SERVICE MANUAL

W190C TIER 4

Wheel Loader

Part number 84525157
English
June 2011

NEW HOLLAND CONSTRUCTION

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MAINTENANCE SCHEDULE

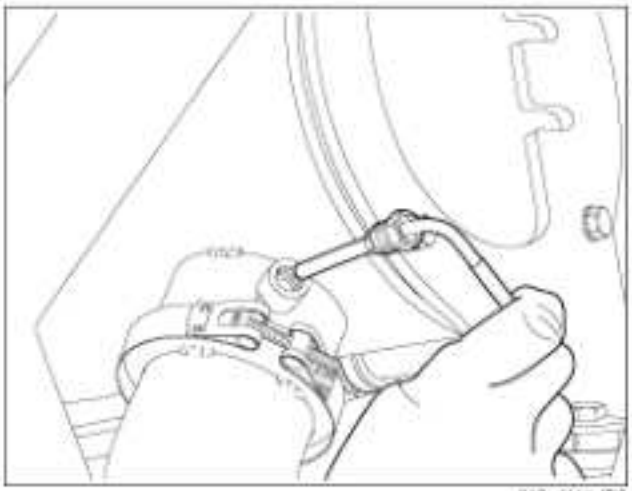
SERVICE INTERVAL	ITEM NUMBER	SERVICE POINTS	Initial Service	FREQUENCY IN HOURS						
				CHECK	CLEAN	CHANGE	DRAIN	LUBRICATE	REPLACE	ADJUST
Variable Periodic (•)	2	Radiator Coolant Level		•						
	13	Tires		•						
	16	Hydraulic Filter		•						
	12	Alternator, AC, Drive Belt		•						
	31	Air cleaner		•	•					
	19	Bleed Fuel Filter of Condensation					•			
	28	Clean SCR system DEF tank filter			•					
	XX	Fire extinguisher		•						
Every 10 Hours	1	Check Engine Oil Level		10						
Every 50 Hours	13	Check Engine Coolant Level		50						
	3	Check Transmission Oil Level		50						
	4	Check Hydraulic Oil Level		50						
	5 & 6	Grease Bucket Mounting Fittings						50		
	7	Grease machine and attachments						50		
First 100 Hours	16	Change Engine Oil and Filters	100							
	18	Replace Fuel Filters	100							
	20	Change Hydraulic Filter	100							
	25	Change Oil in Axles	100							
	13	Check wheel torque		100						
	28	Clean in-line DEF supply filter			100					
Every 100 Hours	8	Lubricate The Steering Cylinder Pivots - Rod And Closed End (4 Fittings)						100		
	9	Grease Front Drive Shaft Support Bearing						100		
	10	Lubricate Loader Lift & Cylinder Pivots (10) Z-bar						100		
	10	Lubricate Loader Lift & Cylinder Pivots (18) XT						100		
Every 250 Hours	11	Check Cab Air Filter		250						
	14	Check Tire Pressure & Wheel Torque	4	250						
	12	Check Drive Belt		250						
	XX	Trans Clutch Calibration (See Section 6002)	250	1000						
Every 500 Hours	14	Check Axle Oil Level		500						
	15	Check Battery Electrolyte Level		500						
	16	Change Engine Oil and Filter				500				
	XX	Check ROPS		500						
	18	Drain Fuel Tank Condensation & Water Separator					500			
	19	Replace Fuel Filter							500	

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Every 1000 Hours	20	Replace Hydraulic Oil filter							1000	
	21	Grease Articulation Fittings						1000		
	24	Change crankcase filter				1000			1000	
	23	Replace Drive Belt								
	11	Replace Cab Air Filter							1000	
	26	Change Transmission Oil and Filter				1000				
	XX	Check Injector Calibration		1000						
	XX	Check Valve Adjustment (Engine Manual)		1000						
	XX	Trans Clutch Calibration (See Section 6002)		1000						
Every 1500 Hours	21	Change Front & Rear Axle Oil				1500				
	26	Change Transmission Oil and Filter				1500				
	28	Clean in-line DEF filter								
Every 2000 Hours	29	Change Hydraulic Oil				2000				
	30	Change Coolant				2000				
	31	Replace Engine Air Cleaner							2000	
	32	Lubricate cab and door						2000		
	XX	Valve Clearance (Engine Manual)								2000
Every 3000 Hours	XX	Replace DEF supply module filter							3000	
Every 6000 Hours	XX	Engine Injectors (Engine Manual)			6000					
	XX	Fuel Pump (Engine Manual)			6000					6000

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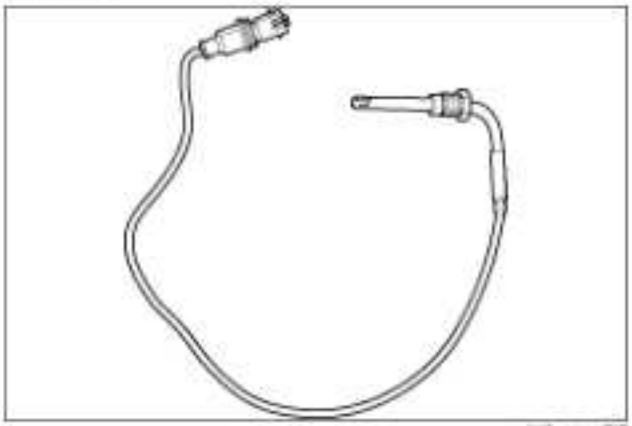
STEP 5



IMG_1510.JPG

Remove temperature sensor from exhaust system.

STEP 6



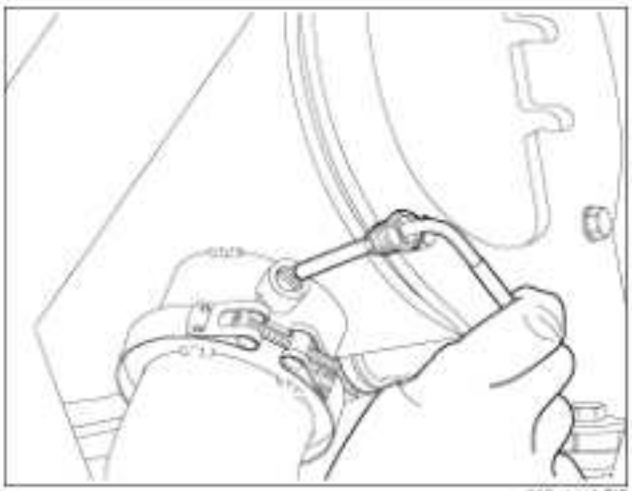
IMG_1514.TIF

Remove wire ties securing wire harness to support brackets. Unplug sensor from machine wiring harness and remove it.

Upstream Exhaust Temperature Sensor Reinstall

NOTE: *Do not use impact wrenches on the exhaust system unless the sensors are removed."*

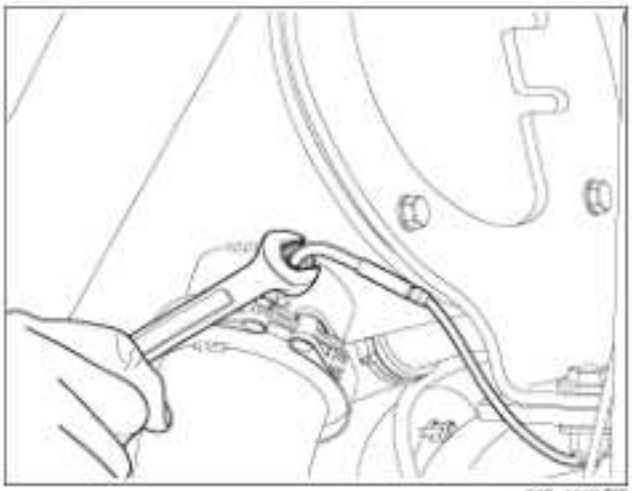
STEP 1



IMG_1510.TIF

Install temperature sensor into exhaust pipe.

STEP 2



IMG_1507.TIF

Secure sensor into exhaust pipe. Sensor torque 40 to 50 Nm (30 to 36 lb ft.). Reconnect sensor to wire harness and secure harness to support brackets using new wire ties.

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131 – Electronic Panel		
Check Points	**Correct Reading**	**Possible Cause of Bad Reading**
NOTE: *Automatic climate control only.*		

132 – External Air Temperature Sensor		
Check Points	**Correct Reading**	**Possible Cause of Bad Reading**
NOTE: *Automatic climate control only.*		

133 – Internal Air Temperature Sensor		
Check Points	**Correct Reading**	**Possible Cause of Bad Reading**
NOTE: *Automatic climate control only.*		

134 – Sun Sensor		
Check Points	**Correct Reading**	**Possible Cause of Bad Reading**
NOTE: *Automatic climate control only.*		

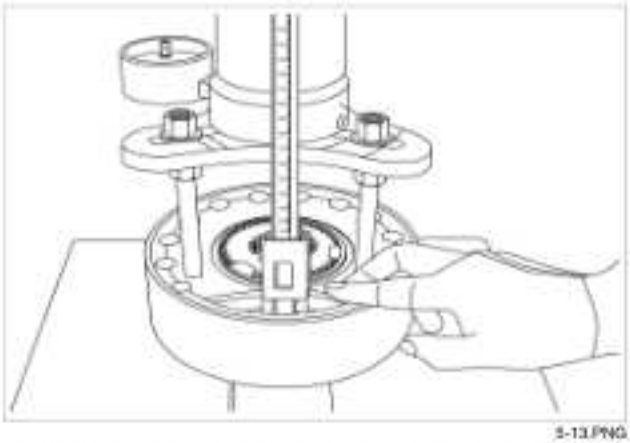
135 – Blower Motor Resistor		
Check Points	**Correct Reading**	**Possible Cause of Bad Reading**
NOTE: *Automatic climate control only*		

136 – Blower Motors		
Check Points	**Correct Reading**	**Possible Cause of Bad Reading**
NOTE: *Automatic climate control only*		

137 – Thermocouple Sensor		
Check Points	**Correct Reading**	**Possible Cause of Bad Reading**
NOTE: *Automatic climate control only.*		

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STEP 13



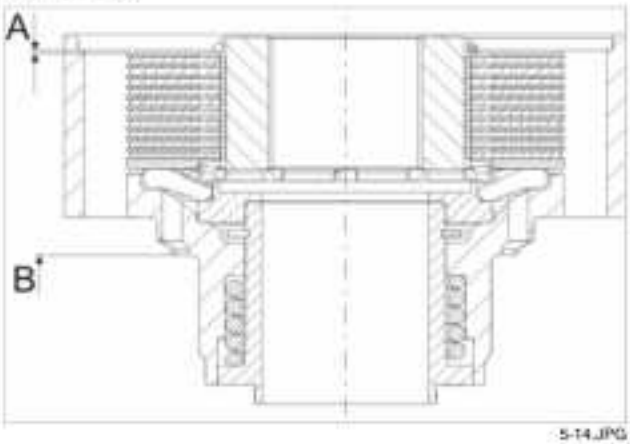
5-13.PNG

Preload disk package with an axial force of F = 50 $^{+30}$ KN. Then check setting dimension "A" = 1.05 +/-0.1 mm (0.041 +/-0.004 in) from collar of differential cover to plane face of outer disc (also see sketch in step 14).

NOTE: *Any deviation from specified setting dimension must be corrected with a corresponding outer disk.*

NOTE: *Special tools pressure piece and load cell are to be determined. Contact special tools.*

STEP 14



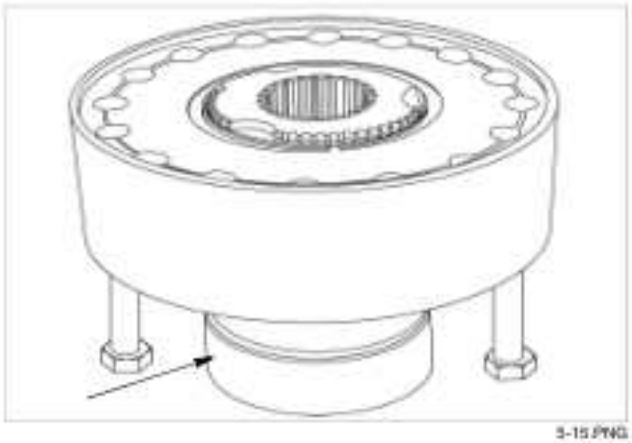
5-14.JPG

A = Setting dimension = 1.05 +/- 0.1 mm (0.041 +/-0.004 in)

B = Contact face.

NOTE: *To obtain correct measuring result, housing cover may only be supported on contact face (B). Ensure that assembly stand is only supported on disk package and not on disk carrier.*

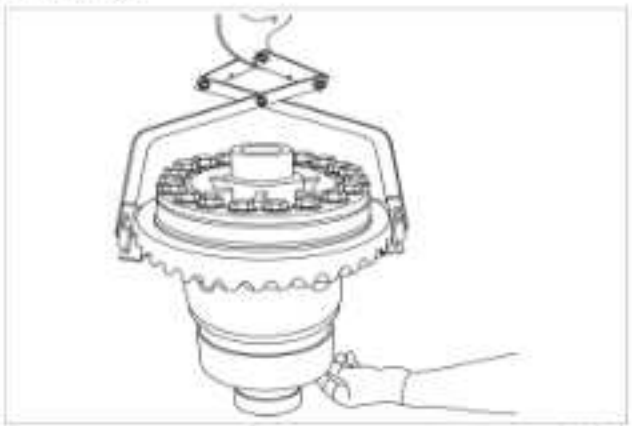
STEP 15



5-15.PNG

Position housing cover onto pressure piece (arrow). Insert two hex bolts into housing cover to radially attach disc package.

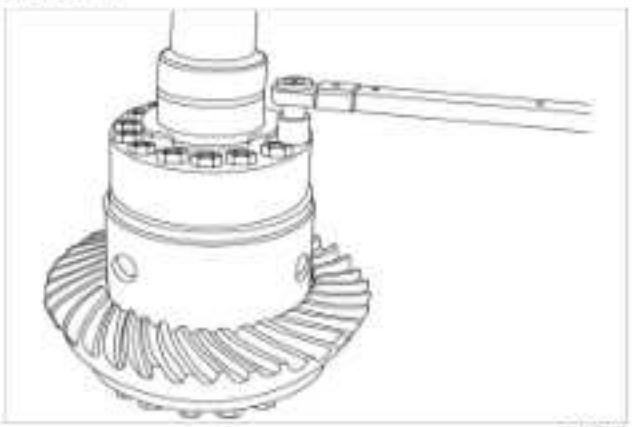
STEP 16



5-16.PNG

Use a suitable lifting device. Position premounted differential onto housing cover and temporarily attach with hex bolts.

STEP 17



5-17.PNG

Preload differential with a press and pressure piece. Final tighten housing cover with hex bolts. Torque to 185 Nm (136 pound feet).

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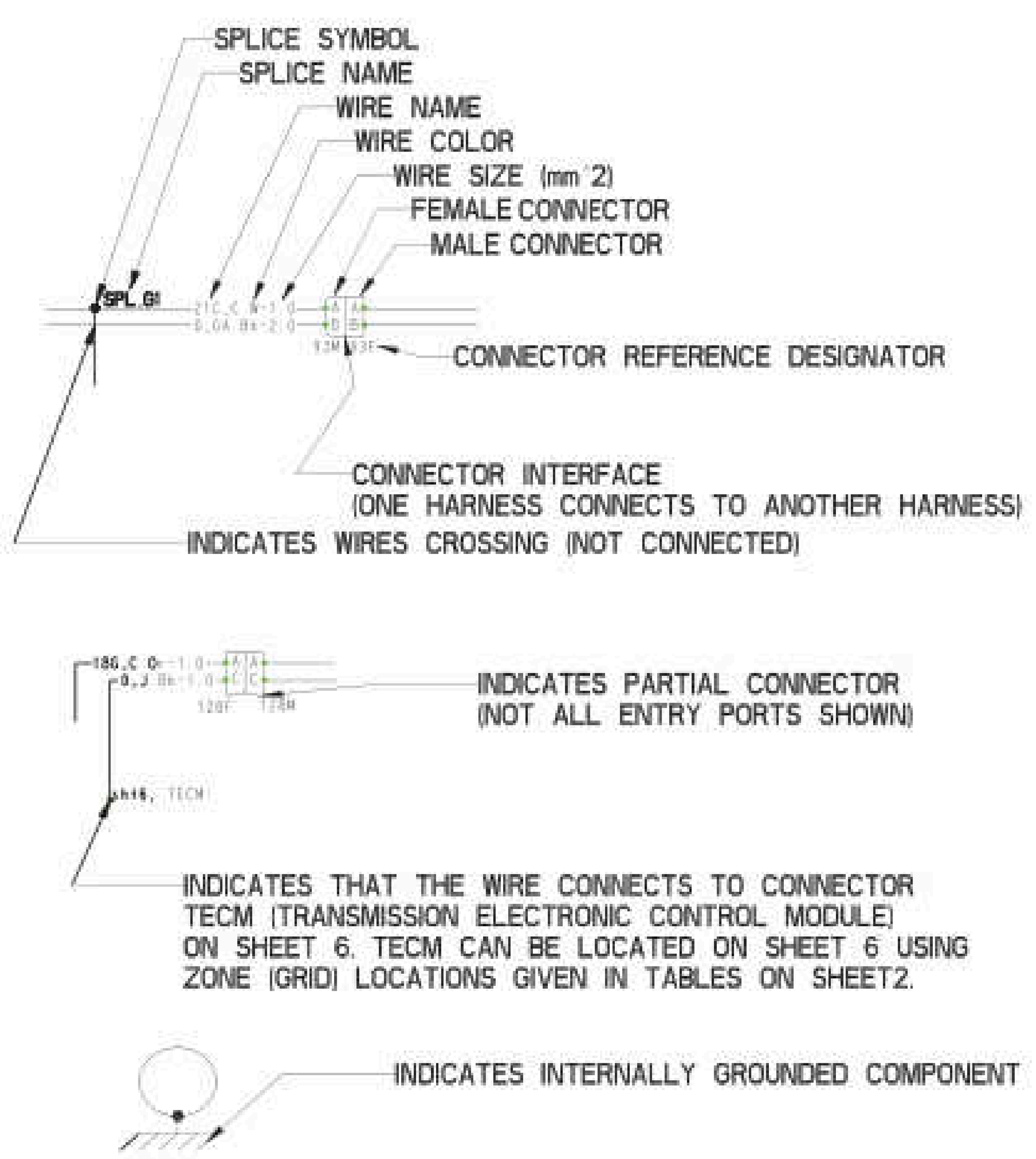
COLOR ABBREVIATIONS

ABBREVIATION	COLOR
Bk	BLACK
DU	DARK BLUE
G	GREEN
K	PINK
LG	LIGHT GREEN
LU	LIGHT BLUE
N	BROWN
Or	ORANGE
P	PURPLE OR VIOLET
R	RED
S	GREY
T	TAN
U	BLUE
W	WHITE
Y	YELLOW

LARGE CONNECTOR LIST

NAME	DESCRIPTION	SHEET
AIC_1	ADV INSTR CLUSTER 1	4, 7, 9, 10
AIC_2	ADV INSTR CLUSTER 2	4, 6, 7, 9, 10
CAB_E	CAB-ENGINE	4, 5, 9, 10, 11, 12
CAB_F	CAB-FRNT_CHAS	6, 10
CAN_MOD_2	JSS CAN MOD	13
ECA	ELECT CNTR A	4, 5, 6, 7, 8, 9, 10, 11
ECB	ELECT CNTR B	4, 6, 9, 10, 12
ECC	ELECT CNTR C	4, 6, 7, 8, 9, 10, 11
ECD	ELEC CNTR D	4, 5, 6, 10, 11, 12
ENG	ENGINE-CAB1	4, 5, 9, 10, 11, 12
FRONT	FRNT_CHAS-CAB	6, 10
SW_PD	SWITCH PAD	6, 9, 10, 12

DIAGRAM SYMBOL DESCRIPTIONS



REF DES NAMING CONVENTION
S... ROCKER SWITCHES
L... LIGHTS
P... PRESSURE SENSORS/SWITCHES
Y... SOLENOIDS
R... RESISTANCE MEASURE
ABOVE LETTER FOLLOWED BY THE FIRST LETTER
OF THE FIRST TWO WORDS OF THE SYMBOL LABEL
SPL ... SPLICE

ECA

PIN	NAME	SHT
A1	A1	8
A2	A2	13
A3	A3	9
A4	A4	11
A5	A5	10
A6	A6	9
A7	A7	10
A8	A8	6
A9	A9	4
A10	A10	5
C1	C1	12
C2	C2	11
C3	C3	11
C4	C4	6
C6	C6	12
C7	C7	11
C8	C8	12
C9	C9	7
L1	L1_1	8
L1	L1_2	13
L1	L1_3	9
L1	L1_4	11
L1	L1_5	10
L1	L1_6	9
L1	L1_7	10
L1	L1_8	6
L1	L1_9	4
L1	L1_10	5
L2	L2_1	12
L2	L2_2	11
L2	L2_3	11
L2	L2_4	6
L2	L2_6	12
L2	L2_7	11
L2	L2_8	12
L2	L2_9	7

ECB

PIN	NAME	SHT
B1	30_K1	4
B3	30_K2	4
B5	30_K3	4
B7	30_K4	10
B9	30_K5	9
B2	85_K1	4
B4	85_K2	4
B6	85_K3	4
B8	85_K4	10
B10	85_K5	9
D1	86_K1	4
D3	86_K2	4
D5	86_K3	4
D7	86_K4	10
D9	86_K5	9
C2	87A_K1	4
C4	87A_K2	4
C6	87A_K3	4
C8	87A_K4	10
C10	87A_K5	9
D2	87_K1	4
D4	87_K2	4
D6	87_K3	4
D8	87_K4	10
D10	87_K5	9
A1	A1	12
A2	A2	12
A3	A3	6
A4	A4	6
A5	A5	6
A6	A6	6
A7	A7	6
A8	A8	6
A9	A9	12
A10	A10	12
AA1	B1	12
AA2	B2	12
AA3	B3	6
AA4	B4	6
AA5	B5	6
AA6	B6	6
AA7	B7	6
AA8	B8	6
AA9	B9	12
AA10	B10	12

ECC

PIN	NAME	SHT
B1	30_K1	11
B3	30_K2	11
B7	30_K4	10
B9	30_K5	4
B2	85_K1	11
B4	85_K2	11
B8	85_K4	10
B10	85_K5	4
D1	86_K1	11
D3	86_K2	11
D7	86_K4	10
D9	86_K5	4
C2	87A_K1	11
C4	87A_K2	11
C8	87A_K4	10
C10	87A_K5	4
D2	87_K1	11
D4	87_K2	11
D8	87_K4	10
D10	87_K5	4
A1	A1	7
A2	A2	7
A3	A3	6
A4	A4	6
A5	A5	4
A6	A6	10
A7	A7	11
A8	A8	9
A9	A9	12
A10	A10	8
L1 1	L1_1	7
L1 2	L1_2	7
L1 3	L1_3	6
L1 4	L1_4	6
L1 5	L1_5	4
L1 6	L1_6	10
L1 7	L1_7	11
L1 8	L1_8	9
L1 9	L1_9	12
L1 10	L1_10	8

ECD

PIN	NAME	SHT
B1	30_K1	11
B3	30_K2	11
B5	30_K3	10
B7	30_K4	10
B9	30_K5	12
B2	85_K1	11
B4	85_K2	11
B6	85_K3	10
B8	85_K4	10
B10	85_K5	12
D1	86_K1	11
D3	86_K2	11
D5	86_K3	10
D7	86_K4	10
D9	86_K5	12
C2	87A_K1	11
C4	87A_K2	11
C6	87A_K3	10
C8	87A_K4	10
C10	87A_K5	12
D2	87_K1	11
D4	87_K2	11
D6	87_K3	10
D8	87_K4	10
D10	87_K5	12
AA2	A1	6
AA1	A2	6
AA4	A3	4
AA3	A4	4
AA6	A5	4
AA5	A6	4
AA8	A7	5
AA7	A8	5
AA10	A9	6
AA9	A10	6
A2	AA1	6
A1	AA2	6
A4	AA3	4
A3	AA4	4
A6	AA5	4
A5	AA6	4
A8	AA7	5
A7	AA8	5
A10	AA9	6
A9	AA10	6

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AIC 1

PIN	SHT
1	9
2	9
3	12
4	12
6	9
7	7
9	9
11	9
12	9
13	9
14	9
20	10
21	13
22	4
23	10
25	9
26	10

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AIC 2

PIN	SHT
2	7
4	9
5	9
6	9
7	10
8	10
9	6
10	6
11	11
12	12
14	9
15	9
16	10
17	4
18	10
20	9
21	9
22	9

ENG ENGINE-CAB1

PIN	SHT
1	9
2	1
3	4
4	4
5	9
6	4
7	4
8	4
9	4
10	5
11	4
12	5
13	5
14	5
15	4
16	9
17	9
18	5
19	9
20	9
21	4
22	10
23	10
24	11
25	11
26	4
27	4
28	9
29	12
30	12
31	4

ENG2 ENG BULKHD2

PIN	SHT
A	5
B	5
C	5
D	5
E	5
F	5
G	5
H	5
J	6
K	6
L	6
M	6
N	6
P	6
R	6
S	6
T	11
U	11
V	11
W	11
X	11

FRONT

PIN	SHT
1	6
2	6
3	6
4	10
5	6
6	6
7	6
8	10
9	10
10	6
11	10
12	10
13	10
14	6
15	6
16	6
17	10
18	10

(70)

SW PD SWITCH PAD

PIN	SHT
1	6
3	10
4	9
5	9
7	12
8	12
9	9
10	9

TRANS TRANSMISSION-CAB

PIN	SHT
1	9
2	8
3	11
4	11
5	8
6	11
7	8
8	8
9	8
10	8
11	8
12	8
13	8
14	8
15	8
16	8
17	8
18	8
19	8
20	8
21	8
22	8
23	9
24	8
25	8
26	11
27	8
28	8
29	8
30	9
31	8

INDEX / WIRE INFORMATION | 1

CONNECTOR LIST

NAME	DESCRIPTION	SHEET
115	GRID_HTR_PWR	4
193	STARTER_RELAY	4
194	STARTER_SIGNAL	4
195	STR_REL_PWR	4
108F	DIAGNOSTIC_CONNECTOR	8
140M	DIODE_MODULE	11
197F	MAIN_CAB_FNR	8
197M	FNR-MAIN_CAB	8
202M	ROLLBACK_JUMPER	10
209F	BACK-UP_ALRM_DISA_JMP	6
209M	BACK-UP_ALRM_DISA_JMP	6
20M	TRANS_KICK-DOWN	8
215F	ALTERNATOR_RESISTOR	4
216F	ALTERNATOR_RESISTOR	4
21M	TRANS_KICK-DOWN	13
242F	CHAS_GRD-SEC_STRG_MTR	11
244F	STARTER-SEC_STRG_MTR	11
245F	SEC_STR_FLYBACK	11
64F	FLASHER_CONNECTOR	6
64M	FLASHER_CONNECTOR	6
AB+	ALTERNATOR_B+	4
AB_5	ALTERNATOR B+	4
ACT	AC_COMP_CLUTCH	12
AD	ALTERNATOR D+	4
ALT_5	ALTERNATOR D+	4
ARM_FNR	FNR-MAIN_CAB	13
ARM_POS	ARM POSITION	13
B1	STARTER PWR STUD	4
B2	STARTER_POWER	4
B3	STARTER-BATTERY	4
B4	STARTER_POWER	4
B5	STARTER PWR STUD	4
B6	STARTER POWER	4
B7	STARTER-BATTERY	4
B8	STARTER_POWER	4
BPP	PEDAL POSITION	8
BT1	BATTERY_STARTER	4
BT2	DISCONECT-BATTERY	4
BT3	STARTER-BATTERY	4
BT4	DISCON-BLCK_GRND	4
BTM_C	CAB BOTTOM BULKHD	6
BTM_E	CAB BTTOM	5
BU1	BACKUP_ALARM_GRND	6
BU2	BACKUP_ALARM	6
BUZ	AIC_BUZZER	9
CABE2	CAB TO ENG2 BULKHD	5
CAB_ARM	CAB TO ARMREST	13
CAB_ARM_FRM	CAB TO ARM TO FRM	13
CAB_B	CAB BTM BULKHEAD	6
CAB_FNR	MAIN_CAB_FNR	13
CAB_FRM	CAB TO JSS FRAME	13
CAB_PW	CAB POWER	4
CAB_RF	CAB TO ROOF CONNECTION	7
CAB_T	CAB-TRANSMISSION	8
CBPW	CAB POWER	4
CL	CIGAR_LIGHTER	12
CNV	24V TO 12V PWR CONVERTER	12
DC1	DISCONECT-BATTERY	4
DC2	DISCON-BLCK_GRND	4
DC3	FUEL_SOL_DISCONNECT	4
DC4	FUEL_SOL_DISCONNECT	4
DC2_A	DISCONECT-BATTERY	4
DEFDM	DOSER METERING VLV	5
DIA	DIAGNOSTIC	12
DIA_2	DIAGNOSTIC	5

CONNECTOR LIST

NAME	DESCRIPTION	SHEET
DISC	DISCONNECT-ENGINE	4
DM	DIODE OR	11
DNOX2	NOX CONTROLLER	5
DS	DOOR SWITCH	7
DTLTS	DEF_TANK_LEVEL_TEMP_SENSOR	5
DTS	DOWNSTREAM TEMP SENS	5
D_OR	DIODE OR	7
ECA_L1	B+ POWER	4
EDC7	ENGINE CONTROLLER	5
EM	RTD_HEIGHT_CONT_RTT	10
ENG2	ENG BULKHD 2	5, 6, 11
ENG_B	CAB BTTOM	5, 9, 12
ENG_D	DISC_HARNESS	4
ENG_H	ENGINE TO HOOD	6
ENG_H_T_1	ENGINE TO HOOD	6
ENG_H_T_2	ENGINE TO HOOD	6
ESS	ENG_SPEED_SENS	8
EVGT_3	EVGT_FUSE	5
EVGT_4	EVGT	5
E_HD	TRANS-HOOD	6
FFH	FUEL_FLTR_HTR	4
FLSHR	FLASHER_MODULE	6
FM	FILT_MAINT_SW	8
FNR_RLY	RELAY K2	13
FSS	FAN_SPEED_SENS	9
FWD_DIODE	DIODE ASSY	13
FWM	FRONT-WIPER_MOTOR	11
FWMG	WIPER GROUND	11
FWW	FRONT_WASHER	11
GH	GRID_HEATER	4
GHC	GRID_HEATER_REL	4
GHF1	GRID HTR FUSE	4
GHF3	GRID_HTR_FUSE	4
GHF4	GRID_HTR	4
GH_1	GRID_HTR	4
GND_CAB1	GROUND_A	7
GND_CAB2	GROUND_A	11
GND_CAB3	GROUND_C	12
GND_CAB4	GROUND_C	12
GND_CAB5	GROUND_C	12
GND_CAB6	STRT, FFH, WAT_SEP_HTR	4
GND_CAB3D	GROUND_A	8
GND_CAB_SPL	CAB GRND SPLICE	12
GND_CAB_SPL2	SPL BACK LGHT GD	4, 6
GND_ENG1	STRT, FFH, WAT_SEP_HTR	4
GND_ENG2	WIF, EDC	5
GND_ENG3	SPLC_PK, WSHR MTR	11
GND_ENG4	REAR LIGHTING	6
GND_ENG6	DEDICATED	9
GND_ENG7	TRANNY, COOL TEMP	9
GND_FC	GROUND_A	10
GND_GH1	STRT, FFH, WAT_SEP_HTR	4
GND_JSS	GROUND_A	13
GND_PDST	GROUND_A	9
GND_PDST1	GROUND_A	9

CONNECTOR LIST

NAME	DESCRIPTION	SHEET
GND_PDST2	GROUND_A	9
GND_S1	GROUND_A	10
GND_S2	GROUND_A	10
GND_SSCHAS	SSM_GROUND_CABLE	11
GND_SSMOD	SEC STR CHASIS GND	11
GND_TRANS	GROUND_TRANS	9
GND_WIF	GRND WIF RING TERM	4
HD	HOOD_SWITCH	11
HDM	HOOD_LIFT_MOTOR	11
HD_E	HOOD-TRANS	6
HD_N	HOOD TO ENG	6
HD_N_T_1	HOOD TO ENGINE	6
HD_N_T_2	HOOD TO ENGINE	6
HN1	HORN_PWR	10
HN2	HORN_GRND	10
HOT	HYD_OIL_TEMP_SEND	9
HTS	HMDTY AND AMB TEMP	5
HVAC1	HVAC1	12
HVAC2	HVAC2	12
ISS	INT_SPEED_SENS	8
JSS_197F	MAIN_CAB_FNR	13
JSS_197M	FNR-MAIN_CAB	13
JSS_ARM	JSS ARMREST TO CAB	13
JSS_CAB	JSS CAB	12, 13
JSS_CNT	JSS CONTROLLER	13
JSS_FRM	JSS FRAME TO CAB	13
JSS_LS	JSS LOAD SENSE	13
JSS_PIL_DUMP	JSS PILOT DUMP	13
JSS_PIL_PR	JSS PILOT PRESSURE	13
JSS_RLY	RELAY K2	13
JSS_VALVE	JSS HYD VALVE	13
K5		
KD_DIODE	DIODE ASSY	13
KWCO	WIPER CUTOUT	11
L1_ECC	ECC BATT PWR	7
LBEGRD	LIGHT BEACON GRND	7
LBEPWR	LIGHT BEACON PWR	7
LDM1	DOME_LIGHT_B+	7
LDM2	DOME_LIGHT_AUTO	7
LDM3	DOME_LIGHT_GND	7
LLF	LIGHTS_LH	6
LLFW	LH_FRONT_WK_LT	7
LLR	LH_REAR_COMB_LT	6
LLRW	LH_REAR_WK_LT	7
LLR_E	LH_REAR_COMB_LT	6
LPL	LIC_PLATE_LIGHT	6
LRF	LIGHTS_RH	6
LRFO	FRONT_WK_LT_OPT	7
LRFR	FRONT_WK_LT_OPT	7
LRFS	FRONT_WK_LT_OPT	7
LRFW	RH_FRONT_WK_LT	7
LRR	RH_REAR_COMB_LT	6
LRRW	RH_REAR_WK_LT	7
LRR_E	RH_REAR_COMB_LT	6
LSPK	LEFT_SPEAKER	12
MON	CAMERA/MONITOR	7
NOXS	NOX SENSOR	5
NTRL_DIODE	DIODE ASSY	13
OSS	OUT_SPEED_SENS	8
PAF	AIR_FILT_RES_SW	9
PBD	DEC_PRESS_SW	8
PBL	BRAKE_LT_PRES_SW	6
PBW	BRK_WARN_PR_SW	9
PHF	HYD_OIL_FILT_RES_SW	9
PHF9	HYD_FLTR_RES_SW	9
PO1	POWER_OUTLET	12
PO2	POWER_OUTLET	12
PRB1	RED_BRAKE_SW	9
PRB2	RED_BRAKE_SW	9
PRBF	ROLLBACK_PRES_SW	10
PRH	AC HIGH PRESS SW	12

CONNECTOR LIST

NAME	DESCRIPTION	SHEET
PRL	AC LOW PRESS SW	12
PRMB_L1	B+ POWER	4
PRMB_L2	B+ POWER	4
PRM_A	PWR RLY MOD A	
PRM_A1	PRM OUTPUT	4
PRM_A2	PRM SIGNAL	4
PRM_B1	PRM SIGNAL	4
PRM_C1	PRM SIGNAL	4
PRM_D	PWR RLY MOD D	
PRM_D1	PRM OUTPUT	4
PRM_D2	PRM SIGNAL	4
PSS	SEC STR PRES SWITCH	11
PVRES	JSS JOYSTICK	13
PXF	RTD	10
PXH	HGT_CNTRL-RTT	10
PXM	RTD	10
PXT	RTD	10
P_A1	B+ POWER	4
P_A3	B+ POWER	4
P_C1	B+ PWR FRM PRMD	4
P_C2	B+ PWR FRM PRMD	4
P_C3	B+ PWR FRM PRMD	4
P_C4	B+ PWR FRM PRMD	4
P_C6	B+ PWR FRM PRMD	4
R1	RESISTOR	13
RAD	RADIO_POWER	12
RAD_J1	RADIO_POWER	12
RAD_J2	SPEAKER	12
RAD_J3	RADIO_JUMPER	12
RECT	ENG_COOL_TEMP	9
RFL	FUEL_SENDER	9
RFLG	FUEL_SEND_GRND	9
RFL_23	FUEL_LEVEL_SEND	9
ROOF	ROOF TO CAB CONNECTION	7, 11, 12
RSPK	RIGHT_SPEAKER	12
RTHP	THROTTLE_PEDAL	5
RVS_DIODE	DIODE ASSY	13
RWM	REAR_WIPER_MTR	11
RWMG	REAR_WIPER_MTR_GD	11
RWW	REAR_WASHER	11
SAJ	FNR_SWITCH	13
SBE	BEACON_SW	7
SBU	BACK-UP_ALRM_DIS_SW	6
SC	SEAT_COMP_MOTOR	12
SDA	DIFF LOCK SWITCH	8
SDC	DECLUTCH_SWITCH	8
SDM	DIFF LOCK SWITCH	8
SDR	DRIVING LIGHTS SW	6
SFC	FAN_CONTROL_SW	10
SFL	RETURN_TO_TRAVEL_SW	10
SFNR	FNR_SWITCH	8
SFWW	FRONT WIPER/WASHER	11
SHC	HEIGHT CONTROL SW	10
SHZ	HAZARD_SWITCH	6
SJS	JOYSTICK_CONTROL_SW	13
SPB	PARKING_BRAKE_SWITCH	9
SPC	PILOT_CONTROL_SWITCH	10
SPE	PIN_ENGAGE_SW	10
SPK	SPEAKER	12
SPL_2	ULTRASONIC	11
SPL_3	ULTRASONIC	11
SPL_12V	ULTRASONIC	12
SPL_19S	ULTRASONIC	11
SPL_35A	ULTRASONIC	6
SPL_42C	ULTRASONIC	7
SPL_A1	ULTRASONIC	10
SPL_A2	ULTRASONIC	10
SPL_A3	ULTRASONIC	10
SPL_A4	ULTRASONIC	9
SPL_A1A	ULTRASONIC	6
SPL_AC	ULTRASONIC	12

CONNECTOR LIST | 2

CONNECTOR LIST

NAME	DESCRIPTION	SHEET
SPL_ACC	ULTRASONIC	4
SPL_ACP	ULTRASONIC	12
SPL_ACS	ULTRASONIC	12
SPL_AJ	ULTRASONIC	13
SPL_ALT	ULTRASONIC	4
SPL_AP	ULTRASONIC	9
SPL_B8	ULTRASONIC	6
SPL_BCK_LGT	SPLICE BACK LGHT PWR	7
SPL_BCK_LGT2	SPL_BACK LGT PWR	10
SPL_BCK_LT_GD	SPL BACK LGHT GD	7
SPL_BCK_LT_GD2	SPL_BACK LGT GRND	10
SPL_BLWR	ULTRASONIC	12
SPL_BUZ	ULTRASONIC	9
SPL_C3	ULTRASONIC	11
SPL_CAN	ULTRASONIC	12
SPL_CAN_DH	ULTRASONIC	5
SPL_CAN_DIAG	ULTRASONIC	12
SPL_CAN_DIAG_L	ULTRASONIC	12
SPL_CAN_DL	ULTRASONIC	5
SPL_CAN_GH	ULTRASONIC	5
SPL_CAN_GL	ULTRASONIC	5
SPL_CAN_HT	ULTRASONIC	5
SPL_CAN_HV	ULTRASONIC	5
SPL_CAN_JS_H1	ULTRASONIC	12
SPL_CAN_JS_H2	ULTRASONIC	12
SPL_CAN_JS_L1	ULTRASONIC	12
SPL_CAN_JS_L2	ULTRASONIC	12
SPL_CAN_L	ULTRASONIC	12
SPL_CAN_LT	ULTRASONIC	5
SPL_CAN_LV	ULTRASONIC	5
SPL_CAN_TEL	ULTRASONIC	12
SPL_CAN_TEL2	ULTRASONIC	12
SPL_CAN_TRANS	ULTRASONIC	12
SPL_CAN_TRANS_L	ULTRASONIC	12
SPL_CNV	ULTRASONIC	12
SPL_CR	ULTRASONIC	4
SPL_CRK	ULTRASONIC	4
SPL_D1	ULTRASONIC	10
SPL_D11	ULTRASONIC	8
SPL_D12	ULTRASONIC	8
SPL_D15	ULTRASONIC	8
SPL_D16	ULTRASONIC	8
SPL_D17	ULTRASONIC	8
SPL_D19	ULTRASONIC	8
SPL_D24	ULTRASONIC	10
SPL_D25	ULTRASONIC	10
SPL_D26	ULTRASONIC	10
SPL_D8_C1	ULTRASONIC	6
SPL_DC	ULTRASONIC	8
SPL_DCUG	ULTRASONIC	5
SPL_DLY3	ULTRASONIC	9
SPL_DR	ULTRASOIC	6
SPL_EDC1	ULTRASONIC	5
SPL_EDC2	ULTRASONIC	5
SPL_EDC3	ULTRASONIC	5
SPL_EDC4	ULTRASONIC	5
SPL_ENG	ULTRASONIC	11
SPL_FAN	ULTRASONIC	10
SPL_FLSHR_PWR	ULTRASONIC	6
SPL_FNR	ULTRASONIC	8
SPL_FW	ULTRASONIC	11
SPL_H1	ULTRASONIC	8
SPL_H2	ULTRASONIC	8
SPL_HB	ULTRASONIC	6
SPL_HC	ULTRASONIC	11
SPL_HOOD	ULTRASONIC	11
SPL_HOOD_GRND	HOOD GRND 6PCK	11
SPL_HRN	ULTRASONIC	10
SPL_HTR	ULTRASONIC	4
SPL_J1	ULTRASONIC	6
SPL_J2_N	ULTRASONIC	6
SPL_JSS_1	ULTRASONIC	13

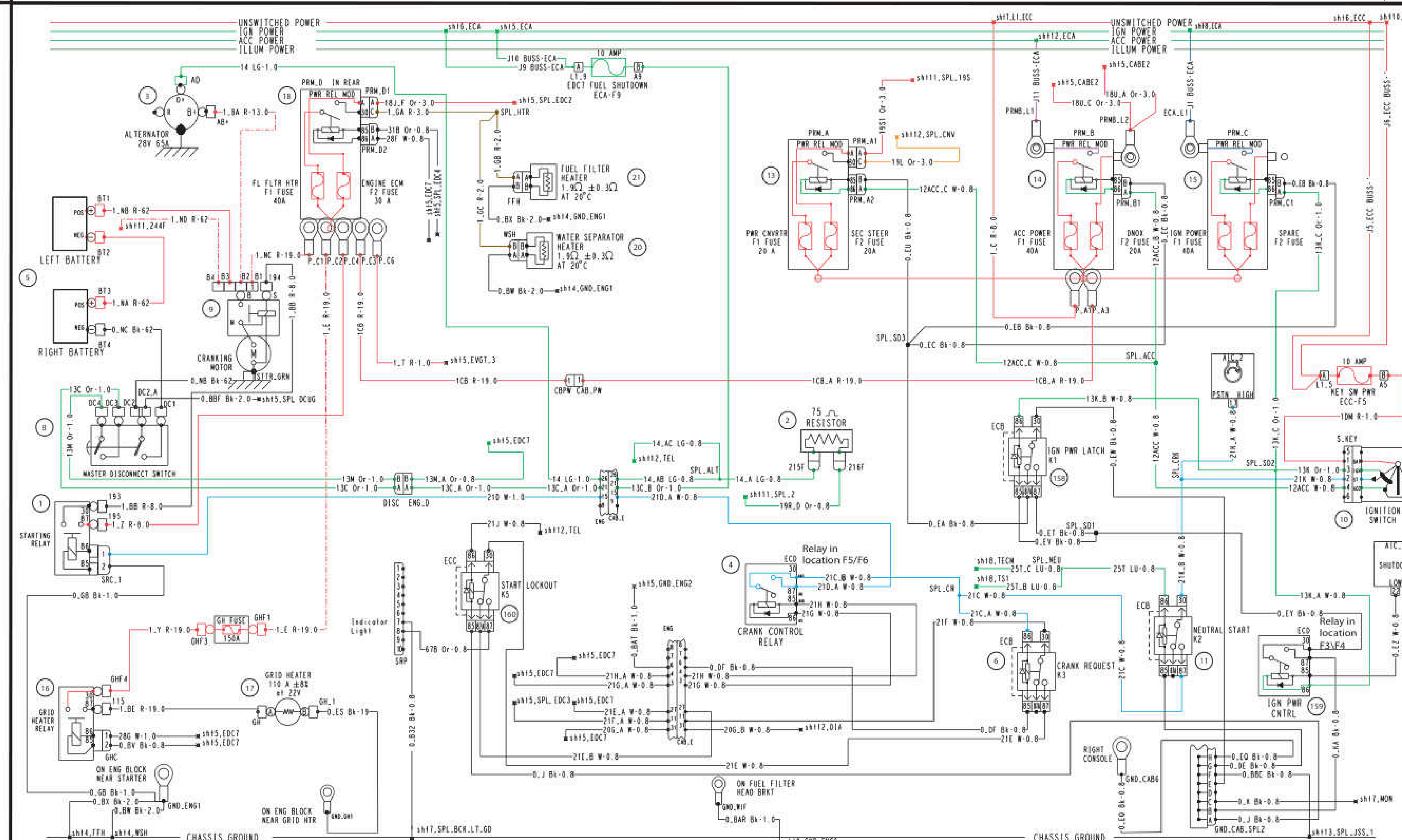
CONNECTOR LIST

NAME	DESCRIPTION	SHEET
SPL_JSS_2	ULTRASONIC	13
SPL_JSS_3	ULTRASONIC	13
SPL_JSS_4	ULTRASONIC	13
SPL_JSS_5	ULTRASONIC	13
SPL_JSS_6	ULTRASONIC	13
SPL_JSS_7	ULTRASONIC	13
SPL_JSS_9	ULTRASONIC	13
SPL_JSS_10	ULTRASONIC	13
SPL_JSS_11	ULTRASONIC	13
SPL_JSS_13	ULTRASONIC	13
SPL_JSS_14	ULTRASONIC	13
SPL_JSS_15	ULTRASONIC	13
SPL_JSS_16	ULTRASONIC	13
SPL_JSS_17	ULTRASONIC	13
SPL_JSS_18	ULTRASONIC	13
SPL_JSS_20	ULTRASONIC	13
SPL_JSS_21	ULTRASONIC	13
SPL_LB	ULTRASONIC	6
SPL_LT	ULTRASONIC	7
SPL_NEU	ULTRASONIC	4
SPL_PBS	ULTRASONIC	9
SPL_PED_BL	SPL BACK LGT PWR 6 PCK	10
SPL_PED_BL_GD	SPL BACK LGT GD 6PCK	10
SPL_PIN	SPL_BACK LGT PWR	10
SPL_PINE	ULTRASONIC	10
SPL_PK1	SPLICE 3-4WAY	7
SPL_PK3	SPLICE 3-4WAY	6
SPL_POS	ULTRASONIC	6
SPL_POS_L	ULTRASONIC	6
SPL_POS_NA	ULTRASONIC	6
SPL_POS_R	ULTRASONIC	6
SPL_PR	ULTRASONIC	6
SPL_PTM	ULTRASONIC	9
SPL_RAD	ULTRASONIC	12
SPL_RD	ULTRASONIC	9
SPL_ROOF	SPLICE ROOF GROUND	7
SPL_RTT	ULTRASONIC	10
SPL_RWW	ULTRASONIC	11
SPL_SD1	ULTRASONIC	4
SPL_SD2	ULTRASONIC	4
SPL_SD3	ULTRASONIC	4
SPL_SEC	ULTRASONIC	11
SPL_SS	ULTRASONIC	11
SPL_SW_PD	ULTRASONIC	9
SPL_TRNS_PWR	TRANS_PWR	8
SPL_WHS	ULTRASONIC	11
SPL_WK	ULTRASONIC	7
SPL_WL	ULTRASONIC	7
SPL_WL1	ULTRASONIC	7
SPL_WLS	ULTRASONIC	11
SPL_WR	ULTRASONIC	7
SPL_WRK1	ULTRASONIC	7
SPL_WRK2	ULTRASONIC	7
SPL_WRKF	ULTRASONIC	7
SPL_WRKR	ULTRASONIC	7
SRC	RIDE_CONTROL_SW	10
SRC_1	RELAY	4
SRHSTLK	RH STALK SWITCH	6
SRP	WORK LIGHTS SW	4
SRTD	DETENT_SWITCH	10
SRWP	REAR_WIPER_SW	11
SSD	SEC_STR_DIODE	11
SSM	SEC STR MOD	11
SSS	SS MAG SWITCH	11
SS_TR	SS_MOD-TRANS	11
STA	TRANS_AUTO_SW	8
STE	TRANS_ENABLE_SW	8
STTR_GRN	GRID_HTR_FUSE	4
SWL	WORK LIGHTS SW	7
S_KEY	IGNITION_SWITCH	4
TCOT	TCO_SENDER	8
TECM	TRANS	8

CONNECTOR LIST

NAME	DESCRIPTION	SHEET
TEL	TELEMATICS	12
TERM_CAN_2	CAN BULK HEAD	5
THV	TANK HEATER CONTROL VALVE	5
TRANS	TRANSMISSION-CAB	8,9,11
TRC	TRANS_CONTROL	8
TR_SS	SEC_STR_MOD_OPT	11
TS1	TRANSMISSION_SHIFTER	8
TS2	TRANSMISSION_SHIFTER	8
TSS	TURB_SPEED_SENS	8
TURBO	ENG DASH_TURBO	5
UBJ	DEF LEVEL TEMP	5
UBJM	DEF LEVEL TEMP	5
UTS	UPSTREAM TEMP SENSE	5
WIF	WATER_IN_FUEL_SNSR	5
WSH	WATER_SEP_HTR	4
YDL	DIFF LOCK SOLENOID	8
YDL_1	DIFF LOCK SOLENOID	8
YDL_2	DIFF LOCK SOLENOID	8
YFN	FAN_PWM_SOL	10
YFR	FAN_REV_SOL_OPT	10
YLS	TC_LOCKUP_VALVE	8
YPB	PARK_BRK_SOL	9
YPE	PIN ENGAGE JUMPER	10
YPE1	PIN ENGAGE JUMPER	10
YPE2	PIN_ENGAGE_OPT	10
YPP	PILOT_PRES_SOL	10
YRC	RIDE_CONTROL_OPT	10
YRC_J	RIDE CNTRL_JUMPER	10
YRC_J2	RIDE_CONTROL_OPT	10
YSS	SEC_STRG_SOL	11
S4_S		14

CONNECTOR LIST | 3



COLD START | POWER DISTRIBUTION | IGNITION SWITCH | 4

ELECTRICAL SCHEMATIC SIDE 1

W170C\W190C TIER 4 WHEEL LOADER

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