

# ATD-5812A 10,000 psi. Hydraulic Foot Pump Owner's Manual



#### Features:

- Perfect power source for many body, frame and alignment applications
- · High strength aluminum reservoir is lightweight and corrosion resistant
- Pressure relief valve protects hydraulic components
- Simple foot pedal controls cylinder advance, hold or retract operation
- · Greater oil capacity to handle bigger jobs
- Maximum working pressure: 10,000 psi

#### Specifications:

- Useable Oil Capacity: 98 cu. in.
- Pressure Rating: 10,000 psi
- Air Pressure Rating: 90-145 psi
- Output Flow Rate No Load: 49.5 cu. in./min.
- Output Flow Rate @ Load: 7.6 cu. in./min.
- Air Input Port 1/4"-18 NPTF
- Oil Output Port 3/8"-18 NPTF
- Shipping Weight: 18 lbs.

Save these instructions. For your safety, read and understand the information contained within. The owner and operator should have an understanding of this product and safe operating procedures before attempting to use this product. Instructions and safety information should be conveyed in the operator's native language before use of this product is authorized. Make certain that the operator thoroughly understands the inherent dangers associated with the use and misuse of the product. If any doubt exits as to the safe and proper use of this product as outlined in this factory authorized manual, remove from service until which time it is clear. Inspect before each use. Do not use if broken, bent, cracked or otherwise damaged parts are noted. If the product has been or suspected to have been subjected to a shock load, discontinue use until checked out by an authorized factory service center. Owners and operators of this equipment should be aware that the use and subsequent repair of this equipment may require special training and knowledge. It is recommended that an annual inspection be done by qualified personnel and that any missing or damaged parts, decals, warning / safety labels or signs be replaced with factory authorized replacement parts only. Any product that appears to be damaged in any way, is worn or operated abnormally should be removed from service immediately until such time as repairs can be made.

#### PRODUCT DESCRIPTION

ATD Tools 10,000 psi Heavy-Duty Hydraulic Foot Pump is designed to operate on as little as 7.8 CFM @ 90 psi. This tool allows quick displacement of hydraulic fluid, up to 10,000 psi, to comparable rams, presses, spreaders compactors and crimping machines, anywhere that 10,000 psi of fluid pressure is needed. Foot actuated treadle design delivers a metered, controllable flow to and from the intended application.

Note: Always check connections before using!

#### **SPECIFICATIONS**

Model Number	Usable Oil Capacity	Rated Pressure	Output Flow Rate (in <sup>3</sup> /min)		Input Air Pressure Port Threads	Air Input Port Threads	Weight (lbs.	
	(in <sup>3</sup> )	(psi)	No Load	Load	(psi)	Fort Tilleaus	Tilleads	w/fluid)
ATD-5812A	98 cu. in.	10,000 psi	49.5	7.6	90-145 psi	3/8"-18 NPTF	1/4"-18 NPTF	18 lbs.

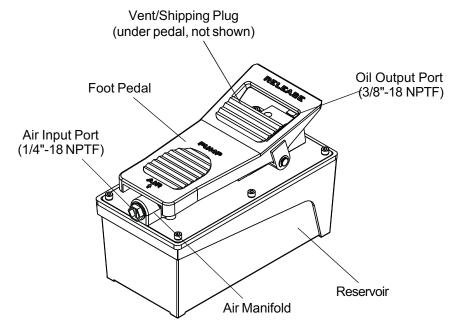


Figure 1- Model ATD-5812A nomenclature

## **AWARNING**

- Read and understand all warnings and instructional material provided on and with this product before use.
- Do not exceed rated capacity.
- Burst hazard exists if hose or connection pressure exceeds rated pressure.
- Never operate pump when it is disconnected from application. This will pressureize the hose and connections and increases the burst harzard.
- Use gauge or other load measuring instrument to verify load.
- Always inspect hoses and connections for damage prior to use.
- Always wear protective clothing and eye protection when operating this equipment.
- Always ensure that the chosen application is stable to work on and around.
- Do not work under a lifted load without adequately rated support devices such as jack stands.
- Do not subject the pump and its components to shock loads.
- Do not connect to application which can return more oil to the reservoir than the pump reservoir can hold.
- Failure to heed this warning may result in personal injury as well as property damage.

#### **BEFORE USE**

- 1. Verify that the product and the application are compatible.
- Before using this product, read the owner's manual completely and familiarize yourself thoroughly with the product, its components and recognize the hazards associated with its use.
- 3. Replace shipping plug (red color) with air vent plug (black color). This will help release any pressurized air which may be trapped within the reservoir. Ensure the oil level is just below the shipping plug hole.
- 4. Always check connections before using. Alteration of this product is strictly prohibited. Use only those adapters and attachments provided and approved by the manufacturer.

**Note:** Secure threaded port connections with nonhardening pipe thread compound. Tighten securely to prevent accidental removal of components while in use. Take care not to introduce compound into port orifices.

#### OPERATION

- Connect to suitable application, then to air source of at least 7.8 CFM @ 90 psi.
- 2. To operate, press on the foot pedal until desired position is reached. Stop further application movement by releasing pressure on treadle.
- 3. To retract application, press the release valve by stepping on the raised, stirrup shaped portion of the foot pedal).

#### **MAINTENANCE**

- Inspect hoses and connections daily. Replace damaged components immediately with factory authorized replacement parts only.
- 2. Tighten connections as needed. Use non-hardening pipe thread compound when servicing connections.
- 3. Use only good quality hydraulic fluid. We recommend Mobil DTE 13M or equivalent.

#### When not in use or during storage

- a. Depressurize and disconnect hydraulic hoses from application.
- b. Wipe clean, thoroughly.
- c. Store in clean, dry environment. Avoid extreme temperatures.
- d. For transportation or long storage, replace air vent plug (black color) with shipping plug (red color).
- e. Shield pump with a protective cover.

#### **Adding Hydraulic Fluid**

- 1. Depressurize and disconnect hydraulic hose from application.
- 2. With pump in its upright, horizontal position, remove the air vent plug located on the top plate of the reservoir.
- 3. Use a small funnel to fill reservoir to within 3/4" (19mm) of the opening.

**Note:** Use only a good quality hydraulic oil. **Never** use brake fluid, transmission fluid, turbine oil, motor oil, alcohol, glycerin etc. Use of other than good quality hydraulic oil will void warranty and damage the pump, hose, and application.

4. Wipe up any spilled fluid and reinstall the air vent plug.

#### **Changing Hydraulic Fluid**

For best performance and longest life, replace the complete fluid supply at least once per year.

- 1. Depressurize and disconnect hydraulic hose from application.
- 2. With pump in its upright, horizontal position, remove the air vent plug located on the top plate of the reservoir.
- 3. Use a small funnel to fill reservoir to within 3/4" (19mm) of the opening.
- 4. Pour used fluid into a sealable container.
- 5. Dispose of fluid in accordance with local regulations.
- 6. Fill with a good quality hydraulic oil as recommended above. Reinstall air vent plug.

#### Lubrication

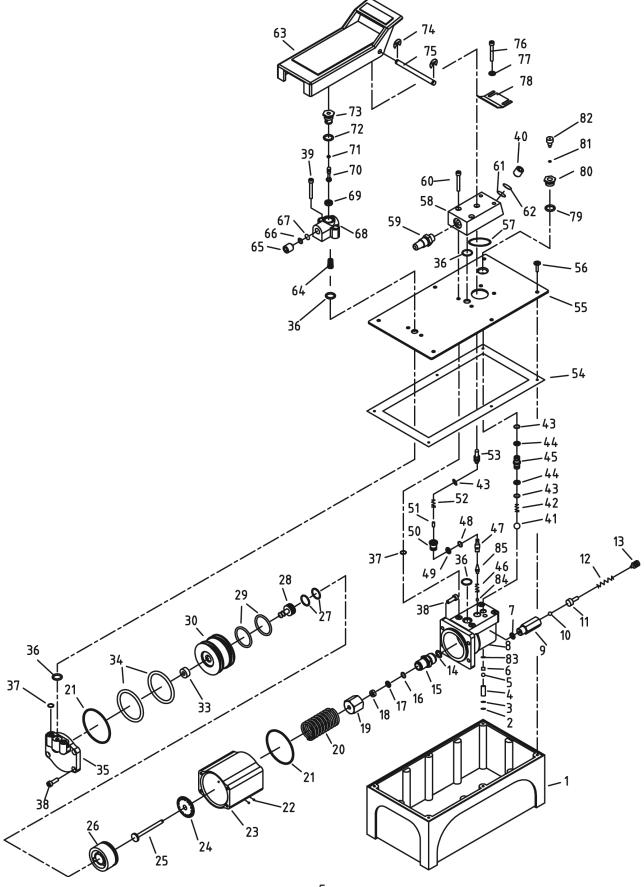
Use a light machine oil to lubricate pivot points, hinges etc.

### **TROUBLESHOOTING**

Symptom	Possible Causes	Corrective Action
Application will not extend, move or respond to pressurized fluid	Overload condition	Remedy overload condition
Application responds to pressurized fluid, but system does not maintain pressure	Overload condition     Hydraulic unit malfunction	Remedy overload condition     Contact Service Center
Application will not return fluid to pump (i.e. cylinder will not retract)	Malfunctioning coupler, damaged application     Reservoir overfilled	Secure load by other means.     Depressurize pump and hose, remove coupler and/or application, then renew or replace     Secure load by other means.     Depressurize pump and hose, remove application, then drain fluid to proper level
Application will not <b>fully</b> extend (cylinder or spreader)	• Fluid level low	Secure load by other means.     Depressurize pump and hose, remove application, then ensure proper fluid level
Poor performance	• Fluid level low	Ensure proper fluid level

### **REPLACEMENT PARTS**

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



ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
1	PRT5812A-01	OIL RESERVOIR	1
2	PRT5812A-02	RETAINER RING	1
3	PRT5812A-03	OIL FILTER	1
4	PRT5812A-04	SUCTION PIPE	1
5	PRT5812A-05	STEEL BALL	1
6	PRT5812A-06	SNAP RING	1
7	PRT5812A-SK	COPPER WASHER	1
8	PRT5812A-08	VALVE BLOCK	1
9	PRT5812A-09	SAFTY VALVE	1
10	PRT5812A-10	STEEL BALL	1
11	PRT5812A-11	BALL VALVE SEAT	1
12	PRT5812A-12	SPRING	1
13	PRT5812A-13	SCREW	1
14	PRT5812A-SK	COPPER WASHER	1
15	PRT5812A-15	AIR PUMP BODY	1
16	PRT5812A-SK	SEAL	1
17	PRT5812A-SK	NYLON GASKET	1
18	PRT5812A-SK	COPPER BUSHING	1
19	PRT5812A-19	BOLT	1
20	PRT5812A-20	SPRING	1
21	PRT5812A-SK	O-RING	2
22	PRT5812A-22	STEEL BALL	4
23	PRT5812A-23	AIR CYLINDER	1
24	PRT5812A-24	WASHER	1
25	PRT5812A-25	AIR PUMP CORE	1
26	PRT5812A-26	PISTON	1
27	PRT5812A-SK	O-RING	2
28	PRT5812A-28	AIR RELEASE VALVE	1
29	PRT5812A-SK	O-RING	2
30	PRT5812A-30	COVER	1
33	PRT5812A-33	AIR PLUG	1
34	PRT5812A-SK	O-RING	2
35	PRT5812A-35	COVER	1
36	PRT5812A-SK	O-RING	4
37	PRT5812A-SK	O-RING	6
38	PRT5812A-38	BOLT	8
39	PRT5812A-39	BOLT	2
40	PRT5812A-40	NPT 3/8" COUPLER	1
41	PRT5812A-41	STEEL BALL	1
42	PRT5812A-42	SPRING	1
43	PRT5812A-SK	O-RING	3
44	PRT5812A-SK	NYLON GASKET	2

ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
45	PRT5812A-45	ADAPTER	1
46	PRT5812A-46	SPRING	1
47	PRT5812A-47	VALVE CORE	1
48	PRT5812A-SK	O-RING	1
49	PRT5812A-SK	NYLON GASKET	1
50	PRT5812A-50	VALVE SEAT	1
51	PRT5812A-51	THIMBLE	1
52	PRT5812A-52	SPRING	1
53	PRT5812A-53	OIL RELEASE VALVE	1
54	PRT5812A-54	SEAL	1
55	PRT5812A-55	PANEL	1
56	PRT5812A-56	BOLT	6
57	PRT5812A-57	O-RING	1
58	PRT5812A-58	BOLT	1
59	PRT5812A-59	MUFFIER	1
60	PRT5812A-60	BOLT	2
61	PRT5812A-61	FILTER	1
62	PRT5812A-62	SNAP RING	1
63	PRT5812A-63-75	PEDAL	1
64	PRT5812A-64	SPRING	1
65	PRT5812A-65	NPT 1/4" CAP	1
66	PRT5812A-66	SNAP RING	1
67	PRT5812A-67	FILTER	1
68	PRT5812A-68	AIR VALVE BLOCK	1
69	PRT5812A-69	SEAL	1
70	PRT5812A-70	AIR VALVE CORE	1
71	PRT5812A-SK	O-RING	1
72	PRT5812A-SK	O-RING	1
73	PRT5812A-73	AIR VALVE SET	1
74	PRT5812A-63-75	SNAP RING	2
75	PRT5812A-63-75	AXIS	1
76	PRT5812A-76	BOLT	2
77	PRT5812A-77	WASHER	2
78	PRT5812A-78	LOCK PLATE	1
79	PRT5812A-79	SEAL	1
80	PRT5812A-80	AIR PLUG	1
81	PRT5812A-SK	O-RING	1
82	PRT5812A-82	SCREW	1
83	PRT5812A-SK	COPPER WASHER	1
84	PRT5812A-84	BOLT	1
85	PRT5812A-85	CONE VALVE	1

<sup>\*</sup>Seal Kit Includes: 7, 14, 16, 17, 18, 21, 27, 29, 34, 36, 37, 43, 44, 48, 49, 71, 72, 81 & 83