THE STENOR FIRE HOSE REPAIR SYSTEM

This poster has been designed to help you easily learn how to repair PVC Nitrile using the Stenor Merlin System.

Summary
1. Turn on and heat up. Prepare hose. Vulcanise internal patch for 10 minutes at 165 degrees. This will take around 8 minutes, and will heat whilst you carry out the preparation. Mount the hose clamp in a vice as shown here, with the round bars in place. Fold the hose in the clamp with the injured area closest to you. Cut a round hole about 8mm in diameter around the injury. This hole may be bigger than the injury. This will enable internal preparation.

2. Check the plug patch position. When you are satisfied with its position, remove the nylon and discard it. Cover with a piece of cellophane to stop the patch sticking to the heating unit.

3. Make sure the vulcaniser has reached 165°C. Bring the top arm over and use the overcentre lever to apply the pressure. Switch to “Timed” and the timer will start to count down. The units on the timer are minutes and seconds. The internal patch will spread and fill the injury before vulcanising.

4. Move the hose into the clamp, so the injury is uppermost, and carry out the external preparation with the wire brush and drill. Prepare an area greater than the size of the patch to allow for the patch spreading. Avoid excessive material removal and damage to the fabric. Allow 2 hours after repairing prior to pressure testing.

5. When the timer shows 30.00 (after 10 min) release the top arm and remove the cellophane. Having removed the polythene from the underside of the external patch apply the patch. The arrows are on the top. See drawing for correct orientation. Place cellophane over the external patch, bring down the top arm and vulcanise for ten minutes. If these have been altered, and you want to return to factory settings follow the instructions below:

- Press PRG and display shows “ST1.” Release SEL to display current set point (Flashing). Change set point using T and S. Return to actual temperature display by pressing SEL. NB During temperature setting the internal alarm may sound to show that the controller is awaiting input. This may be silenced by pressing MUTE.

- Setting Time
Stenor Merlin are factory set. If these have been altered, and you want to return to factory settings follow the instructions below:

- Press PRG and the display shows “ST1” (This is the Alarm Time). Press SEL and T and S to set to desired time (20,00). Press PRG and display shows “ST2”, (This is Heating Time), Use SEL and T and S, to set to desired time (40,00).

- The SEL button also moves the cursor from one digit to another. Press PRG to return display mode. Once the times have been set the Merlin can be controlled using only the On/Off and Mode switches.

6. Correct orientation of external patch to injury

Factors in successful hose repair
- Temperature: PVC Nitrile hose needs to be vulcanised at an accurately held 165°C.
- Preparation: This is very important. The Stenor Merlin has a spring that keeps a constant pressure during the cure.
- Time: For vulcanising and cooling is controlled digitally by a Stenor Merlin.
- Patch shelf life is 12 months. The patches should be stored in a fridge.

Pressure testing: It is highly recommended that you pressure test a repaired hose prior to putting it into service.

Test pressure: 10 bar or 1.5 times maximum working pressure whichever is greater and maintained at that pressure for 1 minute.

It is essential that the pressure can be applied gradually to allow the hose to take the strain imposed on it. Allow 2 hours after repairing prior to pressure testing.

PO Box 56 Craven Arms SY7 8WD UK Tel 44+ 1588 672962 Fax 44+ 1588 672262 chriswesson@stenor.com www.stenor.com

Troubleshooting
- If there is no sign of heating, check the fuse.
- If the alarm sounds, check the settings and input.
- Check for any damage to the heating unit.
- Check the connection to the heating unit.

Part no 3211 Stenor Merlin
Part no 3213 Stenor “standard” heating unit
Part no 3214 Conversion kit for old Stenor Dart machines
Part no 3217 Hose clamp
Part no 3218 Release film for new hose
Part no 3219 Preparation accessories
Part no 3221 Stenor Merlin with handwheel
Part no 3222 Internal patch
Part no 3223 Conversion kit for old Stenor Dart machines
Part no 3225 Instruction manual
Part no 3226 Conversion kit for old Stenor Dart machines
Part no 3227 Replacement rubber pad
Part no 3228 Release film for new hose
Part no 3229 Preparation accessories
Part no 3230 Release film for new hose
Part no 3349 Conversion kit for old Stenor Dart machines
Part no 3231 Stenor Merlin
Part no 3232 Stenor Merlin Replacement heating unit
Part no 3233 Stenor Merlin control box
Part no 3234 Stenor Merlin control box
Part no 3235 Stenor Merlin control box
Part no 3236 Conversion kit for old Stenor Dart machines
Part no 3237 Release film for new hose