Hydraulic Booster Instructions

Boost your bottom line.

Thank you for purchasing a HydraBoost. Whether the unit is powering many hydraulic circuits or a single vac fan, the HydraBoost is a solution to boost hydraulic capacity without needing an expensive upgrade to a newer tractor. 30 years of continual improvement and consumer input makes the HydraBoost the best way to boost your bottom line!

Auxiliary Hydraulic Booster

Instructions

Note: Please read all instructions carefully before operating unit.

⟫ Table of Contents:

Mounting Instructions:

What you will need:

Forklift or loader with straps
Drill
⅝” bolts

Unfasten the screws from 2x4 runners used to support the unit. Unit can be lifted from the loop on top of tank by a strap on a forklift or loader.

Set unit on the planter tongue or mounting area of planter, making sure it is sitting very level.

Certain planters such as JD 1770 (12r & 16r only), 1790, DB, or Kinze 3600 include specific mounting kits. Other planters need to mount as close to the drawbar as possible. Use hardware such as 4 each appropriate length ⅝” bolts along sides of drawbar tube drilled to match width of drawbar.

At this point, install your “Pump Doctor Kit” to the tractor so the pump can be held securely. This will be in a separate box, with instructions.

Plumb the pump to the booster tank unit. There are 3 hoses that run from pump to reservoir/cooler unit. The largest hose is suction, this runs to side of tank to fitting with ball-valve shutoff – medium hose is pressure hose, this runs to pressure manifold, which is aluminum block on opposite side from filter – smallest hose is case drain hose which connects to tee fitting on top of tank.

It is helpful to tape the suction hose and pressure hose together at a couple spots in the center or use spiral hose wrap, the pressure hose will help support the suction hose.

On John Deere planters with CCS bulk-fill system, the case drain hose for vacs & CCS fan are tied together. If you are operating the vacs from HydraBoost and the CCS fan from tractor hydraulics, it will be necessary to run a second case drain line, so that case drain oil flow returns to where it originated from.

Attaching hoses for planter hydraulic circuits

Plumb the items being run by the PTO unit into the manifolds. Note there are two, one is the pressure and the other the return manifold.

Ensure everything stays as clean as possible while plugging in and starting up, the compensator on your pump is very easily plugged by dirt and will cause the pump to go into low pressure destroke mode!!

All pressure hoses go to the pressure manifold, this has the medium size hose from pump on it.

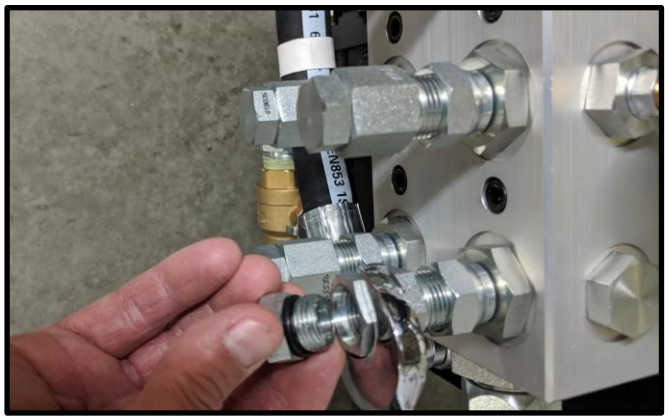
All return hoses go to the return manifold next to the filter.

The manifolds have equal flow to all 4 ports on small units, 6 on the medium and large.

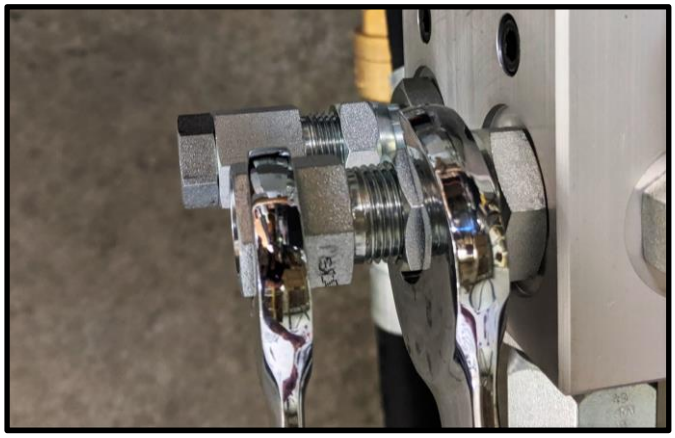
All case drain hoses go to the tee on top of tank on the opposite side from small hose coming from pump. If no case drain, leave the cap fitting installed and tightened.

Pumps are installed with pressure compensator on top as shown on pages 10, 11.

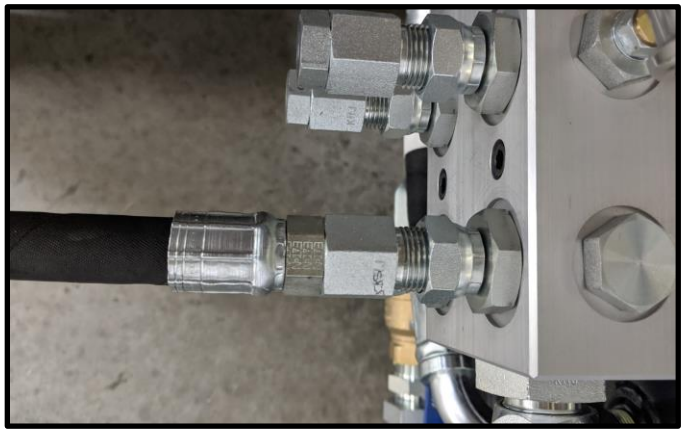
1. To attach ½" O-ring hoses, remove ½" O-ring plug on a port



2. Loosen swivel fitting, this will allow inserting hose with Pioneer tip removed



3. Thread hose into end and tighten, then retighten the swivel fitting



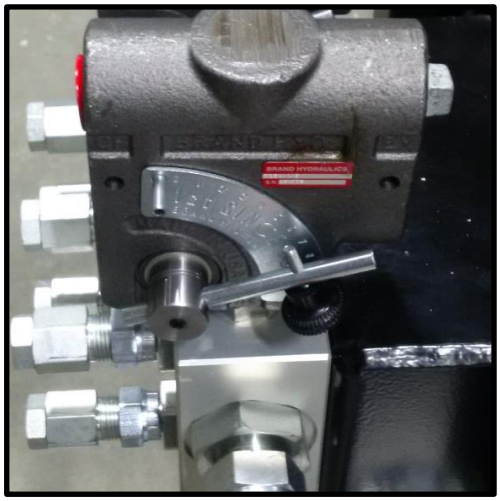
You are now ready to connect the electric fan located in front of the oil cooler. The fan has an in-line fuse and can be directly wired into your 12V power source: typically, the tractor battery or an electric alternator. Our 12-16 GPM pumps use a fan that draw 14 amps and our 20-40 GPM pumps draw 18 amps. It is critical to make sure the fan is functioning correctly to prevent any possibility of the system overheating.

Flow Control Valves

Flow control valves may be used to control vac pressure on vacuum planters when fans are operated by HydraBoost unit.

John Deere planters often have a needle valve inline on the hoses, which works well with HydraBoost.

Most flow control valves have a 2nd outlet that must be plugged when running from our closed-center pressure-compensating piston pump; this port will be marked “EX” on Brand Hydraulics valves.



This is another common flow control valve made in Italy, the inlet in marked “E”, the controlled flow outlet in marked “P”.

The “T” outlet on the bottom MUST BE PLUGGED!! This is a tank return for use with an open-center gear pump system.

Starting Up

You can now fill the unit with oil. HydraBoost units can either be used with an AW46 hydraulic fluid or a UTF-type oil that is used in your tractor.

Fill the unit ¾ of the way up sight/temp gauge, leaving enough room for expansion when the oil warms up.

Open the valve on the tank so the oil can flow down to the pump. *It is very critical that this stays open so the pump does not run dry.*

For initial startup of unit, it is recommended to run tractor at low idle and engage PTO several times as briefly as possible to load pump with oil and purge any air from system.

There may be slight erratic operation of functions briefly as air is purged from entire system; this should smooth out after a minute or two of operation.

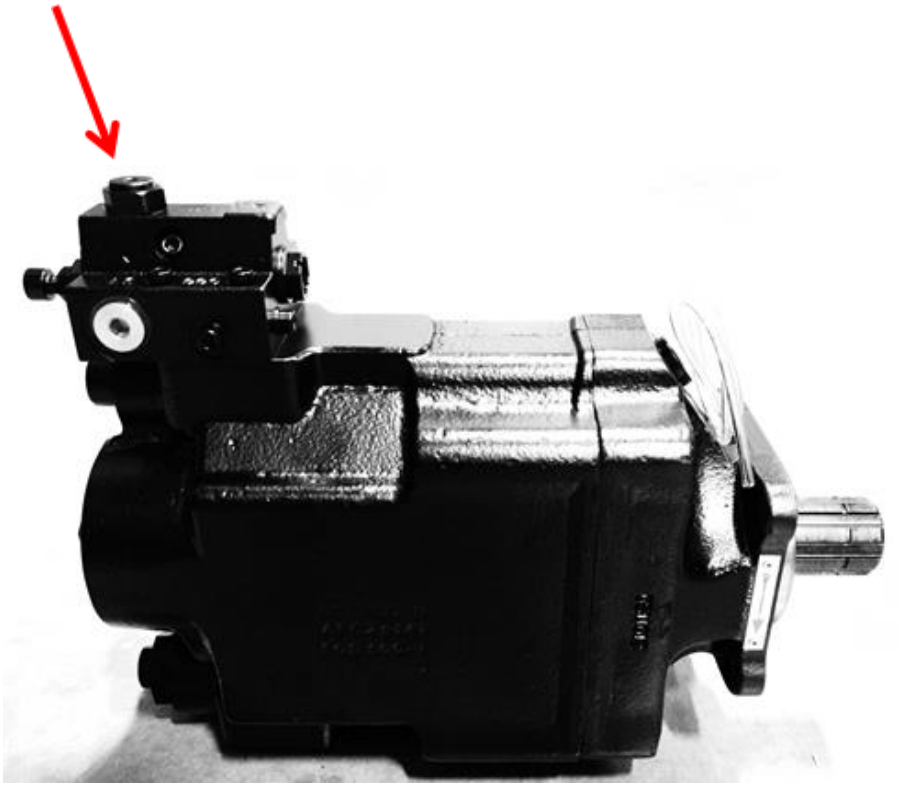
Pressure Adjustment

Increasing pressure on your Hydro-Leduc or Eaton pump may be needed for hydraulic downforce and dry fertilizer attachments. Approximately 2500 psi is needed for Delta Force.

Hydro-Leduc 24, 32, or 40 gpm pumps

Increase pressure as follows:

- Loosen the 19 mm hex locknut
- Set screw using 6 mm Allen wrench
- Retighten the locknut



Eaton 12, 16 or 20 gpm pumps

Increase pressure as follows:

- Remove plastic cap
- Insert Allen wrench
- Loosen jamb nut
- Turn ¼ turn clockwise
- Tighten jamb nut
- Repeat if needed

Please call 1-800-778-6200 or email sales@commandhydraulics.com with any questions.