# SERVICE MANUAL

## CR6090 / CR7090 / CR8080 / CR8090 / CR9090
## Tier 4a
## Combine

**Part number 84561155**
1st edition English
July 2012



Order the manual at mid-west-tech.com >

# Contents


INTRODUCTION

Engine ..... 10

Fuel filters ..... 10.206

Aftercooler ..... 10.310

Engine cooling system ..... 10.400

Oil cooler and lines ..... 10.408

Fan and drive ..... 10.414

Rotary screen ..... 10.418

Engine air compressor ..... 10.450

Selective Catalytic Reduction (SCR) exhaust treatment ..... 10.500

Main gearbox and drive ..... 14

Main gearbox and drive ..... 14.100

Transmission ..... 21

Mechanical transmission ..... 21.114

Mechanical transmission external controls ..... 21.130

Gearbox internal components ..... 21.145

Differential ..... 21.182

Front axle system ..... 25

Powered front axle ..... 25.100

Final drives ..... 25.310

Rear axle system ..... 27

Powered rear axle ..... 27.100

Hydrostatic drive ..... 29

Transmission and steering hydrostatic control ..... 29.100

Two-speed assembly ..... 29.134

Hydrostatic transmission ..... 29.202

Reservoir, cooler, and lines ..... 29.204




MidWestTech | New Holland CR6090, CR7090, CR8080, CR8090, CR9090 Tier 4a Co... Order the manual at mid-west-tech.com >

Pump and motor components ..... 29.218
Rear hydrostatic transmission ..... 29.300
Brakes and controls ..... 33
Parking brake / Parking lock ..... 33.110
Hydraulic service brakes ..... 33.202
Hydraulic systems ..... 35
Hydraulic systems ..... 35.000
Pump control valves ..... 35.102
Variable displacement pump ..... 35.106
Auxiliary hydraulic pump and lines ..... 35.220
Reservoir, cooler, and filters ..... 35.300
Main control valve ..... 35.359
Header/Attachment height system ..... 35.410
Header/Attachment tilting system ..... 35.415
Grain tank unload system ..... 35.440
Traction variator system ..... 35.450
Reel control system ..... 35.518
Crop processor system ..... 35.536
Header/Attachment leveling system ..... 35.602
Header reverser drive ..... 35.760
Chaff spreader control ..... 35.796
Stone trapping system ..... 35.992
Steering ..... 41
Steering control ..... 41.101
Hydraulic control components ..... 41.200
Pump ..... 41.206
Cylinders ..... 41.216
Autoguidance steering ..... 41.432
Tracks and track suspension ..... 48



MidWestTech | New Holland CR6090, CR7090, CR8080, CR8090, CR9090 Tier 4a Co... Order the manual at mid-west-tech.com >

Tracks ..... 48.100
Track frame and driving wheels ..... 48.130
Track tension units ..... 48.134
Cab climate control ..... 50
Heating ..... 50.100
Ventilation ..... 50.104
Air conditioning ..... 50.200
Electrical systems ..... 55
Electrical system ..... 55.000
Fuel injection system ..... 55.010
Fuel tank system ..... 55.011
Engine cooling system ..... 55.012
Engine oil system ..... 55.013
Engine intake and exhaust system ..... 55.014
Engine control system ..... 55.015
Hydrostatic drive control system ..... 55.019
Transmission control system ..... 55.024
Gearbox electric system ..... 55.029
Service brake electrical system ..... 55.030
Parking brake electrical system ..... 55.031
Hydraulic system control ..... 55.036
Heating, Ventilation, and Air-Conditioning (HVAC) control system ..... 55.050
Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls ..... 55.051
Harnesses and connectors ..... 55.100
Engine starting system ..... 55.201
Cold start aid ..... 55.202
Alternator ..... 55.301
External lighting ..... 55.404
Warning indicators, alarms, and instruments ..... 55.408

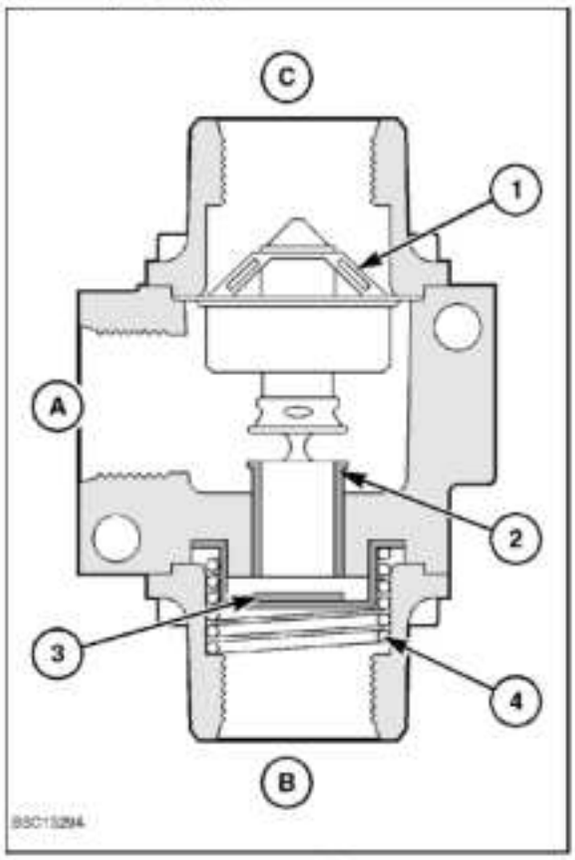


MidWestTech | New Holland CR6090, CR7090, CR8080, CR8090, CR9090 Tier 4a Co... Order the manual at mid-west-tech.com >

# Bypass valve - Static description and Thermostat - Static description

CR6090 [YBG115106 - ], CR6090 NA, CR8080 NA, CR7090 [YBG115106 - ] NA

The oil cooler bypass valve is thermostatically controlled and its function is to allow the hydrostatic system oil to reach maximum operating temperature in the shortest possible time.
When the hydrostatic system oil temperature is below approximately **71 °C** ( **160 °F**) the oil cooler bypass valve thermostat assembly **(1)** is closed and the oil will flow from port, **(A)**, down the center of sleeve **(2)** and through port **(B)**, to the oil reservoir.
When the oil temperature rises above **71 °C** ( **160 °F**) the thermostat assembly **(1)** will begin to open, moving sleeve **(2)** down towards seal **(3)**. The oil will continue to flow from port **(A)**, down the center of sleeve **(2)** and through port **(B)**, to the oil reservoir, it will also flow through open thermostat valve **(1)** and through port **(C)**, to the oil cooler.
When the oil temperature reaches **85 °C** ( **185 °F**) the thermostat valve **(1)** will be fully open and sleeve **(2)** will seat against seal **(3)** closing off the oil flow from port **(A)** to port **(B)**. The oil flow will now flow from port **(A)** through the thermostat valve **(1)** through port **(C)**, to the oil cooler.
If the oil flow through the oil cooler becomes restricted and the cooler oil pressure rises to above approximately **3.1 bar** the oil pressure acting though the center of sleeve **(2)** onto seal **(3)** will compress the spring **(4)** allowing oil to flow through the center of sleeve **(2)** through port **(B)**, to the reservoir.




BSC1329A 1

1. Thermostat Assembly
2. Sleeve
3. Seal
4. Spring

A. Inlet Port
B. Reservoir Port
C. Oil Cooler Port

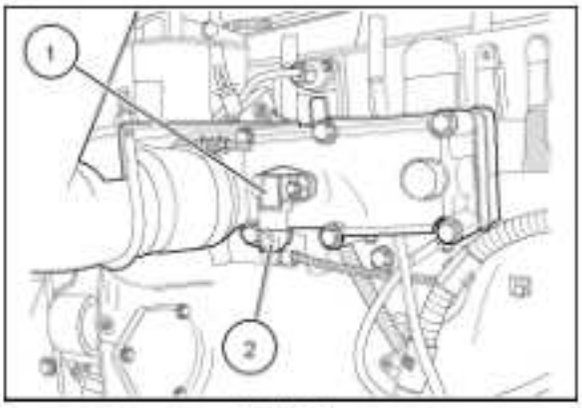


MidWestTech | New Holland CR6090, CR7090, CR8080, CR8090, CR9090 Tier 4a Co... Order the manual at mid-west-tech.com >

# Boost pressure sensor - Overview - Air temperature/boost pressure sensor - 9.0L engine

CR6090 [YBG115106 - ], CR7090 [YBG115106 - ] NA

The air temperature/boost pressure sensor **B-41 (1)** measures the pressure and temperature of the air in the intake manifold. Air temperature and boost pressure are two of the parameters the Engine Control Unit (ECU) uses to determine optimum control requirements, such as amount of fuel to inject, ignition timing and transmission shifting. The sensor connects to the Iveco wire harness through connector **X210 (2)**. The sensor wires terminate at the ECU sensor connector **X516** pins 25, 33, 34 and 36.




3386217 1

The ECU monitors the air temperature/boost pressure sensor. If a fault occurs in the sensor itself or in the sensor wiring, a fault code will appear on the cab display monitor.

**E1561-02 - Boost Temp. Signal** The troubleshooting procedure for this fault code is located at **Boost temperature sensor - Incorrect value (55.014)**.

**E1561-03 - Boost Temp. Signal** The troubleshooting procedure for this fault code is located at **Boost temperature sensor - Short circuit to B+ (55.014)**.

**E1561-04 - Boost Temp. Signal** The troubleshooting procedure for this fault code is located at **Boost temperature sensor - Short circuit to ground (55.014)**.

**E1562-02 - Boost Pressure Sensor** The troubleshooting procedure for this fault code is located at **Boost pressure sensor - Incorrect value (55.014)**.

**E1562-03 - Boost Pressure Sensor** The troubleshooting procedure for this fault code is located at **Boost pressure sensor - Short circuit to B+ (55.014)**.

**E1562-04 - Boost Pressure Sensor** The troubleshooting procedure for this fault code is located at **Boost pressure sensor - Short circuit to ground (55.014)**.

**E1562-12 - Boost Pressure Sensor** The troubleshooting procedure for this fault code is located at **Boost pressure sensor - Bad intelligent device (55.014)**.

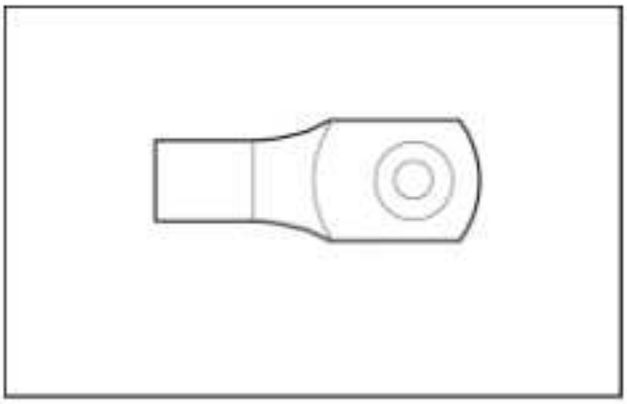
Schematic reference: **Wire harnesses - Electrical schematic frame 05 (55.100)**.



MidWestTech | New Holland CR6090, CR7090, CR8080, CR8090, CR9090 Tier 4a Co... Order the manual at mid-west-tech.com >

***CONNECTOR X-077-B - GROUND***

| CONNECTOR X-077-B - GROUND | | | |
|---|---|---|---|
| **PIN NUMBER** | **WIRE NUMBER** | **CIRCUIT REFERENCE** | **ELECTRICAL SCHEMATIC FRAME** |
| 1 | CM-153 (BK) | Accessory outlet **J-08** | **Wire harnesses - Electrical schematic frame 58 — Accessory (1) (55.100)** |
| 2 | CM-317 (BK) | Neutral lock solenoid **Y-01** | **Wire harnesses - Electrical schematic frame 09 — Drives (55.100)** |
| 3 | CM-788 (BK) | Upper/lower sieve relay **K-18** | **Wire harnesses - Electrical schematic frame 21 — Cleaning (3) (55.100)** |
| 4 | CM-1177 (BK) | Splice 004, accessory socket **J-06**, seat pump motor **M-26**, cigar lighter **R-08**, upper seat heater **R-31**, and lower seat heater **R-32** | **Wire harnesses - Electrical schematic frame 59 — Accessory (2) (55.100)** |
| 5 | CM-4067 (BK) | Actuator power relay **K-50** | **Wire harnesses - Electrical schematic frame 70 — Active Spreading (1) (55.100)** |
| 6 | CM-1859 (BK) | DCU diagnostic **J-12** | **Wire harnesses - Electrical schematic frame 69 — DCU Control (55.100)** |



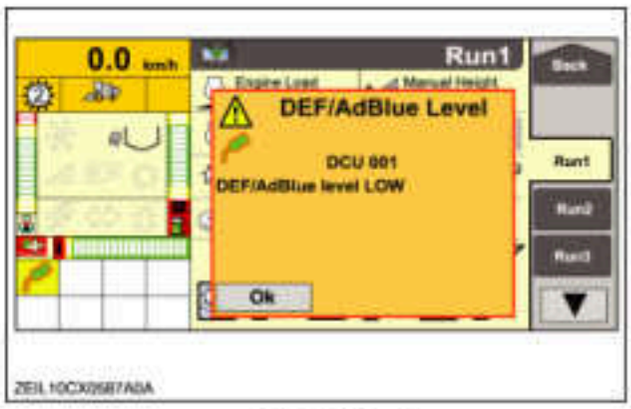
RING TERMINAL 14



MidWestTech | New Holland CR6090, CR7090, CR8080, CR8090, CR9090 Tier 4a Co... Order the manual at mid-west-tech.com >

## DEF/AdBlue® level faults, failures and engine power loss levels

The display indicates that the **DEF/AdBlue®** level is low and needs to be refilled.
The alarm comes up if the **DEF/AdBlue®** level drops below **10 %**.
The low **DEF/AdBlue®** level icon is displayed with a yellow background in the alarm/error icon area at the left hand side of the display.
Refill **DEF/AdBlue®** and reset the system by cycling the key switch OFF then ON. Reset will only be done when the **DEF/AdBlue®** tank is filled more than **15 %**.
No engine power loss.




2

The display indicates that the **DEF/AdBlue®** level is critically low and needs to be refilled. Engine torque limitation is in progress.
The low **DEF/AdBlue®** level icon and the engine power loss icon are displayed with a yellow background in the alarm/error icon area at the left hand side of the display.
Refill **DEF/AdBlue®** immediately and reset the system by cycling the key switch OFF then ON. Reset will only be done when the **DEF/AdBlue®** tank is filled more than **15 %**.
Up to **65 %** torque reduction and **40 %** engine speed reduction within **40 min** of engine running time.



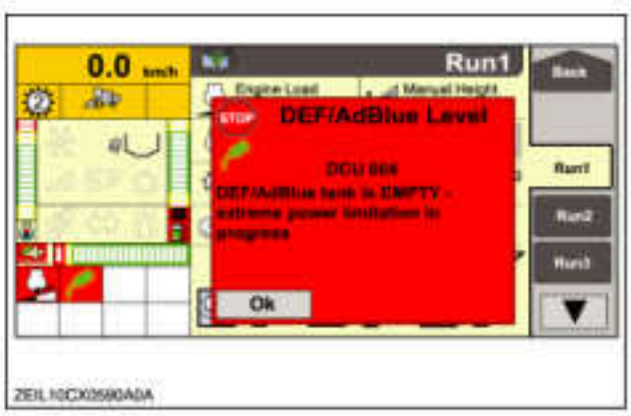

3

The display indicates that the **DEF/AdBlue®** tank is empty. Engine power limitation is in progress.
The low **DEF/AdBlue®** level icon and the engine power loss icon are displayed with a red background in the alarm/error icon area at the left hand side of the display.
Refill **DEF/AdBlue®** immediately and reset the system by cycling the key switch OFF then ON. Reset will only be done when the **DEF/AdBlue®** tank is filled more than **15 %**.
Up to **80 %** torque reduction and **40 %** rated engine speed within **30 min** of engine running time.




4

The display indicates that the **DEF/AdBlue®** tank is empty. Extreme engine power limitation is in progress.
The low **DEF/AdBlue®** level icon and the engine power loss icon are displayed with a red background in the alarm/error icon area at the left hand side of the display.
Refill **DEF/AdBlue®** immediately and reset the system by cycling the key switch OFF then ON. Reset will only be done when the **DEF/AdBlue®** tank is filled more than **15 %**.
**80 %** torque reduction and **40 %** rated engine speed.




5



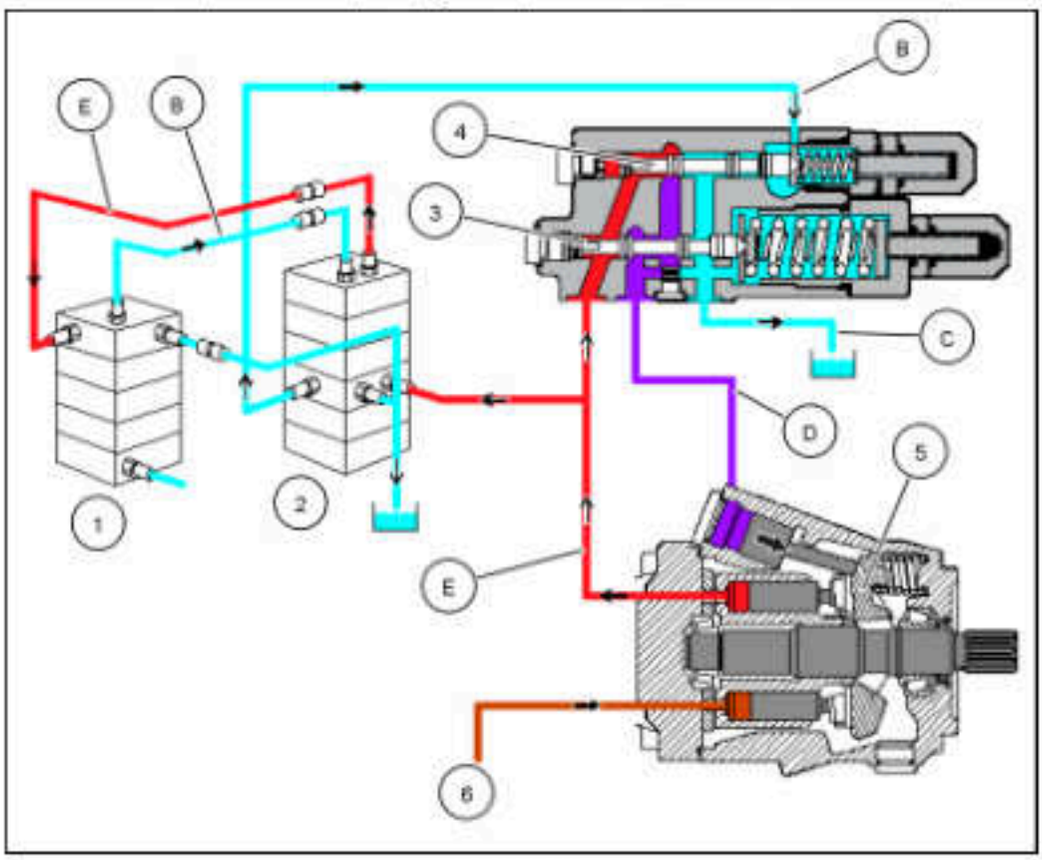
MidWestTech | New Holland CR6090, CR7090, CR8080, CR8090, CR9090 Tier 4a Co... Order the manual at mid-west-tech.com >

## Low Pressure Standby

Low pressure standby is the system pressure - **21 - 24 bar** ( **305 - 348 psi**) - maintained by the hydraulic pump when high pressure hydraulic circuits are not being operated. During engine startup, standby pressure has not been generated and both the pressure and flow compensating valves **(3) (4)** are held to the left by spring pressure. While the spools are held to the left, oil pressure generated by the pump in gallery **(E)** cannot be applied to the swash plate servo piston via gallery **(D)**. The swash plate **(5)** consequently remains in the maximum flow position until the pump has developed sufficient flow to produce pressure at low pressure standby.

As pump output pressure increases to **21 - 24 bar** ( **305 - 348 psi**), this pressure is sensed in gallery **(E)** and applied to the flow compensating spool **(4)**. The spool gradually moves against the spring, allowing oil flow from gallery **(E)** to gallery **(D)**. The controlled pressure rise in gallery **(D)** operates the swash plate servo piston, changing the angle of the swash plate in relation to the pumping head. The change in angle reduces the operating stroke of the pistons and output of the pump.

As pump output decreases and the pressure in gallery **(D)** decreases to less than **24 bar** ( **348 psi**), the flow compensating valve gradually moves under spring pressure to the left, bleeding gallery **(D)** to sump through gallery **(C)**. This reduces the control pressure applied to the servo piston, allowing the servo piston to retract at a controlled rate under pressure from the swash plate return spring and re-adjust the angle of the swash plate to increase pump output. This control process continues, maintaining pump output pressure at **21 - 24 bar** ( **305 - 348 psi**) (low pressure standby) until a high pressure circuit is operated and pump system pressure needs to be increased to operate the service.




86770853A 2

Standby Pressure @ **21 - 24 bar** ( **305 - 348 psi**)

Control Pressure

Return to Reservoir

Charge Pressure

1. Feeder stack valve (in neutral)
2. Main frame stack valve (in neutral)
3. Pressure Compensating Valve
4. Flow Compensating Valve
5. Swash Plate
6. Return from Hydrostatic Motors



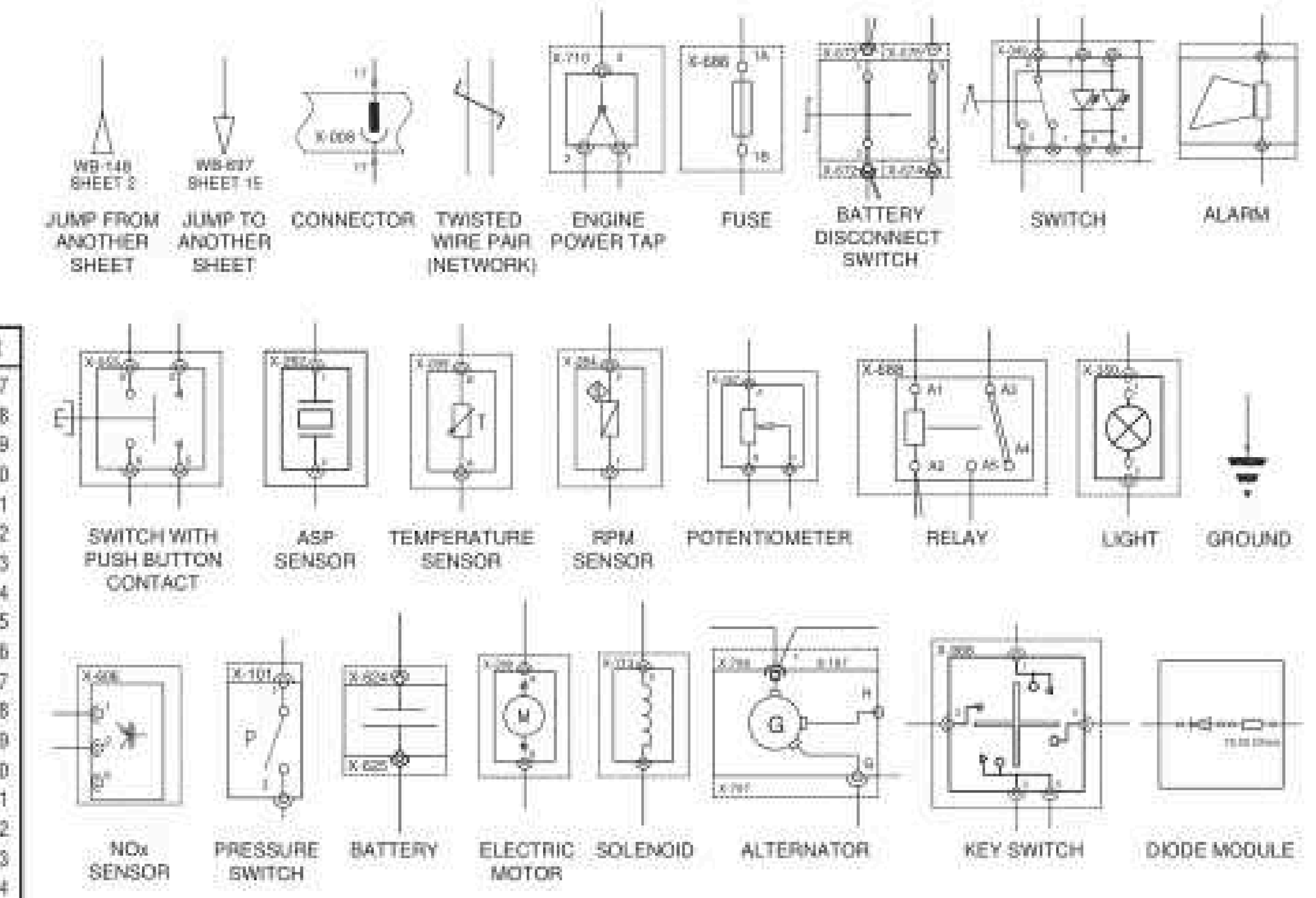
MidWestTech | New Holland CR6090, CR7090, CR8080, CR8090, CR9090 Tier 4a Co... Order the manual at mid-west-tech.com >

# CR6090, CR7090, CR8080, CR8090, and CR9090 COMBINES
# 84571052
## ELECTRICAL SCHEMATIC, NORTH AMERICA
## MODEL YEAR 2012 PRODUCTION



### SCHEMATIC SHEET INDEX


| Component | Page/Sheet | Component | Page/Sheet |
|---|---|---|---|
| STARTING | Page 1, Sheet 1 | CAMERAS | Page 5, Sheet 37 |
| STARTING | Page 1, Sheet 2 | GPS, SERVICE SOCKETS | Page 5, Sheet 38 |
| STARTING | Page 1, Sheet 3 | LIGHTING (INTERIOR) | Page 5, Sheet 39 |
| SELECT EUROPEN MODELS (12V) STARTING | Page 1, Sheet 4 | LIGHTING (CONTROLS) | Page 5, Sheet 40 |
| ENGINE | Page 1, Sheet 5 | LIGHTING (FRONT MARKER) | Page 6, Sheet 41 |
| ENGINE | Page 1, Sheet 6 | LIGHTING (REAR MARKER) | Page 6, Sheet 42 |
| DRIVES | Page 1, Sheet 7 | LIGHTING (FLASHER) | Page 6, Sheet 43 |
| DRIVES | Page 1, Sheet 8 | LIGHTING (FLIP UP) | Page 6, Sheet 44 |
| DRIVES | Page 2, Sheet 9 | STONE TRAP | Page 6, Sheet 45 |
| HEADER | Page 2, Sheet 10 | LIGHTING (LICENSE PLATE, REAR AUSTRIA) | Page 6, Sheet 46 |
| HEADER | Page 2, Sheet 11 | LIGHTING (BEACON, HEADER) | Page 6, Sheet 47 |
| HEADER | Page 2, Sheet 12 | LIGHTING (UNLOAD TUBE, LOWER WORK) | Page 6, Sheet 48 |
| HEADER | Page 2, Sheet 13 | LIGHTING (HEADER, CENTER WORK) | Page 7, Sheet 49 |
| FEEDER (1) | Page 2, Sheet 14 | LIGHTING (MID, OUTER WORK) | Page 7, Sheet 50 |
| FEEDER (2) | Page 2, Sheet 15 | LIGHTING (INNER WORK) | Page 7, Sheet 51 |
| THRESHER (1) | Page 2, Sheet 16 | LIGHTING (REAR, SIDE WORK) | Page 7, Sheet 52 |
| THRESHER (2) | Page 3, Sheet 17 | LIGHTING (SERVICE) | Page 7, Sheet 53 |
| FEEDER ASP | Page 3, Sheet 18 | HYDRAULIC | Page 7, Sheet 54 |
| CLEANING (1) | Page 3, Sheet 19 | NEF ENGINE STARTER CIRCUIT | Page 7, Sheet 55 |
| CLEANING (2) | Page 3, Sheet 20 | MIRRORS | Page 7, Sheet 56 |
| CLEANING (3) | Page 3, Sheet 21 | WASHER, WIPER | Page 8, Sheet 57 |
| UNLOAD | Page 3, Sheet 22 | ACCESSORY (1) | Page 8, Sheet 58 |
| TRASH | Page 3, Sheet 23 | ACCESSORY (2) | Page 8, Sheet 59 |
| AUTO GUIDANCE (1) | Page 3, Sheet 24 | ACCESSORY (3) RADIO | Page 8, Sheet 60 |
| AUTO GUIDANCE (2) | Page 4, Sheet 25 | A/C (MANUAL) | Page 8, Sheet 61 |
| YIELD SENSOR, MOSITURE SENSOR | Page 4, Sheet 26 | A/C (AUTOMATIC) | Page 8, Sheet 62 |
| MOG | Page 4, Sheet 27 | ENGINE | Page 8, Sheet 63 |
| ENGINE ECU TWIN STAGE TURBO | Page 4, Sheet 28 | A/C | Page 8, Sheet 64 |
| DISTRIBUTION (1) | Page 4, Sheet 29 | A/C | Page 9, Sheet 65 |
| DISTRIBUTION (2) | Page 4, Sheet 30 | HYDROSTATIC PUMP CONTROL | Page 9, Sheet 66 |
| DISTRIBUTION | Page 4, Sheet 31 | SPREADING | Page 9, Sheet 67 |
| DISTRIBUTION (CCM POWER RELAYS) | Page 4, Sheet 32 | OPTIONS, SPARE | Page 9, Sheet 68 |
| DISTRIBUTION (KEY SWITCH) | Page 5, Sheet 33 | DCU CONTROL | Page 9, Sheet 69 |
| CAN NETWORK (1) | Page 5, Sheet 34 | ACTIVE SPREADING (1) | Page 9, Sheet 70 |
| CAN NETWORK (2) | Page 5, Sheet 35 | ACTIVE SPREADING (2) | Page 9, Sheet 71 |
| CLEANING (2) | Page 5, Sheet 36 | FUSE CHART | Page 9, Sheet 72 |


### GROUND LOCATIONS

- Frame GND
- Engine GND
- Cab GND
- Front GND
- Rotor/Walker Section GND
- T4 Engine GND
- Grid Heater GND

### WIRING REFERENCES

| Color | Color Code | Function |
|---|---|---|
| Black | BK | Ground, Chassis |
| Blue | BL | Printed Circuit Ground |
| White | WH | Increasing Actuation |
| Gray | GY | Decreasing Actuation |
| Orange | OR | Power After Ignition |
| Yellow | YE | Signal Wires |
| Red | RD | Battery Voltage |
| Violet | VT | Lighting |
| Pink | PK | Reference Voltage |

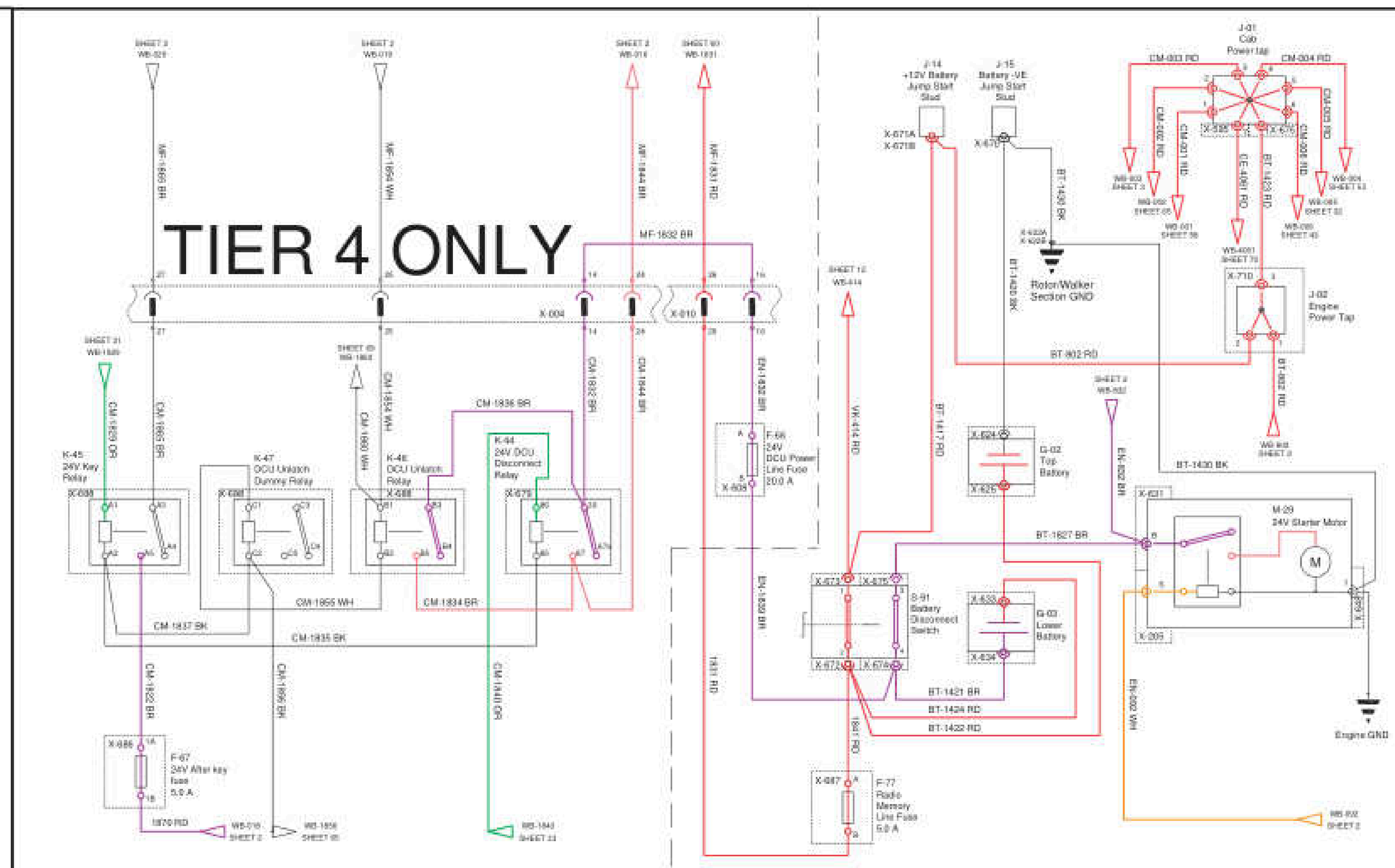
MF - 431 - YE
- WIRE COLOR
- CIRCUIT NUMBER
- HARNESS CODE

### COMPONENT LEGEND

| Label Prefix | Component Type |
|---|---|
| A | Electronics |
| B | Sensors |
| D | Diodes |
| E | Lights |
| F | Fuses |
| G | Generators |
| H | Audio |
| J | Outlets |
| K | Relays |
| M | Motors |
| Q | Circuit Breakers |
| R | Resistive |
| S | Switches |
| W | Splice Blocks |
| Y | Solenoids |

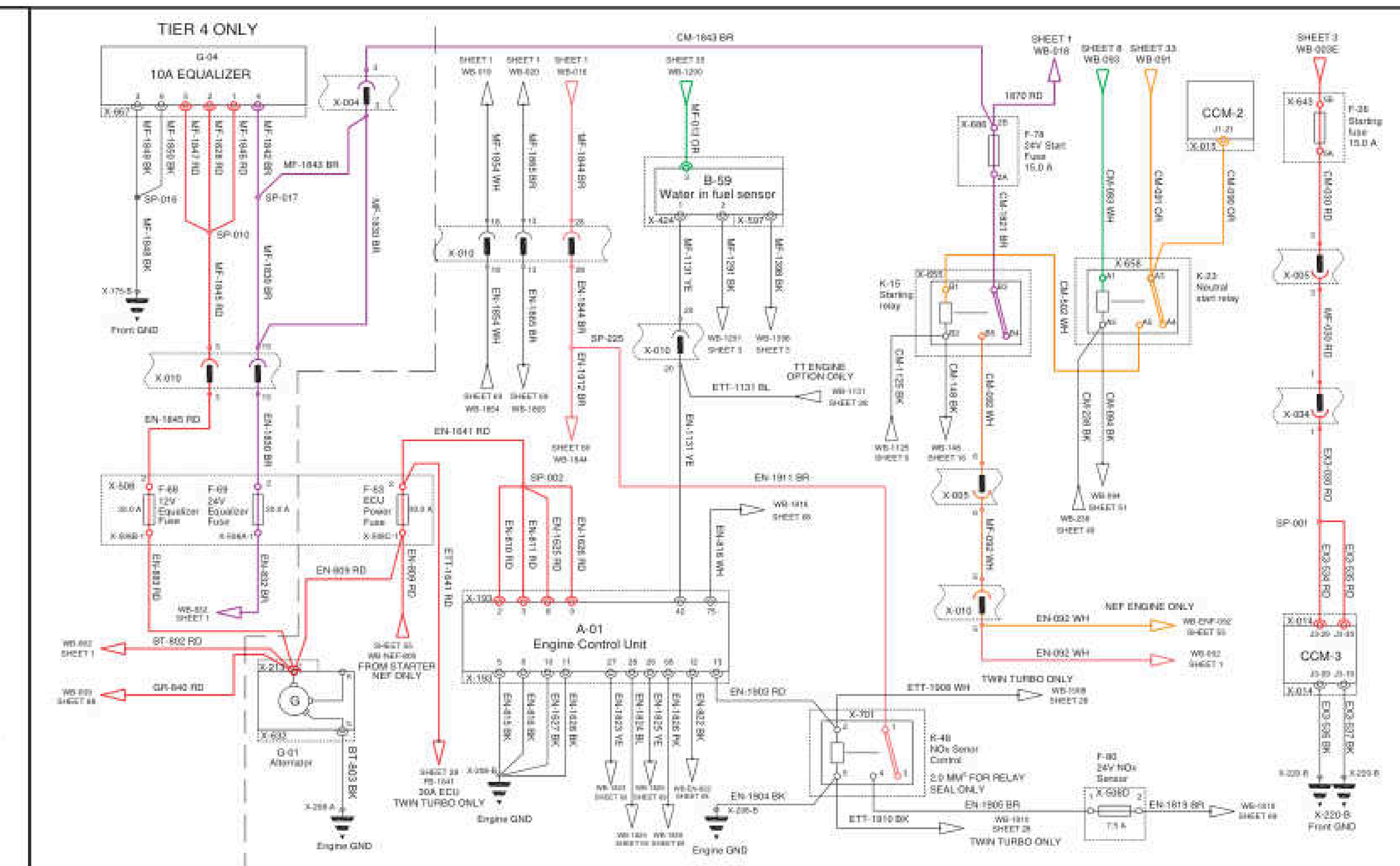
### LEGEND

- UNSWITCHED POWER
- SWITCHED POWER
- STARTING SEQUENCE
- 24 VOLT SYSTEM
- 24 VOLT SWITCHED POWER



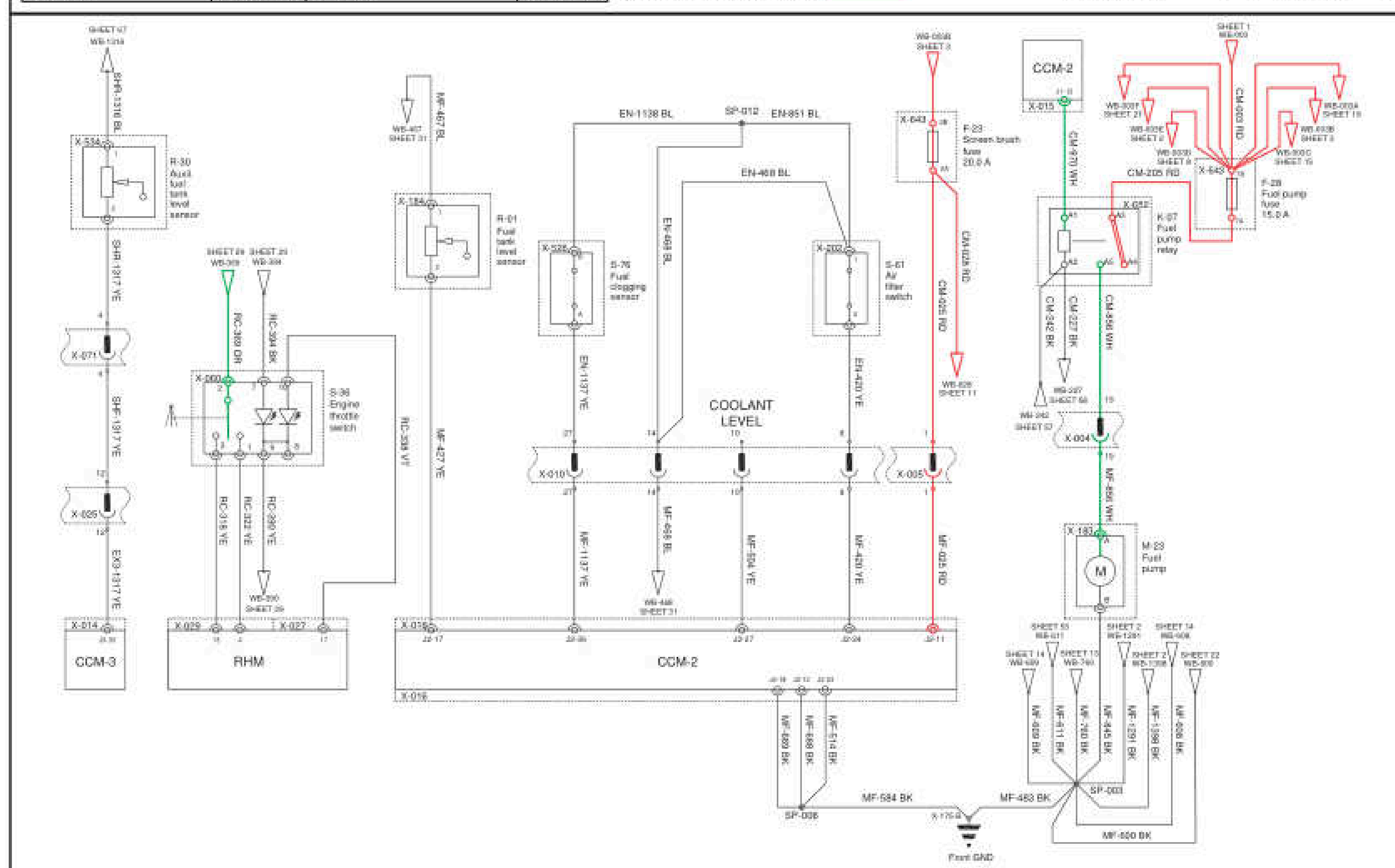

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| G-02 | Top Battery (X-624, X-625) | J-01 | Cab Power Tap (X-595, X-675) | J-15 | Battery -VE Jump Start Stud (X-670) | K-46 | DCU Unlatch Relay (X-688) | S-91 | Battery Disconnect Switch (X-672, X-673, X-674, X-675) |
| G-03 | Lower Battery (X-633, X-634) | J-02 | Engine Power Tap (X-710) | K-44 | 24V DCU Disconnect Relay (X-679) | K-47 | DCU Unlatch Dummy Relay (X-688) | | |
| GND-002 | Engine GND | J-14 | +12V Battery Jump Start Stud (X-6771A, X-671B) | K-45 | 24V Key Relay (X-688) | M-29 | 24V Starter Motor (X-205, X-631, X-648) | | |

**SHEET 1 - STARTING**



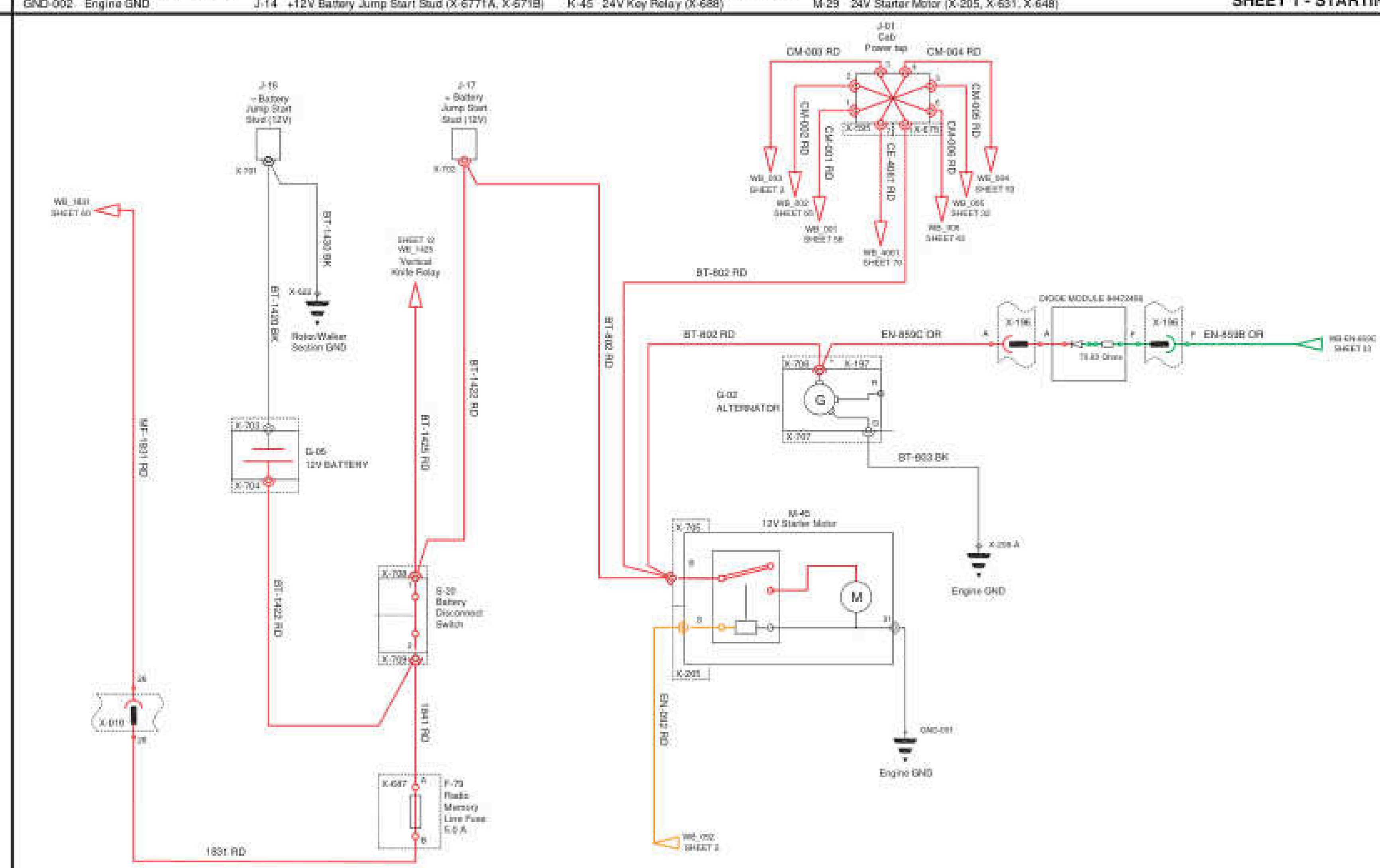

| | | | | | |
|---|---|---|---|---|---|
| A-01 | Engine Control Unit (X-193) | G-04 | 10A Equalizer (X-667) | K-48 | NOX Senor Control (X-701) |
| B-59 | Water in Fuel Sensor (X-424, X-597) | K-15 | Starting Relay (X-655) | | |
| G-01 | Alternator (X-213, X-632) | K-23 | Neutral Start Relay (X-658) | | |

**SHEET 2 - STARTING**



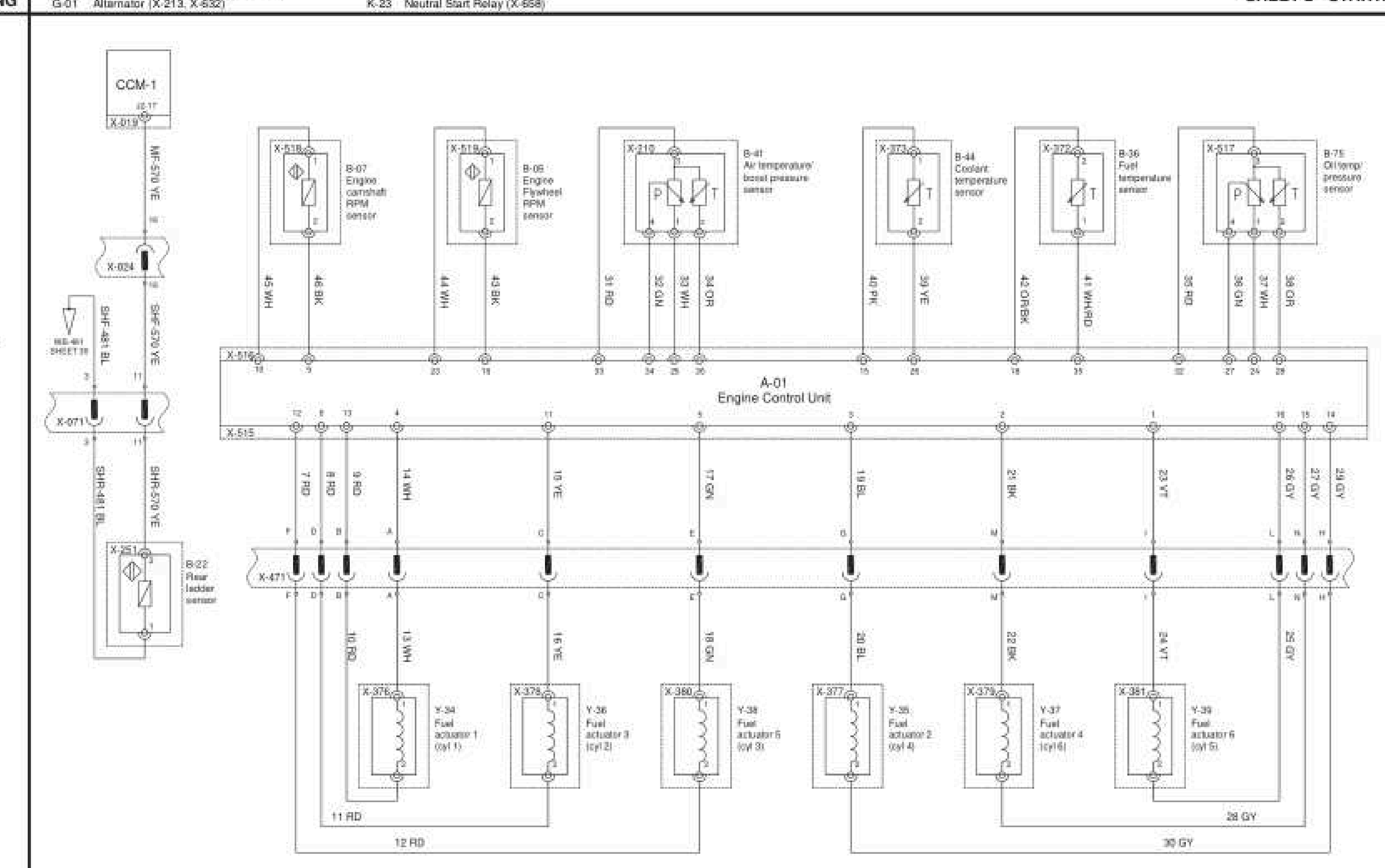

| | | | | | |
|---|---|---|---|---|---|
| K-07 | Fuel Pump Relay (X-652) | R-30 | Auxil. Fuel Tank Level Sensor (X-534) | S-76 | Fuel Clogging Sensor (X-526) |
| R-01 | Fuel Tank Level Sensor (X-184) | S-36 | Engine Throttle Switch (X-060) | | |
| M-23 | Fuel Pump (X-183) | S-61 | Air Filter Switch (X-202) | | |

**SHEET 3 - STARTING**



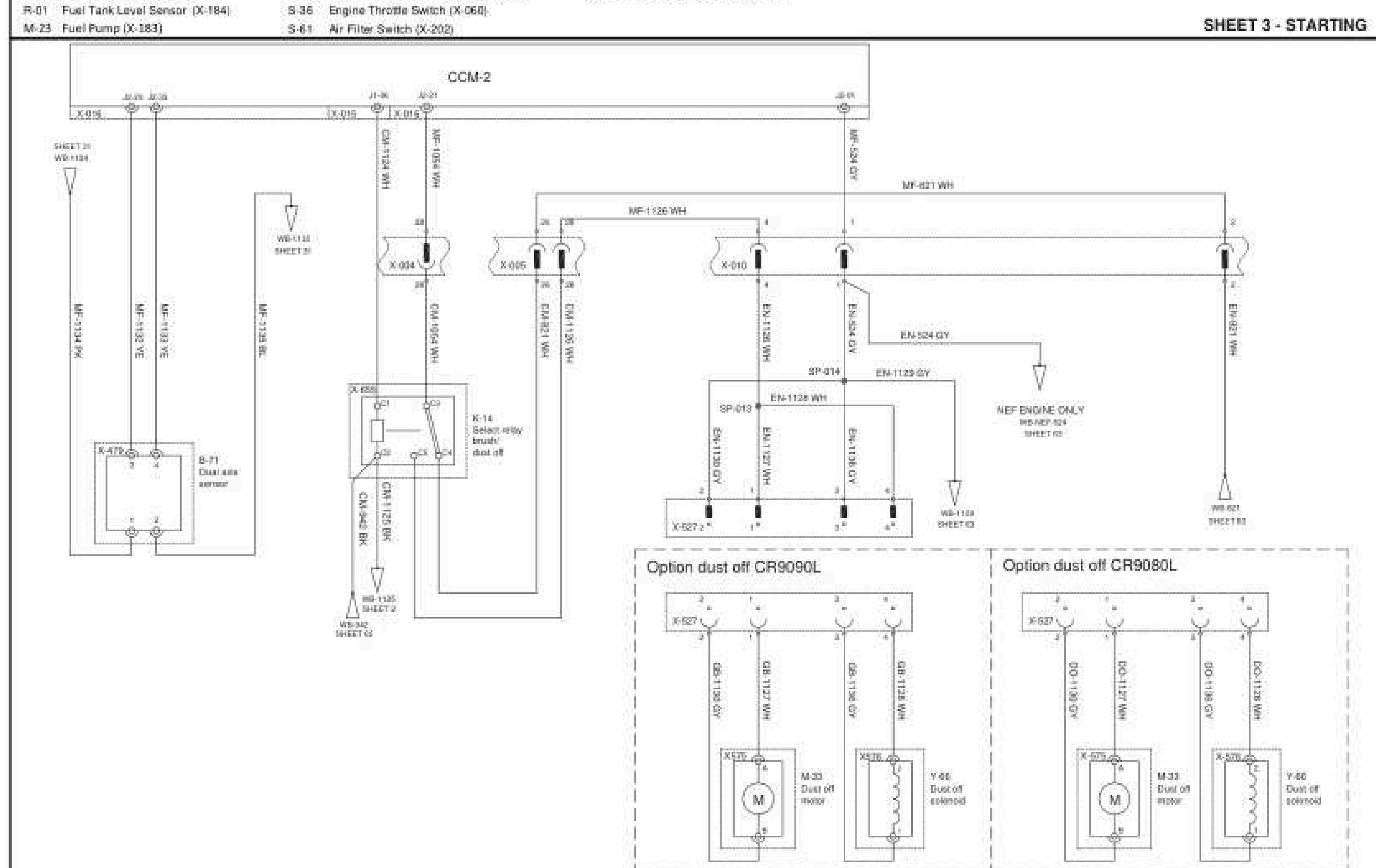

| | | | | | |
|---|---|---|---|---|---|
| G-02 | Alternator (X-197, X-706, X-707) | J-01 | Cab Power Tap (X-595, X-675) | M-45 | 12V Starter Motor (X-205, X-705) |
| G-05 | 12V Battery (X-703, X-704) | J-16 | – Battery Jump Start Stud (12V) (X-701) | S-20 | Battery Disconnect Switch (X-708, X-709) |
| GND-001 | Engine Ground | J-17 | + Battery Jump Start Stud (12V) (X-702) | V-001 | Diode (X-196) |

**SHEET 4 - SELECT EUROPEAN MODELS (12V) STARTING**



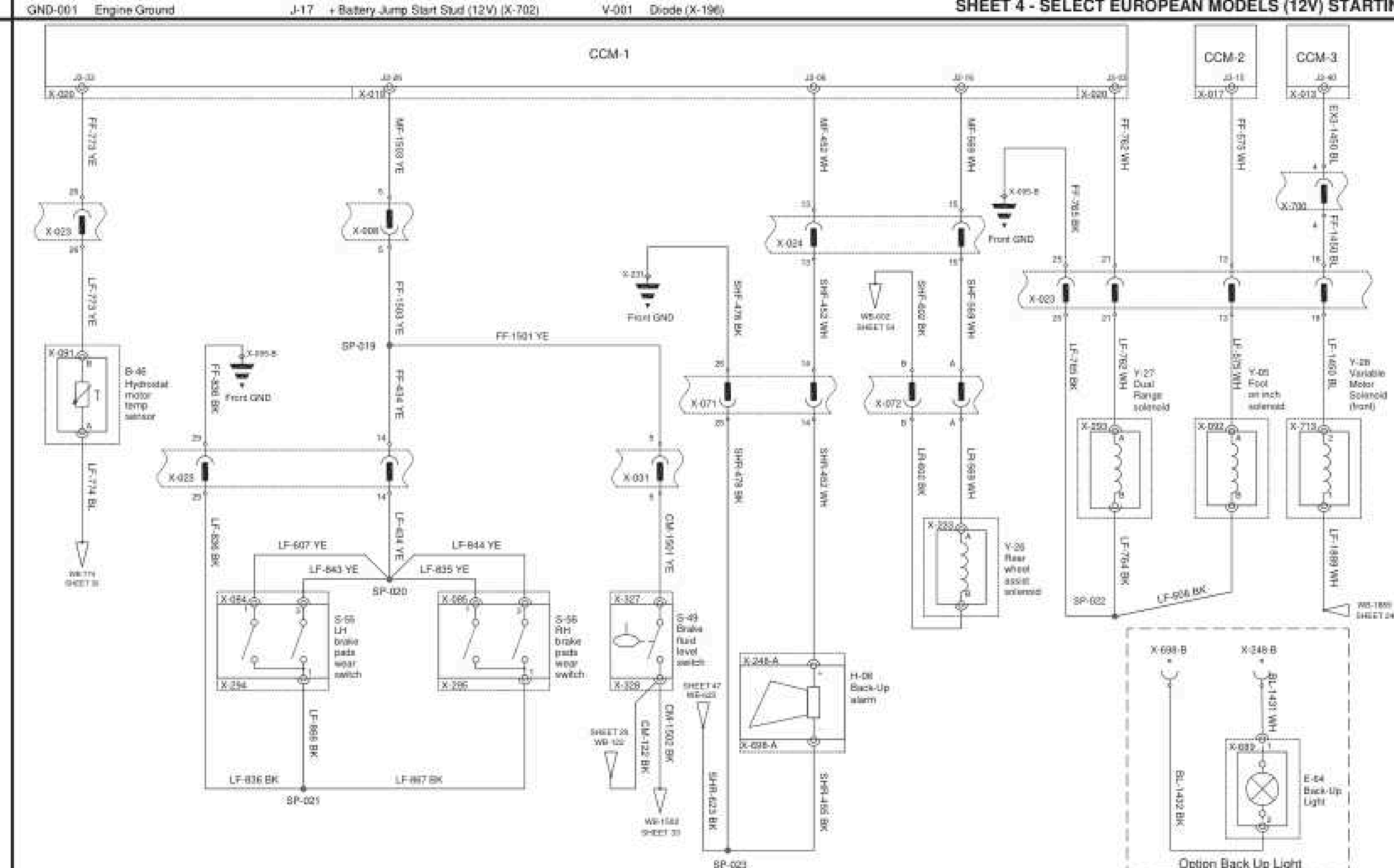

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A-01 | Engine Control Unit (X-193) | B-22 | Rear Ladder Sensor (X-251) | B-44 | Coolant Temp Sensor (X-373) | Y-35 | Fuel Actuator 2 (cyl 4) (X-377) | Y-38 | Fuel Actuator 5 (cyl 3) (X-380) |
| B-05 | Engine Flywheel RPM Sensor (X-519) | B-36 | Fuel Temperature Sensor (X-372) | B-75 | Oil Temp/Press Sensor (X-517) | Y-36 | Fuel Actuator 3 (cyl 2) (X-378) | Y-39 | Fuel Actuator 6 (cyl 5) (X-381) |
| B-07 | Engine Camshaft RPM Sensor (X-518) | B-41 | Air Temp/Boost Press Sensor (X-210) | Y-34 | Fuel Actuator 1 (cyl 1) (X-376) | Y-37 | Fuel Actuator 4 (cyl 6) (X-379) | | |

**SHEET 5 - ENGINE**



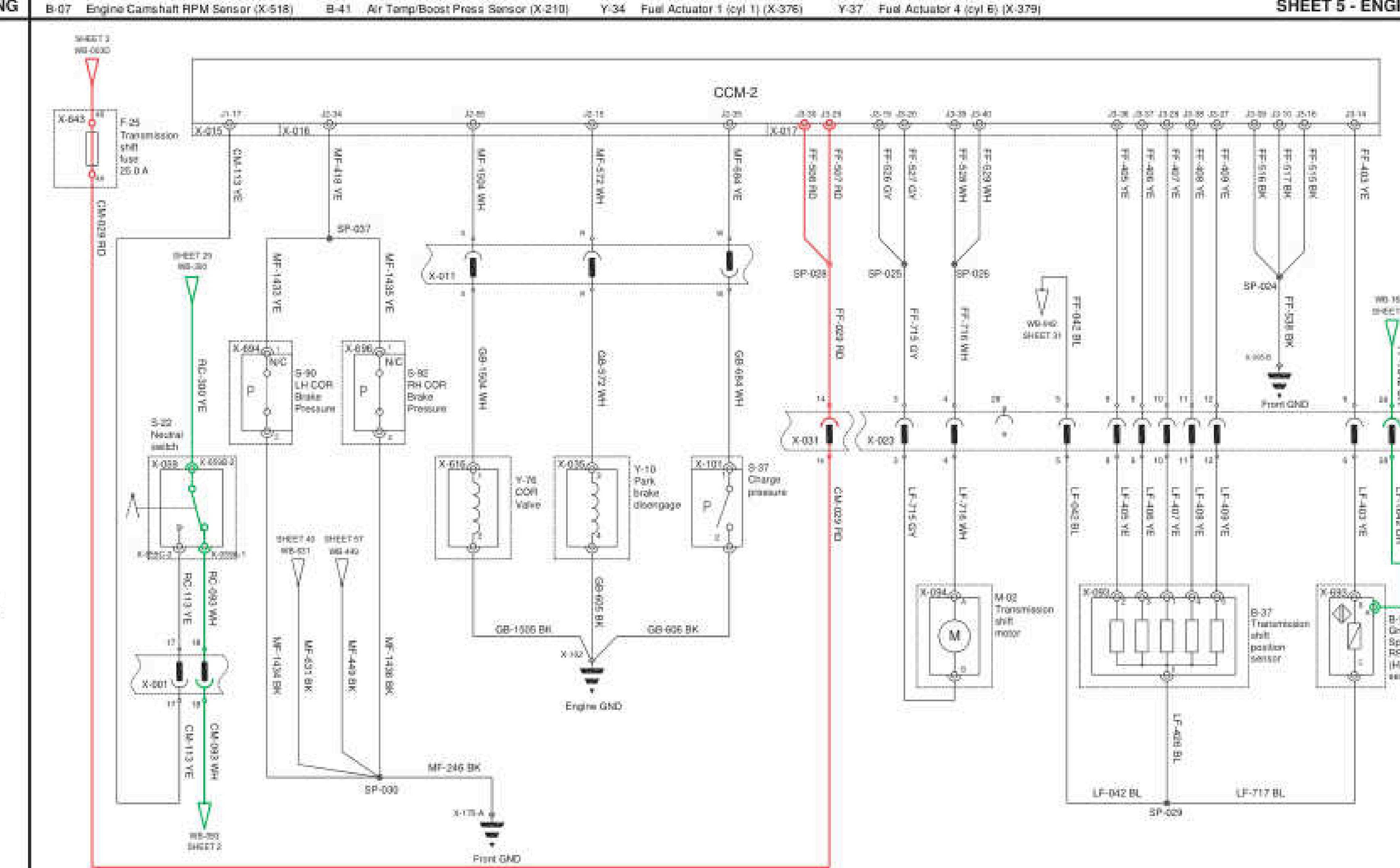

| | | | |
|---|---|---|---|
| B-71 | Dual Axis Sensor (X-479) | Y-66 | Dust Off Solenoid (X-576) |
| K-14 | Select Relay Brush/Dust Off (X-655) | | |
| M-33 | Dust Off Motor (X-575) | | |

**SHEET 6 - ENGINE**




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| B-46 | Hydrostat Motor Temp Sensor (X-091) | S-49 | Brake Fluid Level Switch (X-327, X-328) | Y-05 | Foot on Inch Solenoid (X-092) | Y-28 | Variable Motor Solenoid (front) (X-713) |
| E-64 | Back-Up Light (X-689) | S-55 | LH Brake Pads Wear Switch (X-084, X-294) | Y-26 | Rear Wheel Assist Solenoid (X-233) | | |
| H-08 | Back-up Alarm (X-248-A, X-698-A) | S-56 | RH Brake Pads Wear Switch (X-085, X-295) | Y-27 | Dual Range Solenoid (X-293) | | |

**SHEET 7 - DRIVES**




| | | | | | |
|---|---|---|---|---|---|
| B-37 | Transmission Shift Position Sensor (X-093) | S-22 | Neutral Switch (X-059, X-059A-1, X-059B-2, X-059C-3) | S-92 | RH COR Brake Pressure (X-696) |
| B-95 | Ground Speed RPM (HALL) Sensor (X-693) | S-37 | Charge Pressure (X-101) | Y-10 | Park Brake Disengage (X-035) |
| M-02 | Transmission Shift Motor (X-094) | S-90 | LH COR Brake Pressure (X-694) | Y-76 | COR Valve (X-616) |

**SHEET 8 - DRIVES**



Order the manual at mid-west-tech.com >