

#97121 Rework

YRSPH W/65" AH

KRUCKE Berg Farms

Horse Radisl

PLUG #1				
PIN #				
1	YELLOW	92	CB 1 to HAZARD STAT to FLASHER SWITCH	PANEL
2	GREEN	91	CB 2 to RIGHT WORK LIGHT RELAY AND SWITCH	PANEL
3	ORANGE	091	CB 3 to LEFT WORK LIGHT RELAY	PANEL
4	BLACK	017	CB 4 to BRAKE, STEER, WARNING, SPEEDOMETER	PANEL
5	ORANGE	90	RELAY TO MASTER SWITCH (CB 15)	PANEL
6	YELLOW	89	RELAY TO MASTER SWITCH (CB 5)	PANEL
7	BLACK	012	HI/LO SWITCH TO RELAY	PANEL
8	BLACK	0012	CB 8 to 2-SPEED / 4 X 4 SWITCHES/ WHITE IN CYBER-TECH HANDLE	PANEL
9	BLACK	0017	BRAKE SWITCH to BRAKE SOLENOID (BLACK 17)	PANEL
10	BROWN	88	CB 11 to ROAD / BACK UP/ STROBE LIGHTS SWITCHES & RELAYS	PANEL
11	WHITE	85	CB 12 to ACTUATOR SWITCHES	PANEL
12	BLACK	804	SEAT SWITCH TO PIN 6 TIME DELAY RELAY	PANEL
13	ORANGE	090	RESET SWITCH TO PIN 30 RESET RELAY	PANEL
14	YELLOW	089	RESET SWITCH TO PIN 1 TIME DELAY RELAY	PANEL
✓ 15	WHITE ✓	65	STAR TABLE #1 SPEED RDRS112-30 ACTUATOR	
✓ 16	PURPLE ✓	66	STAR TABLE #1 SPEED RDRS112-30 ACTUATOR	
17	RED	081	CB10 to FUEL PUMP SWITCH	PANEL
✓ 18	WHITE ✓	39	STROBE LIGHT SWITCH to STROBE LIGHTS "RED 29"	
✓ 19	YELLOW ✓	33	LOWER SHAKER SPEED RDRS112-30 ACTUATOR	
✓ 20	RED ✓	32	LOWER SHAKER SPEED RDRS112-30 ACTUATOR	
✓ 21	RED ✓	70	UPPER SHAKER SPEED RDRS112-30 ACTUATOR	
✓ 22	PURPLE ✓	69	UPPER SHAKER SPEED RDRS112-30 ACTUATOR	
23	RED	52	CB 16 to FOOT SWITCHES 12VDC	PANEL
✓ 24	PURPLE ✓	83	FOOT SWITCHES to STEERING BOX RELAYS #1 AND #2 PIN 86	
25	BLACK	810	SEAT SWITCH TO PIN 7 TIME DELAY RELAY	PANEL
✓ 26	BLUE ✓	55	LEFT CRAB FOOT SWITCH TO STEERING BOX RELAY #1 PIN 87	
✓ 27	ORANGE ✓	56	RIGHT CRAB FOOT SWITCH TO STEERING BOX RELAY #2 PIN 87	
✓ 28	BLUE ✓	57	FLOAT SWITCH #1 TO SV4 SOLENOID PIN 1 "BROWN 111"	
✓ 29	ORANGE ✓	58	FLOAT SWITCH #2 TO SV4 SOLENOID PIN 1 "RED 112"	
✓ 30	PURPLE ✓	160	TRUCK LIGHT FOOT PEDAL TO "FORWARD" TRUCK LIGHT "ORANGE 94"	
✓ 31	ORANGE ✓	161	TRUCK LIGHT FOOT PEDAL TO "BACK" TRUCK LIGHT "RED 93"	
✓ 32	GREEN ✓	45	CROSS/BOOM SPEED SWITCH TO RDRS112-30 "YELLOW 134"	
✓ 33	BROWN ✓	46	CROSS/BOOM SPEED SWITCH TO RDRS112-30 "RED 135"	
34				
35				
36				
37				

PLUG #2			
PIN #			
1	BROWN	153	LEFT PRIMARY REVERSE
2	ORANGE	154	RIGHT PRIMARY REVERSE
3	BLACK	059	PARK SWT. to 14(5) / 15(5) RED 0015 to SMX to SV4 CLUTCH VALVE
4	YELLOW	752	HYDRAULIC OIL TEMP SENSOR TO GAUGE
5	GREEN	602	TACH SENSOR TO GAUGE
6	GREEN	155	CROSS/BOOM REVERSE
7	BROWN	54	RIGHT TURN SIGNAL
8	YELLOW	53	LEFT TURN SIGNAL
9	BROWN	06	BACK-UP LIGHT SWITCH TO RELAY
10	BLUE	036	WORK LIGHT SWITCH TO RELAY (RIGHT WORK LIGHTS) / RELAY (LEFT WORK LIGHTS)
11			
12	BLACK	01	4 X 4 SWITCH to RELAY
13	BLACK	12	2 - SPEED RELAY PIN 30 to SOLENOID
14	BROWN	021	STAR TABLE #1 SWITCH TO DTS-0373B SOLENOID
15	BROWN	011	PRIMARY SWITCH TO SOLENOID DTS-0198C
16	YELLOW	05	LOWER SHAKER SWITCH TO DTS-0373B SOLENOID
17	BROWN	016	CROSS/BOOM CONV. SWITCH to DTS-0373B SOLENOID
18	RED	82	UPPER SHAKER SWITCH TO SV3 SOLENOID (BYPASS)
19	RED	81	FUEL PUMP SWITCH TO FUEL PUMP
20	YELLOW	15	FAN RETURN FILTER #3 to LIGHT (ARMREST)
21	BLUE	03	GROUND DRIVE HI-PRESSURE FILTER #3 to LIGHT (ARMREST)
22	YELLOW	020	HYDRAULIC TANK LEVEL SENSOR to CAB BUZZER/LIGHT BZL12 (ARMREST)
23	WHITE	61	CROSS CONV.PRESSURE SWITCH N.O. to CAB (BZ 6562)
24	BLACK	022	STAR TABLE #2 SWITCH TO DTS-0373B SOLENOID
25	ORANGE	143	CB 7 to HYDRO NEUTRAL SWITCH #1
26	ORANGE	144	HYDRO NEUTRAL SWITCH PIN #2 to PANEL RELAY PIN 86
27	PURPLE	094	ROAD LIGHT SWITCH TO RELAY
28	GREEN	607	SPEEDOMETER TO 4 X MULTIPLIER
29	RED	149	STAR TABLE #2 SPEED RDRS112-30 ACTUATOR
30	YELLOW	150	STAR TABLE #2 SPEED RDRS112-30 ACTUATOR
31	ORANGE	145	RIGHT PRIMARY ACTUATOR (PUMP)
32	BLUE	146	RIGHT PRIMARY ACTUATOR (PUMP)
33	BROWN	088	CB 11 TO BACK UP ALARM LIMIT SWITCH
34	BROWN	0088	BACK UP ALARM LIMIT SWITCH TO BACK UP ALARM
35	BLACK	151	LEFT PRIMARY ACTUATOR (PUMP)
36	GREEN	425	PRIMARY TEMP SENDER TO GAUGE
37	RED	152	LEFT PRIMARY ACTUATOR (PUMP)

PANEL PANEL

PANEL

PANEL
PANEL
PANEL

PANEL

A/c Plug?

RED 17 on A
ORANGE 9M on C

PLUG #3			LARGE 16 PIN
PIN #			
*1	RED	18	CB 6 TO WIPER
2	RED	12	CB 6 TO RADIO
3	PURPLE	705	ENGINE OIL PRESSURE TO GAUGE
4	BLACK	20	CAB GROUND TO PANEL GROUND
5	BROWN	503	LIGHT SWITCH "ROAD POSITION" TO RELAY
6	RED	22	CB 7 TO DOME-PANEL-LIGHT SWITCH-RADIO MEMORY
*7	BROWN	507	CAB FIELD LIGHT RELAY TO CAB FIELD LIGHTS
8	YELLOW	755	HYDRAULIC OIL TEMP WARNING LIGHT
9	ORANGE	924	OIL PRESSURE LIGHT TO SENDER
*10	BROWN	526	CAB ROAD LIGHT RELAY TO CAB LIGHTS
11	BLUE	652	FUEL GAUGE TO SENDER
12	BLUE	653	WATER LIGHT TO SENDER
13	GREEN	617	WATER GAUGE TO SENDER
14	BROWN	504	LIGHT SWITCH "FIELD POSITION" TO RELAY
*15	BLACK	156	CB 7 TO AUX POWER OUTLETS 12AWG
16	RED	21	CB 8 TO PIN 4 ON GAUGE PANEL
*			LARGE PINS

RED 14

CAB SIDE

MACHINE SIDE

PLUG #4			
PIN #			
1	RED	118	MASTER BLADE SWITCH "UP" TO PANEL TERMINAL STRIP (T5) to MV5
2	BLACK	119	MASTER BLADE SWITCH "DN" TO PANEL TERMINAL STRIP (T3) to MV5
3	BLACK	SW1	LEFT BLADE "UP" CYBER-TECH to PANEL (T2) to MV5 (ORANGE 29) (YELLOW 7) ✓
4	RED	SW1	LEFT BLADE "DOWN" CYBER-TECH to PANEL (T1) to MV5 (BLUE 30) (GREEN 8) ✓
5	ORANGE	SW2	RIGHT BLADE "UP" CYBER-TECH to PANEL (T7) to MV5 (WHITE 35) (BLUE 11) ✓
6	BLUE	SW2	RIGHT BLADE "DOWN" CYBER-TECH to PANEL (T6) to MV5 (BROWN 37) (WHITE 12) ✓
7	YELLOW	SW3	STAR SPACING "UP" CYBER-TECH to MV5 (YELLOW 116) (BROWN 33) ✓
8	BROWN	SW3	STAR SPACING "DOWN" CYBER-TECH to MV5 (BROWN 117) (YELLOW 32) ✓
9	VIOLET	SW4	3 POINT "UP" CYBER-TECH to MV5 (PURPLE 114) (BROWN 1) ✓
10	GRAY	SW4	3 POINT "DOWN" CYBER-TECH to MV5 (GREEN 115) ?
11	WHITE/BROWN	SW5	MAIN BOOM "UP" CYBER-TECH to MV5 (WHITE 112) (GREEN 90) ✓
12	WHITE/BLACK	SW5	MAIN BOOM "DOWN" CYBER-TECH to MV5 (BROWN 113) (RED 91) ✓
13	WHITE/RED	SW6	OUTER BOOM "UP" CYBER-TECH to MV5 (ORANGE 110) (BLUE 92) ✓
14	WHITE/YELLOW	SW6	OUTER BOOM "DOWN" CYBER-TECH to MV5 (BLUE 111) (WHITE 93) ✓
15	WHITE		COMMON (+12VDC) CB 8 (GREEN 091)
16	GREEN		GROUND (-12VDC) (BLACK 020)
***1	RED	21	CB 7 TO PIN 4 ON GAUGE PANEL
		***	Relocate internal J.D. RED 21 to Plug 3 Pin 16

KRUCKEBERG 4RSPHH
HORSERADISH HARVESTER

PLUG #6	COLOR	WIRE #	DESCRIPTION
1	BLACK	120	REMOTE #1 SWITCH TO FRONT MV5
2	WHITE	121	REMOTE #1 SWITCH TO FRONT MV5
3	YELLOW	122	REMOTE #2 SWITCH TO FRONT MV5
4	RED	123	REMOTE #2 SWITCH TO FRONT MV5
5	GREEN	124	REMOTE #3 SWITCH TO FRONT MV5
6	ORANGE	125	STAR #1 REVERSE SWITCH TO CS11RDE
7	BLUE	126	STAR #2 REVERSE SWITCH TO CS11RDE
8	BROWN	127	STAR ANGLE SWITCH TO MV5 BY CAB
9	WHITE	128	STAR ANGLE SWITCH TO MV5 BY CAB
10	ORANGE	33	REMOTE # 3 SWITCH TO FRONT MV5
11			
12			
13			
14			
15			
16			

RED 1
RED 11
PURPLE 2
PURPLE 22
ORANGE 3
RED 15467
RED 151
PURPLE 96
ORANGE 97

PANEL SIDE / MACHINE SIDE

~~BEAR HARKES~~

1. RED 020 / RED 020
2. BLUE 36 / BROWN 34
3. BLACK 1 / BLACK 1
4. BLACK 12 / BLACK 12
5. BROWN 6 / BROWN 6
6. PURPLE 94 / PURPLE 94 & PURPLE 94 SPLICED
7. BLACK 34 / BROWN 35
8. YELLOW 25 / YELLOW 25

RED-7 - TACH SENSOR

BROWN-35 - LH WORK LIGHTS

WHT-199 - COOLANT TEMP ALERT

BLUE-199 - EXTRA WERE

GREEN-102 - OIL TEMP

ORANGE-4 - COOLANT TEMP

ORANGE-24 - A/C SWITCH

RED-13 - FUEL SHUT OFF

RED-2 - START SOLENOID

BLUE-18 - TACH SENSOR

GND BLACK-9 - GND

BLACK-12 - 2-SPEED

BLACK-1 - 4x4

BLACK-59 - BRAKE PRESS SWITCH

BLACK-17 - BRAKE

YELLOW-121 - STEER RIGHT

RED-120 - STEER LEFT

GND BLACK-9 - GND

GND BLACK-8 - GND ✓
YELLOW-25 - LOW OIL
RED-99 - EXTRA WIRE
BLACK-06 - CROSS PRESS SWITCH

GND BLACK-6 - GND

GND BLACK-7 - GND

RED-15 - CHOPPER FILTER

BROWN-10 - BACK UP LIGHTS

RED-02D - FROM TEMP SWITCH TO HYD COOLER VALVE

PURPLE-94 (x2) HEAD LIGHTS

BROWN-11 - PRIMARY ON/OFF ???

BROWN-34 - RHT WORK LIGHTS

YELLOW-99 - EXTRA WIRE

WHITE-104 - START SOLENOID

RED-13 - KEY ON

GND BLACK-2 - GND

BROWN-502 - TO TURN SIGNAL

GND BLACK-1 - GND

Advanced Farm Equipment, LLC

Customer KRUCKEBERG

W/O#

S# 97121

Initials	Section	Initials	Section
	Plastic		Rollers
_____	<input type="checkbox"/> Conveyors	<u>AL</u>	<input checked="" type="checkbox"/> Digger Bed
_____	<input type="checkbox"/> Airhead	<u>N/A</u>	<input checked="" type="checkbox"/> Primary
_____	<input type="checkbox"/> Sorting Table	<u>AL</u>	<input type="checkbox"/> Secondary
<u>NA</u>	<input type="checkbox"/> Trash Chute	<u>AL</u>	<input checked="" type="checkbox"/> Cross Conv
_____	<input type="checkbox"/> Stone Conveyor	<u>AL</u>	<input checked="" type="checkbox"/> Side Convs
_____	<input type="checkbox"/> Bin	<u>N/A</u>	<input type="checkbox"/> Stone Conv
		<u>AL</u>	<input checked="" type="checkbox"/> Sorting Conv or Bin Fill
		<u>NA</u>	<input type="checkbox"/> Bulk Loader
		<u>NA</u>	<input type="checkbox"/> Stone Conveyor
	Belting		Sprockets
	Airhead	<u>AL</u>	<input checked="" type="checkbox"/> Primary
<u>N/A</u>	<input type="checkbox"/> Door	<u>N/A</u>	<input type="checkbox"/> Secondary
<u>N/A</u>	<input type="checkbox"/> Sides	<u>AL</u>	<input checked="" type="checkbox"/> Cross Conv
<u>N/A</u>	<input type="checkbox"/> Pillow	<u>N/A</u>	<input type="checkbox"/> Lower Side Conv
<u>N/A</u>	<input type="checkbox"/> Diaphragm	<u>AL</u>	<input type="checkbox"/> Upper Side Conv
<u>AL</u>	<input checked="" type="checkbox"/> Cross Conv	<u>N/A</u>	<input checked="" type="checkbox"/> Sorting Conv or Bin Fill
<u>N/A</u>	<input type="checkbox"/> Stone Conv	<u>N/A</u>	<input type="checkbox"/> Bulk Loader
<u>AL</u>	<input checked="" type="checkbox"/> Rear Axle	<u>N/A</u>	<input type="checkbox"/> Stone Conv
<u>BN</u>	<input checked="" type="checkbox"/> Star Rolls	<u>N/A</u>	Gear Boxes
<u>N/A</u>	<input type="checkbox"/> Distributor	<u>N/A</u>	<input checked="" type="checkbox"/> Engine 15W
<u>N/A</u>	<input type="checkbox"/> Vine Belt Shield	<u>N/A</u>	<input type="checkbox"/> Airhead 15W
<u>AL</u>	<input checked="" type="checkbox"/> Bin <i>-(up 25' cross)</i>	<u>N/A</u>	<input checked="" type="checkbox"/> Chain Drive 90W
			<input checked="" type="checkbox"/> Grease All Bearings
			& Wear Plates
<u>BN</u>	Oil Tank	<u>Kyle</u>	<input checked="" type="checkbox"/> Durst Gear Box W/Syntec Oil
<u>BN</u>	<input checked="" type="checkbox"/> Breathers	<u>N/A</u>	<input checked="" type="checkbox"/> Breathers
<u>BN</u>	<input checked="" type="checkbox"/> Sight Gauge	<u>AL</u>	
<u>BN</u>	<input checked="" type="checkbox"/> Plumbed Per Specs	<u>NA</u>	
<u>BN</u>	<input checked="" type="checkbox"/> In Tank Filters	<u>Kyle</u>	

Advanced Farm Equipment, LLC

Customer

W/O#

S#

	Engine		Misc
BN	<input checked="" type="checkbox"/> Radiator Hoses		<input type="checkbox"/> Battery Cables
AL	<input checked="" type="checkbox"/> Heater Hoses	BN	<input checked="" type="checkbox"/> Control Cables
BN	<input checked="" type="checkbox"/> Engine Oil	AL	<input checked="" type="checkbox"/> Cover Wiring
	<input type="checkbox"/> Radiator Fluid	AL	<input checked="" type="checkbox"/> Decals
N/A	<input type="checkbox"/> Anti-Corrosive	AL	<input checked="" type="checkbox"/> Serial Number Plates
BN	<input checked="" type="checkbox"/> Half Water	AL	<input checked="" type="checkbox"/> Slow Moving Vehicle Sign
BN	<input checked="" type="checkbox"/> Half Anti-Freeze	AL	<input checked="" type="checkbox"/> Service Kit ?
BN	<input checked="" type="checkbox"/> Exhaust System		<input type="checkbox"/> Tool Box ?
BN	<input checked="" type="checkbox"/> Air Intake System	AL	<input checked="" type="checkbox"/> Digger Blades Per Spec
N/A	<input type="checkbox"/> Reversing Fan Option	N/A	<input type="checkbox"/> Goultter Blades Per Spec
	Hydraulics	Ryan	<input checked="" type="checkbox"/> Set Screws Tight
BN	<input checked="" type="checkbox"/> Needle Valves	AL	<input checked="" type="checkbox"/> AFE Table
BN	<input checked="" type="checkbox"/> Check Valves		<input type="checkbox"/> Vine Belt Dist
AL	<input checked="" type="checkbox"/> Flow Control Handles	BN	<input checked="" type="checkbox"/> Cross Dist
	<input type="checkbox"/> Hydraulic Oil	AL	<input checked="" type="checkbox"/> Bearings
Kyle	<input checked="" type="checkbox"/> Charge Pumps	BN	<input checked="" type="checkbox"/> Tires
	<input type="checkbox"/> Proper Motor Rotation	BN	<input checked="" type="checkbox"/> Touch Up Paint
Kyle	<input checked="" type="checkbox"/> Plugs In Pumps	W	<input checked="" type="checkbox"/> Chain & Sprockets To Spec.
AL	<input checked="" type="checkbox"/> Plugs In Manifolds		
	<input type="checkbox"/>		

Notes / Comments:

Hole in exhaust pipe

Motor Performance

Motor Performance

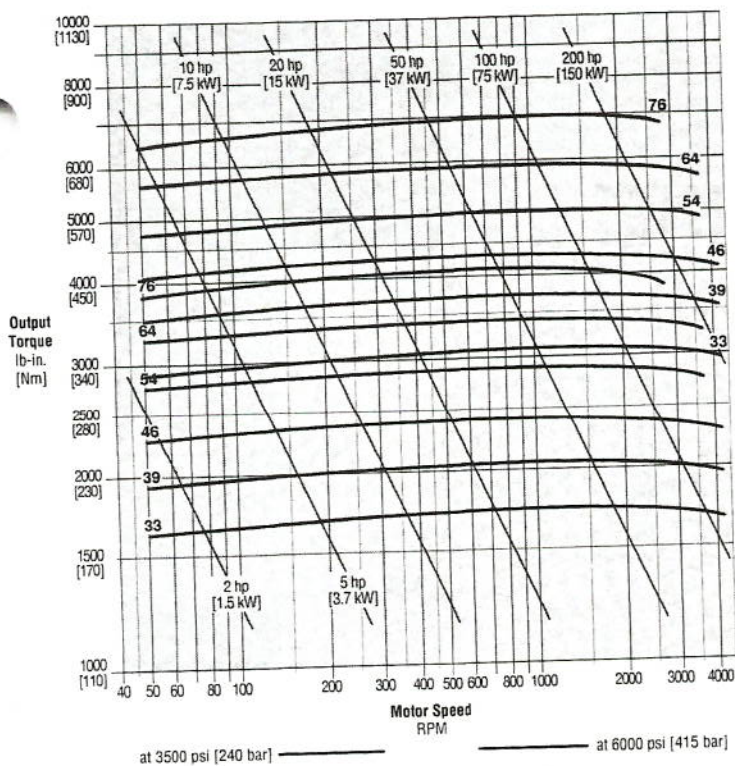
Model		33	39	46	54	64	76
Displacement	in ³ /rev	3.32	3.89	4.60	5.44	6.44	7.62
	cm ³ /rev	54,4	63,7	75,3	89,1	105,5	124,8
Maximum Shaft Speed	RPM @ 18°	4510*	4160	4160	3720	3720	2775
	RPM @ 10°	5380 ⁻	5380 ⁻	5380 ⁻	4810 ⁻	4810 ⁻	3425 ⁻
Maximum Output Torque †	lb-in	2959	3511	4149	4916	5807	6911
	Nm	334	397	469	556	656	781

* The maximum swashplate angle on model 33 motors is 15.5°.

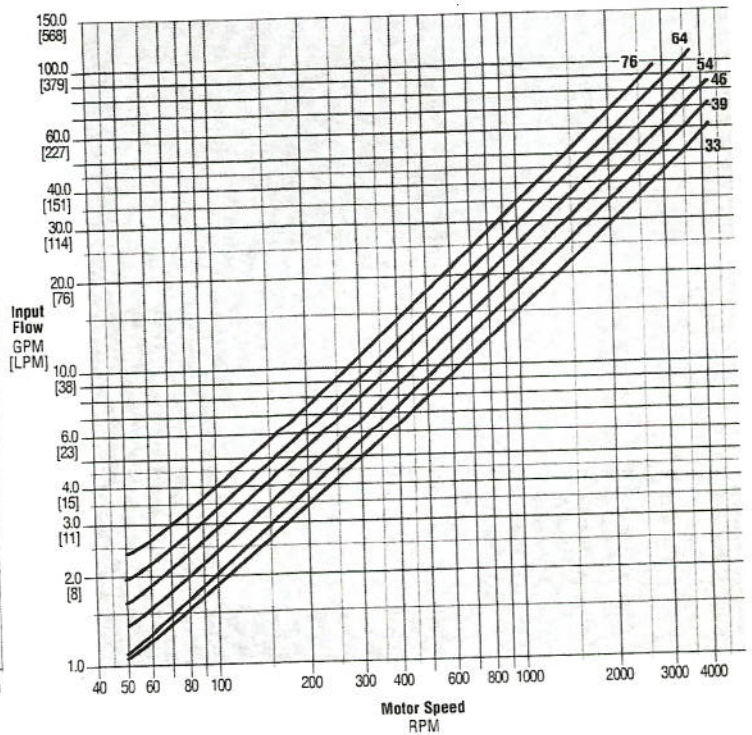
- These shaft speeds require maximum charge pressure relief: 340 psi [23 bar] pump and 280 psi [19 bar] motor.

† Maximum output torque is measured at 6000 psi [415 bar].

Output Torque vs Speed



Input Flow vs Speed



System Pressure 3500 psi [240 bar]
 Charge Pressure 220 psi [15 bar]
 Oil Viscosity 60 SUS
 Temperature 180° F [82° C]

Note: Operating the motor below 50 RPM is not recommended.