
GCI CYLINDER INVERTER

GALISO CYLINDER INVERTER
With TRANSFILL OPTION

INSTRUCTION MANUAL



MANUAL NUMBER 21-11-1179

Issued May 2012

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!!!DANGER!!!

**DO NOT USE THIS EQUIPMENT TO
PURGE TOXIC OR FLAMMABLE GAS**

AND

**DO NOT USE THIS EQUIPMENT
UNDER FLAMMABLE, VOLATILE OR
TOXIC ENVIRONMENTAL
CONDITIONS**

1.0 INTRODUCTION

The Galiso Cylinder Inverter has been designed to help with the Transfilling process, while providing a safe, efficient method for inverting and draining, heavy, water filled cylinders. This unit can also assist in the reduction of back related injuries.

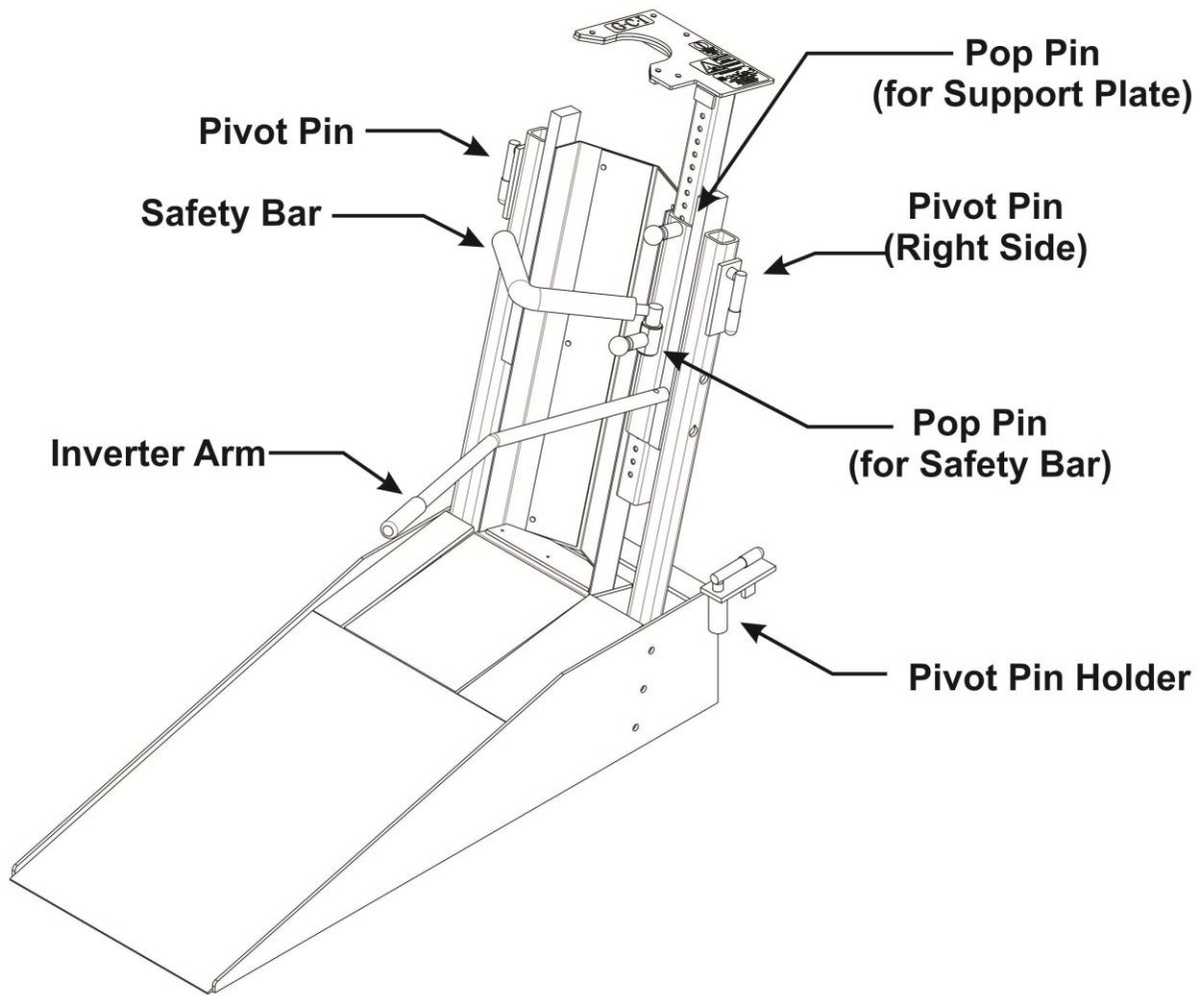


Figure 1, GCI Transfill

A. Specifications:

Dimensions, Upright:	56"L x 20"W x 42" H
	Inverted: 80"L x 20"W x 66 ½" H
Weight:	291 lbs.
Warranty:	6 Months
Operation:	Manual
Minimum Cylinder Size:	4" x 20" Tall
Maximum Cylinder Size:	11" x 63" Tall
Center Pivot Points for:	31", 33", 51", 54" and 60" tall Cylinders

2.0 SAFETY

Read all instructions before attempting to install or operate this machine. Galiso suggests that all persons that will operate this equipment have training prior to use.

NOTICE

GALISO, INCORPORATED IS NOT RESPONSIBLE FOR DAMAGE OR INJURY CAUSED BY UNSAFE USE, MAINTENANCE, APPLICATION, MODIFICATION OR IMPROPER INSTALLATION OF THIS MACHINE. Please contact Galiso, Inc. at 1 (800) 854-3789 for guidance, when you are in doubt as to the proper safety precautions to be taken when installing or operating this machine.

- A. Make certain that the pivot pins are in place before loading cylinders onto the ramp or into the cradle.
- B. When adjusting for a different cylinder size, leave the current set of Pivot Pins in place and use the Pivot Pins from the storage location to set the new height. Always place the Pins from the storage location **BEFORE** removing the first set of Pins. Proceed in this fashion every time, leaving one set of Pins in the holes at all times.
- C. When using the GCI for positioning during a Transfill process, always use the recommended operation instructions and safety precautions that accompany your specific Transfilling equipment.

3.0 INSTALLATION

- A. Carefully remove all strapping from the GCI. Invert the cylinder cradle and insert 2 Pivot Pins into the holes on the sides, to hold cradle in place.
- B. Using a fork lift, remove the GCI the shipping pallet and place at designated pit location. Ensure this location has clearance for the rotation of the cylinder.
- C. Inventory all parts according to the following list:
 - a. 1 ea. Frame Assembly
 - b. 1 ea. Inverter Arm with Pin
 - c. 1 ea. Cradle Assembly
 - d. 1 ea. Box containing:
 - 2 ea. Pivot Pins
 - 1 ea. Instruction Manual
- D. Place the Pivot Pins from the box into the holders provided on each side of the frame.
- E. Remove the Pin from the Inverter Arm. Insert the Arm into the slot on the right-hand, lower section of the cradle with the bend facing away from the cradle. Insert the holding pin to lock handle in place. NOTE: The Inverter Arm can be removed when not in use.
- F. Important! Please read the Instruction Manual in its entirety before beginning any operation of the GCI. If there are any doubts as to the Installation or Operation of this equipment, please call Galiso at 1 (800) 854-3789.

4.0 OPERATION

- A. Before making any adjustment, make sure there is a set of Pivot Pins in the adjustment holes on both sides of the GCI, to prevent the cradle from rotating erratically.
- B. Check free movement of the inverter cradle by rotating the invert arm on the unit slowly back and forth. Prepare the inverter cradle for cylinder loading by pulling the pop pin and rotating the cylinder containment safety bar out of the way.
- C. Before loading a cylinder, determine the height of the cylinder to be inverted. Using the second set of Pivot Pins from the storage holder location, secure them into the adjustment hole, labeled with the appropriate height of the cylinder to be loaded.
- D. Before rolling a cylinder into place, adjust the cylinder support assembly height to a level higher than the top of the cylinder to allow loading clearance. This will allow a cylinder to be loaded, while keeping hands clear from any pinch points. Raise the assembly by lifting at the cylinder neck brace from the outside corner and pulling the Pop Pin out. When desired height is reached, release the Pop Pin and check for full engagement – avoid all pinch points below. Keep hands clear while loading or unloading cylinders.
- E. Be careful not to pull cylinder support assembly above of the slip tube holding the arm of the cylinder support assembly.
- F. Prepare the inverter cradle for cylinder loading by pulling the pop pin and rotating the cylinder containment safety bar out of the way.
- G. Carefully roll your cylinder into the inverter cradle – assuring it fits snugly against the back of the cradle.
- H. Swing and latch the Cylinder Containment Safety Bar into position before inverting the cylinder.
- I. Stay clear of all moving parts when inverting cylinders by holding only the inverter handle. Slowly turn the cradle, remembering to stay on the side of the GCI and away from the swinging cradle.
- J. When inverting a cylinder, if it feels unusually hard to invert – stop, lower cylinder and check your pivot locations. Reposition as necessary by following the above instructions, items A and B.

4.0 OPERATION, continued

- K. Once the cylinder is emptied, the GCI can be reverted at any time, or the operator can continue onto the Transfilling process. Take care in returning the cylinder back over, into an upright position.

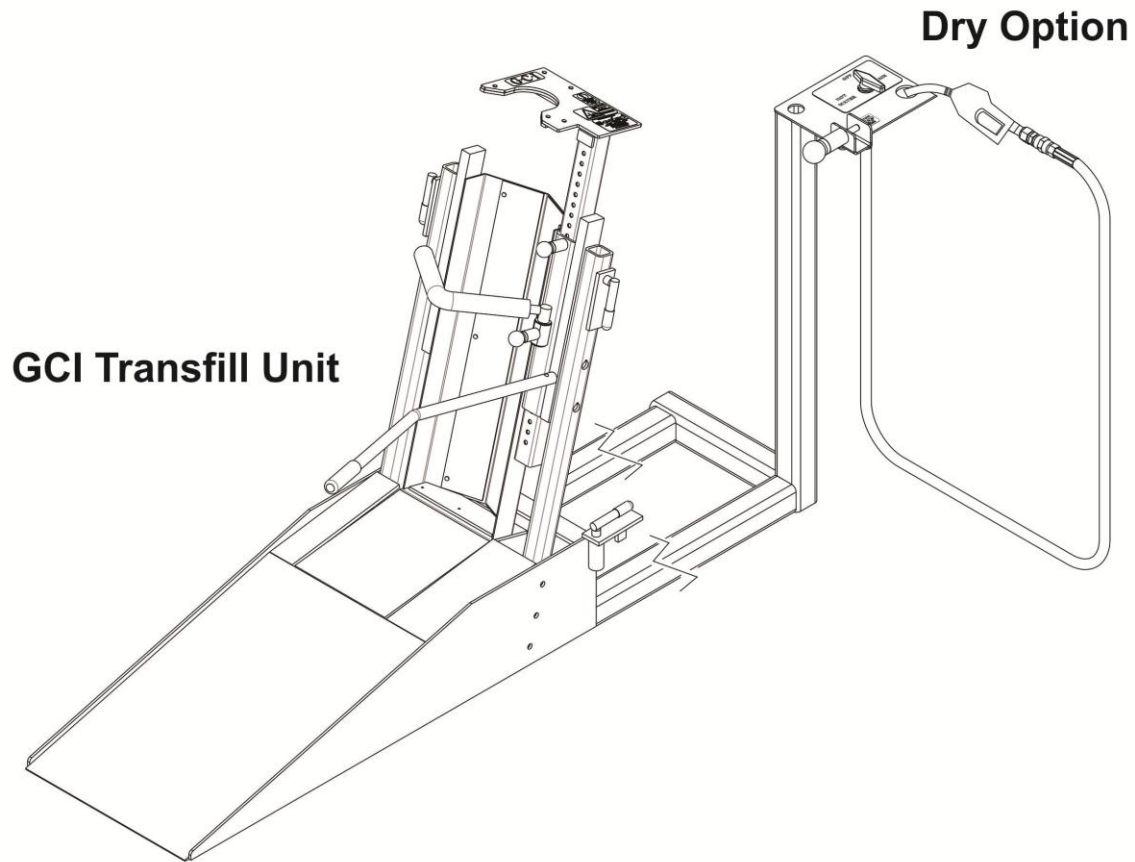
NOTE: When using the GCI for positioning during a Transfill process, always use the recommended operation instructions and safety precautions that accompany your specific Transfilling equipment.

- L. After the inverter has been returned to the upright position, adjust the Cylinder Support Assembly to a height, higher than the top of the cylinder, to allow for unloading. Lift the Cylinder Support Assembly from the outside corner and pull the Pop Pin out. When the desired clearance height is reached, allow the Pop Pin to return to hole and check for full engagement. Always remember to keep hands clear and avoid pinch points
- M. When the cylinder is upright and the support assembly is clear, move the cylinder containment safety bar out of the way by pulling its Pop Pin – thus releasing the bar to swing clear and allowing removal of cylinder.

5.0 MAINTENANCE

- A. None necessary.

ADDENDUM A: GCI DRY OPTION:



Specifications:

Dimensions, when included with the GCI 74”L x 24”W x 60”H

Air Requirements: Clean dry compressed air as required.

Water Requirements: Hot water to meet your cylinder requirements.

1.0 INSTALLATION:

- A. Carefully unstrap and unwrap the Dry Option.
- B. Inventory all parts to the following list:
 - 1 ea. Dry Option assembly
 - 1 ea. Hose
 - 1 ea. Probe
 - 2 ea. Bolts and Washers.
- C. Remove the attaching Bolt and washers in the bottom leg of the Dry Option Frame and insert the Dry Option into the GCI frame. Insert and tighten the attaching bolts and washers.
- D. Insert the Dry Option Probe in the frame and lock in place with the Pop Pin holder when not in use.
- E. Hook up the air-side of the three way valve on the Dry Option to a clean filtered air source that meets your clean requirements. Note: filter assemblies are available from Galiso.
- F. Hook up the Hot Water-side of the three way valve on the Dry Option to a hot water source.

2.0 SAFETY:

- A. All operators must read the manual prior to operating the (GCI) Galiso Cylinder Inverter, Dry Option. Galiso Incorporated suggests that customer management develop a training exercise prior to operating the GCI dry option.

NOTICE:

Galiso, Incorporated is not responsible for damage or injury caused by unsafe use, improper maintenance or improper application of this equipment. Please contact Galiso Customer Service Department with any questions at: 1 (800) 854-3789.

WARNING:

You must LOCK the Wash Option probe in position in the cylinder prior to turning the air or hot water on, and when not in use in its storage holder.

3.0 OPERATION:

- A. Remove the drying probe from the storage holder and insert and lock it in the cylinder using the Pop Pin safety holder provided on the cylinder neck brace.

WARNING:

The drying probe must be locked in the Pop Pin safety holder on the retaining plate before actuating the HOT Water or Air to avoid injury or damage.

- B. Invert the cylinder and turn the valve handle to actuate the air to drain the cylinder. (approx. 3 to 5 seconds)
- C. Now switch the handle to actuate the Hot Water, as required, to heat the cylinder.
- D. Once the cylinder is hot, switch the valve handle back to air to drain and dry the cylinder.
- E. Turn Dry Option Valve to off, re-invert cylinder, remove Probe, place and lock it back in its storage holder: remove cylinder.

NOTICE:

The cylinder may be HOT. Use caution when removing from unit.