

# Beer Gas Systems

## Model BGS 300T



## Nitrogen Specifications

	<b>BGS 300T</b>	<b>BGS 300 N2</b>
N2 Output capacity	300 litres/hr.	300 litres/hr.
Maximum dispense rate	30 pints/min.	N/A
Kegs in 5 hour surge	18	N/A
Monthly capacity	270 kegs	N/A
Mixed gas output	55 - 75 psig	55 - 75 psig
Dimensions	14" X 9" X 33"	14" X 9" X 33"
Storage tank (customer supplied)	135 litre (30g)	135 litre (30g)
Weight (generator)	75 lbs.	68 lbs.
Weight (tank)	75 lbs.	75 lbs.
Sound rating	<61 db	<61 db
Electrical requirements	115 VAC, 7amp, 60Hz	115 VAC, 7amp, 60Hz
Temperature Range	10 – 35° C	10 – 35° C

### Method of operation

Beer Gas Systems Model BGS 300T is a PSA (Pressure Swing Adsorption) Nitrogen generator with a dual blend gas blender. PSA generators operate by converting compressed air to nitrogen through adsorption through carbon molecular sieve (CMS). Timed cycles allow for high purity N2 to be generated through the CMS.





## **Installation Instructions**

**WARNING:** This is an electrical and pneumatic device and should be serviced by qualified personnel.

1. Place generator in a well-ventilated location free from abrasive dust and chemicals. Plug it in.
2. Place nitrogen receiver tank in desired location. (Distance from generator does not matter, on top of cooler is often a convenient location)
3. Run hose (min. 125 psi. rating) from nitrogen inlet/outlet (item 3) on generator to receiver tank. (It is a good idea to purge receiver tank with N2 from generator for 20 mins. or longer)
4. Hook up CO2 supply (item 1). Pressure needs to be 60 psi or higher from CO2 supply. (max. 120 psi)
5. Run blend lines (items 4 & 5) to the cooler. NOTE: Fittings on items 4 & 5 are 1/4" barbs with internal check valves, ***do not remove.***
6. Attach beer gas back-up manifold on the wall near the cooler. Tee in beer gas back-up to each of the blend lines running to the cooler. (see sample installation photo below)
7. Ensure internal CO2 regulator (item 2) is set to 60 - 80 psi.
8. Mark, with sharpie, black lines on N2 gauge (item 3) at 55 and 80 psi (normal operating range).
9. Make sure each beer is on correct gas blend inside the cooler. (It has been recommended by Molson that Sub-Zero taps not using beer pumps be tied into the 75/25 blend **only if secondary regulator is set at 40psi or higher.**)
10. **Check for leaks in and outside the generator and inside the cooler.**



## **Maintenance:**

**NOTE: all maintenance should be performed with generator unplugged and by qualified personnel**

The compressed air filter (item 14) and the exhaust filter (item 12) should be changed on an annual basis. The air intake filter (item 13) should be replaced on a semi-annual basis, or quarterly if the generator is located in a dusty environment. To replace either filter, simply unscrew bowl from filter housing and remove filter element. Note: once compressed air filter is replaced, check for leaks.

**Air compressor:** Life of air compressor is approximately 3-5 years. If compressor fails, customer can send back to Beer Gas Systems for repair or replacement.

## **Ordering information:**

Air intake filter (item 13)	p/n bgs300-13
Compressed air filter (item 14)	p/n bgs300-14
Exhaust filter (item 12)	p/n bgs300-12
Thomas Air Compressor	p/n bgs300-01T



# Trouble Shooting Guide

<u>Symptom</u>	<u>Remedy</u>
1. Nitrogen (N2) gauge is low and Beer is pouring slowly.	<p>A. Check if the orange light is on. If not, plug the generator in.</p> <p>While the motor is running, turn off the 3 ball valves on the right side of generator from the bottom up. If the N2 gauge builds after all three valves are off you have a leak downstream of the generator. Check cooler for leaks. If N2 pressure does not build once the 3 valves are off turn on back-up system and call for service.</p> <p>C. If the motor does not start up after 3 or 4 minutes and the orange light is on, check 10-amp breaker above the orange light. If button is out, push it in and the motor will start up.</p>
2. N2 gauge is up but beer pressure is Low and pouring slowly.	A. Check CO2 level. Change cylinder if empty.
3. Foaming Beer	<p>A. Check temperature of beer at the glass. If beer is over 5° C. (41°F) it will pour foamy.</p> <p>B. Check that N2 gauge is between 60-80 psi. Low gas pressure will cause foaming. If low see symptom 1.</p>
4. Flat beer	<p>A. Check CO2 level. Change cylinder if empty.</p> <p>B. Check temperature of beer at the glass. If beer is under 2° C. (35°F) it will appear flat.</p>

## **Warranty**

The BGS 300T nitrogen generator is warranted against any defects in workmanship and material for 24 months from date of shipping. The purchaser has the liability to ensure that the system is fully inspected upon delivery and shall contact the appropriate shipping company to make any claims on damaged goods due to transit within that shipping company's policies. If the system is received with defects that are not due to shipping, a written claim should be submitted to Beer Gas Systems Inc. within 10 days of receiving the shipment.

All warranty work shall be done by an authorized service technician. Any part that is repaired, returned or replaced under warranty may be remanufactured or changed to different specification at the technician's option. Any work performed by an un-authorized person / company or usage of non-factory parts, may void all warranties to the product.

Beer Gas Systems Inc. is not liable for damages caused by normal wear and tear, water, fire, erosion, corrosion, explosion, misuse, oil/gas vapours or unauthorized modifications. Beer Gas Systems Inc. is also not liable for any losses (including CO<sub>2</sub>), damages, or cost of delays, including incidental or consequential damages.

### Contact Information:

Beer Gas Systems Inc.

9 Amity Rd.

Mississauga Ontario, L5M 1P1

416-809-0501

416-434-0858

Email: [wayne@beergassystems.com](mailto:wayne@beergassystems.com)

Website: [www.beergassystems.com](http://www.beergassystems.com)