

Hose Information and Breakdown Glas-Craft vs Graco Hoses

Here is some input and tech info on the low voltage hose heat systems that are used on the Glas-Craft (GC) machines such as the MH, MH2, MH3 and Guardian series machines.

The Graco machines use the this same low voltage hose heat however, it is controlled different utilizing a control box to feed power to the hose per its amperage needs; GC hose systems uses "set values" with a transformer feeding specific set voltage (through the transformer tap settings) then relies on the resistance value of hose heat elements to give you the correct amperage draw; as in just enough to properly heat your hose and not too much amperage that will melt your hose to the point of failure.

Since Graco purchased GC a few years ago all new hoses are Graco style and require a "GC hose adaptor kit # 256835" to retro-fit a hose or whip to your machine. We have been seeing problems when you mis-match the hose and whip or just use a complete Graco hose/ whip on a GC machine.

Using a GC main hose and Graco whip; the 2 styles have just enough difference in resistance that the whip gets hotter than the main hose causing a whip failure. Graco says this will work but it will fail, we have seen several. I recommend going to a non-heated whip, either a 2 foot or 6 foot whips are available.

The other problem we see is not enough heat from a GC system that is using a complete Graco hose/whip. This generally happens in locations where supply power is 208V (ie; with 208V power feeding the primary side of the transformer, the output on the secondary side of the transformer to the hose is reduced.) In this case we put together a kit that uses a phase controller and a potentiometer, this allows you to adjust the tap setting one setting higher then adjust the amperage down to a safe level of about 50 amps (55 max). Amps must be adjusted with the hose cold as the draw will drop as the hose heats up.

Resistance test:

With jumper wire or heated whip connected at the end of the hose; unplug hose from machine, check resistance of the hose heat. Resistance is based on total length of hose used. All readings have a variance of +/- 10%.

50' = .3 ohms, 100' = .6 ohms, 150' = .9 ohms, 200' = 1.2 ohms, 250' = 1.5 ohms, 300' = 1.8 ohms.

Hose fittings: There are 2 different hose styles with different fittings referred as "Graco style" or "Glas-Craft/ GC style"

Main hoses use 3/8" hose; whips use 1/4" hose.

A 50', 1/4" main hose may also be used with out a whip but I wouldn't go any longer in length as you will see pressure fluctuations or pulses in your spray patterns.

Graco style:

A-side # 5 JIC (1/2" x 20, 37 degree)

B-side #6 JIC (9/16" x 18, 37 degree)

All Graco style hoses and whips have female fitting on the machine end and male fittings on the gun end of the hose.

Glas-Craft (GC) style:

A-side #6 JIC (9/16" x 18, 37 degree)

B-side #6 SAE (5/8" x 18, 45 degree)

All Glas-Craft (GC) style hoses and whips have female fittings on both ends of the hose.