

Maintenance Man

HILL'S MK5 PUMP
DRY PACK



SAFETY FIRST
If you do not have the required skills and equipment to carry out maintenance on any airgun, always have the work done by a recognised expert

Last month, I was chatting with a customer about the use of moisture traps on a stirrup pump, and then by sheer coincidence, I was contacted by Jonathan Merrick, from Hills Pumps in Sheffield, regarding their updated stirrup pump with their new patented dry pack. Hills have been manufacturing pumps and lubrication equipment since 1841. The stirrup pump is an 'at home' solution for anyone with a PCP air rifle because it enables the user to fill their PCP tank without the need of a compressor or dive bottle.

The Mark 5 stirrup pump has been developed to make it 20% easier for people to use, capable of filling up to 300 bar pressure and it has been redesigned so that the end-user can more easily service their stirrup pump themselves, simply by purchasing a service kit. It has been upgraded with a more user-friendly, dry-pack system that gives a visual indication of when the dry pack beads need to be changed and the

new pack comes with a pack of orange indicator beads, as well as the first replacement pack. Further packs can be purchased directly from Hills. One of the additional benefits of this dry-pack system is that it can be retro-fitted to previous stirrup pump models, so this month, I am going to talk it through, showing how it fits to the pump and how it works.

- 1 This shows the two parts that make up the dry-pack system when new.
- 2 After use, when ready to be changed, the indicator beads change from orange to green.
- 3 The refill pack; one replacement pack included with the new pump, further replacements available from Hills.
- 4 Carefully open the refill pack; the desiccant beads are in this outer bag, with an inner bag of replacement colour-changing beads.

- 5 Pour the entire bag of the colour-change beads into the top of the clear housing.
- 6 Then fill to the top with the desiccant beads.
- 7 Screw the clear housing to the filter base
- 8 Unscrew the pump handle, this will allow you to fit the dry pack.
- 9 The dry-pack system is compatible with any Hills pump that is fitted with this housing.
- 10 Slide the ring of the dry-pack housing down the handle of the pump, ensuring that it fits securely over the housing shown in the previous picture.
- 11 This shows the dry-pack system fitted correctly and the stirrup pump can now be used. As air is drawn in through the brass filter, it passes through the beads where any moisture is trapped.

This month our resident technical expert, Richard Nash, explains how to use the Hill dry-pack system



13 ...age and the local relative ...ac material will eventually ...d.
Dry-Pac material should be replaced ...3-4 months when the pump is in use.

2 Unscrew and remove cap

4 Refit Dry-Pac canister and ensure location arm is still in contact with shoulder

NEW SATURATION INDICATOR TECHNOLOGY

1 The small bag of orange indicator media can be found inside the dry-pac refill sachet

3 ...
4 ...
W ...
indicat ...
green ...
to ch ...
dry-p ...

DRY **SATUR**

REPLACE DRY-PAC MATERIAL EVERY 3-4 MONTHS WHEN PUMP IS IN USE

14

Indicating Orange to Green Sachets



Fresh Active Replace Desiccant Exhausted

The indicating orange to green beads will change colour gradually as they adsorb moisture. The speed of colour change will be dependent on heat and humidity and amount of the air passing through the beads.

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12 This is the back page of the assembly and user manual, showing how to replace the dry pack should you need to refer to it.

13 This is the colours of the beads as they change through the cycle from new to needing to be replaced. Although it will vary with usage, the dry pack is expected to be effective up to four months.

14 This is the information guide included in the new Mark 5 stirrup pump.

15 During my meeting with Hills regarding the new dry-pack system, we discussed how easy it is for moisture damage to occur on a rifle, mostly unseen or hidden within the components. As you can see from this picture, the cylinder is showing extensive rust right from the threads, due to the rifle being filled with a stirrup pump WITHOUT a moisture pack.

16 To reduce this risk of moisture getting into your rifle significantly, it is imperative that a moisture trap/dry-pack system is used. ■

NEXT MONTH

Some of you will remember that I have featured the previous Hills Mk4 Pump in Air Gunner Magazine, August 2019, and also a factory visit and EC3000 compressor review in the January and February 2022 issues. Next month, I will show you how to service the Mark 5 stirrup pump with the new service kit.