board	internal name	connector type	pin	internal signal name	function	Use?	Harness Name	Harness Color	wiring	testing	
			1	XDCR_PWR	Accel pedal power	n					
			2	AGND	Accel pedal gnd	y	TEMP-	black	wired		
			3	AIN4	Analog input 4 0-5Vfs	n					
			4	AOUT	Analog output 0-5V	n					
			5	RTD1	RTD Input (PT100 or PT1000)	n					
			6	RTD2	RTD Input (PT100 or PT1000)	n					
			7	/PROG_ENA	Serial boot loader enable	n					
			8	DIN2	Reverse enable switch	n					
			9	DIN5	Ignition input	n					
			10	DIN8	User-defined digital input	n					
			11	CANA_L	CAN Channel A low	y	CAN_N	black	wired		
			12	TXD	RS232 Transmit	n					
			13	AIN1	Accel pedal wiper	n					
			14	XDCR_PWR	Spare 5V transducer power	n					
			15	AGND	Analog ground	n					
			16	AIN6	Analog input 6 0-5Vfs	n					
			17	AGND	Analog ground	n					
Right MC (MC2)	J1	35 pos AMPSEAL 77614-1	18	AIN5	Analog input 5 0-5Vfs	n			6t////9/		
			19	AGND	Analog ground	n					
			20	DIN3	Brake switch	n					
			21	DIN6	Start input	n					
			22	GND	Ground	y					
			23	CANB_H	CAN Channel B high	n					
			24	AIN2	Motor temperature sensor	y	TEMP+	red	wired		
			25	AIN3	Brake pedal	n				Note - a 3.01kOhm pullup must be added between pin 24 and pin 1	
			26	XDCR_PWR	Spare 5V transducer power	n					
			27	RLY6	Hi-side relay driver, controlled by CAN	n					
			28	XDCR_PWR	Spare 5V transducer power	n					
			29	RLY5	Hi-side relay driver, controlled by CAN	n					
			30	DIN1	Forward enable switch	n					
			31	DIN4	REGEN disable input	n					
			32	DIN7	Digital input 7	n					2
			33	CANA_H	CAN Channel A high	y	CAN_P	red	wired		
			34	CANB_L	CAN Channel B low	n					
			35	RXD	RS232 Receive	n					
			1	XDCR_PWR	Encoder power, 5V @ 80mA max	n					
			2	ENCZ	Encoder channel Z input	n				/////////////////	
			3		Resolver excitation return	y	EXC-		wired		
			4	COS	Resolver cosine winding +	y	COS+				
			5	<reserved>	DO NOT CONNECT	n					
			6	GND	Main 12V Return		-		-		
			7	RLY2	Main relay drive	n					
			8	BATT+	Main 12V power source	n	-		-		
			9	ENCA	Encoder channel A input	n					
			10	GND	Encoder GND	n					
Right MC (MC2)	J2	23 pos AMPSEAL 770680-1	11	SIN	Resolver sine winding +	y	SIN+		wired		
			12	/COS	Resolver cosine winding -	y	COS-		wired		
			13	<reserved>	DO NOT CONNECT	n					
			14	GND	Main 12V Return	y	GND_MC2		wired		
			15	RLY3	Lo-side relay driver / 12V power relay drive	n					
			16	ENCB	Encoder channel B input	n					
			17	EXC	Resolver excitation output	y	EXC+		wired		
			18	/SIN	Resolver sine winding -	y	SIN-		wired		
			19	GND	Resolver shield GND	y	SHIELD		wired		
			20	<reserved>	DO NOT CONNECT	n					
			21	RLY1	Precharge Contactor Drive	n					
			22	RLY4	Fault indicator drive	n					

board	internal name	connector type	pin	internal signal name	function	Use?	Harness Name	Harness Color	wiring	testing	
			23	BATT+	Main 12V power source	y	VCC12_MC2		wired		
			1	XDCR_PWR	Accel pedal power	n					
			2	AGND	Accel pedal gnd	y	TEMP-	black	wired		
			3	AIN4	Analog input 4 0-5Vfs	n					
			4	AOUT	Analog output 0-5V	n					
			5	RTD1	RTD Input (PT100 or PT1000)	n					
			6	RTD2	RTD Input (PT100 or PT1000)	n					
			7	/PROG_ENA	Serial boot loader enable	n					
			8	DIN2	Reverse enable switch	n					
			9	DIN5	Ignition input	n					
			10	DIN8	User-defined digital input	n					
			11	CANA_L	CAN Channel A low	y	CAN_N	black	wired		
			12	TXD	RS232 Transmit	n					
			13	AIN1	Accel pedal wiper	n					
			14	XDCR_PWR	Spare 5V transducer power	n					
			15	AGND	Analog ground	n					
			16	AIN6	Analog input 6 0-5Vfs	n					
			17	AGND	Analog ground	n					
Left MC (MC1)	J1	35 pos AMPSEAL 77614-1	18	AIN5	Analog input 5 0-5Vfs	n					
			19	AGND	Analog ground	n					
			20	DIN3	Brake switch	n					
			21	DIN6	Start input	n					
			22	GND	Ground	n					
			23	CANB_H	CAN Channel B high	n					
			24	AIN2	Motor temperature sensor	y	TEMP+	red	wired		
			25	AIN3	Brake pedal	n					Note - a 3.01kOhm pullup must be added between pin 24 and pin 1
			26	XDCR_PWR	Spare 5V transducer power	n					
			27	RLY6	Hi-side relay driver, controlled by CAN	n					
			28	XDCR_PWR	Spare 5V transducer power	n					
			29	RLY5	Hi-side relay driver, controlled by CAN	n					
			30	DIN1	Forward enable switch	n					
			31	DIN4	REGEN disable input	n					
			32	DIN7	Digital input 7	n					
			33	CANA_H	CAN Channel A high	y	CAN_P	red	wired		
			34	CANB_L	CAN Channel B low	n					
			35	RXD	RS232 Receive	n					
			1	XDCR_PWR	Encoder power, 5V @ 80mA max	n					
			2	ENCZ	Encoder channel Z input	n					
			3	GND	Resolver excitation return	y	EXC-		wired		
			4	COS	Resolver cosine winding +	y	COS+		wired		
			5	<reserved>	DO NOT CONNECT	n					
			6	GND	Main 12V Return	n	-				
			7	RLY2	Main relay drive	n					
			8	BATT+	Main 12V power source	y	VCC12_MC1		wired		
			9	ENCA	Encoder channel A input	n					
			10	GND	Encoder GND	n					
			11	SIN	Resolver sine winding +	y	SIN+		wired		
Left MC (MC1)	J2	23 pos AMPSEAL 770680-1	12	/COS	Resolver cosine winding -	y	COS-		wired		
			13	<reserved>	DO NOT CONNECT	n					
			14	GND	Main 12V Return	y	GND_MC1		wired		
			15	RLY3	Lo-side relay driver / 12V power relay drive	n					
			16	ENCB	Encoder channel B input	n					
			17	EXC	Resolver excitation output	y	EXC+		wired		
			18	/SIN	Resolver sine winding -	y	SIN-		wired		
			19	GND	Resolver shield GND	y	SHIELD		wired		
			20	<reserved>	DO NOT CONNECT	n					

board	internal name	connector type	pin	internal signal name	function	Use?	Harness Name	Harness Color	wiring	testing	
			21	RLY1	Precharge Contactor Drive	n					
			22	RLY4	Fault indicator drive	n					
			23	BATT+	Main 12V power source	n					