How to Perform a Dresser Style 90 & NORMAC Compression Coupling Encapsulation in a Traditional Excavation.

Provides a permanent chemical seal over non-leaking ¾" – 2" metallic compression type couplings (i.e. NORMAC, Dresser Style 90). Simple and quick installation makes this a preferred, permanent, cost effective replacement to welded pumpkins or repeated site visits/excavations to re-tighten end nuts.

- Thousands have already been installed, saving millions of dollars.
- Simple, safe, permanent and very economical.
- Installed in traditional excavations or keyhole excavations using long-handled tools.

Sealant passes British Gas LC8 specification and the Cornell University/Wyle Labs tests for the New York Gas Group and backed by PLCS exclusive 10-year warranty.

Simple Installation

- Tighten compression nuts to stop the leak.
- Grit blast and prime repair area.

- Fit mold onto the coupling.
- Mix sealant, pour into the mold and fit cap.

- Cured repair cross section shown for illustration.

A Metal Mold System is also available. Used in traditional excavations where the leak cannot be stopped and will work against a maximum of 60 psi. in the main.

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Kit contents: Mold (complete with bolts and gaskets), Mold Cap, Flange Nuts, Primer, Primer Brush, Gloves, Paint Paddle and Instructions.

Tools Required: Small Jiffy Mixer, Sealant Can Opener, 7/16" Deep Socket, Cordless Drill and 500 rpm air drill.

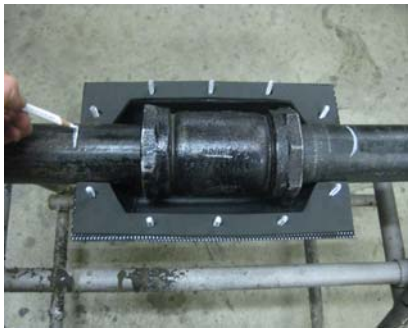
Typical Dresser Style 90 / NORMAC Compression Coupling shown.

Soap test for leaks.

All leaks must be totally stopped by tightening the coupling end nuts.

A fuzz leak is still at full mains pressure and will cause a failure.

When the leak cannot be stopped, use the PLCS metal mold encapsulation system at up to 60 psig.



Hold one half of the mold under the coupling and mark the pipe either side of it so you can center the mold over the coupling between these marks. This will be the area to be grit blasted.

Remove the mold half and grit blast the whole fitting and the pipe between the marks down to bare metal. *(For grit blasting details review document Grit Blasting for Encapsulation for pressure blaster requirements, nozzle size, blast media and technique).*

Check the underside with a mirror.

Grit blasting completed.

NOTE: The importance of cleaning the bottom of the pipe and fitting down to bare metal cannot be emphasized enough. 90% of failures can be traced to poor cleaning here. You must check with a mirror and flashlight.

Soap test again to make sure no leaks were caused by blasting.

Dry the fitting by flashing over with the grit blaster once more. Water and soap can cause a failure.

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PRIMING: Carefully remove the primer bottle lid and the foil seal underneath.

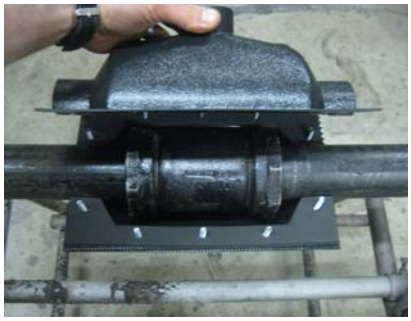
Using a scrubbing motion, apply a thin coat of primer to the cleaned area with the brush supplied in the kit.

Check underside with a mirror.

When applicable, install the extra reducing gaskets on the ends of the mold.

The standard 2" mold can be reduced to fit on an 1 ½" pipe.

The standard 1 1/4" mold can be reduced to fit on an 1" or ¾" pipe.



Center the bottom half of the mold under the coupling.

Place the top half over it with the bolts aligned in the holes in the top.

Place a nut on each bolt, starting at either end of the mold, and screw down a few threads by hand. Make sure they are not cross threaded.

Use a 7/16" deep socket with a 3/8" or ¼" socket adapter in a cordless drill driver on low to medium torque to tighten all the bolts.

Start with those four nuts adjacent to the pipe. Do not use a wrench.

When all bolts are tight, check the foam gaskets around the pipe are smooth with no visible gaps at 3 and 9 o'clock through which sealant could escape.

Note: Sealant should not be mixed until this point and the mold must be filled within one hour of priming.

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Part A and part B sealant cans.

Open both sealant cans with the can opener.

Scrape any solids from the bottom of the Part B can and mix with the paint paddle.

Scrape any solids from the bottom of the Part B can and mix with the paint paddle.

Pour the entire contents of the Part B can into Part A can.

500 rpm geared air drill

Common air drills with a single gear drive run at 2000 - 3000 rpm free air speed. These will not have enough power to mix the sealant, especially in cold weather.

Jiffy Mixer

Hold the part B can between your feet so it cannot spin and mix vigorously for 1 minute using a Jiffy mixer in a 500 rpm geared air drill.

Stop the mixer before removing from the can and spin the mixer head inside an empty carton to remove most of the sealant. Remove the cured sealant from the mixer with a knife each morning.

Hold the can about 6" above the neck and slowly pour all the sealant, in a thin stream, into the mold. Do not fully block the neck. Leave room for air to escape at the same time as sealant is entering the mold.

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When the mold is full attach the cap

Visually inspect the repair before backfilling.

Check the underside with a mirror.

Any small leaks will stop on their own as the sealant thickens.

Clear away your tools, cans, cartons etc. while the sealant is curing.

The repair is now complete and you may carefully backfill with granular material (no sharp stones) around the repair. Tamp each layer properly, especially under the pipe. Be careful not to damage or move the mold as this could cause a failure.

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