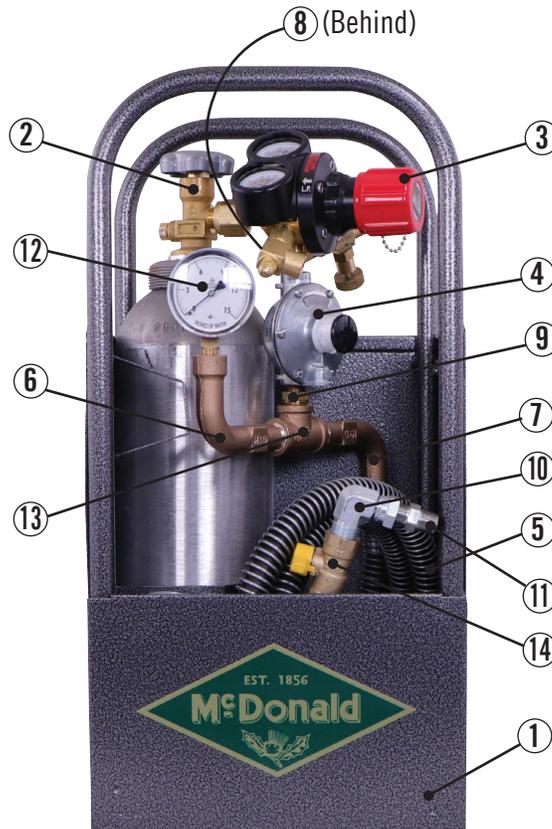




IMPORTANT NOTICE - READ CAREFULLY
Portable Bypass Kit



Part No.	Description
1	4819-504 Aluminum Bypass Box Complete Weld and Powder Coat
2	4819-505 CGA 350 Aluminum Cylinder
3	4819-506 High Pressure Regulator - Methane
4	4819-507 Low Pressure Regulator 5"-10" WC
5	4819-508 CNG 1/2 NPT Hose w/Spring Guard
6	4819-511 Bypass Box Elbow 1/2 MNPT x 1/2 FNPT - Mach
7	4819-512 Bypass Box Elbow 1/2 MNPT x 1/4 FNPT - Mach
8	4819-513 Hex Nipple 1/4 Male High Pressure Brass w/ Vibraseal
9	4819-514 Hex Nipple 3/8 X 1/2 MNPT Brass w/ Vibraseal
10	4819-515 Elbow 90 1/2 MNPT x 3/8 NPSM Swivel Steel Plated
11	4819-516 Hex Nipple NIPPLE 3/8 MNPT Swivel Connection Steel Plated
12	4819-517 Low Pressure Gauge 0"-15" W.C.
13	4422-073 2230 1/2 Tee
14	4901-161 10710Y 1/2 Gas Ball Valve CSA Yellow Handle

WARNING: This product can expose you to chemicals including lead, which is known to the State of CALIFORNIA to cause cancer and birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov.



IMPORTANT NOTICE - READ CAREFULLY

Portable Bypass Kit

Portable Bypass Kit Instructions

Before Use

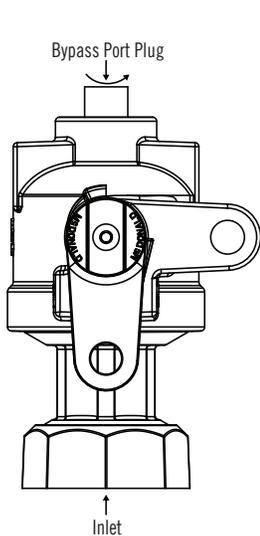
- Ensure all users have proper training with Portable Bypass Kit
- Inspect cylinder and kit completely before each use
 - Verify CNG cylinder has been inspected and hydrostatically tested within the last 5 years and properly marked per DOT and local requirements
- Inspect fittings, regulators, gauges and hose for any signs of damage - replace if identified
- Under pressure inspect water column gauge for accuracy with a manometer
- Follow all local instructions and codes for filling the CNG cylinder
- Do not Overfill the cylinder
- Store cylinder in truck or main center according to Utility and Local codes

Safety

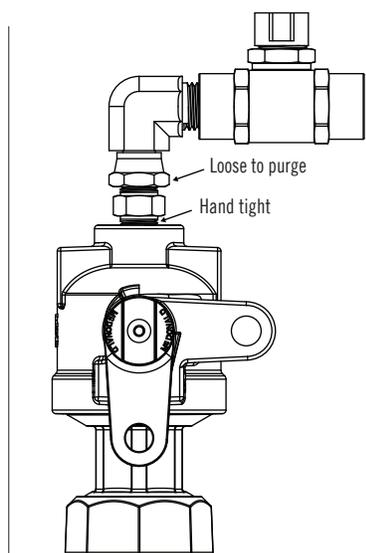
- Read instructions before performing bypass service
- Check for stray voltage at the meter set
- Beware of sources of ignition and safety hazards when purging gas or checking pressure
- DO NOT perform operation in confined space
- DO NOT leave PBK unattended while in use
- Monitor gauges while in use to ensure pressure is maintained through by-pass operation
- Internal damage can occur to CNG cylinder if left empty with valve open
- Do not exceed pressure rating of any component on PBK
- Follow all utility procedures and safety protocols during operation

Performing Bypass with PBK

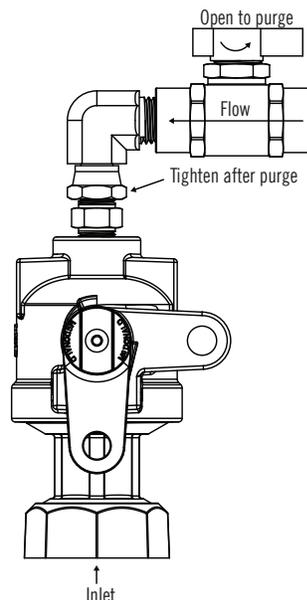
- Ensure you have proper kit and fittings for performing the bypass operation
- Verify cylinder pressure is adequate for performing the task at hand per utility standards
- With valve in normal flow mode (**Fig. A**) remove bypass port plug from valve
- Thread NPT hex nipple (1/4" or 3/8") into bypass port hand tight (**Fig. B**)
- Loosely thread on swivel elbow connection
- Open 1/2" valve on hose to purge through loose connection before tightening swivel hand-tight (**Fig. C**)
- Turn bypass valve counter clockwise to bypass *position (**Fig. D**)
- The meter set is now in bypass mode and service can be performed on any component prior to inlet of bypass valve
- When service is complete and meter is purged per utility standards, slowly turn the valve clockwise back to normal flow mode (**Fig. C**)
- When complete, turn off 1/2" valve on the hose and loosen swivel connection (**Fig. B**)
- Remove the NPT hex nipple and replace bypass port plug tightly (**Fig. A**)
- Turn off main cylinder valve and roll up hose to store in kit
- Recommended to purge line / bleed hose



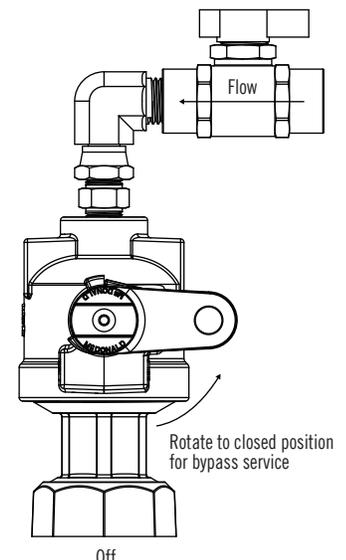
(Fig. A)



(Fig. B)



(Fig. C)



(Fig. D)

*Follow the standard bypass procedure for A.Y. McDonald Angle Gas Ball Valves according to instruction sheet 3210-389.