

MODULE IDENTIFIER (MID)	
MID No.	Module
26	Computerized Monitoring System (CMS)

COMPONENT IDENTIFIER (CID) LIST	
CID No.	Component
Computerized Monitoring System (CMS)	
096	Fuel Level Sensor
100	Engine Oil Pressure Sensor
110	Engine Coolant Temperature Sensor
168	Electrical System Voltage
177	Power Train Oil Temperature Sensor
248	CAT Data Link
270	Harness Code
271	Action Alarm
324	Action Lamp
500	Hydraulic Oil Temperature Sensor
601	Brake Air Pressure Sensor
627	Parking Brake Switch

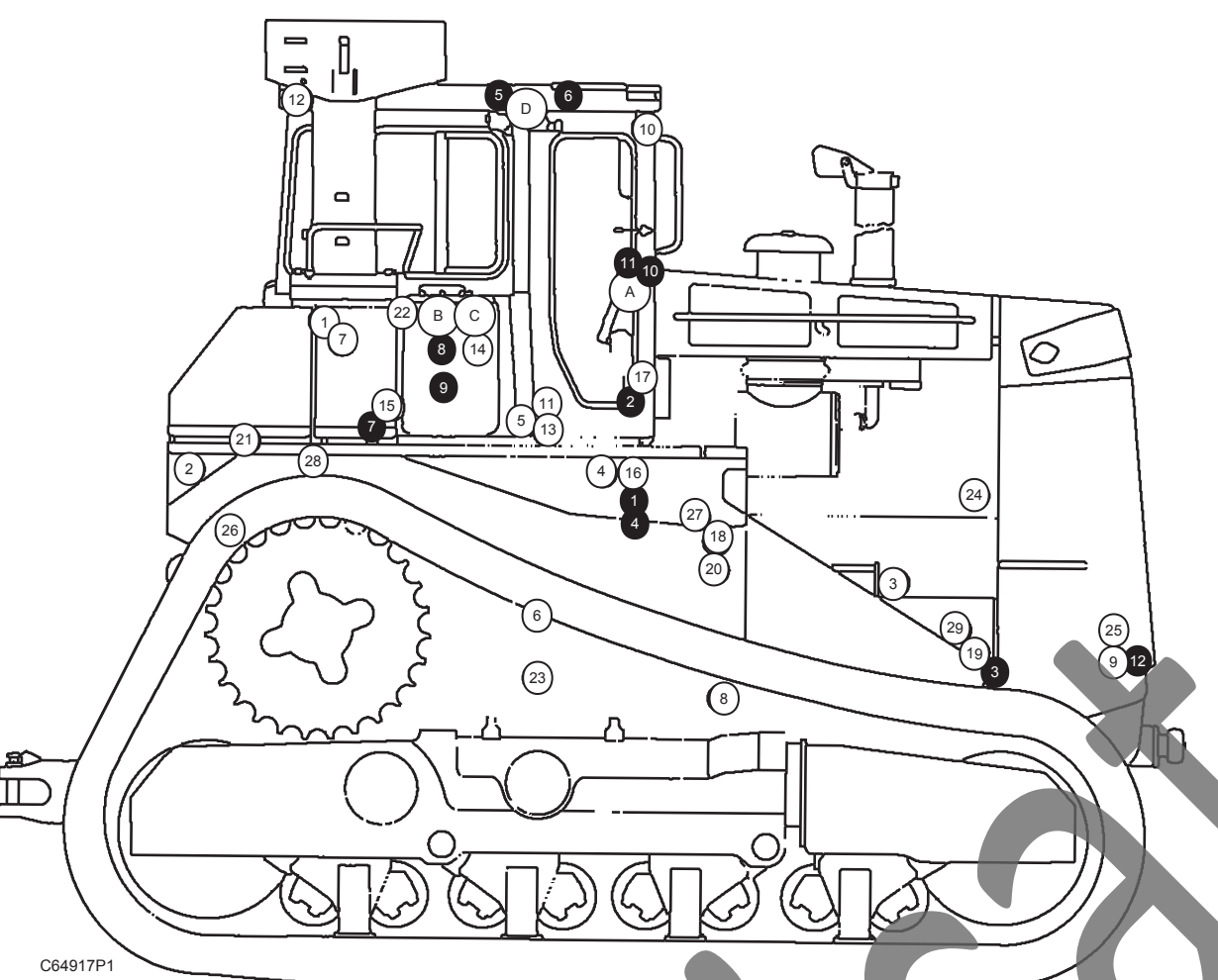
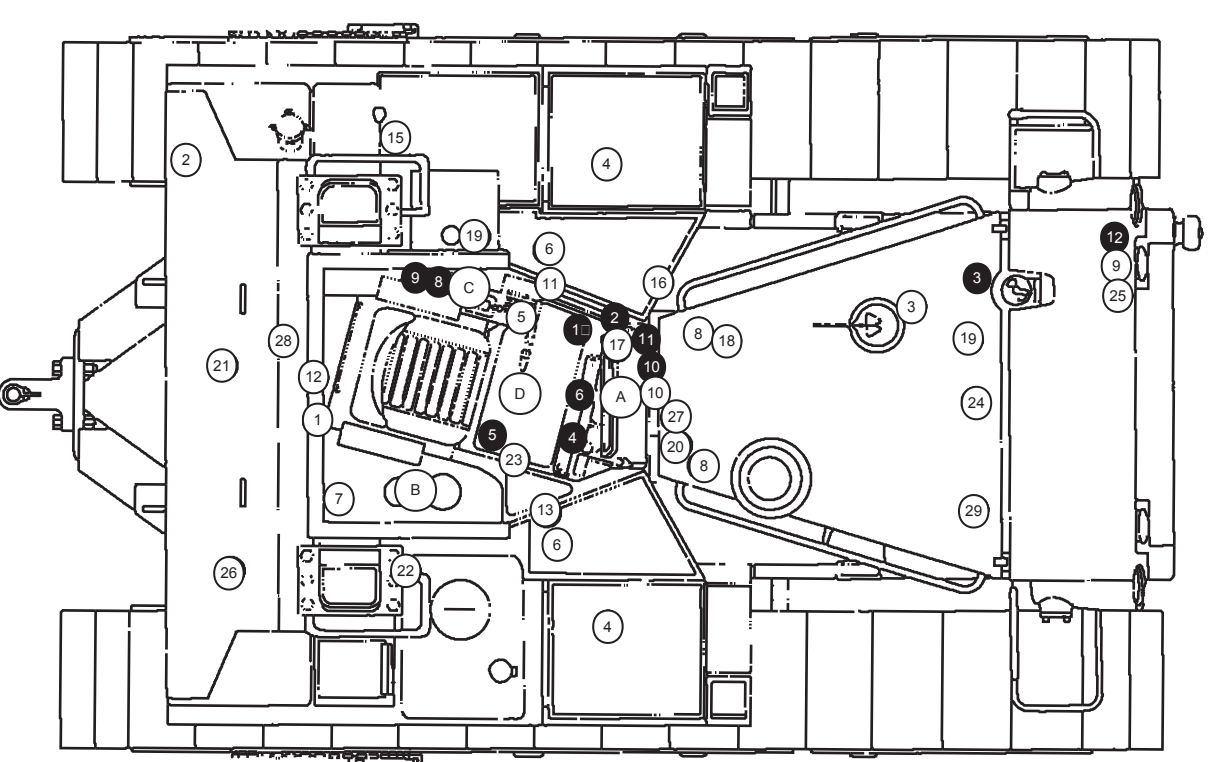
CID list applies to Engine and Monitor Controls

RESISTOR AND SOLENOID SPECIFICATIONS		
Component	Part No.	Resistance (Ohms) ¹
Resistor - Blower Motor Speed	9G1960	Overall 2.0 ± .1; Tap 1.0 ± .05
Resistor - Starter/Diagnostic Comm	9T2177	150 ± 7.5
Solenoid - Air Conditioner Clutch	102-0347	14.4 ± 0.6
Solenoids - Dual Tilt	6T-5208	24.9
Solenoid - Ripper Pin Puller	9G-9988	24.9
Solenoid - Start Aid	7N-7259	6

¹ At room temperature.

Off Machine Switch Specification				
Part No.	Function	Actuate	Deactuate	Contact Position
3E5043	AC High/Low Pressure	450 to 2400 ± 140 kPa (65 to 350 ± 20 psi)	0 to 450 kPa MAX (0 to 65 psi MAX)	Open
		Spec For Increasing Pressure	greater than 2400 ± 140 kPa (greater than 350 ± 20 psi)	Closed
	Spec For Decreasing Pressure	greater than 1720 ± 205 kPa (greater than 250 ± 30 psi)	-	Open
		1720 ± 205 to 205 ± 50 kPa (250 ± 30 to 30 ± 7 psi)	-	Closed
3W5541	Backup Alarm	12.7 to 20.3 mm (0.5 to 0.8 in)	205 ± 50 to 0 kPa (30 ± 7 to 0 psi)	Open
8N-1693	Coolant Temperature (Start Aid)	37.8 ± 2.8°C (100 ± 9°F)	25.7°C MIN (80°F MIN)	Normally Open
9G3341	Power Train Oil Temperature (CMS)	61.7 ± 2.8°C (125 ± 5°F)	43.3°C MIN (110°F MIN)	Closed
8K3040	Engine Coolant Flow (CMS)	362 ± 29 mm (45.6 mm ID point) (1.3 ± 1.02 x 1.6 in ID point)	303 mm MIN (1.1 in MIN)	Normally Open
8K791	Power Train Filter Pressure (CMS)	210 ± 70 kPa (30 ± 10 psi)	-	Normally Open

Related Electrical Service Manuals	
Title	Form No.
Computerized Monitoring System (CMS)	SENRS247
Starting And Charging Systems	SENRS247
Starting Motor, 50-MT Series	SENRS380



MACHINE HARNESS CONNECTOR AND COMPONENT LOCATIONS



SENRS263-01
December 1993

Schematic

D10N Tractor Electrical System

3SK1-UP

Wire Description				
Wire Number	Wire Color	Description	Description	
Power Circuits				
101	RD	BAT	442 GY HYD SYSTEM TEMP GAGE	
102	BU	HD LMP	443 YL POWER TRAIN TEMP GAGE	
103	YL	AUX CKT	447 PK FUEL LEVEL GAGE	
105	BR	KEY START SW	460 YL TACH SENDER (H)	
106	WH	AUX CKT	460 YL TACH SENDER (H)	
107	WH	ENG SHUT - DOWN	460 YL ELECTRICAL SYSTEM NO.1 VOLTAGE	
Accessory Circuits				
108	BU	AUX CKT	500 BR WIPER - FRONT (PARK)	
109	OR	ALT OUTPUT (+) TERM.	501 GN WIPER - FRONT (L.O.)	
112	PU	MAIN POWER RELAY OUTPUT	502 OR WIPER - FRONT (RH)	
113	OR	OPR MON PANEL B+ SWITCHED	503 BR WIPER - REAR (PARK)	
114	GN	WARNING HORN (FORWARD)	504 YL WIPER - REAR (LO)	
116	BR	AUX CKT	505 BU WIPER - REAR (RH)	
121	YL	BACKUP ALARM TO LAMP	506 PU WASHER - FRONT	
124	GN	A/C	507 WH WASHER - REAR	
125	OR	AUX CKT	508 PU RADIO SPEAKER - LEFT	
174	PK	AUX CKT	508 WH RADIO SPEAKER - LEFT (COMMON)	
177	OR	MAIN BKR	511 BR RADIO SPEAKER - RIGHT	
184	BU	AUX CKT	512 GN RADIO SPEAKER - RIGHT (COMMON)	
186	WH	AUX CKT	513 OR A/C COMPRESSOR/REFRIGERANT PRESS. SW	
Ground Circuits				
200	BK	MAIN CHASSIS	515 GY BLOWER MOTOR (H)	
202	BK	OPR MON PANEL CMS	516 GN BLOWER MOTOR (MEDIUM)	
203	BK	CHASSIS DIAGNOSTIC	517 BU BLOWER MOTOR (LO)	
207	BK	STARTER DIAGNOSTIC	521 YL A/C SW TO REFRIGERANT SW	
290	BK	SERVICE	522 WH A/C CLUTCH TO THERMOSTAT SW	
291	BK	CLEAR	523 BR WIPER - LEFT (PARK)	
Basic Machine Circuits				
301	BU	STARTER NO.1 SOL.	525 GY WIPER - LEFT (H)	
302	OR	STARTER NO.1 RESISTOR TO DIAGNOSTIC	526 YL WIPER - RIGHT (PARK)	
304	WH	STARTER RELAY NO.1 OUTPUT	527 GN WIPER - RIGHT (LO)	
306	GN	STARTER RELAY COIL TO NEUT START SW OR KEY SW	528 PK WIPER - RIGHT (H)	
307	OR	KEY SW TO NEUT START SW	529 WH WASHER LEFT	
308	YL	MAIN POWER RELAY COIL	530 OR WASHER RIGHT	
310	PU	START AID SW TO START AID SOL	533 YL PITCH SOL TO TRIGGER SW - DUAL TILT	
311	WH	START AID SOL TO TEMP SW	554 PK MOMENTARY SW TO SINGLE TILT SOL - DUAL TILT	
312	PK	STARTER NO.2 SOL TO RESISTOR	592 BU DC/DC CONVERTER POWER OUTPUT	
313	GY	STARTER NO.2 RESISTOR TO DIAGNOSTIC	613 PK DC/DC CONVERTER MEMORY OUTPUT	
314	PU	STARTER RELAY NO.2 OUTPUT	Lighting Circuits	
321	BR	BCKP ALARM LAMP TRAVEL ALARM	600 BR DASH LAMP BASIC	
322	GY	WARNING HORN (FORWARD)	606 GN FLOOD LAMP - REAR	
Monitoring Circuits				
403	GN	ALTERNATOR (R) TERM.	608 YL FLOOD LAMP - SIDE	
405	GY	OPR MON OIL PRESS. (LO SETTING)	610 OR HEAD LAMP BASIC	
410	WH	OPR MON ACTION ALARM	633 BU ATTACH LIGHTING CKT	
411	PK	OPR MON MASTER ACTION LAMP	643 GN DISPLAY INTENSITY UP	
412	BU	OPR MON COOLANT FLOW	644 OR BRIGHTNESS ADJUST	
426	BR	OPR MON POWER TRAIN OIL FIL TER	Control Circuits	
441	OR	ENG COOLANT TEMP GAGE	779 WH COUPLER ENGAGE SOL	
			780 PU COUPLER DISENGAGE SOL	

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Failure Mode Identifiers (FMI) ¹	
FMI No.	Failure Description
0	Data valid but above normal operational range.
1	Data valid but below normal operational range.
2	Data erratic, intermittent, or incorrect.
3	Voltage above normal or shorted high.
4	Voltage below normal or shorted low.
5	Current below normal or open circuit.
6	Current above normal or grounded circuit.
7	Mechanical system not responding properly.
8	Abnormal frequency, pulse width, or period.
9	Abnormal up/down.
10	Abnormal rate of change.
11	Failure mode not identifiable.
12	Bad device or component.
13	Out of calibration.

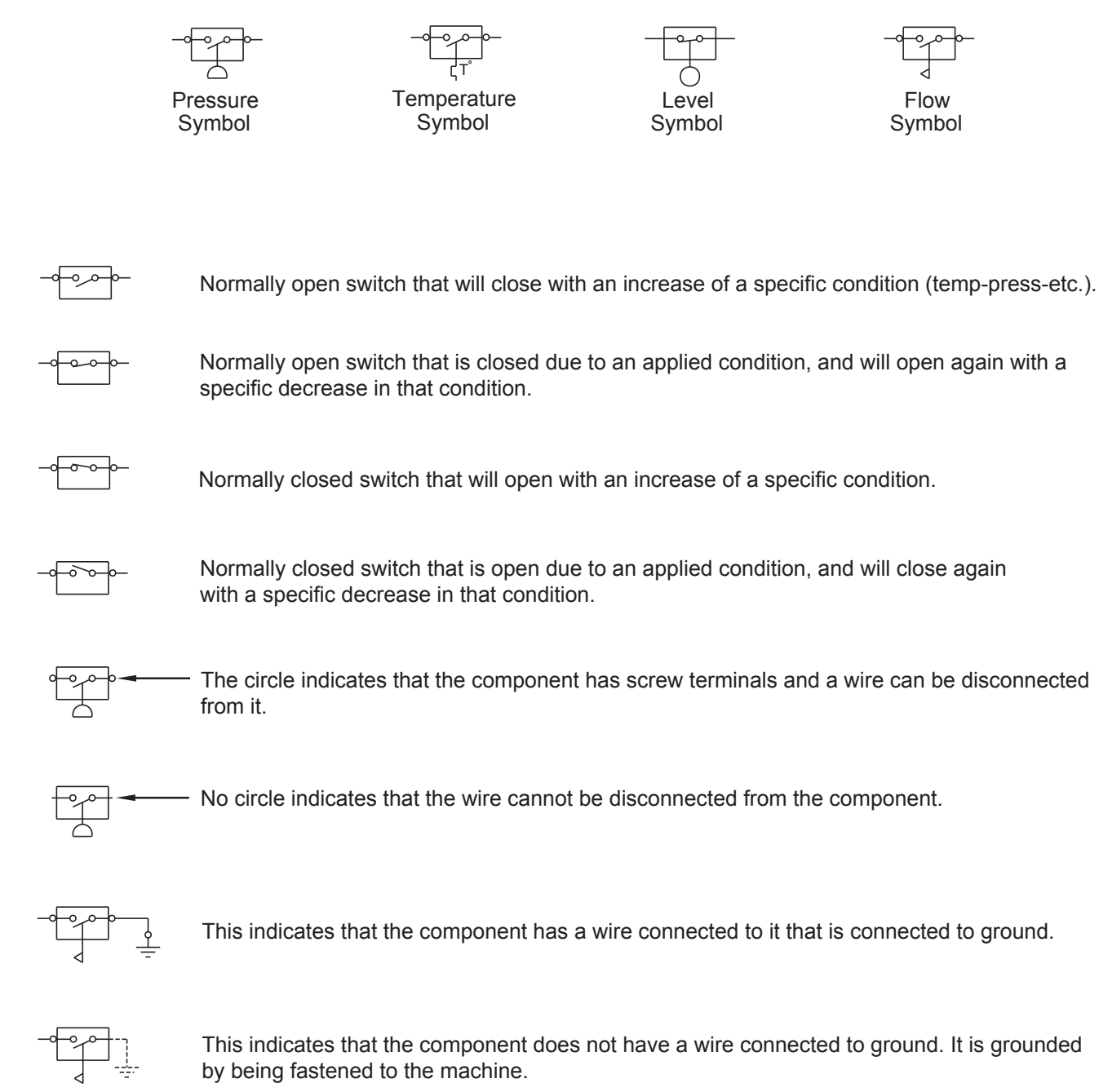
HARNESS CONNECTOR LOCATION CHART			
Connectors	Machine Location	Harness And/Ov Components	Schematic Location
40 Contacts	●	D - 8E-2055 Operator Monitor (CMS)	E-8
		A - 8E-1406 Fuel Level Sensor	E-5
		D - 8E-2955	F-6
24 Contacts	●	B - 9N-4254 U - 9N-7012	F-10
		C - 3E-1405	B-5
		Diagnostic Connector	F-7
		D - 8E-2955	A-12
20 Contacts	●	D - 8E-1406 P - 9U-9046	F-6
		E - 6V-6199	A-10
		C - 8E-1405	F-7
		N - 8E-5207	F-7
8 Contacts	●	P - 9U-9046 A - 9U-9049	E-1
		Radio	C-10
		G - 3T-1098 UU - 3E-7879	E-1
7 Contacts	●	C - 8E-1405 N - 8E-5207	B-6
		T - 9U-9048	A-10
		B - 9N-4254 S - 102-8446	F-12
6 Contacts	●	J - 102-8446 K - 108-8933	F-11
		N - 8E-5207	D-11
		Voltage Converter	D-11
		P - 9U-9046 Wiper Motor Front	B-9
		Wiper Motor Left	E-10
		P - 9U-9046 Wiper Motor Right	A-9
		R - 9U-9009 Wiper Motor Rear	E-11

Machine locations are repeated for components located close together.
* - Connector is located at the component.

Component Location Chart				
Machine Location	Component	Schematic Location	Machine Location	Schematic Location
1	Alarm - Action	C-12	21	Sensor - System Voltage (CMS)
2	Alarm - Backup	C-12	22	Sensor - Coolant Temp
3	Alternator	C-1	23	Sensor - Engine Oil Pressure
4	Batteries	A-4, F-4, F-5	20	Sensor - Engine Speed
5	Breaker - Alternator	D-4	21	Sensor - Fuel Level
A	Breaker - Auxiliary	B-9	21	Sensor - Hydraulic Oil Temperature
A	Breaker - Blower	B-9	26	Sensor - Power Train Oil Temp
A	Breaker - Key	B-9	24	Solenoid - A/C Clutch
A	Breaker - Lamp	B-9	25	Solenoid - Dual Tilt
5	Breaker - Ripper Pin Puller	D-4	26	Solenoid - Ripper Pin Puller
A	Breaker - Starter Outlet	B-9	27	Solenoid - Start Aid
6	Bus Bar - Positive	F-3	24	Switch - A/C Refrigerant Pressure
7	Converter - Voltage	D-12	A	Switch - Accessory
A	Ground - Engine	C-9	C	Switch - Backup Alarm
A	Ground - Engine	A-4, F-3	C	Switch - Blower
9	Horn - Forward	D-1, E-1	29	Switch - Coolant Flow
A	Horn - Action	B-7	18	Switch - Coolant Temp (Start Aid)
A	Key - Service (HORN)	A-7	A	Switch - Dimmer
A	Key - Operator (CMS)	E-9	16	Switch - Disconnect
10	Motor - Wiper	C-9	B	Switch - Dual Tilt
11	Motor - Latch/Relay	E-10	A	Switch - Head Lamp
12	Motor - Rear Wiper	E-11	B	Switch - Horn
13	Motor - Right Wiper	E-11	A	Switch - Key Start
14	Motors - Blower	F-10, F-12	A-9	Switch - Neutral/Start
8	Motors - Starting	B-4, F-3	28	Switch - Power Train Filter Bypass Temp
15	Motors - Windshield Washer	F-12	B	Switch - Ripper Pin Puller
6	Radio	A-6, B-6	A	Switch - Side Flood Lamp
16	Receptacle - Auxiliary Start	F-4	A	Switch - Start Aid
17	Relay - Main	D-4	A	Switch - Thermostat
17	Relays - Start	D-4	28	Switches - Power Train Filter Pressure
14	Resistor - Blower Motor Speed	F-11	D	Switches - Wiper
8	Resistors - Starter to Diagnostic Comm	B-4, F-4	C-11, C-12	

Machine locations are repeated for components located close together.
A = Components located in the dash.
B = Components located in the right console area.
C = Components located in the left console area.
D = Components located in the headliner.

Electrical Schematic Symbols And Definitions



Harness And Wire Electrical Schematic Symbols

