

## ATD-7463 100 Ton Shop Press With Guard Owner's Manual



#### Features:

- · Fully welded frame for maximum strength and durability
- Double speed pump for improved efficiency
- Foot control air valve allows effortless, hands free operation of air motor
- Cylinder can be moved left or right for applying pressure exactly where it's needed
- Press bed adjusted by worm drive for easier raising and lowering
- 6 Position bed allows work height adjustment of 5.5" each
- Large oil filled anti shock pressure gauge with stainless steel frame scale for US and metric tons
- Patented safety valve for longer service life
- Includes a set of Non-Slip steel V blocks for safer operation
- Includes protective work guard for added safety
- Meets or exceeds ASME/PASE 2019 standards

#### Specifications:

- •Capacity: 100 Ton
- Hydraulic stroke: 11.75"
- Working Range: 4.38" to 32"
- Horizontal Ram Travel 10"
- Bed Width: 31"
- Bed Positions: 6
- Press Size: 57.8" W x 39" D x 72.75" H
- · Air Pressure: 110 to 120 psi
- N.W. Press and Guard: 1702.8 lbs

#### Read this manual and follow all Safety Rules and Operating Instructions



The safety alert symbol is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or property damage.

#### SAFETY REQUIREMENTS

Make sure to read, understand, and strictly follow all satety related instructions before operation or maintenance of this press. This manual is to be made available to all persons who are required to install, configure or service the equipment herein, or any other associated operation.

#### **PERSONNEL**

Installation, operation and maintenance of this press should only be carried out by qualified personnel. A qualified person is someone who is technically competent and familiar with all safety information and established safety practices with the installation, operation and maintenance of this press, and with all the hazards involved.

#### SAFETY INSTRUCTIONS



Before using this press, the pressure in the system must be released. At the same time, DO NOT stand facing the air motor. The operator should be on the opposite side. Remember DO NOT strike, press or transfer until it is discharged. When it is necessary to exchange die after running, operators should wear gloves or use tools to operate, to avoid being hurt. NOTE: Immediately stop operating this press if it is not operating properly. Contact a certified technical support engineer for repair. This press must not be operated without approval from the certified technical support engineer.

This shop press includes a guard which brings a higher level of security. Always remember to use the guard for additional safety.

#### Specifications:

Rated Capacity	100 Tons
Working Range	4.4" to 32"
Stroke	11.8"
Bed Width	31"
Required Pressure	110 to 120 PSI

#### **Prepare before Assembly**



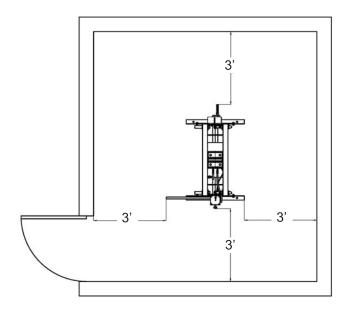
This press is generally too heavy to be moved by hand. Use the correct transport and lifting equipment, and follow the instructions as follows.

#### **Working Area Conditions**

Users should provide enough space for the equipment and the environment should be clean and free of clutter.



A working area of 3 feet is to be kept free both in front of and behind the press while it is in operation so that it is always easily accessible.





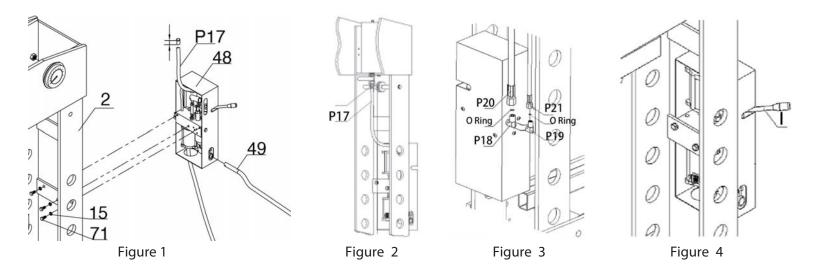
#### UNPACKING AND INSPECTION

When opening the packaging, be sure to use the proper tools, wear protective clothes, gloves and safety helmet. Make sure that the press and parts in the box are complete and identical with the parts list. If not, contact your distributor.

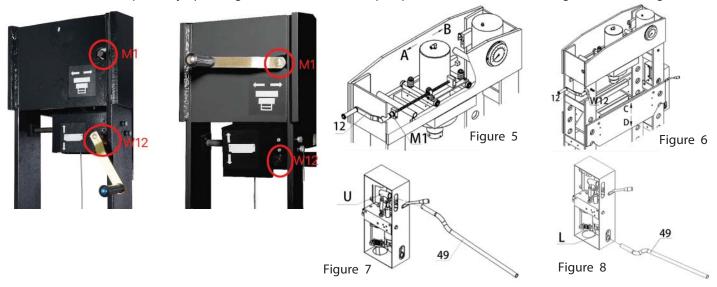
#### ASSEMBLY AND INSTALLATION

When this manual refers to a part number, it is referring to the reference number included on the parts list. Use the exploded drawing in the parts breakdown as a guide to assemble your press. Lay out all parts and assemblies in front of you before beginning. A second person will make several steps easier to carry out. Begin assembly on a horizontal surface. Use a forklift or crane to lift the press assembly out of the shipping case. The following procedure is recommended:

- 1) Begin assembly on a horizontal surface. Use a forklift or crane to lift the press assembly out of the shipping case. The following procedure is recommended:
- 2) Disassemble the hex bolt (#59), flat washer (#15), spring washer (#16), hex nut (#17) from the bottom part of the press frame (#2). Then assemble the base (#13) to the bottom part of the press frame (#2) by the above parts.
- 3) Mount the 4 base supports (#18) to press frame (#2) using hex bolt (#14), flat washer (#15), spring washer (#16), hex nut (#17).
- 4) Mount the pump assembly (#48) to the body frame by using bolt (#71) and flat washer (#15). (Refer to Figure 1).
- 5) To avoid oil spillage from the oil hose (#P17), the factory has fitted a plug in the oil hose for shipping. To remove the plug, trim about 10mm off the end of the oil hose (with the plug). (Refer to Figure 1).
- 6) Then connect the oil hose (#P17) to 1/2" connector (Figure 2). Once the oil supply hose is connected, open the oil tank valve to allow the flow of oil and check for leaks.
- 7) Remove the plug from the hose fittings (#P18, #P19) and oil hose (#P20, #P21), then connect the oil hose (#P20) to fitting (#P18) and oil hose (#P21) to fitting (#P19) and tighten. (Refer to Figure 3).
- 8) Install the selector lever (I) on the selector valve on the pump (#49). (Refer to Figure 4)



- 9. Insert the ram handle (#12) to the connecting shaft (M1). (Figure 5).
- 10. Turn the handle clockwise to move ram left (Direction A), and counterclockwise to move ram right (Direction B).
- 11. Insert the winch handle (#12) to the shaft (W12). (Figure 6).
- 12. Turn the handle clockwise to lift the working bed (Direction C) and counterclockwise to lower the working bed (Direction D).
- 13. When operating the high pressure pump for low speed, insert the pump handle (#49) into the upper socket (U). (Figure 7)
- 14. When operating the low pressure pump for high speed, insert the pump handle (#49) into the lower socket (L). (Figure 8)
- 15. Assemble the 2 brackets (#68, #69) to the working bed (#19) using guard hardware kit (#53).
- 16. Insert the guard (#53) into the slot of the brackets (#68, #69).
- 17. Test the unloaded press by operating both the air and hand pump to drive the ram to full height then lowering it.



#### **OPERATION**

#### **BEFORE FIRST USE**

Before first use, check for proper oil level in the system. Then thoroughly test the hydraulic ram for proper operation prior to it's actual use.

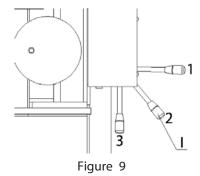
Pour a teaspoon of good quality air tool lubricant into the air supply inlet of the lift control valve, connect the air supply and operate for three seconds to evenly distribute the lubricant.

Purge air from they hydraulic system. See bleeding the hydraulic system instructions in the maintenance section.

#### **OPERATING THE SHOP PRESS**

WARNING! Ensure that you read and understand and apply the safety instructions and warnings before first use.

- 1. Lift or lower the working bed (#19) until it is in position. Insert bed pins (#21) into the left and right posts and lock in the retaining rings (#22).
- 2. Place the steel blocks (#20) on the working bed (#19) then insert a workpiece on the steel blocks.
- 3. Adjust the height of the guard (#67) to make sure it covers the working area.
- 4. Selector valve positions (Figure 9)
  - When the handle lever (I) is in position 1, the ram piston will retract.
  - When the handle lever (I) is in position 2, the ram piston will stop moving.
  - When the handle lever (I) is in position 3, the ram piston will extend.



- 5. Operating by air: Move the selector valve lever (I) to position 3, then depress the air foot valve (#P54), and both air motors will work simultaneously. When the saddle touches the work piece, the ram will begin to apply pressure, and the 1st air motor will stop working, only the 2nd air motor will continue to work. Under this condition, the ram will continue to extend slowly and apply pressure on the work piece. Once the job is completed, release the air foot valve (#P54).
- 6. Operating manually: Move the selector valve lever (I) to position 3, then insert pump handle (#49) into lower low pressure socket for efficient movement. When the saddle touches the work piece, insert pump handle (#49) into upper high pressure socket, and pump the handle (#49) until the job is completed.
- 7. Operating both by Air and Manually: The operator can press the work piece using both manual HIGH pressure and air at the same time as outlined above.
  - WARNING! When operating using air, NEVER operate manually in the manual low pressure mode at the same time.
- 8. To release pressure, move the selector valve lever (I) to position 2, the pressure on the ram piston will be released automatically, causing the ram to retract allowing the user to remove the work piece. When complete, disconnect the air hose from the compressor and clean the press.
- 9. Once the ram has fully retracted, lower the guard and remove the workpiece from the working bed.
- 10. Disconnect the air inlet fitting from the air source when finished for the day.

#### **MAINTENANCE**

- 1. Maintain the shop press with care. A tool in good condition is easier to control and will have fewer problems.
- 2. Inspect the shop press periodically. Repair or replace damaged or worn components. Use only identical replacement parts when servicing.
- 3. Follow instructions for lubricating and changing accessories.
- 4. Only use the accessories intended for this shop press.
- 5. Keep the shop press handles clean, dry and free from oil and grease at all times.

**WARNING!** Only qualified service personnel should repair the shop press. Improperly repaired tools may present a hazard to the user and or others.

#### **BLEEDING THE HYDRAULIC SYSTEM**

Bleed excess air from the hydraulic system as follows:

- 1. To bleed air manually, move the selector valve lever (I) to position 2. Insert the pump handle (#49) into the lower socket, pump the handle (#49) no less than 20 cycles.
- 2. Turn the selector valve lever (I) to position 3 and check if the ram is working properly; If not, repeat above step. To bleed air using the manual high pressure valve, move the selector valve lever (I) to position 2. Insert the pump handle (#49) into the upper socket, pump the handle (#49) no less than 20 cycles. Move the selector valve lever (I) to position 3 and check if the ram is working properly; If not, repeat the above step.

- 3. To bleed using air, connect the air coupler (#P52) of the foot valve to the workshop compressor supply hose. Move the selector valve lever (I) to position 2, then depress the air foot valve (#P54) for no less than two minutes. Move the selector valve lever (I) to position 3, then depress the air foot valve (#P54), keeping the air motor working and check if the ram is working properly; If not, repeat above steps.
- 4. Check the oil level at the filler hole on top of the oil reservoir (#39) and if necessary, top off until the oil level meets the bottom of the filler hole. After adding oil, perform air bleeding.
- 5. Test the ram several times for proper operation before putting it into use. Do not use the ram if it still does not appear to be working properly. Have a qualified technician service or repair the hydraulic system.

#### **CLEANING**

Clean the outside of the press with a dry, clean and soft cloth.

#### **LUBRICATION**

Inspect and lubricate the press when required. Only use a light oil.

Periodically lubricate the hoist wheel shaft assembly and the joints on all moving parts. **DO NOT** allow oil into the heel blocks or frame of the shop press.

#### AIR TOOL LUBRICATION

Only use air tool oil to lubricate the air system. Other lubricants may not be suitable and could damage the tool or cause a malfunction during use. Add a drop or two of air tool oil into the air valve before each use and after every hour of continuous use. Without lubrication, the press will not work properly and parts will wear prematurely.

Avoid adding too much oil as this can cause premature power loss and eventual tool failure. The press will need to be taken apart by a qualified technician and cleaned of excess oil.

In the event that it becomes necessary to store the press for an extended period of time (overnight, weekend, etc.) it should receive generous amount of lubrication at that time. The press should be run for approximately 30 seconds to ensure that oil has been evenly distributed throughout the system.

#### STORAGE

The shop press should be stored in a clean and dry environment.

**NOTICE -** NEVER use a penetrating oil to lubricate the press. Penetrating oil may act as a solvent that will break down the grease and cause the press to seize up.

#### **DISPOSAL**

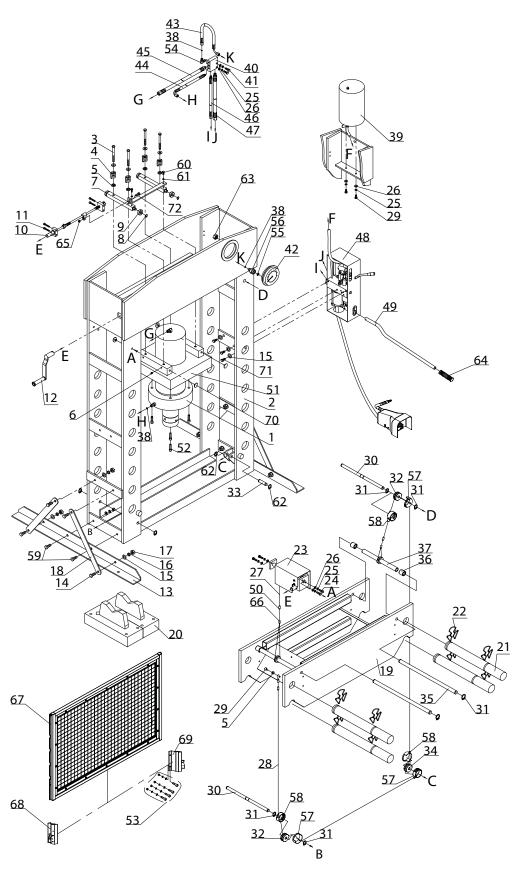
**IMPORTANT!** DO NOT pollute the environment by allowing uncontrolled discharge of waste oil. DO NOT drain hydraulic oil into the sewer system or dispose in an uncontrolled location. Hydraulic fluid may take more than a year to breakdown in the environment and the ingredients may still be toxic. Contact your local municipality for disposal instructions or locations.

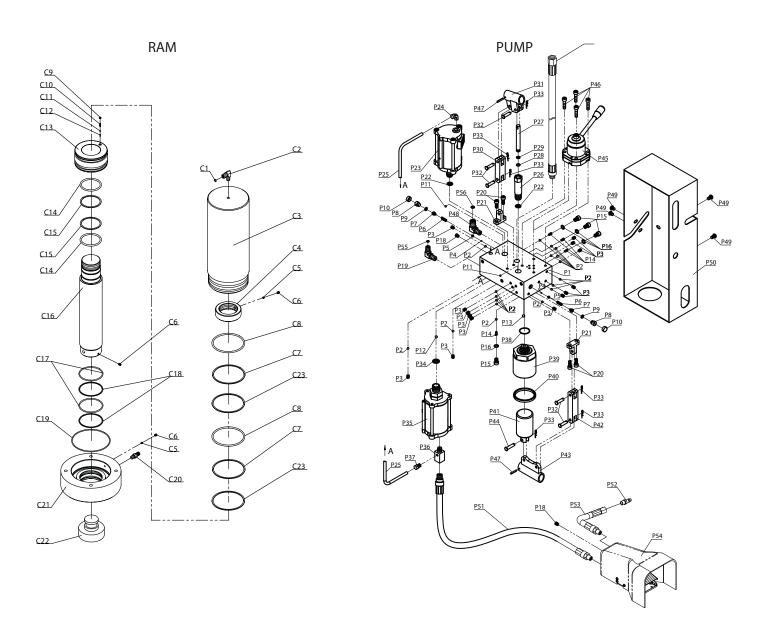
#### **PARTS**

Please refer to the following pages for parts. Please note that all parts are not necessarily replacement items, but are shown for placement.

## **REPLACEMENT PARTS**

Not all components of this product are replacement items, but are illustrated as a convenient reference for position in the assembly sequence. When ordering parts, give model number, part number and description. Call your distributor for current pricing:





ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
39			
55			
R1			
R7			
R8			
R14			
R15			
R17			
R18	ATD7400 OK	0541.145	1
R19	ATD7463-SK	SEAL KIT	1
R23			
P9			
P28			
P29			
P38			
P40			
P55			
P56			
R22	ATD7463-R22	SERRATED SADDLE	1
P54	ATD7463-P54	AIR VALVE	1
P18		_	
P51			
P52	ATD7463-P18-P54 AIR VALVE ASSY		1
P53			
P54			
48	ATD7463-48	PUMP ASSY	1
1	ATD7463-1	RAMASSY	1
67	ATD7463-67	GUARD	1
68	ATD7463-68	GUARD BRACKET, LEFT	1
69	ATD7463-69	GUARD BRACKET, RIGHT	1
23	ATD7463-23	WINCH	1

ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
P45	ATD7463-P45	MANUAL SELECTOR VALVE	1
49	ATD7463-49-64	PUMP HANDI F	1
64	A1D7403-49-04	POWF HANDLE	'
21	ATD7463-21	BED PIN	1
22	ATD7463-22	RETAINING RING	1
P20			
P21			
P30			
P31	ATD7463-P31-P47	UPPER HANDLE SOCKET ASSY	1
P32			
P33			
P47			
P20			
P21			
P32			
P33	ATD7463-P42-P47	LOWER HANDLE SOCKET ASSY	1
P42	A1D1403-F42-F41	LOWER HANDLE SOCKET ASST	'
P43			
P44			
P47			
46	ATD7463-46	OIL HOSE 4	1
47	ATD7463-47	OIL HOSE 5	1
45	ATD7463-45	OIL HOSE 3	1
44	ATD7463-44	OIL HOSE 2	1
43	ATD7463-43	OIL HOSE 1	1
P17	ATD7463-P17	OIL HOSE	1
42	ATD7463-42	PRESSURE GAUGE	
P35	ATD7463-P35	UPPER AIR MOTOR	
P23	ATD7463-P23	LOWER AIR MOTOR	1
20	ATD7463-20	STEEL BLOCK (1PC)	1

## **TROUBLESHOOTING**

Symptom	Possible Causes	Corrective Action
Ram will not press load	Release valve not tightly closed Overload condition Faulty / loose couplers Oil lever in pump is low	Ensure release valve tightly closed Remedy overload condition Replace/ tighten couplers Fill and bleed system
Ram bleeds off after press operation	Release valve not tightly closed Oil lever in pump is low Ram malfunction	Ensure release valve tightly closed Fill and bleed system Contact your distributor
Ram will not retract after unloading	Reservoir overfilled Linkage binding	Drain fluid to proper level Clean and lubricate moving parts
Poor lift performance	Fluid level low Air trapped in system	Ensure proper fluid level With ram fully retracted, remove oil filler plug/screw to let pressurized air escape, then reinstall oil filler plug/screw
Ram will not extend to full extension	• Fluid level low	Ensure proper fluid level

# PREVENTATIVE MAINTENANCE RECORD LOG

DATE	MAINTENANCE PERFORMED



PURCHASED FROM: \_\_\_\_\_

### THIS WARRANTY AND CONFIRMED RECEIPT(S) SHOULD BE <u>RETAINED BY THE CUSTOMER</u> AT ALL TIMES