SealBoss

Professional Kits Manual

SealBoss® HP Hand Dispenser Gun



5000+ PSI - Bulk Loading - Quality made in Germany - Low Price

Very affordable high pressure pump with superior design and quality make this gun the first choice for handheld manual operation.

Based on a grease dispenser this unit has been modified for grout and resin injection for small jobs and the 'Do It Yourself' user

The unit is reusable within limitations. Spare parts are not supported.

Zerk coupler and rigid nozzle included.

Flexible delivery hose for special applications sold separately.

2ccm / 0.06 Oz per stroke.

WARNING: Always wear protective gloves and goggles when using this equipment.

Manual Filling

Before filling gun with material pull plunger rod to the full extend and push back into the cartridge. This moves the plunger inside to the end of the cartridge barrel and ensures a tight seal. Tighten the rigid nozzle/ flexible hose and zerk coupler. Unscrew the pump unit from the cartridge barrel.

Keep the opening of the barrel upright while carefully filling with the premixed injection material. Slight leakage at the plunger rod is possible. Re-connect pump unit and cartridge tightly and immediately turn the gun with the nozzle directing towards the floor and the plunger rod pointing upright.

Injection

The pump unit relies on gravity to feed the cylinder inside with material. Therefore during the injection process and at all times when the gun is charged point the nozzle towards the floor. This permits the resin inside to flow into the cylinder. While pumping resin make use of the full stroke permitted by the handle. An insufficient stroke does not permit optimal fill of the cylinder resulting in reduced pumping volume and pressure. Always point the nozzle downwards. To perform overhead injection, **SealBoss® Corp.** provides the optional flexible hose. This hose replaces the rigid nozzle and permits the unit to pump in an overhead or other 'special' situation.

Cleaning

The unit can be cleaned for repeated use. The recommended SealBoss® R70 Pump Flush & Cleaner, but other cleaners may be used. Please contact the our sales office for further information. Please observe caution when operating the gun. Read and understand all data sheets and SDS when using injection materials.

Waterstop Kit 2002 Professional

- Best Selling Everyday Use Electric Operation
- P 2002 Drill-Powered Injection Pump (Drill Sold Separately)
- 5.5 Gallons Foam Grout, Incl. 0.5 Gal Accelerator
- 2 Gal R70 Pump Flush, 100 Mechanical Packers
- Heavy Duty Drill Bit, Manual

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P 2002 Drill Operated Pump Light Weight, 5000 PSI (Drill Sold Separately) Our Best Seller

Waterstop Kit 495 Professional

- Everyday Use Electric Operation
- IP 495 PRO Electric Injection Machine
- 5.5 Gallons Foam Grout, Incl. 0.5 Gal Accelerator
- 2 Gal R70 Pump Flush, 100 Mechanical Packers
- Heavy Duty Drill Bit, Manual





IP 495 PRO Electric Pump 3000 PSI

Waterstop Kit 100 Econo

- Everyday Use Manual Operation
- HP 100 Hand-Pump
- 5.5 Gallons Foam Grout, Incl. 0.5 Gal
- Accelerator
- 2 Gal R70 Pump Flush, 100 Mechanical Packers
- · Heavy Duty Drill Bit, Manual

Injection Kit 3003 Two Component

- Heavy Duty
- P3003 Two Component Injection Machine,
- Complete
- 15 Gal 4040 A/B Structural Epoxy Resin
- 2 Gal 4500 Quick Seal Epoxy Gel Paste
- 500 SPEPTRI Surface Ports, Manual





HP 100 Economy Hand Pump 1500 PSI

P3003 Affordable Two Component Pump Light Weight, 5000 PSI Epoxy / PU (Drill Sold Separately)



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DIY WATERSTOP KIT 1 & 2: POLYURETHANE INJECTION GROUTING WITH MECHANICAL PACKERS (DRILL HOLES NECESSARY)

General

Furnish all labor, equipment, and materials necessary and incidental thereto to perform all required operations to eliminate the flow of water by pressure injection to fill cracks, voids, and joints in concrete substrates.

Definition of Terms

Refusal - When a crack or void area will accept no more grout under the prevailing pumping conditions (for reasons other than the pumpability of the grout).

Return Time - The time taken for a grout, under certain application conditions to completely penetrate a crack, void, or network of cracks.

Gel Time - The time required for the grout to cure following the reaction with the accelerator. Gel time or cure time can be affected by temperature and amount (percentage) of accelerator mixed in the component A.

INJECTION PROCESS

Fully examine the existing site conditions to ensure that all associated work can be performed without removing or relocating existing utilities, structures or structural members.

- 1. Remove all standing water.
- 2. Drill at a 45° degree angle where possible to intersect the wall/floor joint interface halfway through the thickness of the substrate (e.g. 4" deep for 8" thick slab). Drill straight into the crack for concrete thickness below 4 inches.
- 3. Drilling depth should be half the thickness of the concrete member.
- 4. Install mechanical injection ports and secure in place at a spacing of 6-12" inches apart (6" for hairline and 12" for wider cracks). Alternate positioning from left side to right side as you move along the crack where possible. Extremely wide cracks (if any exist) should be covered with a surface seal prior to injection in order to contain the injection resin until cured. Under proper pumping conditions in active leak injection, the following signs should be observed in the order listed:
 - a. Water displaced from crack/joint by the resin
 - b. Water and resin mix (foamy) appearing at the crack/joint area
 - c. Pure resin from crack/joint

If the joint surface exhibits immediate free flow of resin while working the first packer, pause for a few minutes. In most cases the resin will react fast enough with the water and expand rapidly. The resulting resin product will heal the joint and provide a surface seal to contain the material to follow. The contractor is responsible for estimating what duration time is adequate for grouting the voids and is responsible to prove that the void is full by attempting to inject each port to refusal.

Once the contractor is assured that the resin has reached the next injection packer or has sufficiently stopped the water as evidenced by the grout oozing out of the joint area, he should shut off the resin flow and disconnect the pump pressure line and proceed to the next packer. Follow the injection process for one to three packers, the contractor shall return to the first packer and attempt to re-inject it again. Some of the packers will take more grout, filling up more of the crack/joint area and creating a higher density void filler and water stop.

The contractor shall continue this procedure until refusal.

MATERIALS

A. Injection Ports

Provide suitable injection ports (stainless steel/brass/zinc/plastic), buttonhead or zerk fittings, shaft and rubberized expandable grommet.

B. Grout Injection Material

Hydrophobic water cut-off grout based on MDI (methylene-diphenyl-isocyanate) polyurethane. (e.g. SealBoss® 1510, 1570) Grout material is to be 100% solvent free and 100% solids.

Gel time of the product is adjustable by adding a certain percentage of accelerator per the manufacturer's recommendations. Grout material shall not shrink or swell.

Grout material shall cure to a semi-flexible foam structure which is not affected by water or dryness.

Grout material shall have the capacity to expand upon contact with water to a volume of 30 to 40 times. The composition of the



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material is one that water is not a component of the cured foam structure.

C. Pumping Equipment

All chemical grouting equipment shall be of a type, capacity, and mechanical condition suitable for doing the work. The equipment shall be compatible with the chemicals to be handled and shall be maintained in proper operating conditions at all times.

ENVIRONMENTAL REQUIREMENTS

1. Do not apply if the temperature is below 45°F or above 95°F unless the material manufacturer is consulted for recommendations. Product should always be conditioned to room temperature

OWNER'S REQUIREMENTS

- 2. Execute all work in accordance with all safety requirements, approved written procedures and with the least amount of interference with the work of other trades as possible.
- 3. Equipment should be confined to the delivery area and all components shall be in good working order as approved manufacturer for use with the specified materials.
- 4. Immediately notify the Site Engineer/Owner's representative in the event of any process interruption or environmental concerns which could affect the service or application conditions relative to this work.

PROTECTION, CLEANING & SAFETY

- Following a complete injection of all mechanical packers to refusal and where the visible leakage has been completely eradicated, remove all injection packers. Remove cured material where applicable and fill injection hole with rapid cement.
- 2. Clean all adjacent areas of excess material, powder, cement and/or droppings. Chemicals used for cleaning shall be non hazardous and non flammable such as the **SealBoss® R70 Pump Flush & Cleaner.**
- 3. Process grout materials using appropriate protective gear including gloves, masks or goggles and appropriate clothing as described and in accordance with the manufacturer's SDS sheets.
- 4. Follow manufacturer's recommendations for product safety and disposal of material.
- 5. Comply with all OSHA regulations for drilling procedures using protective gear including highlighted vests, face shields or goggles. Always provide for ample ventilation!

DIY EPOXY CONCRETE REPAIR KIT: EPOXY INJECTION WITH SURFACE PORTS (CARTRIDGE SYSTEM)

Do not apply if the temperature is below 48°F or above 95°F unless the material manufacturer is consulted for recommendations. Product should always be conditioned to room temperature. Cartridges need to be shaken to mix material prior to use.

STEP 1

For better penetration drill a 1/4 hole into crack or use a blade to vee out the width of crack at the area where the surface port is to be installed.

STEP 2

Clean the crack and wall with a wire brush to remove debris and loose concrete.

STEP 3

Dry damp spots on the wall with a heat gun or hair dryer.

STEP 4

Using a small amount of epoxy paste, secure ports over the crack at 4-6 inch intervals.

STEP 5

After the ports set, spread epoxy paste 1/8 thick over the crack. Around ports, apply the epoxy paste slightly thicker. Wait until paste becomes tacky before injecting resin.

STEP 6

Remove the shipping disc, retainer nut and plugs from the cartridges. Attach static mixer with the retainer nut or screw on directly if applicable.

STEP 7

Using the 2:1 dispenser gun, starting at bottom, inject the liquid epoxy resin until it runs out of the port above. Then cap off the port you are injecting and move up the wall.

STEP 8

Wait about a day before removing ports. The time it takes epoxy resin to cure depends on the temperature. At 77°F , the gel time of epoxy is approximately 80 minutes. The colder the temperature the longer it will take to cure.



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DIY FLOOR JOINT FILLER AND FLOOR CRACK REPAIR KIT: POLYUREA QUICKFIX CARTRIDGE SYSTEM

Do not apply if the temperature is below -10°F or above 95°F unless the material manufacturer is consulted for recommendations. Product should always be conditioned to room temperature. Cartridges need to be shaken to mix material prior to use. Polyurea, unlike epoxy, will cure at much lower temperatures. The cure time will be delayed. The thinner products such as SealBoss® 6060 QuickFix may be mixed with sand to create a pliable mortar.

STFP

Discard a small amount of material as it exits the static mixer into a cup to assure uniform color in the mixer indicating correct mix ratio.

STEP 2

Crack or joint surface must be dry. If in doubt apply small amount of material first as a primer. This will help to bind any existing moisture and create a barrier for the final fill. Apply material uniformly into crack or joint. If you plan to shave the excess material overfill slightly.

STEP 3

To reuse cartridge, unscrew static mixer and discard a small amount of material into a cup to avoid cross-contamination. Reinstall plugs and nut to secure the remainder of the product.

STEP 4

After the product has cured, the joint/crack may be shaved with a shaving tool to create a flush and appealing surface.

Visit us at **SealBoss.com**for complete and updated information. Call us at: 714-662-4445 or Toll Free at: 877-932-2293



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