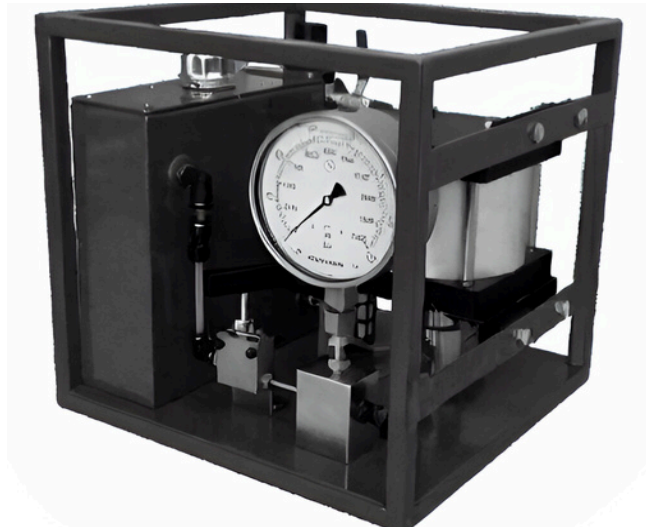


OPERATION AND MAINTENANCE MANUAL

Read the instructions, warnings, and cautions thoroughly before using the tools and keep it well for future referring.



TheGAW
industries

ORDERING INFORMATION

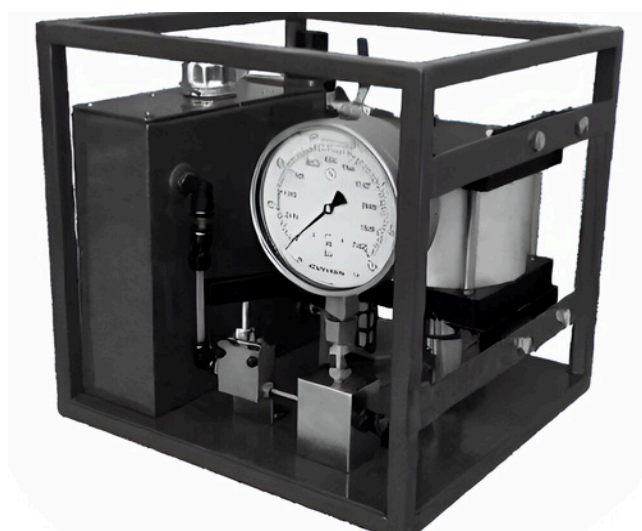
To know more about our Bolting units or to request a quote, please contact us at

Email: cbhe@thegawindustries.com

Phone: +971588156388

Website: www.thegawindustries.com

OPERATION AND MAINTENANCE MANUAL FOR AIR DRIVEN PUMP MODEL ATEP WITH CONVENTIONAL HYDRAULIC BOLT TENSIONING



It is an operating manual for the ATEP-20P Tensioning Pump, please read carefully, follow instructions, warnings, and cautions before using the tools.

SAFETY GUIDE

Air Driven Tensioner Pump's safe usage requires correct operation and regular inspect, the user is always requested to follow always and carefully regular inspect.

▲precaution to avoid direct loss in economy or property.

▲warning to avoid personal injury.

Please follow herein before!

When using, if something abnormal happens, please shut off the power immediately, and then consult TheGAW.

This is a reference document and shall not be distributed to any persons without the Management approval.

IMPORTANT NOTICE

TheGAW has made every effort to ensure that the information given in this manual is correct and understandable. However it is acknowledged that there may be errors or omissions in this publication.

The Company reserve the right to modify its products without notification and consequently to supply machines that may not be in accordance with the descriptions and procedures in this publication.



HEALTH & SAFETY AT WORK

To advise our customers on the safety and handling precautions to be observed when installing, operating, maintaining and servicing their products. Accordingly, the following points should be noted:

- 1.The relevant sections of these instructions should be carefully read before proceeding.
- 2.Installation, maintenance and servicing should only be carried out by suitably trained and competent personnel.
- 3.Normal safety procedures must be taken into account the possibility of an accident occurring.
- 4.Any safety equipment necessary for maintenance is responsibility of the customer.

1)PURPOSE

The objective of this procedure is to lay down the instruction for operating the Air Driven Pump for Conventional Hydraulic Bolt Tensioning System which is designed for installing and removing threaded fasteners requiring precise high torque during bolt makeup and maximum torque during bolt breakout at ambient condition.

2)SCOPE

This is applicable to TheGAW Hydraulic Bolt Tensioners Series

3)GENERAL SAFETY

3.1 Use only the approved tools provided for the operation as list in the permitted equipment list.

3.2 Carry out all operations according to these operating work instructions.

3.3 Prior to connecting the hydraulic pump to any bolt tensioning equipment, the user is to ensure that:

The working pressure of the hydraulic pump and the equipment to be operated are compatible.

The reservoir pump capacity is adequate to operate the equipment throughout its range.

The hydraulic oil specification used within the pump and the equipment are compatible.

The technical specifications of the tensioning tools are known. Ensure sufficient stud protrudes above the hexagon or round joint nut.

4)PERMITTED EQUIPMENT

4.1 TheGAW Bolt Tensioner.

4.2 Hydraulic Feed Hoses and interconnecting hoses.

4.3 Hydraulic Pump Unit

5) SAFETY EQUIPMENT

Approved Personal Protective Gear and equipment.

6) RESPONSIBILITIES

The Operations Manager, Workshop Supervisor and QA shall ensure that the instrument, gauges and test equipment in use are calibrated and in good operating condition.

7) AIR DRIVEN PUMP UNIT

7.1 TheGAW Air Driven Pump Units operate on the simple but efficient principle of power magnification through the use of differential areas. A relatively large air operated piston drives the smaller piston which provides fluid flow at high pressure.

7.2 All TheGAW air driven pump units are fitted into an easily transportable steel frame.

7.3 The pump units are available, fitted with a large choice of pressure gauges and are supplied complete with an air pressure regulator which can be set to stall the pump unit when it reaches the pressure required for each particular Tensioning application.

7.4 TheGAW supply many different air driven pump units, of varying pressure and fluid discharge specifications.

7.5 SAFETY NOTE - It is strongly recommended that the pump is regulated in order to stall at the required Tensioning pressure.

7.6 Before connecting an air supply, it is important to check the following :

- The pressure release valve is fully opened.
- The On / Off valve is off.
- The oil reservoir has sufficient oil. (Grade ISO 46)
- The air lubricator has adequate oil. (Grade SAE 15)

11.4 Pressure setting

Step 1

TheGAW supply all pump units with the air pressure regulator set to stall the pump at its maximum working pressure.

Connect hydraulic outlet male connector with a plugged female connector.

Connect the main air supply to the pump unit. Slowly open the **On / Off valve**, the valve will begin to operate, no pressure can be generated because the pressure release valve is open, the oil simply circulated through the system back to tank.

Step 2

Before adjusting the pressure on the necessary for the 'snap action lock' to be in the up position.

By turning the adjustment knob on the regulator, reduce the air pressure to zero psi, the pump will slow down considerably and may even stop.

Step 3

Fully close the **pressure release valve**, as this is done a slight pressure will be generated on the pressure gauge and the pump will finally stall.

Step 4

Slowly increase the air supply pressure by turning the adjustment knob, the oil pressure gauge will indicate a higher pressure as more and more air is

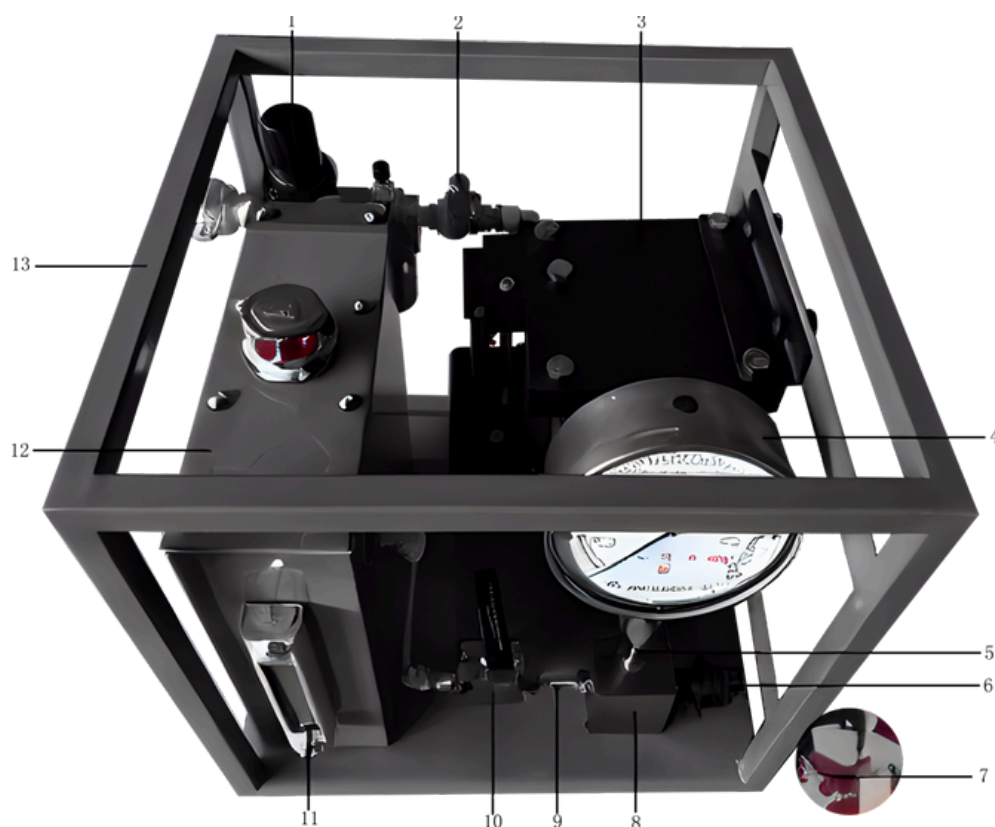
allowed into the pump unit. Stop the air adjustment when the oil pressure gauge indicates the desired tensioning pressure.

Step 5

Stop the pump by turning off the On/Off valve (to vertical position) and release the pressure by slowly opening the pressure release valve, the pump gauge will fall to zero. Lock the air regulator by pushing down on to the 'snap action lock'.

The pump unit is now ready for the tensioning operation.

ATEP AIR TENSIONING PUMP PART LIST



Item No.	Description	Qty
1	Air filter regulator	1
2	On/Off valve	1
3	Air pump	1
4	Pressure gauge	1
6	Quick coupler	2
5、 7、 9	Connector tube	3
8	Pressure gauge block	1
10	Pressure releasing valve	1
11	Oil Level Indicator	1
12	Oil tank	1
13	Frame	1

NOTES:

All TheGAW products are guaranteed against defects in workmanship and materials for as long as you own them. Under this guarantee, free repair or replacement will be made to your satisfaction.

RECYCLED PAPER 