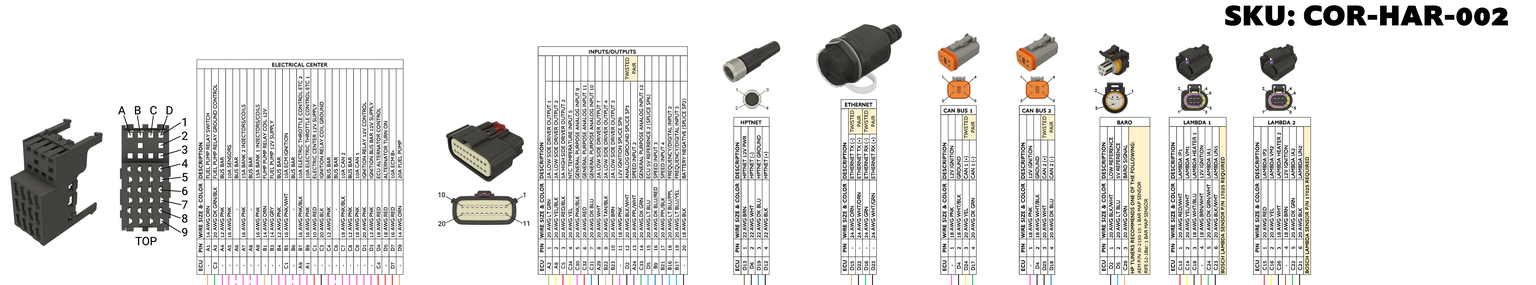
# GEN4 DRIVE-BY-WIRE LSX HARNESS FOR CORE ECU

**SKU: COR-HAR-002**




| HARNESS FUNCTION | PIN DESCRIPTION | WIRE SIZE & COLOR | PIN |
|---|---|---|---|
| THROTTLE BODY 1 10A FUSED POWER (ALSO IAC POWER) | THROTTLE BODY1 SWITCHED +12V SOURCE (10A FUSE #1) | 16 AWG PNK | A1 |
| DRIVE GEAR SELECTION (DEMAND#1) | 3A LOW SIDE DRIVER OUTPUT 1 | 20 AWG LT GRN | A2 |
| FUEL INJECTOR CYLINDER 1 CONTROL | INJECTION OUTPUT 1 | 18 AWG RED/WHT | A3 |
| FUEL INJECTOR CYLINDER 6 CONTROL | INJECTION OUTPUT 2 | 18 AWG LT GRN/BLK | A4 |
| FUEL INJECTOR CYLINDER 1 CONTROL | INJECTION OUTPUT 3 | 18 AWG LT GRN/WHT | A5 |
| FUEL INJECTOR CYLINDER 2 CONTROL | INJECTION OUTPUT 4 | 18 AWG RED/BLK | A6 |
| FUEL INJECTOR CYLINDER 4 CONTROL | INJECTION OUTPUT 5 | 18 AWG TAN/BLK | A7 |
| DRIVE GEAR SELECTION (DEMAND#2) | 3A LOW SIDE DRIVER OUTPUT 2 | 20 AWG YEL/BLK | A8 |
| THROTTLE BODY 2 10A FUSED POWER | THROTTLE BODY2 SWITCHED +12V SOURCE (10A FUSE #2) | 16 AWG PNK/BLK | A9 |
| THROTTLE BODY MOTOR (+) (10A DBW) | THROTTLE BODY LP | 18 AWG BRN | A10 |
| NOT USED | IDLE AIR CONTROL COIL 1N | | A11 |
| IGNITION COIL CYLINDER 3 CONTROL | IGNITION OUTPUT 2 | 18 AWG LT BLU/BLK | A12 |
| IGNITION COIL CYLINDER 1 CONTROL | IGNITION OUTPUT 3 | 18 AWG ORN/BLK | A13 |
| IGNITION COIL CYLINDER 5 CONTROL | IGNITION OUTPUT 4 | 18 AWG BRN/WHT | A14 |
| IGNITION COIL CYLINDER 3 CONTROL | IGNITION OUTPUT 5 | 18 AWG PNK/WHT | A15 |
| NOT USED | IDLE AIR CONTROL COIL 2N | | A16 |
| NOT USED | THROTTLE BODY 2N | | A17 |
| THROTTLE BODY MOTOR (-) (10A DBW) | THROTTLE BODY 1N | 18 AWG YEL | A18 |
| IGNITION COIL CYLINDER 1 CONTROL | IGNITION OUTPUT 1 | 18 AWG ORN/WHT | A19 |
| IGNITION COIL CYLINDER 7 CONTROL | IGNITION OUTPUT 3 | 18 AWG LT BLU/WHT | A20 |
| IGNITION COIL CYLINDER 6 CONTROL | IGNITION OUTPUT 6 | 18 AWG BRN/BLK | A21 |
| IGNITION COIL CYLINDER 4 CONTROL | IGNITION OUTPUT 7 | 18 AWG PNK/BLK | A22 |
| VEHICLE SPEED SENSOR | SPEED INPUT 1 | 20 AWG PPL/WHT | A23 |
| 4L60E INPUT SHAFT SPEED (ISS) SENSOR | SPEED INPUT 2 | 20 AWG PPL/WHT | A24 |
| NOT USED | THROTTLE BODY 2P | | A25 |
| ECU GROUND | ECU GROUND / BATTERY NEGATIVE | 16 AWG BLK | A26 |
| NOT USED | IDLE AIR CONTROL COIL 1P | | A27 |
| NOT USED | 2A LOW SIDE DRIVER OUTPUT 6 | | A28 |
| 3-2 SHIFT SOLENOID (4L60E) | 3A LOW SIDE DRIVER OUTPUT 7 | 20 AWG WHT | A29 |
| TCC PWM SOLENOID VALVE CONTROL (4L60E) | | | |
| FUEL INJECTOR CYLINDER 3 CONTROL | INJECTION OUTPUT 6 | 18 AWG GRY/WHT | A30 |
| FUEL INJECTOR CYLINDER 4 CONTROL | INJECTION OUTPUT 7 | 18 AWG GRY/BLK | A31 |
| FUEL INJECTOR CYLINDER 5 CONTROL | INJECTION OUTPUT 8 | 18 AWG TAN/WHT | A32 |
| NOT USED | IDLE AIR CONTROL COIL 2P | | A33 |
| ECU GROUND | ECU GROUND / BATTERY NEGATIVE | 16 AWG BLK | A34 |

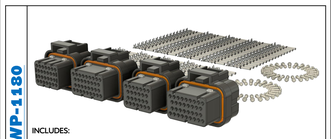
| HARNESS FUNCTION | PIN DESCRIPTION | WIRE SIZE & COLOR | PIN |
|---|---|---|---|
| NOT USED | INJECTION OUTPUT 10 | - | B1 |
| NOT USED | INJECTION OUTPUT 11 | - | B2 |
| NOT USED | INJECTION OUTPUT 12 | - | B3 |
| NOT USED | INJECTION OUTPUT 13 | - | B4 |
| NOT USED | INJECTION OUTPUT 14 | - | B5 |
| NOT USED | INJECTION OUTPUT 15 | - | B6 |
| NOT USED | INJECTION OUTPUT 16 | - | B7 |
| CRANKSHAFT POSITION (CKP) SENSOR SIGNAL (16X DBW) | CRANKSHAFT POSITION | 20 AWG DK BLU/WHT | B8 |
| SPEED INPUT 3 | SPEED INPUT 3 | 20 AWG DK BLU/RED | B9 |
| CAMSHAFT POSITION (CMP) SENSOR SIGNAL (16X DBW) | CAMSHAFT POSITION 1 | 20 AWG BRN/WHT | B10 |
| NOT USED | CAMSHAFT POSITION 2 | - | B11 |
| NOT USED | CAMSHAFT POSITION 3 | - | B12 |
| NOT USED | CAMSHAFT POSITION 4 | - | B13 |
| NOT USED | INJECTION OUTPUT 9 | - | B14 |
| MASS AIR FLOW (MAF) SENSOR SIGNAL | FREQUENCY/DIGITAL INPUT 1 | 20 AWG YEL | B15 |
| FREQUENCY/DIGITAL INPUT 2 | FREQUENCY/DIGITAL INPUT 2 | 20 AWG LT BLU/PPL | B16 |
| FREQUENCY/DIGITAL INPUT 3 | FREQUENCY/DIGITAL INPUT 3 | 20 AWG LT BLU/YEL | B17 |
| NOT USED | FREQUENCY/DIGITAL INPUT 4 | | B18 |
| NOT USED | 2A LOW SIDE DRIVER OUTPUT 12 | | B19 |
| ECU GROUND | ECU GROUND / BATTERY NEGATIVE | 16 AWG BLK | B20 |
| SPEED INPUT 4 | SPEED INPUT 4 | 20 AWG PPL/BLK | B21 |
| TORQUE CONVERTER | 2A LOW SIDE DRIVER OUTPUT 4 | 20 AWG TAN/BLK | B22 |
| TORQUE CONVERTER PWM VALVE CONTROL | 2A LOW SIDE DRIVER OUTPUT 3 | 20 AWG BRN | B23 |
| CEL OUTPUT OR MALFUNCTION INDICATOR LAMP (MIL) | 2A LOW SIDE DRIVER OUTPUT 5 | 20 AWG BRN/WHT | B24 |
| ELECTRIC FAN 2 RELAY CONTROL (COIL GROUND) | 2A LOW SIDE DRIVER OUTPUT 11 | 20 AWG DK BLU | B25 |
| ECU GROUND | ECU GROUND / BATTERY NEGATIVE | 16 AWG BLK | B26 |

| HARNESS FUNCTION | PIN DESCRIPTION | WIRE SIZE & COLOR | PIN |
|---|---|---|---|
| ECU SWITCHED IGNITION (WAKE UP) | SWITCHED IGNITION VOLTAGE +12V SOURCE (10A FUSE #3) | 16 AWG PNK/WHT | C1 |
| ELECTRIC FAN 1 RELAY CONTROL (COIL GROUND) | 2A LOW SIDE DRIVER OUTPUT 10 | 20 AWG DK GRN | C2 |
| FUEL PUMP RELAY CONTROL (COIL GROUND) | 2A LOW SIDE DRIVER OUTPUT 9 | 20 AWG DK GRN/BLK | C3 |
| ALTERNATOR CONTROL (REQUIRES INLINE RESISTOR) | 5A HIGH SIDE DRIVER OUTPUT 1 | 14 AWG RED | C4 |
| LINE PRESSURE ACTUATOR | 5A HIGH SIDE DRIVER OUTPUT 2 | 20 AWG RED/BLK | C5 |
| NOT USED | 5A HIGH SIDE DRIVER OUTPUT 3 | | C6 |
| NOT USED | 5A HIGH SIDE DRIVER OUTPUT 4 | | C7 |
| ENGINE SPEED OUTPUT - TACHOMETER | 2A LOW SIDE DRIVER OUTPUT 12 | 20 AWG WHT | C8 |
| VEHICLE SPEED OUTPUT - SPEEDOMETER | 2A LOW SIDE DRIVER OUTPUT 13 | 20 AWG DK GRN/WHT | C9 |
| ECU GROUND | ECU GROUND / BATTERY NEGATIVE | 16 AWG BLK | C10 |
| ACCELERATION PEDAL 2 SENSOR SIGNAL (16X DBW) | GENERAL PURPOSE ANALOG INPUT 2 | 20 AWG PNK | C11 |
| THROTTLE POSITION 2 SENSOR SIGNAL (16X DBW) | GENERAL PURPOSE ANALOG INPUT 1 | 20 AWG PPL | C12 |
| LAMBDA IP1 | LAMBDA IP1 (PUMP CURRENT APE / IP) | 20 AWG RED/WHT | C13 |
| LAMBDA VM1 | LAMBDA VM1 (VIRTUAL GROUND IPN / VM) | 20 AWG YEL/WHT | C14 |
| LAMBDA IP1 | LAMBDA IP1 (PUMP CURRENT APE / IP) | 20 AWG RED | C15 |
| LAMBDA VM1 | LAMBDA VM1 (VIRTUAL GROUND IPN / VM) | 20 AWG YEL | C16 |
| ECU GROUND | ECU GROUND / BATTERY NEGATIVE | 16 AWG BLK | C17 |
| LAMBDA HEATER 1 | LAMBDA HEATER LOW SIDE DRIVER OUTPUT 1 (HEATER VOLTAGE H / LOW) | 18 AWG WHT/BLU | C18 |
| OIL PRESSURE SENSOR SIGNAL | GENERAL PURPOSE ANALOG INPUT 5 | 20 AWG DK GRN | C19 |
| BRAKE SWITCH INPUT - USE GROUND TO TRIGGER | GENERAL PURPOSE ANALOG INPUT 6 | 20 AWG BLK/YEL | C20 |
| LAMBDA UN1 | LAMBDA UN1 (NERNST VOLTAGE UN / RE) | 20 AWG BLK | C21 |
| LAMBDA IA2 | LAMBDA IA (TRIM RESISTOR RT / IA) | 20 AWG DK GRN | C22 |
| LAMBDA UN1 | LAMBDA UN1 (NERNST VOLTAGE UN / RE) | 20 AWG BLK/WHT | C23 |
| LAMBDA IA1 | LAMBDA IA (TRIM RESISTOR RT / IA) | 20 AWG DK GRN/WHT | C24 |
| THROTTLE POSITION 1 SENSOR SIGNAL (16X DBW) | GENERAL PURPOSE ANALOG INPUT 3 | 20 AWG DK BLU | C25 |
| LAMBDA HEATER 2 | LAMBDA HEATER LOW SIDE DRIVER OUTPUT 2 (HEATER VOLTAGE H / LOW) | 18 AWG WHT | C26 |
| NOT USED | 5A LOW SIDE DRIVER OUTPUT 8 | | C27 |
| MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR SIGNAL | GENERAL PURPOSE ANALOG INPUT 7 | 20 AWG LT GRN | C28 |
| BAROMETRIC PRESSURE SENSOR SIGNAL | GENERAL PURPOSE ANALOG INPUT 8 | 20 AWG ORN | C29 |
| GEAR SELECTOR 1 | GENERAL PURPOSE ANALOG INPUT 9 | 20 AWG PNK/BLK | C30 |
| GEAR SELECTOR 2 | GENERAL PURPOSE ANALOG INPUT 10 | 20 AWG DK BLU | C31 |
| GEAR SELECTOR 3 | GENERAL PURPOSE ANALOG INPUT 11 | 20 AWG RED | C32 |
| 4L60E - POSSIBLE FUTURE USE FOR LINE PRESSURE SENSOR | GENERAL PURPOSE ANALOG INPUT 12 | 20 AWG DK GRN | C33 |
| 4L60E - POSSIBLE FUTURE USE FOR LINE PRESSURE SENSOR | | | |
| TRANSMISSION OIL TEMPERATURE SENSOR SIGNAL | NTC TEMPERATURE INPUT 5 | 20 AWG YEL | C34 |

| HARNESS FUNCTION | PIN DESCRIPTION | WIRE SIZE & COLOR | PIN |
|---|---|---|---|
| KNOCK SENSOR SIGNAL 1 (16X DBW) | ENGINE KNOCK INPUT 1 | 20 AWG DK BLU | D1 |
| ANALOG GROUND | SENSOR GROUND / ANALOG GROUND | 18 AWG BLK/WHT | D2 |
| SENSOR SUPPLY 1 (+5V) | SENSOR1 +5V POWER | 18 AWG LT GRN | D3 |
| DIGITAL GROUND | SENSOR2 / DIGITAL GROUND | 18 AWG WHT/BLK | D4 |
| SENSOR SUPPLY 2 (+5V) | SENSOR2 +5V POWER | 18 AWG LT BLU | D5 |
| HPTNET 1 | HPTNET CAN_N | 22 AWG WHT | D6 |
| BATTERY VOLTAGE 12V SOURCE (10A FUSE) | BATTERY VOLTAGE +12V SOURCE (10A FUSE #4) | 16 AWG RED | D7 |
| KNOCK SENSOR SIGNAL 2 (16X DBW) | ENGINE KNOCK INPUT 2 | 20 AWG LT BLU | D8 |
| INTAKE AIR TEMPERATURE (IAT) SENSOR SIGNAL | NTC TEMPERATURE INPUT 1 | 20 AWG TAN | D9 |
| NOT USED | NTC TEMPERATURE INPUT 2 | | D10 |
| ENGINE COOLANT TEMPERATURE (ECT) SENSOR SIGNAL | NTC TEMPERATURE INPUT 3 | 20 AWG YEL | D11 |
| HPTNET (+) | HPTNET CAN_P | 22 AWG BLK | D12 |
| HPTNET 12V PWR | HPTNET +12V POWER | 22 AWG BRN | D13 |
| NOT USED | NTC TEMPERATURE INPUT 4 | | D14 |
| ETHERNET TX (-) | ETHERNET TX_N | 24 AWG ORN | D15 |
| ETHERNET RX (-) | ETHERNET RX_N | 24 AWG GRN | D16 |
| CAN 1 (-) | CAN 1N (LOW) | 20 AWG DK GRN | D17 |
| CAN 2 (-) | CAN 2N (LOW) | 20 AWG DK BLU | D18 |
| HPTNET GND | HPTNET GROUND | 22 AWG DK BLU | D19 |
| ACCELERATOR PEDAL 1 SENSOR SIGNAL (16X DBW) | GENERAL PURPOSE ANALOG INPUT 1 | 20 AWG DK GRN | D20 |
| NOT USED | FUTURE USE | | D21 |
| ETHERNET TX (+) | ETHERNET TX_P | 24 AWG WHT/ORN | D22 |
| ETHERNET RX (+) | ETHERNET RX_P | 24 AWG WHT/GRN | D23 |
| CAN 1 (+) | CAN 1P (HIGH) | 20 AWG YEL | D24 |
| CAN 2 (+) | CAN 2P (HIGH) | 20 AWG WHT | D25 |
| ECU GROUND | ECU GROUND / BATTERY NEGATIVE | 16 AWG BLK | D26 |

## ECU CONNECTOR KIT

**AWP-1180**

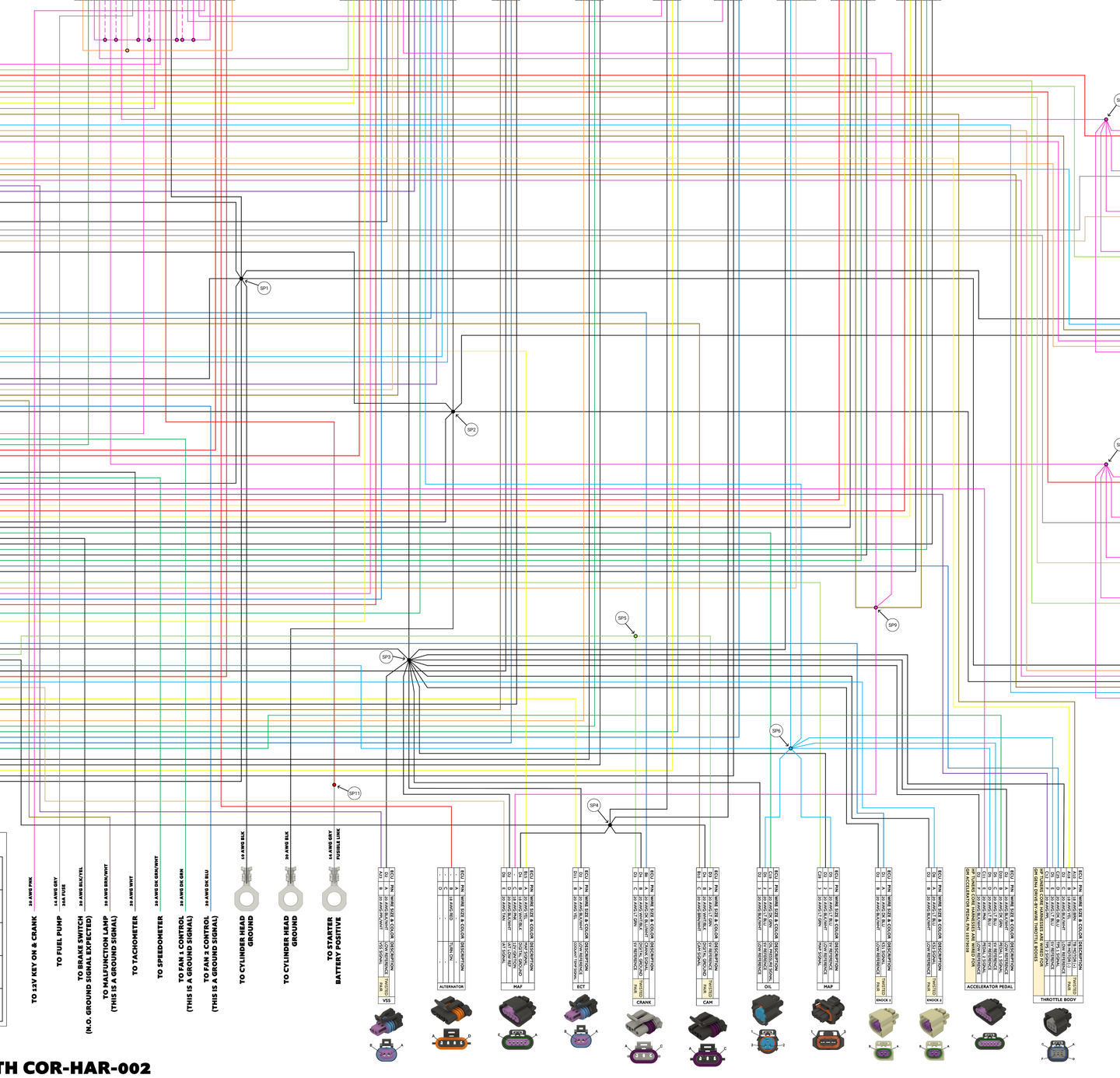


INCLUDES:

- (1) AMP SUPERSEAL 1.0 34 CAVITY ECU CONNECTOR A
- (1) AMP SUPERSEAL 1.0 26 CAVITY ECU CONNECTOR B
- (1) AMP SUPERSEAL 1.0 34 CAVITY ECU CONNECTOR C
- (1) AMP SUPERSEAL 1.0 36 CAVITY ECU CONNECTOR D
- (50) AMP SUPERSEAL 1.0 CAVITY PLUGS
- (50) AMP SUPERSEAL 1.0 FEMALE 18-16 AWG TERMINALS
- (80) AMP SUPERSEAL 1.0 FEMALE 20 AWG TERMINALS

## CONNECTOR CAVITY OPTIONS

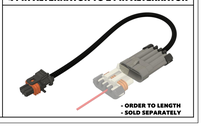
| | | |
|---|---|---|
| AWP-4046 | | AMP SUPERSEAL 1.0 CAVITY PLUG<br>AMP P/N 4-1437284-3 |
| AWP-4038 | | AMP SUPERSEAL 1.0 FEMALE TERMINAL FOR 20 AWG<br>AMP P/N 3-1447221-4 |
| AWP-4037 | | AMP SUPERSEAL 1.0 FEMALE TERMINAL FOR 18-16 AWG<br>AMP P/N 3-1447221-3 |
| AWP-T002 | | GENERAL REPAIR QUALITY HAND CRIMP TOOL<br>MSD P/N 3512MSD |
| AWP-T001 | | PRODUCTION QUALITY HAND CRIMP TOOL<br>RENNSTEIG P/N 624 1091 3 1 RT |




# ADAPTER AND EXTENSION HARNESSES COMPATIBLE WITH COR-HAR-002

## ALTERNATOR

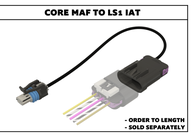
**AWP-6042** — 4 PIN ALTERNATOR TO 2 PIN ALTERNATOR



- ORDER TO LENGTH
- SOLD SEPARATELY

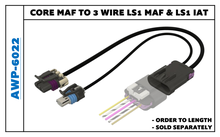
## MAF & IAT SENSOR

**AWP-6025** — CORE MAF TO LS1 IAT



- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6022** — CORE MAF TO 3 WIRE LS1 MAF & LS1 IAT

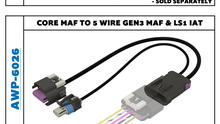


- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6023** — CORE MAF TO 5 WIRE GEN3 MAF

- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6026** — CORE MAF TO 5 WIRE GEN3 MAF & LS1 IAT



- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6024** — CORE MAF TO 5 WIRE GEN4 TRUCK MAF

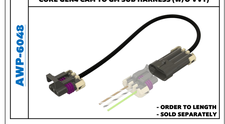
- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6027** — CORE MAF TO 5 WIRE GEN4 TRUCK MAF & LS1 IAT

- ORDER TO LENGTH
- SOLD SEPARATELY

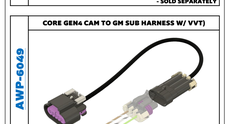
## CAM SENSOR

**AWP-6048** — CORE GEN4 CAM TO GM SUB HARNESS (W/O VVT)



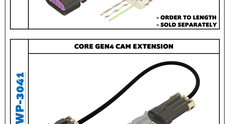
- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6049** — CORE GEN4 CAM TO GM SUB HARNESS W/ VVT)



- ORDER TO LENGTH
- SOLD SEPARATELY

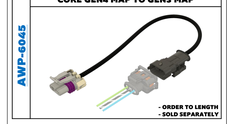
**AWP-3041** — CORE GEN4 CAM EXTENSION



- ORDER TO LENGTH
- SOLD SEPARATELY

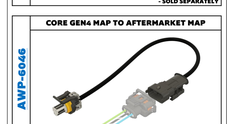
## MAP SENSOR

**AWP-6045** — CORE GEN4 MAP TO GEN3 MAP



- ORDER TO LENGTH
- SOLD SEPARATELY

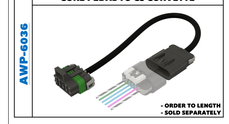
**AWP-6046** — CORE GEN4 MAP TO AFTERMARKET MAP



- ORDER TO LENGTH
- SOLD SEPARATELY

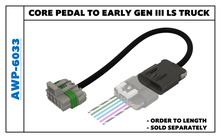
## ACCELERATOR PEDAL SENSOR

**AWP-6036** — CORE PEDAL TO C5 CORVETTE



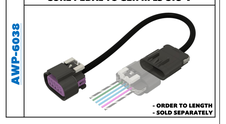
- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6033** — CORE PEDAL TO EARLY GEN III LS TRUCK



- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6038** — CORE PEDAL TO GEN III LS CTS-V

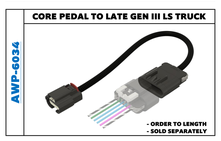


- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6037** — CORE PEDAL TO GEN IV LS GTO

- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6034** — CORE PEDAL TO LATE GEN III LS TRUCK



- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6039** — CORE PEDAL TO 2007-2020 GEN IV LS VAN

- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6040** — CORE PEDAL TO GEN IV LS PONTIAC G8

- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6041** — CORE PEDAL TO 2009-2012 GEN IV LS COLORADO/CANYON

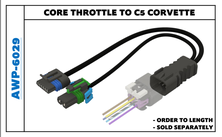
- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6035** — CORE PEDAL TO 2014-2017 GEN IV LS CHEVY SS

- ORDER TO LENGTH
- SOLD SEPARATELY

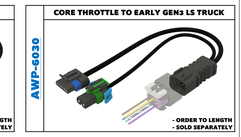
## THROTTLE BODY

**AWP-6029** — CORE THROTTLE TO C5 CORVETTE



- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6030** — CORE THROTTLE TO EARLY GEN3 LS TRUCK

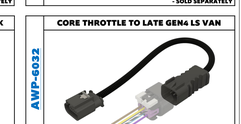


- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6031** — CORE THROTTLE TO LATE GEN III LS TRUCK

- ORDER TO LENGTH
- SOLD SEPARATELY

**AWP-6032** — CORE THROTTLE TO LATE GEN4 LS VAN



- ORDER TO LENGTH
- SOLD SEPARATELY

## INJECTORS

**AWP-6028** — EV6 TO EV1 INJECTOR ADAPTER SET OF 8

SOLD SEPARATELY