



## DAKE HAND-OPERATED HYDRAULIC PRESS

# Model 25H

INSTRUCTIONAL MANUAL



### WARNING!

Read and understand all instructions and responsibilities before operating. Failure to follow safety instructions and labels could result in serious injury.

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## DAKE STANDARD LIMITED WARRANTY

### *Finished Machines*

Dake warrants to the original purchaser the finished machine manufactured or distributed by it to be free from defects in material and workmanship under normal use and service within 1 year (12 months) from the delivery date to the end user.

### *Parts*

Dake warrants to the original purchaser the component part manufactured or distributed by it to be free from defects in material and workmanship under normal use and service within 30 days from the delivery date to the end user.

The standard limited warranty includes the replacement of the defective component part at no cost to the end user.

### *Sale of Service (Repairs)*

Dake warrants to the original purchaser the component part repaired by Dake Corporation at the manufacturing facility to be free from defects in material and workmanship under normal use and service within 90 days from the return date to the end user, as it pertains to the repair work completed. The standard limited warranty includes repair of the defective component part, at no cost to the end user.

## Warranty Process

Subject to the conditions hereinafter set forth, the manufacturer will repair or replace any portion of the product that proves defective in materials or workmanship. The manufacturer retains the sole right and option, after inspection, to determine whether to repair or replace defective equipment, parts or components. The manufacturer will assume ownership of any defective parts replaced under this warranty.

All requested warranty claims must be communicated to the distributor or representative responsible for the sale. Once communication has been initiated, Dake Customer Service must be contacted for approval:

Phone: (800) 937-3253

Email: [customerservice@dakecorp.com](mailto:customerservice@dakecorp.com)

When contacting Dake, please have the following information readily available:

- Model #
- Serial #
- Sales Order #

Purchasers who notify Dake within the warranty period will be issued a Case number and/or a Return Material Authorization (RMA) number. If the item is to be returned per Dake's request, the RMA number must be clearly written on the exterior packaging. Any item shipped to Dake without an RMA will not be processed.



### **Warranty Exceptions:**

The following conditions are not applicable to the standard limited warranty:

- (a) Part installation or machine service was not completed by a certified professional, and is not in accordance with applicable local codes, ordinances and good trade practices.
- (b) Defects or malfunctions resulting from improper installation or failure to operate or maintain the unit in accordance with the printed instructions provided.
- (c) Defects or malfunctions resulting from abuse, accident, neglect or damage outside of prepaid freight terms.
- (d) Normal maintenance service or preventative maintenance, and the parts used in connection with such service.
- (e) Units and parts which have been altered or repaired, other than by the manufacturer or as specifically authorized by the manufacturer.
- (f) Alterations made to the machine that were not previously approved by the manufacturer, or that are used for purposes other than the original design of the machine.



## RETURN & REFUND POLICY

Thank you for purchasing from Dake! If you are not entirely satisfied with your purchase, we are here to help.

### Returns

All Dake manufactured / distributed machines, parts and couplings include a 30-day return option. These policies are valid from the date of final shipment to the end user.

To be eligible for a return, the item must be unused and in the same condition as received.

All requested warranty claims must be communicated to the distributor or representative responsible for the sale. Once communication has been initiated, Dake Customer Service must be contacted for approval:

Phone: (800) 937-3253  
Email: [customerservice@dakecorp.com](mailto:customerservice@dakecorp.com)

Once the return request has been approved by Customer Service, a representative will supply a Return Material Authorization (RMA) number. The returned item must have the provided RMA number clearly marked on the outside packaging. Any item received without an RMA number clearly visible on the packaging will not be processed.

An RMA number can only be provided by the Dake Customer Service team and must be obtained prior to the return shipment.

### Refunds

Once the item has been received and inspected for damages, a representative will notify the requestor referencing the provided RMA number.

If the return is approved, a refund will be issued to the original method of payment, less a 20% restocking fee. The restocking fee may be waived if an order is placed at the time of return with like-value merchandise.

Transportation costs are the responsibility of the end user and will not be credited upon return approval.

Any item that is returned after the initial 30 days or has excessive/obvious use will not be considered for a full refund.



## **SAFEGUARDING THE POINT OF OPERATION**

### **ANSI B11.2 - Hydraulic Power Presses - Safety Requirements for Construction, Care, and Use**

It is important that Dake press users have a clear understanding of their responsibility involving the care and use of their Dake hydraulic press, including point-of-operation safe guards. Dake strongly recommends that Dake press users obtain a copy of the current American National Standard Institute (ANSI) B11.2 standard, for a more complete understanding of their responsibilities.

ANSI B11.2 states the following, relative to point of operation safeguarding:

“Normally, only the employer (press user) can determine the requirements of the press productions system components, including the dies and methods for feeding. Therefore, the employer is ultimately responsible to designate and provide the point-of-operation safeguarding system.”

The standard also discusses additional responsibilities of the employer. Some of the key responsibilities are:

- The employer is responsible for the safety, use, and care of the hydraulic power press production system.
- The employer is responsible to consider the sources of hazards for all tasks to be implemented on the hydraulic power press production system.
- The employer is required to eliminate or control identified hazards in the scope of their work activity.
- The employer is responsible for the training of personnel, caring for, inspecting, maintaining, and operating hydraulic press production systems to ensure their competence.
- The employer is responsible to provide and ensure that point-of-operation safeguarding is used, checked, maintained, and where applicable, adjusted on every production operation performed on a press production system.

A complete and current copy of the ANSI B.11.2 standard can be obtained by contacting the following:

American National Standards Institute  
1430 Broadway  
New York, NY 10018

AMT – The Association for Manufacturing Technology  
7901 Westpark Drive  
McLean, VA 22102



## SPECIFICATIONS

<b>Number</b>	907001
<b>Capacity</b>	25 tons
<b>Width between uprights</b>	33-1/2"
<b>Width between table channels</b>	5-3/16"
<b>Min ram to table</b>	4"
<b>Max ram to table</b>	39"


<b>Ram travel</b>	5"
<b>Screw travel</b>	5"
<b>Height</b>	76"
<b>Weight</b>	460 lbs
<b>Base</b>	42-1/2" x 30"

In the space provided record the serial number and model number of the machine. This information is only found on the black and gold Dake tag shown below. If contacting Dake this information must be provided to assist in identifying the specific machine.



<b>Serial No.</b>	
<b>Model No.</b>	
<b>Install Date:</b>	

## SAFETY

 **This is the safety alert symbol.** When you see this symbol on your press be alert to the potential for personal injury.

Employer is responsible to perform a hazard/PPE assessment before work activity.

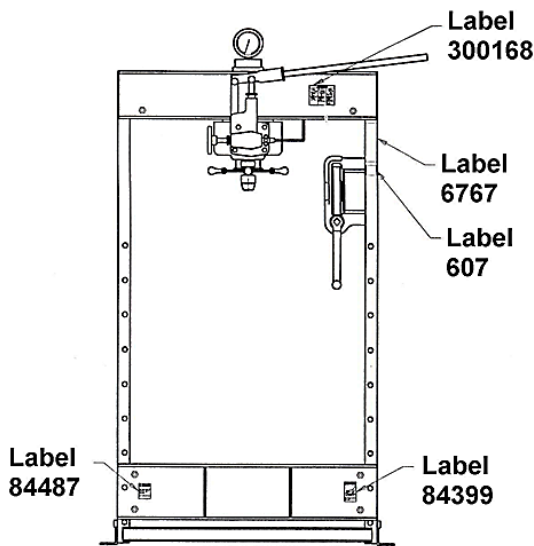
**Follow recommended precautions and safe operating practices.**

### Additional Warnings:

- **Carefully read all safety messages in these instructions and on your press safety signs.**
- Keep safety labels in good condition. Replace missing or damaged safety labels.
- Employer is responsible to perform a hazard/PPE assessment before work activity.
- Do not alter this press from its original design.
- Do not make repairs or adjustments to any hydraulic system unless you are competent or working under competent supervision.
- Only use Dake original parts.

- This machine is intended to be operated by one person. This person should be conscious of the press ram movement not only for themselves but also for persons in the immediate area of the machine.
- Tag out procedures must be followed by authorized employees as per OSHA
- **Hydraulic** – Relieve all hydraulic pressure before servicing the press. Turn the red release handle to relieve the pressure
- **Spring Pressure** – Clamp ring on bottom of piston must be in place before removing cylinder
- **Hoist and table channel** – always place table pins under the table channels then install the remaining pins. Always release pressure on the cable before using press

### Label Placement View



**CAUTION**

ALL pins must be inserted before applying any pressure  
Read instructions.

**CUIDADO**

Todos los escálamos tienen que ser insertados ante de aplicar la presión.  
Lea las instrucciones.

Label Part No. 84487

**WARNING**

Keep fingers out of pin holes.

**PELIGRO ATENCION**

No ponga los dedos en los agujeritos.

Label Part No. 84399

**INSTRUCTIONS**

1. Fill reservoir with a good clean oil such as MOBIL DTE® 24  
A PRODUCT OF MOBIL OIL CORPORATION  
FILTER THIS DIELECTRIC HYDRAULIC OIL AND LUB.

**HAND PRESSES ONLY**

2. REMOVE THE PLUG TOP OF WORKHEAD. COIL BUSHING VALVE AND PUMP OIL INTO WORKHEAD. USE THE BUSHING O-RING TO REMOVE AIR FROM CHAMBER ABOVE PISTON BY PUMPING OIL AT TOP OF O-RING. AFTER PRESSURE GAUGE IN PLACE OF PIPING USING WORK HEAD ON HEAD TO SEAL JOINT.

3. BEFORE APPLYING PRESSURE, ALWAYS WORKHEAD IN POSITION WITH UPPER HAND WHEEL. INSERT TABLE PINS. COIL RELEASE VALVE HANDLE. LEAVE A GAP OF 1/2" BETWEEN HANDLE AND RESERVOIR. PUMP POSITION OF SCREW EXTENDING BEYOND 1/4" AS NEAR AS POSSIBLE.

4. READ INSTRUCTION SHEET FURNISHED WITH PISTON FOR FURTHER DETAILS OF OPERATION AND QUANTITY OF OIL REQUIRED.

5. IF PISTON DOES NOT HOLD PRESSURE, DRAIN ALL OIL FROM RESERVOIR AND Wipe OFF BUSHING O-RING AND CHECK VALVE AND CLEAN OUT OIL FROM SPRING CHAMBER. RESET VALVE BUSHING O-RING AND FILL RESERVOIR.

Label Part No. 6767

**WARNING**

Establish solid footing to prevent falls.	Keep hand away from point of operation. Read instructions.	Guard workpiece to prevent projectiles from reaching operator. Wear eye protection.
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Label Part No. 300168

SERIAL NO.

**DAKE**

MODEL

DAKE GRAND HAVEN MICH.

Label Part No. 607

**IMPORTANT**

ALWAYS PUMP PISTON DOWN 1/4 INCH BEFORE NOSE PIECE COMES IN CONTACT WITH WORK. DAMAGE TO PISTON MAY OCCUR IF THIS INSTRUCTION IS NOT FOLLOWED.

Label Part No. 634




**WARNING:** This product contains Nickel, a chemical known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## SET UP

For shipping convenience, the gauge, pump handle, hoist crank, screw nose and base angles were removed from the press. Assemble these parts to the press in the following order:

1. Bolt the base angles to the uprights using the four bolts and nuts furnished. Shoulder the base angles against the stops on the uprights.
2. The press should be set on a level floor with the base angles touching the floor at all points, using shims where necessary. Then secure the base to the floor using the four, 1/2" bolts included.
3. Install the pressure gauge using the hydraulic sealant to ensure a sealed fit.
4. Insert the pump handle into the handle socket and fasten in place by means of the set screw on top of the handle socket.
5. **CAUTION!**  Place the hoist crank on the lift drum shaft. The table is raised to the desired height by turning the crank after removing the table pins. Check to make sure the hoist cable is tracking correctly. Run the table channels from top to bottom. The cable should be on each of the two upper pulleys and should track back and forth on the cable drum.
  - a. Place the table pins under the table before releasing the hoist crank when positioning the table channels for cable tracking, servicing, or set up for desired work operating. Be sure all table pins are fully inserted in place before applying pressure. Always remove or release pressure on the cable before pressure is applied by turning the hand crank counterclockwise until slack forms in the cables. **FAILURE TO DO SO WILL CAUSE DAMAGE TO THE HOIST.**
  - b. If a tracking problem exists, contact the Dake factory for instructions.
6. Fasten nosepiece to the end of the screw using the thumbscrew included.

## FILLING PRESS WITH OIL

*Recommended to replace hydraulic oil every 6 months of machine use.*

**IMPORTANT! ONLY FILL WITH NEW, CLEAN, LIGHT HYDRAULIC OIL. UNDER NO CIRCUMSTANCES USE DIRTY OIL.**

1. Use Mobil DTE 24 or equivalent.
2. Filter the oil to remove any possible dirt or other contaminant.
3. Move the piston to its maximum upper position.
4. Fill the reservoir with 2-1/2 quarts of oil.
5. Remove the screw plug from the gauge extension on the top of the workhead.
6. Close the release valve handwheel and pump oil into the workhead until oil is visible in the stand pipe.
  - a. This will remove all air from the chamber above the piston.

If oil leaks by the piston, the reservoir should be drained and refilled with the piston in the maximum upper position.



## OPERATION

### CONTROLS

**Hand Crank:** (items 57 & 58) on the side of the press is to assist in lowering and raising the table of the press once the table pins are removed. Do not forget to replace the pins once you have the table at the desired height.

**Head Positioning Handwheel:** can be loosened to allow the head to move along the upper frame track and can be positioned at any length on the top frame. After in position, tightening the handwheel completely will keep the head in place.

**Handle:** (item 49) is the pressure supply source and is manually operated with up and down motion. **IMPORTANT!** Always pump the piston down 1/2" before the nose piece comes in contact with the work. Damage to the piston may occur if not pumped before meeting the work.

**Release Valve Handwheel:** (item 41) releases the pressure to let the ram return to its raised position. Always keep the valve firmly closed when operating the press until you want to release the pressure.

**Screw Handwheel** (item 33) raises or lowers the ram screw in and out of the piston assembly. Always keep the portion of the screw extending out of the piston as short as possible. Instead of overextending the screw it is recommended to raise the table rather than running the screw out of its limit of travel. **NEVER EXCEED THE RECOMMENDED STROKE OF 5 INCHES FOR THIS PRESS. EXCEEDING THE STROKE WILL CAUSE DAMAGE TO THE INNER PACKINGS.**

## MAINTENANCE

*Recommended to replace hydraulic oil every 6 months of machine use. See "FILLING PRESS WITH OIL" section for instructions.*

### LUBRICATION

- Keep all working parts of the press well-oiled for easier operation.
- Keep a light film of oil over the entire surface of the ram to prevent rust.



## TROUBLESHOOTING

### PUMP PACKING LEAKAGE

If oil leaks past the pump packing, tighten the pump packing nut (item 9) until the pump handle moves with resistance, then slack off slightly to cause the handle to stay in position after being let go. After long periods of operation, it may be necessary to install new pump packings.

### PRESS NOT HOLDING PRESSURE

This condition is nearly always caused by dirt under the pressure ball valve (item 2). See hand pump assembly drawing.

Steps to fix:

1. Remove the reservoir drain plug and drain all oil out of the reservoir.
2. Remove parts: pipe plug (item 18), check valve spring (item 6) and ball valve (item 2) then clean out the port hole and valve seat thoroughly.
3. Using a small piece of brass rod as a drift, tap on the brass rod lightly to seat the ball valve in place.
4. Replace the spring and plug with extreme care to prevent dirt from entering.
5. Replace the drain plug and refill the reservoir with clean filtered oil.

See **FILLING PRESS WITH OIL** section in manual.

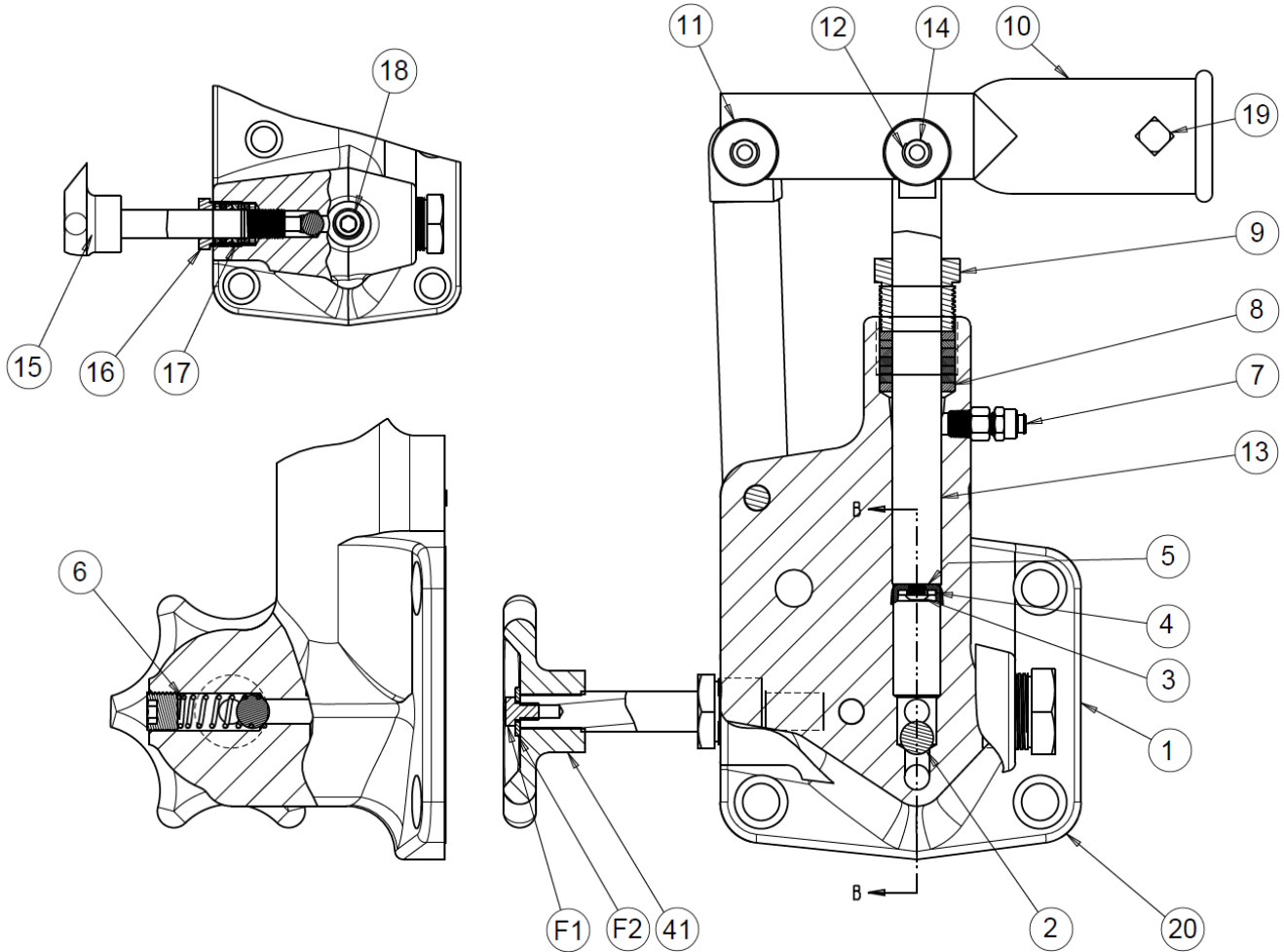


## OTHER TROUBLESHOOTING

<b>SYMPTOM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
Oil leaking from piston oil seal.	1) Reservoir is over filled.* 2) Piston Packing is worn or damaged.	1) Drain excess oil. 2) Replace Piston Packing.
Press will not hold pressure.	1) Check Ball is contaminated. 2) Ball and Seat have poor contact. 3) Piston Packing is worn or damaged.	1) Remove and clean Check Balls and Seats. 2) Reseal Ball on Seat. 3) Replace Piston Packing
Press will not build rated tonnage.	1) Pump Plunger leather is worn or damaged. 2) Check Ball is contaminated. 3) Ball and Seat have poor contact. 4) Piston Packing is worn or damaged. 5) Gauge is defective.	1) Replace Pump Plunger leather. 2) Remove and clean Check Balls and Seats. 3) Reseal Ball on Seat. 4) Replace Piston Packing. 5) Replace Gauge.
Oil leaking from pump plunger.	1) Packing Nut loose. 2) Worn Packings.	1) Tighten Packing Nut. 2) Replace Pump Packings.
Oil leaking from release valve rod.	1) Valve Rod Packing Nut is Loose. 2) Packings are worn.	1) Tighten Packing Nut. 2) Replace Valve Rod Packings.
Pump handle drifts up.	1) Defective Check Ball. 2) Defective Check Ball Spring.	3) Clean Check Ball and reseal. 4) Replace Spring.
Ram will not return.	1) Return Spring damaged. 2) Piston is bent or damaged. 3) Piston Packing is defective.	1) Replace Spring. 2) Replace Piston. 3) Replace Piston Packing
*If oil leaks from around ram but there is no pressure loss than the reservoir has been overfilled		

## EXPLODED VIEW & PARTS LIST

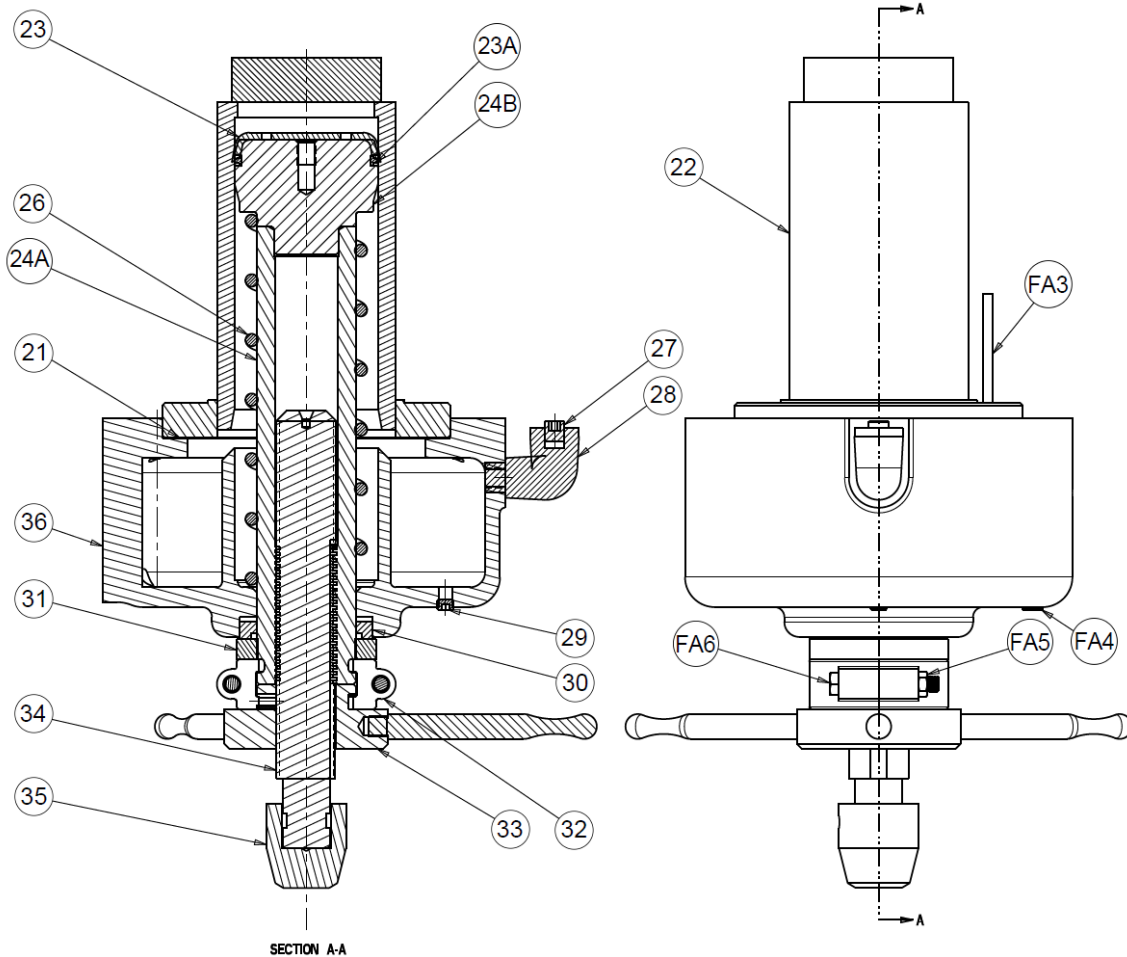
### HAND PUMP ASSEMBLY



Item No.	Part Name	Part No.	Qty
1	Pump Body	546	1
2	Ball Valve	586	3
3	Hex Cap Screw (Nylock 1/4"-20 x 1/2")	28297	1
4	Washer # 12 Flat	43629	1
5	Pump Plunger Leather	599	1
6	Check Valve Spring	579	1
7	Tube Fitting, Poly-Tite	71413	1
8	Pump Packing	573	7
9	Pump Packing Nut	551A	2
10	Handle Socket	550	1
11	Handle Socket Link	555	1
12	3/8" Retaining Ring	43972	6

Item No.	Part Name	Part No.	Qty
13	Pump Plunger	554	1
14	Handle Socket Pin	594A	3
15	Valve Release Rod	1129	1
16	Valve Rod Packing Nut	576A	1
17	Valve Rod Packing	987	7
18	Pipe Plug (3/8")	588	1
19	Socket Set Screw (3/8"-16 x 5/8")	43589	1
20	Pump Gasket	591	1
41	Release Valve Handwheel	10631	1
F1	Screw (1/4"-20 x 1/2")	43301	1
F2	1/4" Flat Washer	43631	1

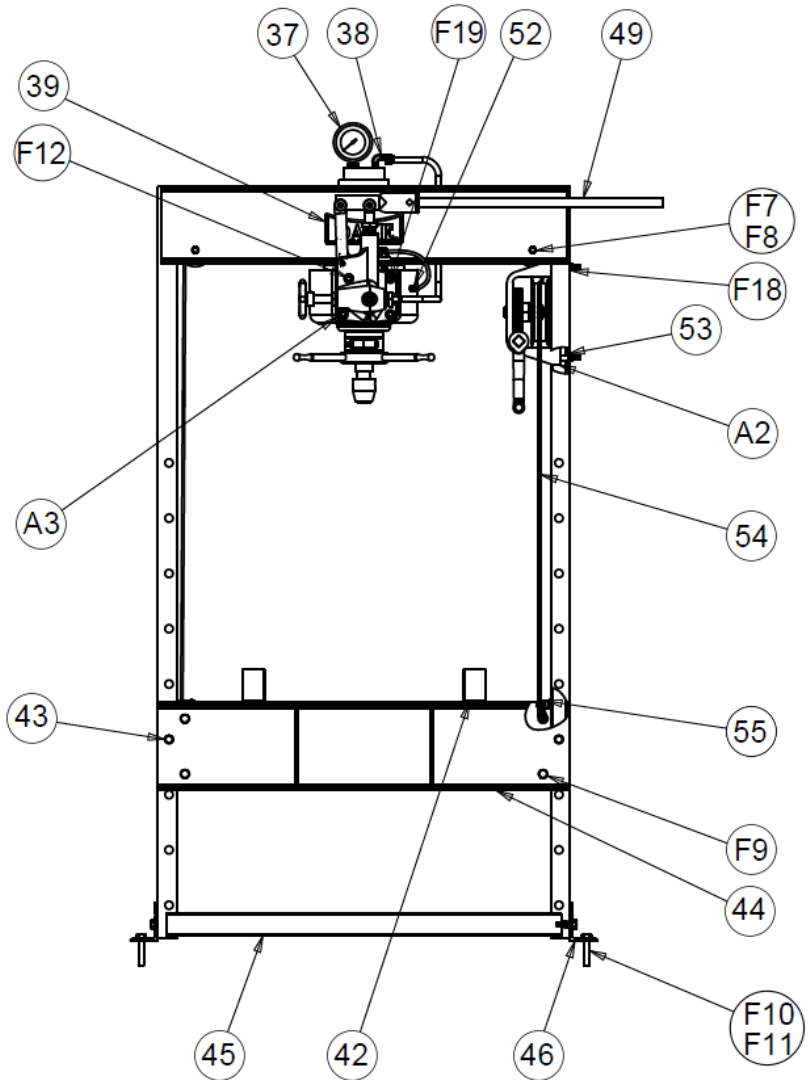
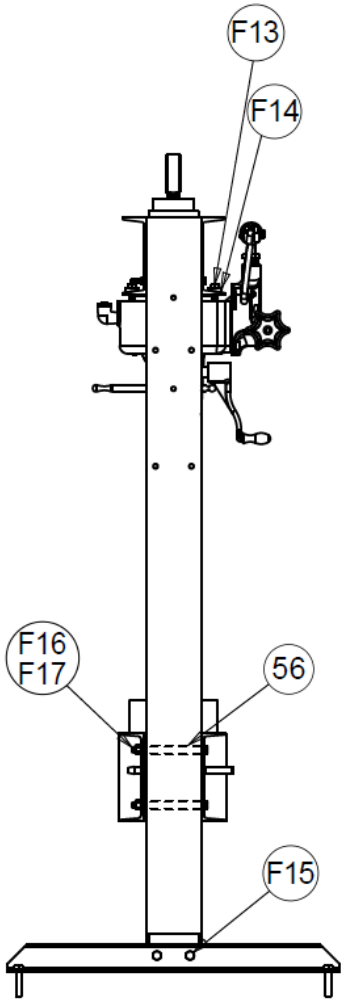
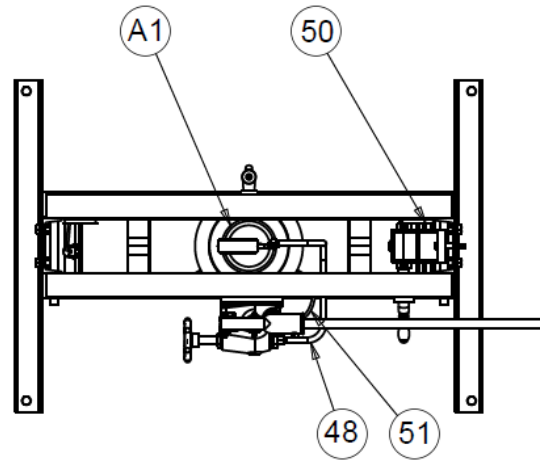
### WORKHEAD ASSEMBLY



Item No.	Part Name	Part No.	Qty
21	Cylinder Gasket	998	1
22	Cylinder	960	1
23	Piston Leather (Serial No. < 192522)	969	1
23A	Packing Ring (Serial No. >192523)	17976	1
24	Piston Assembly (Serial No. < 192522)	701800	1
24	Piston Assembly (Serial No. > 192523)	716221	1
24A	Piston	964	1
24B	Piston Cap	85400	1
26	Ram Spring	968	1
27	Pipe Plug (1/2" NPTF)	596	1
28	Pipe Fitting Street Elbow (1/2")	45388	1
29	1/8" Pipe Plug	589	1
30	Oil Seal	999	1

Item No.	Part Name	Part No.	Qty
31	Piston Bumper	996	1
32	Clamp Ring	982	2
33	Screw Handwheel	716518	1
34	Screw	971	1
35	Screw Nose	986	1
35A	*If needed - Thumb Screw (1/4"-20 x 3/4")	43618	1
36	Reservoir	963	1
F3	Air Vent Tube (1/4" x 3")	632	1
F4	Pipe Plug (1/4") NPTF	1567	1
F5	Hex Nut (3/8"-16)	43912	2
F6	Hex Cap Screw (3/8"-16 x 2-1/2")	43335	2
N/A	Repair Kit – Cylinder & Hand Pump Assembly (Items: 5, 8, 17, 20, 21, 23, 30, 31)	701290	-

GENERAL ASSEMBLY





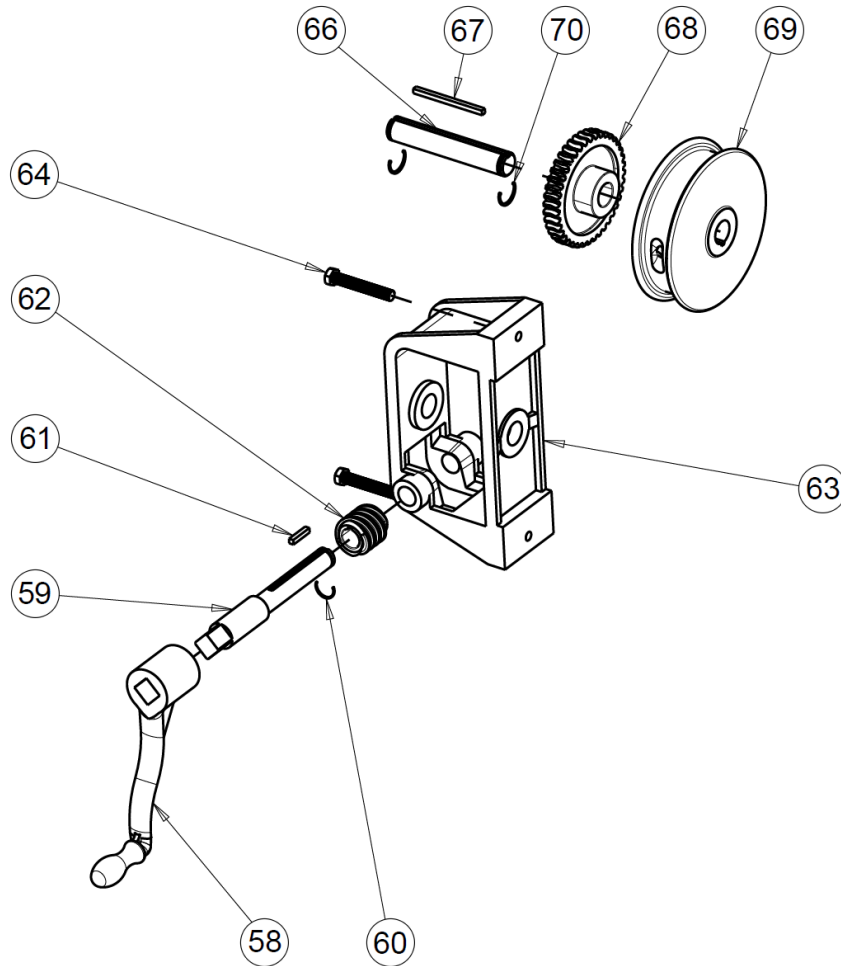
## GENERAL ASSEMBLY PARTS LIST

Item No.	Part Name	Part No.	Qty
37	Hand Gauge	71265	1
37	Special Bushing	81384	1
38	Tube Fitting (37°)	1252	1
39	Dake Nameplate	81002	1
41	Release Valve Handwheel	10631	1
42	Table Plate	966	2
43	Table Pin	981	4
44	Table Channel	701020	2
45	Frame only	700134	1
46	Base Angle	978	2
47	Tube Fitting (3/8" NPTF, 37°)	1251	2
48	Tube Assembly	700133	1
49	Handle	218	1
50	Pulley	602-25H	2
51	Plastic Tube (1/4")	67761	1
52	Tube Fitting (1/8" NPTF, Straight)	71413	1
53	Hoist Spacer	997	2
54	Cable	988	1
55	Cable Clamp	583	4

Item No.	Part Name	Part No.	Qty
56	Table Spacer	86487	4
F7	Screw (3/8"-16 x 6")	43341	2
F8	Lock Washer (3/8")	43645	2
F9	Hex Nut (1/2"-13)	43916	8
F10	Lag Screw (1/2"-2 x 2-1/2")	72355	4
F11	Washer (1/2")	43634	4
F12	Soc. Head Cap Screw (1/2"-13 x 3")	24565	1
F13	Hex Cap Screw (1/2"-13 x 1-3/4")	43350	4
F14	Channel Washer Casting	25H138P	2
F15	Hex Cap Screw (1/2"-13 x 1-1/2")	43349	4
F16	Lock Washer (1/2")	43647	8
F17	Bolt (1/2"-13 x 6x1/2")	79982	4
F18	Hex Nut (3/8"-16)	43912	4
F19	Socket Cap Screw (1/2"-13 x 1-1/4")	43470	3
A1	Workhead Assembly	907006-S	1
A2	Table Hoist Assembly	700112-S	1
A3	Hand Pump Assembly	700887-S	1
N/A	Tag – No oil in reservoir	79956	1
N/A	Label – Made in U.S.A.	76936	1



## HOIST ASSEMBLY



Item No.	Part Name	Part No.	Qty
58	Handle	1000	1
59	Worm Shaft	384	1
60	Retaining Ring	27437	2
61	Worm Key	47364	1
62	Worm	385	1
63	Hoist Frame	725	1

Item No.	Part Name	Part No.	Qty
64	Hex Cap Screw (3/8"-16 x 2-1/2")	43335	2
66	Drum Shaft	724	1
67	Drum Key	737	1
68	Worm Gear	736	1
69	Cable Drum	723	1
70	Retaining Ring	43992	1

***Please contact factory for current prices.***

## ORDERING INFORMATION

Parts are available for direct purchase from Dake or through a distributor. When placing a parts order, you will need to provide the part number, name of part, and model number. All parts shipped F.O.B. Factory in Grand Haven, MI.