

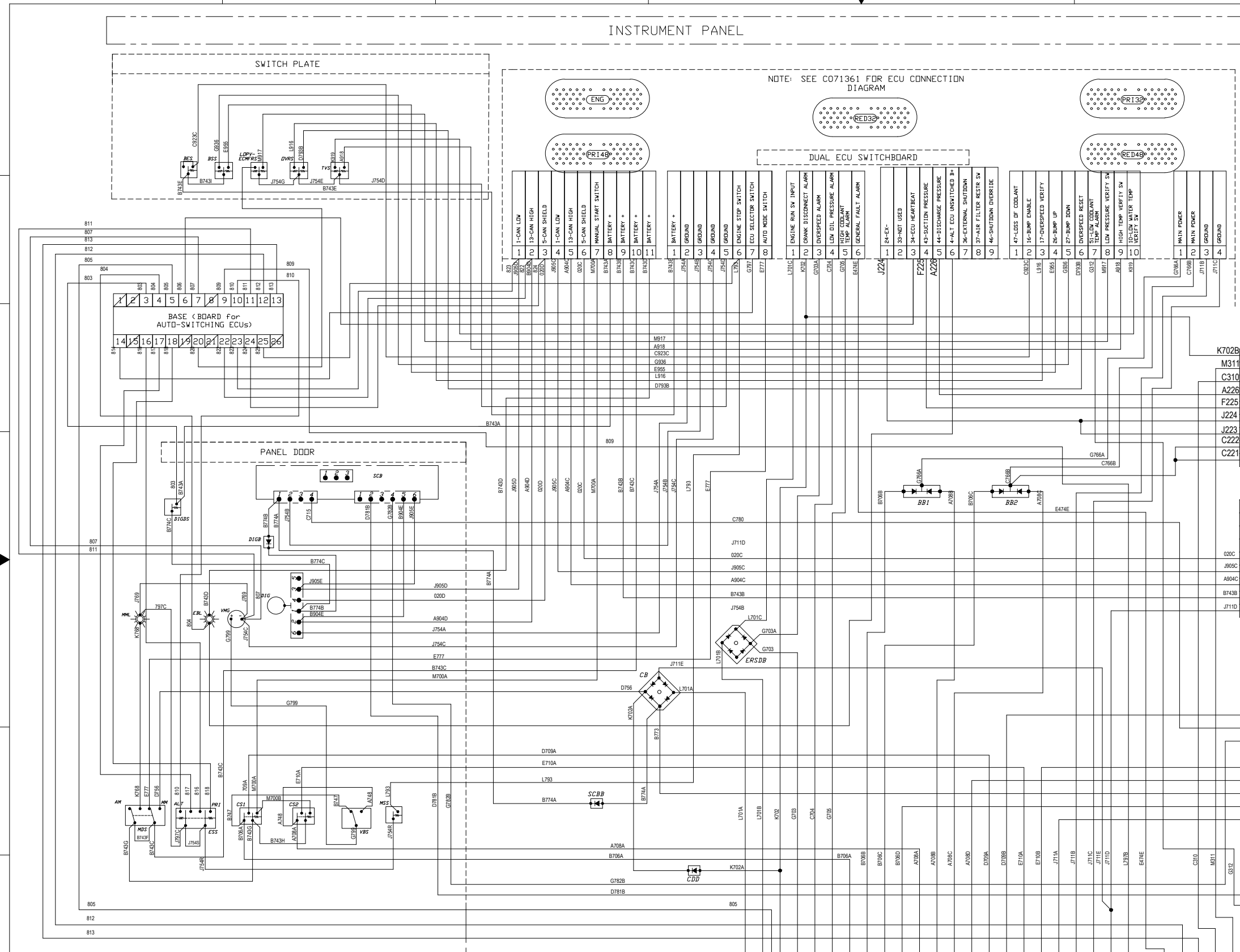
REV	DESCRIPTION	ECN#	DWN	APVD	DATE
-	ADDED CONTROLLED DRAWING BLOCK	6309	LJV	MJD	25AUG21

LEGEND

AB - ALTERNATOR BRIDGE	MMS - MODE SELECTOR SWITCH
AL - ALTERNATOR	MM - MANUAL MODE POSITION
AM - AUTOMATIC MODE POSITION	MML - MANUAL MODE INDICATING LAMP
B1 - BATTERY #1	MP - MAGNETIC PICK-UP
B2 - BATTERY #2	MSS - MANUAL STOP SWITCH
BB1 - BATTERY BRIDGE #1	DCB - OVER-CURRENT BREAKER
BB2 - BATTERY BRIDGE #2	DVRS - OVERSPEED VERIFY @ 67% / RESET SWITCH
BES - BUMP ENABLE SWITCH	RWPS-H - RAW WATER PRESSURE SENSOR HIGH
BSS - SPEED BUMP SWITCH	RWPS-L - RAW WATER PRESSURE SENSOR LOW
B1 - BATTERY ISOLATOR	SC1 - STARTER CONTACTOR BATT#1
CS1 - CRANK (MANUAL) SWITCH - BATT#1	SC2 - STARTER CONTACTOR BATT#2
CS2 - CRANK (MANUAL) SWITCH - BATT#2	SCB - SOLENOID CONTROL BOARD
CB - COOLANT BRIDGE	SCBB - SOLENOID CONTROL BOARD DIODE
CDD - CRANK DISCONNECT DIODE	ST - STARTER
DIA - DIAGNOSTIC GAUGE	TCS - TEMPERATURE CONTROL SOLENOID
DIGB - DIAGNOSTIC GAUGE DIODE BRIDGE	THR - SCB THERMISTOR (COMPRESSOR INLET)
DIGDS - DIAGNOSTIC GAUGE DISPLAY SWITCH	TVS - TEMPERATURE ALARM VERIFY SWITCH
EBL - ALTERNATE ECU INDICATING LAMP	VBS - BATTERY VOLTAGE SELECTOR
ERSDB - ENGINE RUN SIGNAL DIODE BRIDGE	VMG - VOLTMETER GAUGE
ESS - ECU SELECTOR SWITCH	WS - WATER SOLENOID VALVE
HRWTS - HIGH RAW WATER TEMPERATURE SENSOR	WT - WATER TEMPERATURE N.O. SW 205°F
LFAB - LOW FLOW/TEMP ALARM BOARD	
LDPVS - LOW DIL PRESSURE VERIFY SWITCH	

COLOR CODE

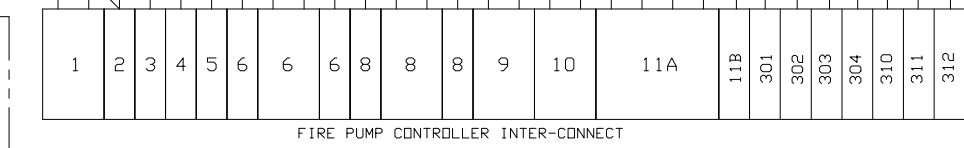
A - WHITE	G - BLUE
B - RED	I - PINK
C - DRANGE	J - BLACK
D - YELLOW	K - BROWN
E - GREEN	L - GRAY
F - GREEN	M - PURPLE
G - BLUE	



- NOTES:**
- SOME MODELS HAVE A STARTER THAT IS INTERNALLY GROUNDED; FOR THOSE THE BATTERY NEGATIVE CABLE (GRD) SHOULD BE ATTACHED TO THE ENGINE BLOCK (ALL PAINT SHOULD BE REMOVED TO BARE METAL)
 - ONLY ON 4045 PTE ENGINES
 - NOT ON 6090 PTE ENGINES
 - SOME MODELS HAVE A STARTER THAT IS INTERNALLY GROUNDED; FOR THOSE THE BATTERY NEGATIVE CABLE (GND) SHOULD BE ATTACHED TO THE ENGINE BLOCK (ALL PAINT SHOULD BE REMOVED TO BARE METAL)

CONTROLLED DRAWING

THIS IS A REGISTERED PART WITH A THIRD PARTY AGENCY FOR USE ON A PRODUCT. NO SUBSTITUTIONS ARE ALLOWED. CONSULT ENGINEERING PRIOR TO AND REGARDING ANY CHANGE.



FOR ENGINES BUILT AFTER MARCH 2015

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CLARKE
Fire Protection Products, Inc.

DATE	30JAN15	NAME	MJDEMBKOWSKI
ENGR	MJDEMBKOWSKI	DRAWING	WIRING DIAGRAM, TIER 3 ELECTRONIC ENGINES WITH ECM AUTO-SWITCHING AND COOLING LOOP ALARMS
PART NO.	C072146	SCALE	NTS
UNITS	MM (INCH)	PAGE	1 OF 1

H

G

F

E

D

C

B

A

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G

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E

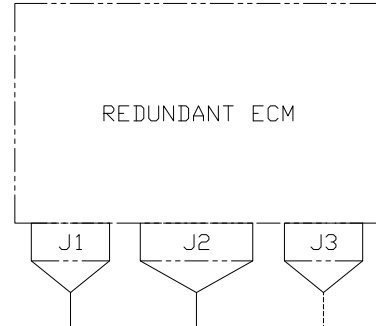
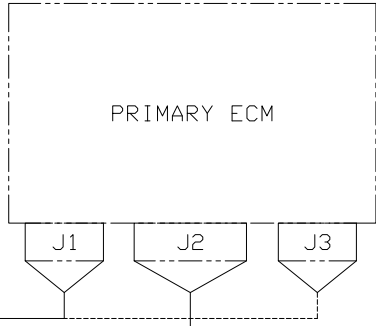
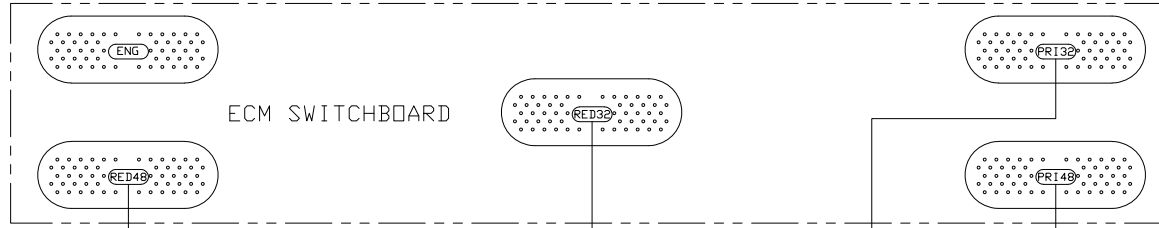
D

C

B

A

REV	DESCRIPTION	ECN#	DWN	APVD	DATE
A	ISSUED DRAWING	572	KJK		02NOV08
B	CORRECTED ECM CONNECTION - WIRE#5023 (ZONE B8); REVISED ENGINE HARNESS P/N CHART	1612	MJD		06APR09
C	PRI48 & RED48 TO ECU J2: WIRE 5473 WAS "STOP ENGINE LAMP". ADDED WIRE 7919. UPDATED CLARKE ENGINE MODELS AND ADDED ECM PART NUMBERS AND LEVELS.	2134	MJD	MJD	05AUG11
D	PRI48 & RED48 TO ECU J2: REVISED DESCRIPTION AND PINDUT OF SWITCHBOARD CONNECTION OF WIRE 5439. DELETED WIRE 7101. ADDED SPLICE DETAIL.	2992	MJD	MJD	12NOV13
-	ADDED CNTRLD DWG NOTE, BOX WAS MARKED *ND*	6309	MAL	MJD	03MAY21



PRI48 & RED48 TO ECU J2

WIRE NUMBER		WIRE COLOR	ECM CONNECTION - J2 (PRIMARY & REDUNDANT)	SWITCHBOARD CONNECTION (PRI48 & RED48)	DESCRIPTION
5904	Yellow	J2-A1	13	SAE J1939 High	Excitation #3 +
5905	Dk Green	J2-B1	1	SAE J1939 Low	Warning Lamp
5912	Red	J2-B2	23	Switched Battery(Key Switch)	
5916	Lt Blue	J2-C1	50		High Coolant Temperature Alarm
7005	Lt Blue	J2-C2	8		Excitation #3 -
5814	Yellow	J2-C3	24		Analog 26 - Discharge Pressure Transducer
7102	White	J2-C4	44		Excitation #3 -
5439	White	J2-D1	34		ECM Heartbeat
5473	Orange	J2-D2	51		Low Coolant Temperature Alarm
5436	Lt Blue	J2-D3	37		Analog 12 Air Filter Restriction Switch
5965	Dk Green	J2-D4	26		Bump Up
5943	Orange	J2-E1	20		Switch in 2 - Full Throttle - Grounded
5918	Gray	J2-E3	45		Overdrive Shutdown
5923	Orange	J2-E4	16		Bump Enable
5906	Lt Blue	J2-F1	27		Bump Down
5954	Yellow	J2-F2	40		Switch in 1 - Full Throttle - Grounded
7103	Dk Green	J2-F4	43		Analog 21 - Suction Pressure Transducer
5945	Gray	J2-G4	47		Analog 23 - Loss of coolant switch
5939	White	J2-1	17		Switch in 3 - Overspeed Verify Enable Input
7919	Brown	J2-2	10		Low Coolant Temperature Test Switch Input
7002	Brown	J2-4	38		1000 rpm (Source Dvr 1)
5941	Brown	J2-K1	36		External Shutdown
5020	Black	J2-K2	5		CAN Shield
7003	Lt Blue	J2-K4	29		Source Dvr2 - Overspeed Alarm
5022A	Red	J2-L1	32		Unswitched Battery
5050A	Black	J2-L2	11		System Ground
5050B	Black	J2-L3	31		System Ground
5022B	Red	J2-L4	54		Unswitched Battery
5022C	Red	J2-M1	22		Unswitched Battery
5050C	Black	J2-M2	53		System Ground
7004	Orange	J2-M3	18		Source Dvr3 - Low Oil Pressure Alarm
5022D	Red	J2-M4	42		Unswitched Battery

PRI32 & RED32 TO ECU J1 & J3

WIRE NUMBER	WIRE COLOR	ECM CONNECTION - J1 (PRIMARY & ALTERNATE)	SWITCHBOARD CONNECTION (PRI32 & RED32)	DESCRIPTION
5497	Purple	J1-A1	7	Injector Low 5 (cyl 4)
5497	Purple	J1-A3	17	Oil Pressure
5445	Dk Green	J1-A4	14	Cam Speed
5494	Yellow	J1-B1	8	Injector Low 4 (cyl 2)
5453	Orange	J1-B2	36	Water-In-Fuel
5469	White	J1-B3	38	Fuel Pressure
5447	Purple	J1-B4	3	Crank Speed
5499	White	J1-C1	18	Injector Low 3 (cyl 6)
5463	Orange	J1-C2	25	Manifold Air Pressure
5023	Dk Green	J1-C3	52	Manifold Air Pressure
5461	Brown	J1-C4	4	Coolant Temperature
5495	Dk Green	J1-D1	9	Injector Low 2 (cyl 3)
5414	Yellow	Spliced together in J1-D2	6	Sensor Return 2
5444	Lt Blue	J1-D3	29	Excitation Voltage 1
5448	Gray	J1-D4	35	Crank Speed Return
5498	Orange	J1-E1	31	Injector Low 0 (cyl 1)
5427	Purple	J1-E2	28	Sensor Return 1
5475	Dk Green	J1-E3	1	Rail Pressure
5443	Orange	J1-E4	43	Cam Speed Return
5498	Gray	J1-F1	10	Injector Low 1 (cyl 5)
5410	Black	J1-F2	51	Shield Drain
5419	White	Spliced together in J1-F3	47	Excitation Voltage 2
5428	Gray	J1-F4	5	Fuel Temperature
5491	Brown	J1-G1	54	Inject High 0.1.2
5496	Lt Blue	J1-G2	21	Inject High 3.4.5
5424	Yellow	J1-H1	12	High Pressure Fuel Pump High Solenoid
5419	White	J1-H2	53	High Pressure Fuel Pump Low Solenoid

WIRE NUMBER	WIRE COLOR	ECM CONNECTION - J1 (PRIMARY & ALTERNATE)	SWITCHBOARD CONNECTION (PRI32 & RED32)	DESCRIPTION
5497	Purple	J1-A1	7	Injector Low 5 (cyl 4)
5494	Yellow	J1-B1	8	Injector Low 4 (cyl 2)
5417	Purple	J1-B3	28	Turbo Speed In Low
5435	Dk Green	J1-B4	50	Turbo Speed In High
5499	White	J1-C1	18	Injector Low 3 (cyl 6)
5458	Gray	J1-C3	23	Low Pressure Fuel Pump Current Out
5495	Dk Green	J1-D1	9	Injector Low 2 (cyl 3)
5457	Purple	J1-D2	24	Low Pressure Fuel Pump Speed CMD
5410	Black	J1-D3	51	Shield Drain
5486	Lt Blue	J1-D4	39	Source Dvr 6 LPFP Power On
5493	Orange	J1-E1	31	Injector Low 0 (cyl 1)
5434	Yellow	J1-E2	48	Low Pressure Fuel Pump Status
5498	Gray	J1-F1	10	Injector Low 1 (cyl 5)
5429	White	J1-F4	42	Source Dvr 10 Cold Start Aid
5491	Brown	J1-G1	54	Inject High 0.1.2
5492	Lt Blue	J1-G2	21	Inject High 3.4.5
5424	Yellow	J1-H1	12	High Pressure Fuel Pump High Solenoid
5419	White	J1-H2	53	High Pressure Fuel Pump Low Solenoid
5511	Brown	J1-A2	47	Excitation #5 +
5444	Yellow	J1-A3	6	Excitation #5 -
5428	Gray	J1-B1	5	Fuel Temperature
5474	Yellow	J1-B2	27	DeltaTemp Return
5475	Dk Green	J1-C1	1	Rail Pressure
5499	White	J1-C2	38	Fuel Pressure
5497	Purple	J1-C3	17	Oil Pressure
5453	Orange	J1-D2	36	Water-In-Fuel
5461	Brown	J1-D3	4	Coolant Temperature
5023	Orange	J1-D4	52	Rail Pressure
5456	Lt Blue	J1-F1	44	EGR Mixed Temperature
5448	Gray	J1-F3	35	Crank Speed Return
5447	Purple	J1-F4	3	Crank Speed
5946	Lt Blue	J1-G1	29	Excitation Voltage 1
5427	Purple	J1-G2	26	Sensor Return 1
5443	Orange	J1-G3	43	Cam Speed Return
5445	Dk Green	J1-G4	14	Cam Speed
5414	Yellow	J1-H3	13	Sensor Return 2
5416	Lt Blue	J1-H4	33	Excitation Voltage 2

WIRE NUMBER	WIRE COLOR	ECM CONNECTION - J1 (PRIMARY & ALTERNATE)	SWITCHBOARD CONNECTION (PRI32 & RED32)	DESCRIPTION
5497	Purple	J1-A1	7	Injector Low 5 (cyl 4)
5494	Yellow	J1-B1	8	Injector Low 4 (cyl 2)
5417	Purple	J1-B3	28	Turbo Speed In Low
5435	Dk Green	J1-B4	50	Turbo Speed In High
5499	White	J1-C1	18	Injector Low 3 (cyl 6)
5458	Gray	J1-C3	23	Low Pressure Fuel Pump Current Out
5495	Dk Green	J1-D1	9	Injector Low 2 (cyl 3)
5457	Purple	J1-D2	24	Low Pressure Fuel Pump Speed CMD
5410	Black	J1-D3	51	Shield drain
5486	Lt Blue	J1-D4	39	H-Bridge 3 -
5493	Orange	J1-E1	31	Injector Low 0 (cyl 1)
5498	Gray	J1-F1	10	Injector Low 1 (cyl 5)
5491	Brown	J1-G1	54	Inject High 0.1.2
5496	Lt Blue	J1-G2	21	Inject High 3.4.5
5421	Brown	J1-G3	41	EGR Valve High Driver
5423	Orange	J1-G4	11	EGR Valve Low Driver
5449B	White	J1-H3	Spliced together then go to pin 22	VTG power
5449A	White	J1-H4	Spliced together then go to pin 22	VTG power
5511	Brown	J1-A2	47	Excitation #5 +
5444	Yellow	J1-A3	6	Excitation #5 -
5428	Gray	J1-B1	5	Fuel Temperature
5474	Yellow	J1-B2	27	DeltaTemp Return
5475	Dk Green	J1-C1	1	Rail Pressure
5499	White	J1-C2	38	Fuel Pressure
5497	Purple	J1-C3	17	Oil Pressure
5453	Orange	J1-D2	36	Water-In-Fuel
5461	Brown	J1-D3	4	Coolant Temperature
5023	Orange	J1-D4	52	Rail Pressure
5456	Lt Blue	J1-F1	44	EGR Mixed Temperature
5448	Gray	J1-F3	35	Crank Speed Return
5447	Purple	J1-F4	3	Crank Speed
5946	Lt Blue	J1-G1	29	Excitation Voltage 1
5427	Purple	J1-G2	26	Sensor Return 1
5443	Orange	J1-G3	43	Cam Speed Return
5445	Dk Green	J1-G4	14	Cam Speed
5414	Yellow	J1-H3	13	Sensor Return 2
5416	Lt Blue	J1-H4	33	Excitation Voltage 2

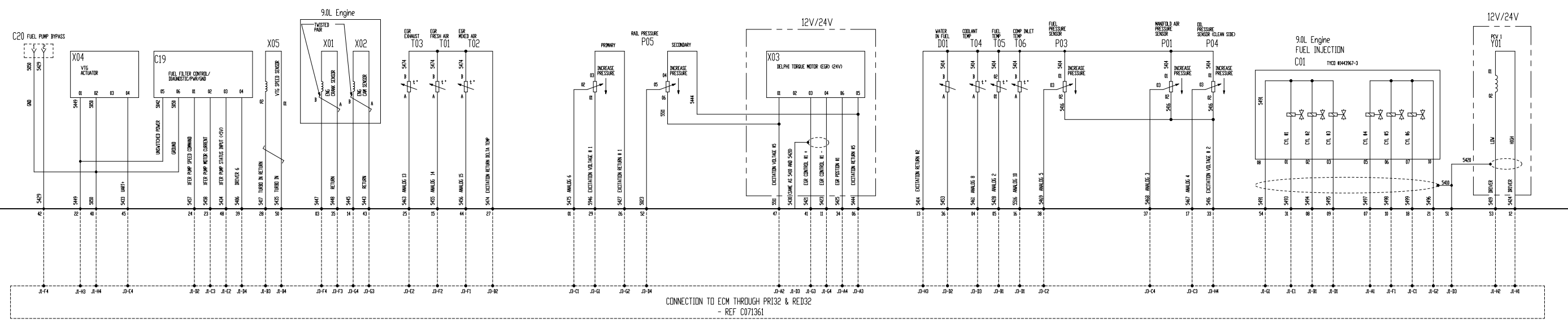
WIRE NUMBER	WIRE COLOR	ECM CONNECTION - J1 (PRIMARY & ALTERNATE)	SWITCHBOARD CONNECTION (PRI32 & RED32)	DESCRIPTION
5497	Purple	J1-A1	7	Injector Low 5 (cyl 4)
5494	Yellow	J1-B1	8	Injector Low 4 (cyl 2)
5417	Purple	J1-B3	28	Turbo Speed In Low
5435	Dk Green	J1-B4	50	Turbo Speed In High
5499	White	J1-C1	18	Injector Low 3 (cyl 6)
5458	Gray	J1-C3	23	Low Pressure Fuel Pump Current Out
5495	Dk Green	J1-D1	9	Injector Low 2 (cyl 3)
5457	Purple	J1-D2	24	Low Pressure Fuel Pump Speed CMD
5410	Black	J1-D3	51	Shield Drain
5486	Lt Blue	J1-D4	39	Source Dvr 6 LPFP Power On
5493	Orange	J1-E1	31	Injector Low 0 (cyl 1)
5434	Yellow	J1-E2	48	Low Pressure Fuel Pump Status
5498	Gray	J1-F1	10	Injector Low 1 (cyl 5)
5429	White	J1-F4	42	Source Dvr 10 Cold Start Aid
5491	Brown	J1-G1	54	Inject High 0.1.2
5492	Lt Blue	J1-G2	21	Inject High 3.4.5
5421	Brown	J1-G3	41	EGR Valve High Driver
5423	Orange	J1-G4	11	EGR Valve Low Driver
5424	Yellow	J1-H1	12	High Pressure Fuel Pump High Solenoid
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5449B	White	J1-H3	Spliced together then go to pin 22	VTG power
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5511	Brown	J1-A2	47	Excitation #5 +
5444	Yellow	J1-A3	6	Excitation #5 -
5428	Gray	J1-B1	5	Fuel Temperature
5474	Yellow	J1-B2	27	DeltaTemp Return
5475	Dk Green	J1-C1	1	Rail Pressure
5499	White	J1-C2	38	Fuel Pressure
5497	Purple	J1-C3	17	Oil Pressure
5453	Orange	J1-D2	36	Water-In-Fuel
5461	Brown	J1-D3	4	Coolant Temperature
5023	Orange	J1-D4	52	Secondary Rail Pressure Sensor
5456	Lt Blue	J1-F1	25	EGR Exhaust Temperature
5443	Orange	J1-E4	45	VGT Communications
5456	Lt Blue	J1-F1	44	EGR Mixed Temperature
5455	Dk Green	J1-F2	15	EGR Fresh Air Temperature
5448	Gray	J1-F3	35	Crank Speed Return
5447	Purple	J1-F4	3	Crank Speed
5946	Lt Blue	J1-G1	29	Excitation Voltage 1
5427	Purple	J1-G2	26	Sensor Return 1
5443	Orange	J1-G3	43	Cam Speed Return
5445	Dk Green	J1-G4	14	Cam Speed
5414	Yellow	J1-H3	13	Sensor Return 2
5416	Lt Blue	J1-H4	33	Excitation Voltage 2

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5447	Purple	J1-F4	3	Crank Speed
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5443	Orange	J1-G3	43	Cam Speed Return
5445	Dk Green	J1-G4	14	Cam Speed
5414	Yellow	J1-H3	13	Sensor Return 2
5416	Lt Blue	J1-H4	33	Excitation Voltage 2

JOHN

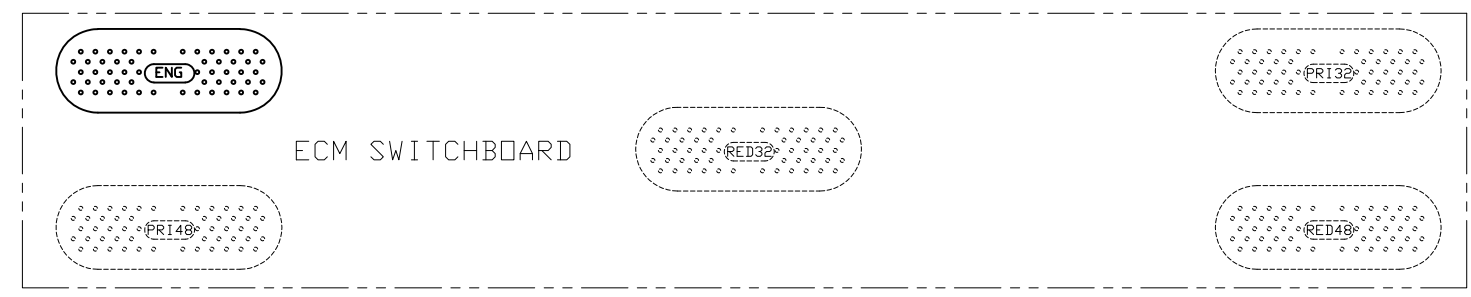
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REV	DESCRIPTION	ECN#	DWN	APVD	DATE
A	ISSUED DRAWING	573	KJK		02NDV08
-	ADDED CONTROLLED DRAWING NOTE, CONTROLLED DWG. BOX WAS MARKED "YES" & "NO"	6309	MAL	<i>MAL</i>	04MAY21



CONNECTION TO ECM THROUGH PRI32 & RED32 - REF C071361

ENG - SWITCHBOARD CONNECTION - 6090PTP



REFERENCE DEERE WIRING DIAGRAM

MODEL RL MODEL REV Changing A. 5 DRW RL DRW REV Changing A. 5		MATERIAL DRAWING:	ORIGINATOR ERIC J. SCHMADEKE ORIGIN DATE 2007-12-13 REFERENCES JDS-G113 NAME DIAGRAM, SCHEMATIC L14, 9.0L OEM, CLARKE	SCALE DRAWING SCALE SIZE E CASE CODE SUBMITTING UNIT JD90 SHEET 1/1 REVISION A
SOURCING OPEN X CLOSED	THIS DRAWING AND THE INFORMATION HEREON ARE OUR PROPERTY AND MAY BE USED AS AUTHORIZED BY DEERE & COMPANY UNPUBLISHED - ALL RIGHTS RESERVED UNDER THE COPYRIGHT LAWS		VERSION RG	PART NUMBER RE537846

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UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: DECIMAL MM IN .X ±1.5 ±0.06 .XX ±0.25 ±0.10 .XXX ±0.25 ±0.01 FRACTIONAL ±1/32 ANGULAR ± 5° SIMILAR TO XXXXXXXX	DRWN NAME DATE DDMMYY ENGR ENGINEER MATERIAL XXXXXXXX	NAME WIRING DIAGRAM, 6090PTP TIER 3 ENG CONNECTION	PART NO. C071370
USED ON / LAYOUT PART NO.	SCALE NTS	UNITS MM [INCH]	PAGE 1 OF 1

8 7 6 5 4 3 2 1