AXIALL LLC

Forced Venturi Installation Kit SKU 9500154

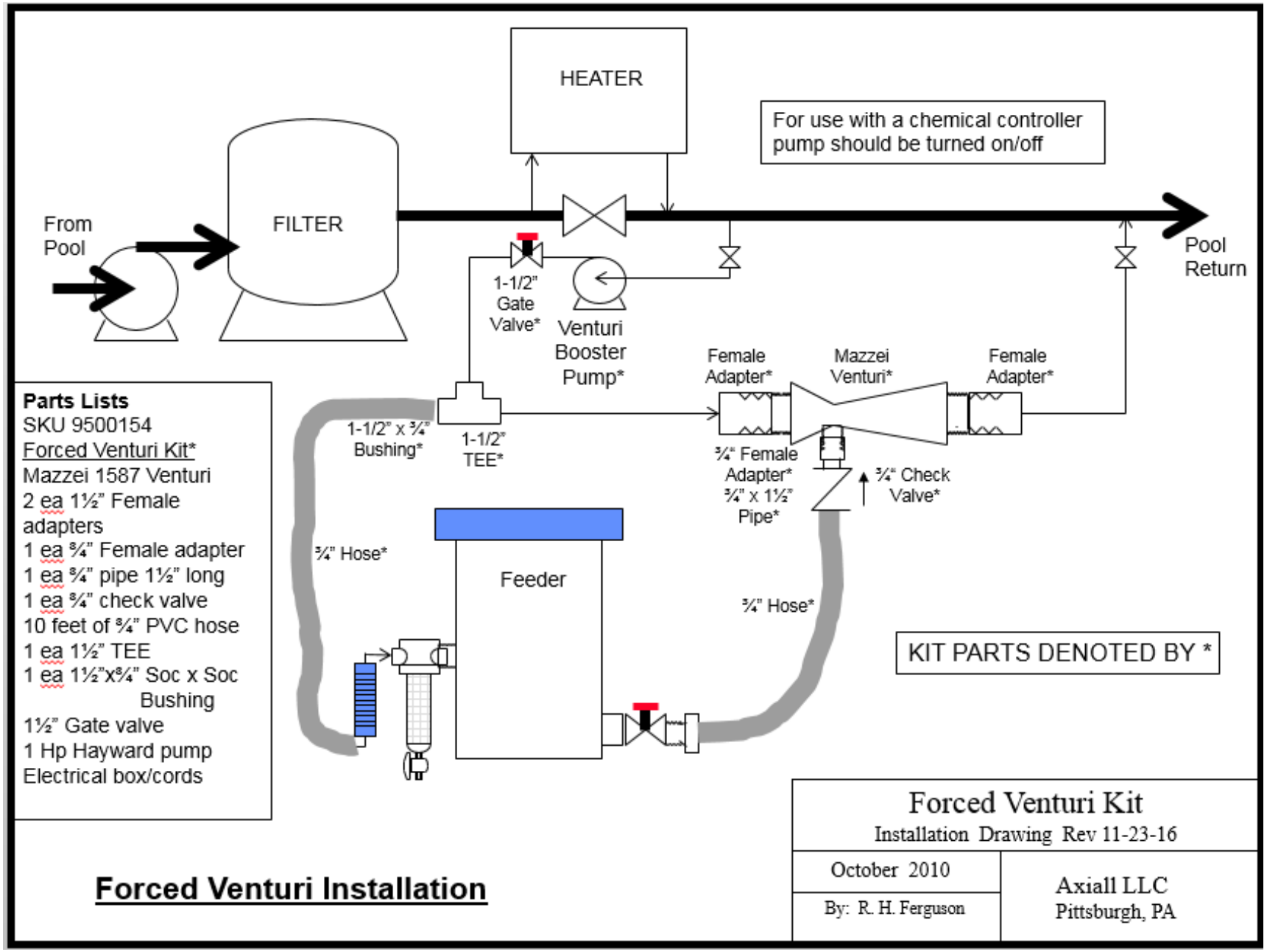
Revised 11-28-2016

Table of Contents

Kit Contents:

Mazzei 1587 Venturi
2 ea 1½" Female Adapters
1 ea ¾" Female Adapter
1 ea ¾" pipe x 1½" long
1 ea ¾" Sanking® Ball Check Valve
10 feet of ¾" PVC Hose
1 ea 1½" Tee
1 ea 1½"x ¾" Soc x Soc Bushing
1 ea 1½" Gate Valve
1 ea 1 HP Hayward pump
1 ea Electrical Box w/ Cords

Kit is shipped in 2 boxes; one box for the pump and one box for the other parts.


HEATER
For use with a chemical controller pump should be turned on/off
From Pool
FILTER
Pool Return
1-1/2" Gate Valve*
Venturi Booster Pump*
Female Adapter*
Mazzei Venturi*
Female Adapter*
1-1/2" x ¾" Bushing*
1-1/2" TEE*
¾" Female Adapter* ¾" x 1½" Pipe*
¾" Check Valve*
¾" Hose*
Feeder
¾" Hose*
KIT PARTS DENOTED BY *
Parts Lists
SKU 9500154
Forced Venturi Kit*
Mazzei 1587 Venturi
2 ea 1½" Female adapters
1 ea ¾" Female adapter
1 ea ¾" pipe 1½" long
1 ea ¾" check valve
10 feet of ¾" PVC hose
1 ea 1½" TEE
1 ea 1½"x¾" Soc x Soc Bushing
1½" Gate valve
1 Hp Hayward pump
Electrical box/cords
Forced Venturi Installation
Forced Venturi Kit
Installation Drawing Rev 11-23-16
October 2010
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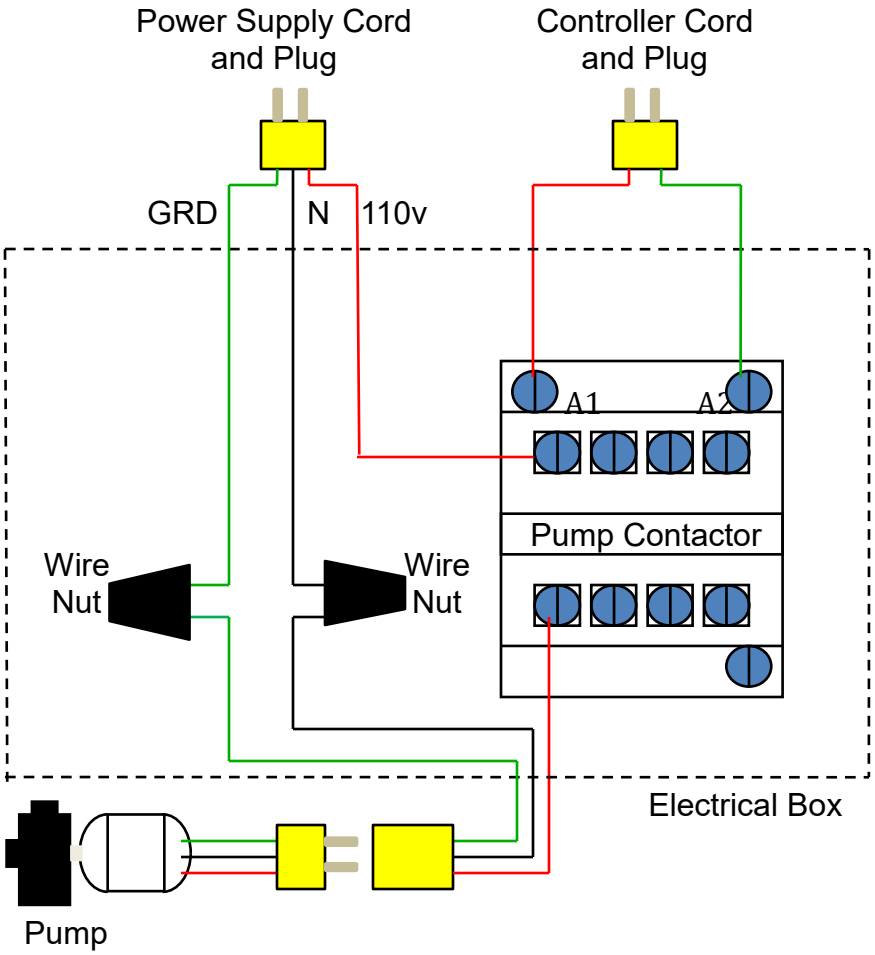
Axiall LLC
Pittsburgh, PA



Electrical Box Schematic

Prepare the Venturi for Installation

All Venturi installation kits are equipped with a Mazzei Injector (Venturi). As detailed below, this contains miscellaneous parts that should be discarded to ensure proper installation.

The Mazzei Injector is shipped with the following parts:

- Mazzei Injector
- ¾" Nozzle
- Check Valve Assembly (rubber gasket, ball and spring)

Prior to installation, remove and discard the ¾" Nozzle and the factory Check Valve Assembly as indicated in the picture below.

Forced Venturi Installation

When to use this Installation

1. With a chemical controller
2. Where direct injection of chlorine is preferred

Additional Parts Required

- [2] 1½" Ball Valves for isolation
- 1½" or larger flexible tubing or PVC pipe
- Miscellaneous fittings (depends on the size of pipe/hose used)
- Miscellaneous Screws to mount the relay box

Installation Instructions

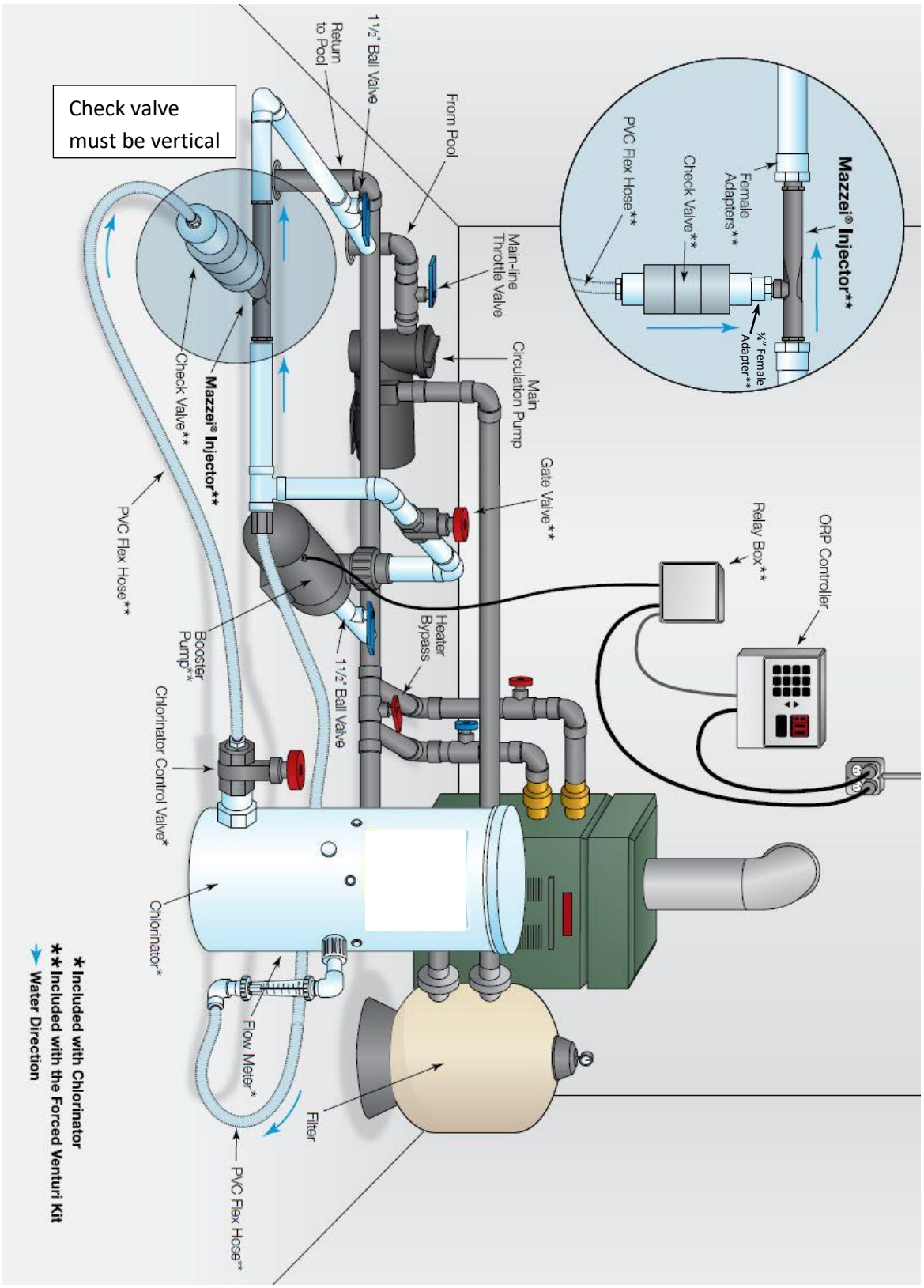
1. Place the chlorination system in a convenient location near the application point
2. Level the system. This is important for proper chlorine delivery
3. Place the venturi booster pump on the floor near the chlorinator
4. Place the Relay Box on the wall near the chemical Controller (if available) and a 120V electrical outlet; **DO NOT** plug cords into electrical outlets until start-up;

5. Install the 1½" booster pump supply line off the pool return line by the following steps:
    a. Install a *Saddle Clamp* **or** Plumb a *Pipe Tee* **or** *Drill & Tap* for a 1½" line into the pool return line (preferably after the filter and heater if available)
    b. Using appropriate fittings, install an inlet isolation valve (ball valve) on the booster pump supply line
    c. Use 1½" PVC Pipe or Hose to connect to the inlet (front) of the booster pump
6. Install the 1 ½" booster pump discharge line by the following steps:
    a. Using 1½" PVC Pipe or Hose, connect the outlet (top) of the booster pump to the 1½" Gate Valve
    b. Use 1½" PVC Pipe or Hose to connect the 1½" Gate Valve to the 1½" Pipe Tee to split the booster pump discharge into two lines: 1)Chlorinator Feed 2)Venturi Feed
7. Install chlorinator inlet assembly to the inlet of the chlorinator following the instructions in the chlorinator Installation Manual.
8. Prepare 1½" Venturi and ¾" Check Valve for Installation by the following steps:
    a. Refer to *"Preparing a Venturi for Installation"*.
    b. Cement the ¾" pipe x 1½" long to the Female Adapter.
    c. Cement the other end of the ¾" pipe into the DISCHARGE side of the check valve. Take great care to use the proper end of the check valve.
    d. Thread the ¾" Female Adapter onto the ¾"suction port of the Mazzei Eductor.
    e. Thread both 1½" Female Adapters onto the inlet and outlet ports on the 1½" Venturi

9. Install 1 ½" Venturi Loop by the following steps:
    a. Install a *Saddle Clamp* **or** Plumb a *Pipe Tee* **or** *Drill & Tap* for a 1½" line into the pool return line downstream of the booster pump supply line
    b. Using appropriate fittings, install an outlet isolation valve (ball valve)
    c. Using 1½" PVC Pipe or Hose, connect the outlet isolation valve to the female adapter located on the *outlet port* of the 1½" Venturi
    d. Using 1½" PVC Pipe or Hose, connect the female adapter located on the in*let port* of the 1½" Venturi to the 1½" Pipe Tee
10. Install the Chlorinator Outlet Line and Connect it to the Venturi by the following steps: Some of these parts are contained with the Chlorinator and there are 2 different chlorinators.
    a. Thread a ¾" x ½" Reducing Nipple into the chlorinator outlet bulk head fitting (VersaChlor). Cement the 1" x ½" Bushing into the chlorinator outlet (Accu-Tab)
    b. Thread on the ½" nipple and ½" Gate Valve.
    c. Thread a ¾" x ½" Reducing Male Adapter into the ½" gate valve
    d. Using the ¾" PVC hose, connect the Reducing Male Adapter (threaded into gate valve) to the ball check valve.

Start Up Instructions

1. Completely open the ½" Gate Valve on the Chlorinator Outlet and completely open the 1½" Gate Valve near the booster pump
2. Open both of the isolation valves
3. Plug the booster pump electrical cord into the relay box female pigtail labeled "Pump"
4. Plug the relay box cord labeled "120 Volt" into a 120V electrical outlet
5. Set the 1½" Booster Pump Gate Valve by the following:
    a. Initially, Plug the relay box cord labeled "Controller" into any 120V electrical outlet to turn on the pump and to allow the Venturi to 'pull' solution out of the chlorinator
    b. Slowly close the 1½" Gate Valve until the chlorinator inlet flow meter reads just below 5 gpm
6. If using a controller to manage chlorine residual, unplug the cord labeled "Controller" from a 120V electrical outlet (from step 5a above) and plug it into the chemical controller
7. If NOT using a controller to manage chlorine residual, adjust the chlorine control valve (½ " gate valve on chlorinator outlet) to the desired setting
    a. Check available chlorine regularly to determine the best setting
8. Refill the chlorinator with the appropriate tablets as needed to maintain chlorine level.


Check valve must be vertical
Mazzei® Injector**
Female Adapters**
Check Valve**
PVC Flex Hose**
¾" Female Adapter**
1½" Ball Valve
Return to Pool
From Pool
Main-line Throttle Valve
Main Circulation Pump
Gate Valve**
Relay Box**
ORP Controller
Check Valve**
Mazzei® Injector**
PVC Flex Hose**
Booster Pump**
Heater Bypass
1½" Ball Valve
Chlorinator Control Valve*
Chlorinator*
Flow Meter*
Filter
PVC Flex Hose**
* Included with Chlorinator
** Included with the Forced Venturi Kit
Water Direction