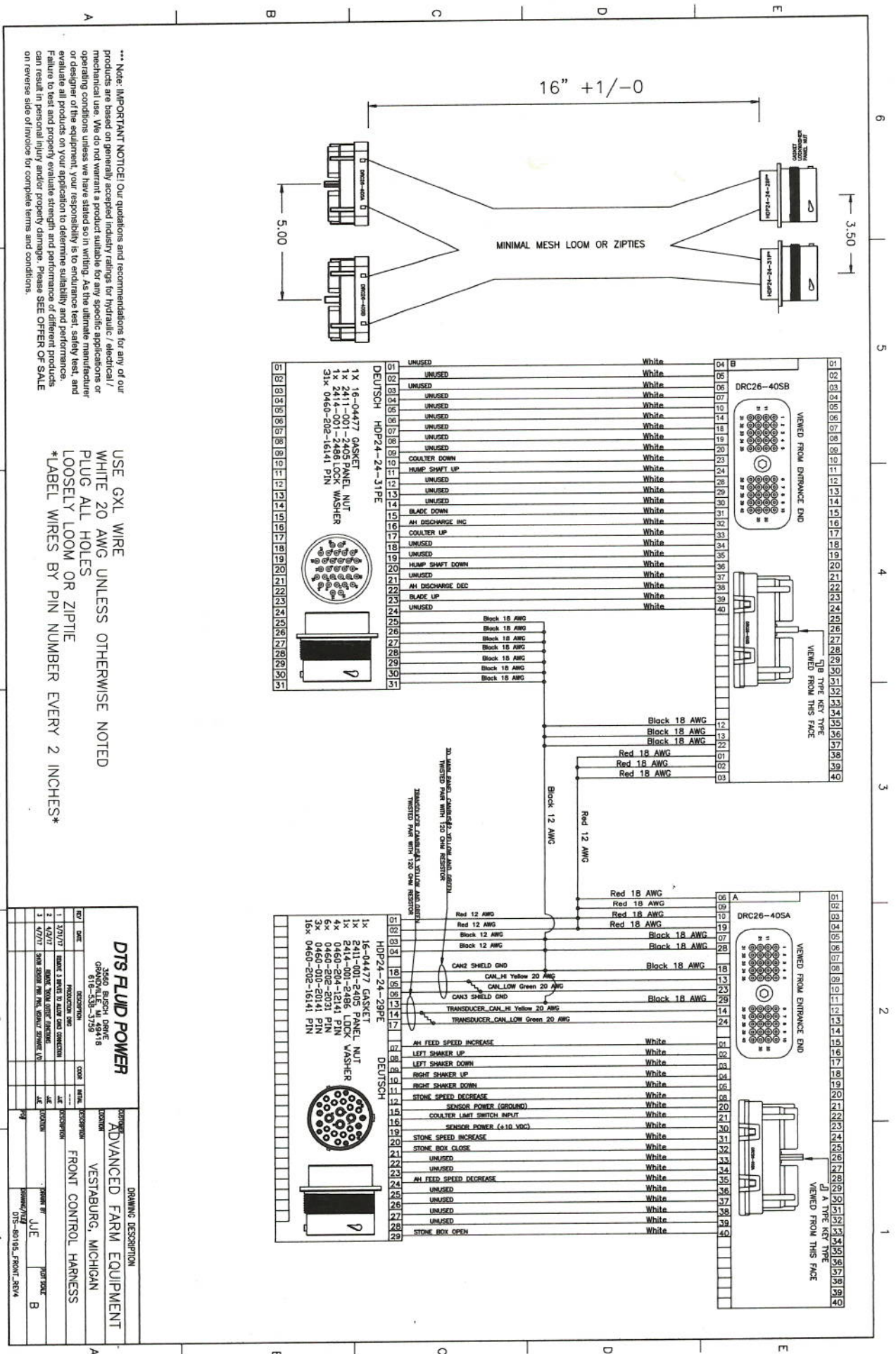


17083

Heartland

1 of 2



\*\*\* Note: IMPORTANT NOTICE! Our quotations and recommendations for any of our products are based on generally accepted industry ratings for hydraulic / electrical / mechanical use. We do not warrant a product suitable for any specific applications or operating conditions unless we have stated so in writing. As the ultimate manufacturer or designer of the equipment, your responsibility is to evaluate, test, safely test, and evaluate all products on your application to determine suitability and performance. Failure to test and properly evaluate strength and performance of different products can result in personal injury and/or property damage. Please SEE OFFER OF SALE on reverse side of invoice for complete terms and conditions.

USE GXL WIRE  
 WHITE 20 AWG UNLESS OTHERWISE NOTED  
 PLUG ALL HOLES  
 LOOSELY LOOM OR ZIPTIE  
 \*LABEL WIRES BY PIN NUMBER EVERY 2 INCHES\*

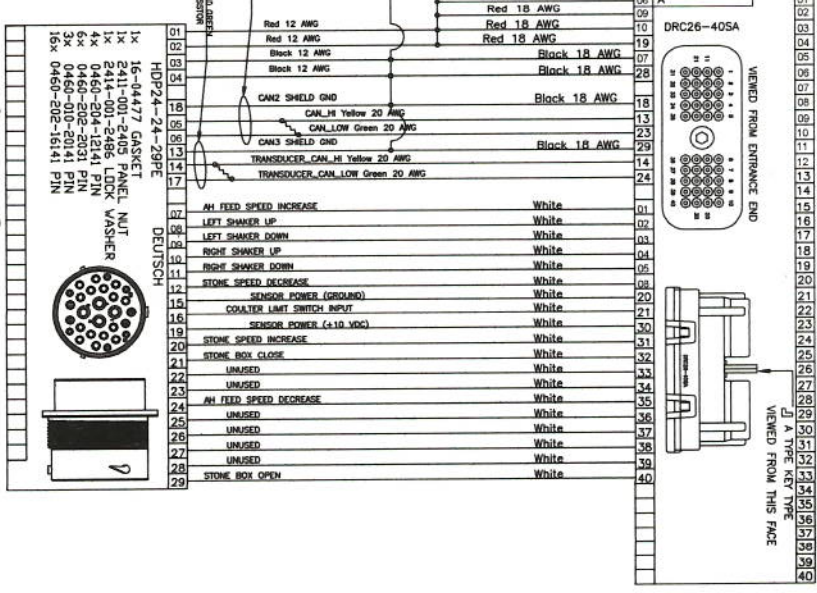
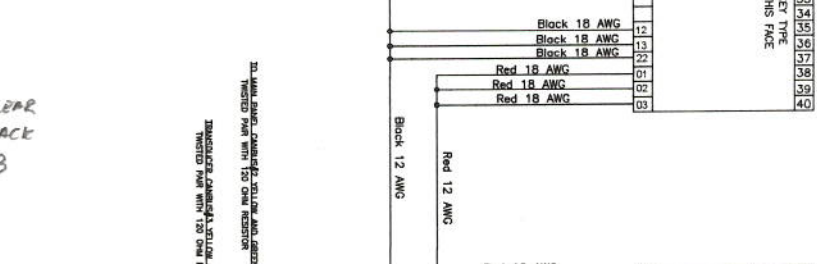
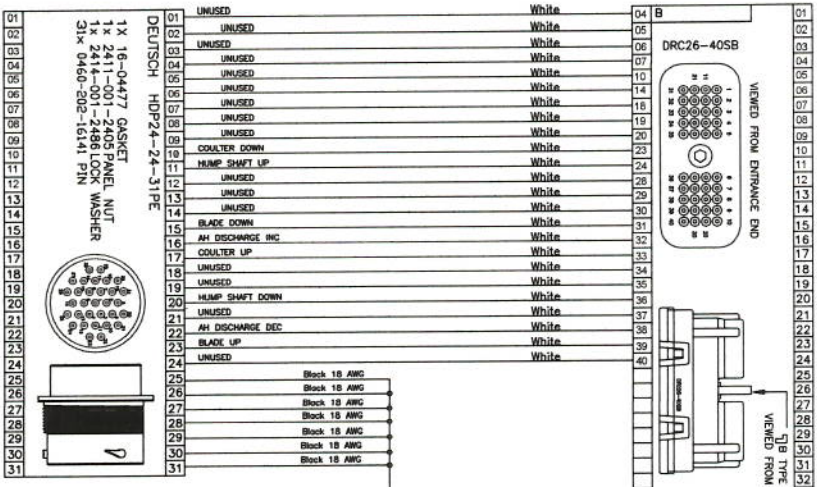
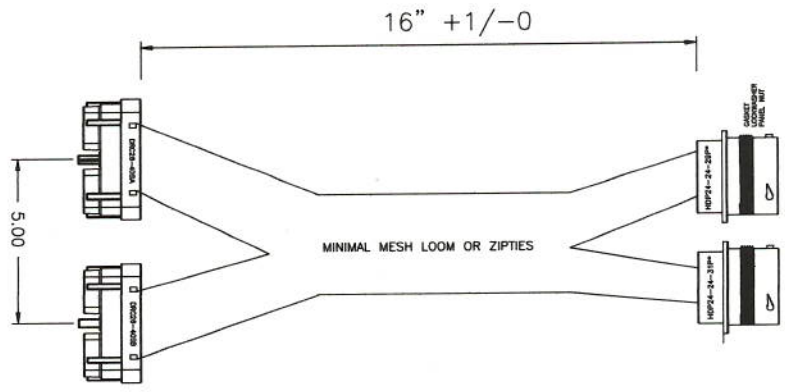
REV	DATE	DESCRIPTION	BY	CHK
1	12/17/17	ISSUE 1 REVISED TO ADD CAN CONNECTION	JK	JK
2	02/27/18	ISSUE 2 REVISED TO ADD CAN CONNECTION	JK	JK
3	02/27/18	ISSUE 3 REVISED TO ADD CAN CONNECTION	JK	JK

<b>DTS FLUID POWER</b>		DRAWING DESCRIPTION	
3260 BUSCH DRIVE		ADVANCED FARM EQUIPMENT	
0815-535-7129		VESTABURG, MICHIGAN	
		FRONT CONTROL HARNESS	
		DATE: JUL 18	
		BY: B	

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6 5 4 3 2 1



- 10 - WHITE 7
- 11 - ORANGE 1147
- 15 - WHITE 9
- 16 - YELLOW 76
- 17 - WHITE 8
- 20 - BLUE 1148
- 22 - GREEN 77
- 23 - WHITE 10
- 25 - VALVE GROUND
- 26 - " "
- 27 - " "
- 28 - " "

- 1 - RED 1
- 2 - RED 2
- 3 - BLACK-3
- 4 - BLACK-4
- 5 - BELDEN CLEAR
- 6 - BELDEN BLACK
- 7 - WHITE 153
- 8 - WHITE 3
- 9 - WHITE 4
- 10 - WHITE 6
- 11 - WHITE 5
- 12 - BLACK 77
- 13 - NOT USED
- 14 - NOT USED
- 15 - NOT USED
- 16 - RED 41
- 17 - NOT USED
- 18 - BELDEN BARE
- 19 - ORANGE 41
- 20 - WHITE 77
- 21 - WHITE 1
- 24 - BLACK 153
- 25 - NOT USED
- 26 - NOT USED
- 27 - NOT USED
- 28 - NOT USED

- 29 - WHITE 2

USE GXL WIRE  
WHITE 20 AWG UNLESS OTHERWISE NOTED  
PLUG ALL HOLES  
LOOSELY LOOM OR ZIPTIE  
\*LABEL WIRES BY PIN NUMBER EVERY 2 INCHES\*

DTS FLUID POWER		DRAWING DESCRIPTION	
REV	DATE	DESCRIPTION	BY
1	12/21/77	2500 DEUSCH DRIVE GRAND RAPIDS, MI 49508	JK
2	4/27/77	CHANGE 2 WIRE TO BLUE AND CONNECTION	JK
3	4/27/77	REMOVE 300A WIRE FROM HARNESS	JK
4	4/27/77	REMOVE 300A WIRE FROM HARNESS	JK
FRONT CONTROL HARNESS		FRONT CONTROL HARNESS	
DRAWN BY JJE		DATE 7/8/78	
CHECKED BY		APPROVED BY	
DTS-80195, FRONT, 86M			

**Front Controller 31 Pin Plug**

"OUTSIDE" FRONT ENCLOSURE HARNESS

**Pin # Wire Color / Number/Desc.**

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	White 7 "Coulter Down" Front Valve Bank
11	Orange 1147 "Hump Shaft Up" Reversing Relay
12	
13	
14	
15	White 9 "Blade Down" Front Valve Bank
16	Yellow 76 "A.H. Discharge Increase" Flow Control
17	White 8 "Coulter Up" Front Valve Bank
18	
19	
20	Blue 1148 "Hump Shaft Down" Reversing Relay
21	
22	Green 77 "A.H. Discharge Decrease" Flow Control
23	White 10 "Blade Up" Front Valve Bank
24	
25	Green "Ground" Front Valve Bank
26	Green "Ground" Front Valve Bank
27	Green "Ground" Front Valve Bank
28	Green "Ground" Front Valve Bank
29	Green "Ground" Front Valve Bank
30	Green "Ground" Front Valve Bank
31	Green "Ground" Front Valve Bank

Front Controller 29 Pin Plug

Pin # Wire Color / Number/Desc.

1	Red 1 +12v
2	Red 2 +12v
3	Black 3 Ground
4	Black 4 Ground
5	Belden White (Clear) CAN HI
6	Belden Black CAN LOW
7	White 153 "A.H. Feed Speed Increase" Flow Control
8	White 3 "Left Shaker Up" Front Valve Bank
9	White 4 "Left Shaker Down" Front Valve Bank
10	White 6 "Right Shaker Up"
11	White 5 "Right Shaker Down"
12	Black 77 "Stone Speed Decrease" Flow Control
13	
14	
15	
16	Red 41 "Coulter Limit Switch Input" Right Side of Digger Bed
17	
18	Belden (Bare) CAN 2 Shield Ground
19	Orange 41 "Sensor Power" (+10vdc)
20	White 77 "Stone Speed Increase" Flow Control
21	White 1 "Stone Box Close" Front Valve Bank
22	
23	
24	Black 153 "A.H. Feed Speed Decrease" Flow Control
25	
26	
27	
28	
29	White 2 "Stone Box Open"

# SALES ORDER

**Advanced Farm Equipment LLC**

5773 Crystal Road  
 Vestaburg MI 48891  
 (989) 268-5711

Sales Order Number 048613

Sales Order Date 12/09/16

Page 1

**SOLD** Advanced Farm Equipment  
**TO** 5773 Crystal Road  
 Vestaburg, MI 48891

**SHIP** Advanced Farm Equipment, LLC  
**TO** 5773 Crystal Road  
 Vestaburg MI 48891

<b>P.O. Number</b>		<b>Terms</b>	Cash on Del.
<b>Ship Via</b>	N/A	<b>Salesperson</b>	Greg Merrihew
<b>Project Code</b>	N/A	<b>Required</b>	12/09/2016
<b>Ship Number</b>			

ITEM	ORDERED	SHIPPED	BO	DESCRIPTION	PRICE	AMOUNT	TAX
------	---------	---------	----	-------------	-------	--------	-----

1.000

Heartland Electrical

n/a

QTY	Description

QTY	Description

<b>Subtotal</b>	.00
<b>* Sales Tax</b>	.00
<b>Invoice Total</b>	.00
<b>Payments</b>	.00
<b>Net Due</b>	.00

QTY	PART NO	DESCRIPTION
1	2001-0505	MD3
1	2001-1133	MC43
1	2001-0119	Wire Harness for DS115
1	2001-0507	MC2 Comm Cable
1	2001-1135	C1 Harness
1	2001-1136	C2 Harness
4	2001-0064	12v Battery
1	2001-0905	Quad input Camera Kit 7" Screen
2	2001-0906	Camera Only
2	2001-0907	20' Camera Cable
3	2001-0908	65' Camera Cable
3	2001-1119	Twin 4" Round Light Brkt (Truck Lights)
6	2001-1120	Grommet for 4" round light
3	2001-1121	4" Round LED Light - Red
3	2001-1122	4" Round LED Light - Amber
6	2001-1123	Wire Harness for truck lights
2	2001-1153	Reversing Relay
2	2001-1154	Reversing Relay Cover
4	2001-1155	100a Circuit Breaker
2	2001-1158	Potentiometer, LNR TPR, 10 Detents
2	2001-1159	Can Joystick 6 Momentary Toggles
4	2001-0469	3 Pin Plug (DTM06-3S)
30	2001-1160	Sz 20 Pin Nickle Plated
30	2001-1161	Sz 20 Socket Nickle Plated
15	2001-1162	Sz 20 Pin Gold Plated
15	2001-1163	Sz 20 Socket Gold Plated
1	2001-1173	60 Amp PAL Fuse
9	2001-1174	15amp ATM Fuse
17	2001-1175	20amp ATM Fuse
7	2001-1176	30amp ATM Fuse
2	2002-28	Caution No Step Decal
3	2002-29	Warning Heavy Fuel Tank Decal
1	2025-138	J.D. Cab
18	2001-0741	Grey Seal
11	2001-0325	2 Pin Shroud Weatherpack
10	2001-0874	16-14awg Socket Terminal
2	2024-0119	Large Tach Sensor
34	2001-0169	2CKT Hirschman w/LED
34	2001-0166	Flat Seal
3	2001-0167	3CKT Hirschman
2	2001-0250	N.O. Relay
2	2001-0251	Micro Switch
3	2001-0335	1/4" Strain Relief
8	2001-0493	16-14awg #10 Ring Terminal
3	2001-0323	16-14awg Male/Female Spade
10	2001-1068	Female Spade

Bill Of Materials

Hydraulics Dept

Heartland W.O.#048613

2	2001-0337	3/8" Strain Relief
1	2001-0915	DT06-08SA 8 Pin Receptacle
1	2001-0914	DT04-08PA-L012 8 Pin Plug
10	2001-0123	Male Pin Contact
1	2001-0917	W8P Wedge
1	2001-0916	W8S Wedge
16	2001-0055	White Cavity Plug
1	2001-1082	SAI Speedometer Cable
1	2001-0808	TC-115 Temp Switch
1	2001-0165	XP-1C-1800J
2	2001-0493	16-14awg #10 eyelet
52	2001-0278	DT06-2S 2 Pin Deutsch Plug
52	2001-0279	W2S Wedge
46	2001-0124	1062-14-0122-PS / 1062-14-0122 Socket Contact
13	2001-0497	12-10awg 1/4" Ring Terminal
4	2001-1118	Blue Seal
12	2001-0299	2 Pin Shroud Weatherpack
4	2001-1116	Male Pin Contact
5	2001-0495	16-14awg Female Disconnect
100	2001-0492	16-14awg Butt Conector
100	2001-0326	16-14awg to 12-10awg Step Down Butt Conector
30	2001-0496	12-10awg Butt Connector
5	2001-0129	DT06-4S 4 Pin Plug
5	2001-0137	W4S Wedgelock
6	2001-0235	120 Ohm Resistor
22	2001-0738	Male Pin Contact
22	2001-0874	Female Socket Contact
1	2001-0828	One Pin Plug Weatherpack
3	2001-0126	DT04-4P 4 Pin Receptacle
3	2001-0135	W4P Wedge
8	2001-0822	DT06-6S - 6 PIN PLUG
150	2001-1151	0462-201-16141 / AT62-201-16141
8	2001-0824	W6P Wedge
2	2001-0825	DT04-6P - 6 PIN RECEPTACLE
150	2001-0030	0460-201-16141 #16 Pin
2	2001-0823	W6S Wedgelock
7	2001-0467	Delphi 4 pin Plug
7	2001-0465	4 Contact TPA - 150 Series Lock
14	2001-0456	Red Seal
14	2001-0540	Red Cavity Plug
2	2001-0826	ATM-6348 Temp Sender
2	2001-0830	ATM-5226 Temp Sender Harness
64	2001-0277	DT04-2P 2 Pin Receptacle
18	2001-0221	1062-20-0122PS Stamped and Formed
4	2001-0220	1060-20-0122PS Stamped and Formed
64	2001-0280	W2P
1	2001-0275	LS1900



Bill Of Materials

Hydraulics Dept

Heartland W.O.#048613

30	2001-0124	Contact Socket 14-16 AWG PS=Partial Strip <4000 Qty
30	2001-0123	Contact Pin 14-16 AWG PS=Partial Strip <4000 Qty
3	2001-0133	HDP26-24-31SE 31 Pin Female Plug
2	2001-1156	HDP26-24-29SE 29 Pin Round Plug
1	2001-1130	HDP26-24-16SE
4	2001-1164	HDP24-24-19SE
5	2001-0131	HDP24-24-31PE
2	2001-1157	HDP24-24-29PE
1	2001-1144	HDP24-24-16PE
1	2001-1165	HDP26-24-19PE
113	2001-0078	31116 / 0460-215-16141 / AT60-215-16141
82	2001-0080	31117 / 0462-209-16141
6	2001-0125	DT04-12PA-L012 12 Pin Recepticle Mounted
6	2001-0276	DT06-12SA / DT06-12S 12 Pin Plug
2	2001-0389	5B373 / 9080GH10 Terminal End Clamp
13"	2001-0388	5B371 / 9080GH136 Channel
4	2001-1112	78310 In Line Fuse Holder
30	2001-0110	Terminal Block Section 9080 GK6
3	2001-0109	783510/38680 - A20R166HCR
3	2001-1146	Panel for 2001-0109 A20P16
1	2001-0164	783510/55420 - A1210CH Enclosure
1	2001-1008	A12P10 Panel
1	2001-0239	Battery Disconnect
1	2001-0296	Faceplate
3	2037-00500	Small Distribution Block
1	2001-0879	10 Gang Fuse Block
1	2001-0776	6 Gang Fuse Block
*1	2022-0542	DTS-80080 / 102EC21700A HFX48
*1	2022-0539	HFX A 40 PIN HARNESS 3FT (AFE Stock)
3	2001-0648	LED Amber
3	2001-0647	LED Red
2	2001-0486	LED Strobe
2	2001-1046	LED Spot Light (Headlight)
16	2001-1047	LED Flood Light (Work)
5	2001-0338	Strain Relief 5/8"
2	402998	20w Spudnik Worklight
1	2001-0176	XM-6C-200R/HRAT
1	2001-0474	Back Up Alarm Switch - 8 Amp Max
1	014-30018	Auto Coulter Lift Switch Brkt
1	2001-0009	SPDT Snap Action Limit Switch
2	2001-1124	Size 8 Cavity Plug
*1	2022-0694	HEARTLAND 2017 CONTROLS HARDWARE
*	at were not supplied, please see attached document	
1	2001-0246	Banner Ultrasonic Sensor
1	2001-0004	Large Actuator 6" stroke D12-20A5-06WC
2	2001-0003	Large Actuator 3" stroke D12-20A5-03LE

**Bill Of Materials**  
**Heartland W.O.#048613**

**Hydraulics Dept**

3	2001-0008	Reversing rocker Foot Switch Lektro-Lok L-2-S
1	2001-0039	Electric Fuel Pump
2	2001-0049	Kilo Knob JD-90-4-5
1	2001-0076	Snap in light
2000ft	2001-0077	14 AWG Wire
200ft	2001-0090	12 AWG Wire
50	2001-0113	18AWG 4 Conductor - Shielded Belden 9418
3	2001-0134	W12p
3	2001-0136	W12S
1	2001-0139	Reversing Valve Switch
1	2001-0140	Rear Steering Centering Switch
1	2001-0152	Warning Buzzer W/Light
1	2001-0815	Fuel Level Sender For 27"-36" Deep Tank
1	2001-0259	1" Diameter Red Heat Shrink 1' Long
1	2001-0260	1" Diameter Black Heat Shrink 1' Long
4	2001-0261	Solder Pellet 3/0
50ft	2001-0262	2/0 Battery Cable
2	2001-0263	3/0 Battery Lug 3/8" Eye
2	2001-0264	3/0 Battery Lug 1/2" Eye
4	2001-0297	Packard Cable Seal Green #12015323
2000ft	2001-0305	16 AWG Primary Wire/ THHN
30	2001-0312	Butt Connector, 22-18 AWG, Non Insulated
12	2001-0320	16-14 AWG 5/16" Eye Non-Insulated
10	2001-1178	6AWG Ring Terminal For 1/2" Stud
10	2001-1177	6AWG Ring Terminal For 3/8" Stud
4	2001-0336	Strain Relief
14	2001-0396	Panel Relief Jam Nut
12	2001-0449	18-16 AWG Female Terminal - Packard
4	2001-1054	Camera Mounting Magnet
1	014-40002	Foot Pedal Brkt Assy
1	2030-00001	Engraved Label Kit for Cab (Gauge Panel)
1	2030-02061	Door Stop RB-3
1	2001-1180	Heavy Duty Foot Switch
1	2001-1128	DT06-12SB
1	2001-1129	HDP26-18-8SN
1	2001-1130	HDP26-24-16SE
1	2001-1131	HDP26-24-9SE
15ft	2001-0257	Expandable Sleeving Black 3/4"
20ft	2001-0255	Expandable Sleeving Black 1/4"
300ft	2001-1147	1/4" FLEXO F6 BRAIDED SPLIT SLEEVING
200ft	2001-1148	1/2" FLEXO F6 BRAIDED SPLIT SLEEVING
80ft	2001-1149	3/4" FLEXO F6 BRAIDED SPLIT SLEEVING
80ft	2001-1150	1" FLEXO F6 BRAIDED SPLIT SLEEVING
100	2001-1127	31123 / 0462-203-12141
100	2001-1126	31122 / 0460-204-12141
10	2001-0084	Panel Lockwasher-31 Pin Recept
10	2001-0028	Retaining Nut

**Bill Of Materials**  
**Heartland W.O.#048613**

**Hydraulics Dept**

10	2001-1168	DEUTSCH Gasket
100	2001-0751	Belden 8770 3 conductor 18 awg
10	2001-0880	8 AWG #10 Eye
30 ft	2001-0884	Belden 8619 Multi conductor
1	2001-0912	Terminal Ground Bar
1	2023-0003	Seal for Steering Sensor Box
1	2024-0020	A/C Hose Kit
1	2024-120	A/C Therm Switch
1	2024-0133	A/C Drier
1	2024-0134	A/C Compressor
1	2024-0231	John Deere A/C Condensor
1	2024-0255	525 hp QSX Enclosed Engine Assy
5	2001-0431	Button for Hole Blanks
30ft	2001-0162	8 AWG Wire
50ft	2001-0500	WB6 Battery Cable
1	2001-0589	512-3026
1	2001-0588	512-3023
15	2001-0591	512-4282
15	2001-0590	571-3506901
4	2001-0470	WM-3S
4	2001-0550	WM-3P
4	2001-0551	DTM06-3P

<b>Item I.D.</b>	<b>Item Description</b>	<b>Qty</b>
DTS-80185-48-FRONT	HARVESTER HFX48 CONTROLLER	1
DTS-80185-48-CENTER	HARVESTER HFX48 CONTROLLER	1
DTS-80185-48-REAR	HARVESTER HFX48 CONTROLLER	1
DTS-80186	RELAY AND FUSE MODULE - PRIMARY	1
DTS-80187	RELAY AND FUSE MODULE - SECONDARY	1
DTS-80188	AFE HARVESTER DISPLAY 7IN	1
37702-1AN0022	70A 12V FUSED POWER RELAY MODULE	3
DTS-80189	2 X 4 KEYPAD	2
H10086HLL-MC1333	BLACK 10X8X6 ENCLOSURE	2
ABP-108-259-A	UNIVERSAL PRE-DRILLED BACKPLATE	2
2NPA1	VIBRATION ISOLATOR	8
DTS-80190	4 X 3 CAN KEYPAD	4
24452	REVERSING RELAY MODULE	2
97297	COVER FOR 24452 REVERSING RELAY MODULE	2
DTS-80195	HFX A/B CABLE TO ROUND DEUTSCH HARNESS	2
DTS-30103	HFX A 40 PIN HARNESS 3FT	1
DTS-30104	HFX B 40 PIN HARNESS 3FT	1
0460-202-2031	DEUTSCH PIN	10
0460-010-20141	LAD 0460-010-20141 PINS	10