valve assembly to handle assembly with the two 1/4-20 and two 5/16-18 flat head screws using Loctite #242 to secure the threads.

3. Valve-in-handle Tamper **(View C).**

   a. Insert the plain ends of the oil tubes into the tube fittings on the block and tube assembly.

   b. Install the handle assembly over the oil tubes and secure to the block and tube assembly with four 5/16-18 x 1-1/4 inch/32 mm long capscrews and lockwashers.

   c. Install new o-rings in the oil tube ports of the body.

   d. Push the on-off valve assembly over the oil tubes until mating with the handle tube flare.

Note: The pressure oil tube is located on the side opposite the trigger and should correspond to the "IN" port on the block and tube assembly.

   e. Apply #242 Loctite to the valve body threads. Place a wrench across the flat area of the valve body and tighten the tube nut to 200 lb ft/270 Nm with a 2-1/8 inch wrench.

Slide the plastic cover in place over the tube nut.

IMPORTANT

Do not allow the vale body to rotate relative to the tamper lower assembly. This will avoid twisting the oil tubes in side the handle assembly.

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 tamper, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the tamper as listed in the table. Use a flow meter known to be accurate. Check the flow with the hydraulic oil temperature at least 80° F/27° C.

PROBLEM	CAUSE	REMEDY
Tool does not run.	Power unit not functioning.	Check power unit for proper flow and pressure 3-9 gpm/ 11-34 lpm at 1000-2000 psi/ 70-140 bar.
	Couplers or hoses blocked.	Remove obstruction.
	Mechanical failure.	Disassemble tool, inspect lower piston rod and/or nose for scoring damage. Inspect for other mechanical failures.
	Pressure and return hoses reversed.	Correct for proper flow direction. a. Oil tubes reversed at valve. b. Couplers backwards.
	Backpressure too high.	Check hydraulic system for excessive backpressure over 250 psi/17 bar measured at the end of the tool operating hoses.
Piston extends but does not retract (reciprocate).	Pressure and return reversed.	Correct for proper flow direction at power unit or tool.
	Tool not assembled correctly.	Review service instructions for proper assembly. Also check for: a. Flow sleeve lined up correctly with locating pin. b. Oil tubes reversed at on-off valve. c. Front sleeve in correctly. d. Thrust bridge washer in correctly.
	Backpressure too high.	Check hydraulic system for excessive backpressure over 250 psi/17 bar measured at the end of the tool operating hoses.

PROBLEM	CAUSE	REMEDY
Does not compact effectively.	Power unit not functioning.	Check power unit for proper output. Optimum 8 gpm/30 lpm at 1500 psi/105 bar.
	Couplers or hoses blocked.	Remove obstruction
	Backpressure too high.	Check hydraulic system for excessive backpressure (over 250 psi/17 bar measured at the end of the tool operating hoses).
	Oil too hot (above 140° F/60° C) or too cold (below 60° F/ 15.5° C).	Provide cooler to maintain proper oil temperature (100-130° F/38-54° C).
	Tamper shoe too large for soil conditions.	Use smaller shoe for backfilling operations Part Number 01849.
Tamper operates slowly, (low frequency).	Low gpm supply from power unit.	Check power unit for proper flow. Optimum flow 8 gpm/ 30 lpm.
	High backpressure.	Check hydraulic system for excessive backpressure (over 250 psi/17 bar measured at the end of the operating hoses).
	Couplers or hoses blocked.	Remove restrictions.
	Oil too hot (above 140° F/60° C) or too cold (below 60° F/ 15.5° C).	Check power unit for proper oil temperature. Bypass cooler to warm oil up, or provide cooler to maintain proper temperature.
Tamper gets hot.	Hot oil going through tool.	Check power unit. Be sure flow rate is not too high causing excess oil to go through the relief valve. Provide cooler to maintain proper oil temperature 100-130° F/38-54° C. Eliminate Flow Control Devices. DO NOT EXCEED RECOMMENDED FLOW.
Oil leakage:		
a. On piston rod.	Lower piston seal failure.	Replace seal and wiper, piston and nose as required.
b. Around trigger.	Valve spool seal failure.	Replace seals.
c. Around spool end caps.	O-ring failure.	Replace o-rings.

SPECIFICATIONS

Weight ..... 25 lbs/11.3 Kg
Pressure Range ..... 1000-2000 psi/70-140 bar
Flow Range ..... 3-9 gpm/11-34 lpm
Optimum Flow ..... 8 gpm/30 lpm
Porting Size ..... 1/2 in. SAE o-ring port or 3/8 pipe, hose ends
Width ..... 4 in./10.2 cm
System Type ..... HTMA Type Ior II, o.c. or c.c.

DIMENSIONS (LENGTH)	NO VALVE		VALVE IN HANDLE		MID-VALVE	
	in	cm	in	cm	in	cm
	54 66 90	137 167 228	49 55 71	124 139 180	119	302
System Type	o.c./c.c.		o.c./c.c.		o.c.	

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 Stanley.

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

There is no other warranty expressed or implied.

SERVICE AND REPAIR NOTES

SERVICE AND REPAIR NOTES

TA52 TAMPER UPGRADE KIT

Some parts used in the new model TA54 Tamper can also be used in the model TA52 Tamper which is no longer being produced. While parts for model TA52 Tampers will remain available, use of TA54 parts such as the piston and nose may significantly decrease service intervals where severe operating conditions exist.

The parts which can be used in model TA52 Tampers are provided in P/N 17138 upgrade kit. The parts supplied in the kit are listed below.

00834	O-Ring
00940	O-Ring
01262	O-Ring
04902	Retaining Ring
14883	Nose
14884	Seal Washer
14886	Piston
14891	Seal
15016	Rod Wiper
17139	Service Instructions

NOTE: Installation of any individual part also requires installation of all other parts listed. For example, installation of P/N 14886 Piston requires installation of P/N 14883 Nose, P/N 14891 Seal, etc. . .

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