

INSTALLATION INSTRUCTIONS (SINGLE AND DOUBLE UNITS)

MACKENZIE GAS BLENDER PANEL

Thank you for choosing the **MacKenzie Gas Blender**, engineered specifically for the Canadian draught beer market. Designed to perform reliably in real-world dispensing environments, it delivers **precise, consistent carbonation** through a simple, installer-friendly design.

The MacKenzie Gas Blender Panel is **easy to install** and operate - requires **minimal maintenance**, and is built for long-term accuracy and **dependability**. When properly installed and supplied with clean, dry gas, it will provide a stable, high-quality mixed-gas supply for many years.

Please take the time to **read and understand the instructions**, the system and the cautions. While the system is simple there are inherent dangers in working with pressurized gases. Pressure vessels and storage tanks, which contain both liquids and pressurized gases, can explode or rupture and cause serious injury or death if over-pressurized or used incorrectly. Be 100% sure you understand the implications of what you are doing whenever you set up, turn on or modify this or any system. Check with your equipment supplier (in the case of storage tanks especially) to be sure you are not exceeding any safety limits. If you have any doubt concerning the safety of your system, get advice from or have the work done by a qualified specialist.

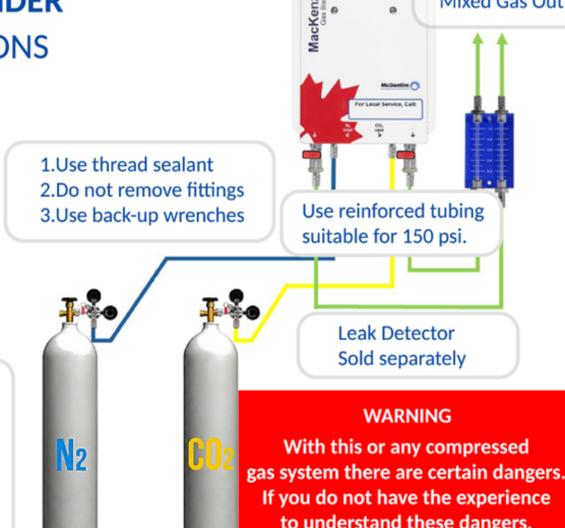
CAUTION

With the MacKenzie Gas Blender Panel, you are dealing with pressurized gases. Serious injury or death can result from **improper installation, use or service**. All work on these systems should be carried out by **qualified personnel only!** Before attempting any work on this system be sure to read and understand these and any other instructions that relate to the equipment involved in these systems! The dangers include, but are not limited to, **EXPLOSION** if the maximum safe pressures for any of the individual components of the system are exceeded or **ASPHYXIATION** if gases are released or leaked into a confined area. If you have any questions regarding the safety of these systems do not proceed with the installation or operation until you are 100% certain as to their safety!

MACKENZIE GAS BLENDER INSTALLATION INSTRUCTIONS

NOTE: These instructions apply to the MacKenzie Single and Double models. The picture to the right is of a Double. The Single will have only one outlet assembly, which is on the right-hand side.

Use primary regulators on your gas source suitable for your panel specifications.
Example: If your inlet pressure label states "Min. inlet pressure 55 psi" then you must provide at least 55 psi to the Blender Panel



INSTALLATION INSTRUCTIONS

STEP 1: DETERMINE THE BEST LOCATION FOR THE BLENDER.

SELECT A LOCATION THAT:

- Minimizes the chance of accidental damage to the blender.
- Near, as practically possible, to both the supply sources and the supplied equipment.
- Convenient access to the shutoff valve for servicing.
- Mount panel in a weather-proof area only.

STEP 2: MOUNT PANEL TO WALL.

STEP 3: HOOK UP GAS SUPPLY AND OUTLET.

- Use only the gases shown on the panel label(s).
- Make sure you are supplying the panel with clean, dry gases that are between the minimum and maximum pressures as indicated on the panel label.
- Turn shutoff valve(s) on panel to the off position.
- Install high pressure braided tubing from the gas sources to the barb fittings on the panel.
- (Leak Detector - Optional, Sold Separately) Using braided tubing, connect the gas outlet from the blender to the barb fittings on the bottom of the leak detector. Then connect tubing from the top barb fittings of the leak detector to the system. (Note: leak detector has an input (0.2 end) and output (1.0 end).

DO NOT ATTEMPT TO REMOVE INLET OR OUTLET FITTINGS

- If blender is to be connected to shared bulk CO2 it is recommended to use a Check Valve Tee.
- Confirm that your system and related equipment is safe and ready for pressurized mixed gas.
- Connect mixed gas supply tube to mixed gas outlet fitting.
- Turn on the supply gases and check supply system and fittings for leaks.
- Open mixed gas supply shut off valve and check system for leaks.

OPERATION GUIDELINES AND HELPFUL HINTS

NOTES:

- Supply the panel with clean gases
- Be sure no liquid can get into the blender as this will render it useless and void the warranty, use Check Valve Tee.
- Some fittings on the panel do not have standard US threads, and should not be removed without checking with QBC!
- Leak Detectors save money!: A small leak of one-half cubic foot an hour wastes more gas each day than you would use to dispense two kegs of beer.

NEVER EXCEED THE RECOMMENDED PRESSURES FOR ANY PART OF YOUR SYSTEM.

TROUBLESHOOTING: NO OUTLET GAS

- Close shutoff valve.
 - If pressure is low or zero, check:
 - Both supply gases. (One or both could be empty, turned off or out of adjustment.)
 - For blockage of either supply line or for a closed valve within the supply system. (The blender shuts off if either gas supply is unavailable.)
- If you continue to have no gas, close shutoff valve, remove tubing from outlet, open shutoff valve and check for gas flow.
- If you still have no supply gas, call QBC or your gas supplier or service person. **There are no user serviceable parts within the panel. Anything done to the internal parts will affect the blend and void the warranty.**

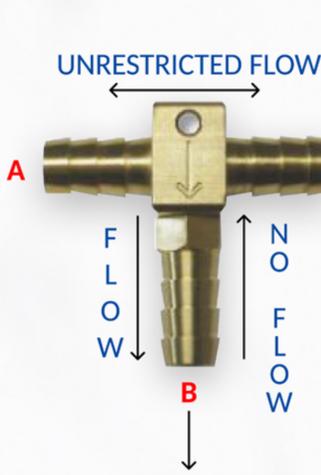
CHECK VALVE TEE - (Sold Separately)

Connecting to a Soda System Co2 Tank

One of the most serious service problems is blenders filled with water. This occurs when the blender is on the same gas supply as the soda carbonator and the CO2 supply fails or runs out. If the check valve(s) in the carbonator fails, the pressure of the water supply to the carbonator tries to supply the blender and fills it with water. The result is a completely ruined blender as well as most of the components in the panel. The Tee with Check Valve will prevent this problem by adding an isolated check valve to your system. The Blender warranty only covers against water damage if a Tee was installed.

Instructions:

- Use braided high pressure hose.
- Connect CO2 supply and Blender to the two "unrestricted flow" legs (A & C).
- The line to the carbonator connects to the remaining leg (B).
- The arrow should point toward the carbonator.
- Use hose clamps on all connections.
- The mounting hole is sized for a # 8 screw.



MCDANTIM LIMITED FIVE-YEAR WARRANTY

Quality Beverage Concepts ("QBC") McDantim Canadian Service Center

Return of Product for Any Reason (60 Days)

If for any reason the original purchaser is unsatisfied with the performance of this product, regardless of whether the product is defective, Quality Beverage Concepts ("QBC"), McDantim Canadian Service Center will, at the purchaser's option, replace the product or refund the original sale price upon return of this product to QBC within sixty (60) days of the date of purchase. The purchase price will be refunded once the product has been returned to QBC in satisfactory condition at the purchaser's expense.

Limited Warranty (Five Years)

McDantim Inc. warrants each product to be free from defects in materials and workmanship under normal use and service for five years from date of sale. This warranty runs to the original purchaser only. Written notice of such defect must be provided to QBC promptly upon discovery of the defect, but no later than five years from the date of purchase. The purchaser shall cooperate with QBC in supplying any other documentation or information reasonably required by QBC to assess the claimed defect. If QBC confirms that the product is defective in materials or workmanship, then QBC will repair or replace the product, in QBC's sole discretion, and reimburse the purchaser for the return shipping costs. If QBC does not agree with the purchaser's claim that the product is defective, QBC shall provide the purchaser with a written explanation within forty-five (45) days of receipt of the warranty claim, and the purchaser shall be responsible for the return shipping costs.

Warranty Exclusions

This limited warranty does not extend to any parts or equipment not manufactured by **McDantim Inc.** This limited warranty does not apply in the event that the **McDantim Inc.** product(s) supplied by QBC are mis-used or altered by the purchaser or any third party or used in combination with equipment, accessories or parts not manufactured by **McDantim Inc.** and supplied by QBC. This limited warranty does not apply to damage to the product caused by circumstances outside of **McDantim Inc.** for example, flood, terrorism, etc.

Purchaser Responsibilities

The purchaser shall assume all responsibility for damage to **McDantim Inc.** product(s) supplied by QBC due to normal wear and tear or use of the product in connection with equipment, accessories or parts not manufactured by **McDantim Inc.** and furnished by QBC. The purchaser is also solely responsible for any damage to the product due to the purchaser's negligence or misuse of the product, the purchaser's failure to properly operate and/or maintain the product, accident, or any work done on the product by anyone other than the **McDantim Inc.** QBC Canadian Service Center.

Disclaimer of Warranties

EXCEPT AS PROVIDED EXPRESSLY HEREIN, **MCDANTIM INC.** DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT.

Limitation of Remedies

THE REMEDIES SET FORTH IN THIS LIMITED WARRANTY ARE THE PURCHASER'S EXCLUSIVE REMEDIES IN CONNECTION WITH THE PERFORMANCE OF, OR ANY BREACH OF A GUARANTY, CONDITION, OR WARRANTY IN RESPECT OF, THE **MCDANTIM INC.** PRODUCT. IN THE EVENT THE ABOVE WARRANTY FAILS TO CORRECT PURCHASER'S PERFORMANCE PROBLEMS CAUSED BY DEFECTS IN WORKMANSHIP AND/OR MATERIALS, PURCHASER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO PAYMENT BY **MCDANTIM INC.** OF ACTUAL DAMAGES IN AN AMOUNT NOT TO EXCEED THE COST OF THE PRODUCT. IN NO EVENT SHALL **MCDANTIM INC.** BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, BUT NOT LIMITED TO, DAMAGES TO OR LOSS OF OTHER PROPERTY OR EQUIPMENT, LOSS OF PROFIT OR REVENUE, LOSS OF USE OF THE PRODUCT, COST OF REPLACEMENT OF THE PRODUCT, OR CLAIMS BY CUSTOMERS FOR LOSSES DUE TO SERVICE INTERRUPTIONS.

No Seller's Warranty

No person or entity, other than **McDantim Inc.** who manufactures this product makes any guaranty or warranty of his/its own on any product warranted by **McDantim Inc.** unless it delivers to the purchaser a separate written guaranty certificate specifically guaranteeing the product, in which case **McDantim Inc.** shall have no obligation to the purchaser. No distributors, dealers, nor any other person or entity has any authority to make any representation or promise on behalf of **McDantim Inc.** or to modify the terms or limitations of this warranty in any way.

Retention of Records

Please retain a copy of your receipt for proof of purchase. Proof of purchase is required for any product return or warranty claim.

PLEASE RETAIN A COPY OF THESE INSTRUCTIONS WITH YOUR PURCHASE RECEIPT FOR YOUR RECORDS.