

FOAM MARKER OPERATORS MANUAL

Seris/Jenell single or double compressor foam marker with boom mounted foam generator with 90Ltr stainless steel tank.

ELECTRIC VALVES These stop and start foam production electrically from the cabin. It is important when stopping the air compressor to shut off liquid, to stop the liquid flooding the system. The liquid can run back up the air line. This can cause solution to gel and block the generator.

GENERATOR The foam generator is used to inject air into the liquid stream. Blockages can occur in new systems from dirt or bugs in the hoses. If the generator is removed for cleaning, to return it to its previous setting, screw generator in fully and the back out one and a half turns, and then lock with locknut.

In double sided systems if one side is working better than the other, adjust generator on bad side in or out until foam production is the same as the other side.

Annually, or more often if needed, clean the screen in the foam generator.

THE LIQUID FILTER The liquid filter should be 80 mesh or finer. If the filter is of larger mesh, screen in foam generator will block after a time (this will be worse with a steel tank due to rust.)

NEEDLE METERING VALVE The needle valve controls the amount of liquid entering the foam generator thus controlling the quantity and quality of foam produced.

COMPRESSOR Air flows from around 1.25 cubic ft/min and above can be used. The larger the air supply the greater the production of foam. Small electric compressors are popular. These compressors work quite well and need little or no air control, only a relief valve for safety.

The back pressure of foam in the foam line being the factor influencing system pressure. Larger engine powered compressors need the air to be regulated by a relief valve or better still an air regulator. The important thing is to have a stable air supply as fluctuating air pressures will cause fluctuating foam production.

FOAM LINE The foam line MUST be four meters long and ¾" /19mm in diameter. This gives the foam time to pack to a fine, dense consistency.

FOAMING AGENT Mix foam agent as per label recommendations. Foam agents do not have a long shelf life so only keep enough for the season. Some foam agents do not mix readily so mixing is very important.

Either bottom filling or putting a hose to the bottom of the tank after adding the foam agent should assure even mixing.

Some foam agents will come out of suspension even while spraying, causing a weaker foam towards the bottom of the tank. Adding some extra foam agent and mixing will solve this problem. Leaving foam mixture lying around in tanks when not being used allows it to go off. This does not take long, as little as 24 hours. If stopped for ½ a day stir up foam mixture, if it doesn't work well add some more foam agent and mix.

START UP

The foam generator works well with air pressures from approx. 6 psi/40 kpa to 15 psi/100 kpa. The more air pressure the more liquid that can be added making more foam. Start compressor. Allow one to two minutes for air pressure to build then open needle valve

approx ¼ to ½ a turn. (If the system is completely dry opening the needle valve fully until liquid appears at foam dispenser then back off to ¼ to ½ a turn will get system primed quicker). When foam appears wait about 10 to 20 seconds and then if it is too runny close needle valve slightly.

If foam is stiff but has air holes in it open needle valve slightly. All needle valve adjustments should be small. With small electric compressors pressure should slowly rise as good quality foam is produced. The back pressure in the foam line sets the pressure in the system.

The stronger the foam mix the higher the pressures will be. Usually between 6 psi/55 kpa and 15 psi/100 kpa. With larger compressors the pressure must be controlled by a relief valve or preferably an air regulator to between 6 psi/55 kpa and 15 psi/100.

TROUBLE SHOOTING

Foam too runny:

- < Water too hard.
- < Mix not 50 to 1. (mixture may need to be stronger for cold or hard water). Foam weak or old.
- < Air jet blocked, usually in new system.
- < Small electric compressors can get dirt under or break the reed valves.
This will cut down the air supply.
- < Screen in foam generator blocked with dirt or rust. This is caused by liquid filter being too coarse. It should be 80 mesh.
- < Needle valve is too far open.
Close needle valve slightly.

Air pressure too low:

- < Foaming agent weak or not 50 to 1 mix.

ERROR: undefined
OFFENDING COMMAND: '~

STACK: