INSTRUCTION MANUAL – AIR DRIVEN HYDROTEST PUMPS:
Model Series: AHP10, AHP26, AHP36, AHP58, AHP107, AHP187, AHP275, AHP425, AHP2-036, AHP2-060, AHP2-097, AHP2-144, AHP2-237

1.0 Inspection of the product upon receipt:

On receipt of the product, visually inspect the item for any evidence of shipping damage. Please note shipping damage is not covered by warranty. If shipping damage is found notify the carrier immediately and refrain from putting the product into service. The carrier is responsible for repair and replacement costs resulting from damage in transit shipment.

2.0 Safety Precautions:

Read and follow all the instructions and safety warnings carefully prior to use of the equipment. Failure to do so could result in equipment damage or failure of the equipment or personal injury. Hi-Force will not be held responsible for any damage to the equipment or personal injury resulting from unsafe use of the product, lack of maintenance or incorrect operation. If in doubt on the correct usage of any Hi-Force equipment, contact your nearest Hi-Force office or distributor. If the operator has not been trained on high pressure hydraulic equipment and its safe use consult your local Hi-Force sales office who can offer you training courses for operators.

All operators should ensure that all necessary personal protective equipment as specified by their employer is worn when operating any hydraulic equipment. Safety shoes, safety glasses/ visor and protective gloves should be worn at all times. All relevant risk assessments should be completed prior to use of the equipment.

Warning: All ancillary equipment to be used with these ranges of Hydrotest pumps **MUST** be rated for use at the same operating pressure as the pump model to be used:

Sufficient time should be allocated to planning your hydraulic system. Make sure that all the components are fit for the intended use

DO NOT exceed the rated pressure of the pump or the rated capacity of the system to be used.

AHP SERIES – Hydrotest Pumps:

1.0 General Description:
The Hi-Force AHP range of Hydrotest pumps are supplied from a range of 8 models with output pressures ranging from 6 bar(87psi) to 2931bar (42,500psi) and are suitable for use with various fluids including water.



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2.0 Before operating your Hi-Force Hydraulic Power Pack please ensure that the following instructions are carried out.

1. Check that there is sufficient fluid in the reservoir. If not, top up with mains water or suitable hydraulic oil.
2. Check that the "Pressure Let-Down Valve" is in the open position (Turn anticlockwise).
3. Close off the "Air Stop Valve". (Turn anti-clockwise).
4. Turn the "Air pressure Regulator" anticlockwise until the handle becomes free and easy.
5. Connect a suitable air supply to the "Air Supply connection" (3/8" BSP Female). Please note that the maximum air pressure supplied to the Power Pack should never exceed 100 PSI.
6. Connect a suitable hydraulic hose (rigid piping with screwed and coned connections in case of very high pressure Power Packs) to the outlet connection. Please note that the hydraulic hose or piping together with adapters and couplings should have a rated working pressure equal to the maximum output pressure of the Power Pack.

Hoses are available from Hi-Force Ltd or your HiForce Distributor suitable for working pressures up to 30,000 PSI. Above this pressure, stainless steel piping together with high-pressure fittings should be used. These are also available from Hi-Force.

INSTRUCTION MANUAL – AIR DRIVEN HYDROTEST PUMPS:
Model Series: AHP10, AHP26, AHP36, AHP58, AHP107, AHP187, AHP275, AHP425, AHP2-036, AHP2-060, AHP2-097, AHP2-144, AHP2-237

Once the above instructions have been completed the Power Pack is ready for use and the following operating procedure can be followed:

1. Open the Air Stop Valve (2) (turn clockwise) **SEE FIGURE 1.**
2. Turn the Air Pressure Regulator (1) slowly clockwise until the pump begins to reciprocate. The pump should start on 10 to 15 PSI of air under normal conditions.
3. Turn the Air Pressure Regulator (1) clockwise further until 25 to 30 PSI is reached on the Air Pressure Gauge (4), and then allow the pump to run until all air has been purged from the circuit. Please note that when pressure testing large vessels and pipes, care should be taken to bleed off any air within the object being tested.
4. Turn the Air Pressure Regulator (1) anticlockwise until zero pressure is reached on the Air Pressure Gauge (4).
5. Close the Pressure Let-Down Valve (3) (Turn clockwise).
6. Close any further "Air Vent" valves, external to the Power Pack once all air has been purged from the total system.
7. Turn the Air Pressure Regulator (1) slowly clockwise until the desired hydraulic pressure is reached on the High Pressure Gauge (5)

Note

If the object being tested is large it will take a while before the pressure builds up in the system and registers on the high pressure gauge. Care should be taken not to set the air driving pressure too high whilst being unattended as this may lead to the object under test being over pressurised.
The air drive pressure can be pre-set if desired by closing off the air stop valve prior to use and winding the air pressure regulating valve clockwise until the required air pressure is registered on the air pressure gauge.

The air pressure should ideally be set slightly below that desired so that it can be raised to the correct amount once the output pressure has built up and the pump has stalled out. The pump can then be started and stopped by using the air stop valve only if preferred.

Once set the pump will maintain the set pressure indefinitely and make up any fluid losses within the hydraulic system automatically.

To let down pressure

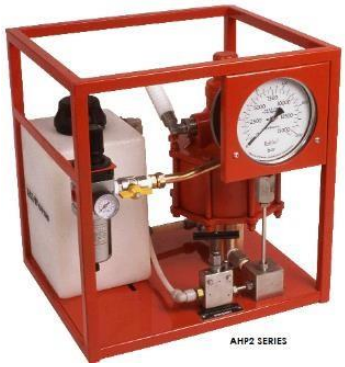
1. Close off the Air Stop Valve (2) (Turn anti-clockwise).
2. Turn the Air Pressure Regulator (1) anticlockwise until the Air Pressure Gauge (4) is reading zero pressure.
3. Open slowly the Pressure Let-Down Valve (3) (Turn anti-clockwise) until the high-pressure gauge reads zero.
4. Disconnect the hydraulic hose from the high-pressure outlet connection.
5. Disconnect the air supply from the "Air Supply Connection".

Figure 1



AHP2 SERIES – Hydrotest Pumps:

1.0 General Description: The Hi-Force AHP2 range of Hydrotest pumps are supplied from a range of 5 models with output pressures ranging from 17 bar(246psi) to 1634bar (23700psi) and are suitable for use with various fluids including water.



2.0 Before operating your Hi-Force Hydraulic Power Pack please ensure that the following instructions are carried out.

INSTRUCTION MANUAL – AIR DRIVEN HYDROTEST PUMPS:
Model Series: AHP10, AHP26, AHP36, AHP58, AHP107, AHP187, AHP275, AHP425, AHP2-036, AHP2-060, AHP2-097, AHP2-144, AHP2-237

1. Check that there is sufficient fluid in the reservoir. If not, top up with mains water or suitable hydraulic oil.
2. Check that the "Pressure Let-Down Valve" is in the open position (Turn anticlockwise).
3. Close off the "Air Stop Valve". (Turn anti-clockwise).
4. Turn the "Air pressure Regulator" anticlockwise until the handle becomes free and easy.
5. Connect a suitable air supply to the "Air Supply connection" (3/8" BSP Female). Please note that the maximum air pressure supplied to the Power Pack should never exceed 100 PSI.
6. Connect a suitable hydraulic hose (rigid piping with screwed and coned connections in case of very high pressure Power Packs) to the outlet connection. Please note that the hydraulic hose or piping together with adapters and couplings should have a rated working pressure equal to the maximum output pressure of the Power Pack.

Hoses are available from Hi-Force Ltd or your HiForce Distributor suitable for working pressures up to 30,000 PSI. Above this pressure, stainless steel piping together with high-pressure fittings should be used. These are also available from Hi-Force.

Once the above instructions have been completed the Power Pack is ready for use and the following operating procedure can be followed:-

1. Open the Air Stop Valve (2) (turn clockwise) **SEE FIGURE 1.**
2. Turn the Air Pressure Regulator (1) slowly clockwise until the pump begins to reciprocate. The pump should start on 10 to 15 PSI of air under normal conditions.
3. Turn the Air Pressure Regulator (1) clockwise further until 25 to 30 PSI is reached on the Air Pressure Gauge (4), and then allow the pump to run until all air has been purged from the circuit. Please note that when pressure testing large vessels and pipes, care should be taken to bleed off any air within the object being tested.
4. Turn the Air Pressure Regulator (1) anticlockwise until zero pressure is reached on the Air Pressure Gauge (4).
5. Close the Pressure Let-Down Valve (3) (Turn clockwise).
6. Close any further "Air Vent" valves, external to the Power Pack once all air has been purged from the total system.
7. Turn the Air Pressure Regulator (1) slowly clockwise until the desired hydraulic pressure is reached on the High Pressure Gauge (5)

Note

If the object being tested is large it will take a while before the pressure builds up in the system and registers on the high pressure gauge. Care should be taken not to set the air driving pressure too high whilst being unattended as this may lead to the object under test being over pressurised.
The air drive pressure can be pre-set if desired by closing off the air stop valve prior to use and winding the air pressure regulating valve clockwise until the required air pressure is registered on the air pressure gauge.

The air pressure should ideally be set slightly below that desired so that it can be raised to the correct amount once the output pressure has built up and the pump has stalled out. The pump can then be started and stopped by using the air stop valve only if preferred.

Once set the pump will maintain the set pressure indefinitely and make up any fluid losses within the hydraulic system automatically.

To let down pressure

1. Close off the Air Stop Valve (2) (Turn anti-clockwise).
2. Turn the Air Pressure Regulator (1) anticlockwise until the Air Pressure Gauge (4) is reading zero pressure.
3. Open slowly the Pressure Let-Down Valve (3) (Turn anti-clockwise) until the high-pressure gauge reads zero.
4. Disconnect the hydraulic hose from the high-pressure outlet connection.
5. Disconnect the air supply from the "Air Supply Connection".

Figure 1



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