

vSet Blower Motor Performance Check Instructions

To complete this test, you will need the following parts

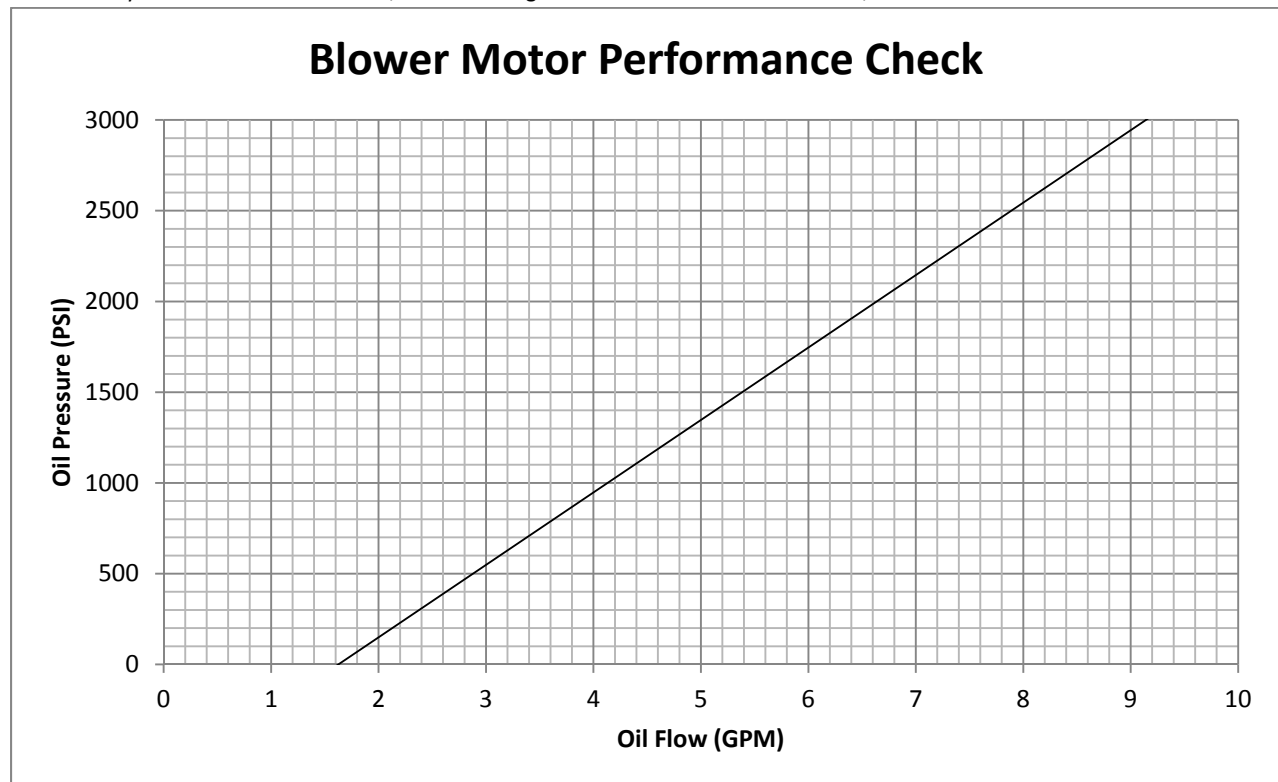
- 730404 Flow Meter Kit

Instructions

1. Disconnect the piping attached to both sides of the vacuum blower air inlet manifold.
2. On the right side of the blower (when looking at it from the air inlet manifold side), attach the 730161 fitting
3. On the left side of the blower leave the inlet open. Make sure there's no restriction to air flow.
4. At the tractor remote hydraulic quick coupling, connect the flow meter assembly. Connect the flow meter assembly in-line with the pressure (supply) hose. Make sure this is the same hose connected to the "IN" port on the motor.

Notes:

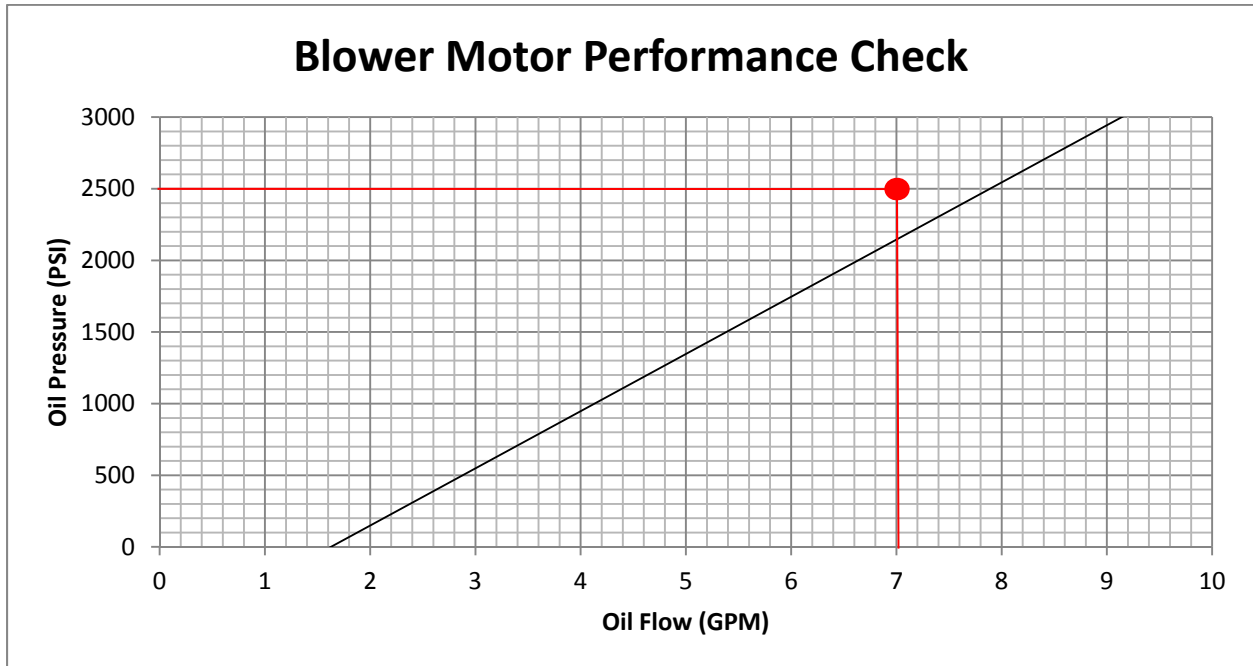
- **If you spin the motor backwards, the results will appear bad, even if it's a good motor. Make sure you send pressure to the "IN" port on the motor.**
 - If there is a flow control valves downstream of the flow meter, make sure it is set to wide open so that there is no restriction between the motor and where the pressure and flow are measured.
 - If 2 blowers are connected to the same hydraulic remote circuit, make sure only one blower is tested at a time. You can use the in-line flow control valve (if equipped) to shut one of the blowers off. Otherwise, disconnect one of them where they tee off and cap the tee.
5. Power up the blower. Set the tractor flow control setting (if equipped) to maximum flow.
 6. Warm the oil to between 110° and 130°F (or until the hose fittings are too hot to hold onto). **Results will not be accurate unless the test is done with warm oil!** Note: to warm the oil you can simply run the blower or you can run oil through a jumper hose loop on one of the SCVs.
 7. Once oil is warm and the blower is at steady state, record the pressure and flow measurements.
 8. On the plot below, find the intersection point of your measurements and mark it on the plot. Pressure is on the vertical axis and flow is on the horizontal axis.
 9. If your mark is above the line, the motor is good. If the mark is below the line, the motor is bad.



Example 1 – Good Motor

Flow Measured = 7 GPM

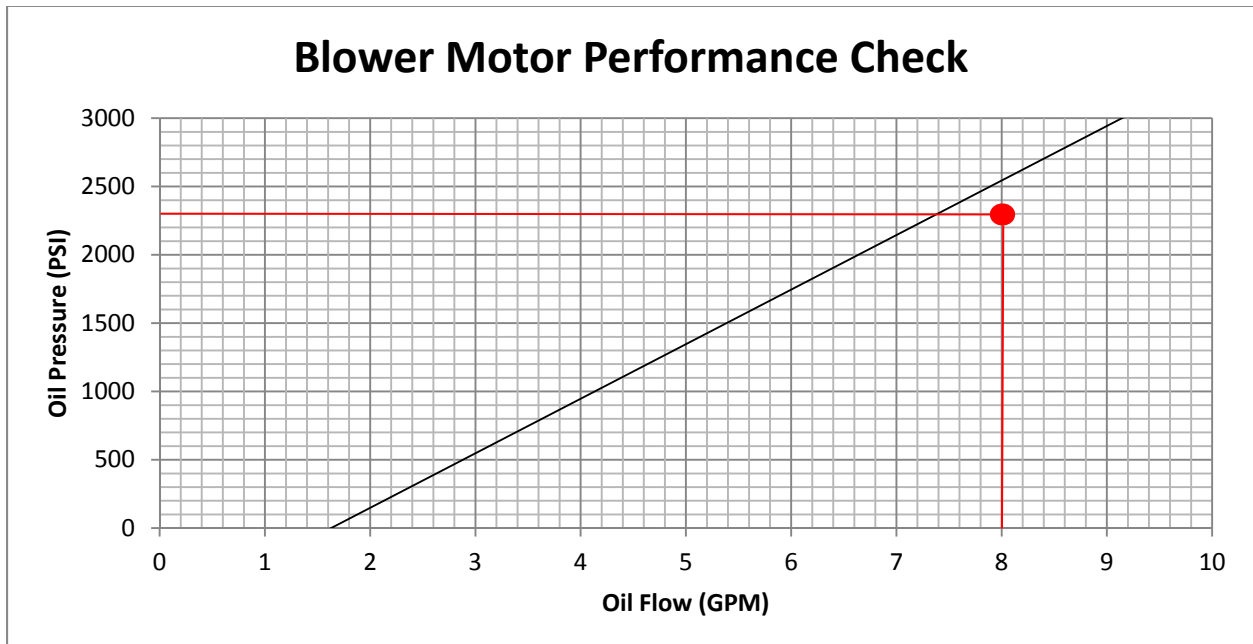
Pressure Measured = 2500 PSI



Example 2 – Bad Motor

Flow Measured = 8 GPM

Pressure Measured = 2300 PSI



Confirmation

If a motor fails the test, double check the following to confirm that it is indeed a bad motor:

1. Was the test performed with warm (110-130°F) oil? Cold oil will give a false failure. Make sure you warm the oil before performing the test.
2. Was the motor spinning in the right direction? Backwards spinning motors will give a false failure. Make sure pressure is sent to the “IN” port marked on the motor.
3. If running a planter with 2 blowers, was only one motor spinning at a time? Running 2 blowers branched off of the same valve will give a false failure. Make sure the oil that’s measured by the flow meter is going to only 1 blower.
4. If the motor barely failed the test, it would be a good idea to repeat the test at a different flow to make sure the result is repeatable. The flow meters tend to be more accurate at higher flow so do the test at maximum flow if you have not already.