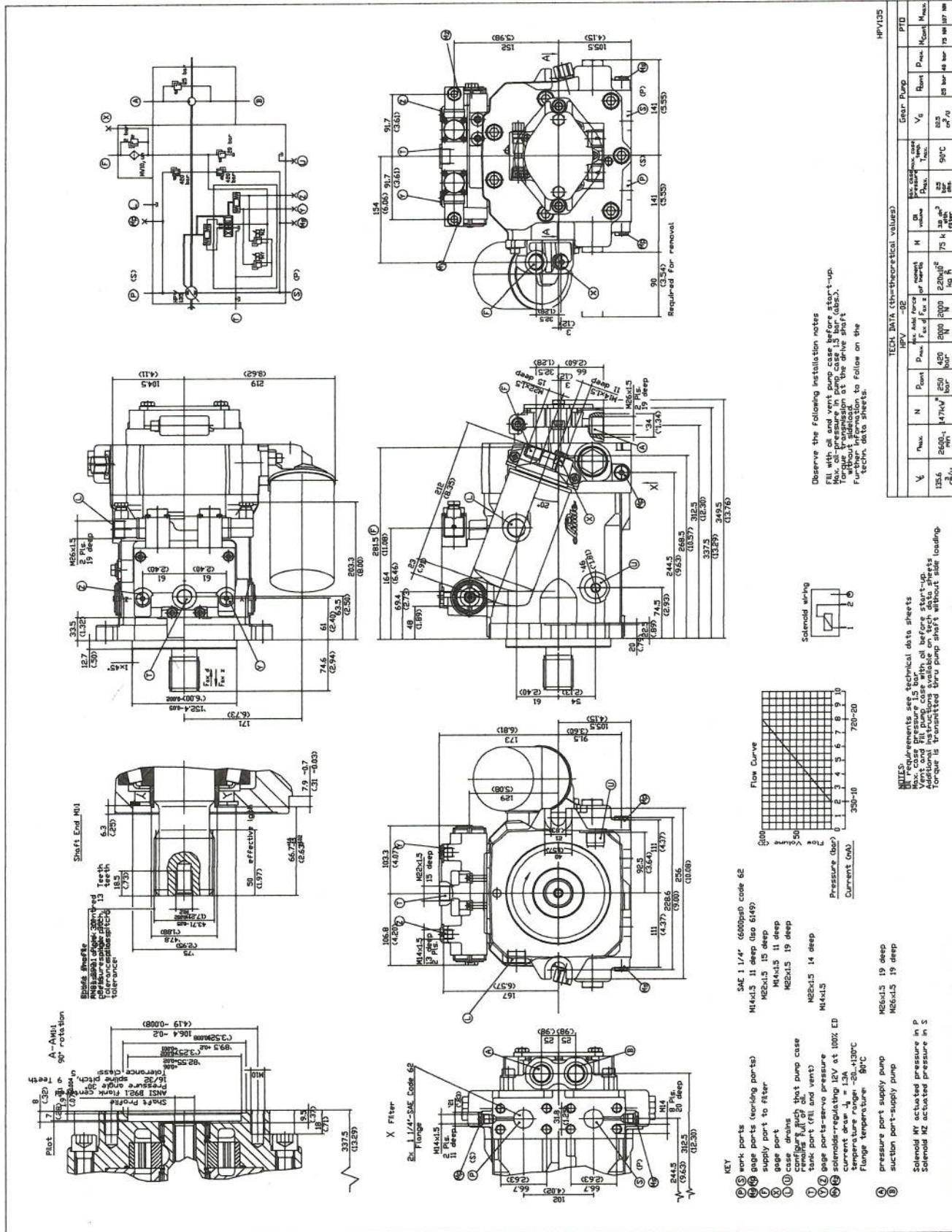


170087

Stahl's

H  
RSPH  
W  
AR

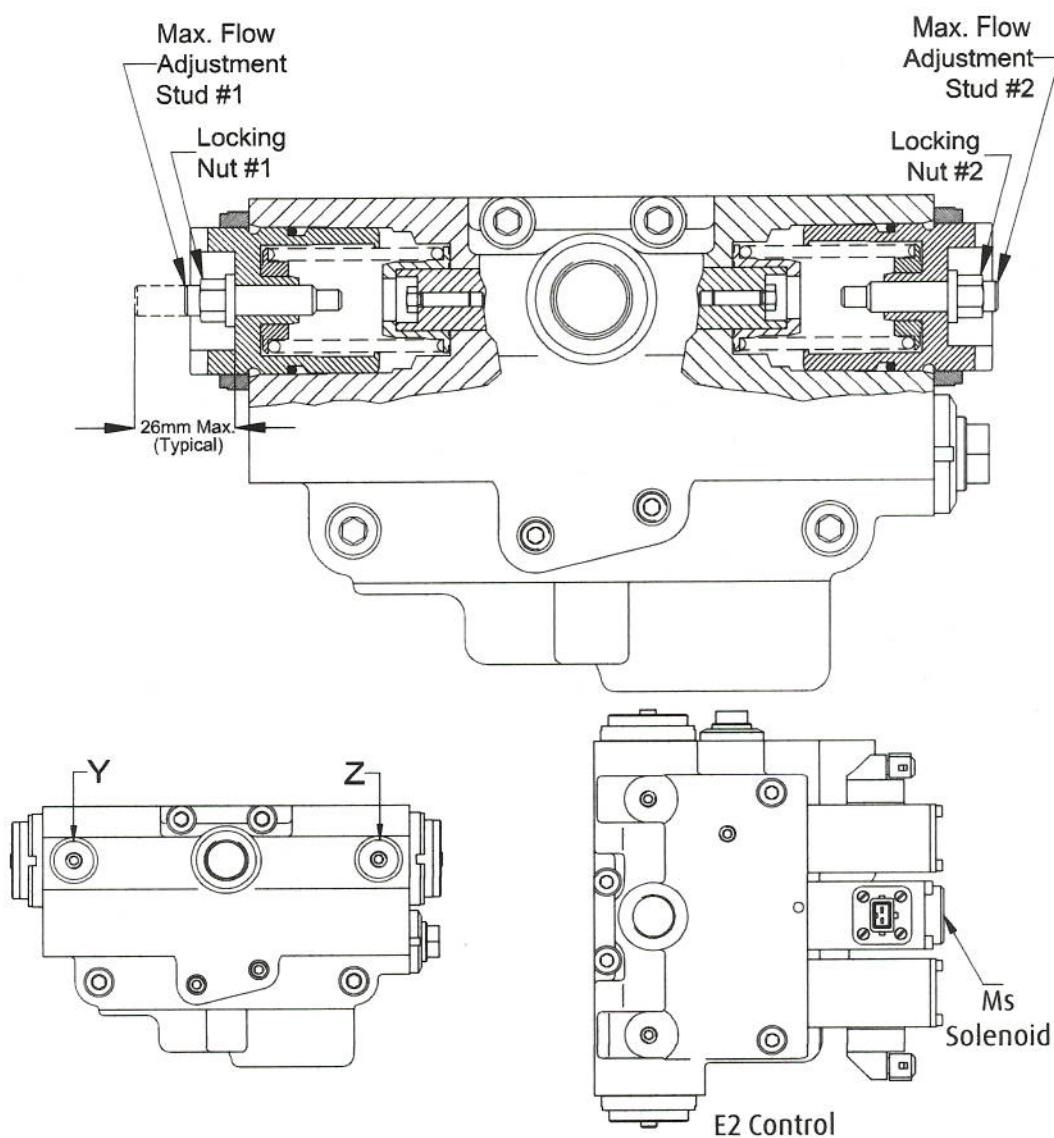




## Maximum Flow Adjustment Procedure for HPV-02 Pumps with "H" or "E" Controls

NOTE: This Service Bulletin is valid for HPV-02 pumps with either "H" (Hydraulic Remote) or "E" (Electro-Hydraulic Remote) Controls

NOTE: The drawing below illustrates an "H1" Control, but the information is also valid for "H1P", "E1", "E1P", and "E2" Controls.





## Maximum Flow Adjustment Procedure for HPV-02 Pumps with "H" or "E" Controls

### Tools/Equipment Required:

- 0-600 psi pressure gauge or transducer (optional)
- 13mm offset closed-end wrench
- 4mm Allen wrench

### WARNING:

If performing this procedure on a vehicle, care must be taken. The pump will be put on stroke during this procedure; hence the vehicle must be safely elevated to allow the motor to free-wheel. If this is NOT possible, then the pump work-ports "P" and "S" must be short circuited to each other. Install a properly sized flow-meter in the short circuit line between "P" and "S" to avoid movement of the motor.

### Adjustment Procedure:

1. (Optional) Install the 0-600 psi gauge into gauge port "Y".
2. Set the input speed to high idle.
3. For E2 Controls, make sure that **Ms** Solenoid is energized.
4. Supply full control pressure to port "Y" or full current to solenoid "My". (Optional) Confirm that the pressure at port "Y" is adequate to put the pump at full displacement.
5. Measure the rotational speed of the motor, the wheel, the gearbox, etc. and calculate if the pump is supplying enough flow. If using a short circuit line, measure the flow from the flow-meter.
6. To Adjust the Maximum Flow:
  - a. Use the 13mm wrench to loosen "Locking Nut #2".
  - b. Use the 4mm Allen wrench to turn "Max. Flow Adjustment Stud #2". Turn it IN to decrease the maximum flow or turn it OUT to increase it.



## Maximum Flow Adjustment Procedure for HPV-02 Pumps with "H" or "E" Controls

**WARNING:** The flow adjustment stud is NOT mechanically restricted from being removed completely from the pump. Care should be taken when turning the flow adjustment stud OUT. ***DO NOT*** turn the adjustment stud OUT more than 26mm as illustrated on page 1 of this bulletin.

- c. Once the desired maximum flow has been acquired, hold the flow adjustment stud stationary with the 4mm Allen wrench and tighten the locking nut with the 13mm wrench (the proper torque for the locking nut is 10 ft-lb [14 N-m]).
7. (Optional) Install the 0-600 psi gauge into gauge port "Z".
8. Set the input speed to high idle.
9. For E2 Controls, Make sure that **M<sub>s</sub>** Solenoid is energized.
10. Supply full control pressure to port "Z" or full current to solenoid "M<sub>z</sub>". (Optional) Confirm that the pressure at port "Z" is adequate to put the pump at full displacement.
11. Measure the rotational speed of the motor, the wheel, the gearbox, etc. and calculate if the pump is supplying enough flow. If using the short circuit line, measure the flow from the flow-meter.
12. To Adjust the Maximum Flow:
  - a. Use the 13mm wrench to loosen "Locking Nut #1".
  - b. Use the 4mm Allen wrench to turn "Max. Flow Adjustment Stud #1". Turn it IN to decrease the maximum flow or turn it OUT to increase it.

**WARNING:** The flow adjustment stud is NOT mechanically restricted from being removed completely from the pump. Care should be taken when turning the flow adjustment stud OUT. ***DO NOT*** turn the adjustment stud OUT more than 26mm as illustrated on page 1 of this bulletin.

13. Once the desired maximum flow has been acquired, hold the flow adjustment stud stationary with the 4mm Allen wrench and tighten the locking nut with the 13mm wrench (the proper torque for the locking nut is 10 ft-lb [14 N-m]).



## Maximum Flow Adjustment Procedure for HPV-02 Pumps with "H" or "E" Controls

### ATTENTION

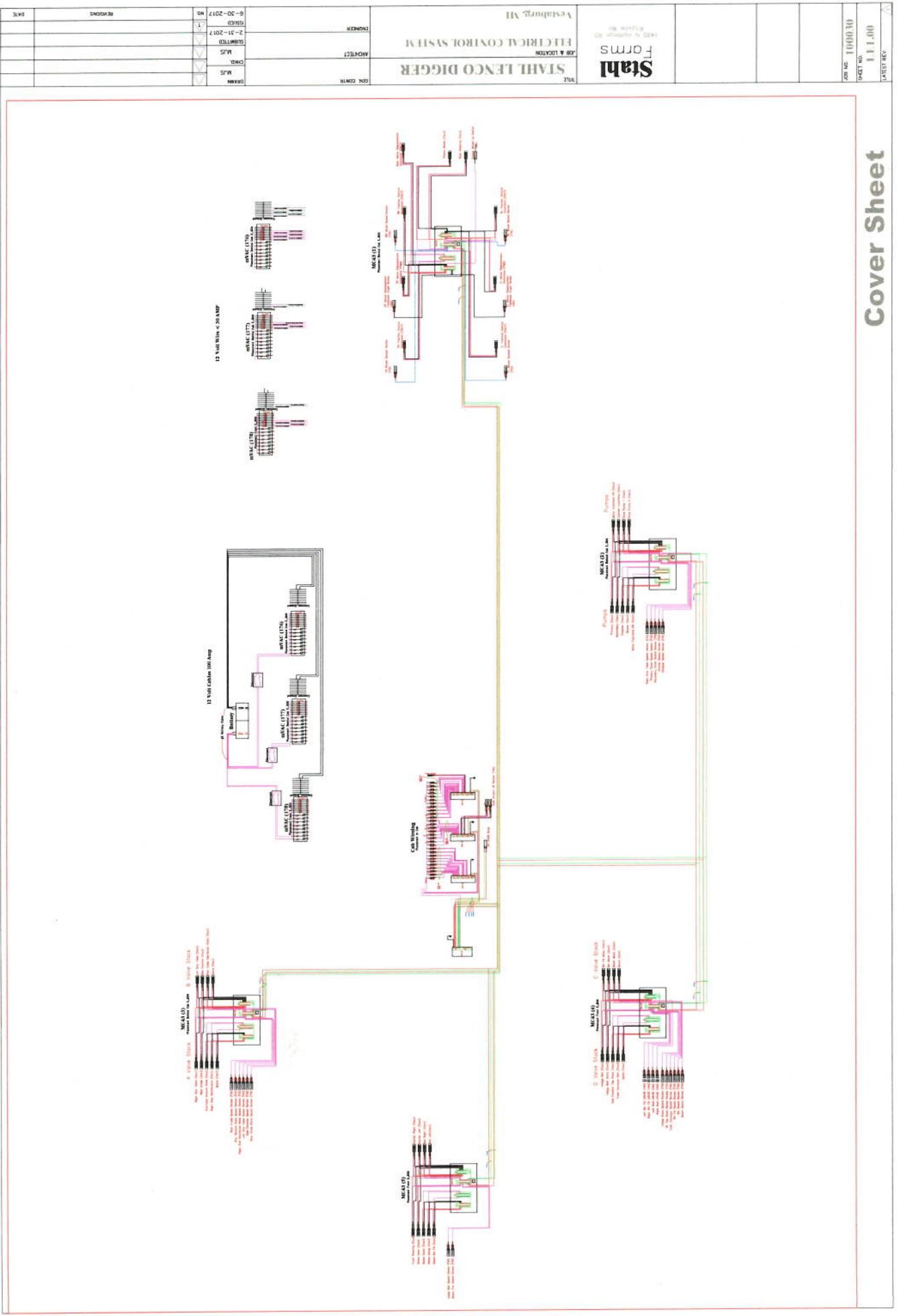
You have been provided information on conversion, repair and/or service of Linde components. Proper application of the information requires specific training and may require use of specialized tooling and equipment. If you choose to proceed with the conversion, repair and/or service of the Linde component(s) absent the necessary training and/or these specialized tools, you do so at your risk.

Linde Hydraulics Corporation will accept no claim for warranty or other consideration resulting from deficiencies in the conversion, repair and/or service done in accordance with the guidance offered herein when the necessary training has not been conducted and/or required specialized tooling and equipment has not been utilized.

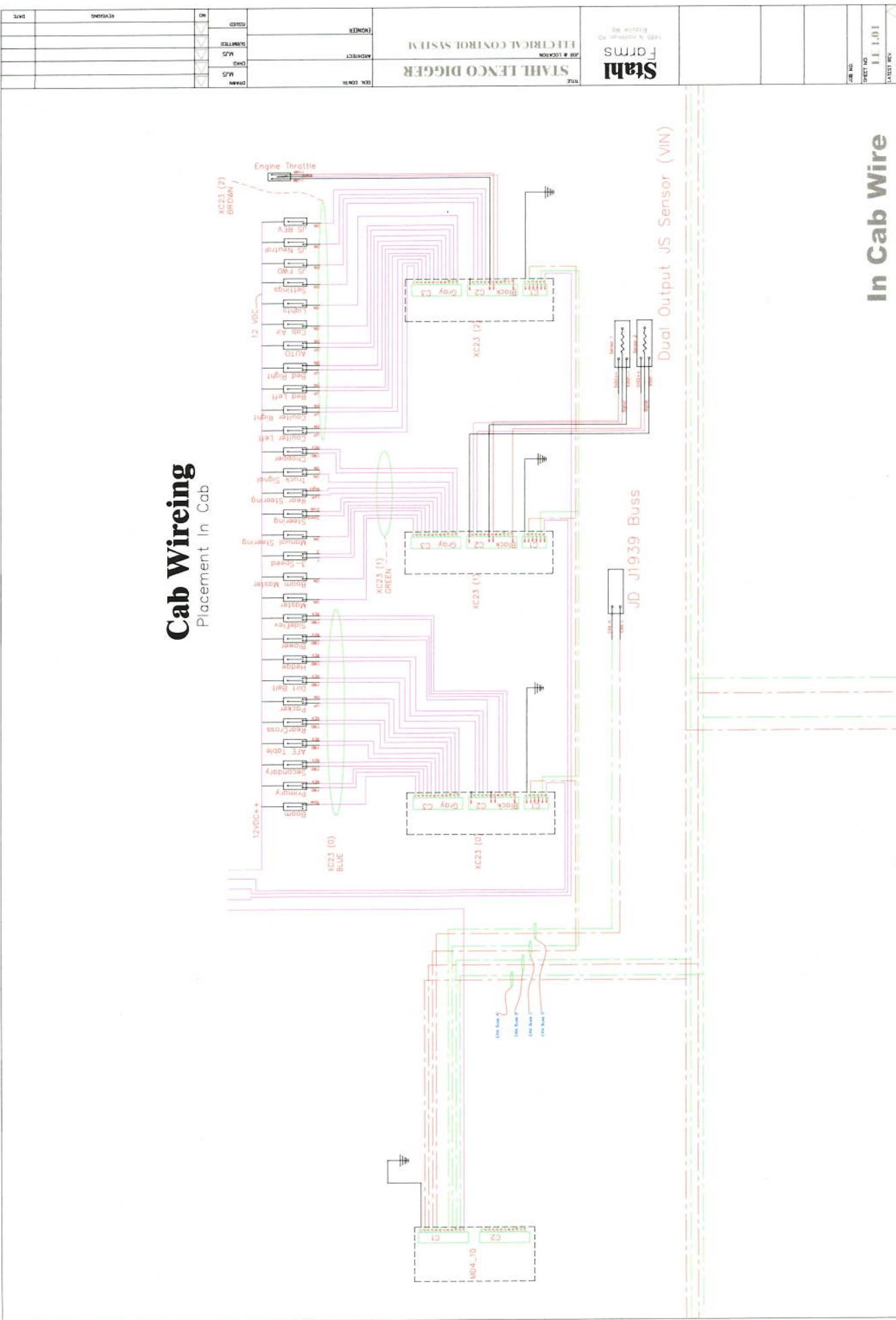
All requests for training must be coordinated through your Linde Account Manager. He can also provide you price and availability of any specialized tooling.

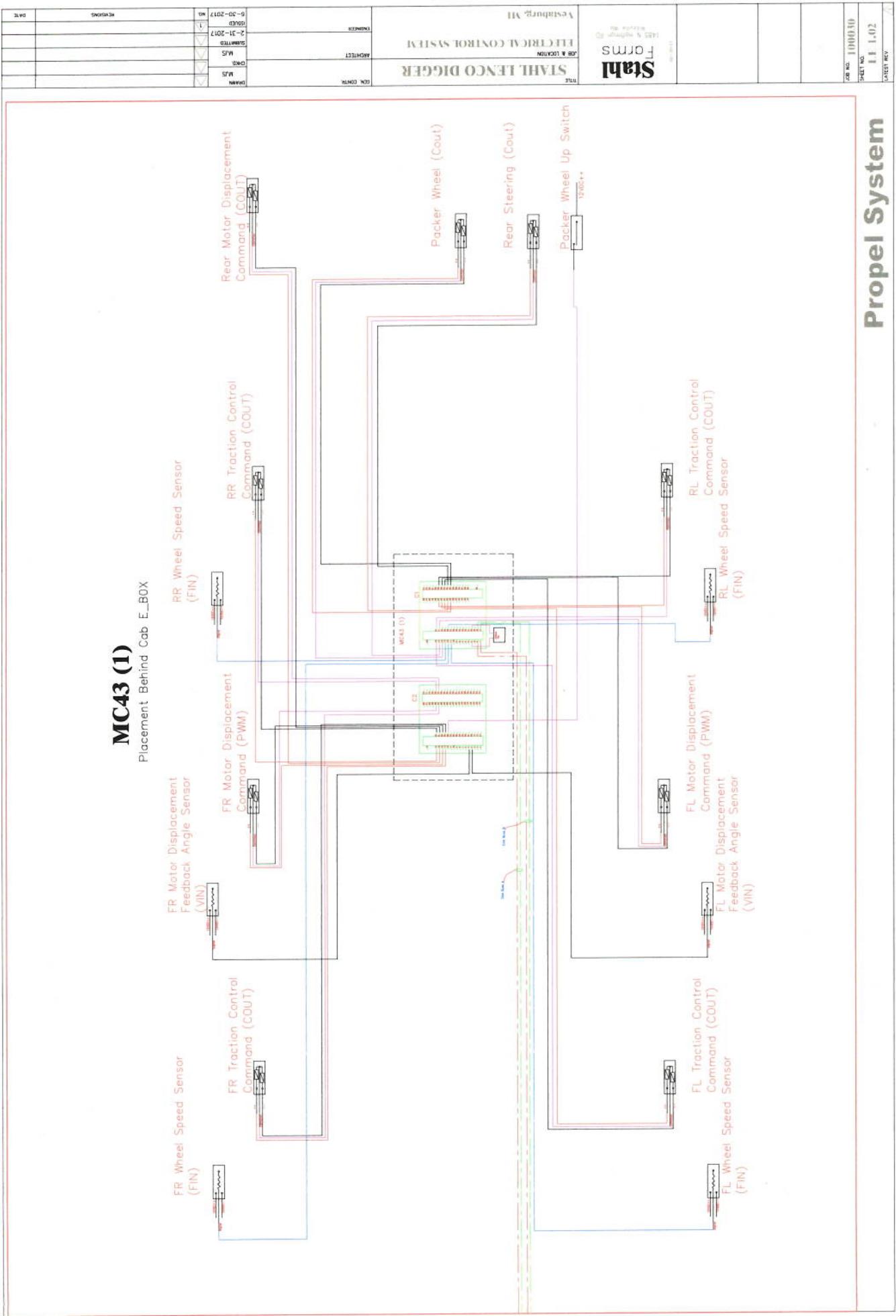
Questions regarding the information provided or this disclaimer should be addressed to the Warranty & Service Department, Linde Hydraulics Corporation.

5089 Western Reserve Road  
Canfield, OH 44406  
330.533.6801 (Telephone)  
330.533.9873 (Facsimile)  
[www.lindeamerica.com](http://www.lindeamerica.com) (Web Site)

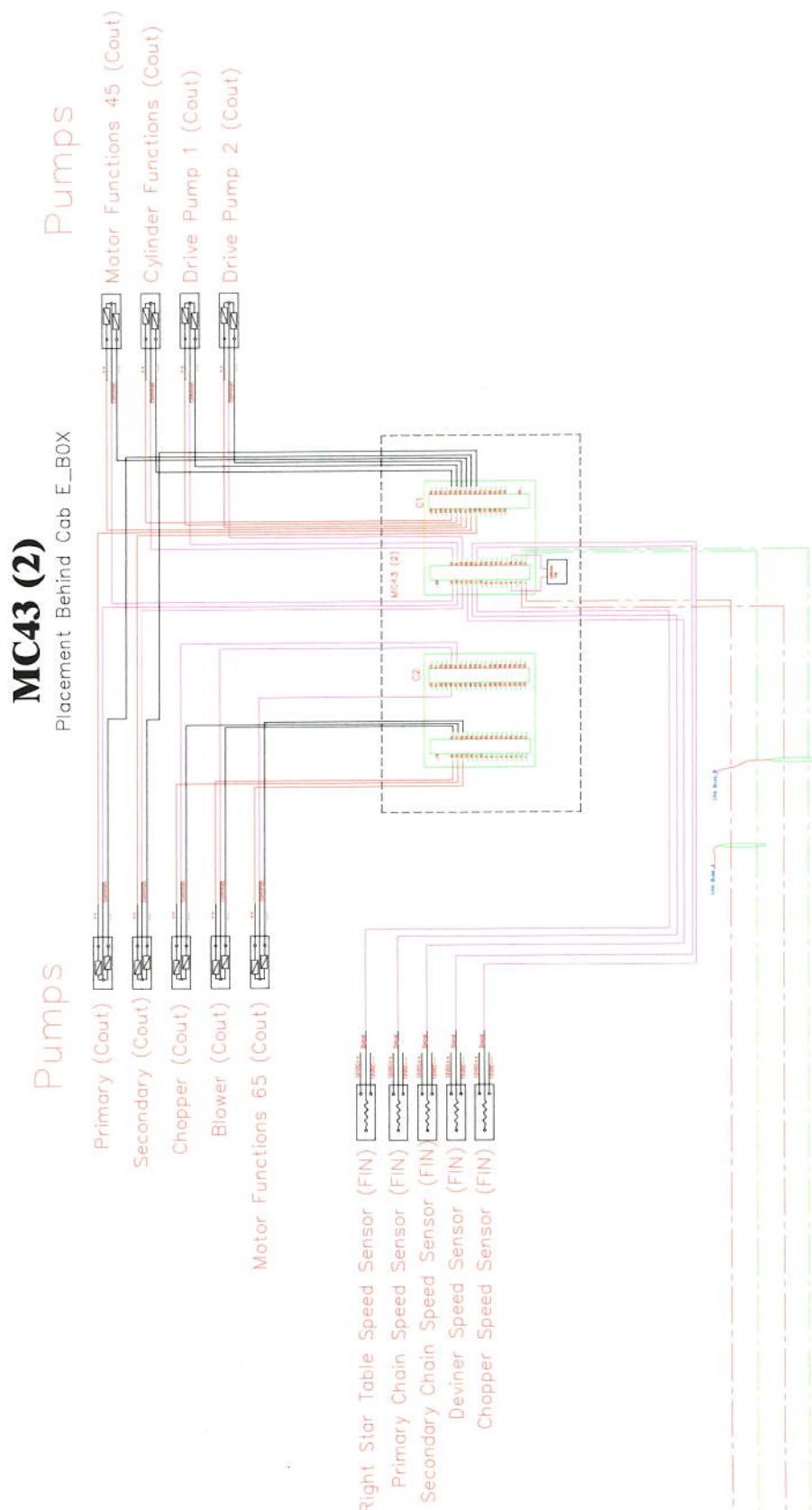


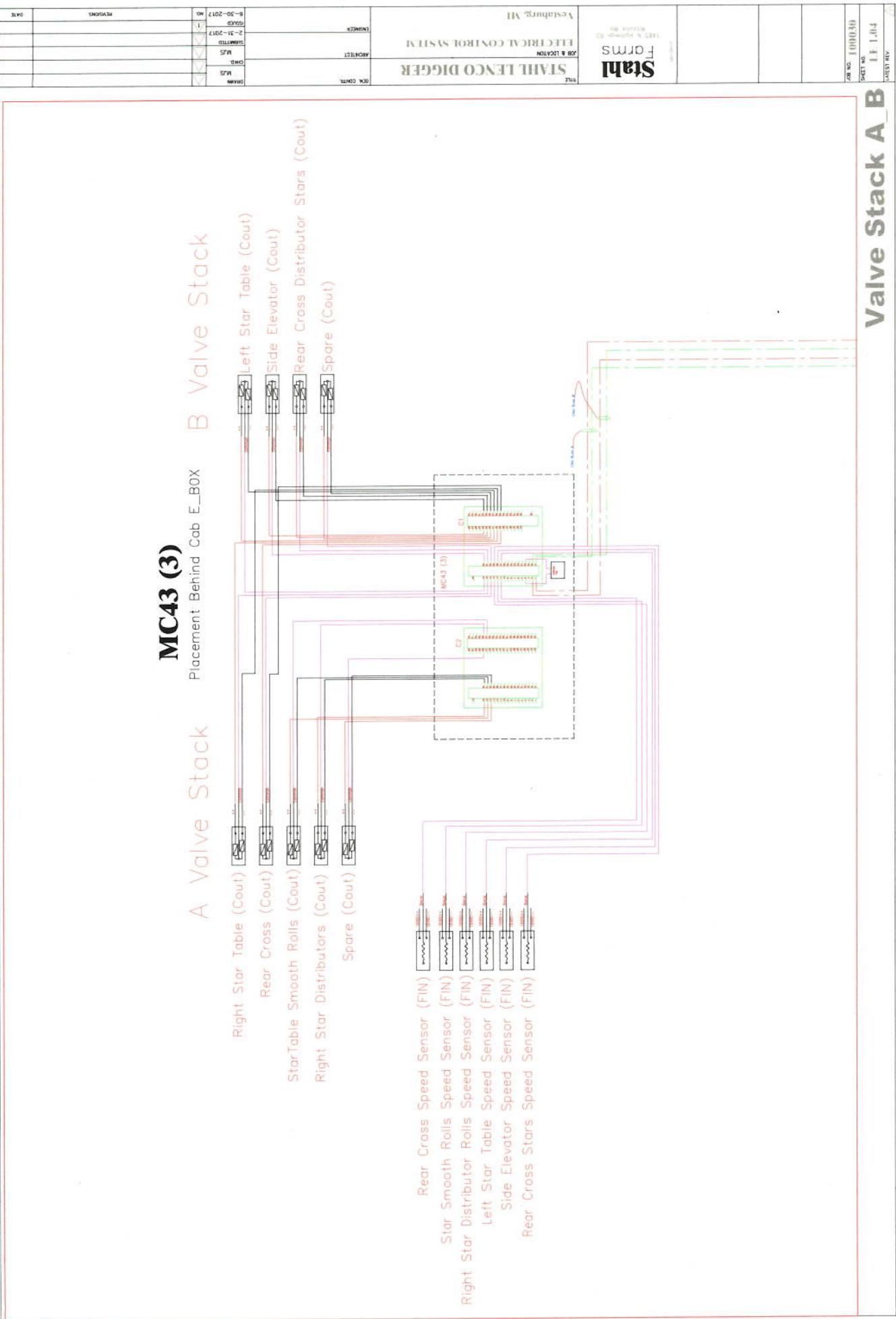
Cover Sheet

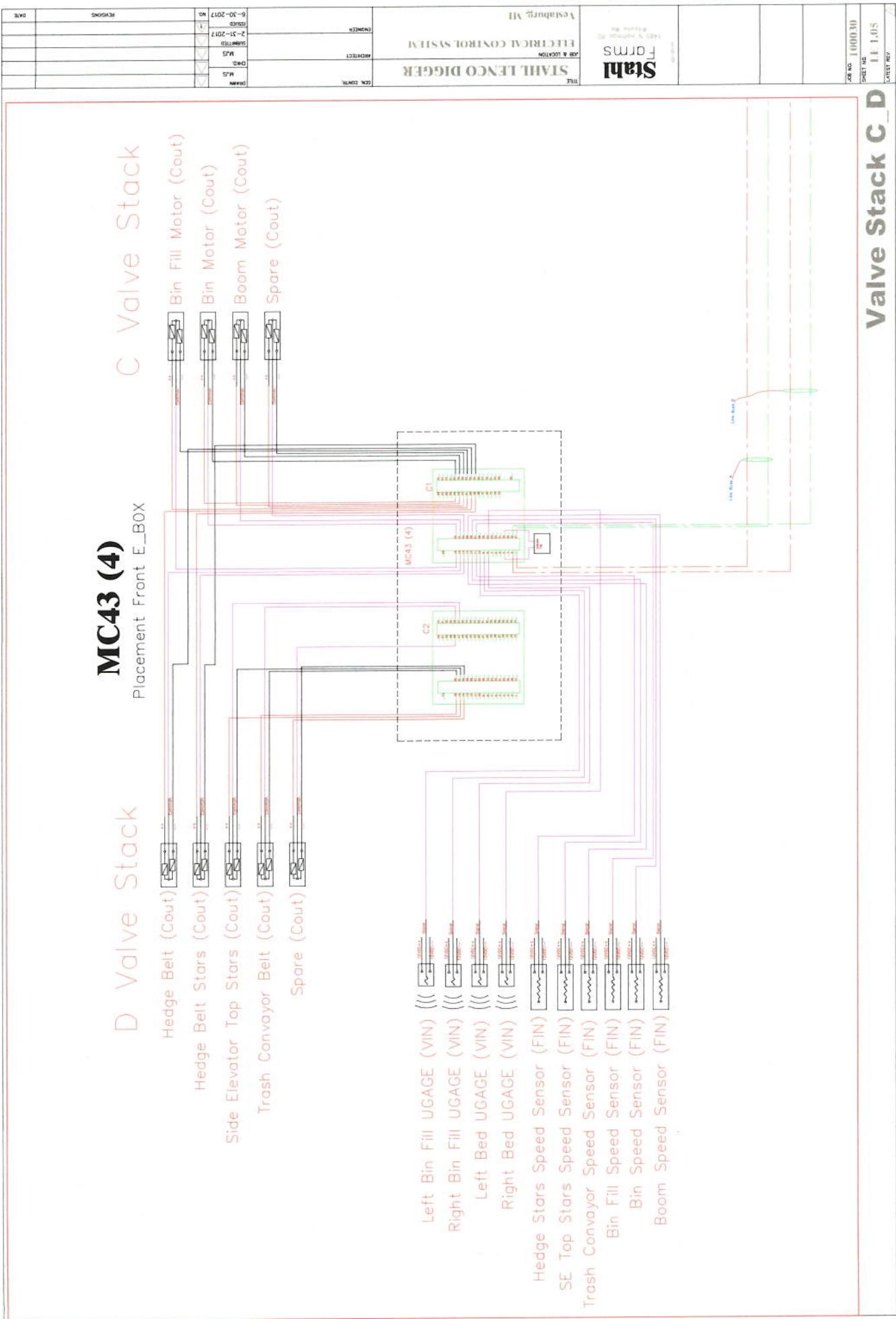


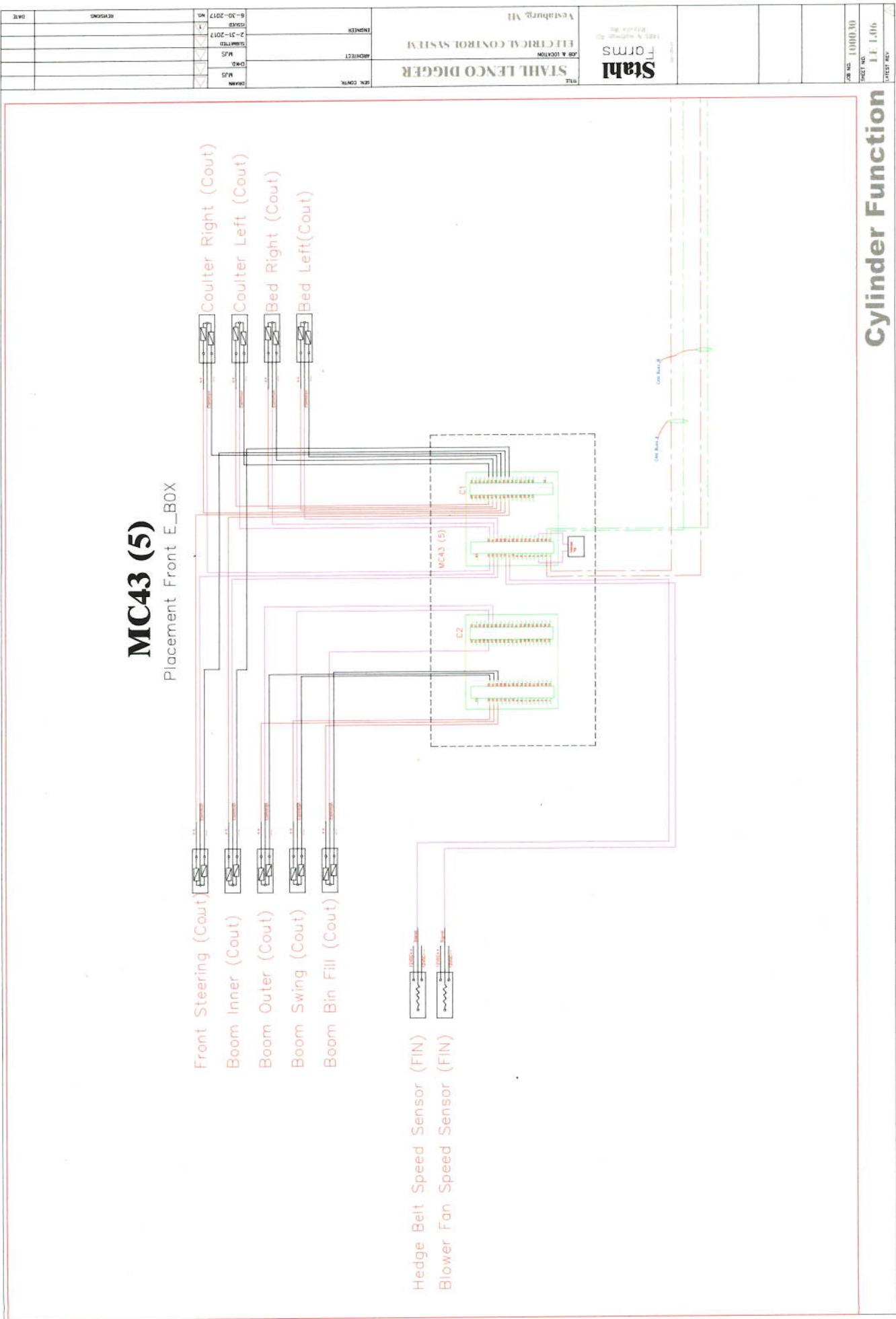


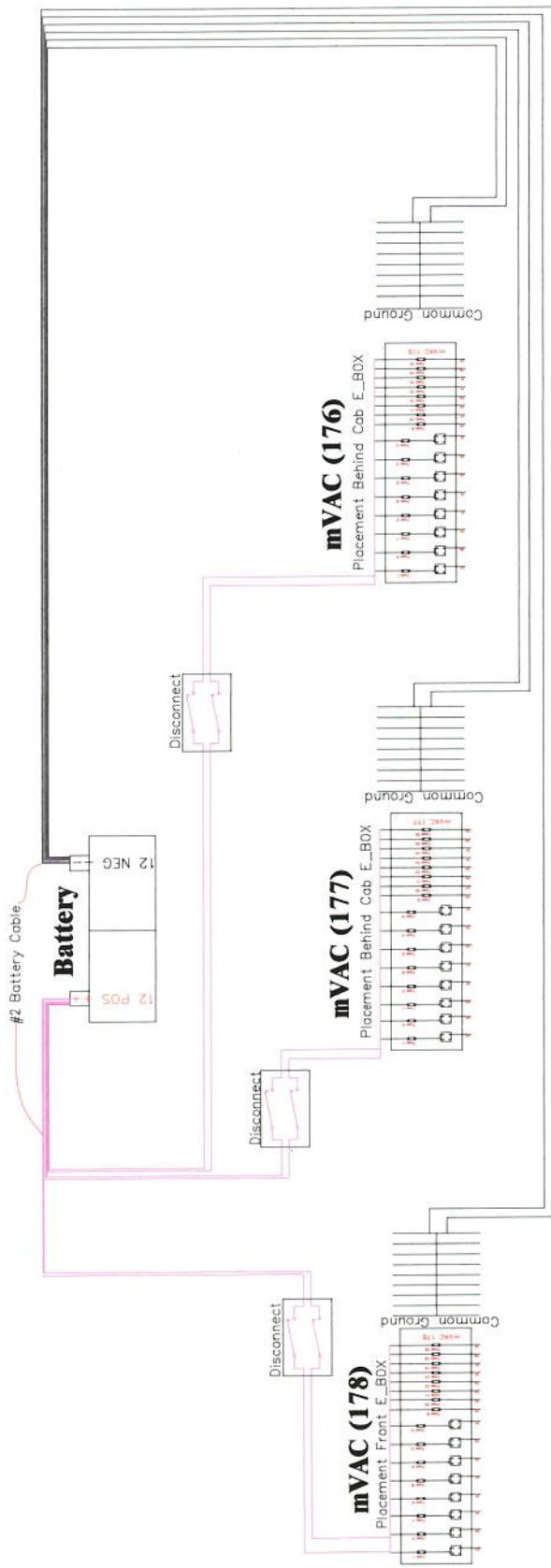

## Pump System











12 Volt Cable 100 AMP

