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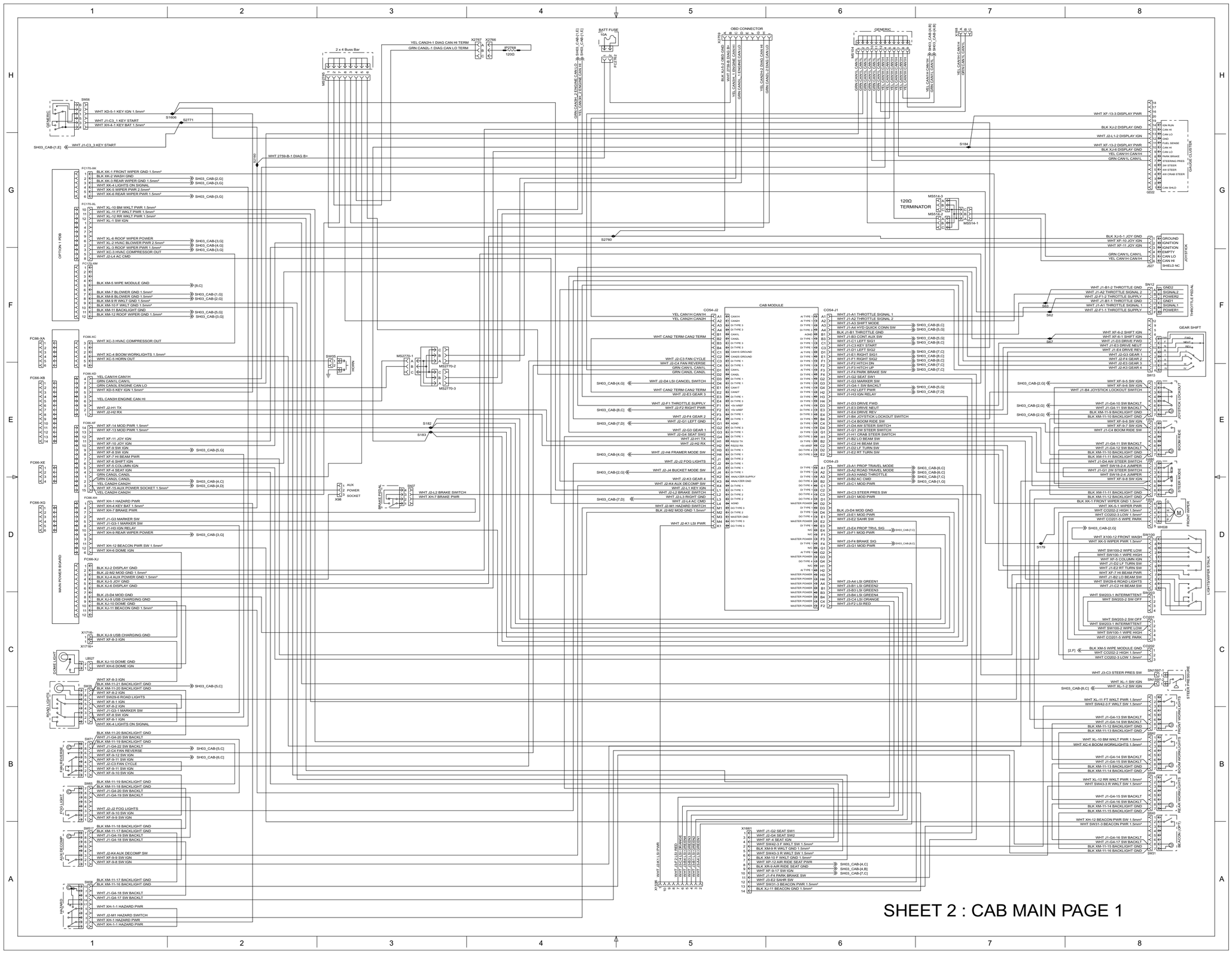
SHEET 1 : TABLE OF CONTENTS

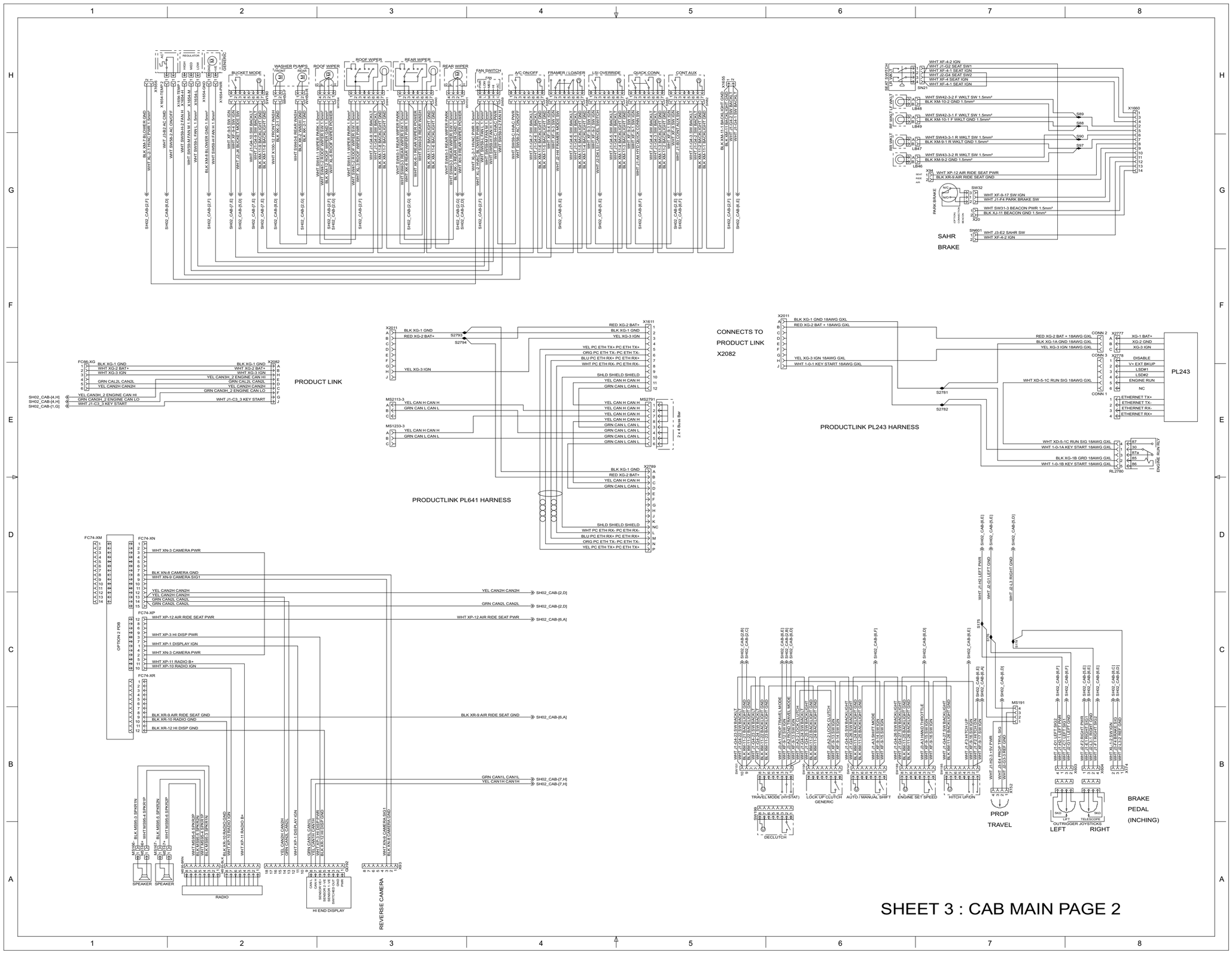


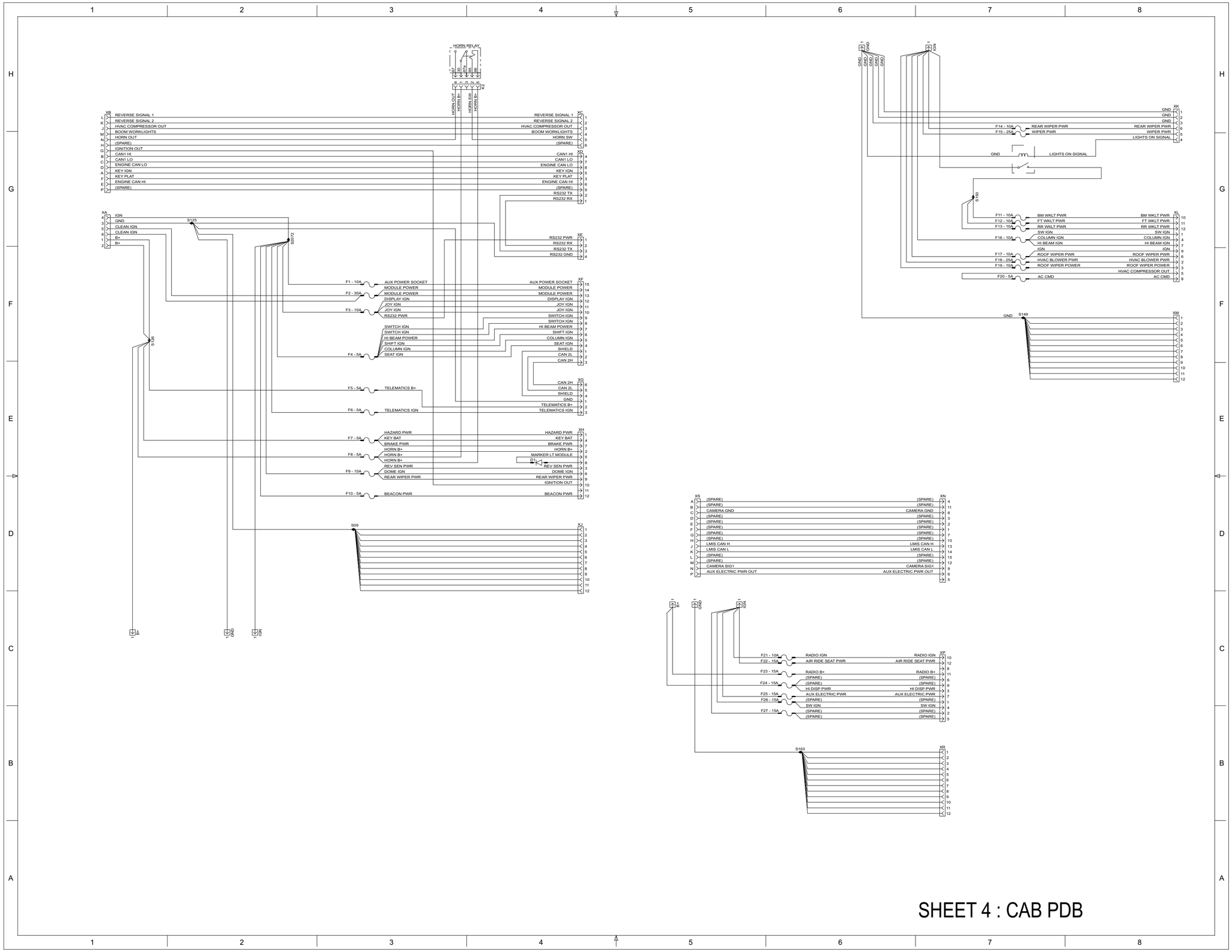
CATERPILLAR®

TH357, TH408 & TH3510

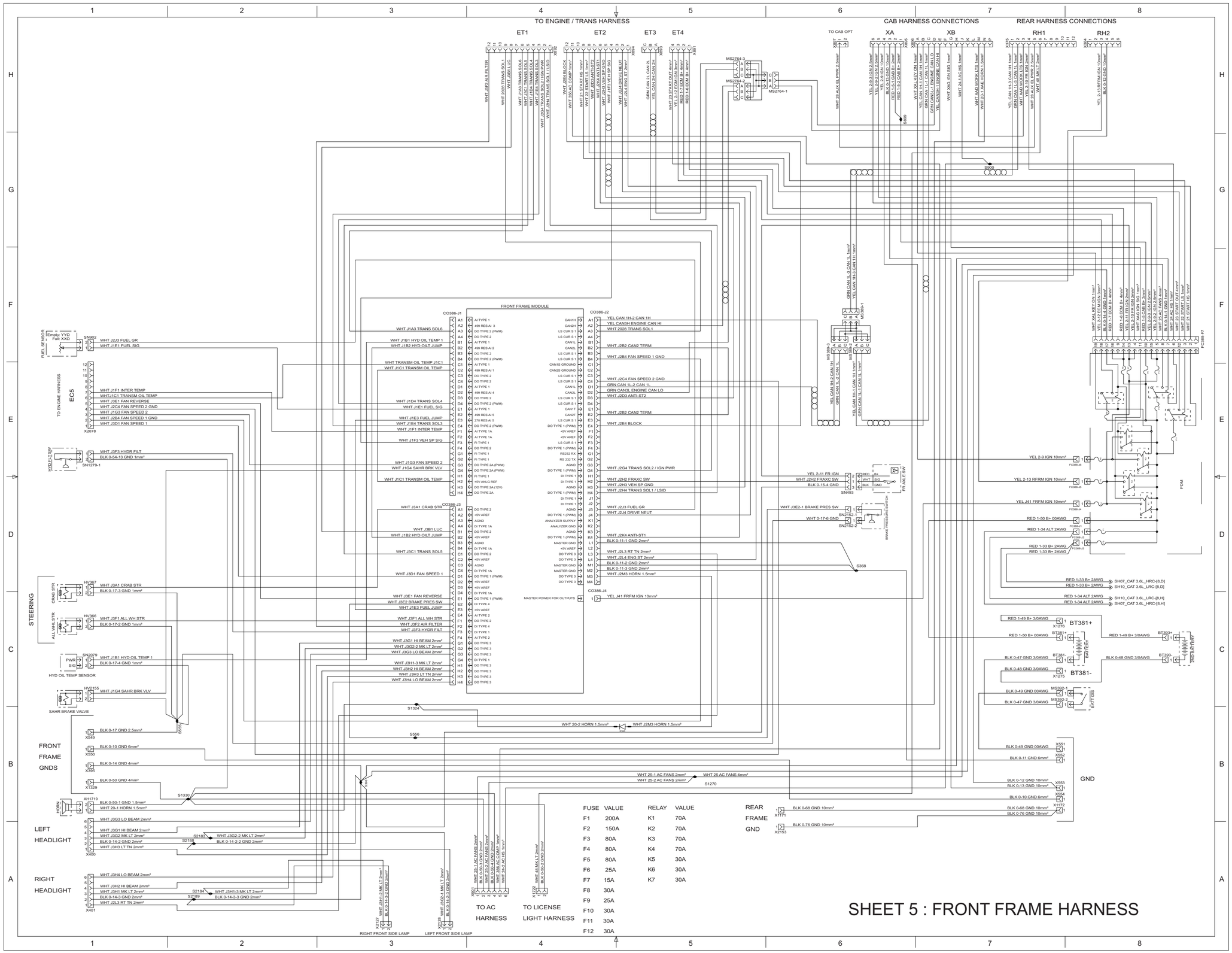
PVC 2205

TH357, TH408 & TH3510
Electrical Schematic
31211942
UENR9332-00

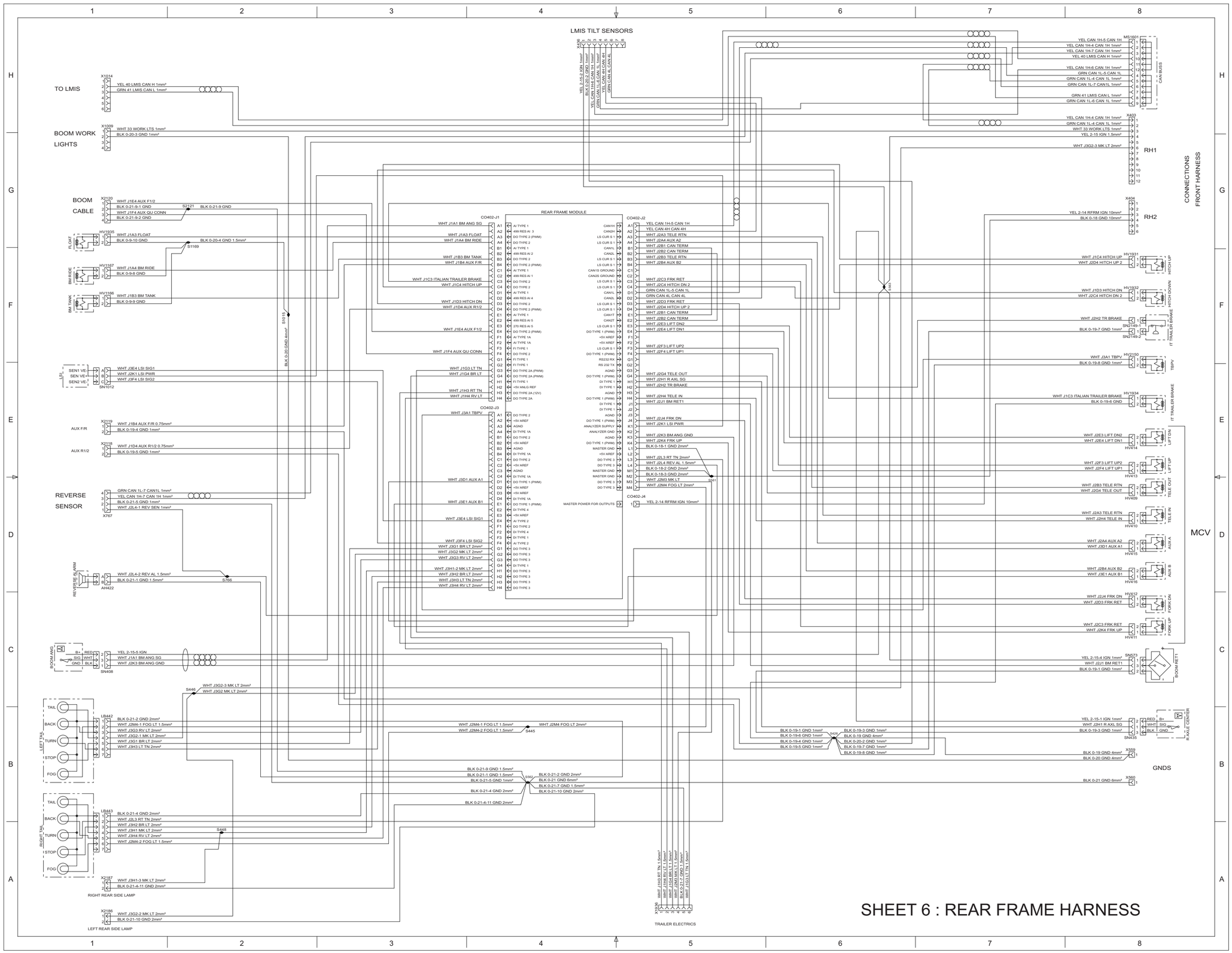

BUCKET MODE
WASHER PUMPS
FRONT
REAR
ROOF WIPER
REAR WIPER
FAN SWITCH
A/C ON/OFF
FRAMER / LOADER
LSI OVERRIDE
QUICK CONN.
CONT AUX
SEAT SWITCH
SAHR
BRAKE
PRODUCT LINK
PRODUCTLINK PL641 HARNESS
CONNECTS TO
PRODUCT LINK
X2082
PRODUCTLINK PL243 HARNESS
PL243
OPTION 2 PCB
SPEAKER
RADIO
HI END DISPLAY
REVERSE CAMERA
TRAVEL MODE (HYSTAT)
LOCK UP CLUTCH
GENERIC
AUTO / MANUAL SHIFT
ENGINE SET SPEED
HITCH UP/DN
DECLUTCH
PROP
TRAVEL
BRAKE
PEDAL
(INCHING)
OUTRIGGER JOYSTICKS
LEFT
RIGHT
SHEET 3 : CAB MAIN PAGE 2

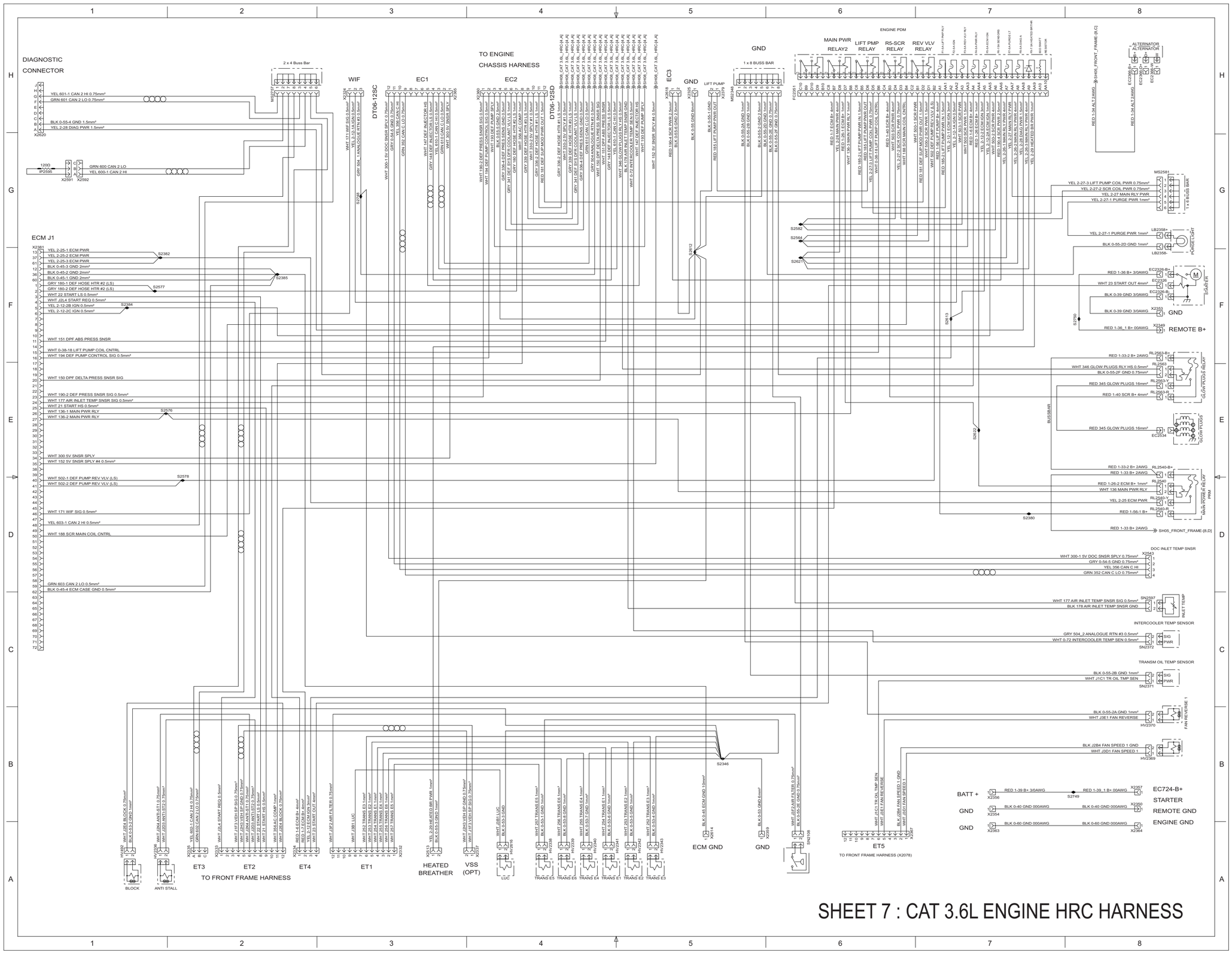


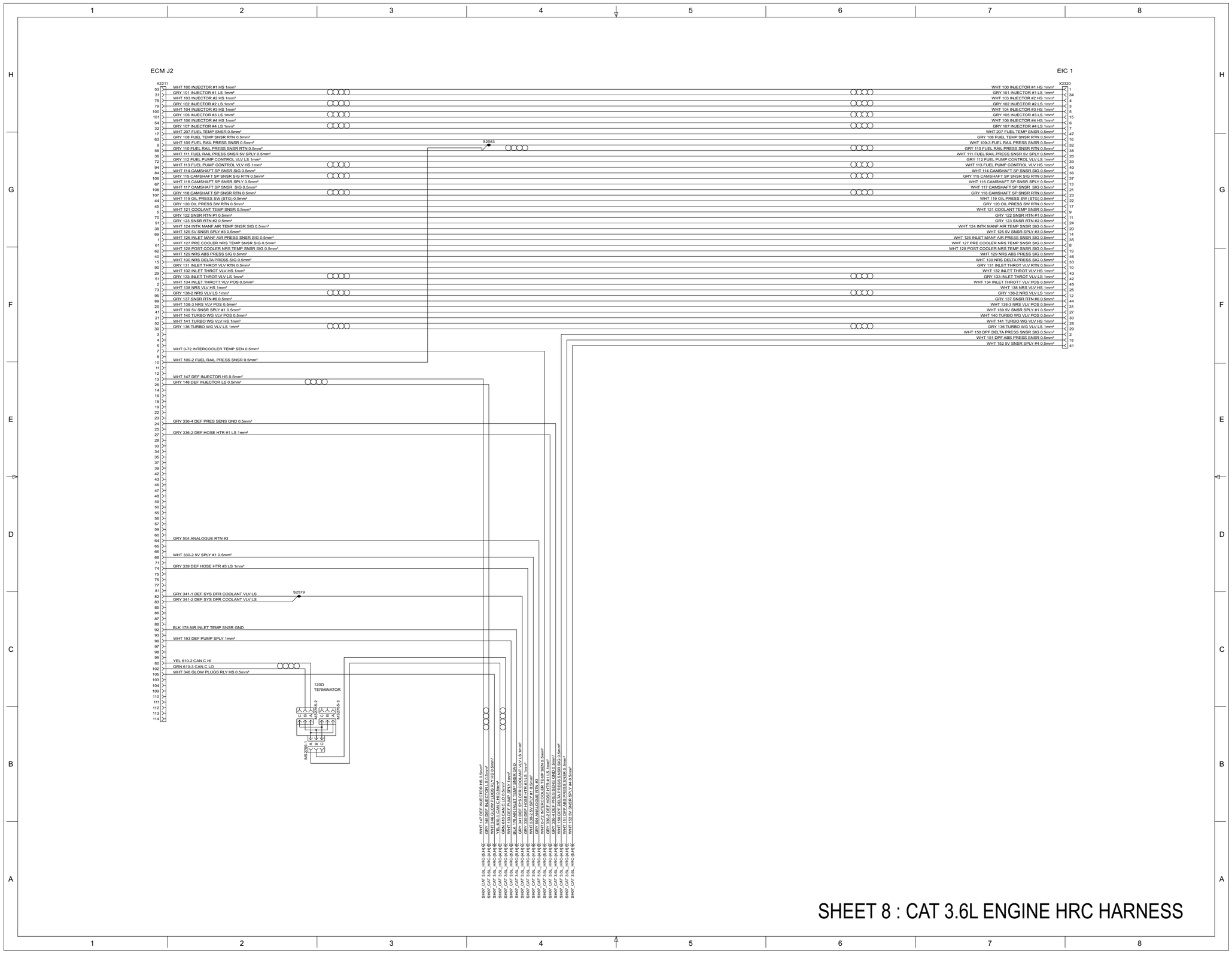
SHEET 4 : CAB PDB

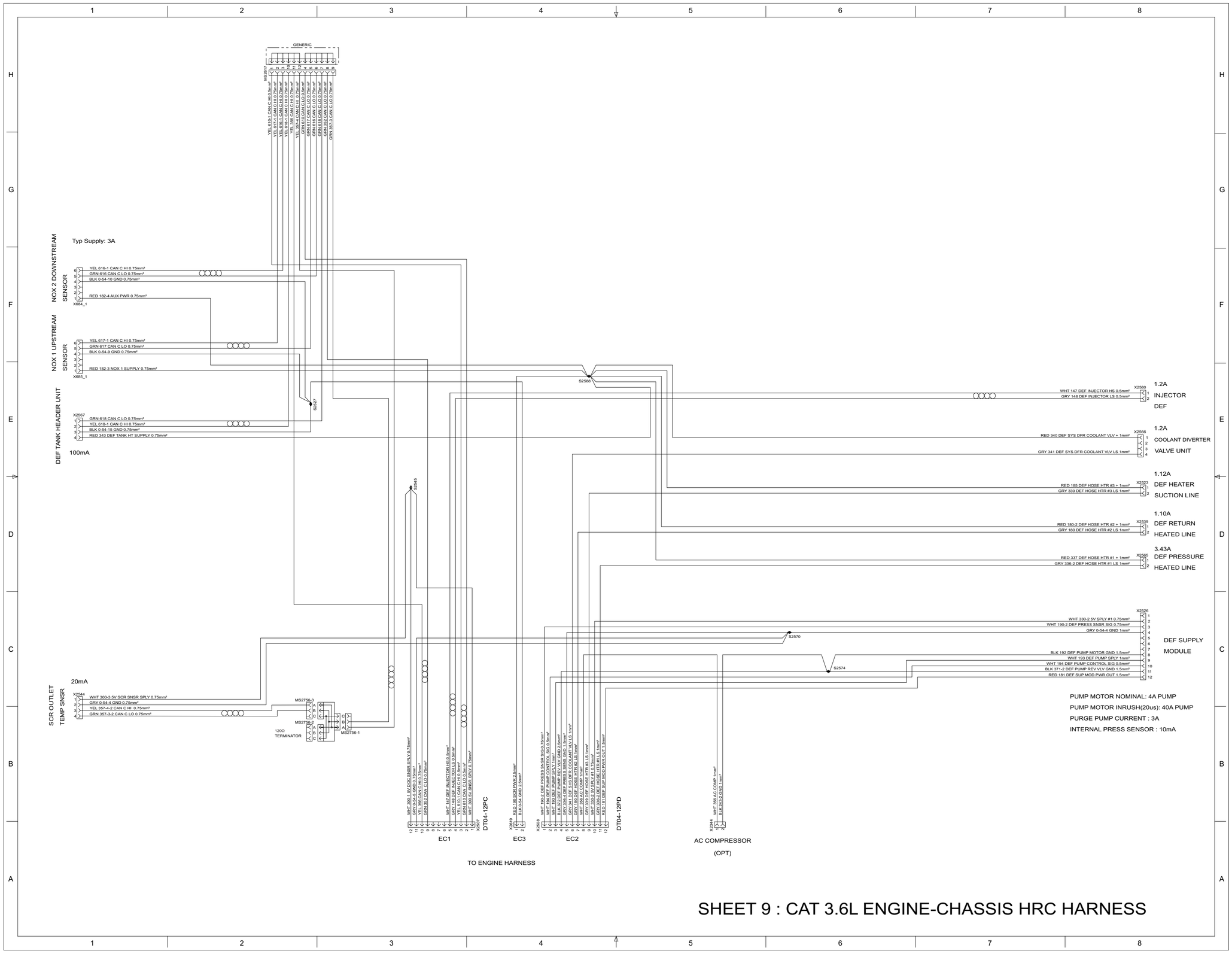


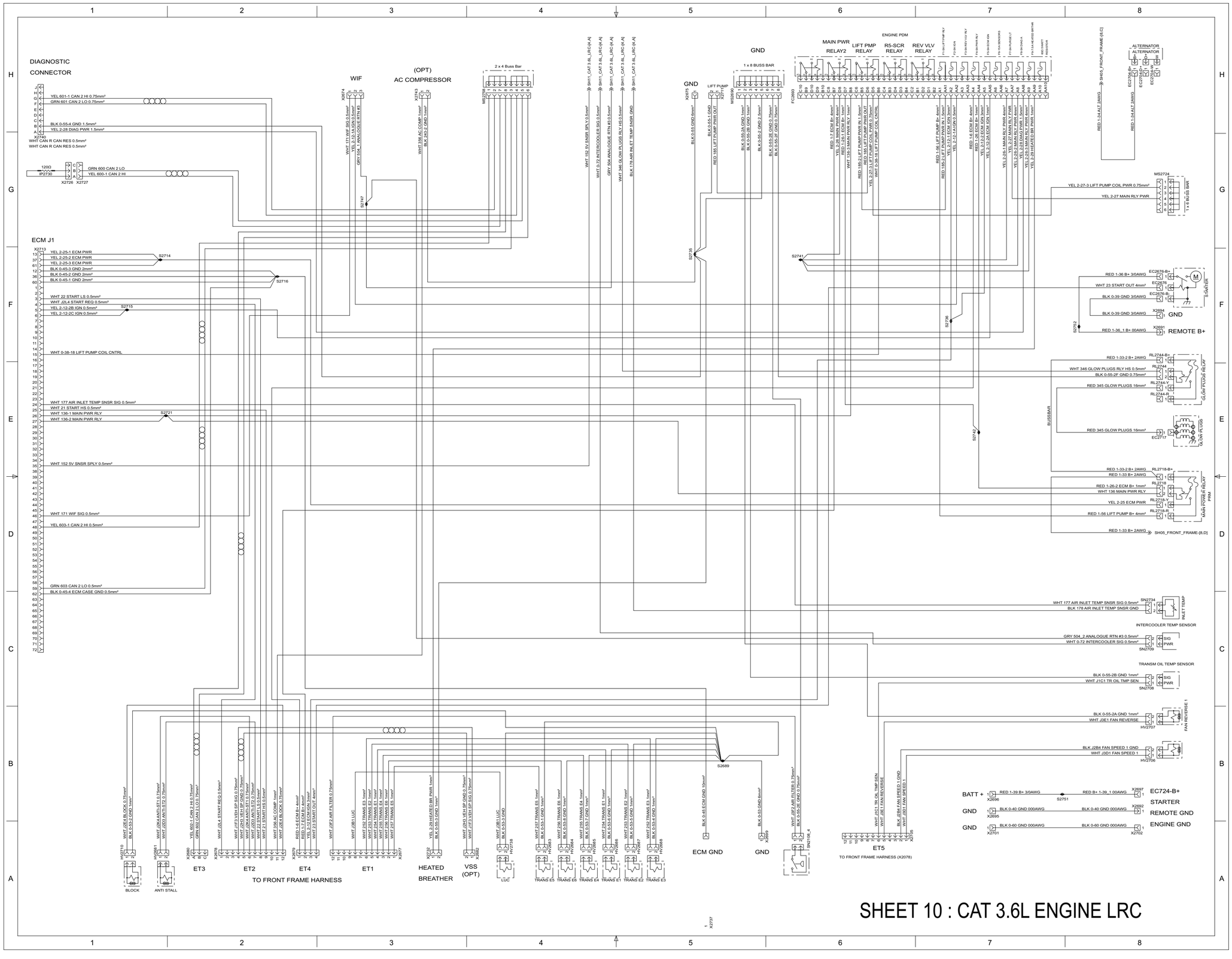
FUSE	VALUE	RELAY	VALUE
F1	200A	K1	70A
F2	150A	K2	70A
F3	80A	K3	70A
F4	80A	K4	70A
F5	80A	K5	30A
F6	25A	K6	30A
F7	15A	K7	30A
F8	30A		
F9	25A		
F10	30A		
F11	30A		
F12	30A		

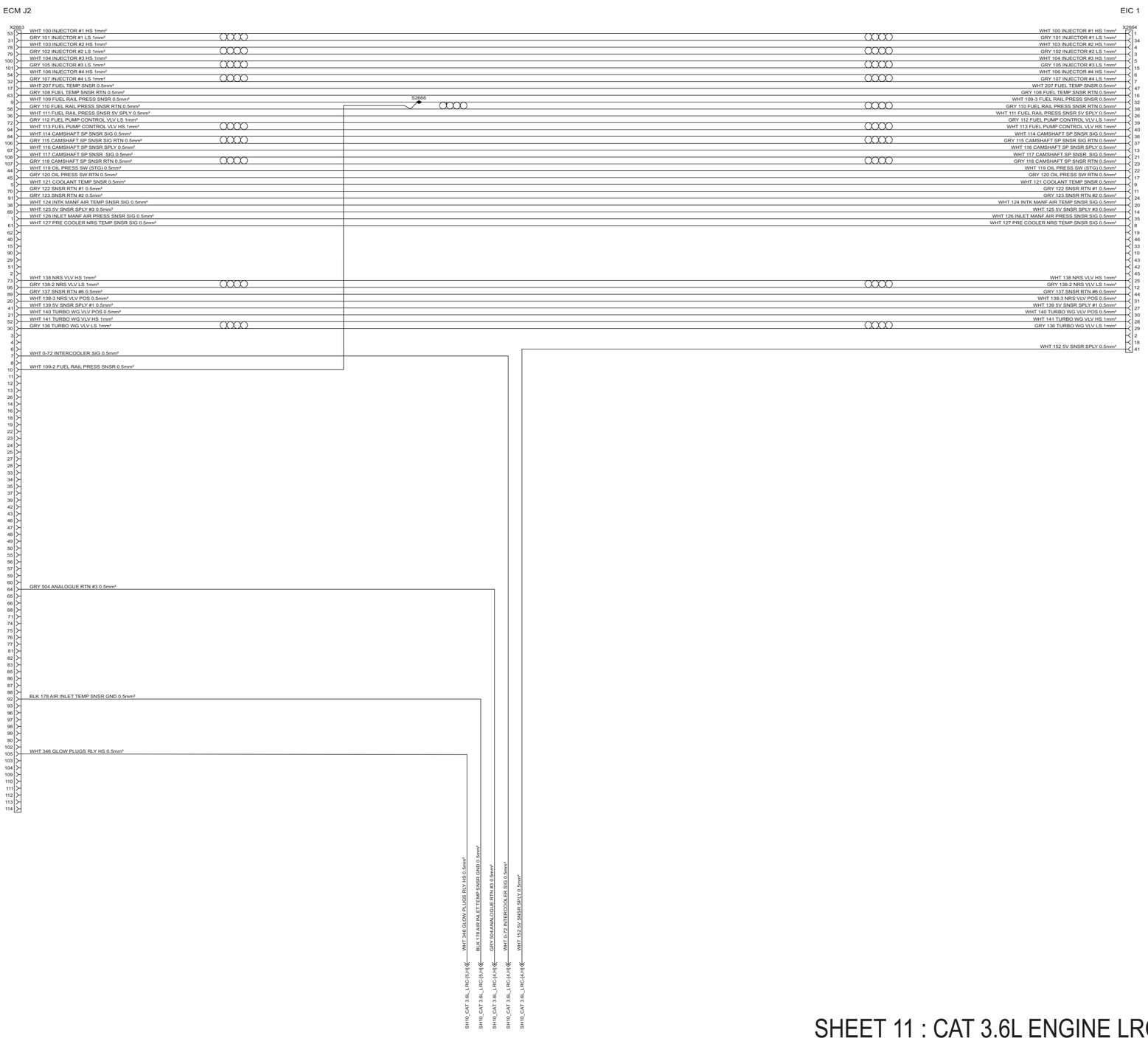

LMIS TILT SENSORS
TO LMIS
BOOM WORK LIGHTS
BOOM CABLE
REVERSE SENSOR
REAR FRAME MODULE
CONNECTIONS FRONT HARNESS
MCV
GNDS
TRAILER ELECTRICS
RIGHT REAR SIDE LAMP
LEFT REAR SIDE LAMP
SHEET 6 : REAR FRAME HARNESS

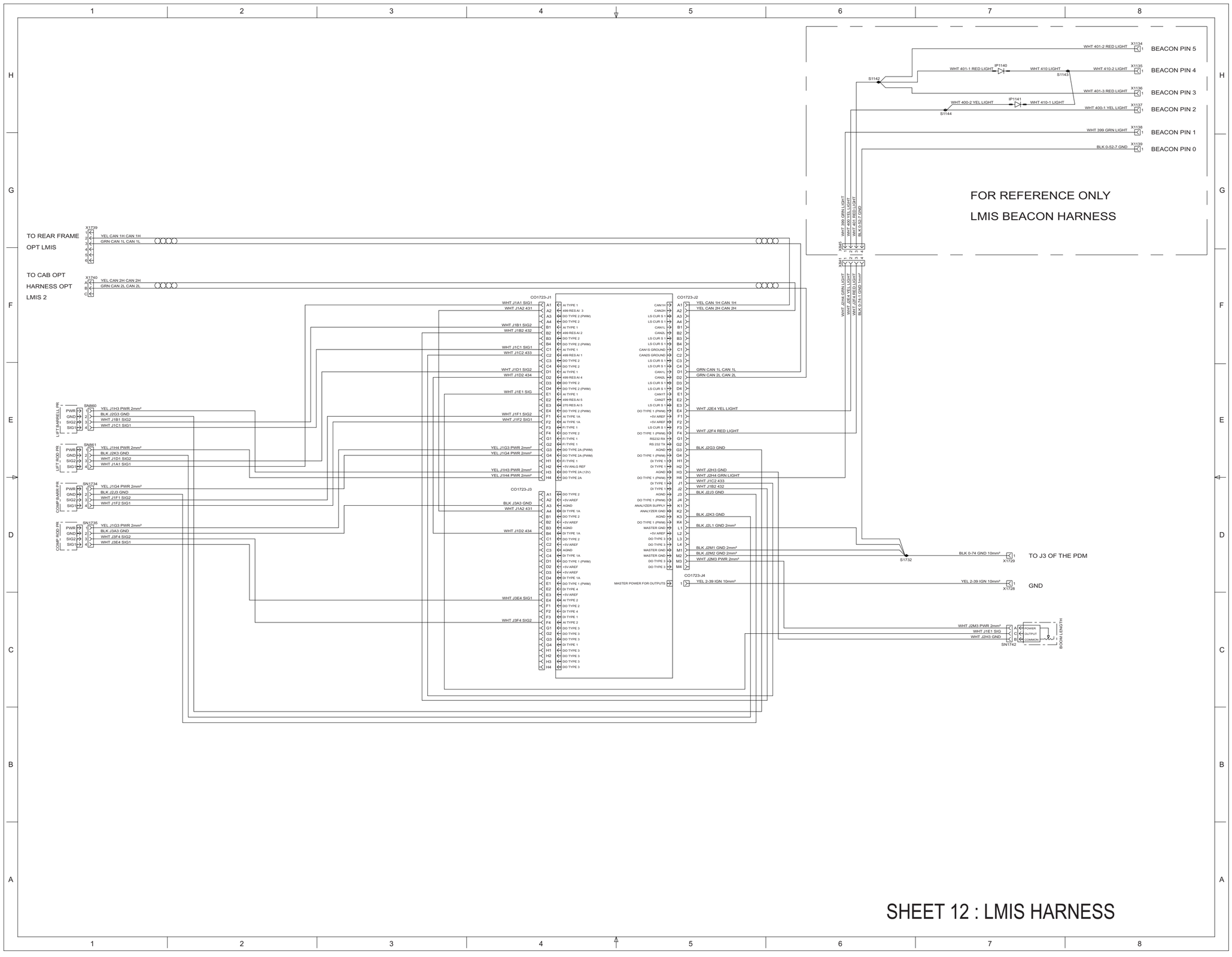

DIAGNOSTIC CONNECTOR
TO ENGINE CHASSIS HARNESS
ECM J1
WIF
EC1
EC2
EC3
GND
DT06-12SC
DT06-12SD
ENGINE PDM
MAIN PWR RELAY2
LIFT PMP RELAY
R5-SCR RELAY
REV VLV RELAY
ALTERNATOR
STARTER
PURGE LIGHT
GLOW PLUGS RELAY
GLOW PLUGS
MAIN POWER RELAY PRM
DOC INLET TEMP SNSR
INTERCOOLER TEMP SENSOR
TRANSM OIL TEMP SENSOR
FAN REVERSE 1
BLOCK
ANTI STALL
TO FRONT FRAME HARNESS
HEATED BREATHER
VSS (OPT)
LUC
TRANS E5
TRANS E6
TRANS E4
TRANS E1
TRANS E2
TRANS E3
ECM GND
ET5
TO FRONT FRAME HARNESS (X2078)
BATT +
EC724-B+
STARTER
REMOTE GND
ENGINE GND
SHEET 7 : CAT 3.6L ENGINE HRC HARNESS

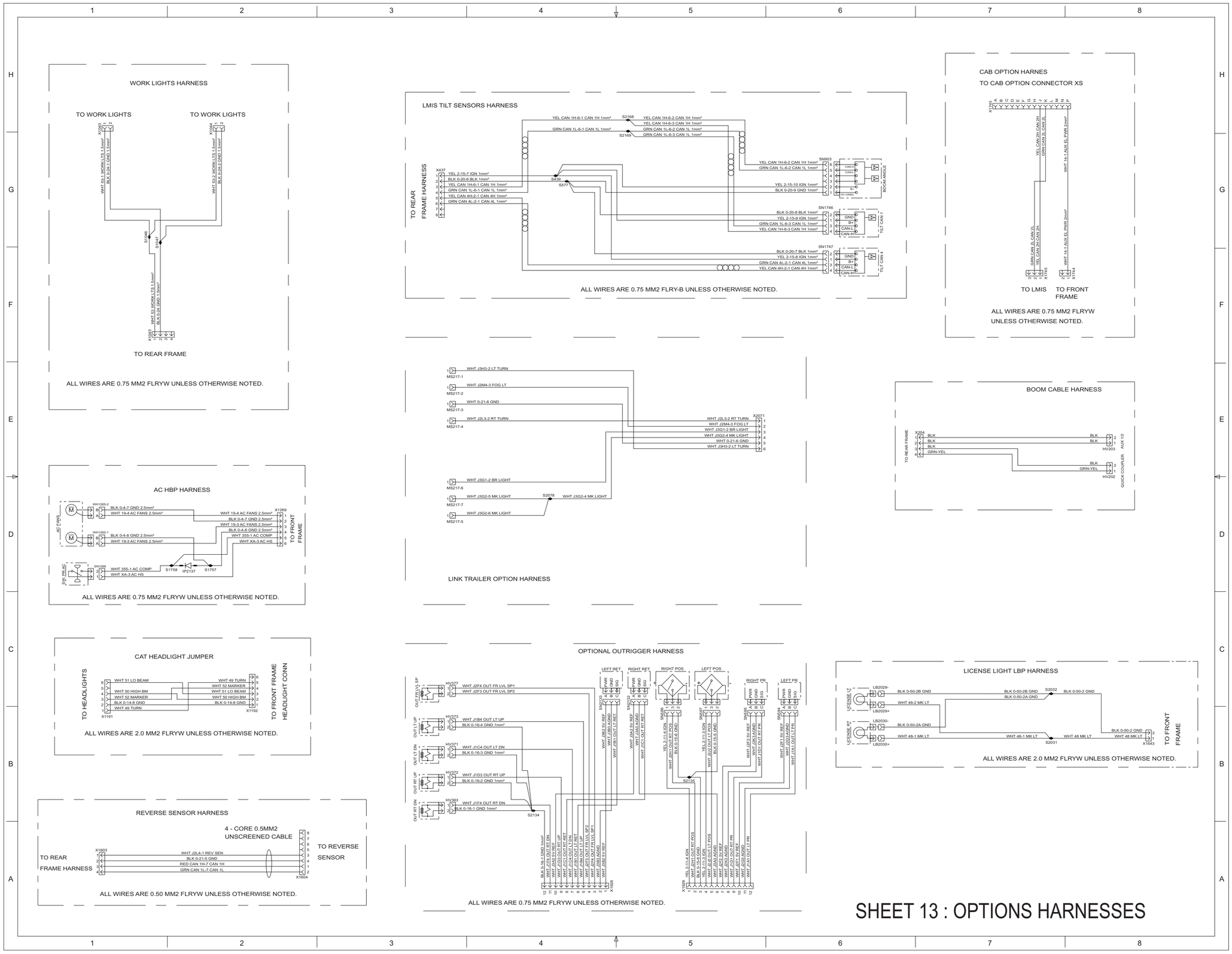

ECM J2
X2211
EIC 1
X2320
WHT 100 INJECTOR #1 HS 1mm²
GRY 101 INJECTOR #1 LS 1mm²
WHT 103 INJECTOR #2 HS 1mm²
GRY 102 INJECTOR #2 LS 1mm²
WHT 104 INJECTOR #3 HS 1mm²
GRY 105 INJECTOR #3 LS 1mm²
WHT 106 INJECTOR #4 HS 1mm²
GRY 107 INJECTOR #4 LS 1mm²
WHT 207 FUEL TEMP SNSR 0.5mm²
GRY 108 FUEL TEMP SNSR RTN 0.5mm²
WHT 109 FUEL RAIL PRESS SNSR 0.5mm²
GRY 110 FUEL RAIL PRESS SNSR RTN 0.5mm²
WHT 111 FUEL RAIL PRESS SNSR 5V SPLY 0.5mm²
GRY 112 FUEL PUMP CONTROL VLV LS 1mm²
WHT 113 FUEL PUMP CONTROL VLV HS 1mm²
WHT 114 CAMSHAFT SP SNSR SIG 0.5mm²
GRY 115 CAMSHAFT SP SNSR SIG RTN 0.5mm²
WHT 116 CAMSHAFT SP SNSR SPLY 0.5mm²
WHT 117 CAMSHAFT SP SNSR SIG 0.5mm²
GRY 118 CAMSHAFT SP SNSR RTN 0.5mm²
WHT 119 OIL PRESS SW (STG) 0.5mm²
GRY 120 OIL PRESS SW RTN 0.5mm²
WHT 121 COOLANT TEMP SNSR 0.5mm²
GRY 122 SNSR RTN #1 0.5mm²
GRY 123 SNSR RTN #2 0.5mm²
WHT 124 INTK MANF AIR TEMP SNSR SIG 0.5mm²
WHT 125 5V SNSR SPLY #3 0.5mm²
WHT 126 INLET MANF AIR PRESS SNSR SIG 0.5mm²
WHT 127 PRE COOLER NRS TEMP SNSR SIG 0.5mm²
WHT 128 POST COOLER NRS TEMP SNSR SIG 0.5mm²
WHT 129 NRS ABS PRESS SIG 0.5mm²
WHT 130 NRS DELTA PRESS SIG 0.5mm²
GRY 131 INLET THROT VLV RTN 0.5mm²
WHT 132 INLET THROT VLV HS 1mm²
GRY 133 INLET THROT VLV LS 1mm²
WHT 134 INLET THROTT VLV POS 0.5mm²
WHT 138 NRS VLV HS 1mm²
GRY 138-2 NRS VLV LS 1mm²
GRY 137 SNSR RTN #6 0.5mm²
WHT 138-3 NRS VLV POS 0.5mm²
WHT 139 5V SNSR SPLY #1 0.5mm²
WHT 140 TURBO WG VLV POS 0.5mm²
WHT 141 TURBO WG VLV HS 1mm²
GRY 136 TURBO WG VLV LS 1mm²
WHT 150 DPF DELTA PRESS SNSR SIG 0.5mm²
WHT 151 DPF ABS PRESS SNSR 0.5mm²
WHT 152 5V SNSR SPLY #4 0.5mm²
S2583
WHT 0-72 INTERCOOLER TEMP SEN 0.5mm²
WHT 109-2 FUEL RAIL PRESS SNSR 0.5mm²
WHT 147 DEF INJECTOR HS 0.5mm²
GRY 148 DEF INJECTOR LS 0.5mm²
GRY 336-4 DEF PRES SENS GND 0.5mm²
GRY 336-2 DEF HOSE HTR #1 LS 1mm²
GRY 504 ANALOGUE RTN #3
WHT 330-2 5V SPLY #1 0.5mm²
GRY 339 DEF HOSE HTR #3 LS 1mm²
GRY 341-1 DEF SYS DFR COOLANT VLV LS
GRY 341-2 DEF SYS DFR COOLANT VLV LS
S2579
BLK 178 AIR INLET TEMP SNSR GND
WHT 193 DEF PUMP SPLY 1mm²
YEL 610-2 CAN C HI
GRN 610-3 CAN C LO
WHT 346 GLOW PLUGS RLY HS 0.5mm²
120Ω
TERMINATOR
M8-2256-1
M8-2256-2
M8-2256-3
SHEET 8 : CAT 3.6L ENGINE HRC HARNESS


GENERIC
MS3617
NOX 2 DOWNSTREAM SENSOR
X684_1
Typ Supply: 3A
YEL 616-1 CAN C HI 0.75mm²
GRN 616 CAN C LO 0.75mm²
BLK 0-54-10 GND 0.75mm²
RED 182-4 AUX PWR 0.75mm²
NOX 1 UPSTREAM SENSOR
X685_1
YEL 617-1 CAN C HI 0.75mm²
GRN 617 CAN C LO 0.75mm²
BLK 0-54-9 GND 0.75mm²
RED 182-3 NOX 1 SUPPLY 0.75mm²
DEF TANK HEADER UNIT
X2567
GRN 618 CAN C LO 0.75mm²
YEL 618-1 CAN C HI 0.75mm²
BLK 0-54-15 GND 0.75mm²
RED 343 DEF TANK HT SUPPLY 0.75mm²
100mA
S2588
S2587
S2545
S2570
S2574
WHT 147 DEF INJECTOR HS 0.5mm²
GRY 148 DEF INJECTOR LS 0.5mm²
X2580
1.2A
INJECTOR
DEF
RED 340 DEF SYS DFR COOLANT VLV + 1mm²
GRY 341 DEF SYS DFR COOLANT VLV LS 1mm²
X2566
1.2A
COOLANT DIVERTER
VALVE UNIT
RED 185 DEF HOSE HTR #3 + 1mm²
GRY 339 DEF HOSE HTR #3 LS 1mm²
X2523
1.12A
DEF HEATER
SUCTION LINE
RED 180-2 DEF HOSE HTR #2 + 1mm²
GRY 180 DEF HOSE HTR #2 LS 1mm²
X2539
1.10A
DEF RETURN
HEATED LINE
RED 337 DEF HOSE HTR #1 + 1mm²
GRY 336-2 DEF HOSE HTR #1 LS 1mm²
X2565
3.43A
DEF PRESSURE
HEATED LINE
X2526
WHT 330-2 5V SPLY #1 0.75mm²
WHT 190-2 DEF PRESS SNSR SIG 0.75mm²
GRY 0-54-4 GND 1mm²
BLK 192 DEF PUMP MOTOR GND 1.5mm²
WHT 193 DEF PUMP SPLY 1mm²
WHT 194 DEF PUMP CONTROL SIG 0.5mm²
BLK 371-2 DEF PUMP REV VLV GND 1.5mm²
RED 181 DEF SUP MOD PWR OUT 1.5mm²
DEF SUPPLY
MODULE
PUMP MOTOR NOMINAL: 4A PUMP
PUMP MOTOR INRUSH(20us): 40A PUMP
PURGE PUMP CURRENT : 3A
INTERNAL PRESS SENSOR : 10mA
SCR OUTLET TEMP SNSR
20mA
X2544
WHT 300-3 5V SCR SNSR SPLY 0.75mm²
GRY 0-54-4 GND 0.75mm²
YEL 357-4-2 CAN C HI 0.75mm²
GRN 357-3-2 CAN C LO 0.75mm²
MS2756-3
MS2756-2
MS2756-1
120Ω TERMINATOR
DT04-12PC
X2507
EC1
X2519
EC3
X2508
EC2
DT04-12PD
X2544
AC COMPRESSOR
(OPT)
TO ENGINE HARNESS
SHEET 9 : CAT 3.6L ENGINE-CHASSIS HRC HARNESS


DIAGNOSTIC CONNECTOR
WIF
(OPT) AC COMPRESSOR
2 x 4 Buss Bar
GND
1 x 8 BUSS BAR
MAIN PWR RELAY2
LIFT PMP RELAY
ENGINE PDM
R5-SCR RELAY
REV VLV RELAY
ALTERNATOR
ECM J1
STARTER
GND
REMOTE B+
GLOW PLUGS RELAY
GLOW PLUGS
MAIN POWER RELAY PRM
INLET TEMP
INTERCOOLER TEMP SENSOR
TRANSM OIL TEMP SENSOR
FAN REVERSE 1
BATT +
EC724-B+
STARTER
REMOTE GND
ENGINE GND
ET5
TO FRONT FRAME HARNESS (X2078)
BLOCK
ANTI STALL
ET3
ET2
ET4
ET1
TO FRONT FRAME HARNESS
HEATED BREATHER
VSS (OPT)
LUC
TRANS E5
TRANS E6
TRANS E4
TRANS E1
TRANS E2
TRANS E3
ECM GND
GND
SHEET 10 : CAT 3.6L ENGINE LRC


ECM J2
EIC 1
X2663
X2664
S3658
WHT 100 INJECTOR #1 HS 1mm²
GRY 101 INJECTOR #1 LS 1mm²
WHT 103 INJECTOR #2 HS 1mm²
GRY 102 INJECTOR #2 LS 1mm²
WHT 104 INJECTOR #3 HS 1mm²
GRY 105 INJECTOR #3 LS 1mm²
WHT 106 INJECTOR #4 HS 1mm²
GRY 107 INJECTOR #4 LS 1mm²
WHT 207 FUEL TEMP SNSR 0.5mm²
GRY 108 FUEL TEMP SNSR RTN 0.5mm²
WHT 109 FUEL RAIL PRESS SNSR 0.5mm²
GRY 110 FUEL RAIL PRESS SNSR RTN 0.5mm²
WHT 111 FUEL RAIL PRESS SNSR 5V SPLY 0.5mm²
GRY 112 FUEL PUMP CONTROL VLV LS 1mm²
WHT 113 FUEL PUMP CONTROL VLV HS 1mm²
WHT 114 CAMSHAFT SP SNSR SIG 0.5mm²
GRY 115 CAMSHAFT SP SNSR SIG RTN 0.5mm²
WHT 116 CAMSHAFT SP SNSR SPLY 0.5mm²
WHT 117 CAMSHAFT SP SNSR SIG 0.5mm²
GRY 118 CAMSHAFT SP SNSR RTN 0.5mm²
WHT 119 OIL PRESS SW (STG) 0.5mm²
GRY 120 OIL PRESS SW RTN 0.5mm²
WHT 121 COOLANT TEMP SNSR 0.5mm²
GRY 122 SNSR RTN #1 0.5mm²
GRY 123 SNSR RTN #2 0.5mm²
WHT 124 INTK MANF AIR TEMP SNSR SIG 0.5mm²
WHT 125 5V SNSR SPLY #3 0.5mm²
WHT 126 INLET MANF AIR PRESS SNSR SIG 0.5mm²
WHT 127 PRE COOLER NRS TEMP SNSR SIG 0.5mm²
WHT 138 NRS VLV HS 1mm²
GRY 138-2 NRS VLV LS 1mm²
GRY 137 SNSR RTN #6 0.5mm²
WHT 138-3 NRS VLV POS 0.5mm²
WHT 139 5V SNSR SPLY #1 0.5mm²
WHT 140 TURBO WG VLV POS 0.5mm²
WHT 141 TURBO WG VLV HS 1mm²
GRY 136 TURBO WG VLV LS 1mm²
WHT 152 5V SNSR SPLY 0.5mm²
WHT 0-72 INTERCOOLER SIG 0.5mm²
WHT 109-2 FUEL RAIL PRESS SNSR 0.5mm²
GRY 504 ANALOGUE RTN #3 0.5mm²
BLK 178 AIR INLET TEMP SNSR GND 0.5mm²
WHT 346 GLOW PLUGS RLY HS 0.5mm²
SH10_CAT 3.6L_LRC-B-HI
SH10_CAT 3.6L_LRC-D-HI
SH10_CAT 3.6L_LRC-E-HI
SH10_CAT 3.6L_LRC-H-HI
SH10_CAT 3.6L_LRC-J-HI
SHEET 11 : CAT 3.6L ENGINE LRC HARNESS


FOR REFERENCE ONLY
LMIS BEACON HARNESS
BEACON PIN 5
BEACON PIN 4
BEACON PIN 3
BEACON PIN 2
BEACON PIN 1
BEACON PIN 0
TO REAR FRAME OPT LMIS
TO CAB OPT HARNESS OPT LMIS 2
TO J3 OF THE PDM
GND
SHEET 12 : LMIS HARNESS



CATERPILLAR®

TH357, TH408 & TH3510
PVC 2205

TH357, TH408 & TH3510
Electrical Schematic
31211942
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