

#12053

Parahount Farms

4RSPH  $\frac{w}{65}$ "AH

A. H. Fan



FILTER WARN



LOW

HYDRAULIC

OIL



GROUND DRIVE

Lo RANGE



Lo RANGE

GROUND

DRIVE

4X4



4X2



FUEL PUMP

EXHAUST



LIGHTS



FLASHERS

PARKING  
BRAKE



OFF



STROBE  
LIGHT

FLASHERS

FUEL PUMP

H/L RANGE

YELLOW DIS(2)

AIR HEAT FILTER

YELLOW DIS(2)

HYDRAULIC OIL TANK

BLUE DIS(2)

GROUND DRIVE MOTOR

BLACK DIS(2)

BROWN DIS(2)  
4X4  
4X2

YELLOW DIS(2)  
BROWN DIS(2)

BLACK DIS(2)  
BLACK DIS(1)

FREE BRAKE

RED DIS(1)

BROWN DIS(2)  
BRAKE UP

YELLOW DIS(1)

BLACK DIS(1)

BLACK DIS(1)

BLACK DIS(1)

BLACK DIS(1)

BLACK DIS(1)

RED DIS(1)

BROWN DIS(1)

ORANGE DIS(1)

ORANGE DIS(1)

ORANGE DIS(1)

ORANGE DIS(1)

20301C 11' + 10'  
20302C 3' + 9' 6" + 2'

RED DIS(1)

STROBE LIGHT

UNITARY DISPLAY

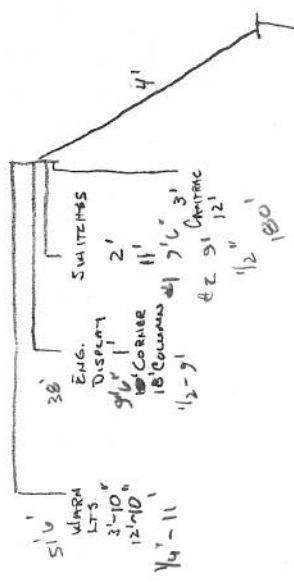
CAS BRAKE

Pin 1 BRAKE  
2 CLEAR  
3 BRAKE DIS (P)  $\frac{1}{2}$   
4 RED DIS (P) + 12VDC

DISPLAY

Pin 1 BRAKE DIS  
2 RED DIS

7 CLEAR  
8 BRAKE



CAS CORNER

4'

5'

36" SWITCHES  
ENG. DISPLAY  
9" 1" CORNER  
18" CORNER  
12" 3"  
12" 12"  
12" 12"  
12" 12"

5' 1" WIRE  
LTS  
3'-10" 12'-10" 14'-11"

Foot Pedal Switches

CENTERING

STEERING

SECONDARY

REVERSING

LEFT

RIGHT

LEFT  
PRIMARY

RIGHT  
PRIMARY

CENTERING

(STEERING COLUMN)

TRUCK LIGHTS

TRUCK LIGHTS

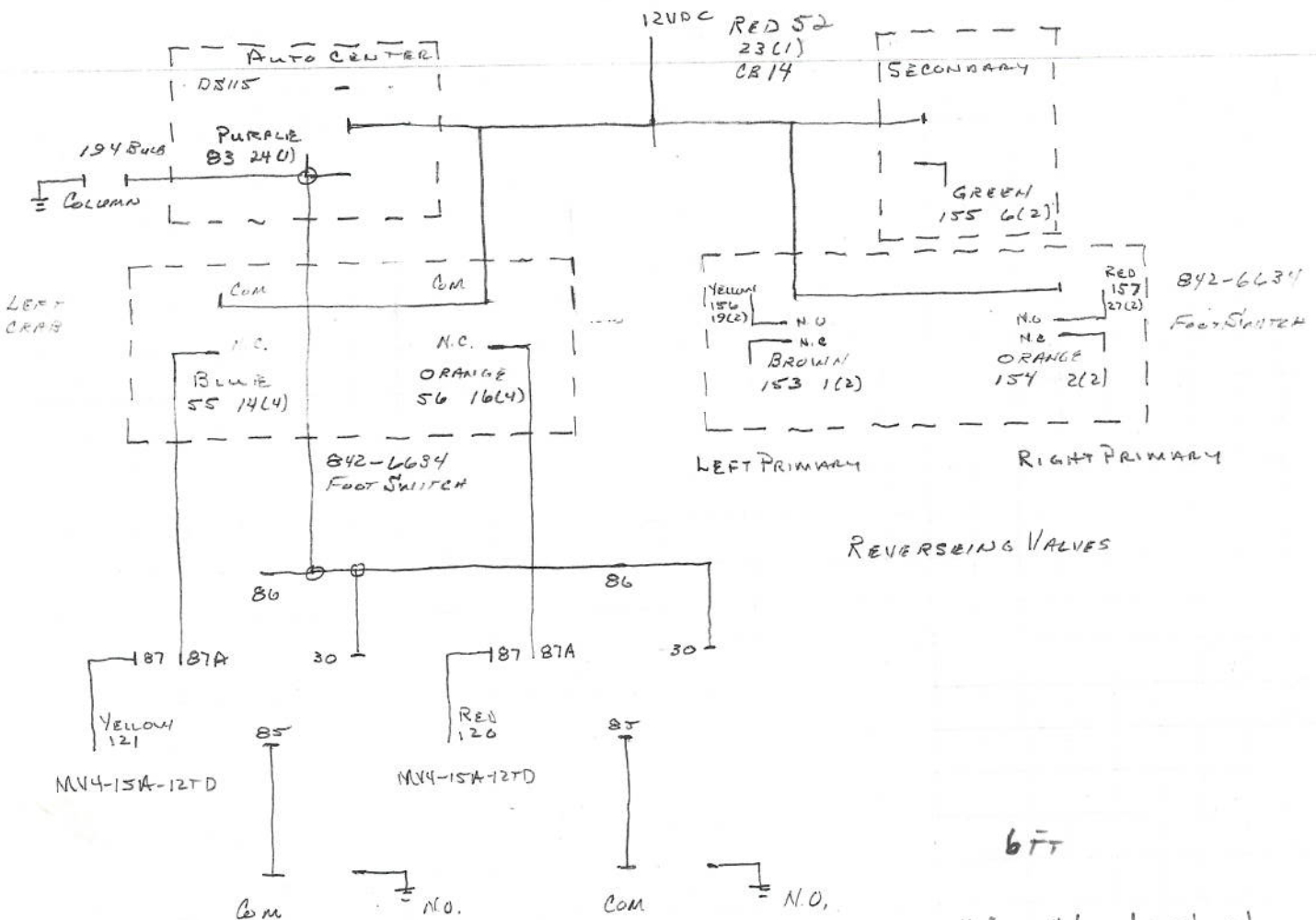
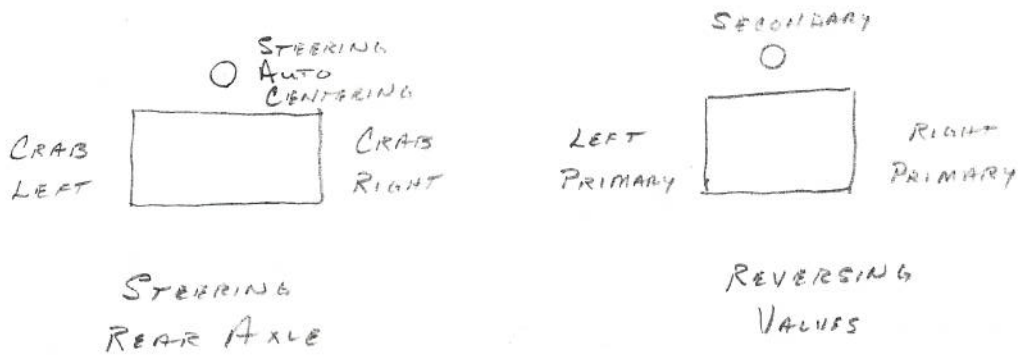
IN

OUT

FORWARD

BACK

# FOOT PEDAL SWITCHES



6 FT

$$\frac{1}{4}'' - 3\frac{1}{2}' + 3' + 3' + 4'$$

$$\frac{1}{2}'' - 3\frac{1}{2}' + 4' + 4'$$

# FOOT PEDAL SWITCHES

REVERSING

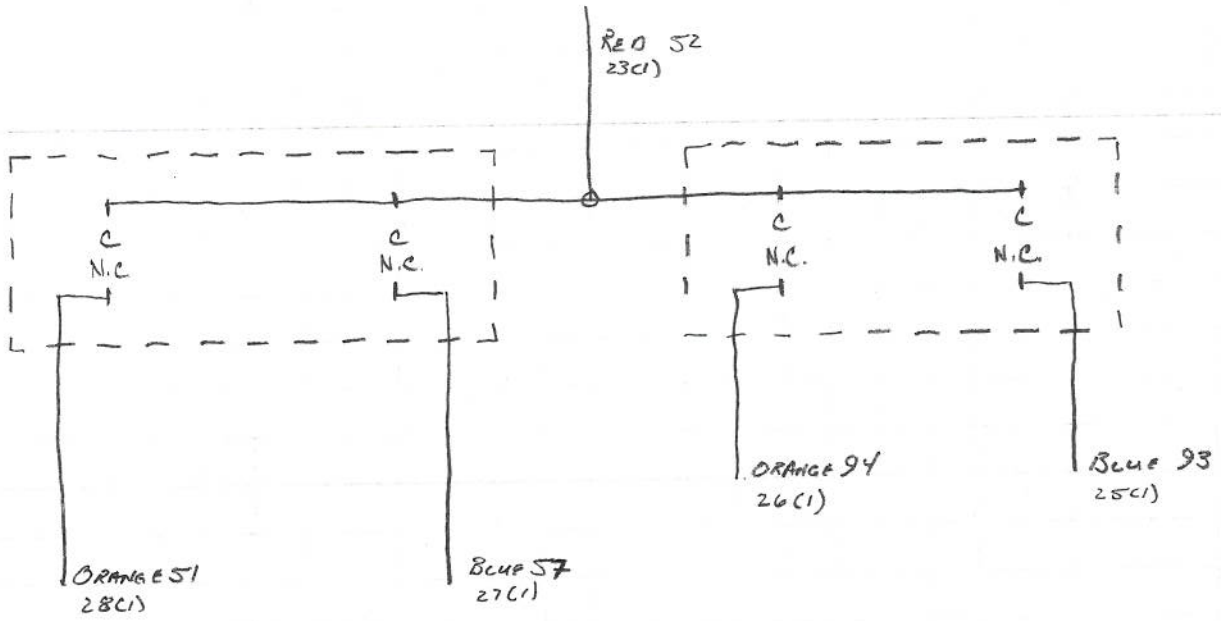


LEFT START/TAKE RIGHT START/TAKE

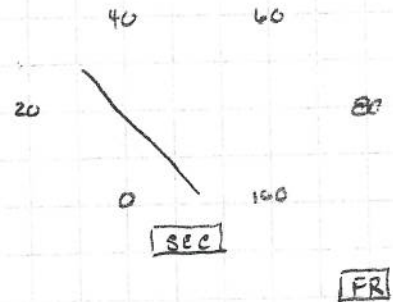
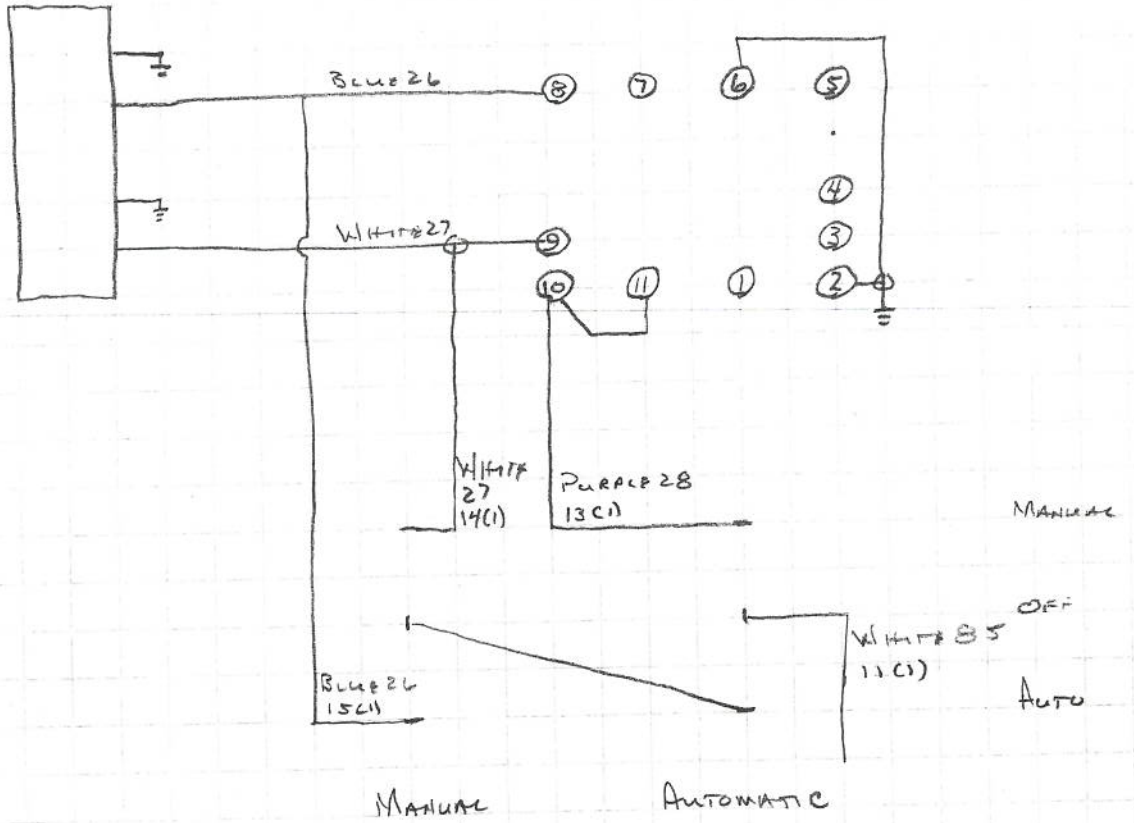
TRUCK LIGHTS



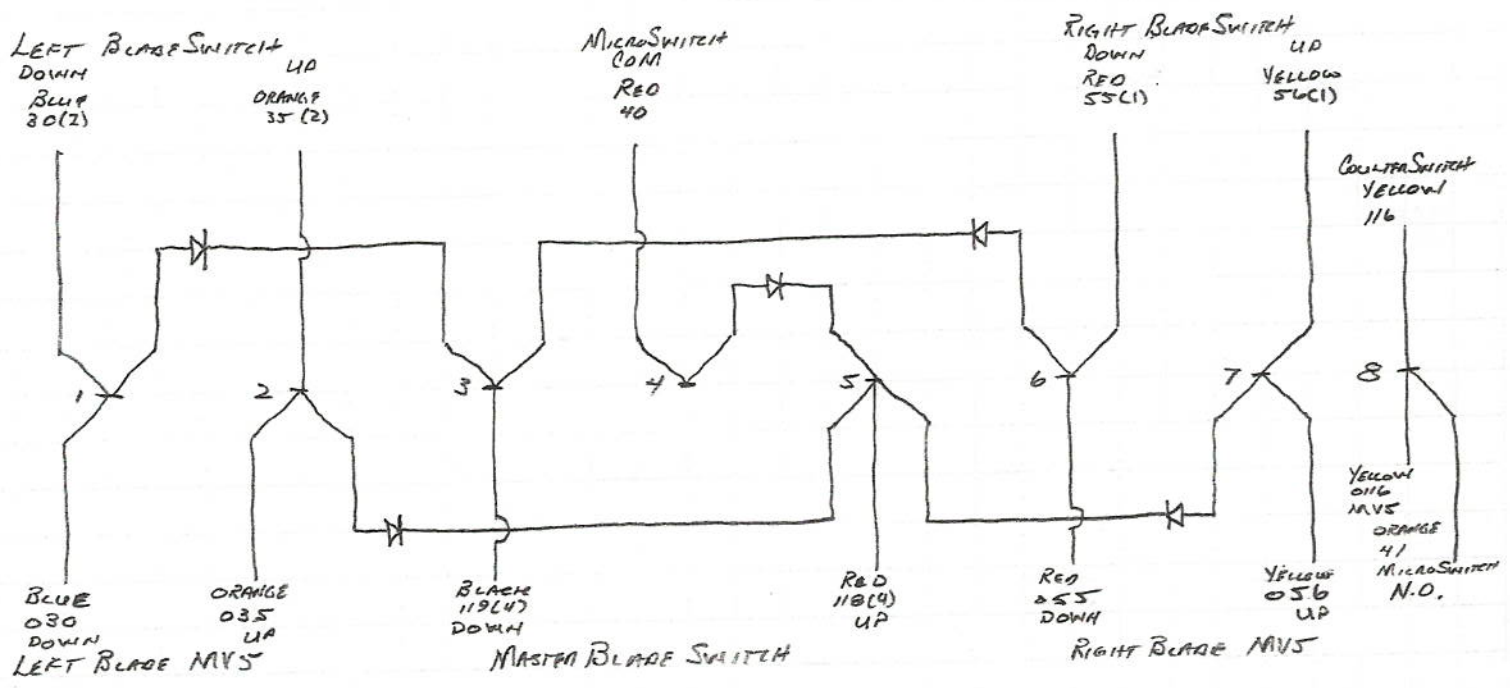
FORWARD BACK



# AIR HEAD CLEANER



# BLADE / COULTER CONTROL



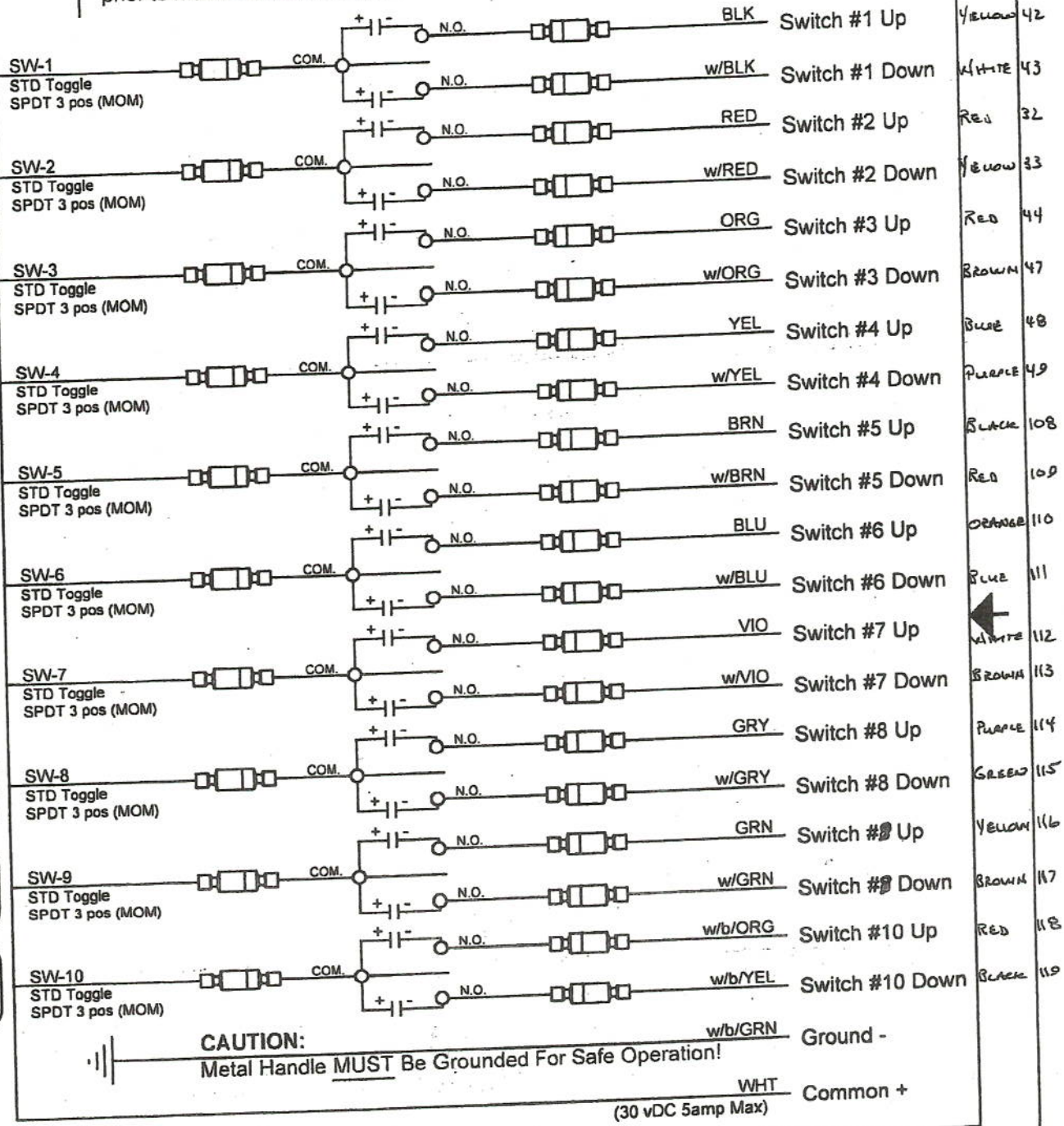
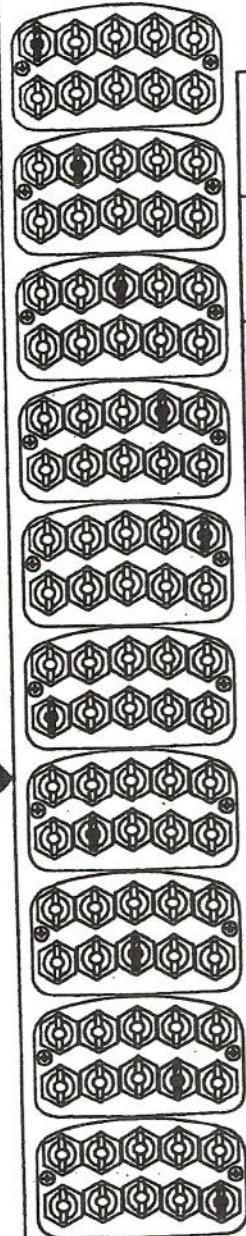
|       |        |      |
|-------|--------|------|
| PIN 1 | BLUE   | 30   |
| 2     | ORANGE | 35   |
| 3     | RED    | 40   |
| 4     | RED    | 55   |
| 5     | YELLOW | 56   |
| 6     | YELLOW | 116  |
| 7     | BLUE   | 030  |
| 8     | ORANGE | 035  |
| 9     | BLACK  | 119  |
| 10    | RED    | 118  |
| 11    | RED    | 055  |
| 12    | YELLOW | 056  |
| 13    | YELLOW | 0116 |
| 14    | ORANGE | 41   |
| 15    |        |      |
| 16    |        |      |

|        |                       |                     |
|--------|-----------------------|---------------------|
| 5      | RECTIFIER 6A          | 266-0086 (276-1661) |
| 1      | ENCLOSURE(Q131310PCA) | 78351/14069         |
| 4 1/2" | Mounting TRACK        | 58371               |
| 8      | TERMINAL BLOCK        | 58364               |
| 2      | END CLAMP             | 58373               |
| 14     | 512-1220              |                     |
| 14     | 512-1225              |                     |
| 1      | 512-1160              | 16 PIN              |
| 1      | 512-1110              | 16 PIN              |
| 1      | 512-1280              | RELIEF              |
| 4      | 6-32 X 1/4"           |                     |



| REVISIONS |     |             |      |          |
|-----------|-----|-------------|------|----------|
| ZONE      | REV | DESCRIPTION | DATE | APPROVED |

**Note:**  
1-Cyber-Tech, Inc. Proposed Handy-Grip® wiring to be APPROVED by the customer prior to manufacture and installation for operator use.



|  |   |                          |                        |
|--|---|--------------------------|------------------------|
| <b>Cyber-Tech, Inc.</b><br>P.O. Box 23801<br>Portland, Or 97281-3801<br><br><b>1.800.621.8754</b><br><br><b>www.cyber-tech.net</b> | <b>8601-RB Handy-Grip</b><br><b>(10Tog w/Boots)</b> |                          |                        |
|  | <b>SCHEMATIC DIAGRAM</b>                            |                          |                        |
| <b>1.800.621.8754</b>  | SIZE<br>503-620-8580                                | FSCM NO.<br>503-620-8580 | DWG NO.<br>CTI-2021887 |
| <b>www.cyber-tech.net</b>  | SCALE<br>1:1  | D DOWERS                 | SHEET<br>3 OF 3        |

- YELLOW 42
- WHITE 43
- RED 44
- YELLOW 45
- RED 46
- BROWN 47
- BLUE 48
- PURPLE 49
- BLACK 108
- RED 109
- ORANGE 110
- BLUE 111
- WHITE 112
- BROWN 113
- PURPLE 114
- GREEN 115
- YELLOW 116
- BROWN 117
- RED 118
- BLACK 119



2-1/16" Ultragage with Memory Recall Instructions  
2-1/16" Ultragage Instructions

**Warning:** Before doing any work on any kind of vehicle, disconnect the negative (-) battery cable from the battery. Failure to do so may result in burns, electrical shock, or other personal injuries.

**Recommended installation technique:**

1. Decide on a location to mount the gauge(s).
2. Drill, cut and do whatever it takes to get the location ready to install the gauge(s).
3. Install the sender(s) and switch(s), if applicable. Refer to section "sender installation".
4. Install the gauge, but do not secure into place.
5. Make all wire connections. Refer to section "Gauge, sender, and switch wire connections".
6. Make sure all gauges are functioning. If any problems are encountered refer to the section "troubleshooting".
7. Adjust warning indicators or fuel tank capacity. Refer to section "understanding and setting the warning indicators" or "setting fuel tank capacity".
8. Secure the gauge into place.
9. Read over sections "memory recall" and "special functions".

**Gauge, sender and switch wire connections:**

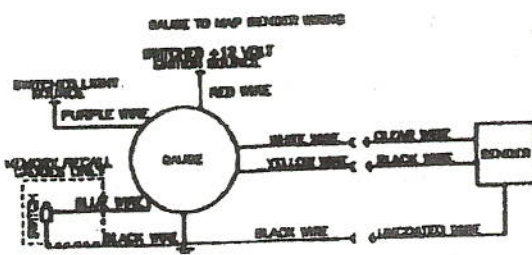
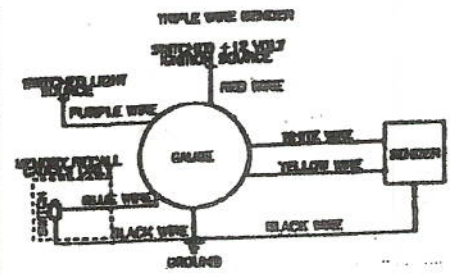
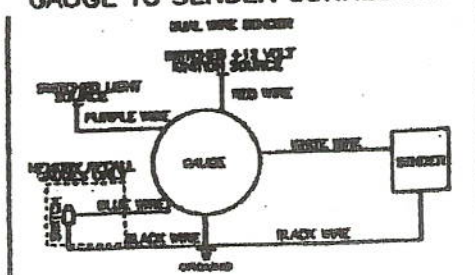
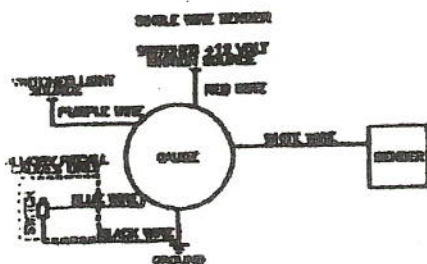
**Note:** For Vacuum, Boost, Vacuum-Boost gauges, skip this section and go to "Gauge, sender and switch connection using Cyberdyne MAP sender". All other gauges should follow the instructions below.

- Red Wire: Ignition wire, hookup to a switched +12 volt ignition source. Ex.: Accessory fuse in fuse box.
- Black Wire: Ground wire, mate all black wires from the gauge, sender, switch..., and connect to the engine block.
- Purple Wire: Dimmer wire, hookup to a switched light source. Ex.: Any switched light bulb.
- White Wire: Signal wire, mate the white wire from the gauge with white wire from the sender.
- Yellow Wire: +5v accessory Wire, if sender has a yellow wire mate the yellow wire from the gauge to the senders yellow wire.

If sender does not have a yellow wire then cut off any bare wire and tie to a safe place.

Blue Wire (if applicable): Memory recall wire, mate blue wire from the gauge to the blue wire on the switch.  
**Note:** All wires should be routed away from the ignition system, spark plug wires or any type of electrical noise imposing wires. Any wire brought through the firewall should be secured through a rubber grommet.

**GAUGE TO SENDER CONNECTIONS**



| Pin # | Primary       | Gauge |
|-------|---------------|-------|
| 1     | RED 21        | RED   |
| 2     | Black 20      | Black |
| 3     | GREEN 425 (2) | WHITE |

| Pin # | Hydraulic Oil Tank | Gauge |
|-------|--------------------|-------|
| 1     | RED 21             | RED   |
| 2     | Black 20           | Black |
| 3     | YELLOW 752         | WHITE |

**Vacuum, Boost and Vacuum-Boost Gauge ONLY.**

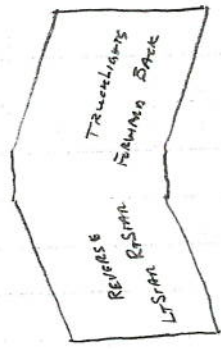
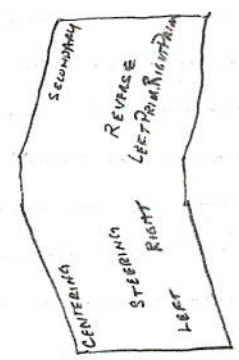
- Gauge, sender and switch wire connections using Cyberdyne MAP sender
- Red Wire: Ignition wire, hookup to a switched +12 volt ignition source. Ex.: Accessory fuse in fuse box.
  - Black Wire: Ground wire, mate the black wire from the gauge, switch and the uncoated wire from the MAP sender together and connect to the engine block.
  - Purple Wire: Dimmer wire, hookup to a switched light source. Ex.: Any switched light bulb.
  - White Wire: Signal wire, mate the white wire from the gauge with clear wire from the sender.
  - Yellow Wire: +5v accessory Wire, mate the yellow wire from the gauge to the black wire from the sender.
  - Blue Wire (if applicable): Memory recall wire, mate blue wire from the gauge to the blue wire on the switch.

**Understanding and setting the warning indicators:**

S P E E D C O N T R O L S  
 PRIMARY SECONDARY Axiom STAR TABLE  
 Air Head Pump OFF SPEED LEFT RIGHT LEFT RIGHT

C O N T R O L S A.H.C. CLEARER  
 Remote Master Boom Bin Fill Automatic  
 MASTER PRIMARY SECONDARY SPAN SIDE Bin Fill Boom TRASH#FIN LOWER OFF MANUAL MANURE  
 V E Y O R S VME#BET RATE RAISE ON  
 Cross Stem Bin/Boom TRASH#FIN LOWER MANUAL AUTOMATIC

Bin Fill  
 Level Error  
 Trans Made  
 Reverse  
 Cross Stem  
 Left  
 Right  
 Raise  
 Humm Shaft



M H A K E R O  
 L.T. UP. R.H.P. L.L. LOW R.T. LOW. STONIE  
 B O O O O O O O  
 MASTER Bin/Boom  
 DUTER LEFT SWING ON OFFERS BEARE

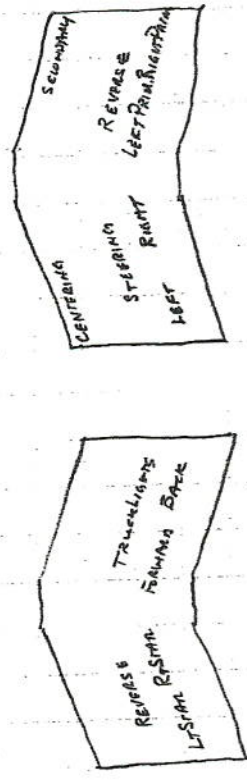
S P E E D C O N T R O L S

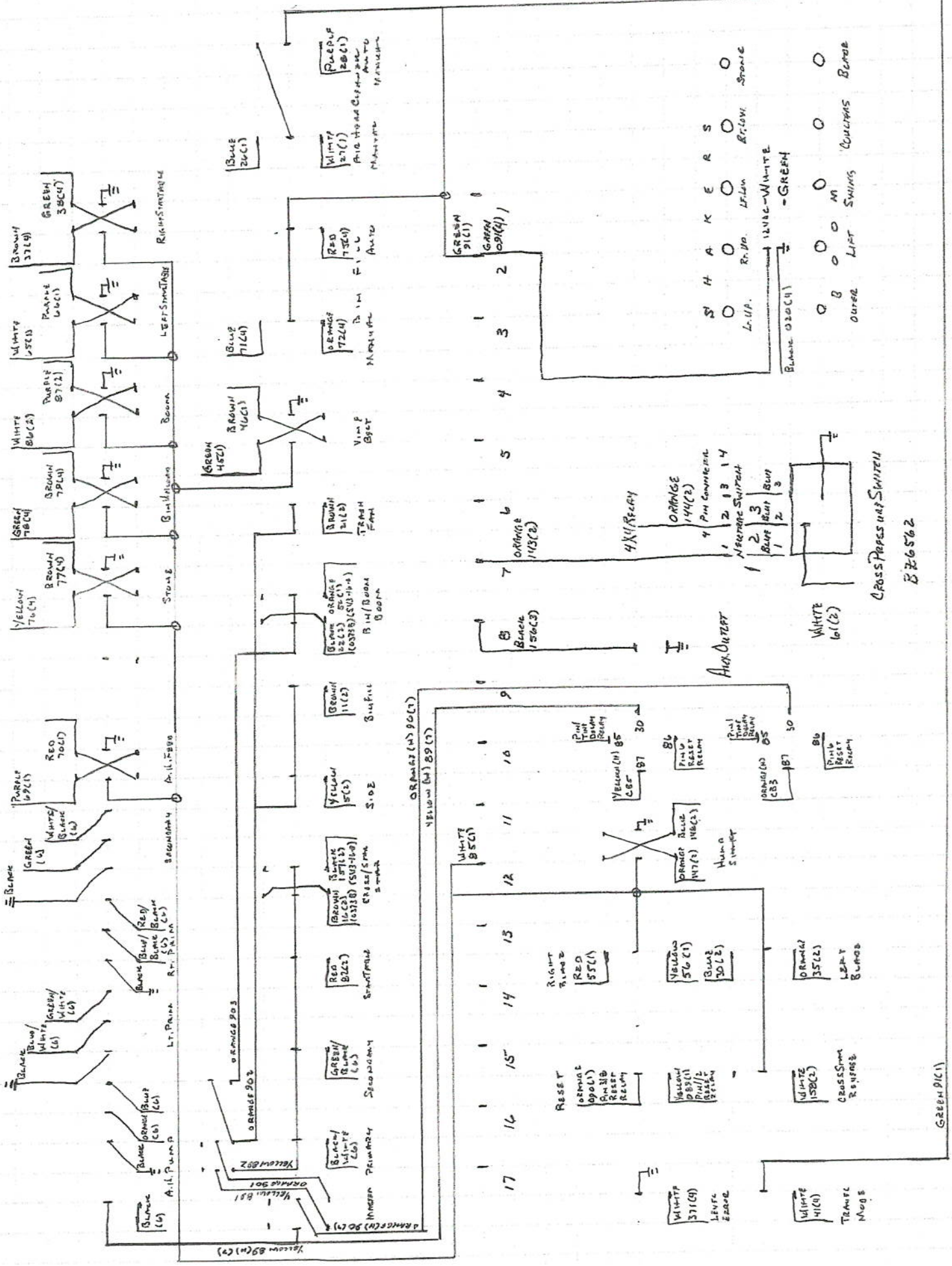
PRIMARYS SECONDARY ANALOG STONE BIRLIANO BOOM STAR TARGE  
 OFF SPEED LEFT RIGHT FAN LEFT RIGHT  
 2X4V 753-5267 55288-8k SS208-8k SS208-8k SS208-8k SS208-8k  
 KNOB 644-1654

C REVERSE BOOM 2X4V  
 N V E Y O R S VIBRET BIN FILL A.H. CLAMP A  
 CROSS STRAP SPAN SIDE BINFILL BOOM TRASH FAN LAUSE OFF MANUAL MANUAL  
 2X4V 2X4V 2X4V 2X4V 2X4V 2X4V 2X4V 2X4V 41203 762261  
 55288-8k SS208-8k

BIN FILL  
 LEVEL ERROR 2X4V  
 TARGE MORE 2X4V  
 REVERSE CROSS STRAP 41203  
 RESET 41203  
 BLADE LEFT RIGHT 41203  
 HUMAN SHAFT 55288-8k

MASTER BINFILL  
 DUFFL LEFT SWING  
 B O M DUFFLERS BRAGE  
 H A K E R O L T LOW STONE  
 LT. UP. RT. UP. L. LOW R. LOW STONE





CROSS PAPER HAT SWITCH  
 BZ6562

GREEN (1) (1)

GREEN (1) (1)

#12053

PARAMOUNT FARMS

25-JAN-2012

4RSPH W/ 65" - TANK

PLUG #1

PIN #

|    |        |      |  |
|----|--------|------|--|
| 1  | YELLOW | 92   | CB 1 TO HAZARD STAT TO SWITCH                |
| 2  | GREEN  | 91   | CB2 TO AIR HEAD CLEANER / BIN FILL SWITCHES  |
| 3  | ORANGE | 0924 | CB20 TO 4X4 SWITCH FREEWHEEL SIDE - 12V      |
| 4  | BLACK  | 017  | CB4 TO BRAKE, STEER, WARNING, SPEEDOMETER    |
| 5  | RED    | 081  | CB 10 TO FUEL PUMP SWITCH                    |
| 6  |        |      |  |
| 7  | RED    | 55   | RIGHT BLADE SWITCH DOWN TO JUNCTION BOX      |
| 8  |        |      |  |
| 9  | BLACK  | 0017 | BRAKE SWITCH TO BRAKE SOLENOID               |
| 10 | BROWN  | 88   | CB11 TO BACK UP LIGHTS SWITCH                |
| 11 | WHITE  | 85   | CB12 TO ACTUATOR SWITCHES                    |
| 12 | RED    | 81   | FUEL PUMP SWITCH TO FUEL PUMP                |
| 13 | PURPLE | 28   | A-H CLEANER AUTO TO TIMER #10                |
| 14 | WHITE  | 27   | A-H CLEANER MANUAL TO TIMER #9 TO SOLENOID   |
| 15 | BLUE   | 26   | A-H CLEANER MANUAL TO TIMER #8 TO SOLENOID   |
| 16 | BROWN  | 46   | VINE BELT RAISE / LOWER SWITCH TO ACTUATOR   |
| 17 | GREEN  | 45   | VINE BELT RAISE / LOWER SWITCH TO ACTUATOR   |
| 18 | RED    | 29   | STROBE LIGHT                                 |
| 19 | BLACK  | 804  | SEAT SWITCH                                  |
| 20 | BLACK  | 810  | SEAT SWITCH                                  |
| 21 | RED    | 70   | AIR HEAD FEED SWITCH TO RDRS112-30 ACTUATOR  |
| 22 | PURPLE | 69   | AIR HEAD FEED SWITCH TO RDRS112-30 ACTUATOR  |
| 23 | RED    | 52   | CB 16 TO FOOT SWITCHES 12VDC                 |
| 24 | PURPLE | 83   | FOOT SWITCHES TO STEERING BOX                |
| 25 | BLUE   | 93   | TRUCK SIGNAL - BACK                          |
| 26 | ORANGE | 94   | TRUCK SIGNAL - FORWARD                       |
| 27 | BLUE   | 57   | RIGHT STAR TABLE REVERSE SWITCH TO VALVE     |
| 28 | ORANGE | 51   | LEFT STAR TABLE REVERSE SWITCH TO VALVE      |
| 29 | ORANGE | 924  | 4X4 SWITCH TO FRONT MOTOR FREEWHEEL VALVE    |
| 30 | YELLOW | 089  | MASTER RESET SWITCH TO RESET RELAY           |
| 31 | ORANGE | 090  | MASTER RESET SWITCH TO RESER RELAY           |
| 32 | BROWN  | 088  | CB11 TO BACK UP WARNING SWITCH IN CAB        |
| 33 | BROWN  | 0088 | BACK UP WARNING SWITCH IN CAB TO ALARM       |
| 34 | YELLOW | 56   | RIGHT BLADE SWITCH UP TO JUNCTION BOX        |
| 35 | WHITE  | 65   | LEFT STAR RDRS175-16 ACTUATOR                |
| 36 | PURPLE | 66   | LEFT STAR RDRS175-16 ACTUATOR                |
| 37 | ORANGE | 50   | BIN UNLOAD BYPASS SV3-16-0-12T-12DG SOLENOID |

BLACK 17

#12053

PARAMOUNT FARMS

25-JAN-2012

4RSPH W/ 65" - TANK

PLUG 2

| PIN # |        |     |  |            |
|-------|--------|-----|--|------------|
| 1     | BROWN  | 153 | LT. PRIM. REV. SWT. TO REV. VALVE - REV .            |            |
| 2     | ORANGE | 154 | RT. PRIM. REV. SWT. TO REV. VALVE - REV.             |            |
| 3     | BLACK  | 059 | PARK SWT. TO 14(5)/15(5) RED 0015 TO SMX TO SV4-10-0 |            |
| 4     | YELLOW | 752 | HYDRAULIC OIL TEMPERATURE SENSOR TO CAB              | YELLOW 752 |
| 5     | BLUE   | 30  | LEFT BLADE SWITCH DOWN TO JUNCTION BOX               |            |
| 6     | GREEN  | 155 | SECONDARY / DEVINER REVERSE                          |            |
| 7     | BROWN  | 54  | RIGHT TURN SIGNAL                                    |            |
| 8     | YELLOW | 53  | LEFT TURN SIGNAL                                     |            |
| 9     | BROWN  | 6   | BACK-UP LIGHT SWITCH TO RELAY                        |            |
| 10    | BROWN  | 505 | RIGHT WORK LIGHT SWITCH TO RELAY                     | BROWN 505  |
| 11    | ORANGE | 35  | LEFT BLADE SWITCH UO TO JUNCTION BOX                 |            |
| 12    | BLACK  | 1   | 4 X 4 SWITCH TO RELAY                                |            |
| 13    | BLACK  | 12  | 2-SPEED SWITCH TO SOLENOID / HIGH PRESSURE RELIEFS   |            |
| 14    | BROWN  | 21  | TRASH FAN SWITCH TO SOLENOID                         |            |
| 15    | BROWN  | 11  | BIN FILL SWITCH TO DTS-0373B SOLENOID                |            |
| 16    | YELLOW | 5   | SIDE CONVEYOR SWITCH TO DTS-0373B SOLENOID           |            |
| 17    | BROWN  | 16  | CROSS / STAR CONVEYOR SWITCH TO DTS-0373B SOLENOID   |            |
| 18    | RED    | 82  | STAR ROLLS SWT. TO 2 DTS-4208B SOL'S.                |            |
| 19    | YELLOW | 156 | LT. PRIM. REV. SWT. TO REV. VALVE COIL - FOR.        |            |
| 20    | YELLOW | 15  | FAN RETURN FILTER #3 TO LIGHT                        |            |
| 21    | BLUE   | 3   | GROUND-DRIVE HI-PRESSURE FILTER #3 TO LIGHT          |            |
| 22    | YELLOW | 20  | HYDRAULIC LEVEL SENSOR TO CAB (BZL-12)               |            |
| 23    | WHITE  | 61  | CROSS CONVEYOR PRESSURE SWITCH N.O. TO CAB (BZ 6562) |            |
| 24    | BLACK  | 22  | BIN / BULK SWT. TO DTS-0373B (A) SOLENOID            |            |
| 25    | ORANGE | 143 | CB7 TO HYDRO NEUTRAL SWITCH #1                       |            |
| 26    | ORANGE | 144 | HYDRO NEUTRAL SWITCH #2 TO PANEL RELAY               |            |
| 27    | RED    | 157 | RT. PRIM. REV. SWT. TO REV. VALVE COIL - FOR.        |            |
| 28    | GREEN  | 607 | DTS-0160 TO CAB SPEEDOMETER                          | GREEN 607  |
| 29    |        |     |  |            |
| 30    |        |     |  |            |
| 31    | WHITE  | 86  | BOOM SWITCH TO RDRS112-30 ACTUATOR                   |            |
| 32    | PURPLE | 87  | BOOM SWITCH TO RDRS112-30 ACTUATOR                   |            |
| 33    | ORANGE | 147 | HUMP SHAFT ACTUATOR                                  |            |
| 34    | BLUE   | 148 | HUMP SHAFT ACTUATOR                                  |            |
| 35    | BLACK  | 151 | CROSS / STAR SWITCH TO CROSS SV3-16 SOLENOID         |            |
| 36    | GREEN  | 425 | TEMP. SENDER IN PRIMARY CIRCUIT TO CAB               | GREEN 425  |
| 37    | WHITE  | 158 | CROSS STAR TABLE REVERSE SWITCH TO VALVE             |            |

#12053

PARAMOUNT FARMS

25-JAN-2012

4RSPH W/ 65" - TANK

PLUG 3

PIN #

[LG 16]

|     |     |        |   |          |
|-----|-----|--------|---|----------|
| *1  | 18  | RED    | CB6 TO WIPER  |          |
| 2   | 12  | RED    | CB6 TO RADIO  |          |
| 3   | 012 | PURPLE | CB6 TO PURPLE 'ACC' IN POWER VIEW HARNESS               |          |
| 4   | 20  | BLACK  | GROUND  |          |
| 5   | 503 | BROWN  | LIGHT SWITCH ROAD POSITION TO RELAY #5-86               |          |
| 6   | 22  | RED    | CB8 TO DOME LIGHT/PANEL/LITE SWT/RADIO MEM ( ST87 HOT ) |          |
| *7  | 507 | BROWN  | CAB FIELD LIGHT RELAY TO CAB FIELD LIGHTS #4-30         |          |
| 8   | 572 | BROWN  | WORK LIGHT SWITCH TO LEFT WORK LIGHTS RELAYS            |          |
| 9   | 013 | PURPLE | ST 95 IGNITION TERMINAL W/RED 13 TO POWER VIEW HARNESS  |          |
| *10 | 526 | BROWN  | CAB ROAD LIGHT RELAY TO CAB LIGHTS #5-30                |          |
| 11  | 652 | BLUE   | FUEL TANK SENDER TO GAUGE                               | WHITE 58 |
| 12  | 022 | RED    | CB8 TO RED 022 IN POWER VIEW HARNESS                    |          |
| 13  | 422 | GREEN  | STARTER RELAY TO POWER VIEW HARNESS                     |          |
| 14  | 504 | BROWN  | CAB FIELD LIGHT POSITION TO RELAY #4-86                 |          |
| *15 | 156 | BLACK  | CB15 TO AUXILLARY OUTLET BOX 12 AWG                     |          |
| 16  |     |        |   |          |



4RSPH W/ 65" - TANK

PLUG 4

SW#/PIN#

|    |    |                      |     |   |        |     |
|----|----|----------------------|-----|---|--------|-----|
|    | 1  | RED                  | 21  | CB7 TO PIN 4 ON GAUGE PANEL                     |        |     |
| 5  | 2  | BROWN                |     | STONE BOX MV5 VALVE                             | BLACK  | 108 |
| 5  | 3  | WHITE / BROWN        |     | STONE BOX MV5 VALVE                             | RED    | 109 |
| 6  | 4  | BLUE                 |     | BOOM OUTER MV5 VALVE                            | ORANGE | 110 |
| 6  | 5  | WHITE / BLUE         |     | BOOM OUTER MV5 VALVE                            | BLUE   | 111 |
| 7  | 6  | VIOLET               |     | BOOM LIFT MV5 VALVE                             | WHITE  | 112 |
| 7  | 7  | WHITE / VIOLET       |     | BOOM LIFT MV5 VALVE                             | BROWN  | 113 |
| 8  | 8  | GRAY                 |     | BOOM SWING MV5 VALVE                            | PURPLE | 114 |
| 8  | 9  | WHITE / GRAY         |     | BOOM SWING MV5 VALVE                            | GREEN  | 115 |
| 9  | 10 | GREEN                |     | COULTER UP SWITCH TO JUNCTION BOX               | YELLOW | 116 |
| 9  | 11 | WHITE / GREEN        |     | COULTER MV5 VALVE                               | BROWN  | 117 |
| 10 | 12 | WHITE/BLACK/ORG.     |     | BLADE UP SWITCH TO JUNCTION BOX                 | RED    | 118 |
| 10 | 13 | WHITE/BLACK/YELL.    |     | BLADE DOWN SWITCH TO JUNCTION BOX               | BLACK  | 119 |
|    | 14 | BLUE                 | 55  | LEFT CRAB FOOT SWITCH TO STEERING BOX RELAY     |        |     |
|    | 15 | GREEN                | 605 | A.H. FAN RPM PICKUP TO CAB                      |        |     |
|    | 16 | ORANGE               | 56  | RIGHT CRAB FOOT SWITCH TO STEERING BOX RELAY    |        |     |
|    | 17 | BROWN                | 37  | RIGHT STAR TABLE RDRS175-16 ACTUATOR            |        |     |
|    | 18 | GREEN                | 38  | RIGHT STAR TABLE RDRS175-16 ACTUATOR            |        |     |
|    | 19 | BLUE                 | 71  | BIN FILL MAN. SWITCH TO MD3 MODULE ( DOWN )     |        |     |
|    | 20 | ORANGE               | 72  | BIN FILL MAN. SWITCH TO MD3 MODULE ( UP )       |        |     |
|    | 21 | RED                  | 75  | BIN FILL AUTO. SWT. TO MD3 PANEL JUNCTION BLOCK |        |     |
|    | 22 | YELLOW               | 76  | STONE SWITCH TO RDRS112-30 ACTUATOR             |        |     |
|    | 23 | BROWN                | 77  | STONE SWITCH TO RDRS112-30 ACTUATOR             |        |     |
|    | 24 | GREEN                | 78  | BIN UNLOAD SWITCH TO RDRS112-30 ACTUATOR        |        |     |
|    | 25 | BROWN                | 79  | BIN UNLOAD SWITCH TO RDRS112-30 ACTUATOR        |        |     |
|    | 26 | WHITE                | 41  | TRAVEL MODE SWITCH TO MD3 MODULE                |        |     |
|    | 27 | WHITE                | 371 | LEVEL WARN LIGHT TO MD3 / XA2 MODULES           |        |     |
| 1  | 28 | BLACK                |     | LEFT UPPER SHAKER MV5 VALVE                     | YELLOW | 42  |
| 1  | 29 | WHITE/BLACK          |     | LEFT UPPER SHAKER MV5 VALVE                     | WHITE  | 43  |
| 2  | 30 | RED                  |     | RIGHT UPPER SHAKER MV5 VALVE                    | RED    | 32  |
| 2  | 31 | WHITE / RED          |     | RIGHT UPPER SHAKER MV5 VALVE                    | YELLOW | 33  |
| 3  | 32 | ORANGE               |     | LEFT LOWER SHAKER MV5 VALVE                     | RED    | 44  |
| 3  | 33 | WHITE / ORANGE       |     | LEFT LOWER SHAKER MV5 VALVE                     | BROWN  | 47  |
| 4  | 34 | YELLOW               |     | RIGHT LOWER SHAKER MV5 VALVE                    | BLUE   | 48  |
| 4  | 35 | WHITE / YELLOW       |     | RIGHT LOWER SHAKER MV5 VALVE                    | PURPLE | 49  |
|    | 36 | WHITE / BLACK / GREE |     | CYBER TECH HANDLE TO PANEL GROUND               | BLACK  | 020 |
|    | 37 | WHITE                |     | CB2 TO CYBER TECH HANDLE                        | GREEN  | 091 |

#12053

**COLUMN PLUG  
PARAMOUNT FARMS**

25-JAN-2012

4RSPH W/ 65" - TANK

**PLUG 5**

| <b>PIN #</b> |      | <b>COLUMN PLUG</b> |  |            |
|--------------|------|--------------------|--|------------|
| 1            | 11   | RED                | ST 87 HOT SIDE TERMINAL                                    |            |
| 3            | 13   | RED                | ST 87 IGINATION TERMINALS                                  |            |
| 4            | 502  | BROWN              | POWER FROM TURN STAT                                       | 502 TO 507 |
| 5            | 104  | WHITE              | CLUTCH SWITCH N.C. TO RELAY                                |            |
| 14           | 059  | BLACK              | TO CLUTCH SWITCH N.O. POSITON TO 15 ( 5 )                  |            |
| 15           | 0015 | RED                | TO SMX SWITCH - "COM" / N.O. ON SMX RED 15 TO SV4 SOLENOID |            |
| 18           | 522  | BROWN              | RIGHT TURN SIGNAL - BROWN 54 ON MACHINE                    | 512 TO 522 |
| 20           | 523  | BROWN              | LEFT TURN SIGNAL - YELLOW 53 ON MACHINE                    | 513 TO 523 |

#12053

**PARAMOUNT FARMS  
CAB TO KAR TECH PANEL  
4RSPH W/ 65" - TANK**

25-JAN-2012

| <b>PLUG #6</b> |               |   |             |
|----------------|---------------|---|-------------|
| 1              | BLACK         | AIR HEAD SWITCH - ON / OFF              | BELDEN 8468 |
| 2              |               |   |             |
| 3              | ORANGE        | AIR HEAD POTENTIOMETER TERMINAL #2      | BELDEN 8468 |
| 4              | BLUE          | AIR HEAD POTENTIOMETER TERMINAL #3      | BELDEN 8468 |
| 5              | BLACK / WHITE | LEFT / RIGHT PRIMARY SWITCH - ON / OFF  | BELDEN 8468 |
| 6              |               |   |             |
| 7              | BLUE / WHITE  | LEFT PRIMARY POTENTIOMETER TERMINAL #2  | BELDEN 8468 |
| 8              | GREEN / WHITE | LEFT PRIMARY POTENTIOMETER TERMINAL #3  | BELDEN 8468 |
| 9              |               |   |             |
| 10             | BLUE / BLACK  | RIGHT PRIMARY POTENTIOMETER TERMINAL #2 | BELDEN 8468 |
| 11             | RED / BLACK   | RIGHT PRIMARY POTENTIOMETER TERMINAL #3 | BELDEN 8468 |
| 12             | GREEN / BLACK | SECONDARY SWITCH - ON / OFF             | BELDEN 8468 |
| 13             |               |   |             |
| 14             | GREEN         | SECONDARY POTENTIOMETER TERMINAL #2     | BELDEN 8468 |
| 15             | WHITE / BLACK | SECONDARY POTENTIOMETER TERMINAL #3     | BELDEN 8468 |
| 16             |               |   |             |

CONTROLLER POWER SUPPLY PIN " B " TO BLOCK GROUND  
ENERGIZED COIL

AIR HEAD PUMP: NEXT TO FLANGE - "IN" - PRESS. OUT PORT "A"  
AWAY FROM FLANGE - "OUT"

PRIM / SEC PUMP: NEXT TO PRESS. PORT: "IN" - PRESS. OUT PORT "A"  
AWAY FROM PRESS. PORTS: - "OUT"

**LARGE 3 PIN PLUG**

**PLUG #7**

|   |        |          |  |
|---|--------|----------|--|
| 1 | ORANGE | 90 (H)   | MAIN POWER RESET RELAY (N.O.) TO MASTER SWITCH |
| 2 | YELLOW | 89 (H)   | MAIN POWER RESET RELAY (N.O.) TO MASTER SWITCH |
| 3 | BLACK  | 0012 (H) | CB7 TO HI / LO SWITCH                          |

ADVANCED FARM EQUIPMENT

**BIN LEVELING  
MD3/XA2**

| PLUG #1<br>PIN NO. |                                  |     | JUNCTION<br>BLOCK NO. |                     |           |
|--------------------|----------------------------------|-----|-----------------------|---------------------|-----------|
| 1                  | ORANGE                           | 72  | 9                     | BIN MANUAL UP       | C2:9 MD3  |
| 2                  | BLUE                             | 71  | 10                    | BIN MANUAL DOWN     | C2:10 MD3 |
| 3                  | WHITE                            | 41  | 11                    | TRAVEL MODE         | C2:11 MD3 |
| 4                  | BLACK (BELDEN 9418) <i>PIN A</i> |     | 12                    | BIN LEVEL CONTROL % | C1:4 XA2  |
| 5                  | WHITE (BELDEN 9418) <i>PIN A</i> |     | 12                    | BIN LEVEL CONTROL % | C1:4 XA2  |
| 6                  | RED (BELDEN 9418) <i>PIN B</i>   |     | 16                    | BIN LEVEL CONTROL % | C1:18 XA2 |
| 7                  | GREEN (BELDEN 9418) <i>PIN B</i> |     | 19                    | BIN LEVEL CONTROL % | C1:32 XA2 |
| 8                  | WHITE                            | 371 | 13                    | LEVEL WARNING       | C1:8 XA2  |
| 9                  |                                  |     |                       |                     |           |
| 10                 |                                  |     |                       |                     |           |
| 11                 | BLACK                            | 15  | 15                    | PANEL GROUND        | C1:15 XA2 |
| 12                 | RED                              | 28  | 18                    | 12VDC POWER SUPPLY  | C1:28 XA2 |

PLUG #2  
PIN NO.

|    |                |     |    |                              |           |
|----|----------------|-----|----|------------------------------|-----------|
| 1  | BLUE (SENSOR)  |     | 1  | BANNER SENSOR GROUND         | C1:1 MD3  |
| 2  | WHITE (SENSOR) |     | 14 | BANNER SENSOR "SIGNAL IN"    | C1:10 XA2 |
| 3  | BROWN (SENSOR) |     | 21 | 12VDC POWER SUPPLY           |           |
| 4  | RED            | 75  | 21 | 12VDC POWER SUPPLY           |           |
| 5  | RED            | 280 | 3  | REAL TIME CLOCK POWER SUPPLY |           |
| 6  |                |     |    |                              |           |
| 7  |                |     |    |                              |           |
| 8  |                |     |    |                              |           |
| 9  |                |     |    |                              |           |
| 10 |                |     |    |                              |           |
| 11 |                |     |    |                              |           |
| 12 |                |     |    |                              |           |

ADVANCED FARM EQUIPMENT

**BIN LEVELING**

**MD3 (GRAY PLUG) C1**

|       |         |                  |                               |
|-------|---------|------------------|-------------------------------|
| C1:1  | - BATT  | GROUND           | BLACK TO XA2-AO C 1:15        |
| C1:2  | CAN-A-L |                  | CLEAR TO XA2-AO MODULE C 1:40 |
| C1:7  | + RTC   | 12VDC CONTINUOUS | PANEL RED 280                 |
| C1:11 | CAN-A-H |                  | BLACK TO XA2-AO MODULE C1:26  |
| C1:12 | + BATT  | POWER SUPPLY     | RED TO XA2-AO MODULE C1:28    |

**MD3 (BLACK PLUG) C2**

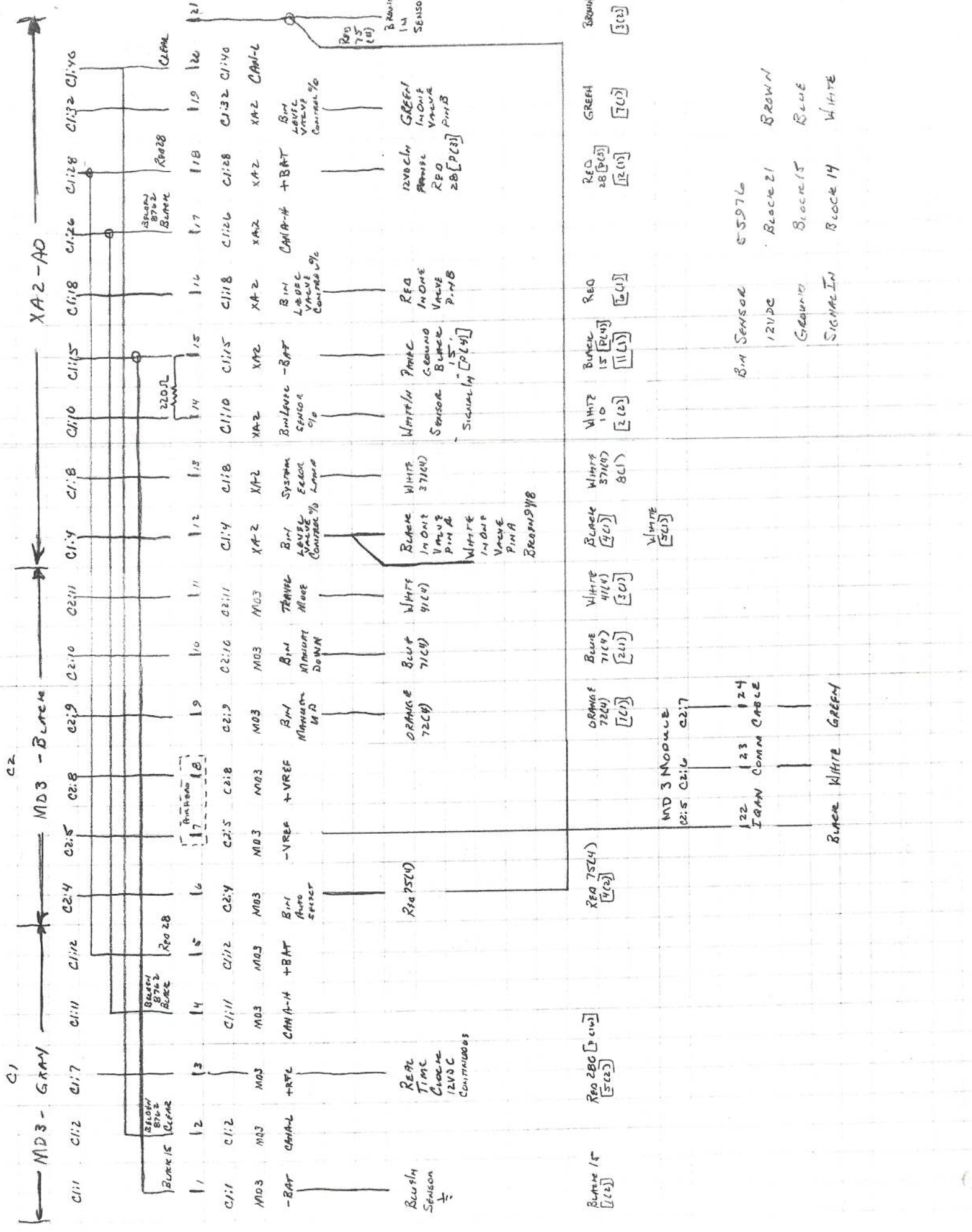
|       |        |                      |           |
|-------|--------|----------------------|-----------|
| C2:4  | DIN-D  | BIN AUTO SELECT MODE | RED 75    |
| C2:5  | - VREF | COMM CABLE           | BLACK     |
| C2:6  | USB-D- | COMM CABLE           | WHITE     |
| C2:7  | USB-D+ | COMM CABLE           | GREEN     |
| C2:8  | + VREF |                      |           |
| C2:9  | DIN-E  | BIN MANUAL UP        | ORANGE 72 |
| C2:10 | DIN-F  | BIN MAUAL DOWN       | BLUE 71   |
| C2:11 | DIN-G  | TRAVEL MODE INPUT    | WHITE 41  |

**XA2-AO**

|       |             |                      |                           |
|-------|-------------|----------------------|---------------------------|
| C1:1  | ADDR-H      | TERMINATION RESISTOR |                           |
| C1:4  | PWM-C       | BIN LEVEL CONTROL%   | BOTH VALVES BLACK / WHITE |
| C1:8  | DOUT-A      | SYSTEM ERROR LAMP    | WHITE 371                 |
| C1:10 | VIN-A       | BIN LEVEL SENSOR %   | WHITE IN SENSOR           |
| C1:15 | - BATT      | GROUND               | BLACK 15 TO PANEL         |
| C1:18 | PWM-C RET + | BIN LEVEL CONTROL %  | RED TO ONE VALVE COIL     |
| C1:26 | CAN-H       |                      |                           |
| C1:28 | + BATT      | POWER SUPPLY         | PANEL RED 28              |
| C1:32 | PWM-C RET-  | BIN LEVEL CONTROL %  | GREEN TO ONE VALVE COIL   |
| C1:40 | CAN-L       |                      |                           |
| C1:14 | ADDR-L      | TERMINATION RESISTOR |                           |

**BIN SENSOR**

|  |       |                    |  |
|--|-------|--------------------|--|
|  | BLUE  | GROUND             |  |
|  | WHITE | SIGNAL             |  |
|  | BROWN | 12VDC POWER SUPPLY |  |



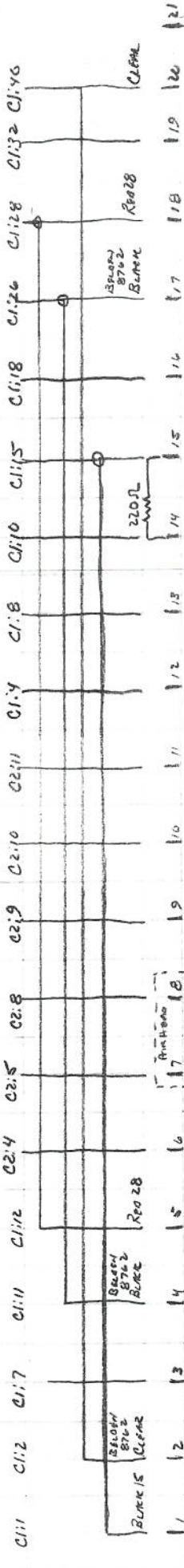
C1

C2

MD3 - GRAY

MD3 - BLACK

XA2-AD



BROWN [1(2)]

RED 28C [5(12)]

RED 75C [4(2)]

ORANGE 72C [1(2)]

BLUE 71C4 [2(1)]

WHITE 41C4 [3(2)]

BLACK 91C4 [4(1)]

WHITE 371C4 [8(1)]

WHITE 10 [2(2)]

BLACK 15 [1(1)]

RED 28 [6(3)]

RED 18 [2(1)]

RED 12VDC [12(1)]

GREEN 12VDC [7(3)]

BROWN 1M [3(2)]

MD3 MODULE C2:5 C2:6 C2:7

122 123 124 IRAN COMM CABLE

BLACK WHITE GREEN

BI-M SENSOR 5-5976

12VDC BLOCK 21

GRAND BLOCK 15

SIGNAL IN BLOCK 14

BROWN BLOCK 21

BLUE BLOCK 15

WHITE BLOCK 14

ADVANCED FARM EQUIPMENT

BIN LEVEL SETTINGS

| MACHINE NO.          | 2010 DEFAULT | 12053 |  |  |  |  |  |  |
|----------------------|--------------|-------|--|--|--|--|--|--|
|                      | SETTINGS     |       |  |  |  |  |  |  |
| BIN LEVEL SENSOR:    |              |       |  |  |  |  |  |  |
| MIN                  | 820          | 820   |  |  |  |  |  |  |
| MAX                  | 4450         | 4450  |  |  |  |  |  |  |
| BINLEVEL PID:        |              |       |  |  |  |  |  |  |
| P-TERM               | 2.50         | 2.00  |  |  |  |  |  |  |
| I-TERM               | 0.30         | 0.30  |  |  |  |  |  |  |
| BIN TRAVEL:          |              |       |  |  |  |  |  |  |
| CYLINDER SPEED       | 30           | 30    |  |  |  |  |  |  |
| BIN LEVEL:           |              |       |  |  |  |  |  |  |
| CYLINDER SPEED       | 25           | 20    |  |  |  |  |  |  |
| BIN LEVEL CONTROL:   |              |       |  |  |  |  |  |  |
| MIN                  | 40           | 40    |  |  |  |  |  |  |
| MAX                  | 85           | 85    |  |  |  |  |  |  |
| START                | 0            | 0     |  |  |  |  |  |  |
| STOP                 | 0            | 0     |  |  |  |  |  |  |
| ACCEPTABLE ERROR:    | 1.50         | 1.50  |  |  |  |  |  |  |
| LEVEL CONTROL DELAY: | 150          | 100   |  |  |  |  |  |  |
| START RAMP:          | 20           | 20    |  |  |  |  |  |  |
| STOP RAMP:           | 20           | 20    |  |  |  |  |  |  |
|                      | REV. 1       |       |  |  |  |  |  |  |

ADVANCED FARM EQUIPMENT

**BIN LEVEL SETTINGS**

| MACHINE NO.          | 2010 DEFAULT | 11044 | REPROGRAM |  |  |  |  |  |
|----------------------|--------------|-------|-----------|--|--|--|--|--|
|                      | SETTINGS     |       | 11/28/10  |  |  |  |  |  |
| BIN LEVEL SENSOR:    |              |       |           |  |  |  |  |  |
| MIN                  | 820          | 820   |           |  |  |  |  |  |
| MAX                  | 4450         | 4450  |           |  |  |  |  |  |
| BINLEVEL PID:        |              |       |           |  |  |  |  |  |
| P-TERM               | 2.50         | 4.00  | 2.50      |  |  |  |  |  |
| I-TERM               | 0.30         | 0.30  |           |  |  |  |  |  |
| BIN TRAVEL:          |              |       |           |  |  |  |  |  |
| CYLINDER SPEED       | 30           | 30    |           |  |  |  |  |  |
| BIN LEVEL:           |              |       |           |  |  |  |  |  |
| CYLINDER SPEED       | 25           | 55    | 25        |  |  |  |  |  |
| BIN LEVEL CONTROL:   |              |       |           |  |  |  |  |  |
| MIN                  | 40           | 40    |           |  |  |  |  |  |
| MAX                  | 85           | 85    |           |  |  |  |  |  |
| START                | 0            | 0     |           |  |  |  |  |  |
| STOP                 | 0            | 0     |           |  |  |  |  |  |
| ACCEPTABLE ERROR:    |              |       |           |  |  |  |  |  |
|                      | 1.50         | 1.00  |           |  |  |  |  |  |
| LEVEL CONTROL DELAY: |              |       |           |  |  |  |  |  |
|                      | 150          | 100   |           |  |  |  |  |  |
| START RAMP:          |              |       |           |  |  |  |  |  |
|                      | 20           | 20    |           |  |  |  |  |  |
| STOP RAMP:           |              |       |           |  |  |  |  |  |
|                      | 20           | 20    |           |  |  |  |  |  |
| BIN ADJUST ( IN.)    |              |       |           |  |  |  |  |  |
|                      |              | 10    | 12        |  |  |  |  |  |
|                      | REV. I       |       |           |  |  |  |  |  |



**Module: Slave Module (XA2-A0)**

| Pin            | Name       | Channel                    | Description                                   |
|----------------|------------|----------------------------|---|
| → C1:1         | ADDR-H     | Termination Resistor       |   |
| C1:2           | PWM-A      | Airhead Pitch Control [%]  |   |
| C1:3           | PWM-B      | Airhead Roll Control [%]   |   |
| VALVE → C1:4   | PWM-C      | Bin Level Control [%]      | VALVE - (BELDEN 9418 Blue/White) (Blue/White) |
| C1:5           |            |                            |   |
| C1:6           | PWM-E      | Side Conveyor Control [%]  |   |
| C1:7           | PWM-F      | Cross Conveyor Control [%] |   |
| → C1:8         | DOUT-A     | System Error Lamp          |   |
| C1:9           |            |                            |   |
| → C1:10        | VIN-A      | Bin Level Sensor #1 [%]    | Bin Sensor Signal IN White                    |
| C1:11          | VIN-B      | Bin Level Sensor #2 [%]    |   |
| C1:12          | VIN-C      | Pitch Sensor [%]           |   |
| C1:13          | VIN-D      | Roll Sensor [%]            |   |
| → C1:14        | ADDR-L     | Termination Resistor       |   |
| → C1:15        | -BAT       |                            | Banner I'S                                    |
| C1:16          | PWM-A RET+ | Airhead Pitch Control [%]  |   |
| C1:17          | PWM-B RET+ | Airhead Roll Control [%]   |   |
| → C1:18        | PWM-C RET+ | Bin Level Control [%]      | VALVE - (BELDEN 9418 Red)                     |
| C1:19          |            |                            |   |
| C1:20          | PWM-E RET+ | Side Conveyor Control [%]  |   |
| C1:21          | PWM-F RET+ | Cross Conveyor Control [%] |   |
| C1:22          |            |                            |   |
| C1:23          |            |                            |   |
| C1:24          | FIN-A      | Airhead Speed Sensor [rpm] |   |
| C1:25          | VIN-F      | Side Conveyor Roll [%]     |   |
| TOM03 → C1:26  | CAN-H      |                            | BELDEN 8762 Banner (M03)                      |
| C1:27          | CAN-H      |                            |   |
| +12VDC → C1:28 | +BAT       |                            | R10 2B  |
| C1:29          | -VREF      |                            |   |
| C1:30          | PWM-A RET- | Airhead Pitch Control [%]  |   |
| C1:31          | PWM-B RET- | Airhead Roll Control [%]   |   |
| → C1:32        | PWM-C RET- | Bin Level Control [%]      | VALVE (BELDEN 9418 GREEN)                     |
| C1:33          |            |                            |   |
| C1:34          | PWM-E RET- | Side Conveyor Control [%]  |   |
| C1:35          | PWM-F RET- | Cross Conveyor Control [%] |   |
| C1:36          |            |                            |   |
| C1:37          |            |                            |   |
| C1:38          | VIN-G      | Cross Conveyor Pitch [%]   |   |
| C1:39          | VIN-H      | Accelerometer [%]          |   |
| TOM03 → C1:40  | CAN-L      |                            | BELDEN 8762 CLEAR (M03)                       |
| C1:41          | CAN-L      |                            |   |
| C1:42          | +VREF      |                            |   |

BANNER - WHITE SENSOR SIGNAL IN - XA2 - C1:10  
 BLUE GROUND - M03 - C1:11  
 RED 12VDC. MAN/Air to SWITCH

**Module: Master Display (MD3)**

| Pin        | Name           | Channel           | Description                        |
|------------|----------------|-------------------|------------------------------------|
| → C1:1     | -BAT           |                   | Black 15                           |
| → C1:2     | CAN-A-L        |                   | Belden 8762 Clear (XAZ-A0)         |
| C1:3       | CAN-B-L        |                   |                                    |
| C1:4       | CAN-C-L        |                   |                                    |
| C1:5       | RS232-DATA IN  |                   |                                    |
| C1:6       | Reserved       |                   |                                    |
| C1:7       | +RTC 12V       |                   | 12V to Real Time Clock             |
| C1:8       | RS232-DATA-OUT |                   |                                    |
| C1:9       | CAN-C-H        |                   |                                    |
| C1:10      | CAN-B-H        |                   |                                    |
| → C1:11    | CAN-A-H        |                   | Belden 8762 Black (XAZ-A0)         |
| → C1:12    | +BAT           |                   | R.P.O. 28                          |
| Black C2:1 | VIN-A          |                   |                                    |
| C2:2       | VIN-B          |                   |                                    |
| C2:3       | DIN-C          |                   |                                    |
| → C2:4     | DIN-D          |                   | Bin Auto Mode Select R.P.O. 75 (4) |
| → C2:5     | -VREF          | Green Cable       | Black                              |
| C2:6       | USB-D-         | Green Cable       | White                              |
| C2:7       | USB-D+         | Green Cable       | Green                              |
| C2:8       | +VREF          |                   |                                    |
| → C2:9     | DIN-E          | Bin Manual Up     | Orange 72 (4)                      |
| → C2:10    | DIN-F          | Bin Manual Down   | Blue 71 (4)                        |
| → C2:11    | DIN-G          | Travel Mode Input | White 41 (4)                       |
| C2:12      |                |                   |                                    |