

Engine Instrument Panels and Controls

<u>Contents / Notes</u>	<u>Drawing Number</u>	<u>Page</u>
Electronic Controls Accessories List.....		ACC10 - 02
Instrumentation and Controls Kits (RE508625; RE508626)		ACC10 - 03
Suspended Throttle Installation		ACC10 - 04
Floor-mounted Throttle Installation		ACC10 - 05
Basic Diagnostic Module Specifications (RE538507).....		ACC10 - 07
Basic Diagnostic Module Installation Information (RE538507).....		ACC10 - 09
Connector Supplier Information		ACC10 - 10
 Application Drawings		
Wiring Harness (3.7m Extension).....	RE516542.....	ACC10 - 11
Wiring Harness (1m Extension)	RE516537.....	ACC10 - 12
Instrument Panel, Full-Feature	RE521564.....	ACC10 - 13
Instrument Panel, Basic	RE522233.....	ACC10 - 14
Gauge Dimensions		ACC10 - 15
Throttle, Hand, Electronic Control	RE69667.....	ACC10 - 16
Throttle Sensor (Drawing)	RE57391.....	ACC10 - 17
 Instrument Panel - Mechanically Controlled Engines		
Control Panel (Drawing)	R522445	ACC10 - 19
Control Panel (Wire Schematic)	R522445	ACC10 - 20
 Field-installed Kit for Hazardous Environment Powerview Instrument Panel - 4.5L, 6.8L, 8.1L, 12.5L		
RE500535	RE500535	ACC10 - 21
 HazLoc Ship-direct ECU Enclosure (Option 97GW)		
RE539156	RE539156	ACC10 - 22

Electronic Controls Accessories List

Instrument Panel and Panel Kits		Comments
RE521564	Full-featured Plug-&-Play Instrument Panel	Provided with 3-state and no analog throttle
RE522233	Basic Instrument Panel	Provided with ramp throttle
RE522526	Custom Instrument Panel Assembly Kit	Includes basic gauges, connectors, databus module and instructions
RE508626	2-state Throttle Switch Kit	

Individual Components		Comments	Included with:		
			RE521564	RE522526	RE508626
RE505259	Instrument Panel Wiring Harness		X		
RE521565	PowerView Diagnostic Gauge		X	X	
RE521566	Coolant Temperature Gauge		X	X	
RE521567	Oil Pressure Gauge		X	X	
RE521568	Tachometer		X	X	
RE163465	Shutdown Override Switch		X	X	
RE162423	Speed Select (Bump) Switch		X		X
RE162424	Bump Enable Switch		X		X
RE162425	High / Low Speed Selector Switch				X
RE198505	3-State Speed Selector Switch		X		
RE521569	12/24-volt System Voltage Gauge				
RE521580	Audible Warning Alarm Module				
RE521570	Percent Load Gauge				
RE67334	12-volt Wait Lamp Assembly	For use with intake heater			
RE132093	24-volt Bulb	Use conversion to 24-volt wait lamp			
RE69667	Analog Hand Throttle Potentiometer	Rotary knob type			
RE521820	Backlight Dimmer Control				
RE516542	12-ft Instrument Panel Extension Harness	21 pin			
RE507276	12-ft Diagnostic Gauge Adapter Harness	For use without RE162429 panel or RE508625 kit			
RE538507	Basic Diagnostic Module	For connector and socket availability, see Connector Supplier Information.			
Analog Throttle Potentiometer		For part numbers and assembly instructions, refer to Accessory section "Instrument Panels/Controls" (ACC10) drawing RE57391.			
RE192470	Ramp Throttle Switch				
RE519695	Small Panel Wiring Harness				
RE516537	Adapter Harness (3 ft.)	21 pin			
RE519876	Foot Throttle, Suspended				
RE519877	Foot Throttle, Floor-mounted				
RE508492	24-volt Backlight Jumper Wire				
RE508493	12-volt Backlight Jumper Wire				
RE163465	Push Button Shutdown Override	The harness connection for the shutdown override button assembly is a Packard Metri-Pack 150 Series, two-cavity male connector, #12162000 with #12045773 sealed male terminals, cable seals and a #12052634 TPA or secondary lock.			

INSTRUMENTATION AND CONTROLS KITS (RE522526; RE508626)

The RE522526 instrumentation and wiring kit includes all the parts that are included in the RE521564 instrument panel except for the throttle switches, which can be added by purchasing a separate switch kit, RE508626. The RE522526 instrumentation and wiring kit includes a diagnostic gauge, tachometer, coolant temperature gauge, oil pressure gauge, key switch, shutdown override switch, instructions, and all the necessary electrical connectors to make your own harness. All you need to add is the actual wires and a throttle control.

Instrumentation and Wiring Kit RE522526		
Qty.	Part Number	Part Description
1	RE521565	PowerView Diagnostic Gauge
1	RE521568	Tachometer
1	RE521567	Oil Pressure Gauge
1	RE521566	Coolant Temperature Gauge
1	AE21116	Fuse Holder (Buss HKP-HH)
1	AT28061	Fuse (AGC-5)
1	AR58126	Ignition Switch (with two keys)
1	R44342	Nut for key switch
1	A4827R	Washer for key switch
1	L38138	Connector body for key switch
3	U46662	Locking spade terminals to fit key switch connector body 14-16 ga.
4	57M7498	Locking spade terminals to fit key switch connector body 12 ga.
1	57M7748	21 Pin Connector (00-00-7681)
5	R78068	NO. 12 Pin (12-14 ga., 00-00-3912)
15	R78066	NO. 16 Pin (16-18 ga., 00-00-3097)
4	R78069	Sealing Plug (16 AWG 00-00-2914)
1	RE163465	Shutdown Override (Rocker) Switch
3	RE521042	PowerView Jumper Harness
1	RE521043	PowerView Terminator Plug
1	57M7756	3 Position Connector
1	57M8133	3 Position sec. lock
1	AZ54533	6 Position Connector
1	57M7677	6 Position sec. lock

Kit RE522526 (Continued)		
Qty.	Part Number	Part Description
1	57M8131	CAN Terminator Plug
10	R78065	NO. 16 Socket
3	R104919	Pin Terminal
3	57M7258	Cable Seal
1	57M7256	2 Pos. Connector
1	57M7289	2 Pos. TPA
1	Z55304	Butt Connector

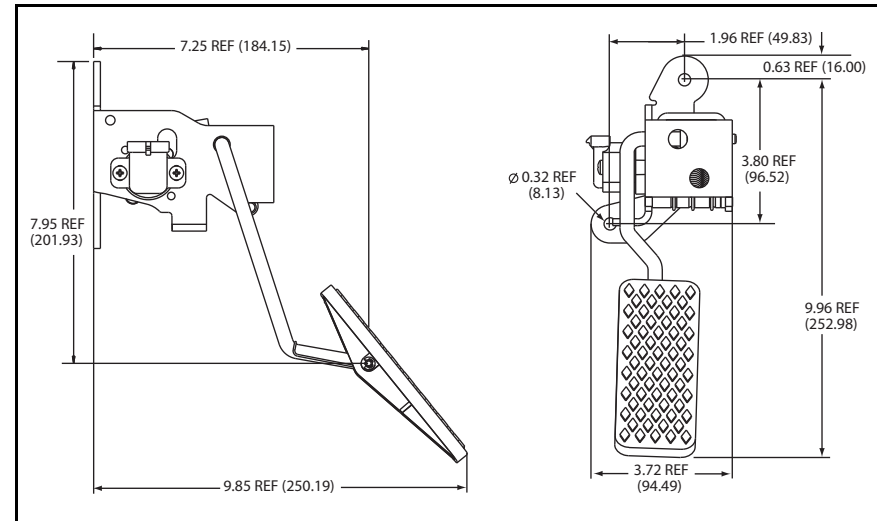
Switch Kit RE508626		
Qty.	Part Number	Part Description
1	RE162423	Rocker Switch (Speed Select "Bump")
1	RE162424	Rocker Switch (Bump Enable)
1	RE162425	Rocker Switch (High / Low "Idle" Speed Select)

SUSPENDED THROTTLE INSTALLATION

1. Choose the desired location for mounting the EAP and drill holes per diagram, "Suspended Throttle Installation."
2. Locate the EAP aligning the mounting holes with the panel mounting holes.
3. Install mounting screws (maximum diameter = 5/16") and tighten. This will secure the unit to the panel.
4. Plug the wiring harness connector into the unit.
5. Restrain any objects that may interfere with the operation of the EAP away from the pedal.

NOTE:

The connector is polarized and will only plug into the unit one way. A clip on the unit will engage the connector when properly plugged in.



Suspended Throttle Installation

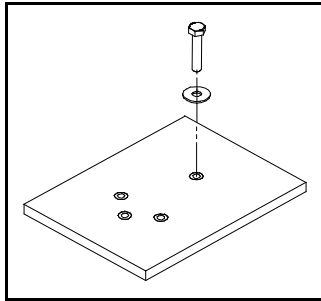
FLOOR-MOUNTED THROTTLE INSTALLATION

Installation Instructions

1. Ensure vehicle floor pan area is flat, clean and free of debris.

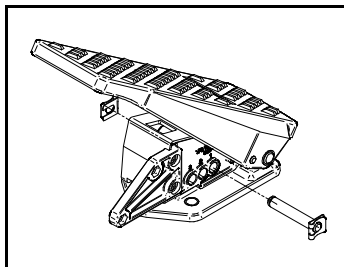
Note: It is recommended that the pedal is secured directly to the floor pan, not through any carpet, rubber mat or compressible material.

2. Loosely fit an M8 bolt and large form washer to the rear-most fixing position. Screw in to leave approximately 8mm between floor pan and the underside of the washer.



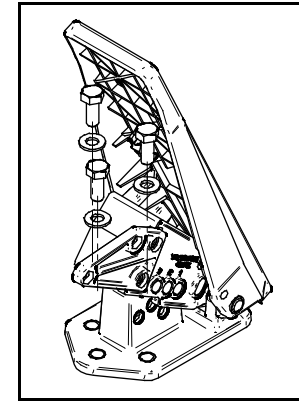
Floor Mounting Plate

3. Remove one clevis clip from the pedal (see following diagram), and slide out the clevis pin. Set the pin and clip aside for later re-fitting.



Clevis Pin and Clip

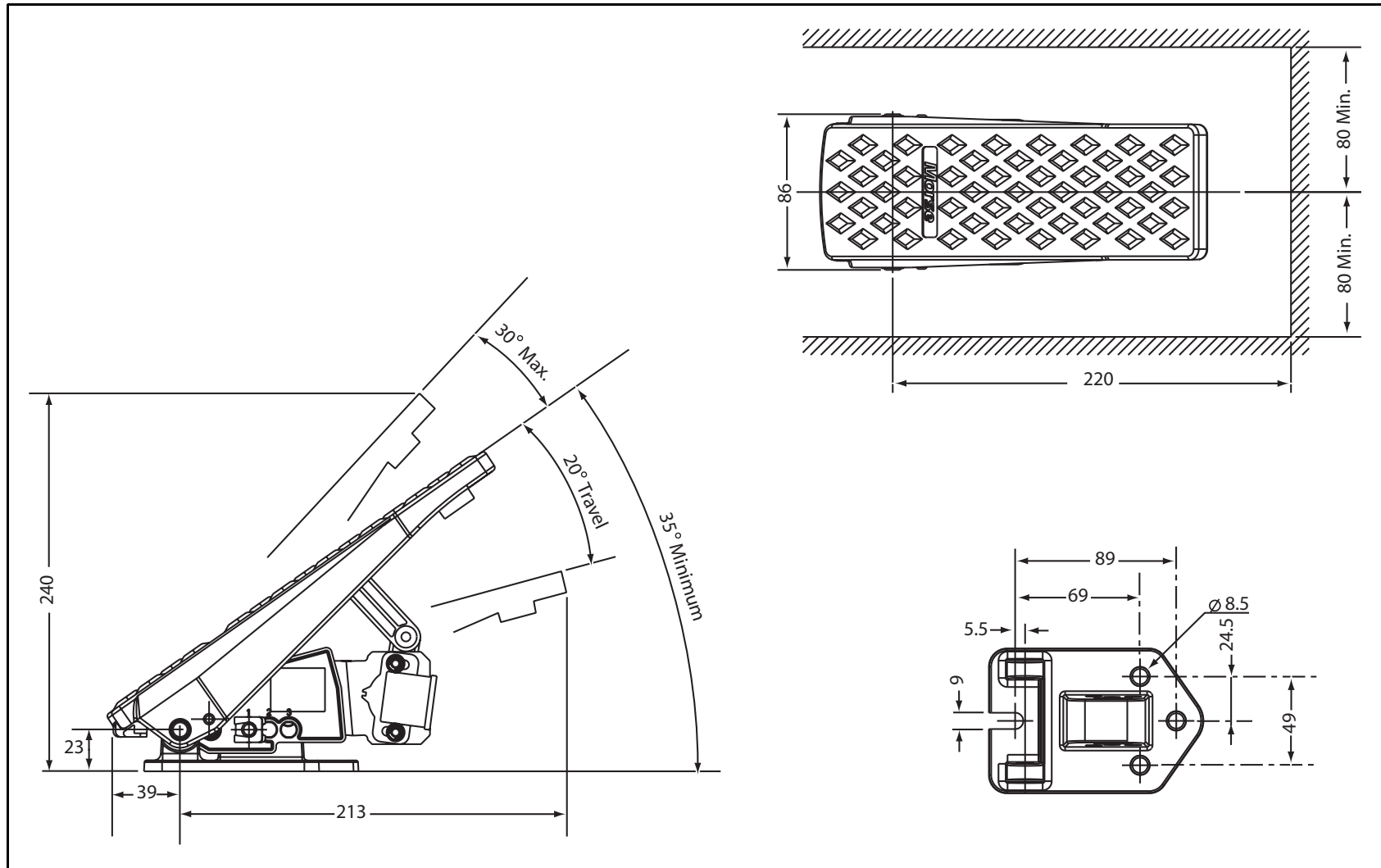
4. Locate the rear fixing slot in the base molding under the large washer of the rear mounting bolt. Slide fully rearwards onto the bolt shank.
5. Fit 3 X M8 bolts and standard plain washers through the front fixing holes in the base.



Throttle Mounting Base

6. Tighten all 4 mounting bolts evenly to 17Nm \pm 3Nm.
7. Re-fit the clevis pin to set the desired idle position of the treadle. As the treadle is raised, the pin location holes align with the individual holes within the base molding.
8. Re-fit the clevis clip to secure the pin.
9. Couple the electrical connectors to the vehicle harness.
10. Dress the cable in accordance with the vehicle build instructions.
11. Test the pedal for correct function in accordance with the vehicle build instructions.


For overall "Floor-mounted Throttle Installation" details, see the following diagram.



Floor-mounted Throttle Installation

BASIC DIAGNOSTIC MODULE SPECIFICATIONS

Basic Diagnostic Module - RE538507

RE538507	Features
	<ul style="list-style-type: none"> • Display supports electronically controlled engines and equipment applications that use SAE J1939 Controller Area Networks. • Displays Active and Stored diagnostic trouble codes for diagnosing equipment malfunctions. • Displays Engine Hours, SPN, FMI, and OC information on a graphic display. • Provides enhanced visual alarm indication using Ultra-bright ALARM or SHUTDOWN LED's (amber and red). • Simple installation and connections to the system bus. • Rugged design for demanding applications.

Operating Voltage: 6.0 VDC minimum to 36 VDC maximum

Power Supply Operating Current:

- 460mA max @ 12VDC
- 810mA max @ 24VDC

Reversed Polarity: Withstands reversed battery terminal polarity.

Environmental

- Operating Temperature: -40 C to 70 C (-40 F to 158 F)
- Storage Temperature: -55 C to 85 C (-67 F to 185 F)
- Sealing: IP68

CAN Bus: SAE J1939 compliant

Case: Polycarbonate /PBT blend

Clamp: PBT

Connectors:

- 4-pin AMP "Mini-universal Mate-N-Lok" connector
- AMP Plug Housing (P/N 172338-1)
- AMP Contact Socket/Terminal (P/N 171639-1) - 4 sockets per plug

Maximum Panel Thickness: 3/8 inch (9.6 mm)

Shipping Weights: 0.2 lb. (0.1 kg.)

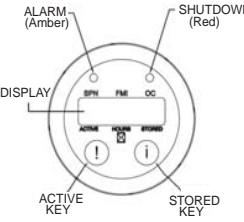
Shipping Dimensions:

3-7/8 x 2-3/4 x 2-3/4 in. (98.4 x 69.85 x 69.85 mm)

Product Description

The diagnostic module is a CAN device that receives data from a controller or ECU and then displays Active and Stored Fault messages and Engine Hours.

The default mode provides hourmeter data from the ECU for cumulative engine hours.

RE538507	Fault Messages
	<p>The module is equipped with</p> <ul style="list-style-type: none"> • Two buttons to quickly select between Active or Stored Faults • A graphic display • Two LED's to indicate the Active fault's Alarm or Shutdown status in a sealed enclosure that matches the PowerView line of gauges.

Fault Messages

Fault messages are formatted to display SPN (Suspect Parameter Number), FMI (Failure Mode Indicator) and OC (Occurrence Count) codes that conform to the SAE J1939 protocol.

Up to 32 Active or Stored messages may be displayed/cycled at a rate of three seconds per message. Fault message format contains three banks of numbers representing:

- SPN -6 digits
- FMI - 2 digits
- OC - 3 digits





WARNING!

The module displays any valid fault data received through the CAN bus as long as it complies with the SAE J1939 communications protocol. When reading CAN information, it is important that care is taken to refer to the engine's technical manuals to insure proper interpretation of the data.

For more specific information, contact the engine manufacturer or refer to the SAE J1939 specifications at www.sae.org.

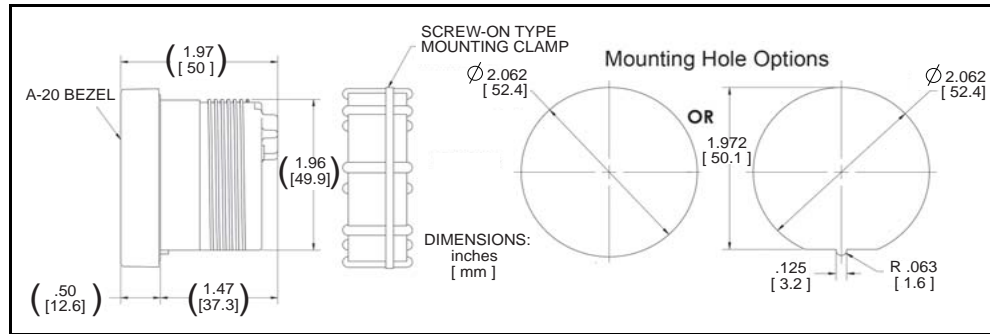
Display Operation

Up to 32 diagnostic fault codes may be displayed for three seconds each. Whether in Active or Stored mode, pressing "!" or "i" respectively, will immediately advance to the next message. Holding down a key will quickly cycle through messages.

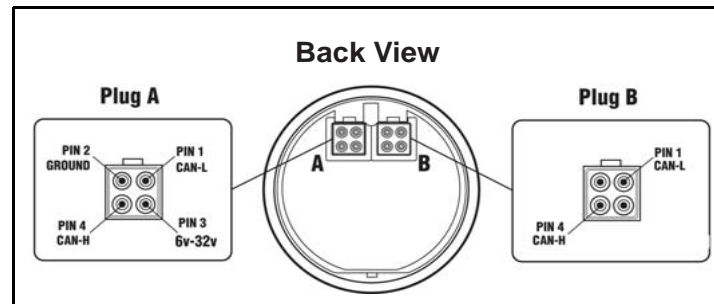
<p>Engine Hours</p> 	<p>By default, the unit displays in hourmeter mode, indicated by a cursor above the word HOURS. After viewing Active or Stored Faults, the screen will return to Engine Hours mode.</p> <p>PGN (Parameter Group Number) 65253, Engine Total Hours of Operation</p>
<p>Active Faults</p> 	<p>When the diagnostic module receives an Active Fault:</p> <ul style="list-style-type: none"> • the LED Alarm will light • the cursor will indicate 'Active' • all Active Fault code(s) will display <p>After scrolling through all the faults, the display returns to Engine Hours. After three seconds the module will look for the next Active Fault message and the process repeats.</p> <p>You may also display Active Faults at any time by pressing "!".</p>
<p>Stored Faults</p> 	<p>Press "i" to display Stored Faults. Notice the cursor moves to the STORED indicator. After the module scrolls through all the Stored Faults, the device returns to Engine Hours.</p> <p>NOTE: If the LED Alarm lights up while displaying Stored Faults, you may press "!" to immediately display the Active Faults. Otherwise, the display will finish scrolling through the Stored Fault codes, return to Engine Hours for three seconds, and then display the Active Faults.</p>
<p>Blank Display</p> 	<p>When all dashes are displayed in place of numbers, the module received invalid or no-data-to-display Engine Hours, Active or Stored Faults.</p>

BASIC DIAGNOSTIC MODULE INSTALLATION INFORMATION

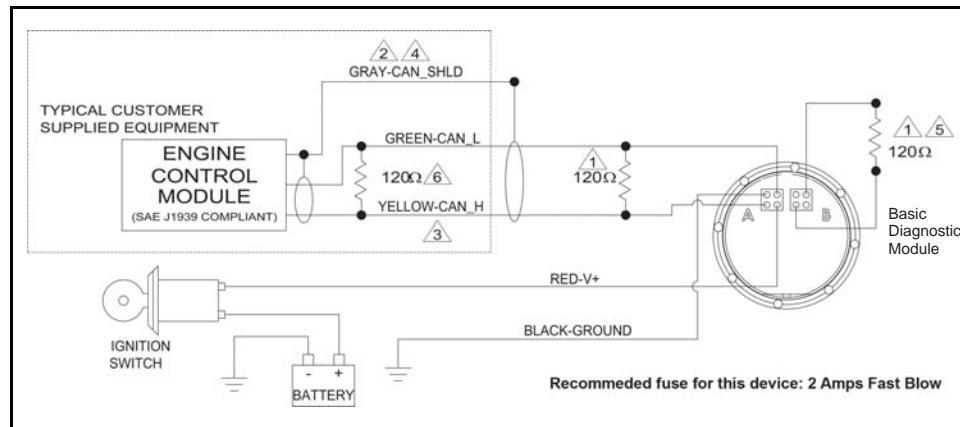
Product Dimensions



Connection Detail









Typical Wiring Diagram



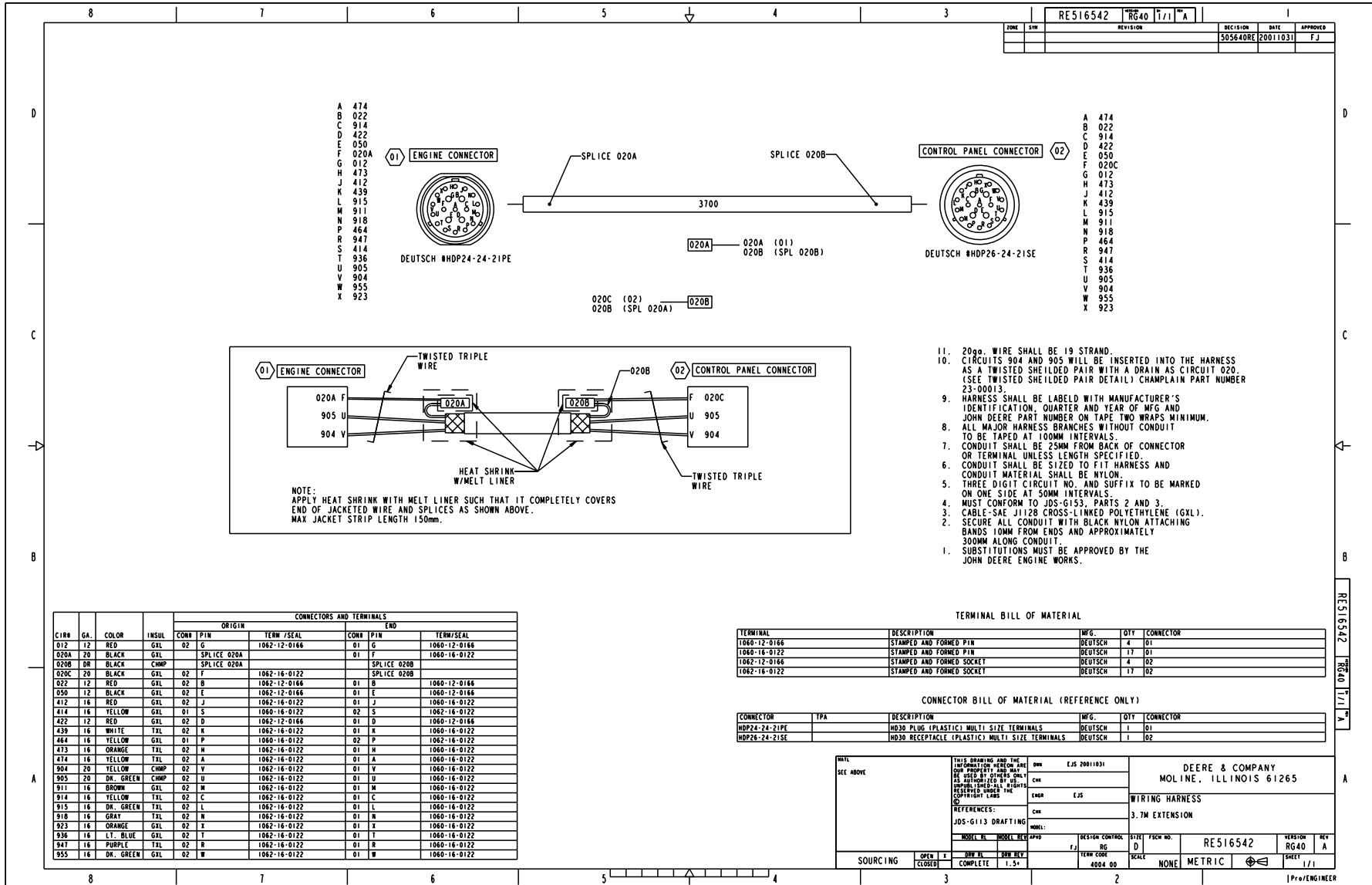
WARNING!

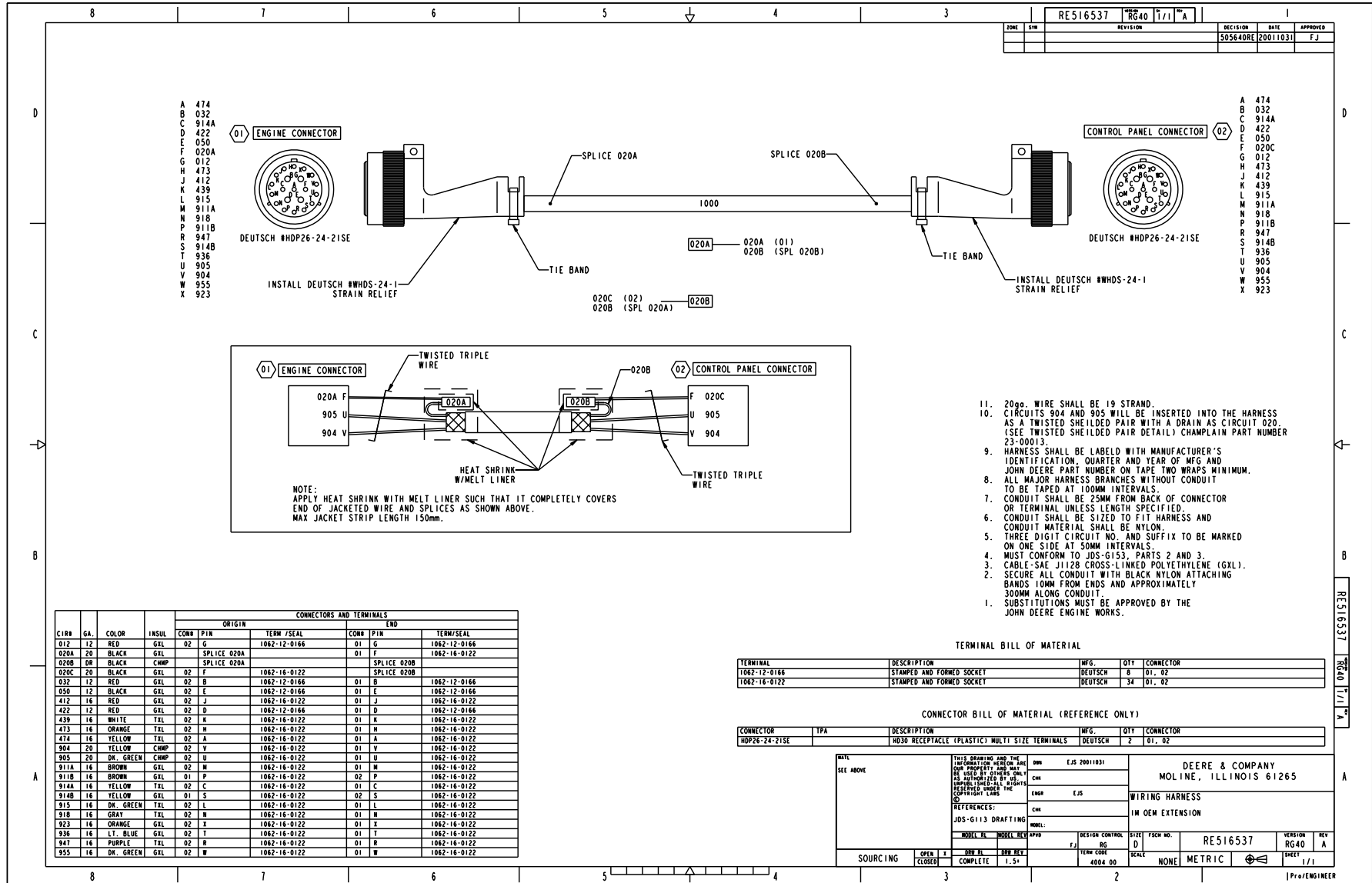
Read notes below before installing the unit.

Note	
 1	Use resistor between CAN_H and CAN_L line near Basic Diagnostic Module (included in some cables or factory purchased panels). Resistor can be installed in the wire harness attached to Port A or a terminating resistor (Murphy P/N 7800480) can be attached to Port B. Do not connect a terminating resistor to Port A and B simultaneously. If the module is not the last device on the CAN bus, place terminator resistor at last CAN device.
 2	Use SAE J1939 CAN compliant wiring.
 3	Only use 120 OHM characteristic impedance cable, ex. Belden 9841.
 4	CAN Shield connected to ECU end only.
 5	Do not connect to module Port B other than to terminate CAN bus. See Note 1.
 6	Terminating resistor at ECU end of harness. WARNING: Two 120 Ohm resistors should be located at opposite ends of the J1939 CAN bus. Failure to comply will cause bus failures. Only two 120 Ohm resistors are allowed on the J1939 CAN bus. ECU terminating resistor is typically located in the harness, but can be located inside the ECU's. For ECU resistor location check with OEM, equipment supplier, or ECU specification.

Connector Supplier Information

Tyco Electronics
 420 Ridge Road
 Albert Lea, MN 56007
 (507) 377-8926
 ATTN: Mr. Matthew Peterson
 matthew.peterson@tycoelectronics.com





ZONE	REV	REVISION	DECISION	DATE	APPROVED
		RE516537 RG40 T/11 A		305640RE 20011031	F J

- A 474
- B 032
- C 914A
- D 422
- E 050
- F 020A
- G 012
- H 473
- J 412
- K 439
- L 915
- M 911A
- N 918
- P 911B
- R 947
- S 914B
- T 936
- U 905
- V 904
- W 955
- X 923

- A 474
- B 032
- C 914A
- D 422
- E 050
- F 020C
- G 012
- H 473
- J 412
- K 439
- L 915
- M 911A
- N 918
- P 911B
- R 947
- S 914B
- T 936
- U 905
- V 904
- W 955
- X 923

11. 20ga. WIRE SHALL BE 19 STRAND.
10. CIRCUITS 904 AND 905 WILL BE INSERTED INTO THE HARNESS AS A TWISTED SHIELDED PAIR WITH A DRAIN AS CIRCUIT 020. (SEE TWISTED SHIELDED PAIR DETAIL) CHAMPLAIN PART NUMBER 23-00013
9. HARNESS SHALL BE LABELD WITH MANUFACTURER'S IDENTIFICATION, QUARTER AND YEAR OF MFG AND JOHN DEERE PART NUMBER ON TAPE TWO WRAPS MINIMUM.
8. ALL MAJOR HARNESS BRANCHES WITHOUT CONDUIT TO BE TAPED AT 100MM INTERVALS.
7. CONDUIT SHALL BE 25MM FROM BACK OF CONNECTOR OR TERMINAL UNLESS LENGTH SPECIFIED.
6. CONDUIT SHALL BE SIZED TO FIT HARNESS AND CONDUIT MATERIAL SHALL BE NYLON.
5. THREE DIGIT CIRCUIT NO. AND SUFFIX TO BE MARKED ON ONE SIDE AT 50MM INTERVALS.
4. MUST CONFORM TO JDS-G153, PARTS 2 AND 3.
3. CABLE-SAE J1128 CROSS-LINKED POLYETHYLENE (GXL).
2. SECURE ALL CONDUIT WITH BLACK NYLON ATTACHING BANDS 10MM FROM ENDS AND APPROXIMATELY 300MM ALONG CONDUIT.
1. SUBSTITUTIONS MUST BE APPROVED BY THE JOHN DEERE ENGINE WORKS.

CIR#	GA.	COLOR	INSUL	CONNECTORS AND TERMINALS					
				ORIGIN			END		
				CONN	PTN	TERM /SEAL	CONN	PTN	TERM/SEAL
012	12	RED	GXL	02	G	1062-12-0166	01	G	1062-12-0166
020A	20	BLACK	GXL	SPLICE 020A					
020B	08	BLACK	CHMP	SPLICE 020B					
020C	20	BLACK	GXL	02	F	1062-16-0122	SPLICE 020B		
032	12	RED	GXL	02	B	1062-12-0166	01	B	1062-12-0166
050	12	BLACK	GXL	02	E	1062-12-0166	01	E	1062-12-0166
412	16	RED	GXL	02	J	1062-16-0122	01	J	1062-16-0122
422	12	RED	GXL	02	D	1062-12-0166	01	D	1062-12-0166
439	16	WHITE	TXL	02	K	1062-16-0122	01	K	1062-16-0122
473	16	ORANGE	TXL	02	H	1062-16-0122	01	H	1062-16-0122
474	16	YELLOW	TXL	02	A	1062-16-0122	01	A	1062-16-0122
904	20	YELLOW	CHMP	02	V	1062-16-0122	01	V	1062-16-0122
905	20	DR. GREEN	CHMP	02	U	1062-16-0122	01	U	1062-16-0122
911A	16	BROWN	GXL	02	M	1062-16-0122	01	M	1062-16-0122
911B	16	BROWN	GXL	01	P	1062-16-0122	02	P	1062-16-0122
914A	16	YELLOW	TXL	02	C	1062-16-0122	01	C	1062-16-0122
914B	16	YELLOW	GXL	01	S	1062-16-0122	02	S	1062-16-0122
915	16	DR. GREEN	TXL	02	L	1062-16-0122	01	L	1062-16-0122
918	16	GRAY	TXL	02	N	1062-16-0122	01	N	1062-16-0122
923	16	ORANGE	GXL	02	X	1062-16-0122	01	X	1062-16-0122
936	16	LT. BLUE	GXL	02	T	1062-16-0122	01	T	1062-16-0122
947	16	PURPLE	TXL	02	R	1062-16-0122	01	R	1062-16-0122
955	16	DR. GREEN	GXL	02	W	1062-16-0122	01	W	1062-16-0122

TERMINAL BILL OF MATERIAL

TERMINAL	DESCRIPTION	MFG.	QTY	CONNECTOR
1062-12-0166	STAMPED AND FORMED SOCKET	DEUTSCH	8	01, 02
1062-16-0122	STAMPED AND FORMED SOCKET	DEUTSCH	34	01, 02

CONNECTOR BILL OF MATERIAL (REFERENCE ONLY)

CONNECTOR	TPA	DESCRIPTION	MFG.	QTY	CONNECTOR
HDP26-24-21SE		HDP30 RECEPTACLE (PLASTIC) MULTI SIZE TERMINALS	DEUTSCH	2	01, 02

MAIL SEE ABOVE

THIS DRAWING AND THE INFORMATION HEREON ARE OUR PROPERTY AND MAY BE USED BY OTHERS ONLY AS AUTHORIZED BY US. INVENTOR: JOHN DEERE. COPYRIGHT 1998. JDS

REFERENCES:
JDS-G113 DRAFTING

DEERE & COMPANY
MOLINE, ILLINOIS 61265

WIRING HARNESS
1M OEM EXTENSION

REV	DATE	BY	CHKD
1	01/10/01	JDS	EJS

MODEL NO.	MODEL REV.	REV.	DATE
		1.5	01/10/01

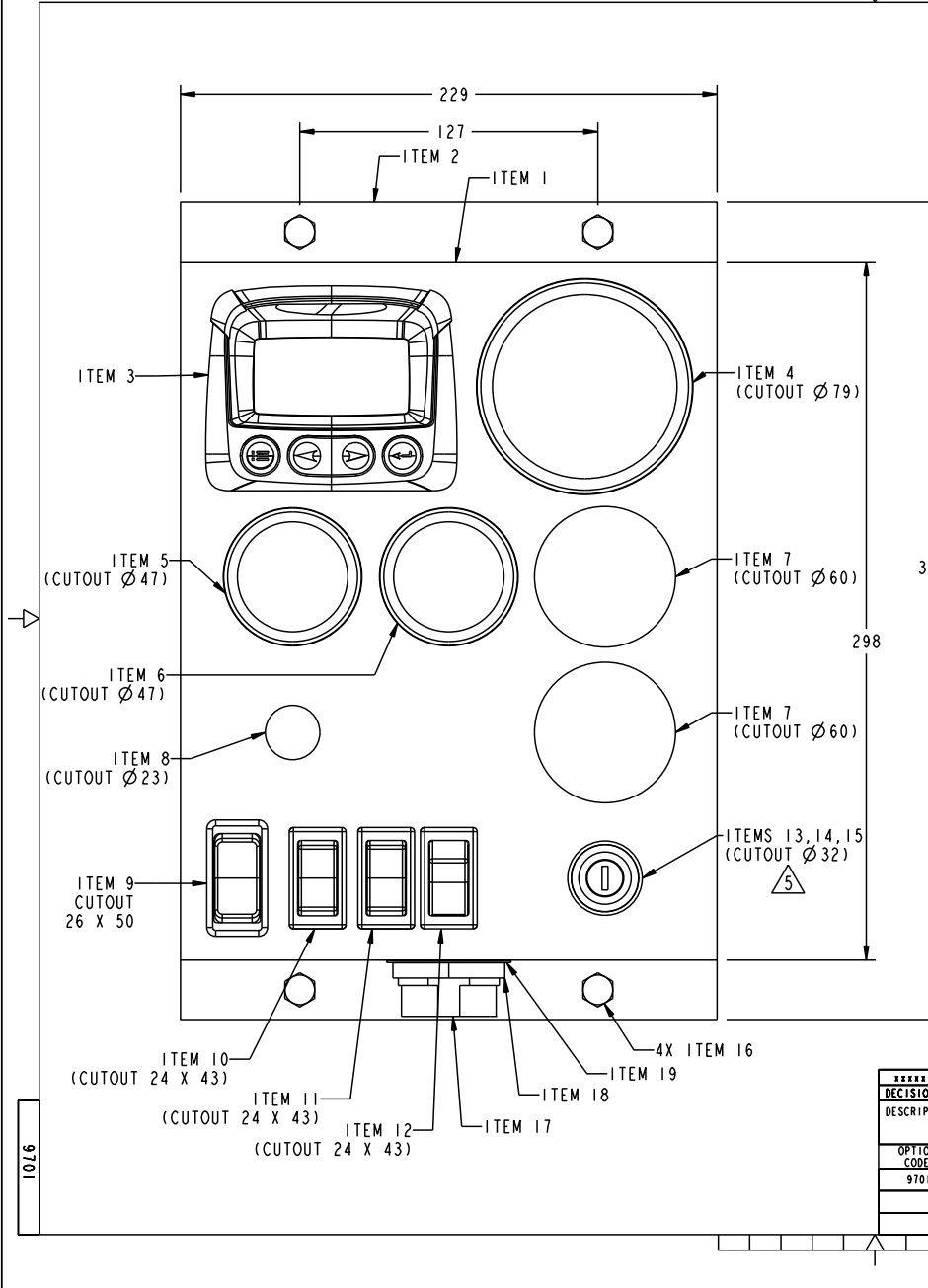
DESIGN CONTROL	SIZE	FRGM NO.	VERSION
D	D	RE516537	1/1

SOURCING	OPEN	CLOSED	COMPLETE
	1		1.5

ITEM CODE	SCALE	SHEET
4004 00	NONE	1/1

PRO/ENGINEER

RE521564 JD90 I 1/2 A



BOM 32-35-0003 SERVICE PARTS

ITEM	DESCRIPTION	MODEL NO.	J. D. P/N	QTY.
3	POWerview DISPLAY	PV100-A-JD1	RE521565	1
4	POWerview TACHOMETER	PVA35-T-3000-AB-D0141	RE521568	1
5	POWerview OIL PRESS. GAGE	PVA20-A-100-AB-D0137	RE521567	1
6	POWerview COOLANT TEMP. GAGE	PVA20-B-250-AB-D0138	RE521566	1
7	HOLE COVER, 2"	00-00-8910	R130486	2
8	HOLE COVER, THROTTLE CONTROL	00-00-7777	R502862	1
9	SWITCH, IDLE SELECT	00-00-8990	RE198505	1
10	SWITCH, SPEED SELECT	00-00-7294	RE162423	1
11	SWITCH, BUMP ENABLE	00-00-7285	RE162424	1
12	SWITCH, OVERRIDE SHUTDOWN	00-00-7286	RE163465	1
13	KEYED IGNITION SWITCH	00-00-7021	AR58126	1
14	NUT FOR KEYED IGN. SW.	00-00-7022	R44342	1
15	WASHER FOR KEYED IGN. SW.	00-00-7028	A4827R	1
16	SHKMT ASSY	65-00-0394	AH126657	4
17	INTERNAL WIRE HARNESS	78-00-0196	RE521571	1
18	PANEL NUT	00-00-9128	57H8035	1
19	LOCK WASHER	00-00-9127	57H8426	1

- SEE 32-57-0003 FOR WIRING DIAGRAM.
- ITEM NUMBERS REFER TO SERVICE PARTS LIST AND BILL OF MATERIAL (NOT INCLUDED).
- DIMENSIONS IN [] ARE MILLIMETERS.
- N/S = NOT SHOWN.
- INSTALL WASHER FOR KEY SWITCH (ITEM 19) ON OUTSIDE OF PANEL.
- PANEL (ITEM 1) IS PAINTED BLACK, SEMI-GLOSS, TEXTURED.

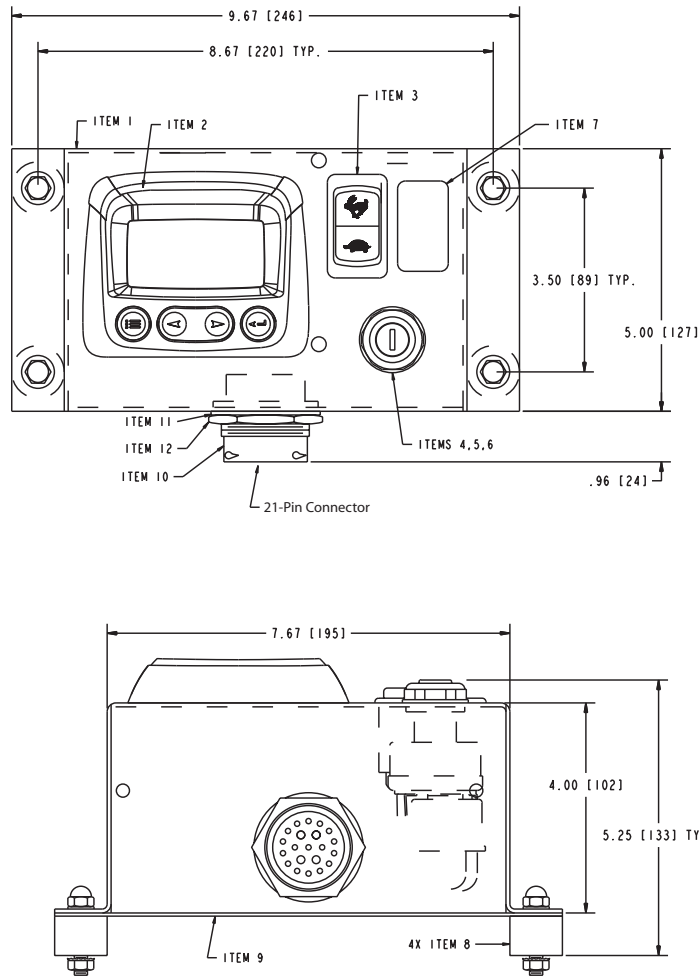
RE521564 JD90 I 1/2 A

XXXX	20040630	CDW	JLE
DECISION	DATE	BY	CHK
DESCRIPTION: INDUSTRIAL 12/24 V			
OPTION CODE	ENGINE MODEL	REF. P/N	MAT'L
9701		NAME	
PANEL ASSEMBLY			

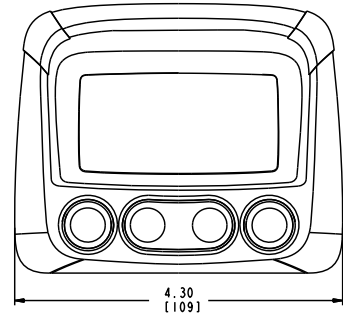
DRW RL	DRW REV
CHANGING	1, 1
DEERE & COMPANY MOLINE, ILLINOIS 61265	
SCALE	FINCH/METRIC
CDW 20030522	DO
RE521564	A

Pro/ENGINEER

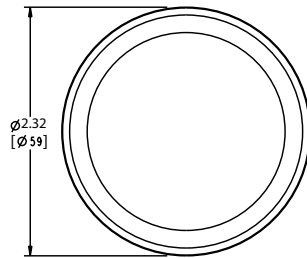
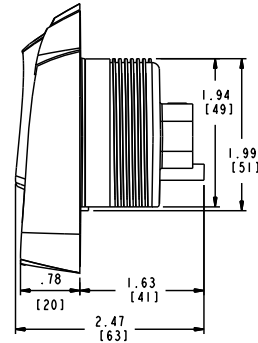
Basic Instrument Panel
RE522233



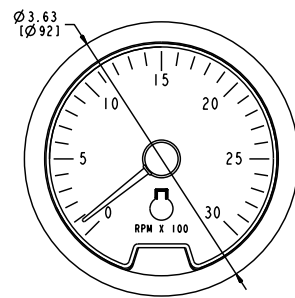
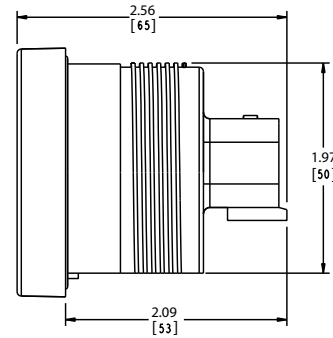
ITEM	DESCRIPTION	MODEL NO.	J.D. P/N	QTY.
2	POWerview DISPLAY	PV100-A-JD1	RE521565	1
3	RAMP IDLE SWITCH	00-00-7109	RE192470	1
4	IGNITION KEY SWITCH	00-00-7021	AR58126	1
5	NUT, KEY SWITCH	00-00-7022	R44342	1
6	WASHER, KEY SWITCH	00-00-7028	A4827R	1
7	HOLE COVER, EATON	00-00-8966	M115279	1
8	SHOCKMOUNT ASSY	65-00-0149	AH126657	4
10	INTERNAL WIRE HARNESS	78-00-0187	RE522234	1
11	LOCK WASHER	00-00-9127	57M8426	1
12	PANEL NUT	00-00-9128	57M8035	1



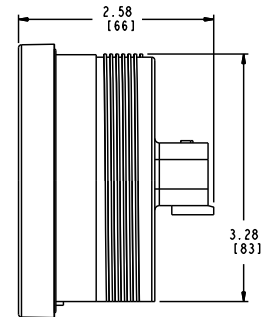
PowerView Diagnostic Gauge

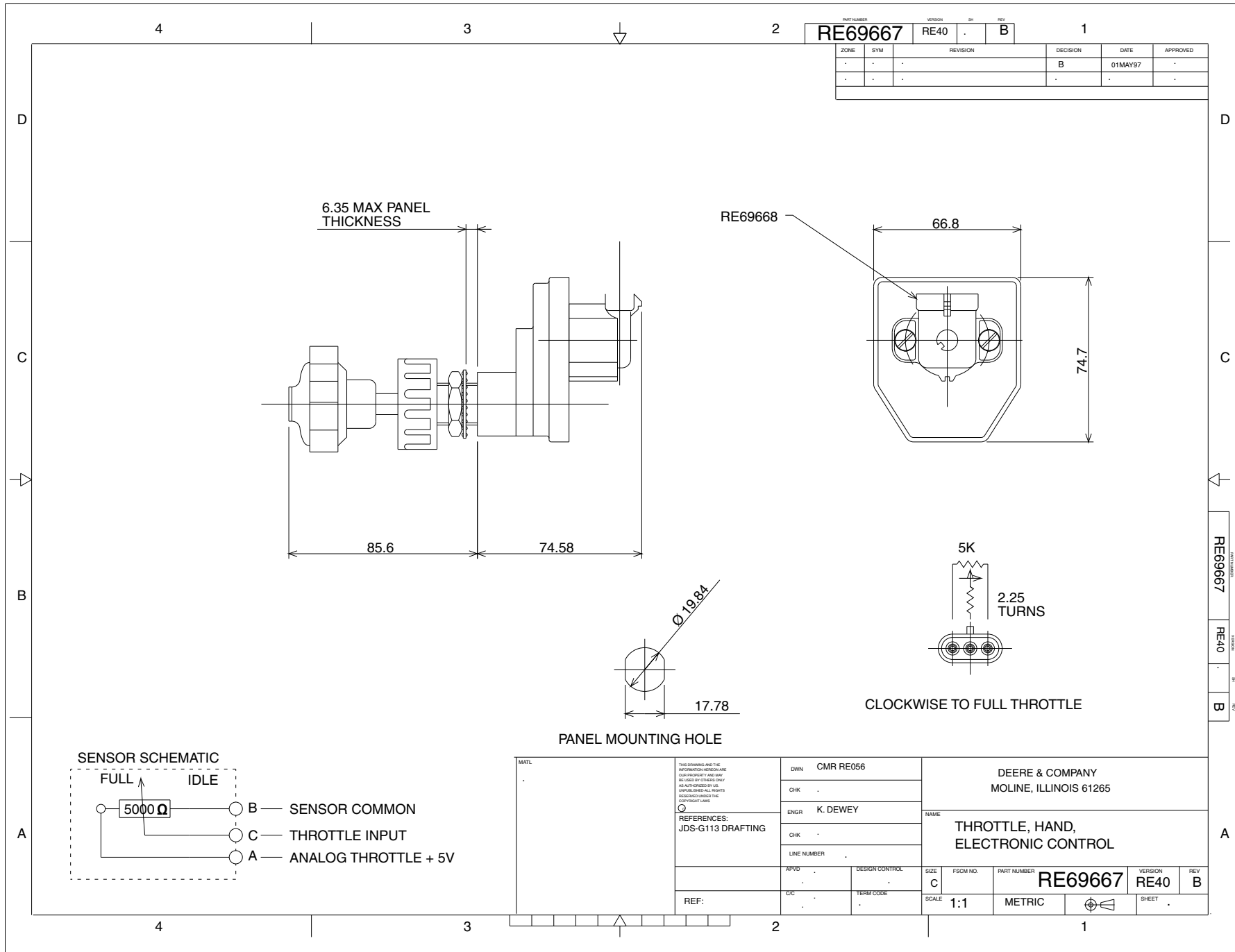


Auxiliary Gauge



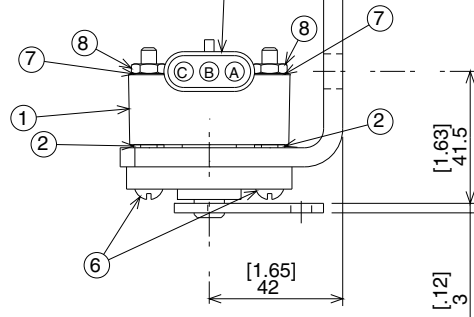
Tachometer



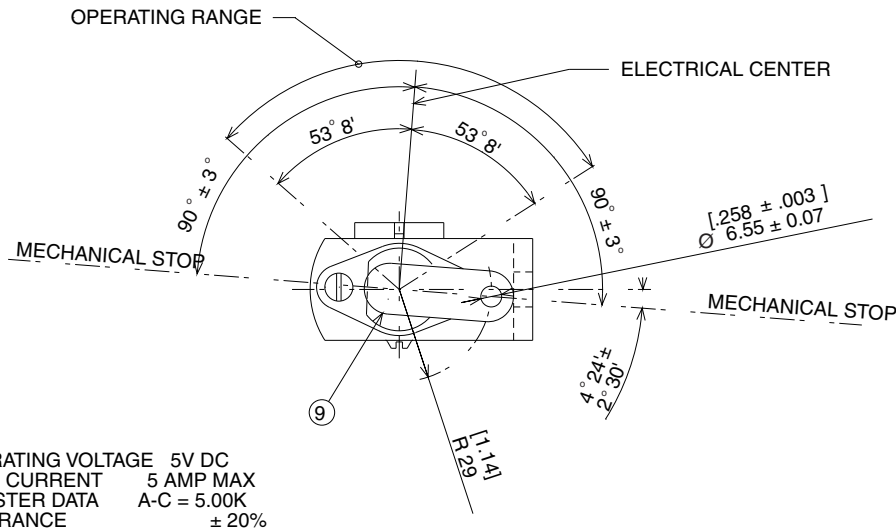


RE57391

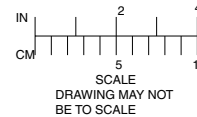
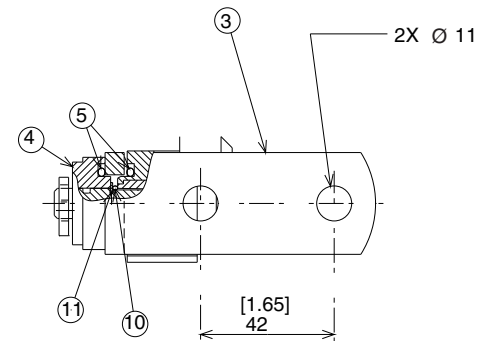
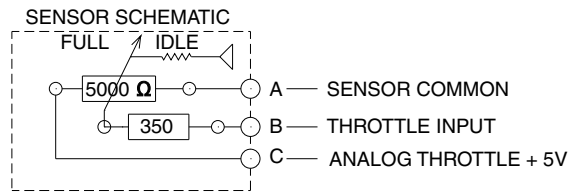
FEMALE CONNECTOR MATES WITH
PACKARD WEATHER PACK MALE
CONNECTOR AND CONNECTOR SEAL
ASSEMBLY NO. 12015793 AND
MALE TERMINAL NO. 12033674



ASSEMBLY COMPONENTS			
ITEM NO.	PART NO.	QTY	DESCRIPTION
1	RE30295	1	SENSOR
2	T15715	2	FLAT WASHER
3	R94648	1	MOUNTING BRACKET
4	R86457	1	SENSOR SUPPORT
5	P48347	2	O-RING FOR SHAFT SUPPORT
6	21H1390	2	#10-32 MACHINE SCREW X 44.5 (1.75)
7	12H295	2	#10 LOCK WASHER
8	14H631	2	#10-32 NUT
9	RE24468	1	BELL CRANK SHAFT
10	A4365R	1	O-RING FOR SHAFT
11	R72654	1	SNAP RING FOR SHAFT



OPERATING VOLTAGE 5V DC
LOAD CURRENT 5 AMP MAX
RESISTER DATA A-C = 5.00K
TOLERANCE ± 20%



(EXP:RE57391A)

DESCRIPTION:
ELECTRONIC FUEL INJECTION PUMP
THROTTLE SENSOR

NAME
THROTTLE SENSOR

VERSION NO.	201809E	22DEC93	MLM	MSG
REVISION	RE60	DECISION	DATE	BY

DEERE & COMPANY
MOLINE, ILLINOIS 61265

SCALE	[INCH] METRIC
DWN TVT 27SEP93 A/17752	DESIGN CONTROL RE

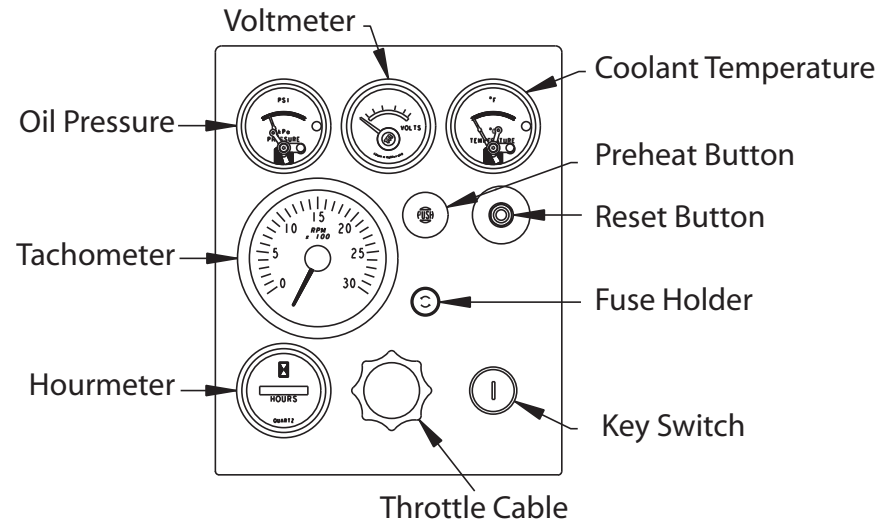
RE57391

INSTRUMENT PANEL - MECHANICALLY CONTROLLED ENGINES

There are four instrument panels for the Tier-2 mechanically controlled engines. These four instrument panels are available for use on the John Deere industrial engines 2.4L, 2.9L, 3.0L, 4.5L, and 6.8L. The instrument panels come as 12-volt or 24-volt assemblies. The Economy panels come with the basic list of components compared to the full-featured Deluxe panels.

RE523842	Economy 12V
RE526316	Deluxe 12V
RE526296	Economy 24V
RE526314	Deluxe 24V

The installation dimensions and wire schematics are similar for all four panels. Insure that any loose terminals for optional gauges will not short. The dimensions and wire schematics are described in the following pages.

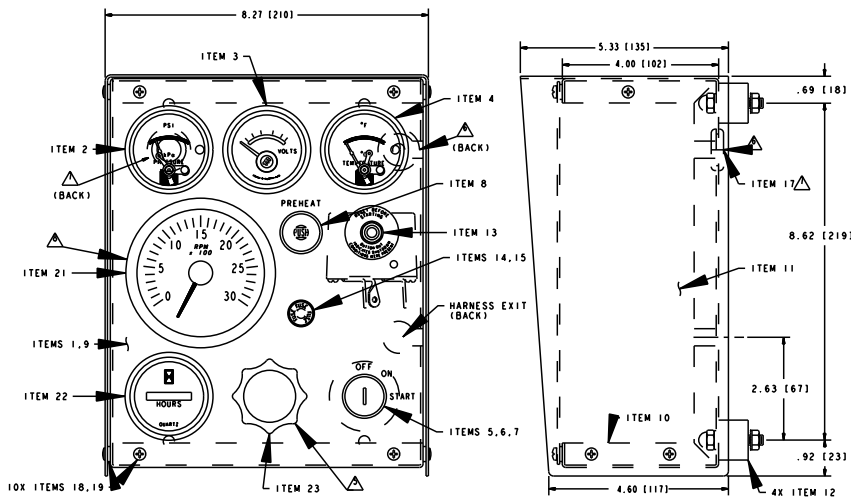


R522445

VERSION JD90

SH 1/2

REV A



ENCLOSURE MOUNTING DIMENSIONS SCALE: 1/2

SERVICE PARTS

ITEM	DESCRIPTION	J.D. P/N	DELUXE 12V	ECONOMY 12V	DELUXE 24V	ECONOMY 24V
			RES26316	RES23842	RES26314	RES26296
			QTY	QTY	QTY	QTY
2	PRESSURE SWITCHGAGE	RE43305	1	1	1	1
3	VOLTMETER, 12VDC	RE523882	1	1	0	0
3	VOLTMETER, 24VDC	RE523883	0	0	1	1
4	TEMPERATURE SWITCHGAGE	RE501656	1	1	1	1
5	KEY SWITCH	AR58126	1	1	1	1
6	NUT FOR KEY SWITCH	R44342	1	1	1	1
7	WASHER FOR KEY SWITCH	A4827R	1	1	1	1
8	PUSH BUTTON, PREHEAT	AT188735	1	1	1	1
13	518APH-12 W/DUST BOOT	RE63642	1	1	0	0
13	518APH-24 W/DUST BOOT	RE526277	0	0	1	1
14	FUSE HOLDER	RE63643	1	1	1	1
15	FUSE, AGC-10	AT28077	1	1	1	1
21	12 VDC TACHOMETER	RE523884	1	0	0	0
21	24 VDC TACHOMETER	RE523885	0	0	1	0
22	HOURMETER	F305213	1	0	1	0
23	THROTTLE CABLE	RE526317	1	0	1	0
N/S	EXTERNAL WIRE HARNESS	RE523886	1	1	1	1
N/S	HOSE ASSEMBLY	RE63695	1	1	1	1
S/L	1/2-14 NPT ADAPTER	R501207	1	1	1	1
S/L	ADAPTER, BUSHING, M14X1.5 MAL	R501306	1	1	1	1

- NOTES
 1. THE DIAGRAM DISPLAYS THE DIMENSIONS AND GAGE PLACEMENT FOR THE FOUR INSTRUMENT PANELS USED ON MECHANICALLY CONTROLLED ENGINES.
 2. DIMENSIONS IN [] ARE MILLIMETERS.
 3. N/S-NOT SHOWN, S/L SHIPPED LOOSELY.

*****	2005-01-19	PAT	CAM
DECISION	DATE	BY	CHK

SHEET	DRW RL	DRW REV
1/2		1.4

DESCRIPTION: INDUSTRIAL
12/24 VOLT

DEERE & COMPANY
MOLINE, ILLINOIS 61265

OPTION CODE	ENGINE MODEL	REF. P/N	MAT'L	VERSION	SCALE	[INCH] METRIC
9701				JD90	None	[INCH] METRIC
NAME				DWN		SUBMITTING UNIT
CONTROL PANEL				PAT 20050120		DO
					R522445	A

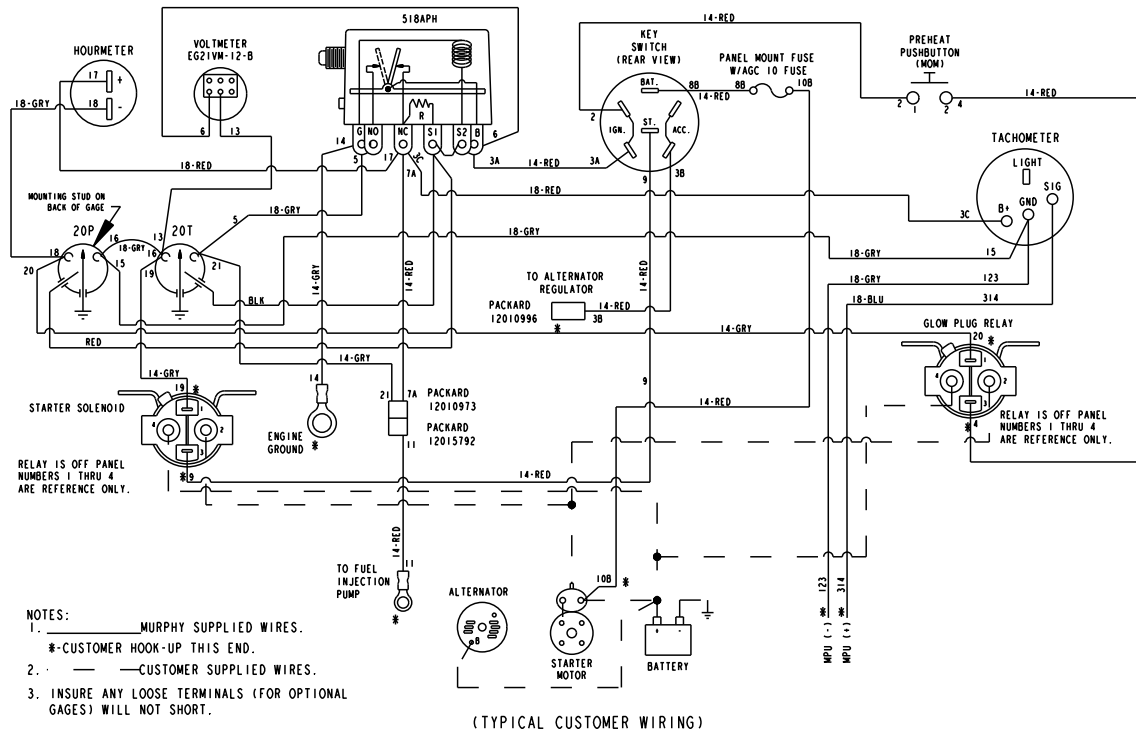
Pro/ENGINEER

R522445

VERSION JD90

SH 2/2

REV A



*****	2005-01-19	PAT	CAM
DECISION	DATE	BY	CHK

SHEET	DRW RL	DRW REV
2/2		1.4

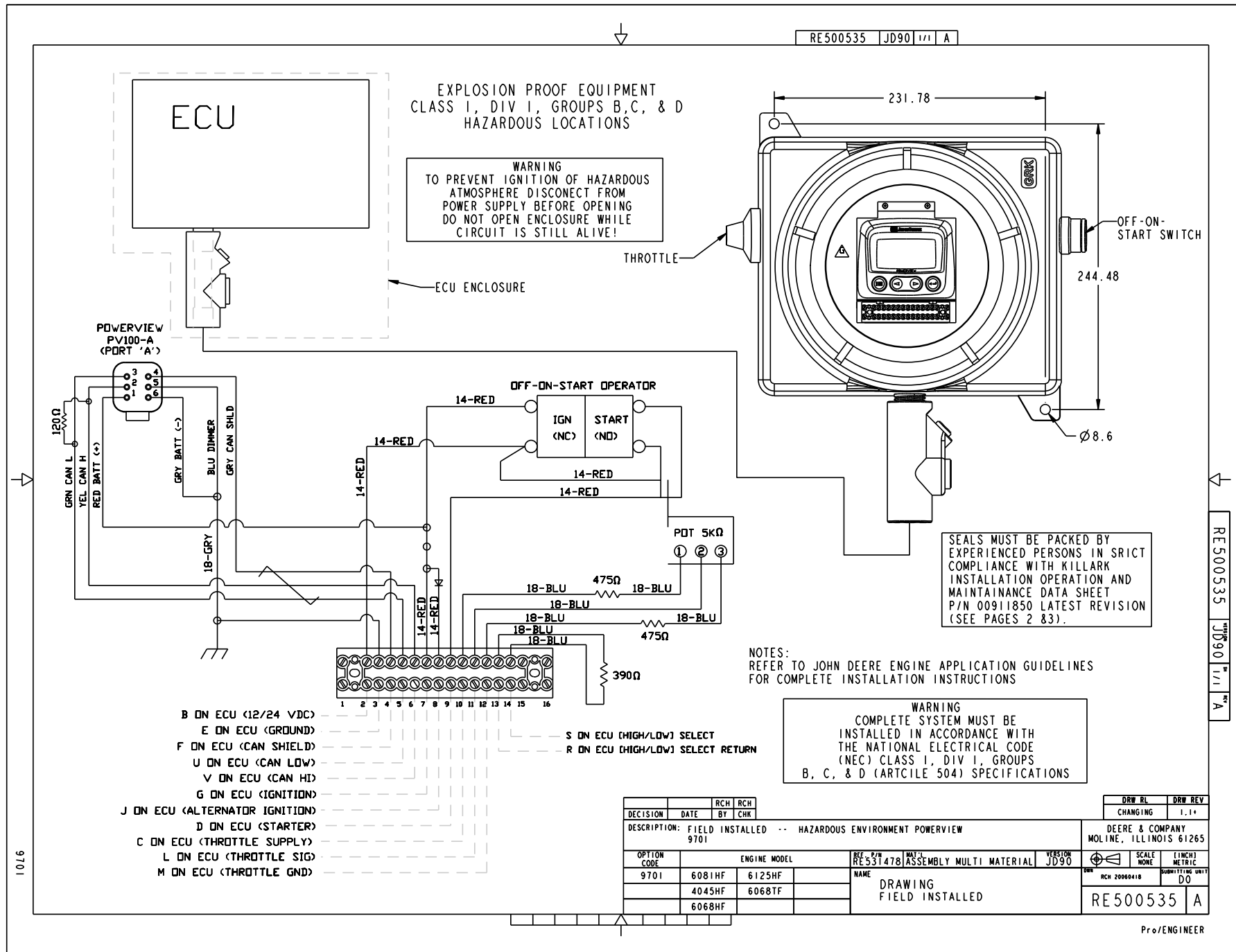
DESCRIPTION: INDUSTRIAL
12/24 VOLT

DEERE & COMPANY
MOLINE, ILLINOIS 61265

OPTION CODE	ENGINE MODEL	REF. P/N	MAT'L	VERSION
9701		NAME		JD90
		CONTROL PANEL		

	SCALE NONE	[INCH] METRIC
DWN	PAT 20050120	SUBMITTING UNIT DO
R522445		A

Pro/ENGINEER

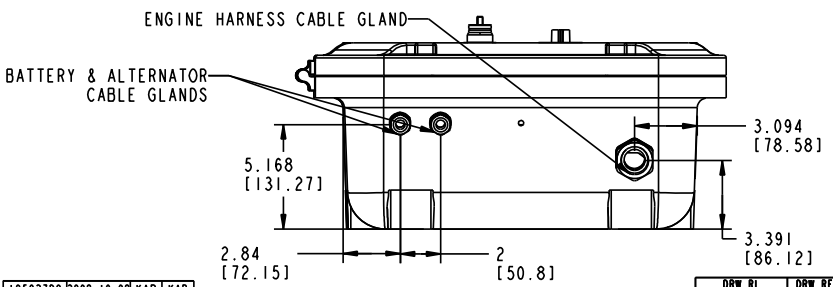
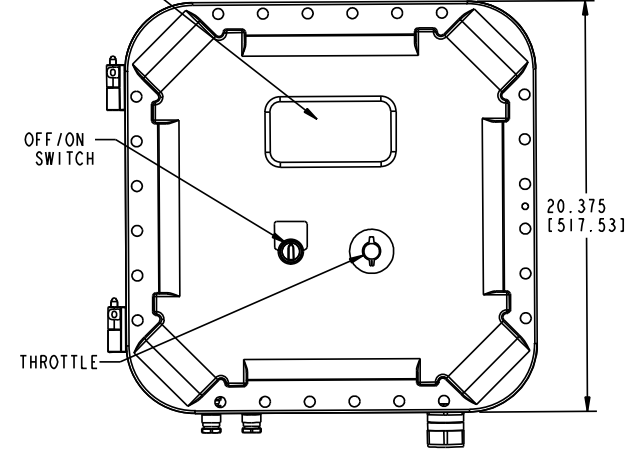
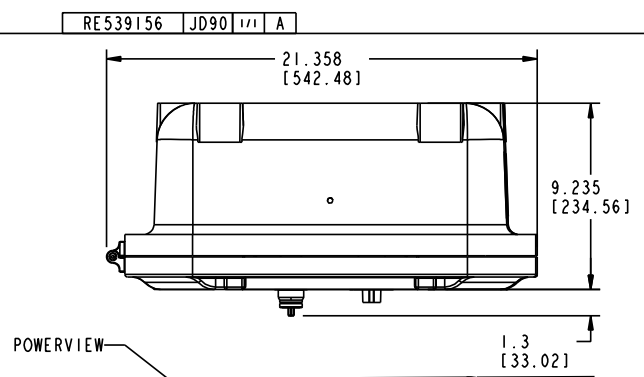
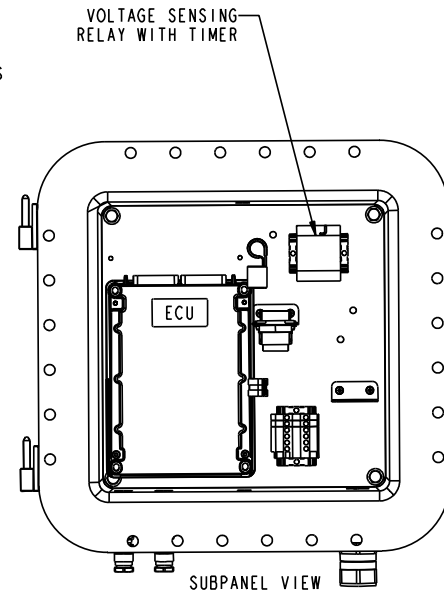
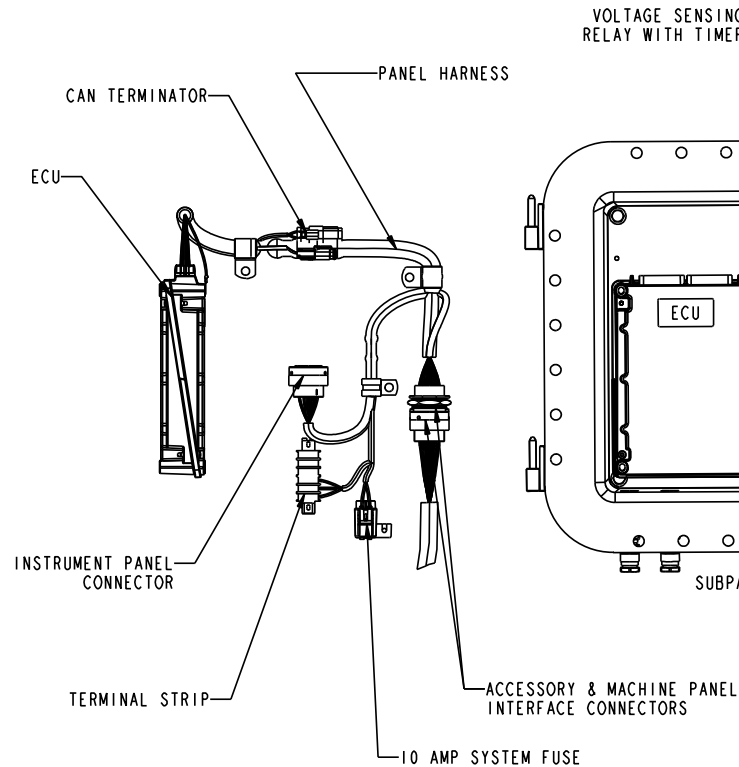


RE500535 JD90 1/1 A

DECISION	DATE	RCH BY	RCH CHK	DRW BL	DRW REV
				CHANGING	1.1+
DESCRIPTION: FIELD INSTALLED -- HAZARDOUS ENVIRONMENT POWERVIEW 9701				DEERE & COMPANY MOLINE, ILLINOIS 61265	
OPTION CODE	ENGINE MODEL	REF. P/N	MAT'L	VERSION	SCALE
9701	6081HF 6125HF	RE531478	ASSEMBLY MULTI MATERIAL	JD90	1:1
	4045HF 6068TF				
	6068HF				
DRAWING FIELD INSTALLED				RE 500535	A

Pro/ENGINEER

WARNING
COMPLETE SYSTEM MUST BE INSTALLED
IN ACCORDANCE WITH ATEX GROUP II
CATEGORY 2 G SPECIFICATIONS



WARNING!
TO PREVENT IGNITION OF HAZARDOUS
ATMOSPHERE DISCONNECT FROM
POWER SUPPLY BEFORE OPENING!
DO NOT OPEN ENCLOSURE WHILE
CIRCUIT IS STILL ALIVE!

REFER TO APPLICATION GUIDELINES
AND OPERATOR'S MANUALS FOR
SPECIFIC CERTIFICATION
REQUIREMENTS

1. ECU ENCLOSURE IS INSTALLED BY ENGINES, INC.
2. INSTALLATION INSTRUCTIONS & CERTIFICATION INFORMATION ARE PROVIDED WITH EACH UNIT

105927DD	2008-10-08	KAP	KAP	DECISION	DATE	BY	CHK	DESCRIPTION: HAZLOC SHIP DIRECT ECU ENCLOSURE		DEERE & COMPANY MOLINE, ILLINOIS 61265
OPTION CODE	ENGINE MODEL	REF. P/N	MAT'L	VERSION	SCALE	UNIT	QUANTITY	UNIT	PRICE	DATE
97GW	6081HFH 6081AFH	RES36400	SEE ABOVE	JD90	NONE	INCH	DO	DO	2008-07-10	RE539156 A
DRAWING										RE539156 A

RE539156 JD90 1/1 A

Pro/ENGINEER

MD16