

# Hill Air Compressor Pump Assembly and User Manual 4128-005 and 4128-555 Models



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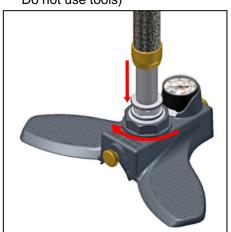
1. Remove from carton



- 2. Remove lock ring

3. Fit Base plate (push down to seat on block)

4. Replace lock ring (tighten by hand. Do not use tools)



6. Attach connecting hose (tighten using 14 mm A/F spanner to prevent air leaks)



7. Tighten bleed screw (tighten by hand. Do not use tools)



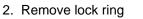


#### Assembly sequence for 4128-555 pump tools required; 14 mm A/F Spanner or adjustable wrench

1. Remove from carton



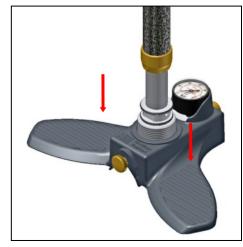
4. Replace lock ring (tighten by hand. Do not use tools)



3. Fit Base plate (push down to seat on block)



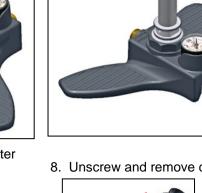
5. Attach connecting hose (tighten using 14 mm A/F spanner to prevent air leaks)



6. Remove Dry-Pac from carton



7. Unscrew and remove canister



- 8. Unscrew and remove cap
- 9. Pour contents of



10. Level using straight edge



14. Push down over o'rings to contact with shoulder (rotate to required position)



11. Replace cap



12. Replace canister on location arm



13. Insert location arm on tube



Page 4



15. Attach handle



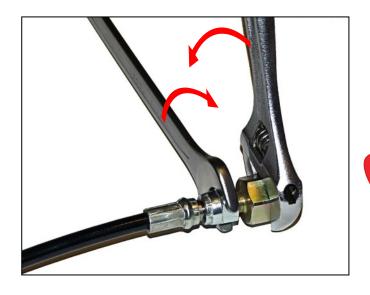
16. Tighten bleed screw (tighten by hand. Do not use tools)



# Hose End Connectors



To attach connectors to the hose you will require two suitable spanners. One to hold the hose and the other to firmly attach the connector. This joint must be tight.





Fully tighten hose connector joint using appropriate spanners



**DO NOT** use thread seal tape or sealing washers

# Using the Pump



- 1. Ensure bleed screw has been tightened (see 16 on page 5)
- 2. Adopt a comfortable, balanced stance
- 3. Keep back straight and flex knees to apply long steady strokes.



- During prolonged usage the body of the pump will become very warm. Stop pumping and allow pump to cool down before continuing. (This will take several minutes)
- 5. As the pressure increases the pump will require more force. (This is normal)



6. Do not continue pumping if the pressure reaches 275 bar. This is the maximum working pressure and is indicated on the gauge by a red bar. (do not pressurise into the red area)

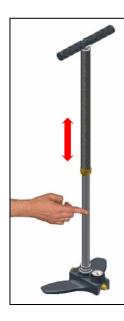


7. Slowly unscrew the bleed screw to release pump pressure

## Maintenance for 4128-005 and 4128-555 pumps

#### Lubrication

The pump requires very little maintenance but it is recommended that every 3 months the inner tube should be lubricated using the silicone grease provided

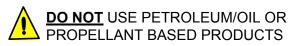


Raise the pump to the top of its stroke and squeeze out a small quantity of grease.



Smear the grease around the tube and slide the outer tube up and down a few times to evenly distribute it. Use only a small amount of grease at any one time.

Do not use any other type of silicone grease on the pump. Replacement tubes are available from Hill (see website)



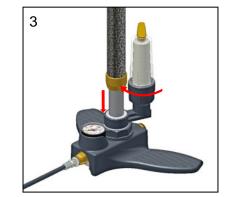


# Dry-Pac Replacement for 4128-555 pumps

It is recommended that the Dry-Pac medium is replaced at intervals of 3 months







- 1. Unscrew Dry-Pac canister and remove
- 2. Refer to page 4 and follow the steps 8 to 11 after emptying out the old medium and cleaning the canister where required.
- 3. Refit canister and ensure location arm is still in contact with shoulder

### What is Dry-Pac?

Ambient air used by hand pumps contains varying amounts of moisture depending on temperature and relative humidity. Dry-Pac is a patented method of extracting that moisture before passing that air through our pumps

### How does the Dry-Pac work?

As air is drawn into the pump it is forced to pass through and over a specially selected medium that attracts and removes water molecules from air. This drier air is then passed through the pump and the second integral micron filter in the normal way. The extraction is a one way process and eventually the medium will become fully saturated and require changing. The Dry-Pac should always be fixed in the vertical position but it can be rotated around the pump to the desired position.

## How long does the Dry-Pac medium last?

Our tests show that under average conditions the Dry-Pac medium will be effective for up to four months. In warmer and humid climates, or for users who require optimum quality, we recommend that the medium is changed every 2-3 months. Although the Dry-Pac medium principally works with flowing air, it will continue to extract a small amount of moisture from still air. Therefore, we recommend that the medium is also changed if the pump has undergone prolonged periods of storage. We do not include any dye markers in the material as a visible way to check how saturated the material has become. These are unreliable and can have toxicity issues. If there is evidence of any moisture when the pressure relief screw is released the material definitely needs changing.

## **Replacement of the Dry-Pac medium**

The only replacement medium we recommend is the Hill medium (product code 062128-56). This has been carefully researched and selected to give optimum performance. Do not attempt to use or mix other absorbent materials such as silica gels or dyed markers. These products have entirely different properties and will impair the correct functioning of the Dry-Pac.

#### Regeneration

There is currently no method of regenerating the medium in domestic circumstances. The medium should always be replaced with a fresh sachet. **Do not** attempt to heat or microwave the medium.

## Environmental

The Dry-Pac medium is an inert, environmentally safe product. As a synthetic copy of a naturally occurring product it can be disposed of in any normal waste treatment method. It is non toxic, chemical free and entirely safe to handle without protective equipment. Normal precautions should be taken when handling or storing the medium within the vicinity of children and pets. Although not harmful if swallowed it may cause the symptoms of very slight dehydration.

## **Dry-Pac Medium Storage**

The Dry-Pac medium is supplied in vacuum packed sachets with the optimum quantity to refill the Dry-Pac cartridge. Due to the nature of the medium, ambient temperature may cause expansion or contraction of the foil container. This is normal and has no detrimental effect on the life of the medium. Heat will cause the foil to expand like a balloon; cold will cause a "shrink wrap" condition. Providing the foil sachet remains intact the medium will not be impaired under most storage conditions and can be stored for many months.

## **Accessories**

The following equipment is available from the Website



Part No: Z4128-640

MK4 Hill Pump Dry Pac Kit

This kit is for the MK4 pump comes with everything you need including 1 sachet of DryPac Refill



Part No: Z2128-300

**Din 200 Female Adaptor** 



Part No: Z2128-350

#### Walther and Diana Adaptor

Adaptor for direct connection to Walther or Diana Airgun Cylinders. Direct connection to the end of the hose without bonded washers.



Part No: Z2128-600

**Quick Release Coupling** 

Quick Release Coupling for fast connect/disconnect of the hose or adaptor. 1/8" BSP connections.

**Note:** All adaptors must be fitted to hose and tightened using an appropriate spanner to prevent air leaks

## **Service / Kits**

The Hill pump has been designed to enable user servicing and the following kits are available for this purpose. Contact Hill for any other advice

Part No: Z4128-201

#### **Piston Seal Kit**

Set of 3 x Piston Seals for MK4 Hill Pump



The classic symptom of a problem with this seal is resistance on the upstroke and tendency to recoil back downwards. The piston seal is the workhorse of the pump and it's life can be dramatically shortened by overheating and a lack of lubrication. To maximise the life of this seal please follow the advice on pumping and lubrication in our instructions.



Part No: Z4128-401

#### MK4 Full Service Seal Kit

Full Service seal kit for the MK4 Hill Pump. Includes micron filter, piston seal and all other seals.



Part No: 06R50023

**Silicone Grease** 



Part No: 062128-56

#### **Dry-Pac Refill**

For all pumps with Dry-Pac systems. One sachet of Dry-Pac medium for complete refill of Dry-Pac cartridge. For optimum performance the Dry-Pac should be renewed every 4-6 months depending upon usage. The Dry-Pac medium is vacuum packed and can be stored indefinitely providing the vacuum remains intact.



Part No: 06R20201

Test Plug

## **Troubleshooting**

- 1. Pump becomes stiff to operate
- 2. At 50-80 bar the pump becomes difficult to pull upwards and springs back down

Lubricate pump in accordance with procedure on page 6

Piston seal kit required see page 9 . If the pump is used regularly it would be better to service the whole pump using the Mk4 Full Service Seal Kit see page 9 Full instructions for fitting are supplied with the kits.

- 3. Gauge needle bouncing up/down
- 4. Gauge steadily loosing pressure

Non return valve problem. Service as required

Bleed screw not tight enough. Hose connections to pump and/or rifle not tight enough