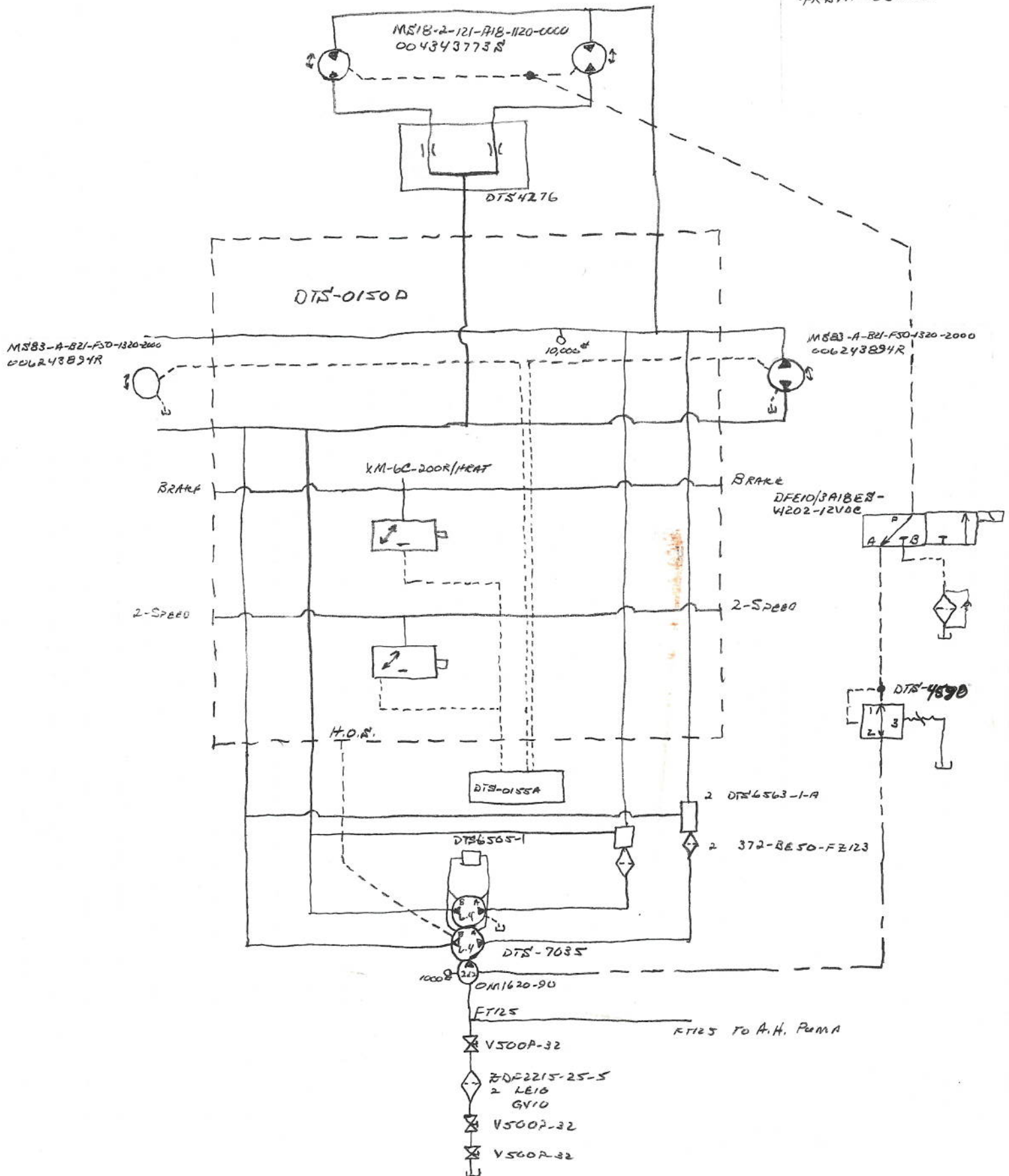


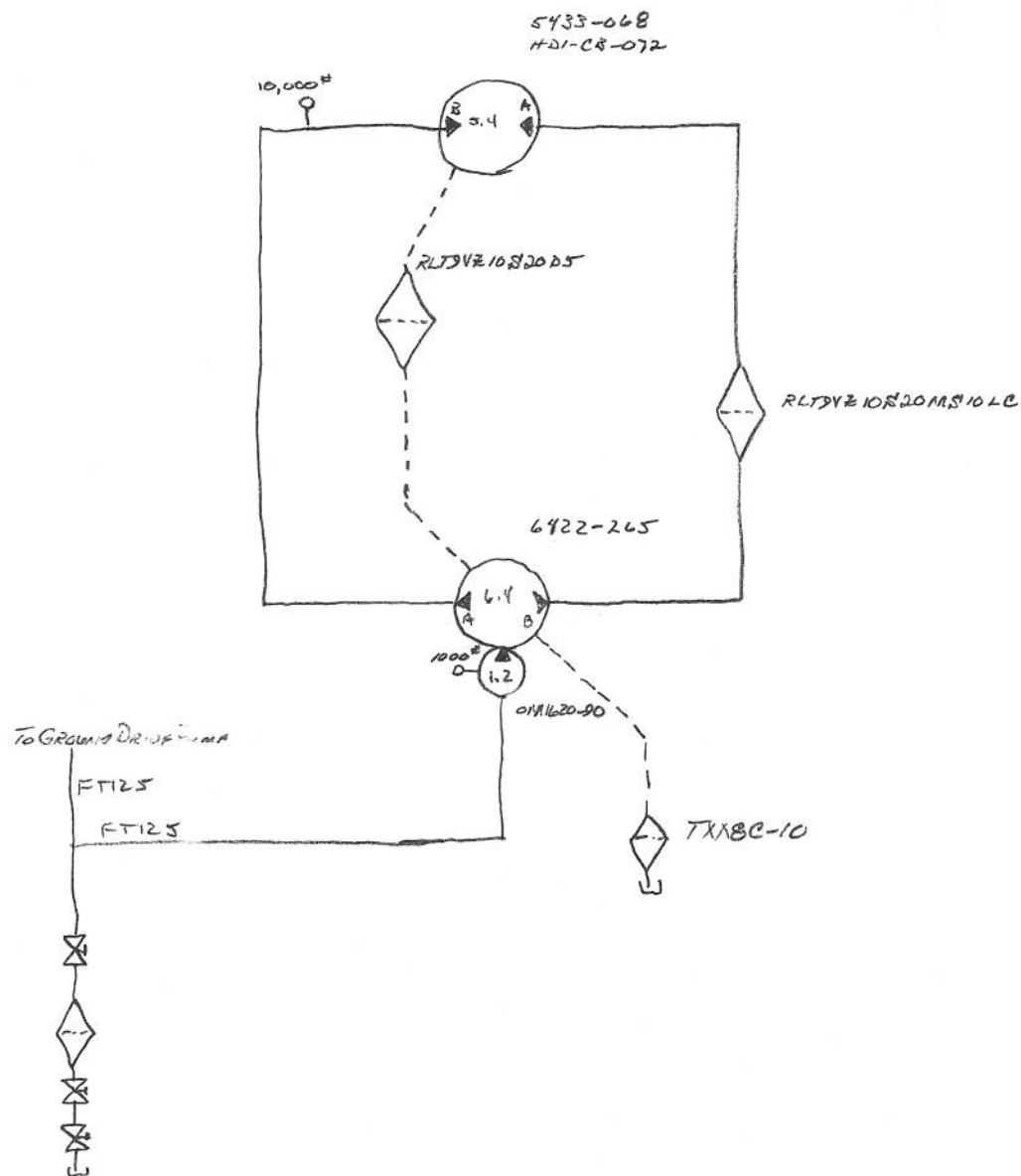
#08024

Hearland Farms

1/14/08
#08024
HEATLAND FARMS
4RSH 65LAH



1/14/08
#08024
HEARTLAND FARMS
4RSPH-65' LAH



1/14/08
208024
HEARTLAND FARMS
4RSPH - 65' LAH

LEFT PRIMARY
155-0171-003
DTS-6200

DTS-8811

RIGHT PRIMARY
155-0171-003
DTS-6200

DTS-8811

DTS-7005-2

RLTSVZ10F20DS

DTS-7005-2

RV5-10-S-0-3

600#

500#

5000#

DTS-2809

3.6

3.0

0.84

0M1620-90

FT125

FT100

To Secondary Pump

V500P-32

SF150-25-5

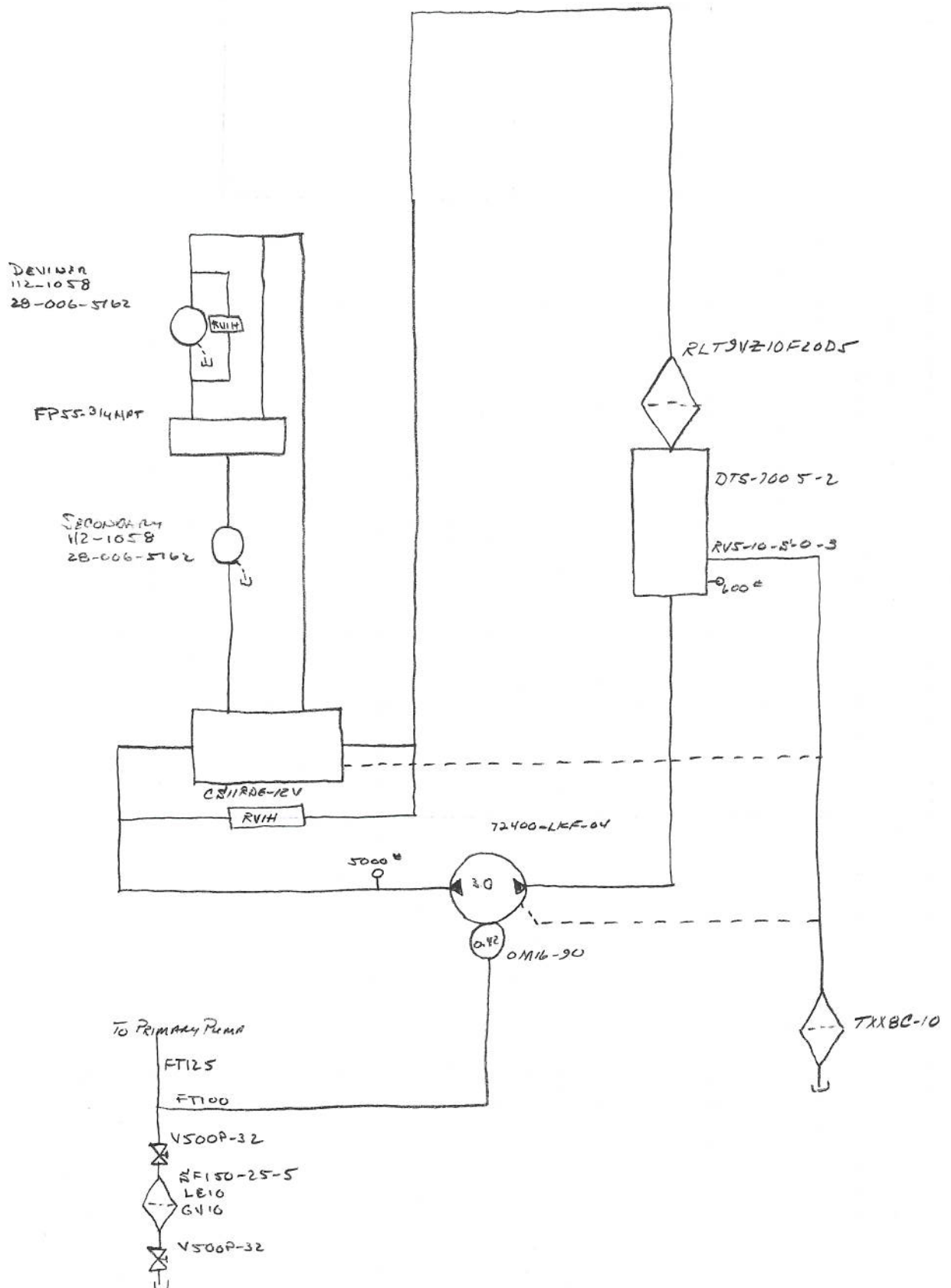
LE10

GV10

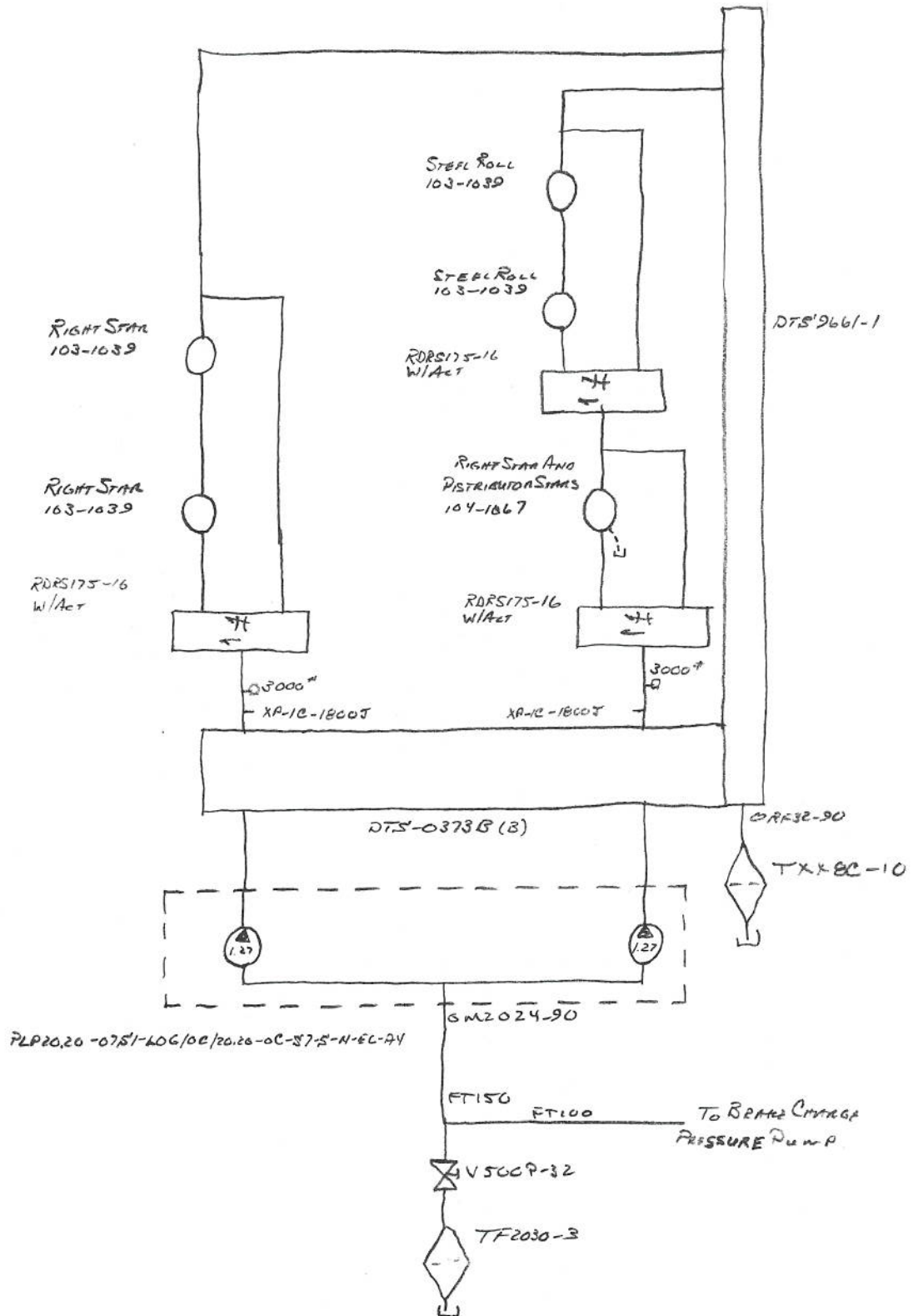
V500P-32

TXKBC-10

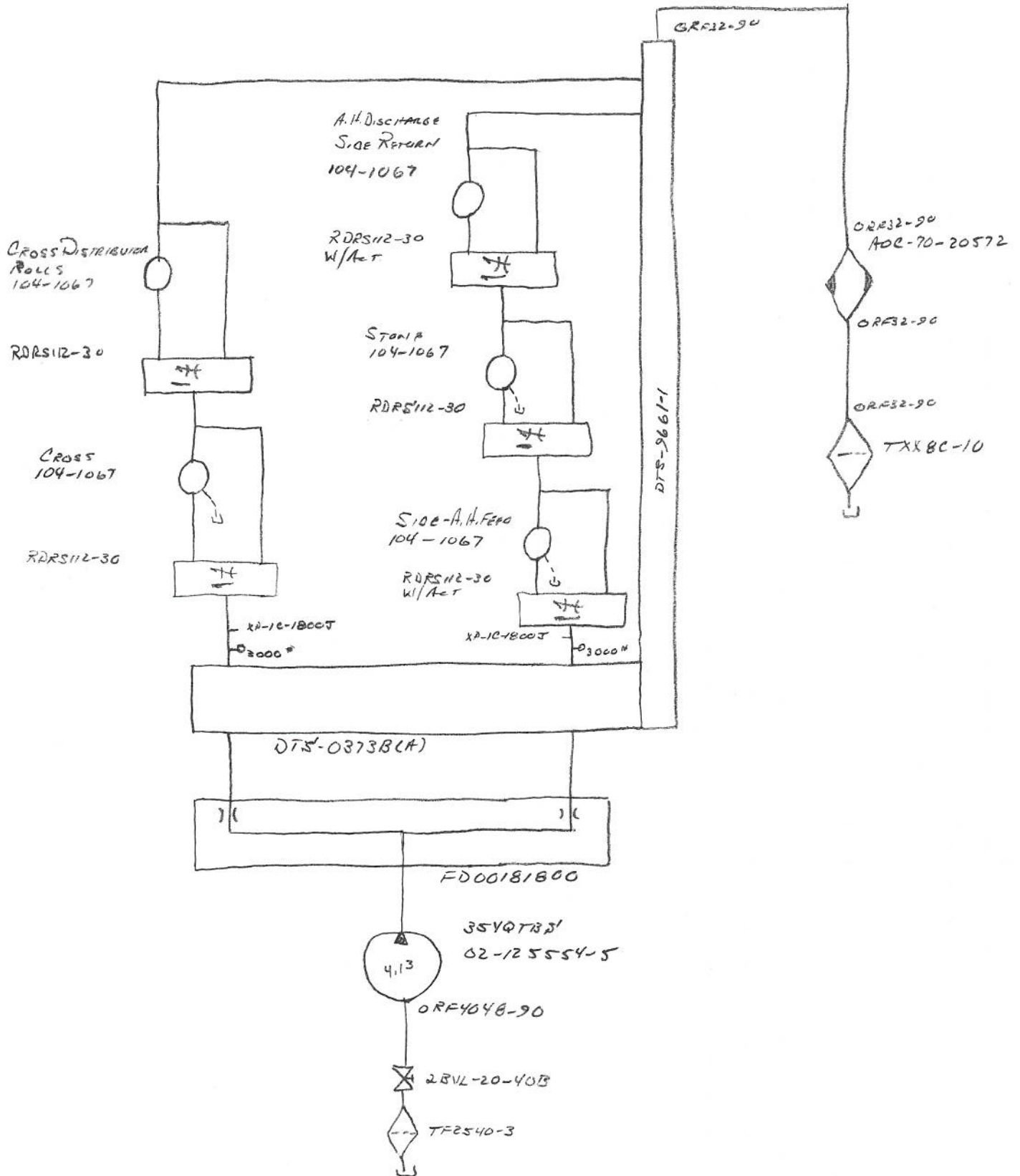
1/14/68
E08024
HEATLAIN TANKS
4RSPT-65 LPH



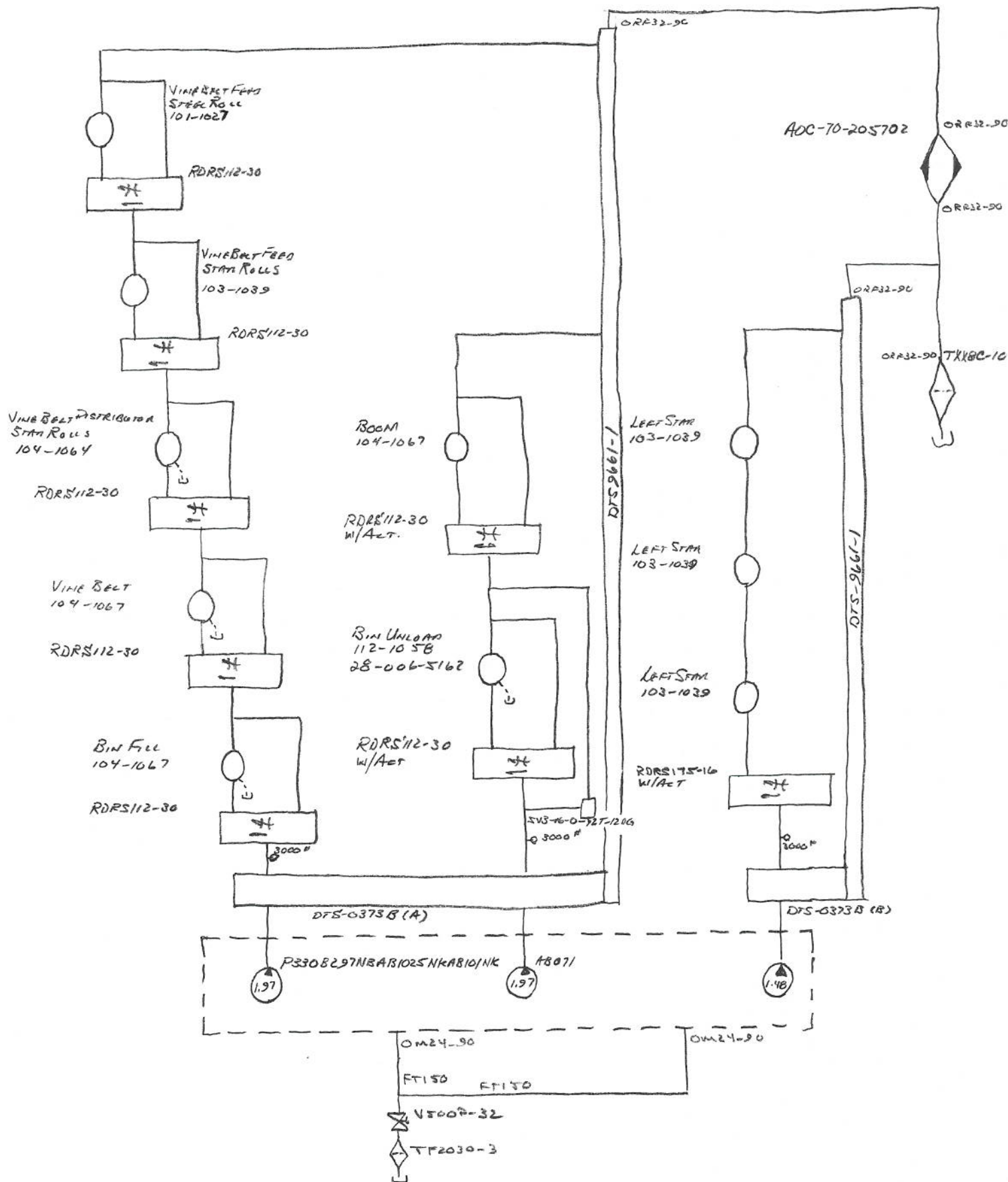
1/14/08
E08024
HEARTLAND FARMS
4R51A1-65L1A1



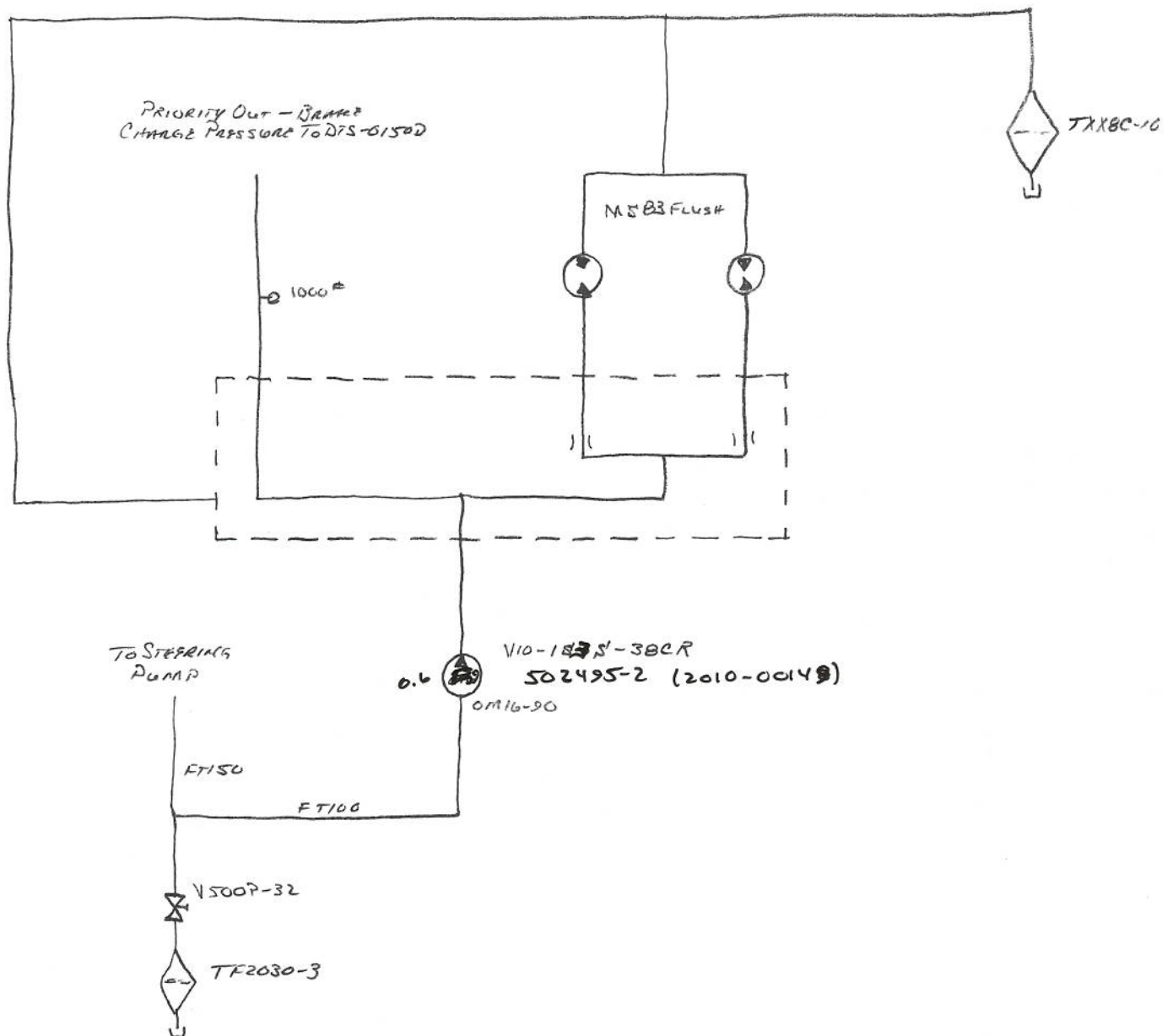
1/14/08
 E08024
 HEARTLAND FARM
 4PSA4-LSLAH



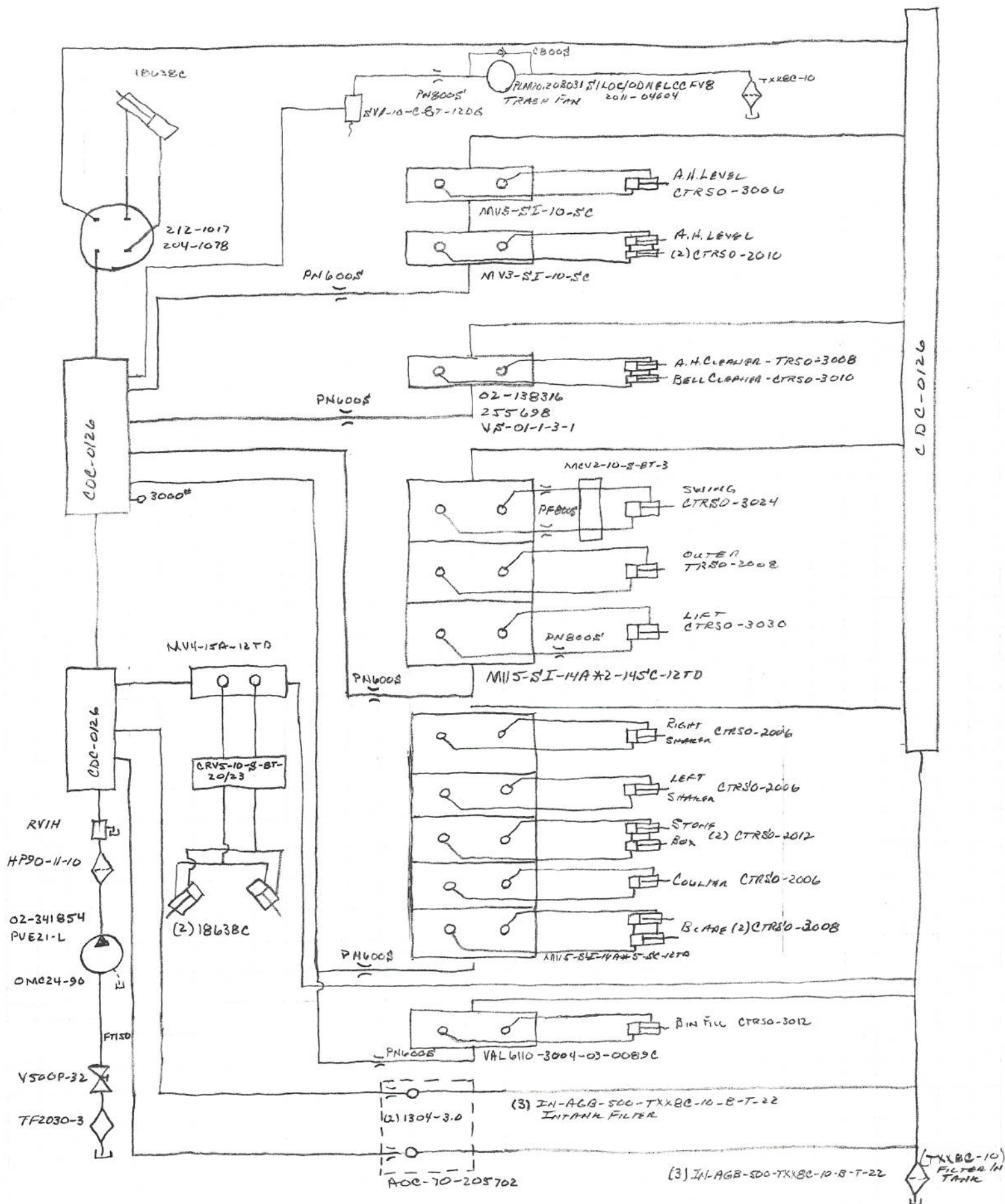
1/14/08 = 08024
HEATLATH FRAMES
4RSAL-65'LAN



1/14/08
#08024
HEARTLAND FARMS
4REP4-65" LAH



2/12/08
E08024
HEARTLAND FARMS
4554 W 65" SPAN TABLE
REV 1 TIRAGE FAN



1/14/08 208024
HEARTLAND FARMS
4RSP-65' L&H

④
TF2540-3
2 1/2" 90° Steel
2 1/2" C/S N/A
2BVL20-40B
FT250
* 35VQTB'S

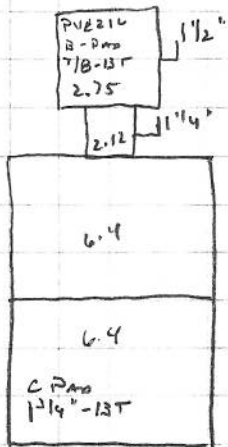
③
3" X 2" Bush
2" C/S N/A
VSDOP-32
FT200

FT200
2" 90° Steel
W43-32PK
ZDF2215-25-5
W43-32PK-2"
2" 90° Steel
2" C/S N/A
VSDOP-32
2" C/S N/A
2" TEE X
X- 2" X 1 1/4" Bush 0-2" 90° Steel
FT125 2" X 1 1/4" Bush
FT125
* TL 4/6.4 * 6.4

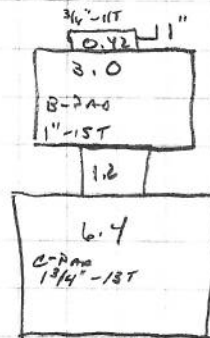
③
TF2030-3
2" 90° Steel
2" C/S N/A
VSDOP-32
2" C/S N/A
2" TEE X
VSDOP-32
2" X 1 1/2" Bush
FT150
* 2V21L

③
TF2030-3
2" 90° Steel
2" C/S N/A
VSDOP-32
2" C/S N/A
2" TEE X
X- 2" X 1 1/2" Bush
FT150
* TRIP, Comm. Pump
O- 2" 90° Steel
2" X 1 1/2" Bush
FT150
* TRIP, Comm. Pump. * VIO

④
4" X 2" Bush
2" 90° Steel
2" C/S N/A
VSDOP-32
2" X 1 1/2" Bush
1 1/2" C/S N/A
RFT150-25-5
1 1/2" C/S N/A
2" X 1 1/2" Bush
VSDOP-32
2" C/S N/A
2" TEE X
X- 2" X 1 1/4" Bush
FT125
* TAN. 3.0/3.0
O- 2" X 1" Bush
FT100
* SINGLE 3.0



L.R.



L.L.

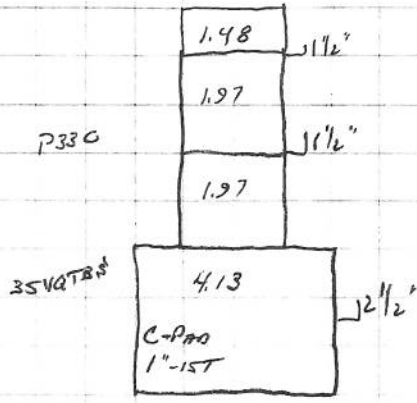
L.R. TANDEM 6.4
DVE21L
L.L. 6.4
3.0
T.R. 35VQTB'S

GROUND DRIVE
STEERING
AIRHEAD
SECONDARY
CROSS
S.O.B
BIN FILL
BIN UNLOADER
LEFT SPAN TABLE
LEFT PRIMARY
RIGHT PRIMARY
RIGHT SPAN TABLE
RIGHT SPAN TABLE
BRAND PAGE PRESSURE
FLUSHING

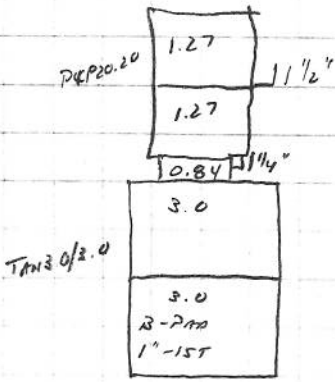
TL - TANDEM 3.0/3.0

TANDEM PL20

ENGINE - VIO



T.R.



T.L.

GEAR PRODUCTS - 4/HOLE
DA 49 / 19310 DRIVE PLATE

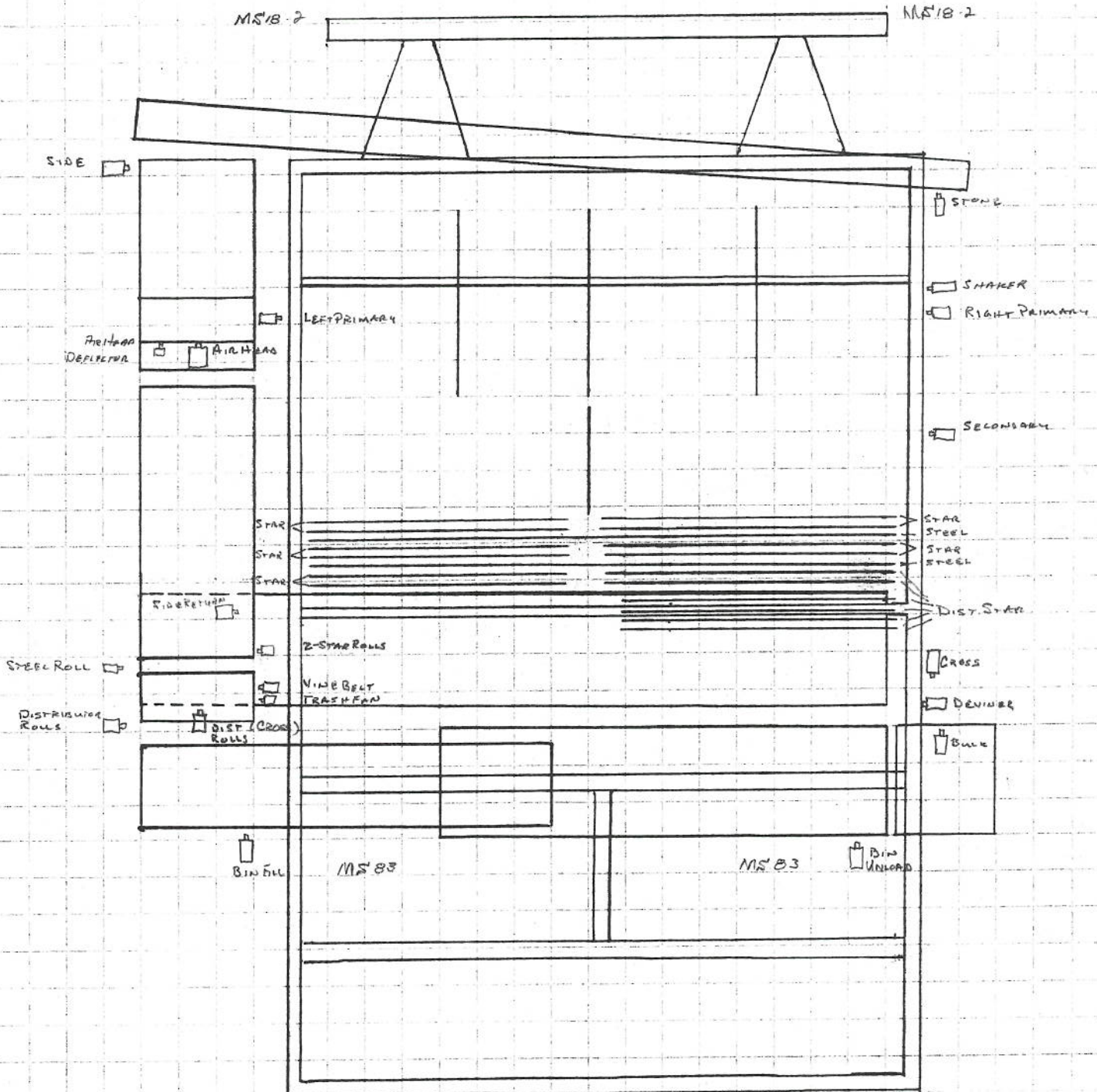
VIO  1"
ENGINE - QSK-15L-520HP

12/2/02

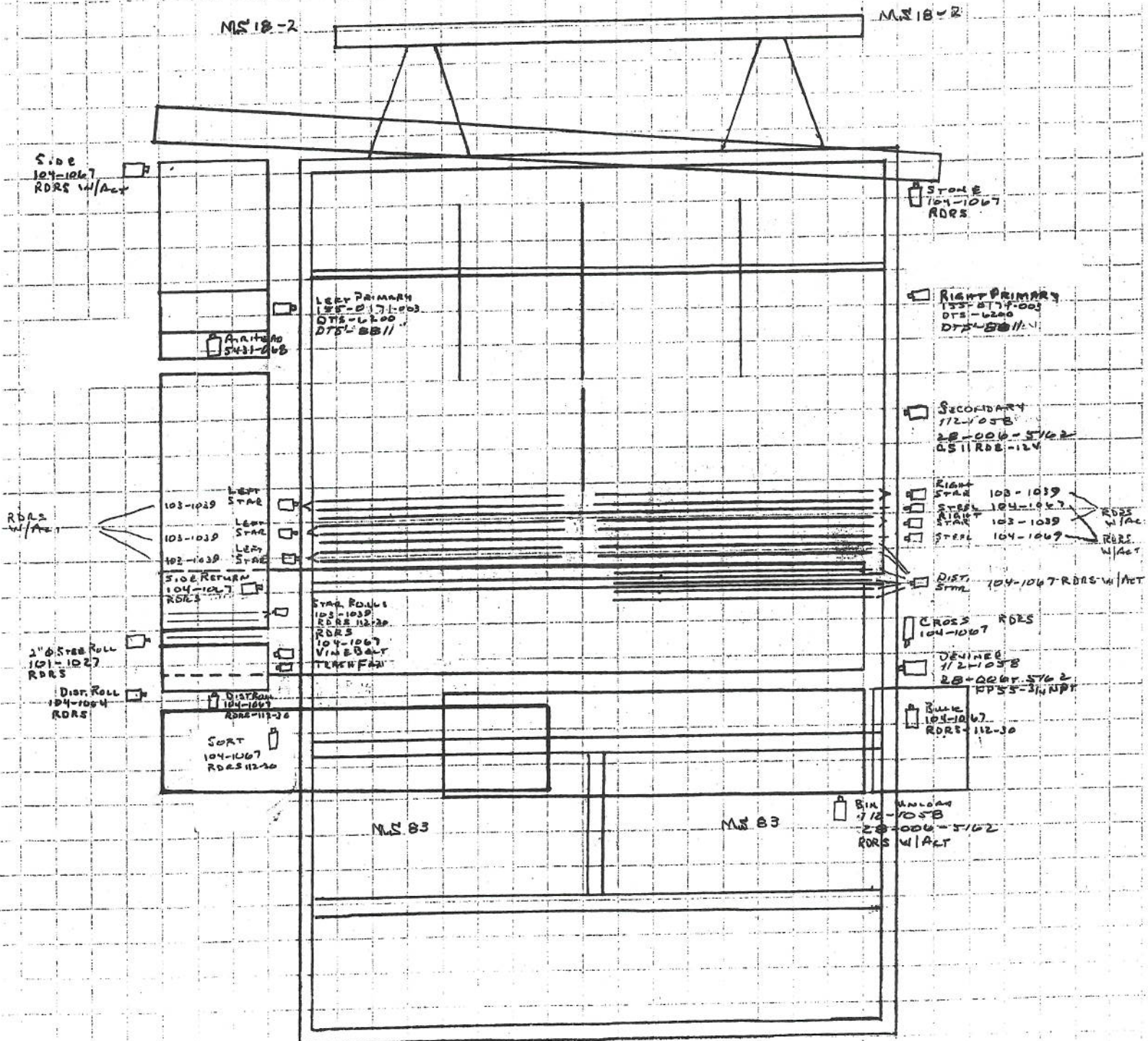
02210

DOMINEY

4RSPHW/65'A.H.



1114/08
 #C8024
 HEARTLAND FARMS
 4RSPH W/65"-TANK-STABLE



#08024

ELECTRONIC GAUGES

HEARTLAND FARMS

2-4-08

SCREEN

1

GROUND DRIVE
LEFT PRIMARY
RIGHT PRIMARY
SECONDARY

10,000#
5,000#
5,000#
5,000#

SCREEN

2

GROUND DRIVE CHARGE
AIRHEAD CHARGE
PRIMARY CHARGE PRESSURE
SECONDARY CHARGE

1,000#
1,000#
1,000#
600#

SCREEN

3

AIRHEAD

BRAKE CHARGE
STEERING

10,000#

1,000#
3,000#

SCREEN

4

RIGHT STAR
LEFT STAR
STAR TABLE DIST
CROSS

3,000#
3,000#
3,000#
3,000#

SCREEN

5

SIDE
BIN FILL
BIN UNLOAD

3,000#

3,000#
3,000#

Project: OHIO Power Systems

5.1 Sensor Scaling

All data scaling for each of the displayed parameters will be done within the CANtrak S/W & the GPSI shall transmit raw (unscaled) data acquired from the sensors.

The pressure sensors are assumed to produce an output signal in the range 0-10V with the max. pressure producing the max. voltage.

The ranges and the scaling factors applied to the parameters described above are detailed below.

Only the initial digits of the part number are specified as the remaining requirements are not known.

BELDEN 9444 20AWG 4C

GPSI	INPUT
13'10"	A1 GROUND DRIVE
17'4"	A2 LEFT PRIMARY
16'4"	A3 RIGHT PRIMARY
18'4"	A4 SECONDARY
18'4"	A5 GROUND DRIVE CHARGE PRESS.
17'4"	A6 TRAILER CHARGE PRESS.
13'8"	A7 PRIMARY CHARGE PRESS.
12'2"	A1 SECONDARY CHARGE PRESS.
17'10"	A2 AIR HEAD
8'10"	A3
13'4"	A4 BRANK CHARGE PRESS.
13'4"	A5 STEERING
13'4"	A6 RIGHT STAR TABLE
13'4"	A7 LEFT STAR TABLE
13'4"	A1 STAR TABLE DISTRIBUTION
11'10"	A2 CROSS
11'10"	A3 SIDE
13'4"	A4 BIN FILL
11'10"	A5 BIN UNLOAD
	A6
	A7

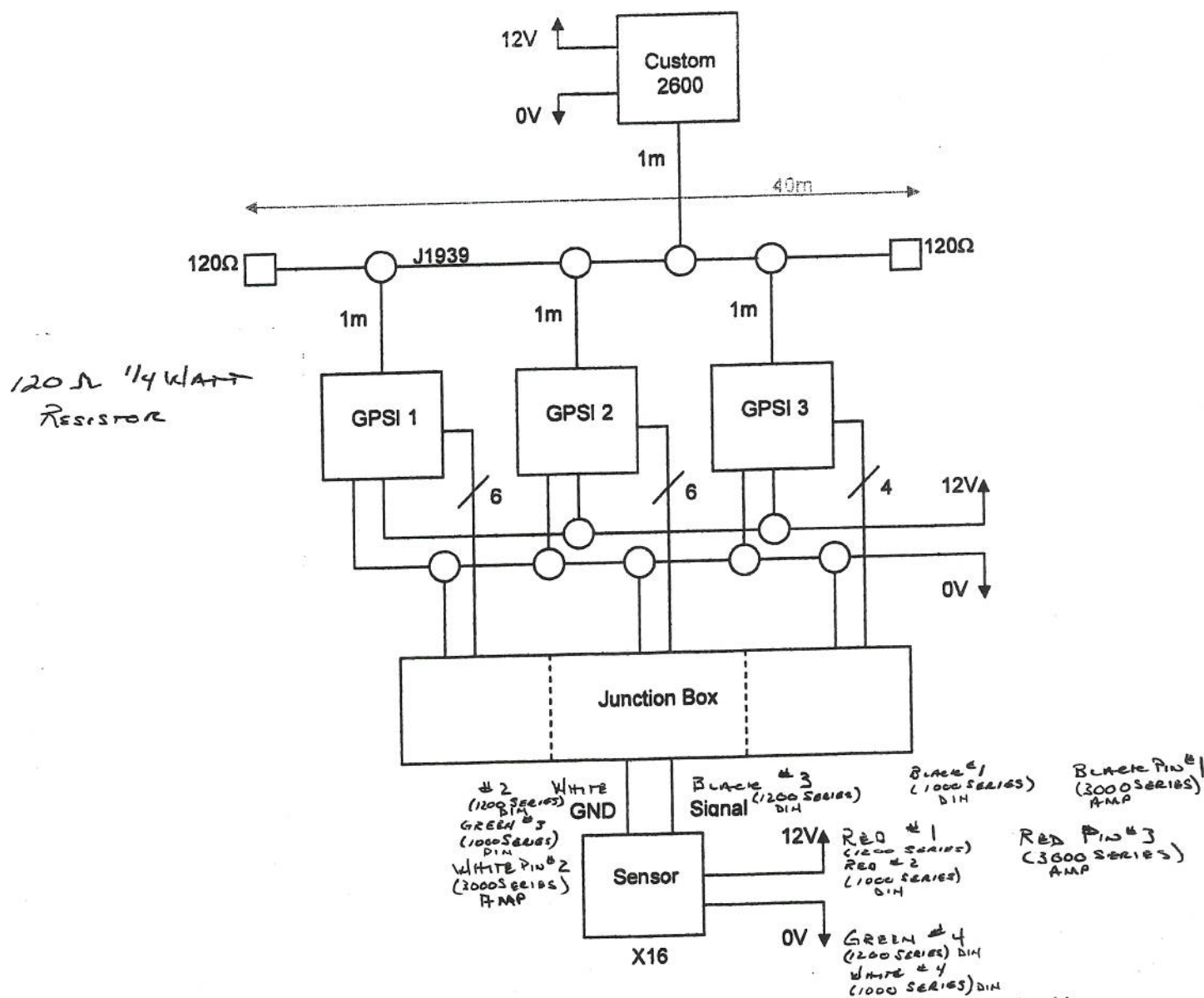
4	1	4	1
3		3	
2		2	
1	BIN FILL	1	OPEN
2	SIDE	2	LT. STAR
3	CROSS	3	RT. STAR
4	BIN UNLOAD	4	RT STAR DIST.

3000 SERIES (WEATHER DICK CONNECTOR) 3000PSI

PIN #1 TOP BLACK
2 OV(1/2) WHITE
3 + 14 RED

Project : OHIO Power Systems

6 Appendix A – Circuit Block Diagram for CANtrak & GPSI to OHIO Power System's Sensors



The CAN bus should be a shielded twisted pair, with impedance 120Ω. The shield ground should be connected to 0V.

'CAN+' (App.B GPSI Connector B pin 6) and 'CAN HI' (App.C CANtrak pin 8) should be linked.

'CAN -' (App.B GPSI Connector B pin 7) and 'CAN LO' (App.C CANtrak pin 7) should be linked.

GPSI Ground (App.B Connector B pin 1) and CANtrak Ground (App.C CANtrak pin 1) should be common.

GPSI Power (App B Connector B pin 12) should be tied to +12V.

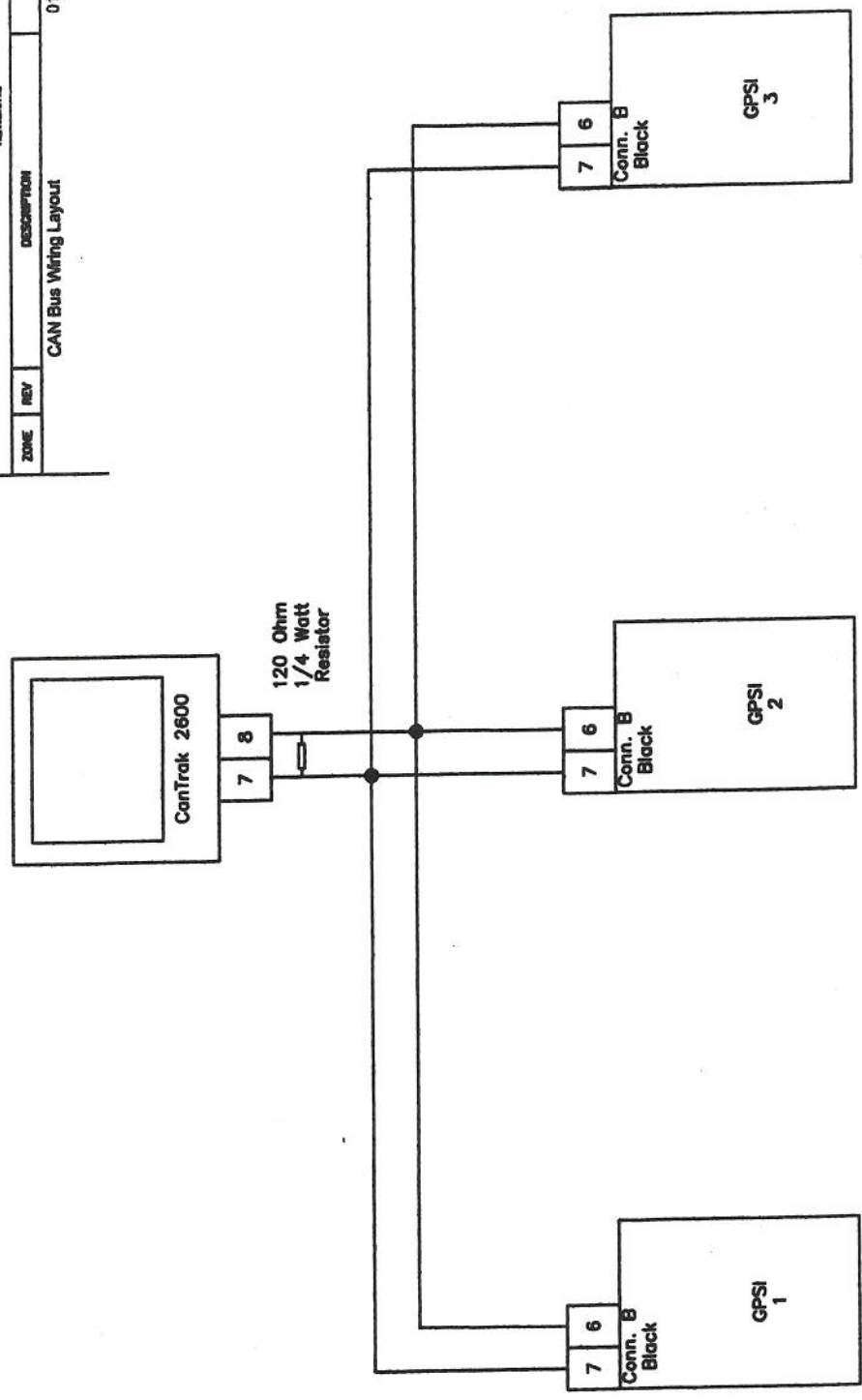
OUT+ of each sensor should be connected to the relevant Analog input on GPSI (see 4.1)
Each sensor's Ground and Earth should be common and IN+ tied to 12V.

GPSI Cable Harness Connections

Deutsch pin#	GRAY	Connector A.	Function	GPSSI 1 A	GPS 2 A	GPSSI 3 A
1		Ground		GREEN TO GND BAR		GREEN TO GND BAR
2		Fuel Sensor 1				
3		Analogue Input 7	PRIMARY CHARGE	BLACK 1-7	LEFT START TAIL	BLACK 2-7
4		Analogue Input 5	GND DRIVE CHARGE	BLACK 1-5	STEERING	BLACK 2-5
5		Analogue Input 3	RIGHT PRIMARY	BLACK 1-3		BLACK 3-5
6		Analogue Input 1	GROUND DRIVE	BLACK 1-1	SECONDARY	BLACK 3-3
7		Analogue Input 2	LEFT PRIMARY	BLACK 1-2		BLACK 3-1
8		Analogue Input 4	SECONDARY	BLACK 1-4	AIRHEAD	BLACK 3-2
9		Analogue Input 6	A.H. CHARGE	BLACK 1-6	BRAKE LITE PRESS.	BLACK 3-4
10		Fuel Sensor 2			RIGHT START TAIL	
11		Fuel Sensor Supply				
12		Voltage Reference		RED TO JUNE BLOCK 1		RED TO JUNE BLOCK 3

Deutsch pin#	Function	Black	Connector B.	GPSI / B	GPSI 2 B	GPSI 3 B
1	Ground	Green To Gnd. Bar			Green To Gnd. Bar	
2	Digital Output				-	-
3	Tach H				-	-
4	RS232 TxD / RS485A / J11708A				-	-
5	CAN Supply + (isolated version only)	Red To June. Block	7		Red To June. Block	Red To June. Block
6	CAN H	Blue To June. Block	15		Blue To June. Block	Blue To June. Block
7	CAN L	Green To June. Block	16		Green To June. Block	Green To June. Block
8	CAN Supply - (isolated version only)	Black To Gnd. Bar			Black To Gnd. Bar	Black To Gnd. Bar
9	RS232 RxD / RS485B / J1708B				-	-
10	Tach L				-	-
11	Battery Sense				-	-
12	Supply +	Red To June. Block	4		Red To June. Block	Red To June. Block

REVISIONS			
ZONE	REV	DESCRIPTION	DATE
		CAN Bus Wiring Layout	01-21-05
			APPROVED



Acemarc, Inc. Automation & Machinery Repair 1 888-960-TECH		Advanced Farm Equipment HARVESTER	
11138 Holshee Rd Homerville, Ohio 42335	SIZE B	FIG. NO. B	REV 1
CANTrak 2600/GPS I/O CAN Bus Wiring		SHEET 1 of 1	

Project : OHIO Power Systems

7 Appendix B - GPSI Pinouts

The GPSI housing contains 2 Deutsch 12 pin connectors that contain all power & signal connections as detailed below.

Connector A (Grey)	
Signal	Pin Number
1	Ground
2	Switched Input 1
3	Analogue Input 7
4	Analogue Input 5
5	Analogue Input 3
6	Analogue Input 1
7	Analogue Input 2
8	Analogue Input 4
9	Analogue Input 6
10	Switched Input 2
11	Fused +5V Supply Output
12	4.096V Reference Supply Output

Connector B (Black)	
Signal	Pin Number
1	Ground
2	Digital Output
3	Tachometer High Input
4	RS232 Tx
5	* CAN Power Input +
6	CAN Bus High
7	CAN Bus Low
8	* CAN Power Input -
9	RS232 Rx
10	Tachometer Low Input
11	High Voltage Input
12	Power Supply Input +

BELDEN 9444

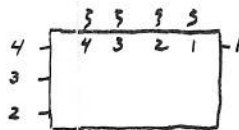
TRANSDUCER WIRING

3000 SERIES

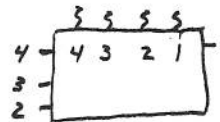
DTS-0373 B

AMP CONNECTOR

PIN # 1 TOP BLACK
 2 OV($\frac{1}{2}$) WHITE
 3 + IN RED



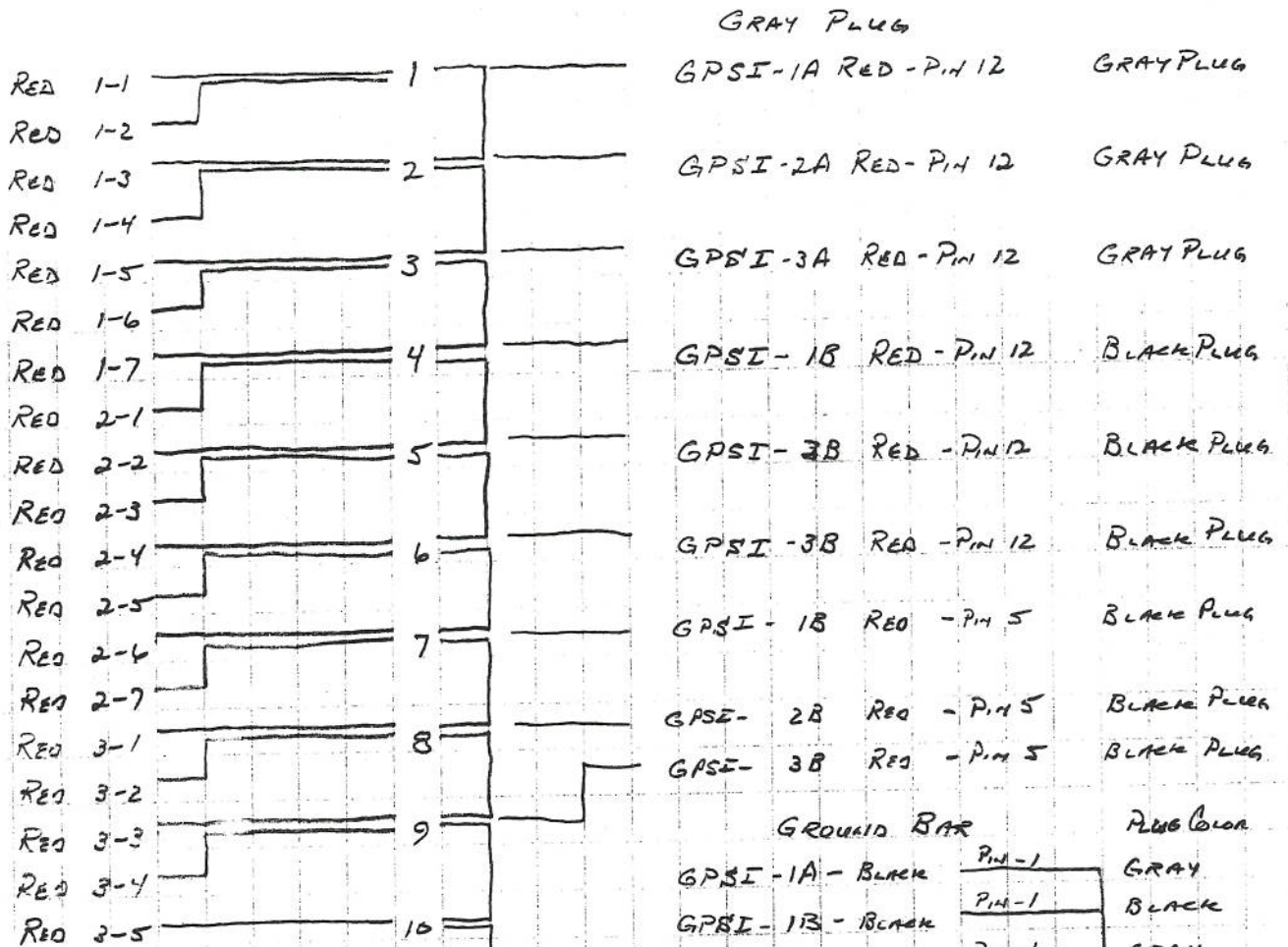
1 B.M.F.I.C.
 2 S.O.E.
 3 C.R.O.S.S.
 4 B.M.U.N.I.O.N.



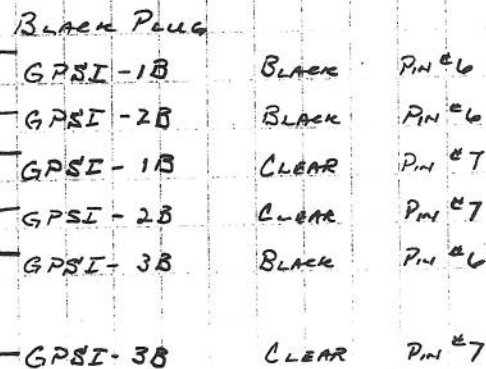
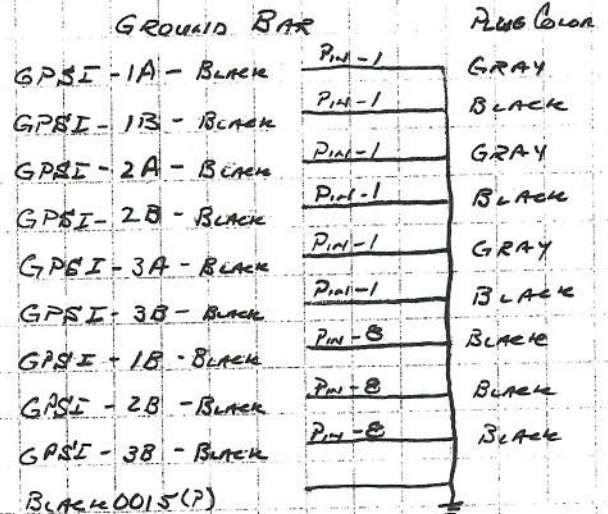
1 OPEN
 2 L.T. STIM
 3 R.T. STIM
 4 R.T. STIM DIST

(6/20/05) 2/20/06

GAUGE GPSI'S (19 GAUGES) JUNCTION BLOCK



PANEL 12VDC RED 0028(P)



PIN #8
CANTRAC - BLACK
PIN #7
CANTRAC - CLEAR

CANTRAC PLUG
PIN 1 BLACK - CANTRAC
2 CLEAR - CANTRAC
3 BLACK 015 - P 12VDC
4 RED 028 - P 12VDC

Junction Block #11
12VDC
10 AMP FUSE

RED 0028 DIST. PANEL SPIN PLUG PIN #6

12VDC JUNCTION BLOCK

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

CAB CONNECTION

- PIN 1: BLACK - TWISTED PAIR
- PIN 2: CLEAR - TWISTED PAIR
- PIN 3: RED - 12VDC - PANEL
- PIN 4: BLACK - 12VDC - PANEL

CANTRAC PINOUT

- 1: RED 015 PIN 14 DIST. PANEL
- 2: RED 028 PIN 14 DIST. PANEL

+12VDC

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

GPSI 3A GRAY PLUG

GPSI 3B BLACK PLUG

GPSI 2A GRAY PLUG

GPSI 2B GRAY PLUG

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

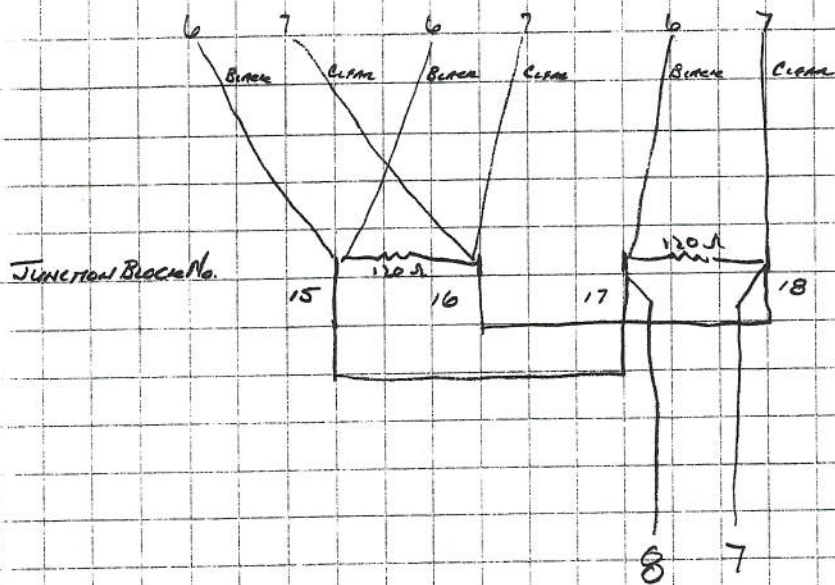
BELOW 8762 TWISTED PAIR

BELOW 8762 TWISTED PAIR

GPSI Plug
1B (BLEN)

GPSI Plug
2B (BLEN)

GPSI Plug
3B (BLEN)



REDDEN 8762

20AWG 2C TWISTED

JUNCTION BLOCK No.

TO CONTRA

For Chris

ADVANCED FARM EQUIPMENT 19 GAUGE GPSI LAYOUT

CABLE NUMBER

GROUND DRIVE	// A1 - GPSI 1	1-1
LH PRIMARY	// A2	1-2
RH PRIMARY	// A3	1-3
SECONDARY	// A4	1-4
GD CHARGE	// A5	1-5
AIRHEAD CHARGE	// A6	1-6
PRIMARY CHARGE	// A7	1-7
SECONDARY CHARGE	// A1 - GPSI 2	2-1
AIRHEAD	// A2	2-2
ROCK CRUSHER	// A3	2-3
BRAKE CHARGE	// A4	2-4
STEERING	// A5	2-5
RH STAR	// A6	2-6
LH STAR	// A7	2-7
STAR TABLE DIST	// A1 - GPSI 3	3-1
CROSS	// A2	3-2
SIDE	// A3	3-3
BIN FILL	// A4	3-4
BIN UNLOAD	// A5	3-5
UNUSED	// A6	
UNUSED	// A7	

Fax

To: AFE From: HJV
 Fax: 989-268-5630 Pages:
 Phone: Date: 5-4-05
 Re: LEVESQUE CC: LAYOUT

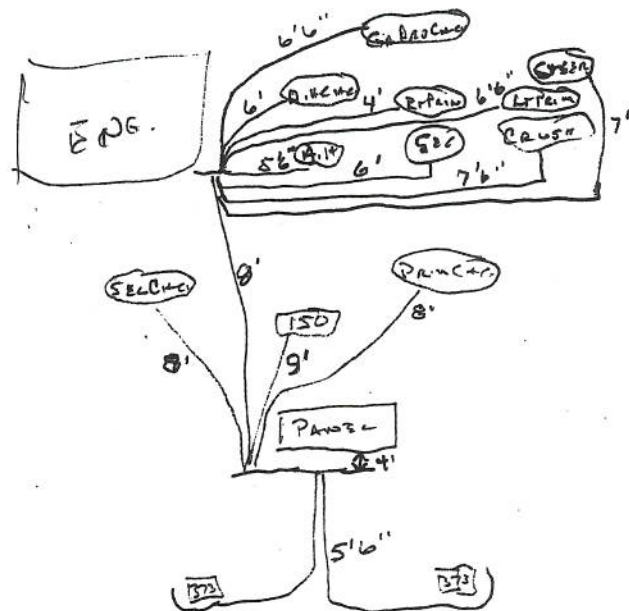
☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Comments:

THIS WOULD BE MY CHOICE FOR LAYOUT

- 1 GROUND DRIVE
- 5 LH PRIMARY
- 6 RH PRIMARY
- 8 SECONDARY
- 2 GROUND DRIVE CHARGE
- 7 AIRHEAD CHARGE
- 4 PRIMARY CHARGE
- 10 SECONDARY CHARGE
- 3 AIRHEAD
- 9 ROCK CRUSHER (#05007)
- 18 BRAKE CHARGE
- 19 STEERING
- 11 RT STAR
- 17 LH STAR
- 12 STAR TABLE DIST
- 13 CROSS
- 14 SIDE
- 15 BIN FILL
- 16 BIN UNLOAD

#05007 Levesque
 #06005 TORIQUE



Alliston Location: (Head Office)

R.R. #3, 5770 County Road #15
 Alliston, Ont. L9R 1V3
 705.435.3226 • FAX 705.435.8893

Hershall Location:

72080 London Road, R.R. #1
 Hershall, Ont. N0M 1M0
 519.283.2450 • FAX 519.283.2455

www.hjv.ca

Grand Falls Location:

10109-Rm #2, DEL
 Du St. Andre, NB E5Y 3H6
 506.473.5557 • FAX 506.473.5874

#08024

ELECTRONIC GAUGES
HEARTLAND FARMS
 4RSPH W/ 65" LAH
ENCLOSURE PINOUTS

PIN #1 - TOP - Black
 2 - OV(+) - WHITE
 3 - +IN - Red

2/4/08

PLUG #1

PIN #1	1-1	BLACK	GROUND DRIVE
13' 10" 2	1-1	WHITE	GROUND DRIVE
3	1-1	RED	GROUND DRIVE
4	1-2	BLACK	LEFT PRIMARY
17' 4" 5	1-2	WHITE	LEFT PRIMARY
6	1-2	RED	LEFT PRIMARY
7	1-3	BLACK	RIGHT PRIMARY
16' 4" 8	1-3	WHITE	RIGHT PRIMARY
9	1-3	RED	RIGHT PRIMARY
10	1-4	BLACK	SECONDARY
18' 4" 11	1-4	WHITE	SECONDARY
12	1-4	RED	SECONDARY

PLUG #2

PIN#1	1-5	BLACK	GROUND DRIVE CHARGE PRESSURE
18' 4" 2	1-5	WHITE	GROUND DRIVE CHARGE PRESSURE
3	1-5	RED	GROUND DRIVE CHARGE PRESSURE
4	1-6	BLACK	AIR HEAD CHARGE PRESSURE
17' 4" 5	1-6	WHITE	AIR HEAD CHARGE PRESSURE
6	1-6	RED	AIR HEAD CHARGE PRESSURE
7	1-7	BLACK	PRIMARY CHARGE PRESSURE
13' 8" 8	1-7	WHITE	PRIMARY CHARGE PRESSURE
9	1-7	RED	PRIMARY CHARGE PRESSURE
10	2-1	BLACK	SECONDARY CHARGE PRESSURE
12' 2" 11	2-1	WHITE	SECONDARY CHARGE PRESSURE
12	2-1	RED	SECONDARY CHARGE PRESSURE

PLUG #3

PIN#1	2-2	BLACK	AIR HEAD
17' 10" 2	2-2	WHITE	AIR HEAD
3	2-2	RED	AIR HEAD
4	2-3		
5	2-3		
6	2-3		
7	2-4	BLACK	BRAKE CHARGE PRESSURE
8' 10" 8	2-4	WHITE	BRAKE CHARGE PRESSURE
9	2-4	RED	BRAKE CHARGE PRESSURE
10	2-5	BLACK	STEERING
13' 4" 11	2-5	WHITE	STEERING
12	2-5	RED	STEERING

#08024

**ELECTRONIC GAUGES
HEARTLAND FARMS
4RSPH W/ 65" LAH
ENCLOSURE PINOUTS**

Pin #1 - + OP - Black

2 - OV(t) - White 2/4/08

3 - +IN - Red

PLUG #4

PIN #1	2-6	BLACK	RIGHT STAR TABLE
13' 4" 2	2-6	WHITE	RIGHT STAR TABLE
3	2-6	RED	RIGHT STAR TABLE
4	2-7	BLACK	LEFT STAR TABLE
13' 4" 5	2-7	WHITE	LEFT STAR TABLE
6	2-7	RED	LEFT STAR TABLE
7	3-1	BLACK	STAR TABLE DISTRIBUTOR
13' 4" 8	3-1	WHITE	STAR TABLE DISTRIBUTOR
9	3-1	RED	STAR TABLE DISTRIBUTOR
10	3-2	BLACK	CROSS
11' 10" 11	3-2	WHITE	CROSS
12	3-2	RED	CROSS

PLUG #5

PIN#1	3-3	BLACK	SIDE
11' 10" 2	3-3	WHITE	SIDE
3	3-3	RED	SIDE
4	3-4	BLACK	BIN FILL
13' 4" 5	3-4	WHITE	BIN FILL
6	3-4	RED	BIN FILL
7	3-5	BLACK	BIN UNLOAD
11' 10" 8	3-5	WHITE	BIN UNLOAD
9	3-5	RED	BIN UNLOAD
10			
11			
12			

PLUG #6

PIN#1	BLACK		BELDEN 8762 TO CAB
2	CLEAR		BELDEN 8762 TO CAB
3	RED	0028	12VDC FROM DISTRIBUTION PANEL
4	BLACK	0015	GROUND TO DISTRIBUTION PANEL GROUND