

Owners Manual

Product Code: 2054T

**MADE FOR THE
TRADE**

TQ TRADEQUIP
the trusted brand in equipment

**AIR
HYDRAULIC PUMP**



Specifications

- Maximum output pressure: 10,000psi
- Usable Hydraulic Fluid Capacity: 2.25 Litres
- Operating air pressure: 90-145 psi
- Air consumption: 7.5CFM @ 100 psi
- Oil Delivery with No Load: 49.5 cu.in/min
- Oil Delivery with Load: 7.6 cu.in/min
- Input (Air) port thread: 1/4" -18 NPT
- Output (Oil) port thread: 3/8" -18 NPT
- Weight: 8kg
- Carton: 300 x 170 x 205mm

About the TradeQuip brand

The 'TradeQuip' brand of workshop equipment, is designed for use in a demanding workshop environment by professional users. With proven and trusted "Made for the Trade" reliability, 'TradeQuip' branded products offer the very best in performance for an affordable price. All backed by a 1year trade guarantee across 1,000+ distributors Australia wide.

TQ TRADEQUIP
the trusted brand in equipment

TQ PRO
Trusted by serious professionals

BORUM
INDUSTRIAL WORKSHOP EQUIPMENT

WARNING INFORMATION

IMPORTANT: READ ALL INSTRUCTIONS BEFORE USE



WARNING

The instructions and warnings contained in this manual should be read and understood before using or operating this Air/Hydraulic Pump. Do not allow anyone to use or operate this Air/Hydraulic Pump until they have read this manual and have developed a thorough understanding of how this Air/Hydraulic Pump works. Failure to observe any of the instructions contained in the manual could result in severe personal injury to the user or bystanders, or cause damage to the equipment and property. Keep this manual in a convenient and safe place for future reference.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the TradeQuip policy of continuous improvement determines the right to make modifications without prior warning.

CONTENT

WARNING INFORMATION 2

CONTENT 2

STANDARD OPERATING PROCEDURE 3

ASSEMBLY, OPERATION & PREVENTATIVE MAINTENANCE 4

TROUBLESHOOTING 6

PARTS LIST 7

PARTS DIAGRAM 8

WARRANTY 9

STANDARD OPERATING PROCEDURE

DO NOT use this machine unless you have been trained and assessed to a competent level in its safe use and operation, and have been given permission to use this



Safety glasses must be worn when operating this equipment



Long loose hair must be contained when operating this equipment



Safety footwear must be worn when operating this equipment



Close fitting/protective clothing must be worn when operating this equipment



Rings and jewellery must not be worn when operating this equipment

PRE-OPERATIONAL SAFETY CHECKS

- Read, study and understand all warnings and operating instructions prior to use.
- The hydraulic equipment operator must be a qualified operator with correct training and work experience with hydraulic equipment. Lack of knowledge in any of these areas can lead to equipment damage or personal injury.
- To avoid personal injury, please do not modify or weld hydraulic equipment without approval of TQB Brands Pty Ltd.
- Never lift a more than the rated capacity of the cylinder, overloading causes equipment failure and serious personal injury.
- The cylinder is a load lifting device, not a load holding device. After the load has been raised or lowered, it must always be held mechanically, never work under a load supported by a hydraulic unit.
- Keep hands and feet away from cylinder and workplace during operation to avoid personal injury.
- Do not put unbalanced or off-centre loads on cylinders. The incorrect load can result in equipment failure and serious personal injury.
- Wear safety glasses, helmet and other necessary personal protective equipment when operating hydraulic equipment.
- Cylinder used to lift load must have solid footing for correct support. Please select steel or wood blocks that are capable of supporting the load.
- Install pressure gauges in the system to monitor the operating pressure. The gauge must have the same pressure rating as the pump and cylinder. The wrong gauges may result in personal injury.
- The system operating pressure must lower than the lowest rated pressure in the system.
- Carefully inspect the cylinder and couplers before use cylinder. Never connect a cylinder with damaged couplers or damaged port threads. The damaged coupler or damaged port threads may cause equipment failure and possible personal injury.
- Install coupler in a clean environment; prevent dirt or other debris from entering into cylinder body or tube. Dirt or other debris will damage the cylinder and result in equipment failure and possible personal injury.
- Before removing or tightening hose or coupler, release hydraulic pressure in system.
- Never handle pressurized hoses; escaping oil under high pressure can penetrate the skin, causing serious injury. Seek medical aid immediately if injured.
- Use Pennzoil or other approved hydraulic oil only.

INTENDED USE

For medium duty applications when compressed air is used in conjunction with a good quality manual hydraulic pump.

ASSEMBLY, OPERATION & PREVENTATIVE MAINTENANCE

1. FEATURES

This "TradeQuip Made for the Trade" hand or foot Air Hydraulic Pump is designed to operate pneumatically. It is an ideal power source for various body, frame and alignment applications and can be used with different ram kits, workshop presses and hydraulic pullers (not included) that operate with a hydraulic oil pressure requirement of up to 10,000 psi. This heavy-duty Air Hydraulic Pump connects via a 1/4" NPT air nipple and a 3/8" NPT hydraulic adaptor.

- Made of Durable Light-weight Corrosion-free Aluminium
- Built-in Overload System prevents pump from being used beyond its safety capacity, Hand of Foot Activation Lever
- Filter prevents contaminants from entering hydraulic system

2. BEFORE USE

Prior to each use conduct a visual inspection checking for abnormal conditions, such as cracked welds, leaks, and damaged, loose, or missing parts.

To prevent oil leaks during shipment, a metal knob is installed and tightened to ensure a good seal. ***Before Use*** loosen the metal knob by turning it 2 turns counter-clockwise.

Familiarise yourself with the specifications and illustrations in this owner's manual. Know your pump, its limitations and how it operates before attempting to use. Refer to Specification chart above for details of oil port thread size, usable oil capacity, and other information.

Note: Always secure threaded port connections with non-hardening pipe thread compound. Tighten securely to prevent accidental removal of components while in use. Take care not to introduce thread compound into port openings.



3. OPERATION

- Keep the Air Hydraulic Pump clean at all time.
- When the Air Hydraulic Pump is not in use, release the valve, remove hose and use rubber cap to recover the port.
- Do not drop objects on hose.
- Do not lift or carry hydraulic equipment by the hoses or couplers, use the handle or other means.
- Use hydraulic equipment in normal operating temperatures. Do not use equipment in temperatures of 65 °C (150°F) or higher. Overheating will soften seals and weakens hose material, resulting in oil leaking or other equipment failure.

3.1. Operation of Pump

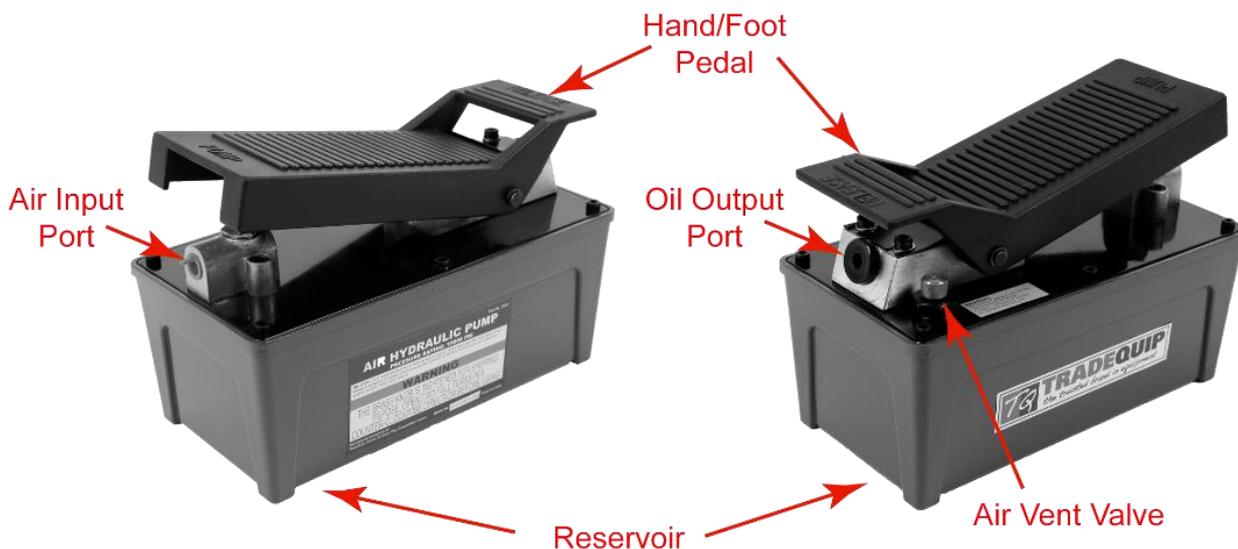
- Connect the hose of the Air Hydraulic Pump to the hydraulic coupling on the selected tool.
- Connect the air supply line to the Air Hydraulic Pump. Air supply should be 5-10 CFM at 100 PSI to obtain proper operating characteristic. The air line should be equipped with an air- line filter.
- To advance, hold or retract

3.2. Foot Pedal Pump

- Depress the “Pump” end of pedal will pump hydraulic oil to the system.
- Stop depressing the “Pump” or “Release” end will stop and hold the pressure.
- Depress the “Release” end of pedal will release the pressure in the system.

3.3. Remote control Pump

- Press the “pump” button on the pendant will pump hydraulic oil to the system.
- Stop pressing the “Pump” or “Release” button will stop and hold the pressure.
- Press the “Release” button on the pendant will release the pressure in the system.



4. INSPECTION

- Prior to each use conduct a visual inspection checking for abnormal conditions, such as cracked welds, leaks, and damaged, loose, or missing parts.
- The Air Hydraulic Pump shall be maintained in accordance with the product instructions. No alterations shall be made to this Air/Hydraulic Pump.
- Inspections shall be performed in accordance with this manual.
- The product shall be inspected immediately if it is believed to have been subjected to abnormal load or shock.
- Owners and /or operators should be aware that repair of this product may require specialised equipment and knowledge (refer to maintenance section).

5. STORAGE

This Air Hydraulic Pump should always be stored in clean dry location on a level surface, avoid temperature extremes.

- When the Air Hydraulic Pump is not in use, release the valve, remove hose and use rubber cap to recover the port.
- Depressurize and disconnect hydraulic hoses from application.
- Clean the pump and hose and couplers before storage

6. MAINTENANCE

Monthly maintenance is recommended. Lubrication is critical to Air Hydraulic Pump. The following steps are designed to keep the Air Hydraulic Pump maintained and operational.

6.1. Inspect the connections

Inspect hoses and connections, tighten connections as needed. Use non-hardening pipe thread compound when servicing connections.

6.2. Adding Hydraulic Fluid

- Depressurise and disconnect hydraulic hose from application.
- With pump in its upright, horizontal position, remove the oil filler plug located on the top plate of the reservoir.
- Use a small funnel to fill reservoir to within 3/4" (19mm) of the opening.
- Wipe up any spilled fluid and reinstall the oil filler plug.

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

6.3. Changing Hydraulic Fluid

- For best results, change fluid once a year.
- Repeat step 5.2 above, and then pour used fluid into a sealable container.
- Dispose of fluid in accordance with local regulations.
- Fill with good quality hydraulic oil as recommended above. Reinstall vented oil filler plug.

6.4. Lubrication

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

7. SERVICE & REPAIR

Any Air Hydraulic Pump found damaged in any way, or found to be worn or operates abnormally should be removed from service until repaired by an authorised service agent. Owners and / or operators should be aware that repair of this product may require specialised equipment and knowledge. Only authorised parts, labels, decals shall be used on this equipment. Annual inspection of the Air/Hydraulic Pump is recommended and can be made by an authorised repair facility to ensure that your equipment is in optimum condition and that the equipment has the correct decals and safety labels specified by the manufacturer.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	ACTION
Application will not extend, move or respond to pressurized fluid	<ul style="list-style-type: none"> • Overload condition • Release valve not closed 	<ul style="list-style-type: none"> • Remedy overload condition • Ensure release valve is closed
Application responds to pressurized fluid, but system does not maintain pressure	<ul style="list-style-type: none"> • Overload condition • Release valve not closed • Hydraulic unit malfunction 	<ul style="list-style-type: none"> • Remedy overload condition • Ensure release valve is closed
Application will not return fluid to pump (i.e. cylinder will not retract)	<ul style="list-style-type: none"> • Malfunctioning coupler • Reservoir overfilled 	Secure load by other means: <ul style="list-style-type: none"> • Open release valve, depressurize pump & hose, remove coupler and/or application, then renew or replace Secure load by other means: <ul style="list-style-type: none"> • Open release valve, depressurize pump & hose, remove coupler and/or application, then drain fluid to correct level
Application will not fully extend (cylinder or spreader)	<ul style="list-style-type: none"> • Fluid level low 	<ul style="list-style-type: none"> • Follow 'Problem 3' procedure for securing load, depressurising pump, remove application, then ensure correct fluid level
Poor performance	<ul style="list-style-type: none"> • Air trapped in system 	<ul style="list-style-type: none"> • Ensure correct fluid level • Ensure vented oil filler plug lets pressurised reservoir air escape (refer Before Use)

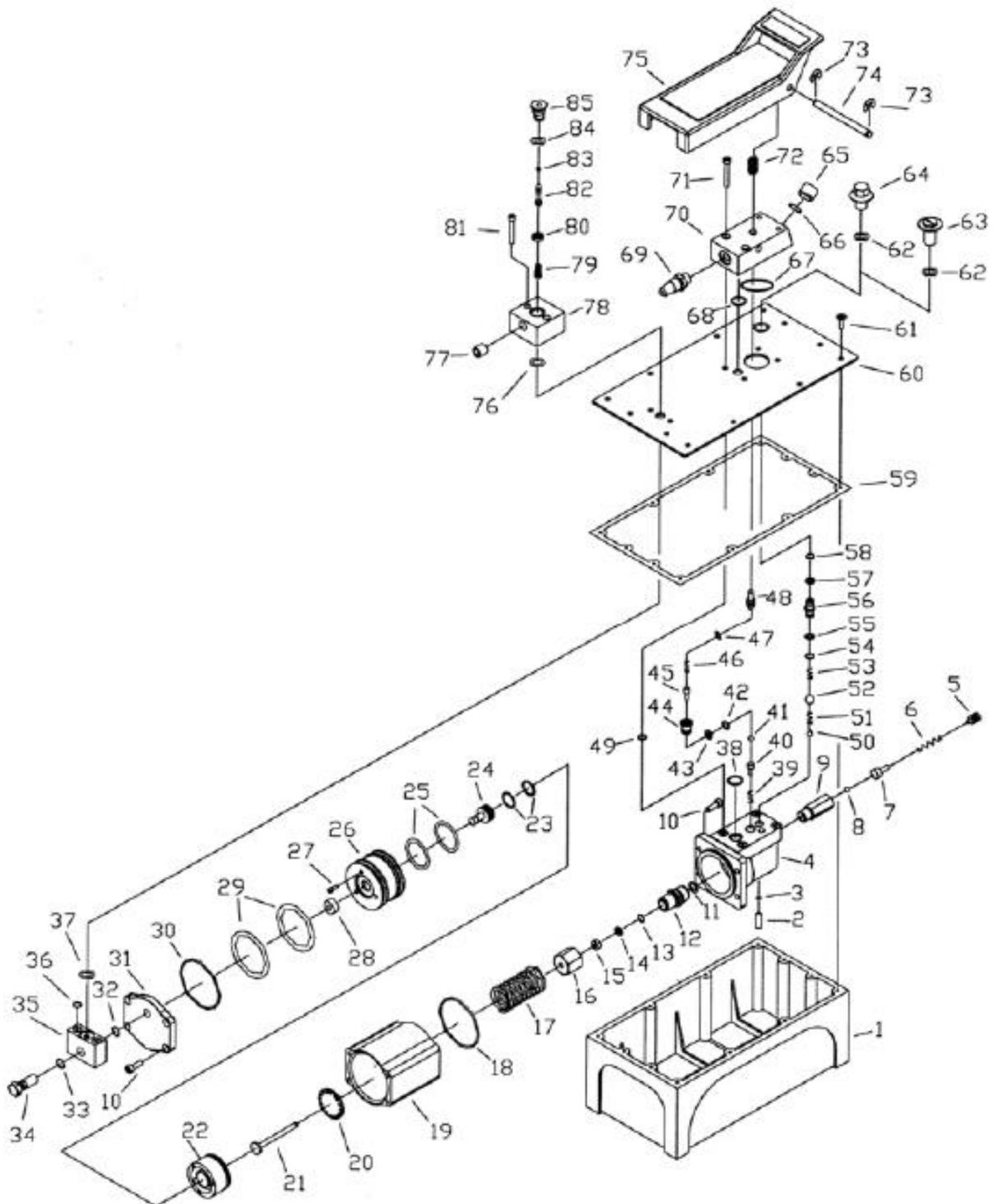
PARTS LIST

Part	Description	Qty
1	Oil reservoir	1
2	Oil filter	1
3	Oil filter	1
4	Valve block	1
5	Screw	1
6	Spring	1
7	Ball seat	1
8	Steel ball	1
9	Safety valve	1
10	Bolt	8
11	Copper washer	1
12	Pump cylinder	1
13	Y-seal	1
14	Nylon gasket	1
15	Copper washer	1
16	Nut	1
17	Spring	1
18	O-ring	1
19	Air pump housing	1
20	Washer	1
21	Pump plunger	1
22	Air piston base	1
23	O-ring	21
24	Air shuttle valve	2
25	O-ring	1
26	Piston	3
27	Bolt	1
27	Shuttle valve seal	2
29	O-ring	1

Part	Description	Qty
30	O-ring	1
31	Rear cover	1
32	O-ring	1
33	O-ring	1
34	Bolt	1
35	Fixing base	1
36	O-ring	2
37	O-ring	1
38	O-ring	1
39	Spring	1
40	Ball seat	1
41	Steel ball	1
42	O-ring	1
43	Nylon gasket	1
44	Release valve	1
45	Ball seat	1
46	Spring	1
47	O-ring	1
48	Release rod	1
49	O-ring	4
50	Steel ball	1
51	Spring	1
52	Steel ball	1
53	Spring	1
54	O-ring	1
55	Nylon gasket	1
56	Coupler	1
57	Nylon gasket	1
58	O-ring	1

Part	Description	Qty
59	Seal	1
60	Cover	1
61	Screw	12
62	O-ring	2
63	Oil filler plug	1
64	Oil filler plug	1
65	Screw	1
66	Oil filter	1
67	O-ring	1
68	O-ring	1
69	Exhaust muffler	1
70	Fixing base	1
71	Bolt	4
72	Spring	1
73	Snap ring	2
74	Shaft	1
75	Foot pedal	1
76	O-ring	1
77	Screw	1
78	Air valve	1
79	Spring	1
80	Seal	1
81	Bolt	2
82	Air valve rod	1
83	O-ring	1
84	O-ring	1
85	Switch coupler	1
81	Bolt	2
82	Air valve rod	1
83	O-ring	1

PARTS DIAGRAM



WARRANTY

TradeQuip products have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

Should this piece of equipment develop any fault, please return the complete tool to your nearest authorised warranty repair agent or contact TQB Brands Pty Ltd Warranty team – warranty@tqbbrands.com.au.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised TQB Brands Pty Ltd repair agent.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your TQB Brands Pty Ltd guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

Consumer Guarantee

Our goods come with a guarantee that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.



All images and illustrations shown are for reference purposes only. All information, specifications and illustrations in this manual are based on the latest information available at the time of publication and are subject to change without notice. The information in this manual is periodically revised to ensure the latest information is included. Download the latest version of this manual and other related technical documentation from www.tqbbrands.com.au