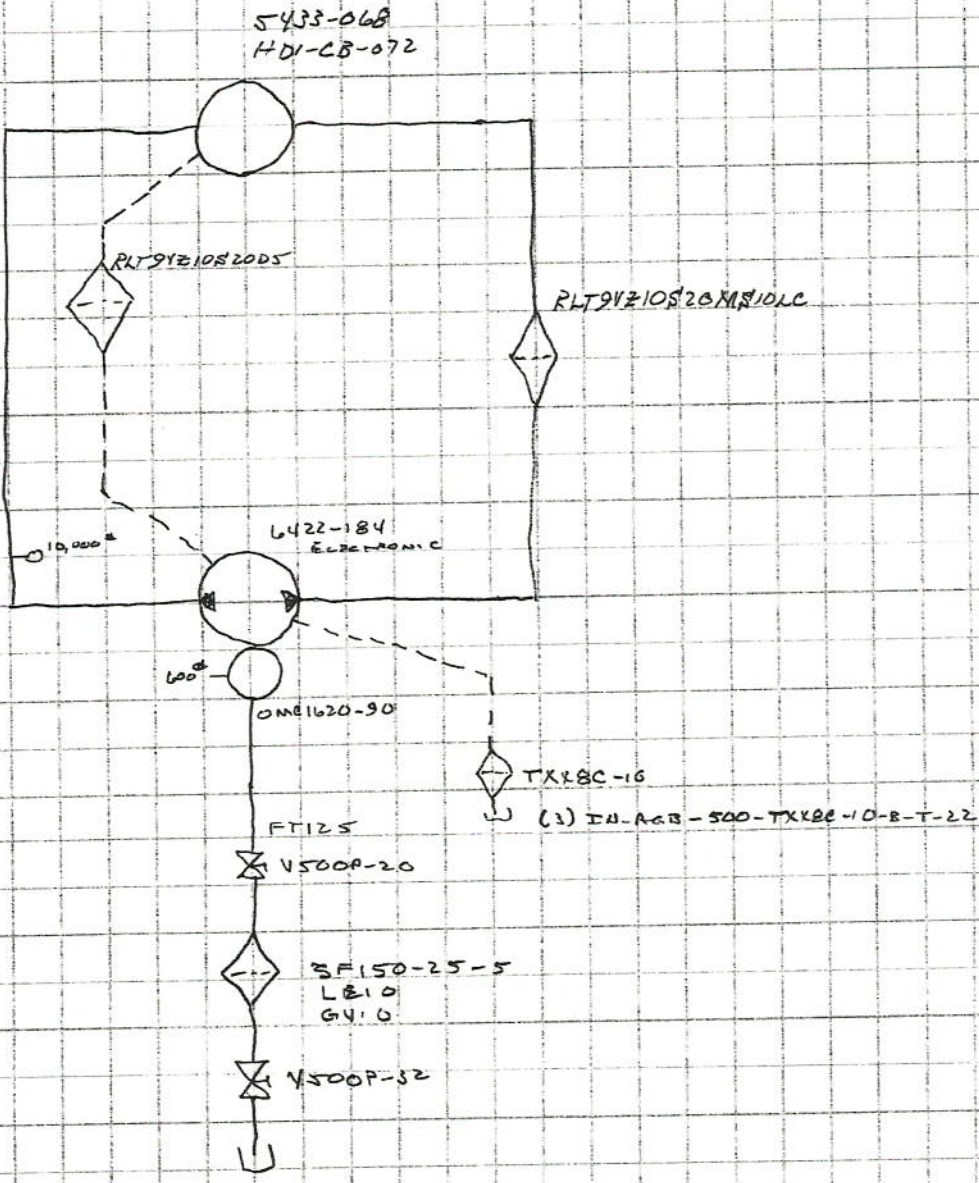


#06012

Lenmark AG.

4 RPTH $\frac{1}{65}$ " AH

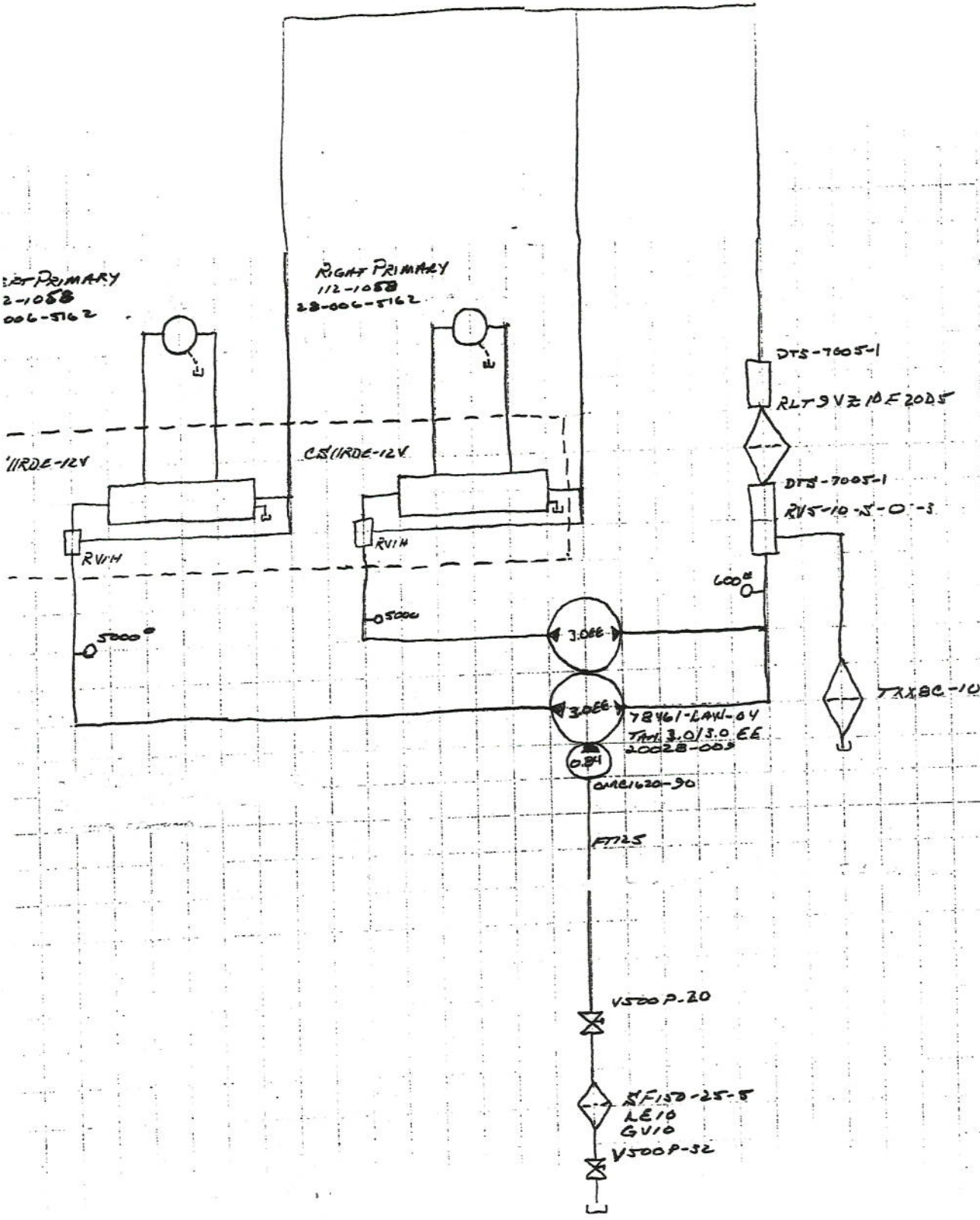
#06012
4RPTA W/65' A.H.



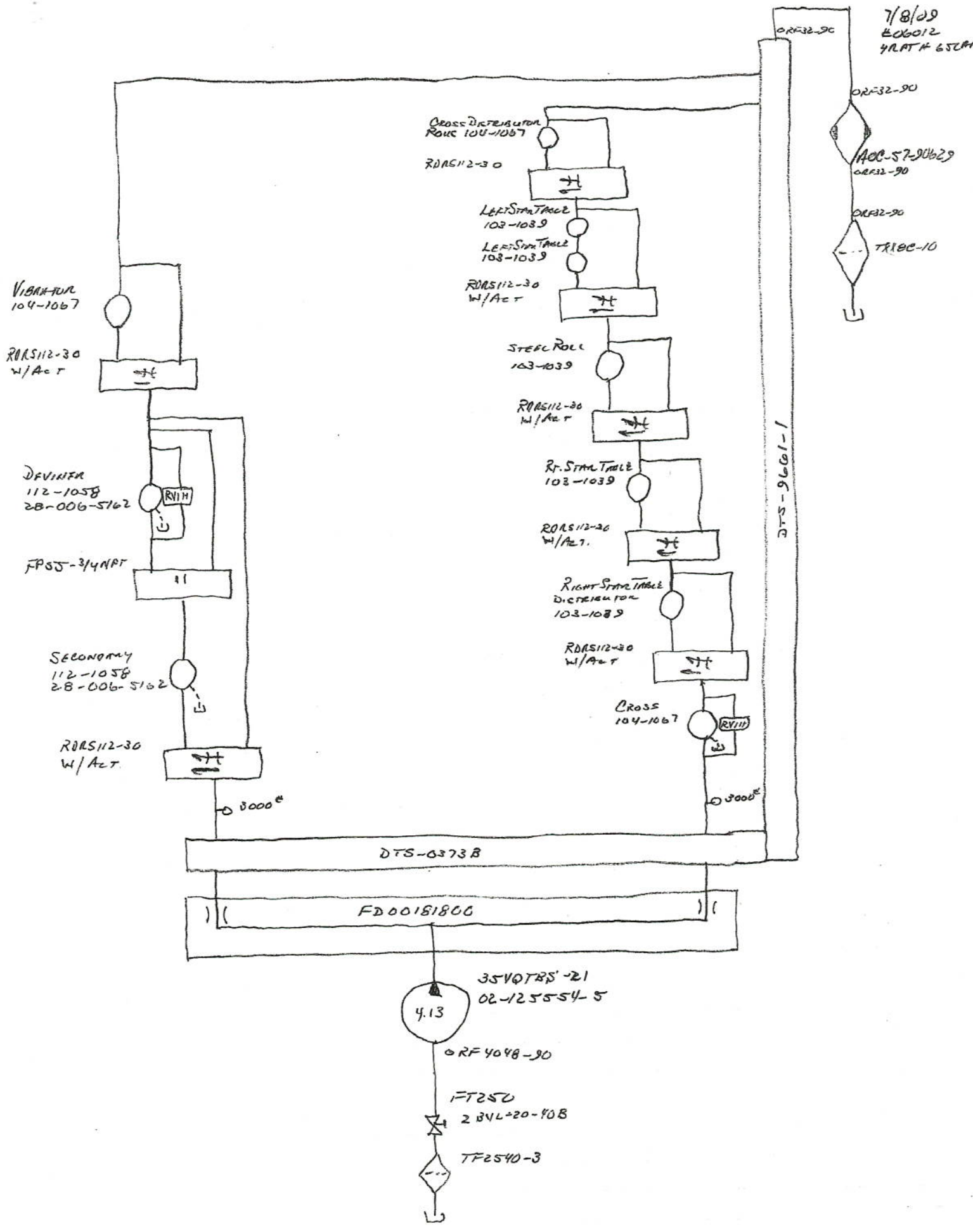
21100
#06012
4RPT H W/LS A.4.

LEFT PRIMARY
2-1058
006-5162

RIGHT PRIMARY
112-1058
28-006-5162

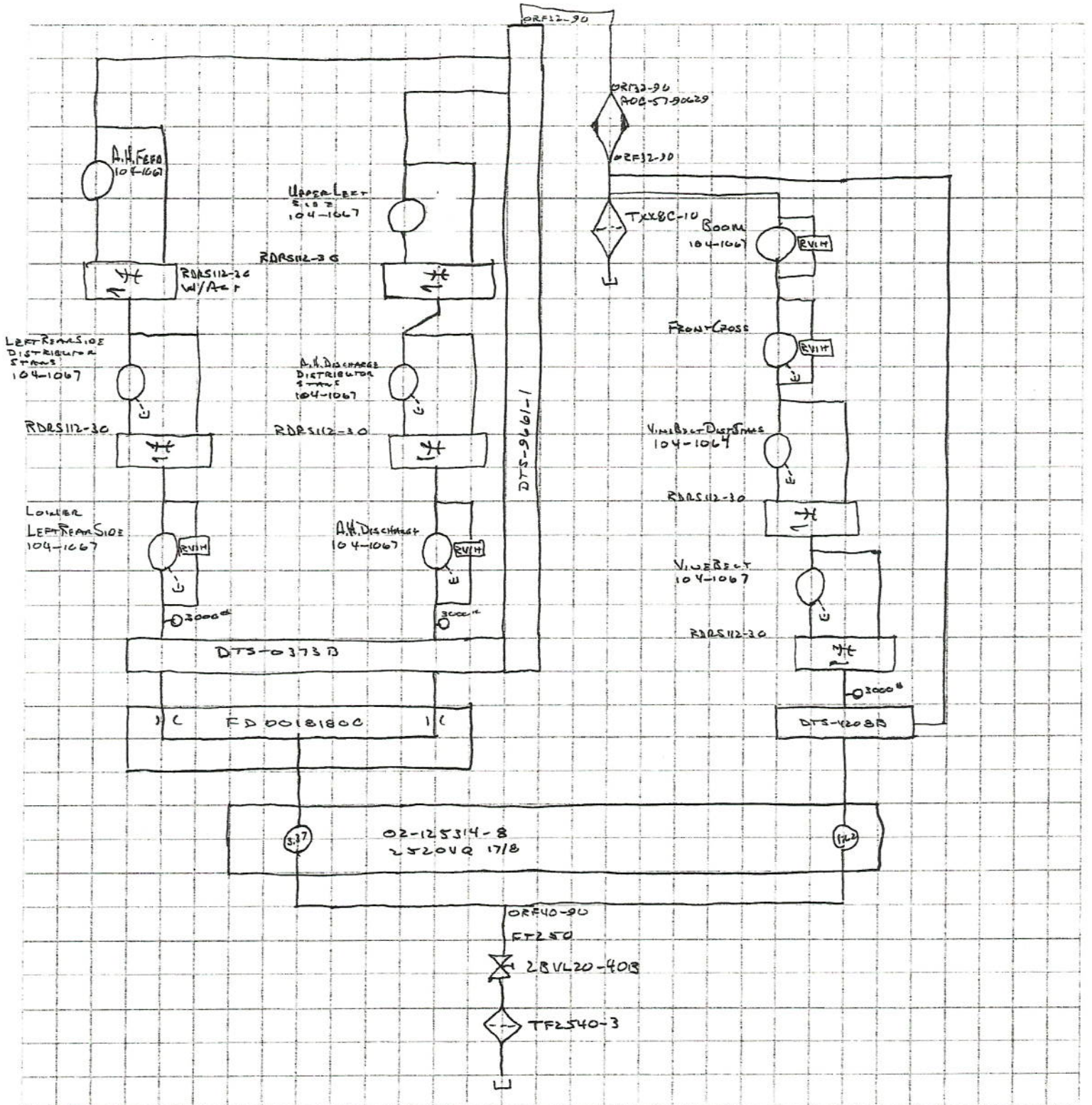


7/8/09
E06012
4 RPT # 65044



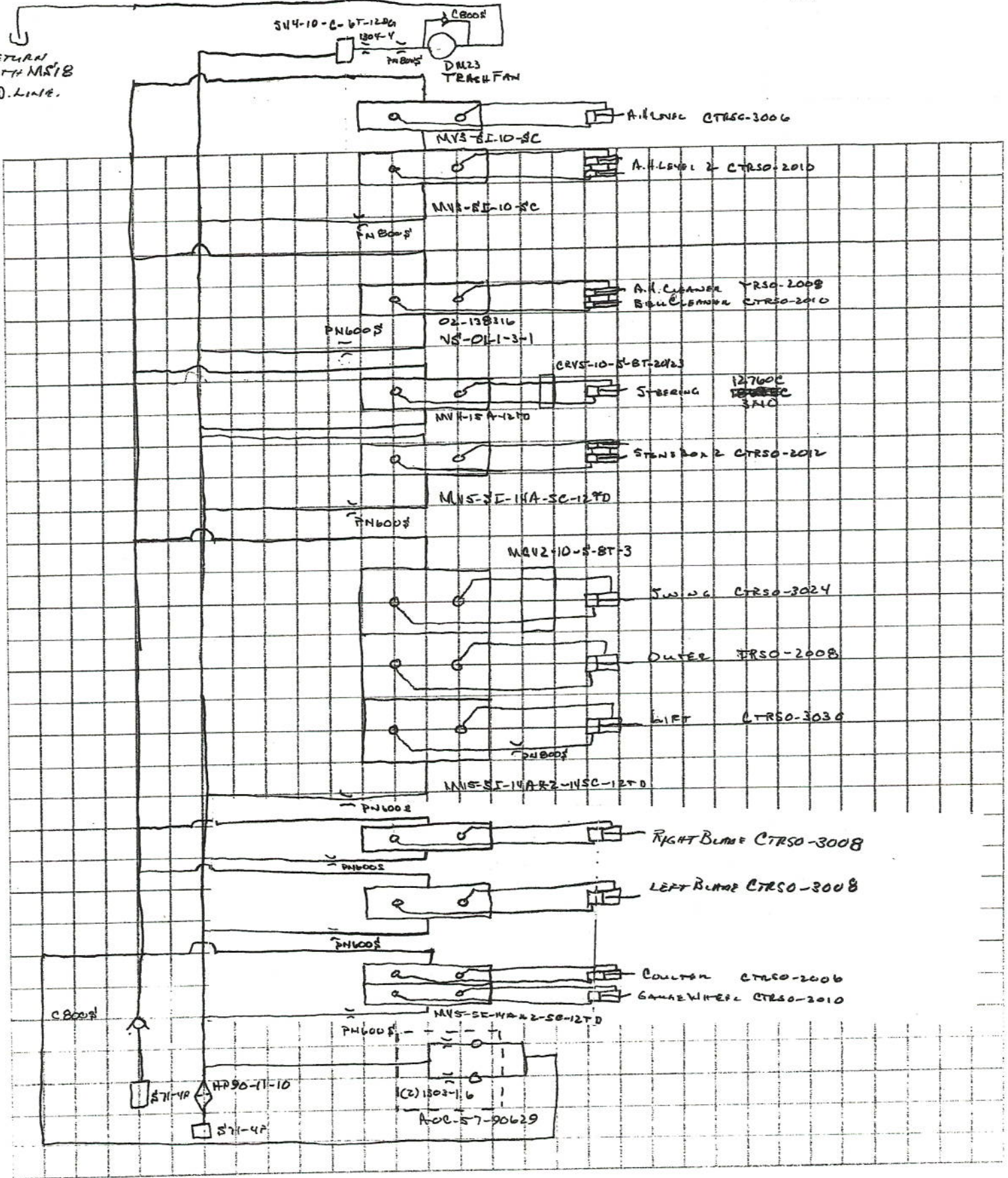
006012
4 ROTARY W. 105 A. 1.

UPPER LEFT CORN
RDS112-30 AND 112-30
8/09



7/8/09
 E06012
 4RPTH-65'L.A.H.

RETURN
 WITH MSIB
 C.O. LINE.



MACHINE PSI

DIESEL ENGINE

+

KEY SWITCH

+

HYP. OIL LEVEL

+

CROSS PRESS WMAN

+

A.H. FUEL WMAN

THROTTLE

INCREASE

+

DECREASE

WORK LIGHTS

+ LEFT

RIGHT

+

FLASHERS

+

STROBE LIGHT

+

REAR W/HEEL ASSIST

ON

+

OFF

+

FUEL PUMP

ARC HANS CLEAN AUTOMATIC

+

MANUAL

PRIMARY

+

RIGHT

+

VISCATOR

+

SECONDARY

+

A.H. FEED

+

COOLER

+

STEERING BOX

+

COULTER

+

GA WHEEL

LEFT

RIGHT

+

BOTH

SWINGS

MINSTER

STARTABLE

+

LEFT

+

RIGHT

+

RT DIST ROLL

+

SPACE

+

STARR

+

TABLE

STEER

ROLL

AIR HEAD

+

RIGHT

+

LEFT

+

SPERS

+

OFF

+

HEAD

+

STAFF

COOLANT

+

GA WHEEL

LEFT

RIGHT

+

BOTH

SWINGS

MINSTER

DISCHARGE FEED

+

HEAD

+

SMUTTER CROSS

+

SECONDARY

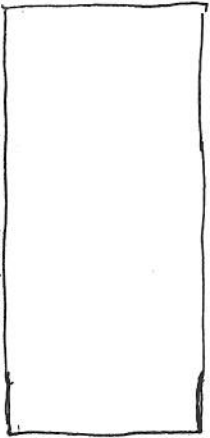
+

PRIMARY

+

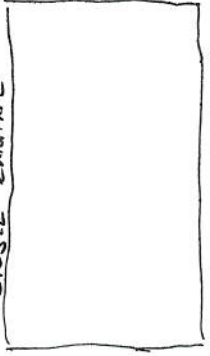
MINSTER

MACHINE PSI



+ KEY SWITCH

DIESEL ENGINE



THROTTLE
+ INCREASE
- DECREASE

+ HYD. OIL LEVEL
Yellow 20

+ CROSS PRESS WMAN
White 61

+ A.H. FUEL WMAN
Yellow 15

WORK LIGHTS

REAR VIEW ASSIST

+ BACKLIT Brown 06	+ LEFT Brown 04	+ RIGHT Blue 036	+ FLASHERS Yellow 053	+ STRONG LIGHT Red 29	+ ON Orange 50	+ OFF Orange 50	+ FUEL PUMP A Red 81
-----------------------	--------------------	---------------------	--------------------------	--------------------------	-------------------	--------------------	-------------------------

Air Trans Clean Automatic

STEER ROLL

+ MANUAL Blue 20	+ MANUAL Purple 28	+ LEFT White 65	+ RIGHT Brown 37	+ ADJUST ROLL Orange 149	+ SPEED Red 149	+ SPACE Blue 151	+ SPACE Blue 152
---------------------	-----------------------	--------------------	---------------------	-----------------------------	--------------------	---------------------	---------------------

PRIMARY

AIR HEAD

+ LEFT Red 32	+ VISOR Yellow 33	+ SECONDARY Yellow 120	+ SECONDARY Yellow 121	+ A.H. FUEL Green 45	+ SPEED Orange 147	+ HEADSTAFF Blue 148
------------------	----------------------	---------------------------	---------------------------	-------------------------	-----------------------	-------------------------

+ STONE BOX
Blue 108

+ COULTER
Yellow 116

+ GR. WHEEL
Purple 120

+ LEFT
Blue 30

+ RIGHT
Brown 39

+ BOTH
Black 119

+ SWING
Purple 114

+ LIFT
White 112

+ OUTER
Orange 110

+ TRASH PAN
Brown 25

+ AIR
Yellow 115

+ HEAD
Brown 11

+ CROSS
Brown 16

+ SECONDARY
Red 82

+ PRIMARY
Master

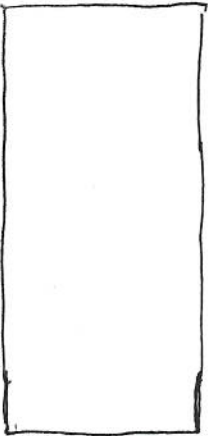
+ GREEN 115

+ BROWN 113

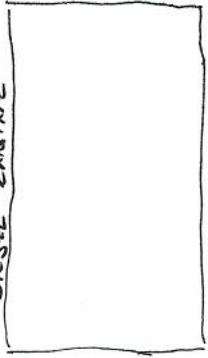
+ BLUE 111

+ BLUE 111

MARINE PSI



DIESEL ENGINE



+

KEY SWITCH

+

Hyo. Oil Level
BZL-13

+

Cross Press Wman
BZL-13

+

A.M. Fuel Wman
TGA-10

THROTTLE

INCREASE

+

DECREASE

WORK LIGHTS

+ BACKUP 2X464

+ LEFT 2X464

+ RIGHT 2X464

+ FLASHERS 2X464

+ STROBE LIGHT 2X464

+ ON TGA-10

+ OFF 2X464

+ FUEL PUMP 2X464

Air Hams Clean Automatic

+ MANUAL 41203
S P R E E D C

+ VISCATOR 55208C-RK

+ SECONDARY 55208C-RK

+ A.H. FRED 55208C-RK

+ LEFT 55208C-RK

+ RIGHT 55208C-RK

+ RT DIST ROLL 55208C-RK

+ SPEED 55208C-RK

+ SPACE 55208C-RK

PRIMARY

+ LEFT POT 41203

+ COULTER 41203

+ GA W/HEC 41203

+ STERN BOX 41203

+ RIGHT POT 41203

+ SWING 41203

+ LIFT 41203

+ OFF 2X464

+ HUMID STAFF 55208C-RK

+ TRANSMISSION 2X464

+ ROOM 2X464

+ DISCHARGE 2X464

+ AIR HEAD F860 2X464

+ SECONDARY 2X464

+ PRIMING 2X464

+ MASTER 76L43

+ SWING 41203

+ LIFT 41203

+ OUTFEED 41203

REAR WHEEL ASSIST

ON

+

+

+

STARBLE

STEER

ROLL

AIR HEAD

ROLL

ROLL

ROLL

ROLL

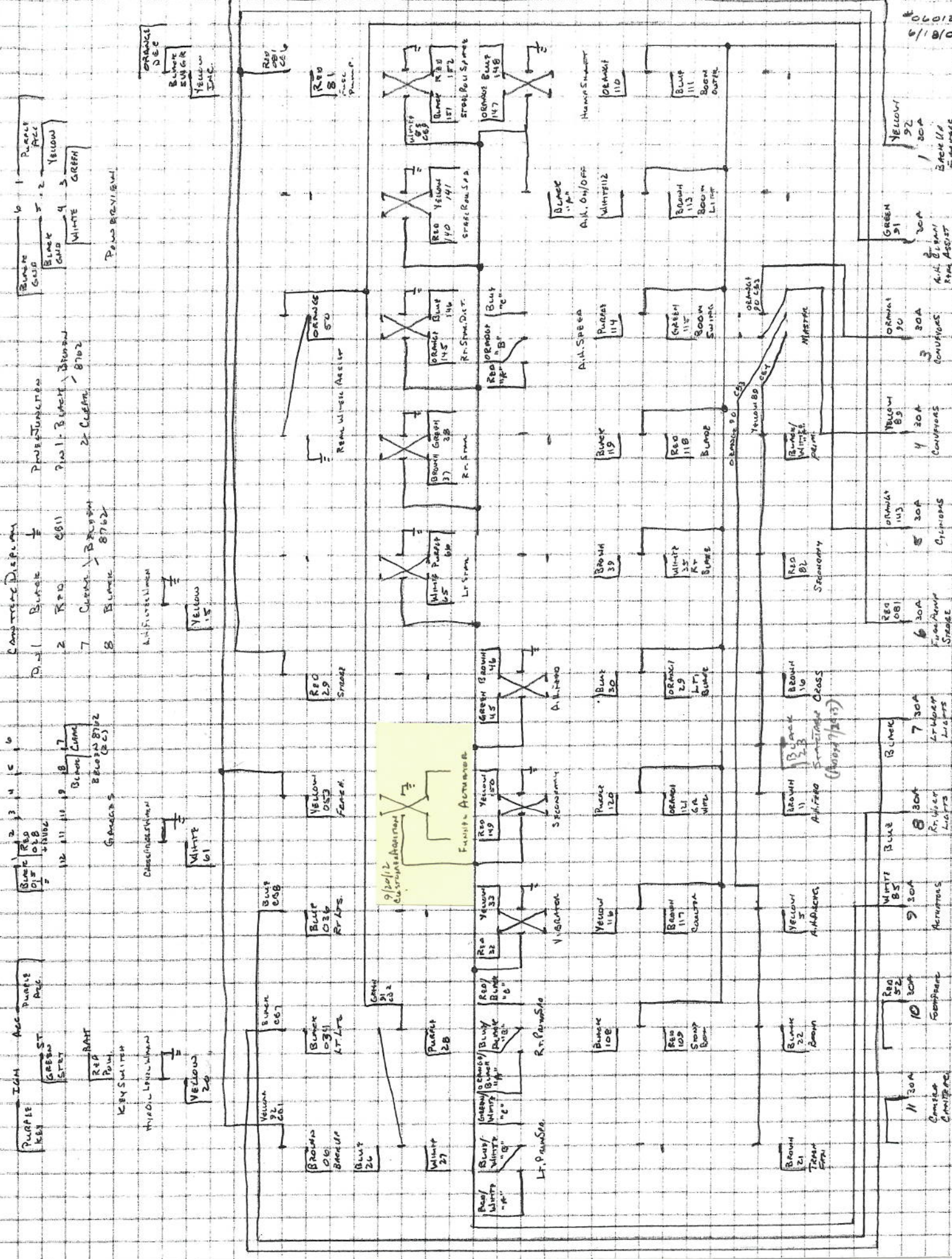
ROLL

ROLL

ROLL

ROLL

JUL ENGINE 2012



06/012
6/18/09

1 Purple Key
 2 Green ST
 3 Red RAH
 4 Yellow 24
 5 Brown 06
 6 White 27
 7 Yellow 26
 8 Blue 036
 9 Red 29
 10 Yellow 053
 11 Green 145
 12 White 37
 13 Red 118
 14 Brown 113
 15 Green 112
 16 White 110
 17 Yellow 108
 18 Red 103
 19 Brown 100
 20 White 85
 21 Red 52

Purple Key
 Green ST
 Red RAH
 Yellow 24
 Brown 06
 White 27
 Yellow 26
 Blue 036
 Red 29
 Yellow 053
 Green 145
 White 37
 Red 118
 Brown 113
 Green 112
 White 110
 Yellow 108
 Red 103
 Brown 100
 White 85
 Red 52

Purple Key
 Green ST
 Red RAH
 Yellow 24
 Brown 06
 White 27
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 Red 29
 Yellow 053
 Green 145
 White 37
 Red 118
 Brown 113
 Green 112
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 Yellow 108
 Red 103
 Brown 100
 White 85
 Red 52

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 Red RAH
 Yellow 24
 Brown 06
 White 27
 Yellow 26
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 Red 29
 Yellow 053
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 Red 118
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 Green 112
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 Red 52

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 Brown 06
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 White 27
 Yellow 26
 Blue 036
 Red 29
 Yellow 053
 Green 145
 White 37
 Red 118
 Brown 113
 Green 112
 White 110
 Yellow 108
 Red 103
 Brown 100
 White 85
 Red 52

37 AMP PLUG

PIN #

1	YELLOW	20	HYDRAULIC OIL LEVEL SENSOR TO BZL12
2	WHITE	61	CROSS PRESSURE SWITCH TO BZL12
3	YELLOW	15	AIR HEAD FILTER TO TGA10 LIGHT
4	BROWN	06	BACK UP LIGHT SWITCH TO BACK UP LIGHT RELAY IN PANEL
5	BLACK	034	LEFT WORK LIGHT SWITCH TO LEFT WORK LIGHT RELAYS IN PANEL
6	BLUE	036	RIGHT WORK LIGHT SWITCH TO RIGHT WORK LIGHT RELAYS IN PANEL
7	YELLOW	053	FLASHER SWITCH TO SIGNAL STAT IN PANEL TO FLASHERS
8	ORANGE	50	REAR WHEEL ASSIST SWITCH TO REAR WHEEL ASSIST MANIFOLD SOL
9	BLUE	26	AIR HEAD CLEANER MANUAL SWITCH TO PIN #8 ON TIMER IN PANEL
10	WHITE	27	AIR HEAD CLEANER MANUAL SWITCH TO PIN #9 ON TIMER IN PANEL
11	PURPLE	28	AIR HEAD AUTOMATIC SWITCH TO PIN #10 ON TIMER IN PANEL
12	RED	32	VIBRATOR SWITCH TO RDRS112-30 ACTUATOR
13	YELLOW	33	VIBRATOR SWITCH TO RDRS112-30 ACTUATOR
14	RED	149	SECONDARY SWITCH TO RDRS112-30 ACTUATOR
15	YELLOW	150	SECONDARY SWITCH TO RDRS112-30 ACTUATOR
16	GREEN	45	AIR HEAD FEED SWITCH TO RDRS112-30 ACTUATOR
17	BROWN	46	AIR HEAD FEED SWITCH TO RDRS112-30 ACTUATOR
18	ORANGE	147	HUMP SHAFT SWITCH TO ACTUATOR
19	BLUE	148	HUMP SHAFT SWITCH TO ACTUATOR
20	RED	81	FUEL PUMP SWITCH TO FUEL PUMP
21	BLACK	108	SRONE BOX MV5 VALVE
22	RED	109	STONE BOX MV5 VALVE
23	YELLOW	116	COULTER MV5 VALVE
24	BROWN	117	COULTER MV5 VALVE
25	RED	118	LEFT - RIGHT BLADE MV5 VALVE JUNCTION BOX
26	BLACK	119	LEFT - RIGHT BLADE MV5 VALVE JUNCTION BOX
27	PURPLE	114	SWING MV5 VALVE
28	GREEN	115	SWING MV5 VALVE
29	WHITE	112	LIFT MV5 VALVE
30	BROWN	113	LIFT MV5 VALVE
31	ORANGE	110	OUTER MV5 VALVE
32	BLUE	111	OUTER MV5 VALVE
33	PURPLE	83	AUTO CENTER SWITCH TO RELAY IN STEERING BOX
34	BLUE	55	LEFT STEER FOOT SWITCH TO RELAY IN STEERING BOX
35	ORANGE	56	RIGHT STEER FOOT SWITCH TO RELAY IN STEERING BOX
36	BROWN	153	LEFT PRIMARY REVERSE FOOT SWITCH TO REVERSING VALVE
37	ORANGE	154	RIGHT PRIMARY FOOT SWITCH TO REVERSING VALV E

#06012

2006 4RPTH W/ 65" AIR HEAD
REWORK - 2009

6/18/2009

LARGE 16 PIN AMP PLUG

PIN #

*1	RED	8AWG	12VDC FROM ST95 IN FRAME PANEL
2	BROWN	21	TRASH FAN SWITCH TO SV4-10-C-6T-12TD SOLENOID
3	BLACK	22	BOOM SWITCH TO DTS-4208B SOLENOID
4	YELLOW	5	AIR HEAD DISCHARGE SWITCH TO DTS-0373B SOLENOID
5	BROWN	11	AIR HEAD FEED SWITCH TO DTS-0373B SOLENOID
6	BROWN	16	CROSS SWITCH TO DTS-0373B SOLENOID
*7	RED	8AWG	12VDC FROM ST95 IN FRAME PANEL
8	RED	82	SECONDARY SWITCH TO DTS-0373B SOLENOID
9	RED	13	KEY SWITCH "IGN" TO ST95'S IN FRAME PANEL
*10	BLACK	8AWG	PANEL GROUND TO ENGINE GROUND
11	RED	29	STROBE LIGHT SWITCH TO STROBE LIGHT
12	BLACK	23	START/STOP SWITCH TO DTS-4208B SOLENOID (Added 7/9/13)
13			
14			
*15	BLACK	8AWG	PANEL GROUND TO ENGINE GROUND
16			

#06012

2006 4RPTH W/ 65" AIR HEAD

6/18/2009

REWORK - 2009

ELECTRONIC PUMPS

SMALL 16 PIN AMP PLUG

PLUG #1

1	BLACK	AIR HEAD CONTROLLER POWER SUPPLY PIN "A"
2	RED	AIR HEAD CONTROLLER COMMAND SIGNAL PIN "A"
3	ORANGE	AIR HEAD CONTROLLER COMMAND SIGNAL PIN "B"
4	BLUE	AIR HEAD CONTROLLER COMMAND SIGNAL PIN "C"
5	BLACK / WHITE	LEFT / RIGHT PRIMARY CONTROLLAER POWER SUPPLY PIN "A"
6	RED / WHITE	LEFT PRIMARY CONTROLLER COMMAND SIGNAL PIN " A "
7	BLUE / WHITE	LEFT PRIMARY CONTROLLER COMMAND SIGNAL PIN " B "
8	GREEN / WHITE	LEFT PRIMARY CONTROLLER COMMAND SIGNAL PIN " C "
9	ORANGE / BLACK	RIGHT PRIMARY CONTROLLER COMMAND SIGNAL PIN "A"
10	BLUE / BLACK	RIGHT PRIMARY CONTROLLER COMMAND SIGNAL PIN "B"
11	RED / BLACK	RIGHT PRIMARY CONTROLLER COMMAND SIGNAL PIN "C"
12	GREEN / BLACK	
13	WHITE	
14	GREEN	
15	WHITE / BLACK	
16		

CONTROLLER POWER SUPPLY PIN " B " TO BLOCK GROUND

#06012

2006 4RPTH W/ 65" AIR HEAD

6/18/2009

REWORK - 2009

ELECTRONIC PUMPS

SMALL 16 PIN AMP PLUG

PLUG #2

PIN #

1	WHITE	65	LEFT STAR TABLE RDRS112-30 ACTUATOR
2	PURPLE	66	LEFT STAR TABLE RDRS112-30 ACTUATOR
3	BROWN	37	RIGHT STAR TABLE RDRS112-30 ACTUATOR
4	GREEN	38	RIGHT STAR TABLE RDRS112-30 ACTUATOR
5	ORANGE	145	RIGHT STAR ROLL RDRS112-30 ACTUATOR
6	BLUE	146	RIGHT STAR ROLL RDRS112-30 ACTUATOR
7	RED	140	STEEL ROLL RDRS112-30 ACTUATOR
8	YELLOW	141	STEEL ROLL RDRS112-30 ACTUATOR
9	BLACK	151	STEEL ROLL SPACE ACTUATOR
10	RED	152	STEEL ROLL SPACE ACTUATOR
11	PURPLE	120	GAUGE WHEEL MV5 VALVE
12	ORANGE	121	GAUGE WHEEL MV5 VALVE
13	ORANGE	29	LEFT BLADE MV5 VALVE JUNCTION BOX
14	BLUE	30	LEFT BLADE MV5 VALVE JUNCTION BOX
15	WHITE	35	RIGHT BLADE MV5 VALVE JUNCTION BOX
16	BROWN	39	RIGHT BLADE MV5 VALVE JUNCTION BOX

#06012

2006 4RPTH W/ 65" AIR HEAD

6/18/2009

REWORK - 2009

CANTRAC DISPLAY

4 PIN DEUTSCH LPUG

PIN #

1	BLACK	CANTRAC DISPLAY TO GAUGE PANEL ON FRAME - BELDEN 8762
2	CLEAR	CANTRAC DISPLAY TO GAUGE PANEL ON FRAME - BELDEN 8762
3		
4		

FOOT PEDAL

9 PIN AMP PLUG

PIN #

1	RED	52	CB10 TO FOOT SWITCHES
2	PURPLE	83	AUTOMATIC CENTER SWITCH TO RELAY IN STEERING BOX
3	BLUE	55	LEFT STEER FOOT SWITCH TO RELAY IN STEERING BOX
4	ORANGE	56	RIGHT STEER FOOT SWITCH TO RELAY IN STEERING BOX
5	BROWN	153	LEFT PRIMARY REVERSE FOOT SWITCH TO REVERSING VALVE
6	ORANGE	154	RIGHT PRIMARY REVERSE TO FOOT SWITCH TO REVERSING VALVE
7			
8			
9			

CAMERA SYSTEM

4 PIN AMP PLUG

PIN #

1	RED	CB 11 POWER TO CMAERA SYSTEM
2	B LACK	CMAERA SYSTEM GROUND
3		
4		

#06012

2006 4RPTH W/ 65" AIR HEAD

6/18/2009

REWORK - 2009

FRAME DISTRIBUTION PANEL

BLACK	340	LEFT FRONT WORK LIGHTS - BLADE / VINE BELT / UPPER SIDE
BLACK	34	LEFT REAR WORK LIGHTS - LOWER SIDE / AH FEED / AH DISCHG.
BLUE	360	RIGHT FRONT WORK LIGHTS - BLADE / SORT / BOOM (2)
BLUE	36	RIGHT REAR WORK LIGHTS - CROSS / AH FEED
BROWN	6	BACK UP LIGHTS
YELLOW	53	FLASHERS
BLUE	26	AIR HEAD CLEANER VALVE
WHITE	27	AIR HEAD CLEANER VALVE
RED	0028	12VDC TO CCIM UNITS
BLACK	0015	GROUND TO CCIM UNITS

DTS-0373B

1	12VDC
2	GRND.

TEMPERATURE SWITCH

1	12V DC
2	N.C.
3	N.O.

AIR HEAD RETURN FILTER

P/N A-LF-2919LC-40

1	N.C.
2	COM
3	N.O.

FAIREY FILTER

1	12V DC
2	N.C.
3	N.O.

**ADVANCED FARM EQUIPMENT
CANtrak & CCIM
4 Row Pull Type Harvester w/65" Air Head**

<u>SCREEN</u>	<u>TEXT</u>	<u>RANGE</u>	<u>CCIM #</u>	<u>INPUT</u>	<u>CONNECTOR</u>	<u>PGN</u>
1	AIR HEAD	10,000 PSI	1	A1	A PIN 6	FF00
1	AIR HEAD CHARGE	600 PSI	1	A2	A PIN 7	FF04
1	AIR HEAD RPM	2,000 RPM	1	TM	B PIN 3 & 10	FF18
2	LEFT PRIMARY	5,000 PSI	1	A3	A PIN 5	FF08
2	RIGHT PRIMARY	5,000 PSI	1	A4	A PIN 8	FF0C
2	PRIMARY CHARGE	600 PSI	1	A5	A PIN 4	FF10
2	SECONDARY	3,000 PSI	1	A6	A PIN 9	FF14
3	CROSS	3,000 PSI	2	A1	A PIN 6	FF1C
3	A. H. FEED	3,000 PSI	2	A2	A PIN 7	FF20
3	A. H. DISCHARGE	3,000 PSI	2	A3	A PIN 5	FF24
3	SORTING	3,000 PSI	2	A4	A PIN 8	FF28

TO: OHIO POWER SYSTEMS
 MACHINE # 06012
 4RPTH W/ 65" AIR HEAD

DATE: 8-31-06
 PAGE: 1 OF 1

QTY ORDER	PART NUMBER	DESCRIPTION
1	PTS-10000-1JA DIN	10,000# TRANSDUCER
2	PTS-600-1JA DIN	600# TRANSDUCER
2	PTS-5000-1JA DIN	5000# TRANSDUCER
5	PTS-3000-1JA-AMP	3000# TRANSDUCER
1	900601	GEM 2600 DISPLAY
2	931925	CCIM (GPSI)
1	930293	GEM DISPLAY BRACKET

SCREEN 1

AIR HEAD AIR HEAD CHG. PRESS.

AIR HEAD RPM

AIR HEAD SPROCKET - 18T -6.25" O.D.
 NOTE: WILL THIS REQUIRE A DIFFERENT
 SENSOR FROM WHAT IS NOW USED?

SCREEN 2

LEFT PRIM. RIGHT PRIM.

PRIM CHG. PRESSURE SECONDARY

SCREEN 3

CROSS A.H. FEED

AIR HEAD DISCHARGE SORTING

Project : OHIO Power Systems

5.1 Sensor Scaling

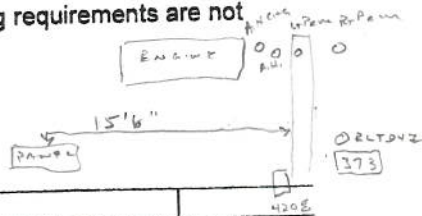
All data scaling for each of the displayed parameters will be done within the CANtrak SW & the GPSI shall transmit raw (unscaled) data acquired from the sensors.

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.

RECDAN 9444 20AWG 4C



GPSI	INPUT	INPUT	INPUT	INPUT
3'6" + 19'6"	6.4% ✓ A1	Air Head	10,000	
3'6" + 21'6"	6.4% ✓ A2	Air Head Charge	600	
3'6" + 20'	3.0% ✓ A3	LEFT PRIMARY	5000	R3 (TM) Air Head RPM 33'6"
3'6" + 21'	13.0% ✓ A4	RIGHT PRIMARY	5000	
19'	RLT 9V ✓ A5	PRIMARY CHARGE	600	
18'	273 ✓ A6	SECONDARY	3000	
		A7		
18'6"	373 ✓ A1	CROSS	3000	
18'	373 ✓ A2	A.H. FEED	3000	
18'	373 ✓ A3	A.H. DISCHARGE	3000	
18'6"	24208 ✓ A4	SORTING	3000	
		A5		
		A6		
		A7		
	3	A1		
		A2		
		A3		
		A4		
		A5		
		A6		
		A7		

VOLTAGE UNITS
 1200 SERIES - 600⁺ TO 6000⁺
 PIN #1 IN+(SUPPLY) RED
 2 COMMON ± WHITE
 3 OUT+(OUTPUT) BLACK
 4 EARTH ± GREEN

TERMINAL SIDE
 3
 12 11
 4

PLUG SIDE
 3
 11 21 4
 2 - 512-1178
 2 - 512-1100
 4-512-1250

1000 SERIES - 10,000⁺
 PIN #1 OUTPUT(OUT+) BLACK
 2 SUPPLY (IN+) RED
 3 EARTH ± GREEN
 4 SUPPLY REF ± WHITE

3000 SERIES (WEATHER DATA CONNECTOR)
 PIN #1 TOP BLACK
 2 0V(±) WHITE
 3 + 14 RED

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GPSI Cable Harness Connections

Deutsch pin#	Connector A - Gray Function	GPSI 1A	GPSI 2A	GPSI 3A
1	Ground	GREEN TO GROUND		
2	Fuel Sensor 1			
3	Analogue Input 7			
4	Analogue Input 5			
5	Analogue Input 3	PRIMARY CHARGE BLACK 1-5		
6	Analogue Input 1	LEFT PRIMARY BLACK 1-3	Air DISCHARGE BLACK 2-3	
7	Analogue Input 2	Air HEAD BLACK 1-1	CROSS BLACK 2-1	
8	Analogue Input 4	Air HEAD CHARGE BLACK 1-2	Air FEED BLACK 2-2	
9	Analogue Input 6	RIGHT PRIMARY BLACK 1-4	SORTING BLACK 2-4	
10	Fuel Sensor 2	SECONDARY BLACK 1-6		
11	Fuel Sensor Supply			
12	Voltage Reference			

Connector B - BLACK				
Deutsch pin#	Function	GPSI 1B	GPSI 2B	GPSI 3B
1	Ground	GREEN TO GROUND BOM		
2	Digital Output			
3	Tach H			
4	RS232 TxD / RS485A / J11708A			
5	CAN Supply + (isolated version only)	RED TO JUNCTION BLACK 7	RED TO JUNCTION BLOCK 8	
6	CAN H	BLACK TO JUNCTION BLOCK 10	BLACK TO JUNCTION BLOCK 10	
7	CAN L	GREEN TO JUNCTION BLOCK 11	GREEN TO JUNCTION BLOCK 11	
8	CAN Supply - (isolated version only)	BLACK TO GROUND BOM		
9	RS232 RxD / RS485B / J1708B			
10	Tach L	Air HEAD TACH PIVOT BLACK		
11	Battery Sense			
12	Supply +	RED TO JUNCTION BLOCK 4	RED TO JUNCTION BLOCK 5	

Air Head Tachometer Pickup
 BEFORE 944
 Red
 Black - SIGNAL
 WHITE - GROUND
 GREEN

1200 Series / 1600 Series – OEM Transducers Featuring Exceptional Proof Pressure and Stability Specifications

- ▶ Gauge, Vacuum, and Compound Pressure Models
- ▶ General Purpose and Wash down Enclosures
- ▶ High Proof Pressure Achieved by Thicker Diaphragm Construction
- ▶ Voltage and Current Output Models

The 1200 Series features stability and toughness via its CVD and ASIC design coupled with a thicker diaphragm. The thicker diaphragm enables these sensors to survive most pressure spikes caused by pump ripple, solenoid valves, etc. The 1600 Series extends the packaging options by providing an all welded stainless steel back end for demanding industrial applications. A modular design allows special ordering of fittings, electrical cables, etc. for OEM applications. The ASIC and CVD technology enables Gems to offer almost any output over any pressure range.

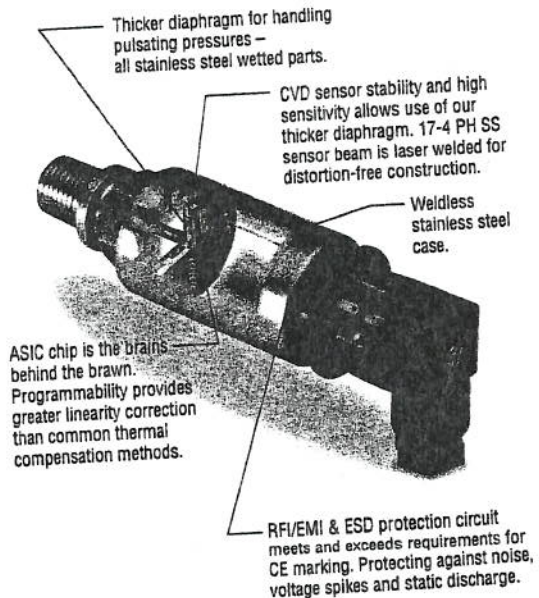
Specifications

Input	
Pressure Range	Vacuum to 400 bar (6000 psi)
Proof Pressure	4 x Full Scale (FS) (<1% FS Zero Shift)
Burst Pressure	>35 x FS <= 4 bar (60 psi); >20 x FS <=40 bar (600 psi); >5 x FS <= 400 bar (6000 psi)
Fatigue Life	Designed for more than 100 million FS cycles
Performance	
Supply Voltage Sensitivity	0.01% FS/Volt
Long Term Drift	0.2% FS/year (non-cumulative)
Accuracy	0.5% FS typical
Thermal Error	2.0% FS typical
Compensated Temperatures	-20°C to 80°C (-5°F to 180°F)
Operating Temperatures	-40°C to 125°C (-40°F to 260°F) for elec. codes A, B, C, 1 -20°C to 80°C (-5°F to 180°F) for elec. codes 2, D, G, 3 -20°C to 50°C (-5°F to 125°F) for elec. code F temperatures >100°C supply is limited to 24 VDC
Zero Tolerance	1% of span
Span Tolerance	1% of span
Response Time	0.5 ms
Mechanical Configuration	
Pressure Port	see ordering chart
Wetted Parts	17-4 PH Stainless Steel
Electrical Connection	see ordering chart
Enclosure	316 SS, 17-4 PH ss IP65 NEMA 4 for elec. codes A,B,C,D,G,1,2,3 IP67 for elec. codes F IP30 for elec. code "3" with flying leads
Vibration	70g, peak to peak sinusoidal, 5 to 2000 Hz (Random Vibration: 20 to 200 Hz @ ≈20g Peak per MIL-STD.-810E Method 514.4)
Acceleration	100g steady acceleration in any direction 0.032% FS/g for 1 bar (15 psi) range decreasing logarithmically to 0.0007% FS/g for 400 bar (6000 psi) range.
Shock	20g, 11 ms, per MIL-STD.-810E Method 516.4 Procedure I
Approvals	CE, UR (12 ET, 16 ET Intrinsically safe)
Weight	approx. 100 grams (additional; cable 75 g/m)



PRESSURE TRANSDUCERS

Along with the superiority of the CVD strain gauge, Psibar® transducers incorporate components to leverage the sensing element's strength. The output is a product with a unique balance of performance and value unmatched in today's pressure sensing market.



Individual Specifications

Voltage Output units	
Output	See ordering chart
Supply Voltage (Vs)	1.5 VDC above span to 35 VDC
Min. Load Resistance	(FS output / 2) Kohms
Current Output units	
Output	4-20 mA (2 wire)
Supply Voltage (Vs)	24 VDC. (7-35 VDC)
Max. Loop Resistance	(Vs-7) x 50 ohms

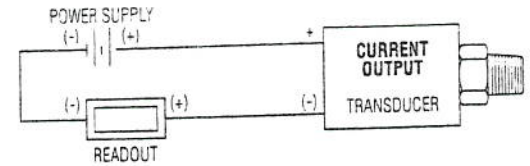
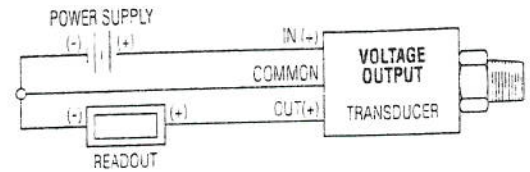
Electrical Connection Cable	PIN	Voltage Units				Current Units (4-20 mA)		
		IN+	COM	OUT+	EARTH	(+)	(-)	EARTH
A, B, G "DIN"	PIN	1	2	3	4	1	2	4
C "10-6 Bayonet"	PIN	A	C	B	E	A	B	E
D "cable"		R	BK	W	DRAIN	R	BK	DRAIN
F "IP 67 cable"		R	BK	W	DRAIN	R	BK	DRAIN
1 "8-4 Bayonet"	PIN	A	C	B	D	A	B	D
2 "cable"		R	BK	W	DRAIN	R	BK	DRAIN
3 "conduit & cable"		R	BK	W	DRAIN	R	BK	DRAIN

Electromagnetic Capability

Meets the requirement for CE marking of EN50081-2 for emissions and EN50082-2 for susceptibility.

Test Data:

- EN61000-4-2 Electrostatic Discharge. 8kV air discharge, 4kV contact discharge. Unit survived.
- ENV50140 Radiated RF Susceptibility. 10V/m, 80MHz-1GHz, 1kHz mod. Maximum recorded output error was $\pm 1\%$
- ENV50204 Radiated RF Susceptibility to Mobile Telephones. 10V/m, 900MHz. Maximum recorded output error was $\pm 1\%$.
- EN61000-4-4 Fast Burst Transient. 2kV, 5/50ns, 5kHz for 1 minute. Unit survived.
- ENV50141 Conducted RF Susceptibility. 10Vms, 1kHz mod, 150kHz - 80MHz. Maximum recorded output error was $\pm 1\%$



Cable Legend:

- R = Red
- BL = Blue
- BK = Black
- W = White
- Y = Yellow

Table 1 - Cable Length

Code	Length (M)	Code	Length (M)
U	No Cable Fitted	M	40
D	1	N	50
E	3	P	75
F	5	Q	100
G	10	R	125
H	15	S	150
J	20	4	170
K	25	5	200
L	30	6	225

10,000^{psi} 1000 SERIES

PIN #1	OUTPUT	BLACK
2	SUPPLY	RED
3	EARTH	GREEN
4	SUPPLY REF.	WHITE

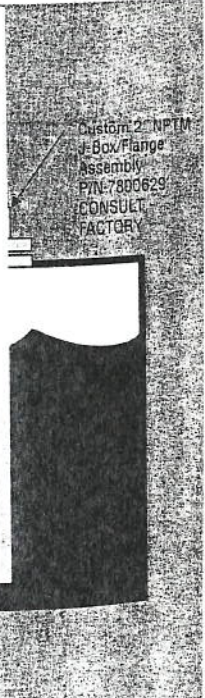
2000 SERIES (WATERHARDEN CONNECTOR) 3000 PSI

PIN #1	TOP	BLACK
2	OV (±)	WHITE
3	FIN	RED

VOLTAGE UNITS

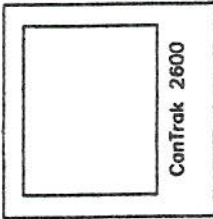
600^{psi} TO 1600^{psi} 1200 SERIES

PIN #1	RED	IN +
2	WHITE	COM
3	BLACK	OUT +
4	GREEN	EARTH

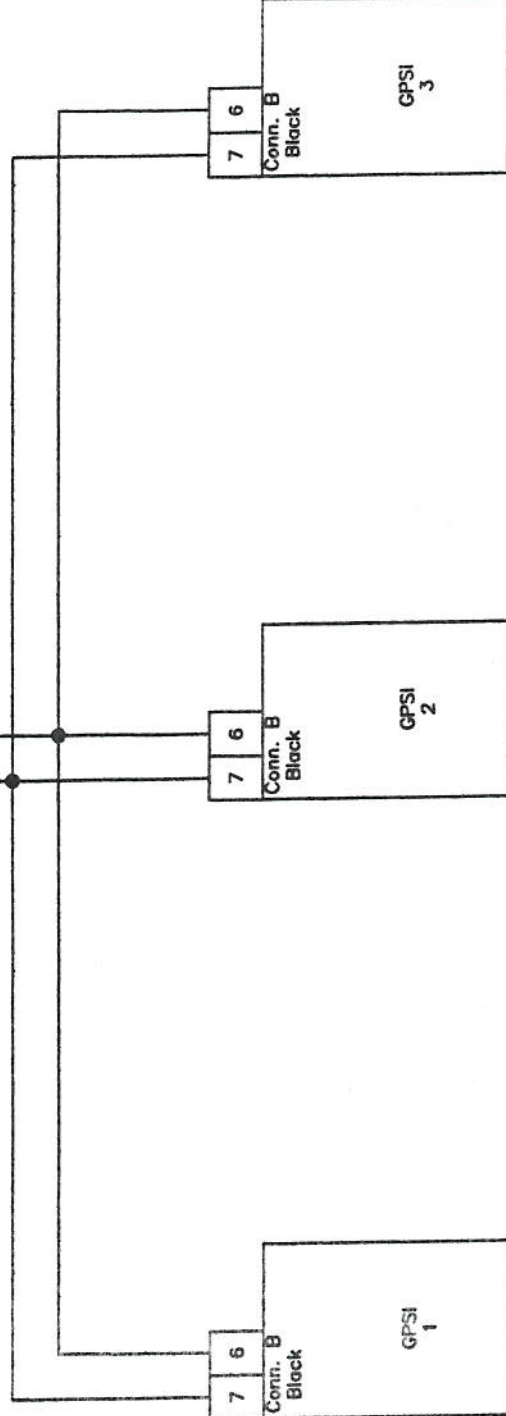


Pressure in PSI = Liquid Level (in feet) x (Specific Gravity x 0.433)
 Pressure in PSI = 30 x (1.0 x 0.433)
 Pressure in PSI = 12.99 PSI
 Using a Psibar Series 1200, 1600, 2200 or 2600 transducer, specify Pressure Range code F15 (0-15 PSI)

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



120 Ohm
1/4 Watt
Resistor



Acemarc, Inc. Automation & Machinery Repair 1 888-860-TECH		Advanced Farm Equipment HARVESTER	
11136 Hoishoe Rd Homerville, Ohio 44235		CANtrak 2600/GPSI IO CAN Bus Wiring	
SIZE	FSCM NO.	DWG NO.	REV
B			1
SCALE		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 +

TRANSducer WIRING

PIN #1	RED	IN +
2	WHITE	COMM.
3	BLACK	OUT +
4 (EARTH)	GREEN	EARTH

3000 SERIES (WEATHER PACK CONNECTOR) 3000PSI

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

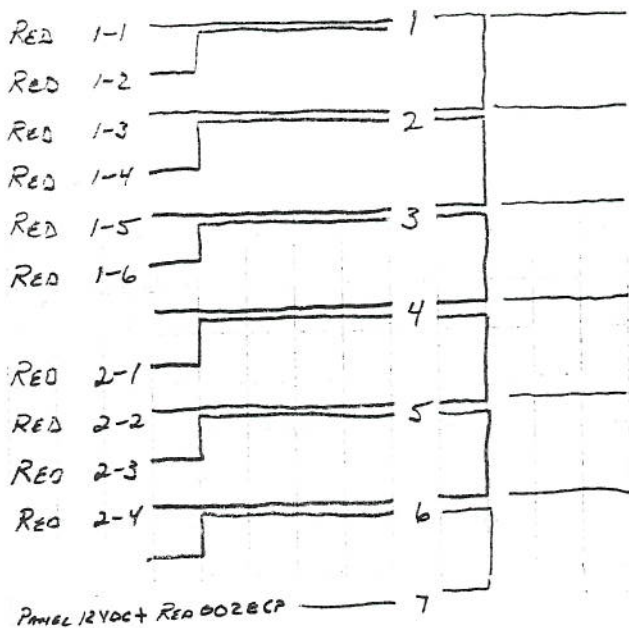
10,000^{PSI}

1000 SERIES

TRANSducer WIRING

PIN #1	OUTPUT	BLACK
2	SUPPLY	RED
3	EARTH 1/2	GREEN
4	SUPPLY REF 1/2	WHITE

GAUGE GPST'S (19 GAUGES) JUNCTION BLOCK

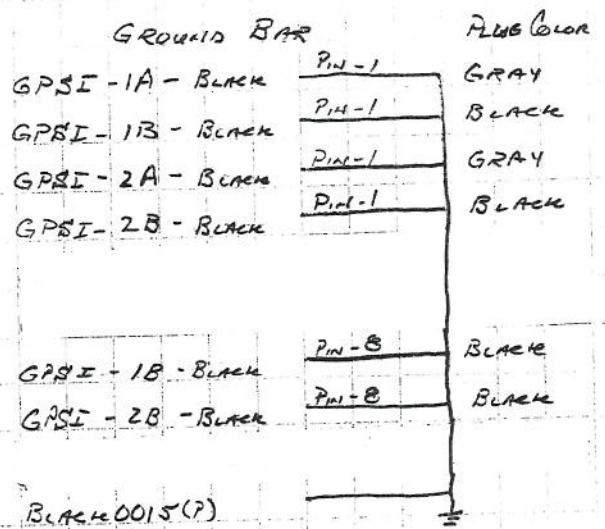


GRAY PLUG		
GPST-1A	RED - PIN 12	GRAY PLUG
GPST-2A	RED - PIN 12	GRAY PLUG
GPST-1B	RED - PIN 12	BLACK PLUG
GPST-2B	RED - PIN 12	BLACK PLUG
GPST-1B	RED - PIN 5	BLACK PLUG
GPST-2B	RED - PIN 5	BLACK PLUG

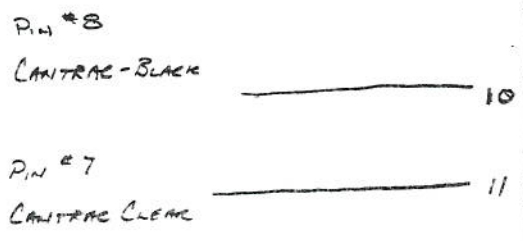
AIR HORN TACH PICKUP (BRIEFING 9444) BLACK - 8
WHITE TO GROUND BAR.

ECIM 1B PIN #10 BLACK

GRAY (TOP)						BLACK (TOP)					
7	8	9	10	11	12	1	2	3	4	5	6
6	5	4	3	2	1	12	11	10	9	8	7



GROUND BAR			PLUG COLOR
GPST-1A - BLACK	PIN-1		GRAY
GPST-1B - BLACK	PIN-1		BLACK
GPST-2A - BLACK	PIN-1		GRAY
GPST-2B - BLACK	PIN-1		BLACK
GPST-1B - BLACK	PIN-8		BLACK
GPST-2B - BLACK	PIN-8		BLACK



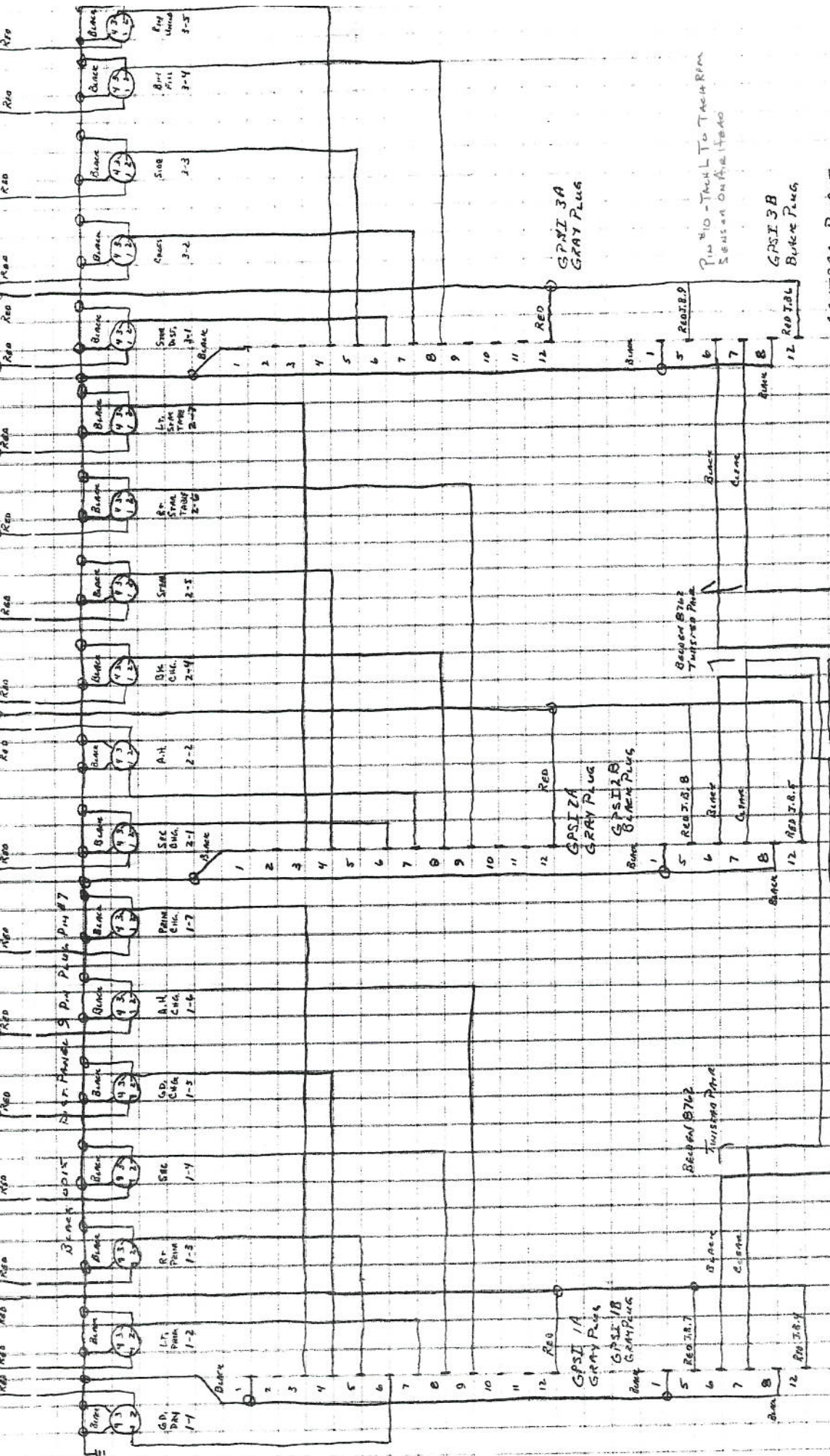
BLACK PLUG		
GPST-1B	BLACK	PIN #6
GPST-2B	BLACK	PIN #6
GPST-1B	CLEAR	PIN #7
GPST-2B	CLEAR	PIN #7

Junction Block #11
 12VDC
 10 AMP FUSE
 AC/DC FUSE

RED 0020 Dist Panel 5 Pin Plug Pin #7

12VDC Junction Block

10
9
8
7
6
5
4
3
2
1



CAB CONNECTION
 Pin 1 Black
 Pin 2 Green
 Pin 3 Red
 Pin 4 Black

12VDC - PANEL
 TWISTED PAIR

BEDEL 8762
 TWISTED PAIR
 BEDEL 8762
 TWISTED PAIR

CANTRAC RING OUT
 1 3.0VDC BIT
 2 1.0VDC BIT
 3 1.0VDC BIT
 4 1.0VDC BIT
 5 1.0VDC BIT
 6 1.0VDC BIT
 7 1.0VDC BIT
 8 1.0VDC BIT
 9 1.0VDC BIT
 10 1.0VDC BIT
 11 1.0VDC BIT
 12 1.0VDC BIT

GPXI 3A
 GRAY PLUG

Pin #10 - THRU TO TACT RIM
 SENSAN ON RAIL 1040

GPXI 3B
 BLACK PLUG

GPXI 2A
 GRAY PLUG

GPXI 2B
 GRAY PLUG

BEDEL 8762
 TWISTED PAIR

RED 3.0.3.B
 BLACK
 GREEN
 RED 3.0.3.F

14
15
16
17
18

BEDEL 8762
 TWISTED PAIR

BEDEL 8762
 TWISTED PAIR

12VDC

FOOT PLATE SWITCHES

CENTERING

SECONDARY

STEERING

REVERSING

LEFT

RIGHT

LEFT
PRIMARY

RIGHT
PRIMARY

CENTERING

(STEERING COLUMN)

PACKING SLIP

Page: 1

From Warehouse: HRT

Packing Slip: 46766

From:

Superior Diesel
5050 Greenwich Road
Seville OH 44273
USA
330-769-1850

*INSTALLED
10/16/12*

Bill To: 111388

Ship To: (0)

ADVANCED FARM EQUIPMENT
5773 CRYSTAL ROAD
VESTABURG MI 48891
USA

ADVANCED FARM EQUIPMENT
5773 CRYSTAL ROAD
VESTABURG MI 48891
USA

*CUMMINS
REPLACEMENT*

Order Contact:

Pack Date	Order#	Cust PO	Ship Via	Weight	Pkgs #
01/06/12	E009685	045483	UTS PREPAY &ADD	0.00	0

Line/Rel	Item	U/M	Qty Ordered	Qty to Pack
1	ES31082 AFE, 6090HF485 350 HP 12V, FLEXXAIRE	EA	1.000	1.000

S/N: RG6090L110054-1

SERIAL #'S CHECKED

mja

LENNARD AG

Older Lenco Harvester Engine Info

S/N RG6090L #110045

Oil Filter J.D # RES09672 NAPA # 1370

Fuel Filter J.D # RES25523

This engine S/N will call for a DZ101884 oil filter
from John Deere and it will be wrong