

#07016

Tupling Farms

4 RS pH $\frac{w}{65}$ "A#

FOOT PEDAL SWITCHES

RIGHT FOOT PEDAL

CENTERING

SECONDARY

STEERING

REVERSING

LEFT

RIGHT

LEFT
PRIMARY

RIGHT
PRIMARY

CENTERING
(STEERING COLUMN)

LEFT FOOT PEDAL

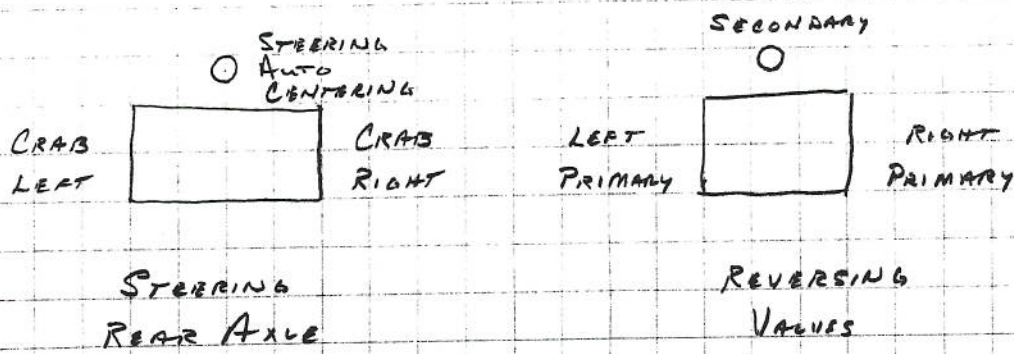
BOOM

REVERSING

A.H. FEED

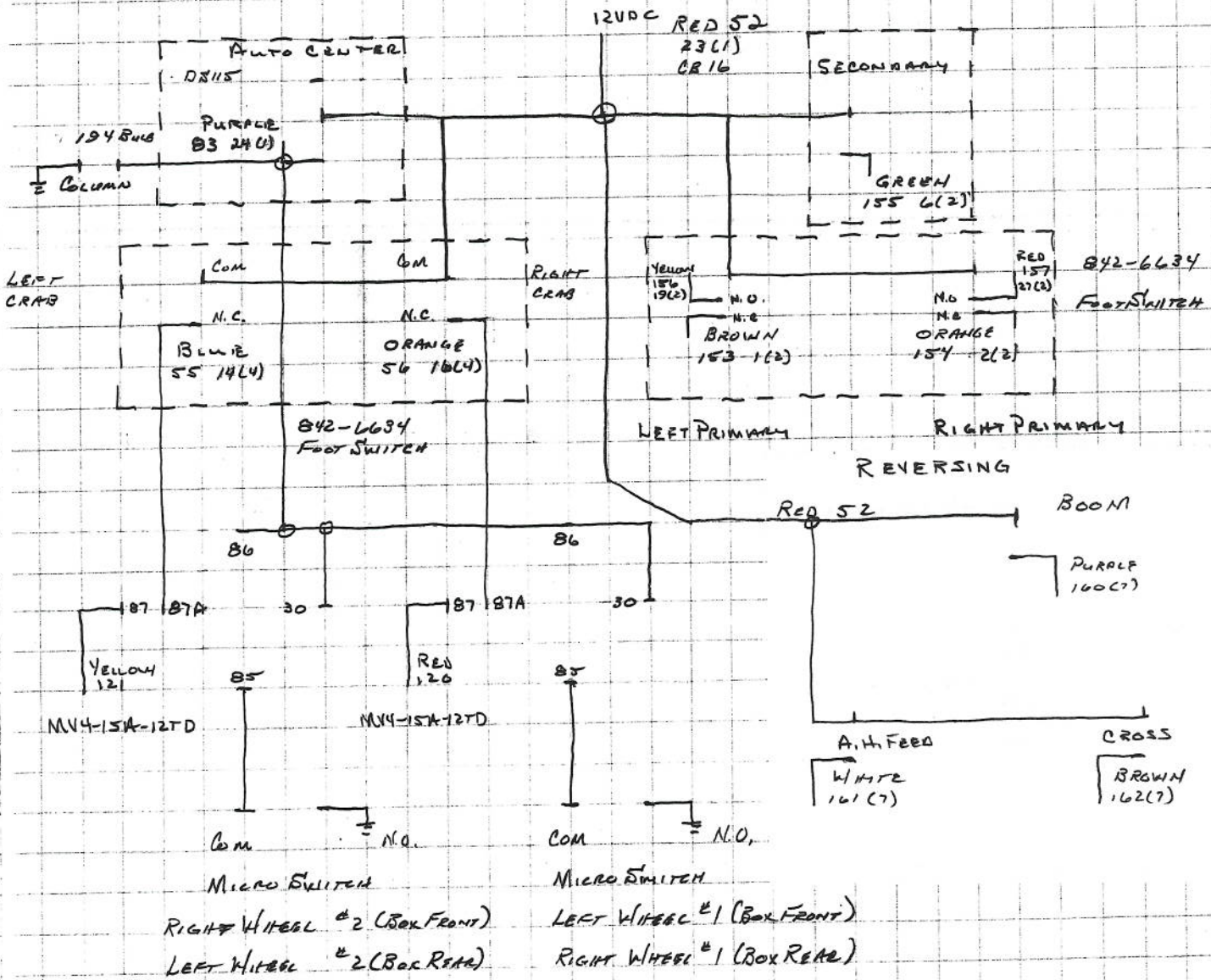
CROSS

FOOT PEDAL SWITCHES



STEERING
REAR AXLE

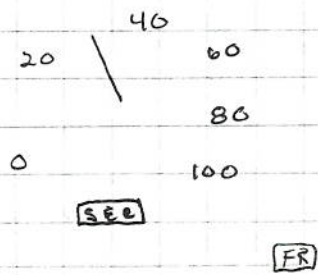
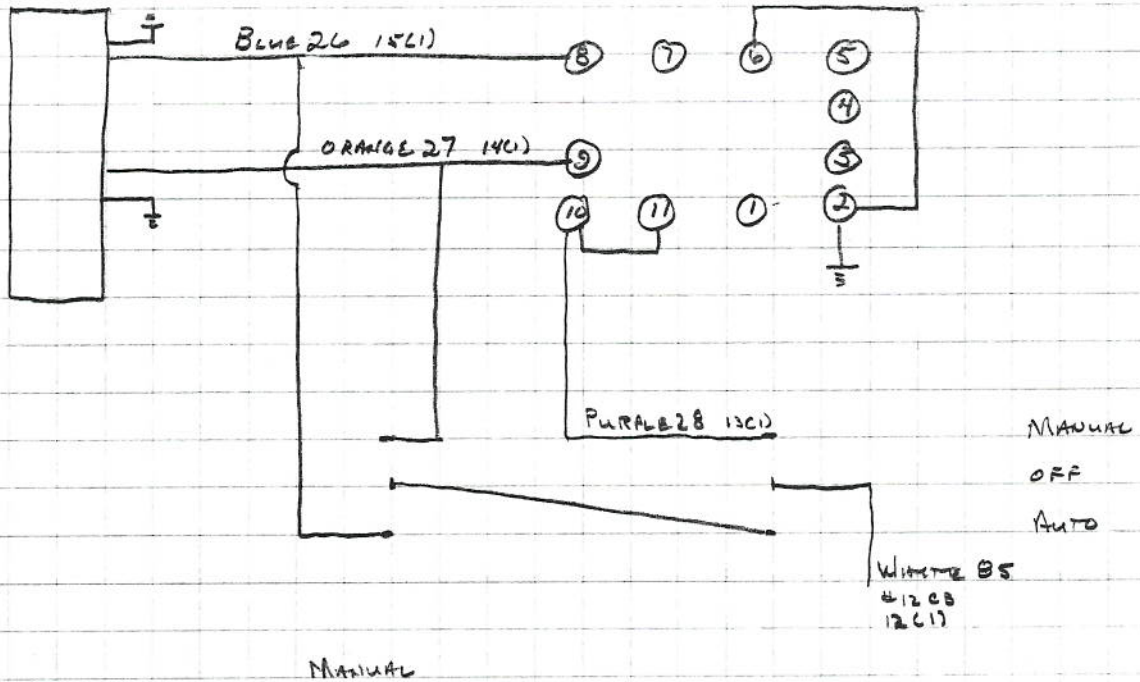
REVERSING
VALVES



RIGHT WHEEL #2 (BOX FRONT)
 LEFT WHEEL #2 (BOX REAR)

LEFT WHEEL #1 (BOX FRONT)
 RIGHT WHEEL #1 (BOX REAR)

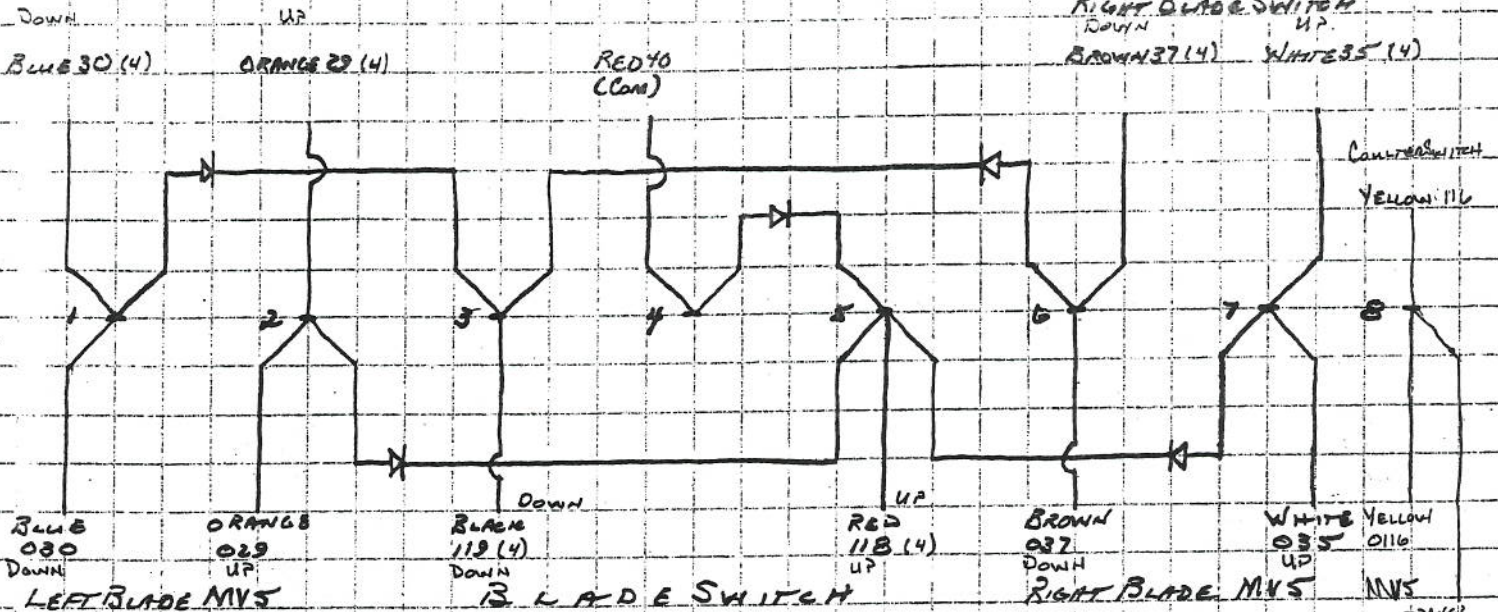
AIR HEAT CLEANER



BLADE/COUNTER CONTROL

LEFT BLADE SWITCH

RIGHT BLADE SWITCH



PIN	1	BLUE	30
	2	ORANGE	29
	3	RED	40
	4	BROWN	37
	5	WHITE	35
	6	YELLOW	116
	7	BLACK	030
	8	ORANGE	029
	9	BLACK	119
	10	RED	118
	11	BROWN	037
	12	WHITE	035
	13	YELLOW	0116
	14	ORANGE	41

BROWN DOWN 117 (1)

RED 40

ORANGE 41

N.D.

YELLOW UP 116 (1)

COUNTER MVS

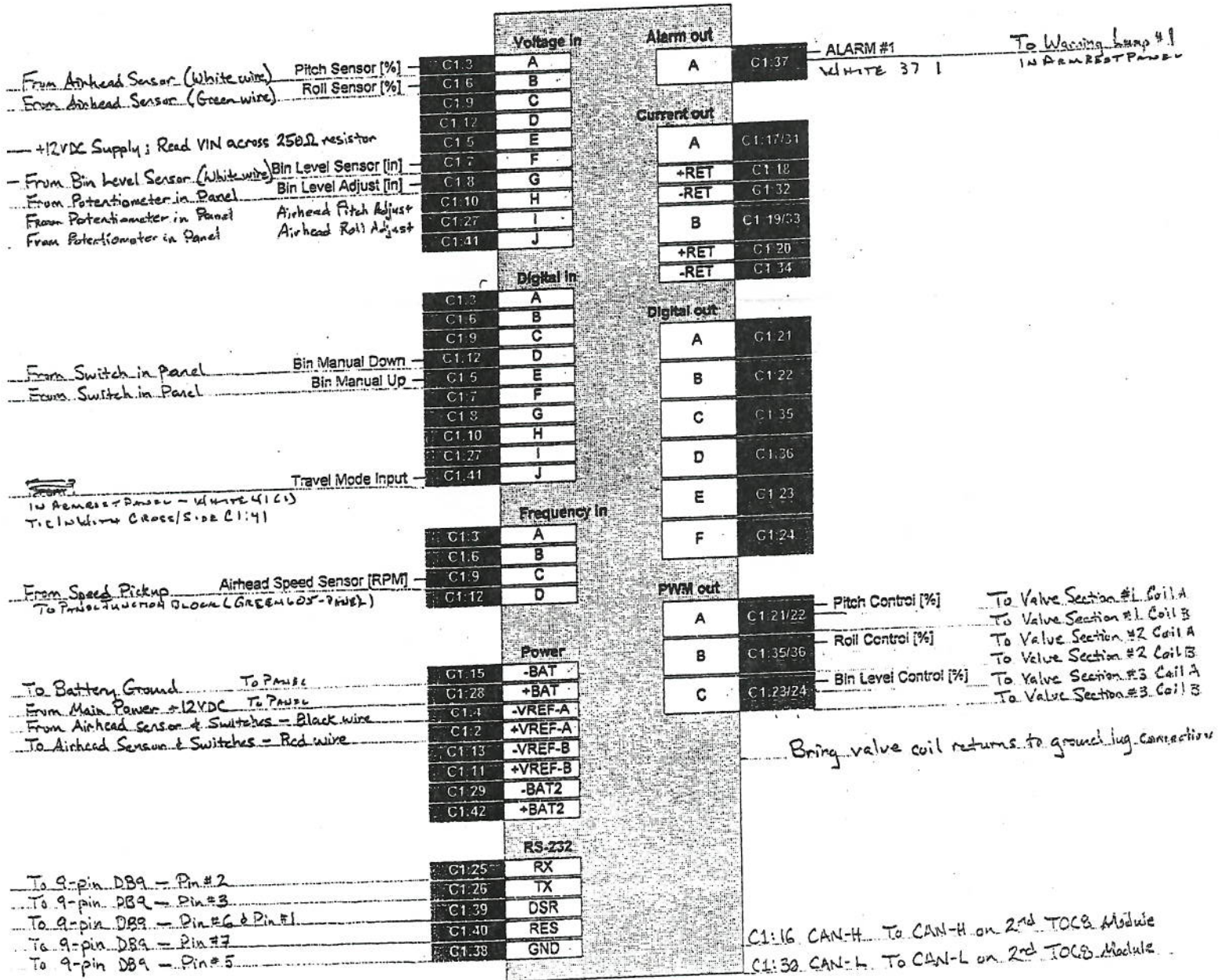
COUNTER MICRO SWITCH

5	276-1061	RECTIFIER
14	512-1220	
14	512-1225	
2	58373	END CLAMP
8	58364	JUNCTION BLOCK
4 1/2 IN	58371	CHANNEL
1	(Q131310PCE) 783570/14069	ENCLOSURE
1	512-1160	16 PIN
1	512-1110	16 PIN
1	512-1280	RELIEF
4	#6-32 X 1/4"	

IQAN TOC8: AIRHEAD & BIN LEVEL CONTROL

Serial number: 1107
 Hardware version: 4.00
 Software version: 3.57

SENSOR SETTINGS
6 To 30



Bring valve coil returns to ground lug connection

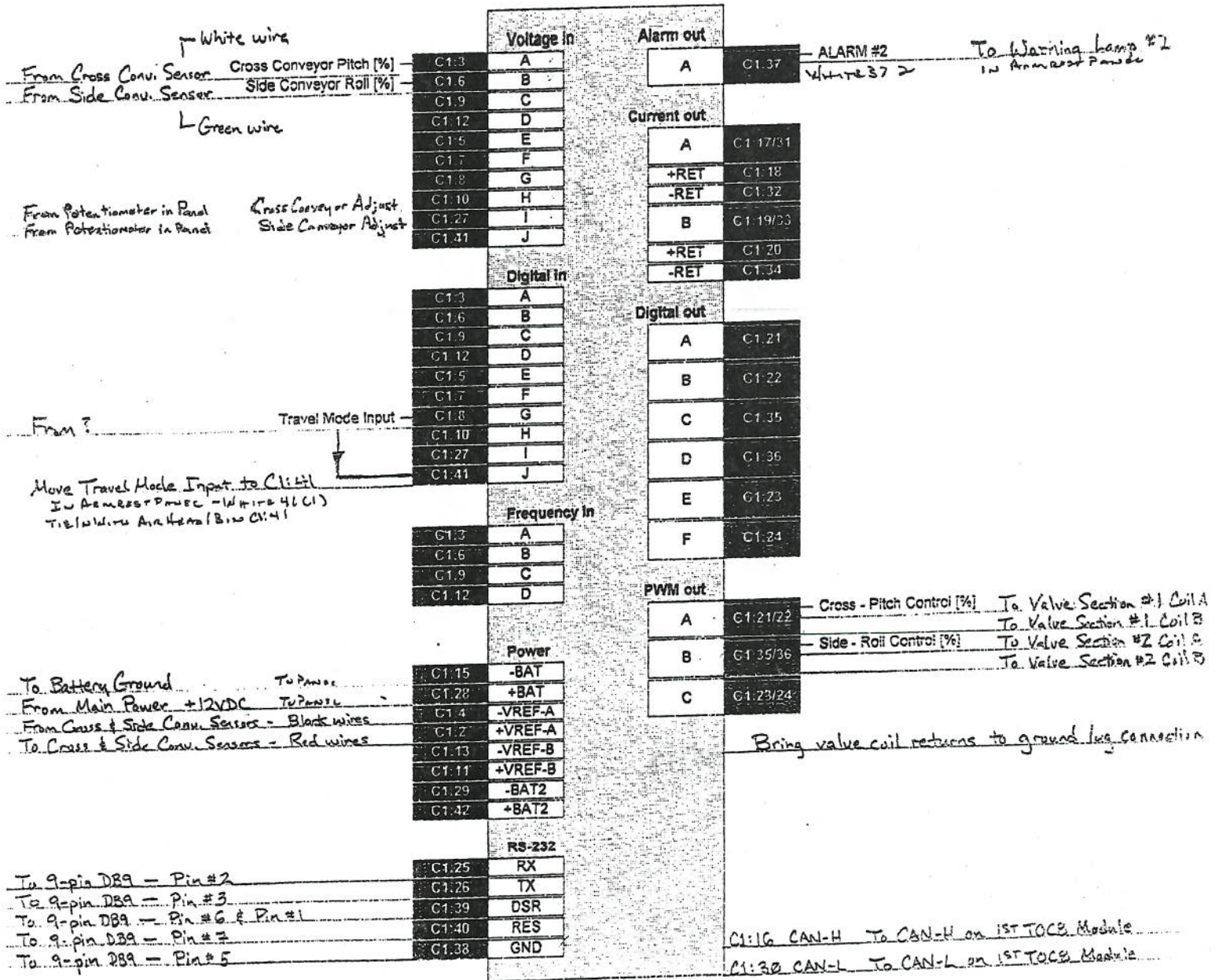
C1.16 CAN-H To CAN-H on 2nd TOC8 Module
 C1.39 CAN-L To CAN-L on 2nd TOC8 Module

Include 120Ω Bus Termination Resistor

IQAN TOC8: CROSS & SIDE CONVEYOR LEVEL CONTROL

616-335-2893

Serial number: 0
 Hardware version: 0.00
 Software version: 0.00



ADVANCED FARM EQUIPMENT

AIR HEAD / BIN LEVELING TOC 8

12/18/2007

TOC 8	PANEL RECEP.	JUNCTION BLOCK	DESCRIPTION	POTENT.	INCOMING WIRE
WHITE 2		1	TO JUNCTION BLOCK		
		1 (2 WIRES)	TO AIR HEAD PITCH/ROLL POT'S / + VREF-A	WHITE 2	
		1	TO BIN LEVEL POT / + VREF-A	WHITE 2	
	1-1	1	TO AIR HEAD SENSOR / + VREF-A		RED #1
WHITE 3	1-2		FROM AIR HEAD SENSOR / - PITCH		WHITE #1
WHITE 4		2	TO JUNCTION BLOCK		
		2 (2 WIRES)	TO AIR HEAD PITCH/ROLL POT'S / - VREF-A	WHITE 4	
		2	TO BIN LEVEL POT / - VREF-A	WHITE 4	
	1-3	2	FROM AIR HEAD SENSOR / - VREF-A		BLACK #1
WHITE 5	2-1		BIN LEVEL MANUAL UP FROM ARMREST		ORANGE 72 20(4)
WHITE 6	1-4		FROM AIRHEAD SENSOR / ROLL		GREEN #1
WHITE 7		3	TO JUNCTION BLOCK		EXT. WHITE
	1-5	3	BIN LEVEL SENSOR (IN)		WHITE #9-EXT WHITE
		3	CONNECT TO C1:15 W/ 250 OHM REISTOR		
WHITE 8			BIN LEVEL ADJUST (IN) FROM POT.	WHITE 8	
WHITE 9		9	A.H. RPM SENSOR INPUT		
WHITE 9	1-6	9	FROM A.H. RPM SENSOR TO C1:9		GREEN 605
WHITE 9	2-2	9	TO AIR HEAD FAN RPM READOUT IN CAB		GREEN 605 15(4)
WHITE10			A.H. PITCH ADJUST (IN) FROM POT	WHITE 10	
WHITE 12	2-3		BIN MANUAL DOWN FROM ARM REST		BLUE 71 19(4)
BLACK 15		4	TO JUNCTION BLOCK		
	1-7	4	TO DISTRIBUTION PANEL PLUG		BLACK 15 (P)
		4	CONNECT TO C1:7 W/250 OHM RESISTOR		
WHITE 21	3-1		A.H. PITCH CONTROL VALVE COIL-A / #4		BLACK #4 VALVE
WHITE 22	3-2		A.H. PITCH CONTROL VALVE COIL-B / #4		RED #4 VALVE
WHITE 23	3-3		BIN LEVEL CONTROL VALVE COIL-A / #8		BLACK #8 VALVE
WHITE 24	3-4		BIN LEVEL CONTOLL VALVE COIL-B / #8		RED #8 VALVE
WHITE 27			A.H. ROLL ADJUST (IN) FROM POT	WHITE 27	
RED 28	1-8		TO MAIN POWER IN DIST. PANEL PLUG		RED 28 (P)
WHITE 35	3-5		A.H. ROLL CONTROL VALVE COIL-A / #5		BLACK #5 VALVE
WHITE 36	3-6		A.H. ROLL CONTROL VALVE COIL-B / #5		RED #5 VALVE
WHITE 37	2-4		A.H. / BIN LEVEL ALARM TO ARM REST		WHITE 37 23(4)
WHITE 41		5	TO JUNCTION BLOCK		
WHITE 41	2-5	5	TO TRAVEL MODE SWITCH IN ARM REST		WHITE 41 22(4)
RED 75	2-6	6	FROM BIN FILL AUTO SWT TO BIN FILL SENSOR		RED 75 21(4)
BROWN #9	1-11	6	12VDC FROM ARM REST TO BIN FILL SENSOR		BROWN #9-EXT RED
BLUE #9	1-12	4	BIN FILL SENSOR TO GROUND		BLUE #9-EXT GREEN
WHITE #4	3-7	14	A.H. PITCH CONTROL VALVE COIL-A / #4		WHITE #4 VALVE
GREEN #4	3-8	14	A.H. PITCH CONTROL VALVE COIL-B / #4		GREEN #4 VALVE
WHITE #5	3-9	13	AH. ROLL CONTROL VALVE COIL-A / #5		WHITE #5 VALVE
GREEN #5	3-10	13	A.H. ROLL CONTROL VALVE COIL-B / #5		GREEN #5 VALVE
WHITE #8	3-11	12	BIN FILL CONTROL VALVE COIL-A / #8		WHITE #8 VALVE
GREEN #8	3-12	12	BIN FILL CONTROL VALVE COIL-B / #8		GREEN #8 VALVE
BLUE 16		7	CAN-H TO CAN-H ON A.H. / BIN TOC 8	CONNECT 7/8 W/ 120	OHM RESISTOR
WHITE 30		8	CAN-L TO CAN-L ON A.H. / BIN TOC 8		

ADVANCED FARM EQUIPMENT

CROSS / SIDE CONVEYOR LEVELING TOC 8

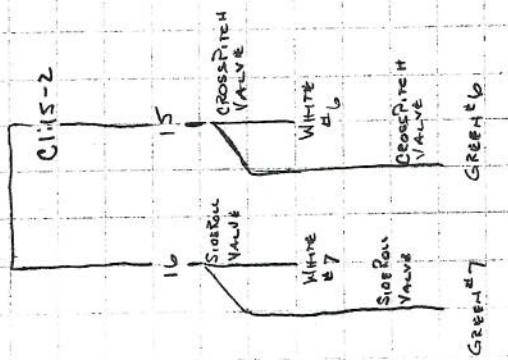
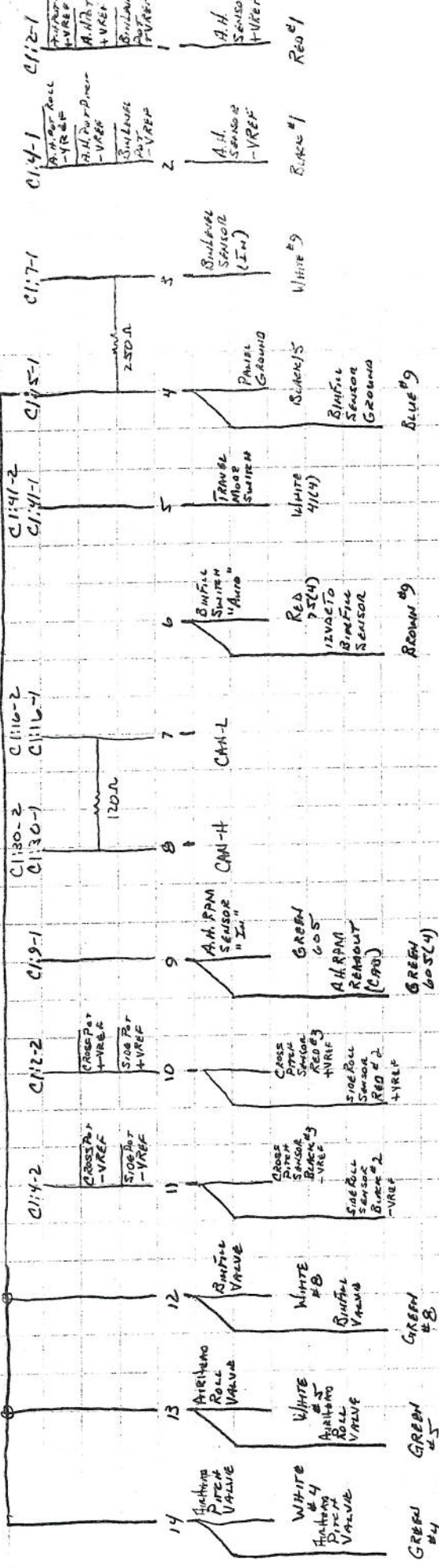
12/18/2007

TOC 8	PANEL RECEP.	JUNCTION BLOCK	DESCRIPTION	POTENT.	INCOMING WIRE
WHITE 2		10	TO JUNCTION BLOCK		
		10	TO CROSS POT / +VREF	WHITE 2	
		10	TO SIDE POT / +VREF	WHITE 2	
	4-1	10	TO CROSS PITCH SENSOR / +VREF		RED #3
	4-2	10	TO SIDE ROLL SENSOR / +VREF		RED #2
WHITE 3	4-3		FROM CROSS PITCH SENSOR		WHITE #3
WHITE 4		11	TO JUNCTION BLOCK		
		11	TO CROSS POT / -VREF	WHITE 4	
		11	TO SIDE POT / -VREF	WHITE 4	
	4-4	11	TO CROSS PITCH SENSOR / -VREF		BLACK #3
	4-5	11	TO SIDE ROLL SENSOR / -VREF		BLACK #2
WHITE 6	4-6		FROM SIDE ROLL SENSOR		WHITE #2
WHITE 10			CROSS ADJUST (IN)	WHITE 10	
BLACK 15		15	TO JUNCTION BLOCK		
	1-9	15	TO DISTRIBUTION PANEL PLUG		BLACK 000015 (P)
WHITE 21	5-1		CROSS PITCH CONTROL VALVE COIL A		BLACK #6 VALVE
WHITE 22	5-2		CROSS PITCH CONTROL VALVE COIL B		RED #6 VALVE
WHITE 27			SIDE ADJUST (IN)	WHITE 27	
RED 28	1-10		TO MAIN POWER IN DIST. PANEL		RED 000028 (P)
WHITE 35	5-3		SIDE ROLL CONTROL VALVE COIL A		BLACK #7 VALVE
WHITE 36	5-4		SIDE ROLL CONTROL VALVE COIL B		RED #7 VALVE
WHITE 37	2-9		CROSS / SIDE ALARM TO ARM REST		WHITE 372 (4)
WHITE 41		5	TO JUNCTION BLOCK W/ A.H.-BIN TOC8 C1:41		
BLUE 16		7	CAN-H TO CAN-H ON A.H./ BIN TOC 8		
WHITE 30		8	CAN-L TO CAN-L ON A.H./ BIN TOC 8	CONNECT 7/8 W/ 120 OHM RESISTOR	
WHITE #6	5-5	15	CROSS PITCH CONTROL VALVE COIL-A #6		WHITE #6 VALVE
GREEN #6	5-6	15	CROSS PITCH CONTROL VALVE COIL-B #6		GREEN #6 VALVE
WHITE #7	5-7	16	SIDE ROLL CONTROL VALVE COIL-A #7		WHITE #7 VALVE
GREEN #7	5-8	16	SIDE ROLL CONTROL VALVE COIL-B #7		GREEN #7 VALVE

WHITE 25	DB9	PIN #2		BIN LEVEL JUNCTION - BELDEN 9444	
WHITE 26	DB9	PIN #3		PIN 1 WHITE	WHITE
WHITE 39	DB9	PIN #6 / #1		PIN 2 BROWN	RED
WHITE 40	DB9	PIN #7		PIN 3 BLUE	GREEN
WHITE 38	DB9	PIN #5		PIN 4 PLUG PIN	

6/6/07

Roller Fill - Air Header Leveling TOCB Junctional Board
CROSS - SIOB CONVEYOR LEARNING TOCB



ADVANCED FARM EQUIPMENT

AIR HEAD / BIN FILL / CROSS / SIDE POTENTIOMETER CONTROLS

AIR HEAD PITCH

10K POT		
WHITE	WHITE	WHITE
2	10	4
+VREF	SIGNAL	-VRFEF

AIR HEAD ROLL

10K POT		
WHITE	WHITE	WHITE
2	27	4
+VREF	SIGNAL	-VREF

BIN FILL

10K POT		
WHITE	WHITE	WHITE
2	8	4
+VREF	SIGNAL	-VREF

CROSS

10K POT		
WHITE	WHITE	WHITE
2	10	4
+VREF	SIGNAL	-VREF

SIDE

WHITE	WHITE	WHITE
2	27	4
+VREF	SIGNAL	-VREF

POTENTIOMETER LAYOUT

9 PIN DB9 PLUG

TOC 8	DB9 PIN
WHITE 25	2
WHITE 26	3
WHITE 38	5
WHITE 39	6 & 1
WHITE 40	7

O-AIR HEAD RAISE

O-BIN FILL

O-SIDE

O-CROSS

O-AIR HEAD

BIN FILL CABLE #9 JUNCTION

BELDEN 9444

SENSOR

PIN #1 WHITE

PIN #2 BROWN

PIN #3 BLUE

PIN #4 PLUGGED

EXTENSION

WHITE

RED

GREEN

PLUGGED

LEVELING ENCLOSURE WIRING - BELDEN M 9418 CABLE

AIR HEAD SENSOR #1

PIN #1	WHITE	PITCH
PIN #2	GREEN	ROLL
PIN #3	BLACK	-VREF
PIN #4	RED	+VREF

CROSS CONV. SENSOR #3

PIN #1	WHITE	SIGNAL
PIN #2	BLACK	-VREF
PIN #3	RED	+VREF

SIDE CONV. SENSOR #2

PIN #1	WHITE	SIGNAL
PIN #2	BLACK	-VREF
PIN #3	RED	+VREF

ADVANCED FARM EQUIPMENT

AIR HEAD PITCH CONTROL VALVE

	PIN #			
BLACK	10	COIL A - PIN A		
RED	11	COIL B - PIN A		
WHITE	22	COIL A - PIN B	GROUND	# 4 VALVE
GREEN	23	COIL B - PIN B	GROUND	

AIR HEAD ROLL CONTROL VALVE

BLACK	15	COIL A - PIN A		
RED	16	COIL B - PIN A		
WHITE	24	COIL A - PIN B	GROUND	# 5 VALVE
GREEN	25	COIL B - PIN B	GROUND	

BIN LEVEL CONTROL VALVE

BLACK	12	COIL A - PIN A		
RED	13	COIL B - PIN A		
WHITE	26	COIL A - PIN B	GROUND	# 8 VALVE
GREEN	27	COIL B - PIN B	GROUND	

CROSS PITCH CONTROL VALVE

BLACK		COIL A - PIN A		
RED		COIL B - PIN A		
WHITE		COIL A - PIN B	GROUND	# 6 VALVE
GREEN		COIL B - PIN B	GROUND	

SIDE ROLL CONTROL VALVE

BLACK		COIL A - PIN A		
RED		COIL B - PIN A		
WHITE		COIL A - PIN B	GROUND	# 7 VALVE
GREEN		COIL B - PIN B	GROUND	