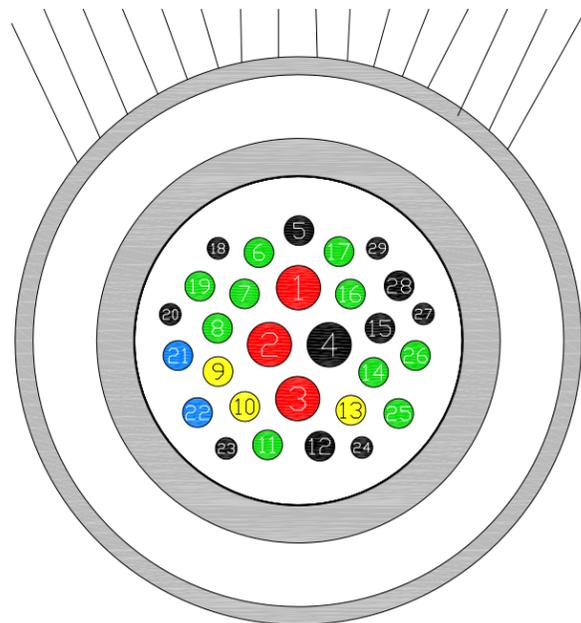


REV	DATE	REVISION	BY
A	08/18/16	RELEASED FOR PRODUCTION	MCD
B	04/21/17	CHANGES SH 3	MCD

CN6C
CUSTOMER INTERFACE
HDP24-24-29PE-L015



SAFETY RELAY TABLE (NOTE 3)						Description of Control
CUST CONN TERM NO						
CS1	CS2	21	22	25	26	
N/C	N/C	+12V	26	GND	22	Break (+) of Safety Relay Through Safety Switch
N/C	N/C	GND	25	22	+12V	Break (-) of Safety Relay Through Safety Switch
+12V	26	N/C	N/C	GND	CS2	Break (+) of Safety Relay directly by customer switch.
GND	25	N/C	N/C	CS2	+12V	Break (-) of Safety Relay directly by customer switch.

Make connections as shown to operate Safety Relay by breaking +12VDC or Ground either through Customer Switch (CS1 & CS2) or through Safety Switch

For example, connect +12V to 21, Ground to 25, and 22-26 to control Safety Relay by Breaking +12VDC through Safety Switch.

CUSTOMER CONNECTOR DETAILS (USED TO INTERFACE TO CN6E ON EPS7669X-TY)					
CIRCUIT	PIN	TERMINAL	WIRE	FUNCTION	EXPLANATION
900A	1	1060-12-0222	RED 10G	BATTERY (+)	+12VDC AT ALL TIMES
805D	2	1060-12-0222	RED/WHT 12G	+12VDC AFTER SAFETY RELAY OK	+12VDC DNCE SAFETY RELAY ENERGIZES
922	3	1060-12-0222	BLK 10G	BATTERY (-)	GROUND AT ALL TIMES
031B	6	0460-202-16141	GRY/YEL 18G	PREHEAT LAMP (+) NOTE 4	SIGNAL IS AT 12VDC WHEN GLOW PLUGS ACTIVATED
907A	7	0460-202-16141	GRN/RED 18G	WAIT TO START LAMP (+)	SIGNAL IS AT 12VDC AFTER KEY ON UNTIL ECU RELAY ENERGIZED
920	8	0460-202-16141	PNK 18G	ALTERNATOR FAIL LAMP (-) NOTE 4	SIGNAL GOES TO GROUND ON ALTERNATOR FAILURE
923	9	0460-202-1631	YEL 18G	CANBUS (+)	CANBUS COMMUNICATION POSITIVE
924	10	0460-202-1631	GRN 18G	CANBUS (-)	CANBUS COMMUNICATION NEGATIVE
911	11	0460-202-16141	DRG/BLK 18G	NEUTRAL SAFETY SWITCH (-)	MUST SEND GROUND SIGNAL WHEN OK TO START ENGINE
917	13	0460-202-1631	BLU/DRG 18G	FUEL LEVEL SENSOR (ANALOG)	CONNECTED TO RESISTIVE FUEL SENSOR (OPTIONAL)
905	14	0460-202-16141	PUR 18G	ECU STARTER INPUT (+)	FROM 50 ON KEYSWITCH THRU SAFETY RELAY TO ECU
908	16	0460-202-16141	YEL/BLK 18G	ECU POWER UP SIGNAL (-) NOTE 1	SEND GROUND TO ENERGIZE ECU RELAY
938	19	0460-202-16141	YEL/BLU 18G	ECU POWER UP SIGNAL (+) NOTE 1	SEND +12VDC TO ENERGIZE ECU RELAY
925	21	0460-202-16141	YEL/GRN 18G	E-STOP SWITCH TERMINAL 1 NOTES 2 & 3	OPTIONAL CONNECTION FOR SAFETY SHUTDOWN
926	22	0460-202-16141	DRG/WHT 18G	E-STOP SWITCH TERMINAL 2 NOTES 2 & 3	OPTIONAL CONNECTION FOR SAFETY SHUTDOWN
921	25	0460-202-16141	GRN/BLK 18G	SAFETY RELAY (-) NOTE 3	SEND GROUND TO ENERGIZE SAFETY RELAY
912	26	0460-202-16141	BLU/YEL 18G	SAFETY RELAY (+) NOTE 3	SEND +12VDC TO ENERGIZE SAFETY RELAY
-	-	M902-2244	-	CONNECTOR BACKSHELL	-
-	-	M902-2054	-	CONNECTOR BACKSHELL LOCK	-
-	-	114017	-	SEALING PLUG 12G	-
-	-	0413-204-2005	-	SEALING PLUG 18G	-

NOTES:

- The ECU Relay can NOT be energized until Customer equipment is actively communicating on J1939 CANbus. Customer may energize this relay by switching +12VDC or GROUND signal to the ECU Relay while holding the other signal constant.
- Optional E-STOP switch may be used by Customer to break the signal used to energize the SAFETY Relay.
- The SAFETY Relay MUST be energized for engine to operate. Customer may energize this relay by switching +12VDC or GROUND signal to the ECU relay while holding the other signal constant (see Safety Relay Table). Removing power from this relay at any time will result in immediate engine shutdown.
- Lamps for these functions are optional because Preheat and Alternator Fail messages are transmitted via CANbus.

ENGINE POWER SOURCE

ENGINE POWER SOURCE

348 Bryant Blvd, Rock Hill, SC, 29732
Phone: 704-944-1999 Fax: 704-944-1873

Customer Connector for use with V38T4F IH Module Relay Control Assembly

ENGINE POWER SOURCE

ENGINE POWER SOURCE

NO SCALE ACAD

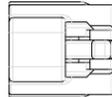
EPS7669XS

REV	DATE	REVISION	BY
A	08/18/16	RELEASED FOR PRODUCTION	MCD
B	04/21/17	ADD CONNECTIONS FOR OPTIONAL FOOT PEDAL CN2	MCD

CN2



CN2 NOT LABELED
POSITIONS SHOWN
WIRE ENTRY VIEW



CN2 FOOT PEDAL (WILLIAMS)

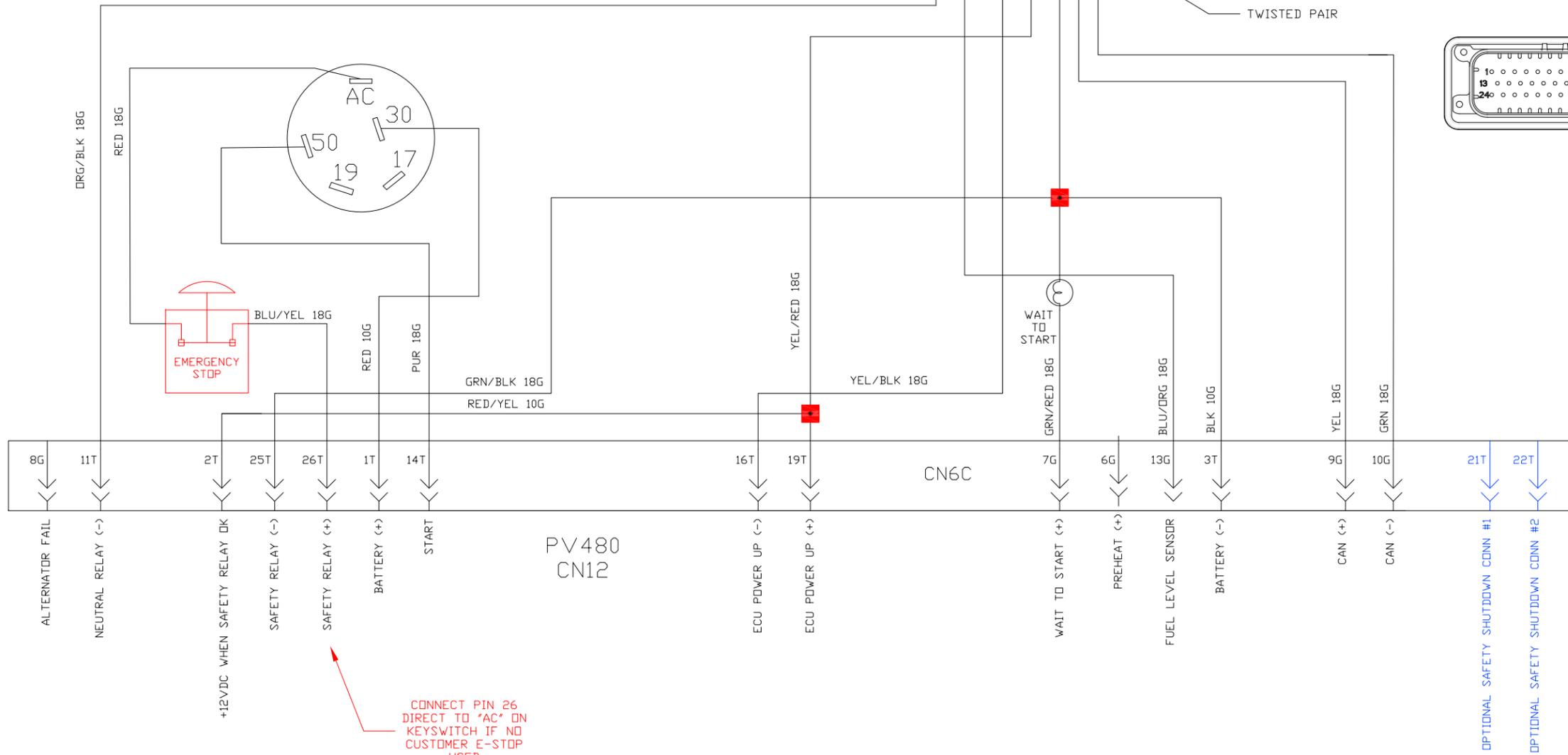
PIN	WIRE	FUNCTION
1	BLK/WHT 18G	GROUND APS1
2	GRN/RED 18G	APS 1
3	DRG 18	+5VDC APS1
4	DRG 18	+5VDC APS2
5	BLU 18G	APS 2
6	BLK/WHT 18G	GROUND APS2

CN2 COMPONENTS

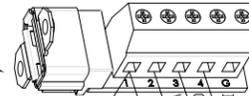
MANUFACTURER - TYCO		
PART NO	ITEM	QTY
2822346-1	SHELL	1
171662-1	TERMINAL	6
2822352-1	SEAL	6
174263-7	LOCK	1

PARK/NEUTRAL SIGNAL
Customer to Connect
ground here in
PARK & NEUTRAL.

PV480
CN12



REF DWG EPS6404XP

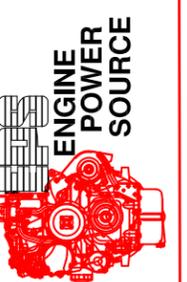
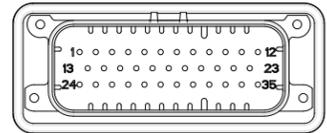


CN12 CONNECTION DETAILS

PIN	WIRE	FUNCTION
1	WHT 18	USB DATA (-)
3	YEL/BLK 18	ECU PWR (GROUNDS WHEN ACTIVE)
6	DRG/BLK 18	PARKING BRAKE (-)
8	BLU 18G	APS 2
13	BLK 18	USB GROUND
14	GRN 18	CANBUS (-)
18	DRG/BLK 18G	NEUTRAL SWITCH (-)
19	GRN/RED	APS 1
20	BLU/DRG 18G	FUEL LEVEL
22	BLK/WHT 18G	APS GROUND
24	GRN 18	USB DATA (+)
25	RED 18	+5VDC FOR USB & APS 1 & 2
26	YEL 18G	CANBUS (+)
27	YEL/RED 18G	AC POWER FROM KEYSWITCH
28	YEL/RED 18G	BATTERY (+)
29	BLK 18G	BATTERY (-)

CN12 CONNECTOR DETAILS

PART NUMBER	DESCRIPTION	QTY	MANUF
776164-1	CONNECTOR BODY	1	TYCO
770584-1	SOCKET TERMINAL	9	TYCO



SHEET NUMBER
3 OF 3

DATE
06-24-2016

CAD BY
MCD

DESCRIPTION
Sample Controls Connections for use with V38T4F SCR Engine

348 Bryant Blvd, Rock Hill, SC, 29732
Phone: 704-944-1999 Fax: 704-944-1873

REVISION
B

PART NUMBER
EPS7669XS