



**215 Gallon
Waste Oil Tank
With Bypass Regulator
Installation Instructions**

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BEFORE YOU BEGIN INSTALLATION...


IMPORTANT

Read and understand this manual completely before beginning installation.

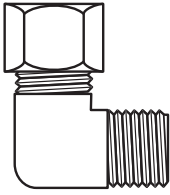
- This tank is for commercial and industrial use only. **This unit is not intended for residential use.**
- Install Heater/Tank combination in an area that is protected from fork lift and motor vehicle traffic.
- Bolt tank to floor before you fill the tank or install the heater.
- Secure the heater to a permanent structure after installation.
- Install the heater according to the printed information in your owners manual.
- **Installation of this unit must be made in accordance with state and local codes or authorities having jurisdiction over environmental control, fuel, fire and electrical safety.**
- Read and familiarize yourself with these instructions and associated photos, diagrams and illustrations before beginning installation or operation. These instructions should be followed closely, to achieve the best possible results.

If you have questions or concerns at any time during the installation, stop the installation and contact a Lanair Service Representative.

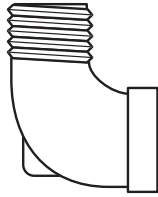
- Check to make sure you have all the required components needed for proper installation and operation.
- Check each component for visible damage. If you find a damaged component, contact a Lanair Service Representative for a replacement. **Do not install broken or damaged parts.**
- Read and understand the warranty. Fill out the enclosed warranty card and return within 10 days of purchase.
- Clean and de-burr all pipe connections prior to use. Loose filings and burrs can clog the nozzle.

- 
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 - **Secure the heater to a permanent structure after installation.**
 - **Install the heater according to the printed information in your owners manual.**

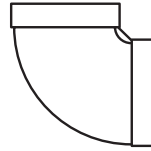
Section 1 - Plumbing Kit Parts List



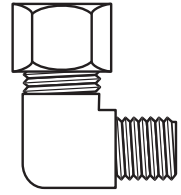
Part # 8563
Brass Elbow
1/2" Comp x 3/8" NPT
Qty: 3



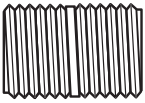
Part # 8902
Elbow Street 1/2"
Qty: 3



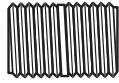
Part # 8602
Elbow 1/2"
Qty: 1



Part # 8850
Brass Elbow
1/2" Comp x 1/4" NPT
Qty: 1



Part # 8186
Nipple Close 1/2"
Qty: 4



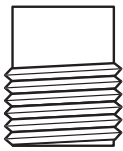
Part # 8475
Nipple Close 3/8"
Qty: 1



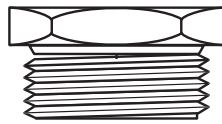
Part # 8647
Nipple Close 1/4"
Qty: 1



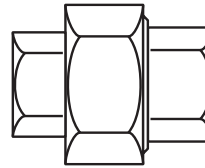
Part # 8882
Nipple Close 1/8"
Qty: 1



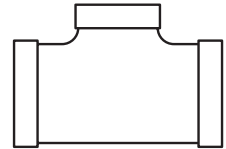
Part # 8185
Pipe Plug 1/2"
Qty: 2



Part # 8904
Bushing 1/2" x 1"
Qty: 2



Part # 8556
Union 1/2"
Qty: 1



Part # 9412
Tee 1/2" x 1/4" x 1/2"
Qty: 1



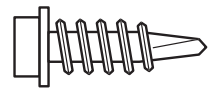
Part # 8558
Coupling Reducing
1/2" x 1/4"
Qty: 1



Part # 8560
Coupling Reducing
3/8" x 1/8"
Qty: 1



Part # 9572
Coupling Reducing
1/2" x 3/8"
Qty: 1



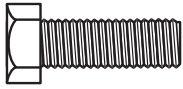
Part # 7101
Screw
#10 x 1"
Qty: 4



Part # 8557
Nipple 1/2" x 5-1/2"
Qty: 1



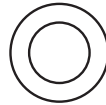
Section 1 - Plumbing Kit Parts List



Part # 7043
Screw 5/16" - 18 x 1"
Qty: 4



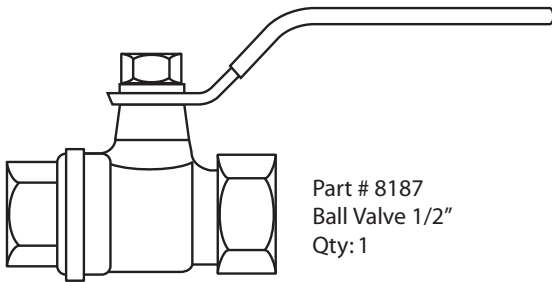
Part # 7427
Washer Lock 5/16"
Qty: 4



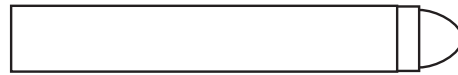
Part # 7417
Washer Flat 5/16"
Qty: 4



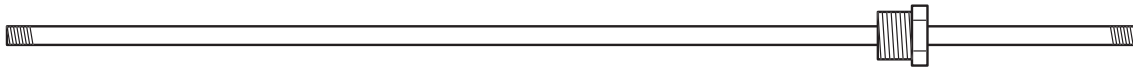
Part # 7207
Nut 5/16" - 18
Qty: 4



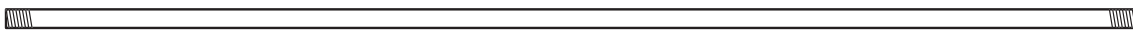
Part # 8187
Ball Valve 1/2"
Qty: 1



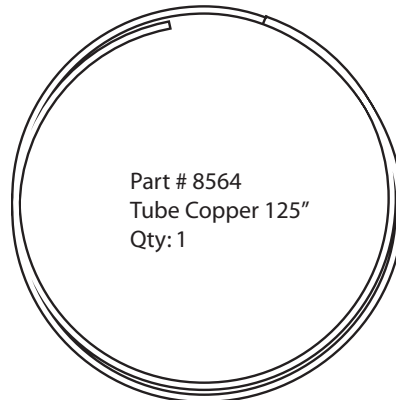
Part # 5277
Thread Sealing Compound
Qty: 1



Part # 9030
Pick-up Tube
Qty: 1



Part # 9036
Pipe Return Line 1/2" x 48"
Qty: 1

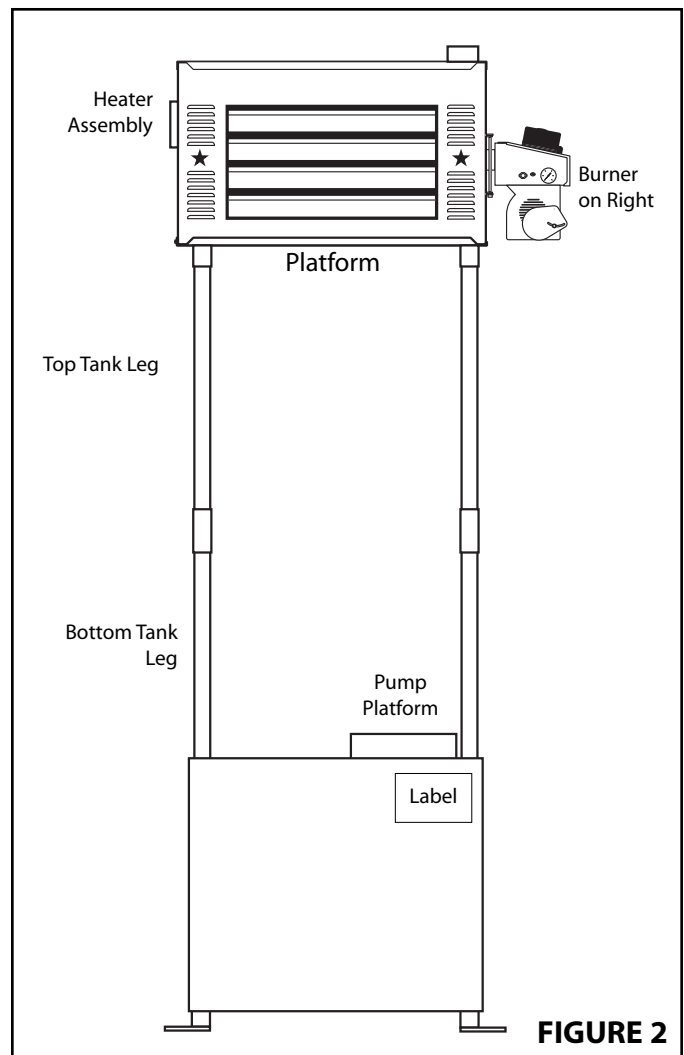
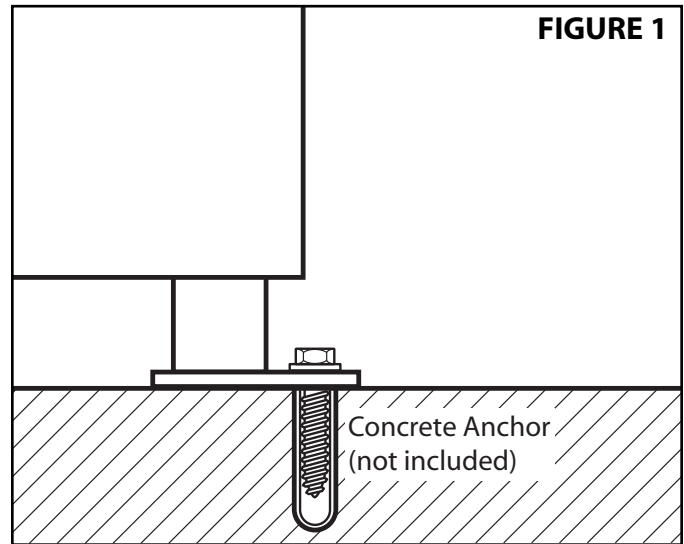


Part # 8564
Tube Copper 125"
Qty: 1

Section 2 - Installation Instructions

TANK INSTALLATION

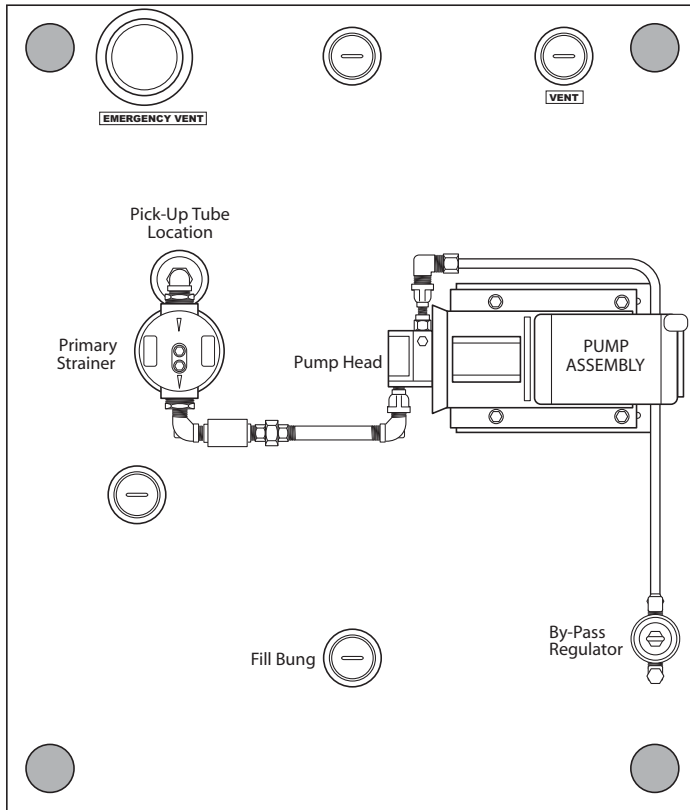
1. Unwrap the tank and parts.
2. Choose tank location. Locate the tank in an area that is protected from lift truck and motor vehicle traffic. **NOTE:** Make sure you have enough room to install and service your heater.
3. Anchor all four legs of the tank to the floor as indicated in Fig. 1. **NOTE:** This method of anchoring is a suggestion only. Anchoring methods may vary per individual applications and environments. Check state and local codes for clarification.
4. Install the four tank legs included with the tank on top of the bottom legs (see Fig. 2).
5. Using a forklift, lift and center the heater on top of the platform. **NOTE:** The front of each unit is indicated on the top of the tank platform.
6. Using a forklift, carefully raise the platform and heater assembly and place on top of the previously installed legs (see Fig. 2).
7. Locate the four holes on the bottom side of the heater platform. Attach the heater to the platform using four #10 x 1" screws provided.





Section 3 - Plumbing Installation

FIGURE 3- Top View of Tank



PLUMBING INSTALLATION - Pick-Up Tube Assembly

1. Unpack and lay out all of the parts shipped with your tank and heater. Before beginning assembly, make sure all lines and fittings are free of dirt and/or burrs. **NOTE:** When making plumbing connections, use the thread seal compound (P/N 5277) included in the plumbing kit on all joints. **DO NOT USE TEFLON TAPE.**

2. Locate the pick-up tube assembly (P/N 9030). This tube will have a 2" bushing welded onto it.
3. Attach the brass check valve (P/N 8662 - included in the heater accessory kit) to the bottom of the pick-up tube assembly (P/N 9030). **NOTE:** The arrow on the check valve must point in the direction of the oil flow (up) or the check valve will not work properly (see Fig. 4).
4. Attach the 1/2" elbow (P/N 8902) to the check valve. Attach the suction line strainer (P/N 8748 - included in the heater accessory kit) to the 1/2" elbow (P/N 8902) as indicated in Fig. 4.
5. Insert the pick-up tube assembly into the 2" bung (hole) and tighten (see Fig. 3 for bung location).

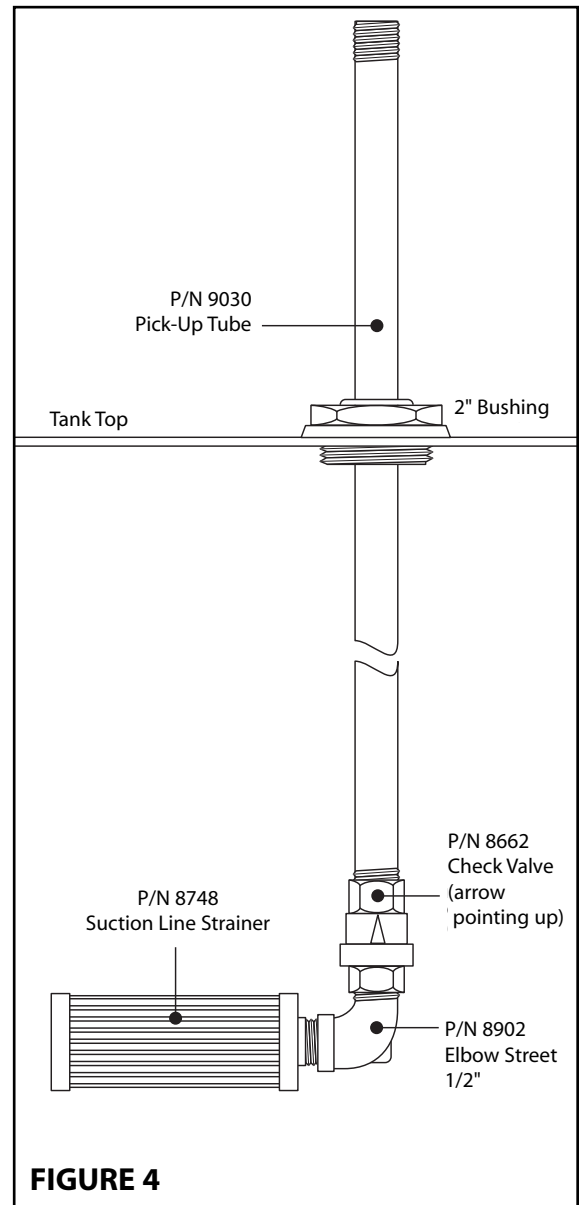
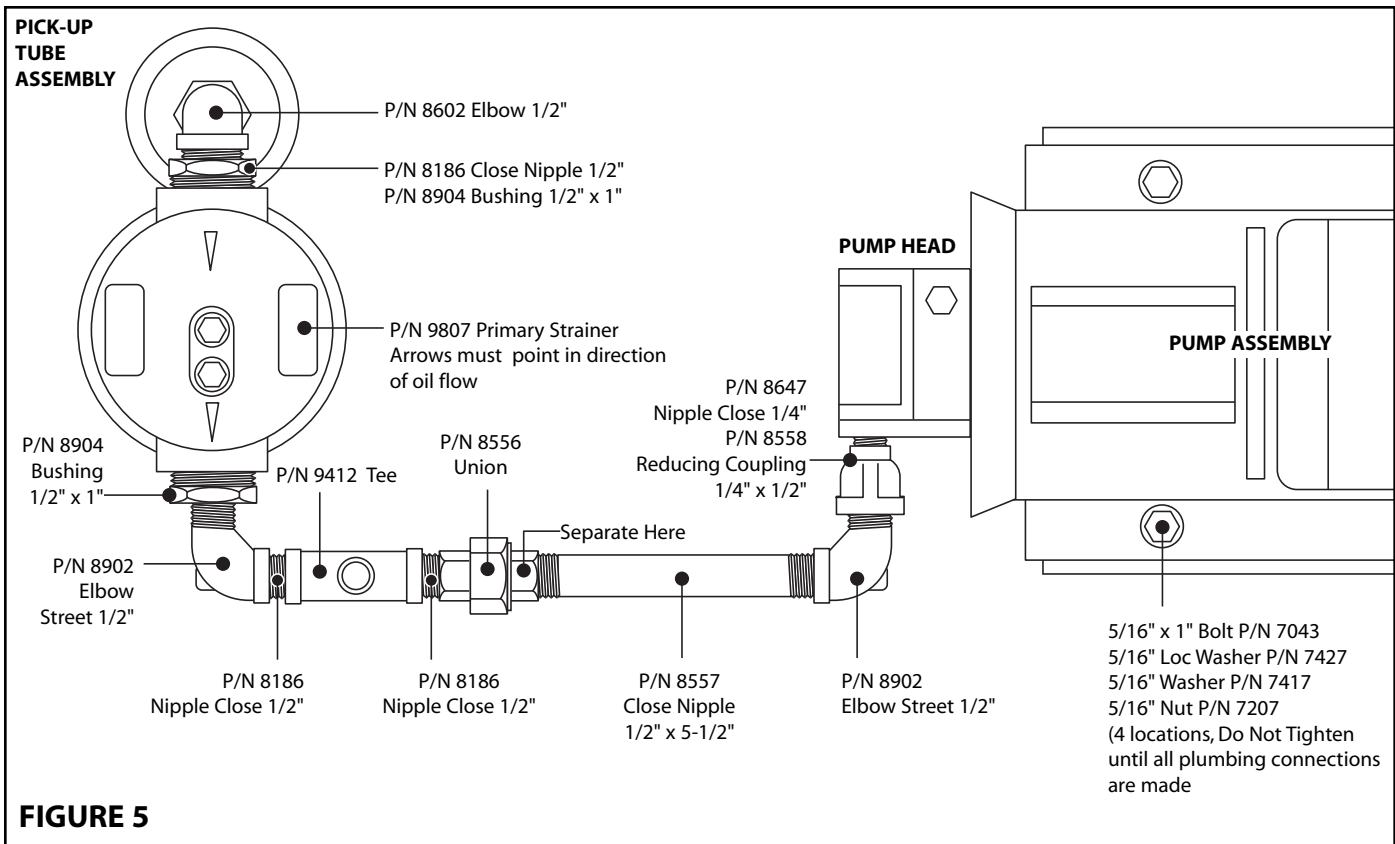


FIGURE 4

Section 3 - Plumbing Installation



PLUMBING INSTALLATION - Pick-Up Tube to Pump Plumbing

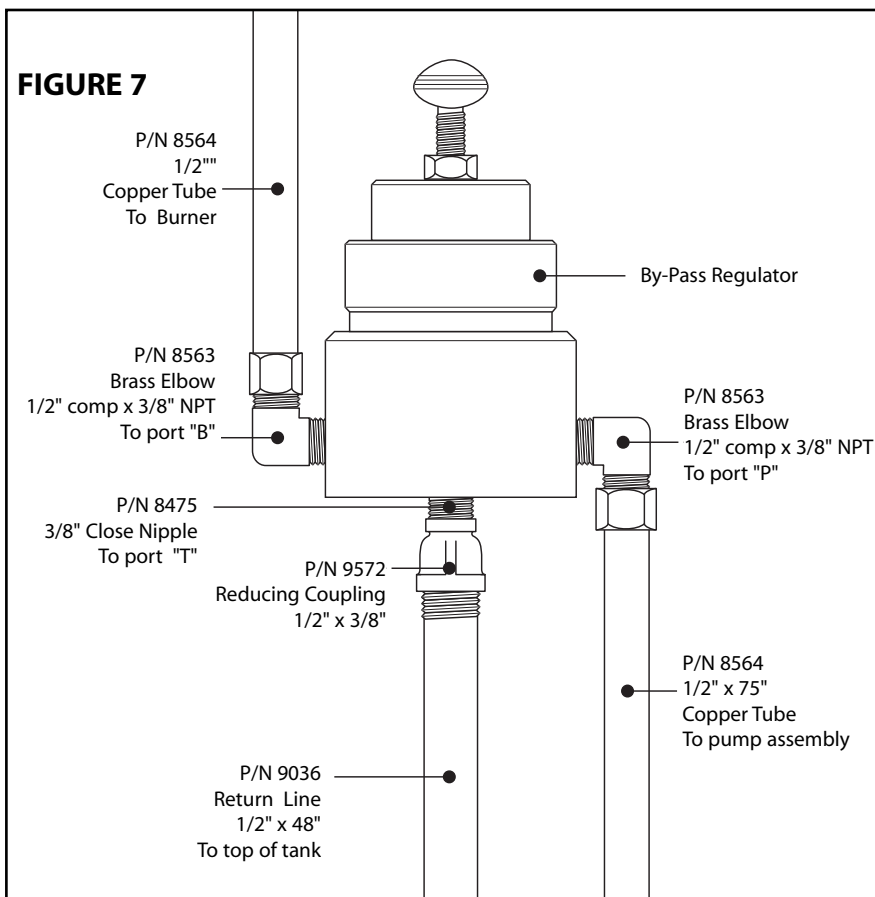
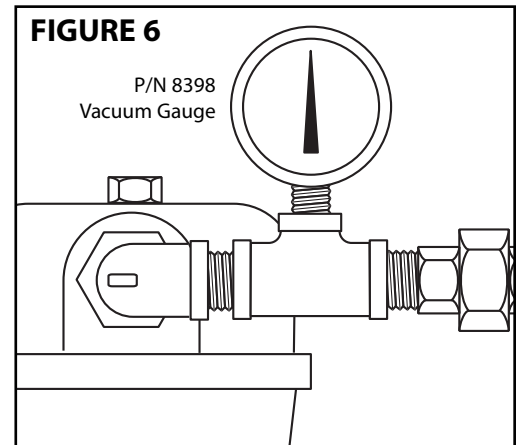
1. Attach the pump assembly to the top of the tank bracket (see Figs. 2 and 3 for bracket location) using four 5/16" x 1" bolts, loc washers, washers and nuts (See Fig. 5). **NOTE:** Do not tighten until all plumbing connections are made.
2. Install a 1/2" elbow (P/N 8602), 1/2" close nipple (P/N 8186) and 1/2" x 1" bushing (P/N 8904) to the top of the previously installed pick-up tube assembly. **NOTE:** When making plumbing connections, use the thread seal compound (P/N 5277) included in the plumbing kit on all joints. **DO NOT USE TEFLON TAPE.**
3. Attach the primary strainer assembly (P/N 9807 - included in heater accessory kit) to the previously installed components. **NOTE:** Make sure that the arrows on the top of the strainer are pointed in the direction of the oil flow (see Fig. 5).
4. Install a 1/2" x 1" bushing (P/N 8904), 1/2" elbow street (P/N 8902), 1/2" close nipple (P/N 8186), 1/2" x 1/4" x 1/2" tee (P/N 9412), 1/2" close nipple (P/N 8186) and Union (P/N 8556) to the primary strainer assembly (P/N 9807) as indicated in Fig. 5 above. **NOTE:** When making plumbing connections, use the thread seal compound (P/N 5277) included in the plumbing kit on all joints. **DO NOT USE TEFLON TAPE.**



Section 3 - Plumbing Installation

PLUMBING INSTALLATION - Pick-Up Tube to Pump Plumbing (cont.)

5. Install a 1/4" close nipple (P/N 8647) to the pump head (see Fig. 5, page 7).
6. Install a 1/4" x 1/2" reducing coupling (P/N 8558), 1/2" street elbow (P/N 8902) and 1/2" x 5" nipple to the previously installed 1/4" close nipple (see Fig. 5, page 7).
7. Separate the 1/2" union (P/N 8556) as indicated in Fig. 5.
8. Attach the separated part of the union to the 1/2" x 5" nipple. Re-assemble the union and tighten.
9. Check to make sure all joints are tight. **NOTE:** Failure to do so will result in suction leaks (drawing air into oil) causing the heater to operate improperly. Tighten the pump assembly to the bracket. Install the vacuum gauge (P/N 8398 - included in the heater accessory kit) to the previously attached 1/2" x 1/4" x 1/2" tee (P/N 9412) as indicated in Fig. 6.



PLUMBING INSTALLATION - By-Pass Regulator Assembly

Using a tube cutter, cut a 75" length of tube from coil of 1/2" copper

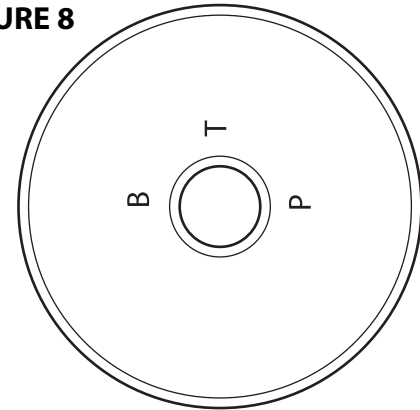
1. Install the 1/2" x 48" by-pass return line (P/N 9036) to the top of the tank (See Fig. 3, page 6 for hole location). **NOTE:** When making plumbing connections, use the thread seal compound (P/N 5277) included in the plumbing kit on all joints. **DO NOT USE TEFLON TAPE.**
2. Attach the 1/2" x 3/8" reducing coupling (P/N 9572) to the top of the by-pass return line (P/N 9036) as indicated in Fig 7.
3. Attach a 3/8" close nipple (P/N 8475) to the previously installed reducing coupling (P/N 9572) as indicated in Fig. 7.

Section 3 - Plumbing Installation

PLUMBING INSTALLATION - By-Pass Regulator Assembly (cont.)

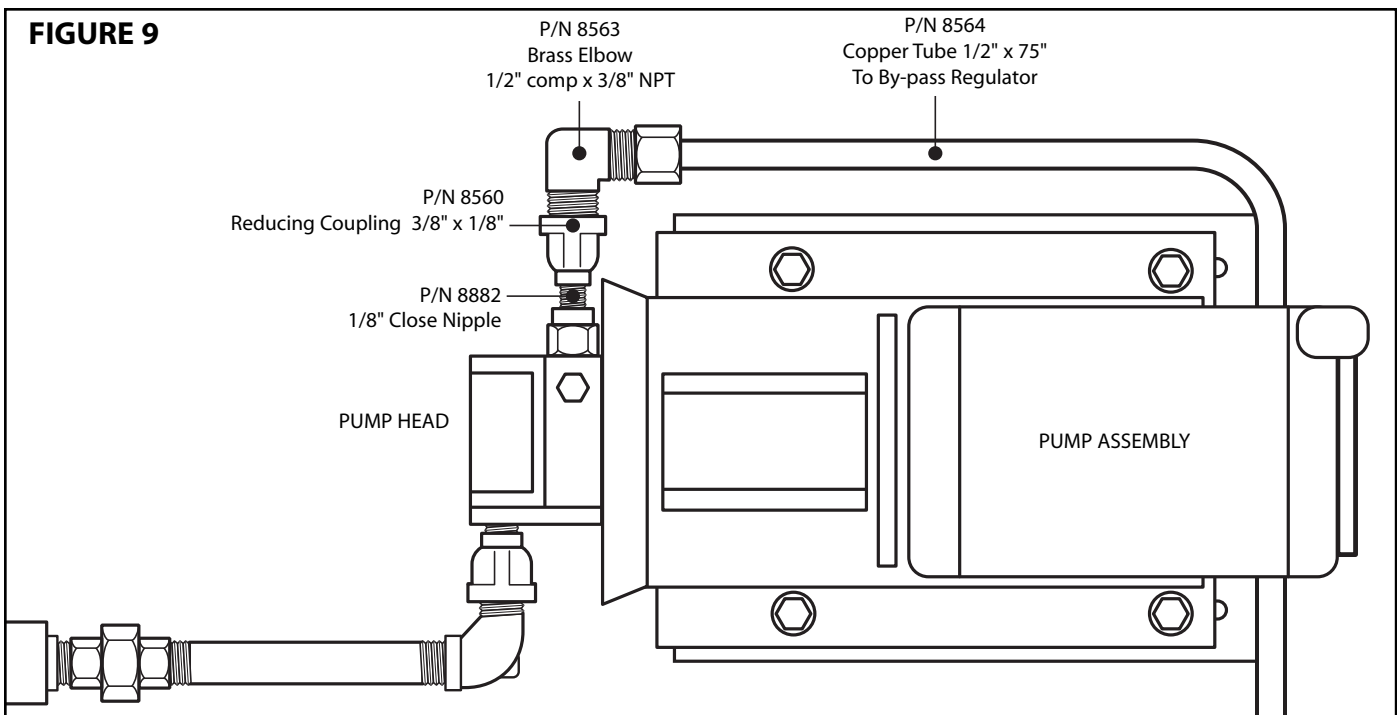
4. Install a 1/2" comp x 3/8" NPT brass elbow (P/N 8563) into the port labeled "B" on the bottom of the by-pass regulator (see Figs. 7 & 8). **NOTE:** The elbow should be facing up.
5. Install a 1/2" comp x 3/8" NPT brass elbow (P/N 8563) into the port labeled "P" on the bottom of the by-pass regulator (see Figs. 7 & 8). **NOTE:** The elbow should be facing down.
6. Attach the by-pass regulator assembly (T) to the top of the return line assembly (see Fig. 7) and tighten. **NOTE:** The brass elbow (P/N 8114) facing up should face the front of the tank and the return line **MUST** drop straight into the tank. **DO NOT MODIFY OR ADD ELBOWS.**

FIGURE 8



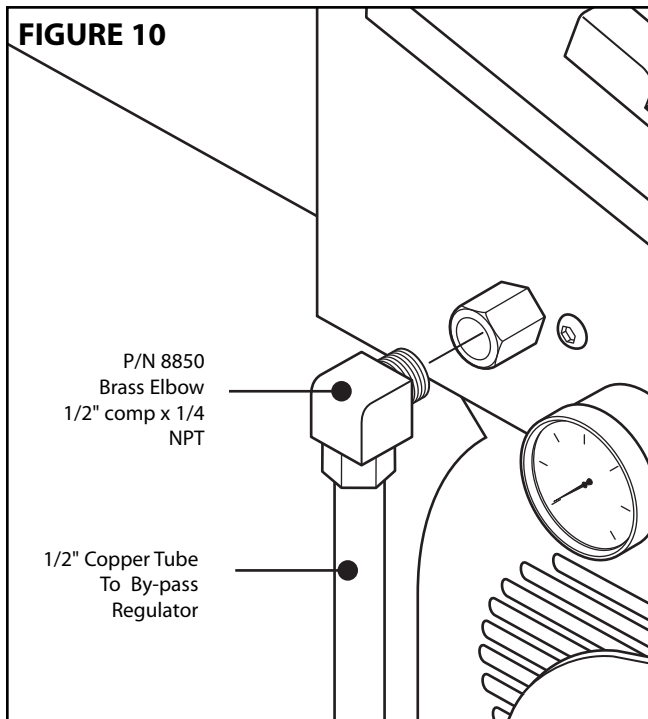
Bottom of By-Pass Regulator

7. Install a 1/8" close nipple (P/N 8882) into the pump head outlet as indicated in Fig. 9.
8. Attach a 1/8" x 3/8" reducing coupling (P/N 8560) and 1/2" comp x 3/8" NPT brass elbow to the 1/8" close nipple (see Fig. 9).
9. Install the 1/2" copper tube (P/N 8564) between the compression fitting of the pump assembly and the compression fitting on the by-pass regulator (see Figs. 7 & 9).





Section 3 - Plumbing Installation



PLUMBING INSTALLATION - By-Pass Regulator To Burner

1. Attach the 1/2" comp x 1/4" NPT brass elbow (P/N 8850) as indicated in Fig 10.

3. Install the remaining 1/2" copper tube between the compression fittings of the by-pass regulator and burner (see Figs. 7 & 10).

NOTE: Make sure all fittings are properly tightened. Leaking fittings may cause delayed ignition in the burner.

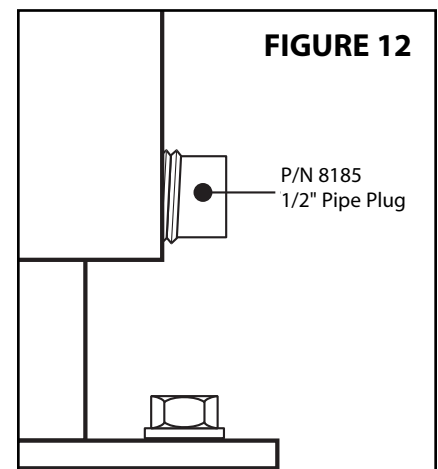
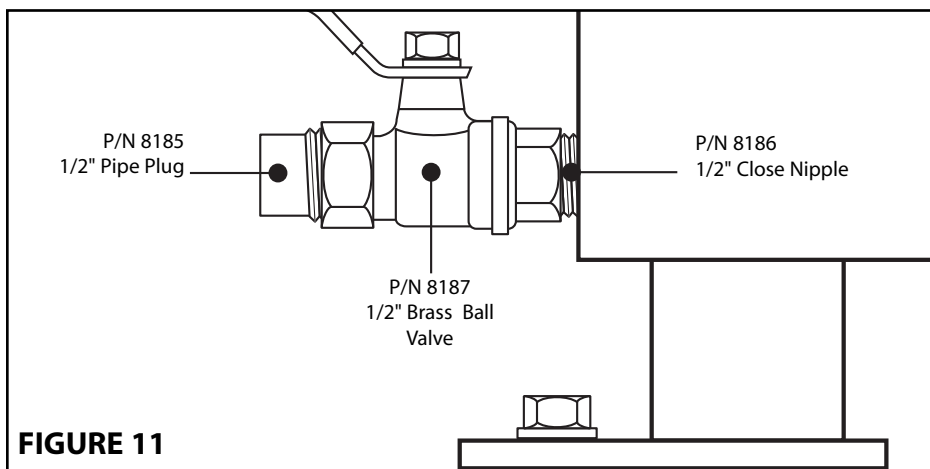
Tank Drain and Plug

1. Determine which side of the tank the drain will be on. On that side, install a 1/2" close nipple (P/N 8186) to the drain hole (see Fig 11).

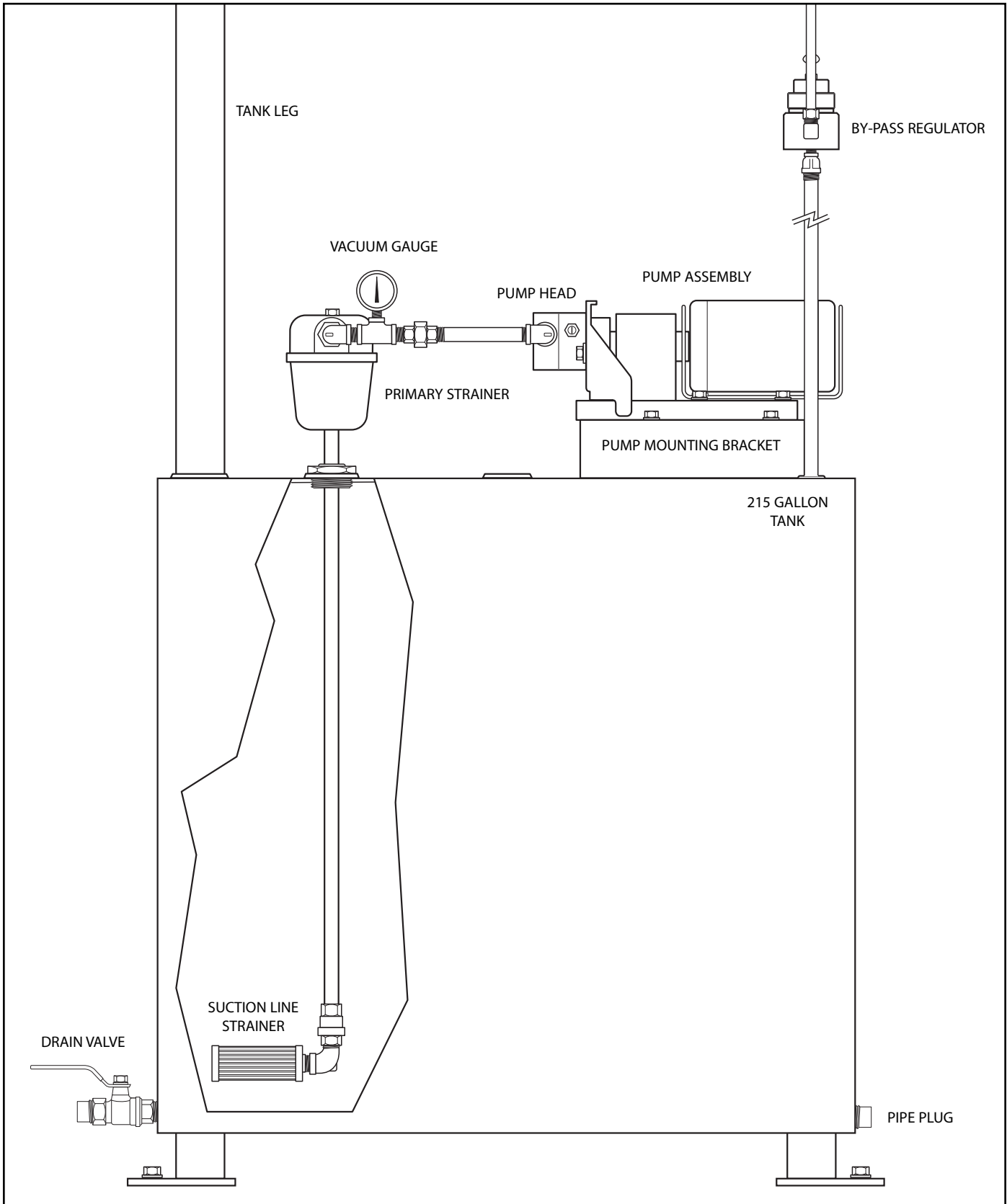
2. Install the 1/2" brass ball valve (P/N 8187) to the 1/2" close nipple. Install a 1/2" pipe plug (P/N 8185) into the end of the ball valve (see Fig. 11).

3. Install a 1/2" pipe plug (P/N 8185) into the hole on the opposite side of the tank (see Fig.12).

4. Vent the tank in accordance to state and local codes.



Section 5 - Reference Diagram





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