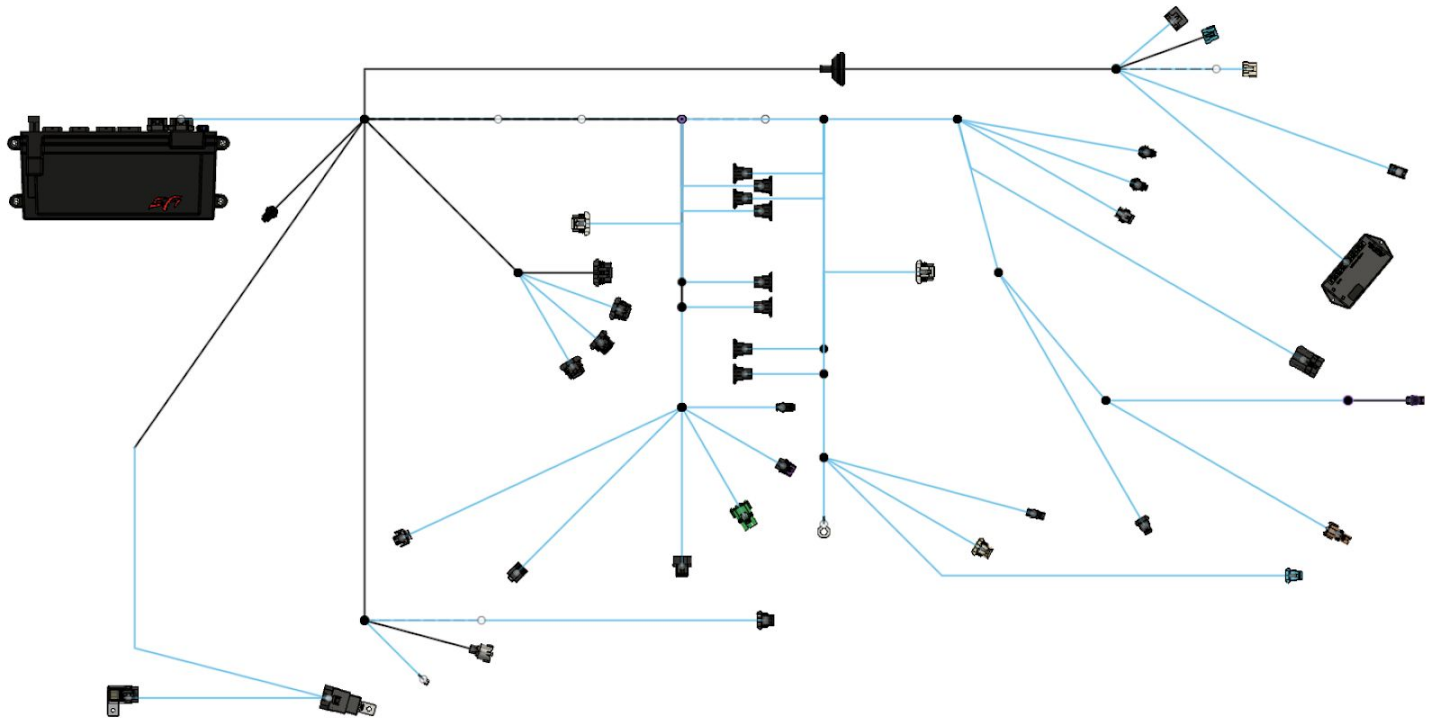




Engine Wire Harness Installation Guide

Direct-Fit Engine Harness for LT1 Camaro/Firebird with Holley EFI ECU

P/N 100-05000



PLEASE READ THIS GUIDE IN ITS ENTIRETY BEFORE INSTALLATION

IMPORTANT! You have chosen to remove the original engine control module, that GM designed to integrate with auxiliary systems of your vehicle, to install a stand-alone Holley ECU that has limited integration capabilities. You are expected to take ownership and responsibility of Holley ECU integration efforts by working with Holley documentation, GM service manual documentation, and technical support from the vendors of the equipment installed in your vehicle.

CONGRATULATIONS! (AND THANK YOU)

You've chosen a quality wire harness assembly manufactured in the USA by EFI Connection, LLC. The development of this engine harness is the result of many years of experience with the 1993-1997 Camaro and Firebird. Our modern harness manufacturing equipment and production tooling has allowed us to meet or exceed the quality of the original GM wire harness you are removing from your vehicle.

Ultrasonic Solderless Splices

This harness features ultrasonically welded splices. Each splice is defined within our Telsonic TS3 software and the welded nugget is automatically measured and recorded to ensure quality control. Finished splices are then covered with an adhesive-lined heat shrink tube to protect the splice within the harness loom.



Production Crimp Tools

Each terminal within this harness assembly has been crimped by a semi-automatic applicator or Rennsteig hand tool using terminal-specific dies that result in crimp quality that meets manufacturer-defined crimp height and width specifications. As an authorized Rennsteig Tools reseller, we have years of experience and expertise when it comes to the highest quality construction.



HOW THIS HARNESS DIFFERS FROM HOLLEY MAIN ENGINE HARNESS P/N 558-102

While Holley brand engine harnesses are of good quality and may have been bundled with your Holley ECU purchase, they are universal and require a significant amount of vehicle integration. This engine harness exceeds Holley's design in the following ways:

- Vehicle plug and play integration through connectors C100, C105, C210, C220, C230.
- Layout and connectors designed for the F-Body engine bay, interior, and LT1 engine sensor locations.
- Wired for plug and play air conditioning integration.
- Wired for backup lamp integration (with manual transmission).
- Wired for starter crank function.
- Wired for generator (alternator) control.
- Wired for oil pressure gauge and oil level indicator.
- Wired for coolant temperature gauge.

In other words, this harness is plug and play where possible and designed to properly fit the engine, engine bay, and interior of the 1993-1997 Camaro/Firebird that came from the factory with the 5.7L LT1 engine.

This harness meets Holley's design in the following ways:

- Follows Holley schematics for wire colors and function.
- Includes specialty shielded cable for wide band oxygen sensor, crank sensor, and cam sensor.
- Includes Holley Power Tap, Holley Inputs/Outputs, and Holley CAN bus connectors.
- Features the same Aptiv/Delphi GT 150 series connectors (rather than Metri-Pack pull-to-seat connectors).
- Features the same braided sleeving for harness protection.

Dakota Digital SGI-100BT Module Integration (Dakota Digital SGI-100BT Module Sold Separately)

Holley's ECU may not be able to control your vehicle's speedometer and tachometer. For that reason, we've conveniently provided the necessary wires to install a Dakota Digital SGI-100BT speedometer/tachometer signal interface module. This module can be installed under the dash beyond the firewall grommet. This harness provides loose wires that follow the table below.

IMPORTANT! FOR ASSISTANCE WITH THIS MODULE, PLEASE CONTACT HOLLEY AND/OR DAKOTA DIGITAL



WIRE	OTHER END	FUNCTION
20 AWG RED	IGNITION RELAY CAVITY 1	SWITCHED 12V
20 AWG BLK	CYLINDER HEAD TERMINAL	GROUND
20 AWG PPL	VSS CAVITY A	VSS LOW
20 AWG YEL	VSS CAVITY B	VSS HI
20 AWG GRN/WHT	C220 CAVITY G	SPEEDOMETER
20 AWG BLU/WHT	ECU P1A PIN 28	TACH (SIGNAL)
18 AWG WHT	C230 CAVITY D	TACHOMETER

COMPATIBILITIES

Supported Vehicles

This harness has been designed to universally fit 1993-1997 Camaro/Firebird with LT1 engine. The harness lengths, routing, and vehicle-specific connectors make this harness an excellent solution for installing a Holley EFI ECU.

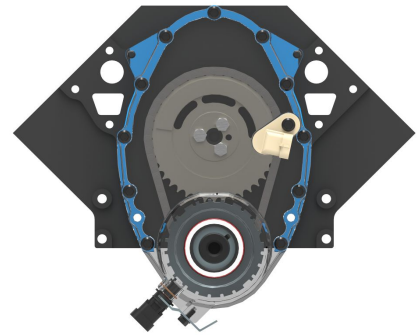
IMPORTANT! Holley Terminator X ECUs have a plastic housing and are not suited for all environments. If your engine bay generates temperatures that damage the ECU, we recommend you upgrade to a HP or Dominator ECU. By using this harness, you accept complete responsibility for any ECU damage due to heat.

Crankshaft and Camshaft Signal Requirements

24x CRANKSHAFT AND 1x CAMSHAFT SIGNALS ARE REQUIRED

EFI Connection recommends the use of any of our 24x/1x crank/cam signal conversions for LT1 engines. The crank and cam sensors are wired to the Holley ECU's 12V output on connector P1B pin 20.

This harness is also compatible with competitor crank/cam signal conversions, but may require crank/cam sensor extension/adapter harnesses. Contact us if you would like us to manufacture extension/adapter harnesses.



1993-1997 T56 6-Speed Manual Transmissions

This harness is designed to connect to the T56 backup lamp switch and vehicle speed sensor (VSS). The backup lamp switch is integrated through connector C230 of the I/P harness. The VSS twisted pair is labeled for use with a Dakota Digital SGI-100BT module and can be found within the interior segment of the harness. Reverse lockout and skip shift solenoid control are not supported, but can be added through available Holley inputs.

4L60 Transmission

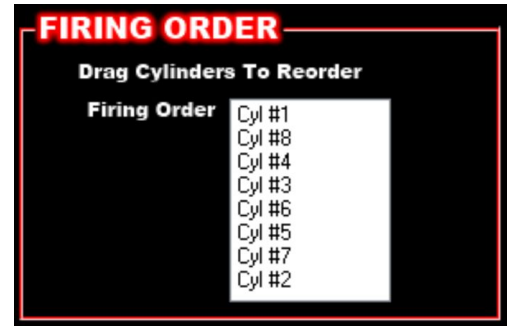
This harness does not support 1993 4L60 transmissions. Consider aftermarket torque converter lockup control or use one of the available Holley outputs.

4L60E Transmission

This harness does not include wiring for 4L60E support. Holley offers a 4L60E transmission harness as P/N 558-405. Contact Holley for additional information.

Engine Firing Order

No wiring changes are necessary to change the firing order. Simply update the Firing Order table within Holley's software. The Firing Order table is located within System Parameters > Ignition Parameters.



INITIAL HOLLEY SOFTWARE SETTINGS

Holley Software Ignition Settings

Choose the "GM LSx 24 tooth" Ignition Type within the System Parameters.

Holley Software Firing Order

Drag and drop the Firing Order within the System Parameters to reflect the firing order of your engine.

Holley Software Knock Sensors

Choose "Resonant (1 Wire)" as Type and 1 as the Number within the Knock Sensors section of System Parameters.

Holley Software Settings for A/C Clutch Control

REMINDER! You have chosen to install an aftermarket stand-alone ECU into your vehicle. EFI Connection expects you to learn and understand how your vehicle interacts with the Holley ECU. While this guide presents example software settings, the A/C and fan settings should be your own. EFI Connection is not responsible for any damages to your vehicle because of the software settings you choose to use.

This harness takes into consideration the following A/C related components within the 1993-1997 Camaro/Firebird:

DEVICE	DESCRIPTION	HOLLEY ECU INPUT/OUTPUT
A/C CONTROLS	12V ON SIGNAL TO ECU	INPUT #1 (ECU P1A PIN 12)
A/C COMPRESSOR CLUTCH	12V ON SIGNAL TO ECU	INPUT #2 (ECU P1A PIN 3)
A/C PRESSURE SENSOR	0-5V SIGNAL	INPUT #3 (ECU P1A PIN 13)
A/C RELAY	GROUND TO TURN ON A/C	OUTPUT #3 (ECU P1B PIN 10)
FANS LOW SPEED	"FAN 1" CONTROL	OUTPUT #1 (ECU P1B PIN 12)
FANS HIGH SPEED	"FAN 2" CONTROL	OUTPUT #2 (ECU P1B PIN 11)

Understanding A/C Operation

A/C COMPRESSOR CLUTCH

The end goal is that the A/C compressor clutch receive 12V when the A/C is commanded on. When the A/C compressor clutch has power, it also sends 12V to Holley ECU connector P1A pin 3 as an indication that A/C is on. This is helpful for electric fan operation when A/C is on. You will have to configure this as Holley ECU INPUT #2.

A/C PRESSURE SENSOR

It's not always safe for the A/C compressor clutch to be on. For this reason, GM has installed a 0-5V pressure sensor in the A/C line near the ECU. For our 1997 Camaro Z28 test vehicle, we calculated a minimum pressure of 39 psi (0.58V) is required to turn on the A/C compressor clutch and that the clutch should be turned off if pressure reaches 414 psi (4.59V). In addition to this, pressure should be under 249 psi when turning on the A/C compressor clutch. The A/C pressure sensor is necessary to ensure safe operation of the A/C system. You will have to configure this as Holley ECU INPUT #3.

A/C RELAY

The A/C relay is controlled by Holley ECU OUTPUT #3. You will have to configure this output within Holley's software to control the operation of the A/C compressor clutch.

A/C CONTROLS

The vehicle operator's request to turn on A/C happens through the A/C controls on the dash. When A/C is commanded on, a 12V signal is sent to the Holley ECU as INPUT #1. You will have to configure this input within Holley's software.

Initial Holley Dominator ECU Software Settings for our shop 1997 Camaro Z28

CAUTION! Use these settings at your own risk. Make your implementation your own.

INPUTS					
	NAME	TYPE	ENABLE		
#1	A/C Request Sign	+12V	<input checked="" type="checkbox"/> Enable	Configure	Where Used
#2	A/C Clutch Status	+12V	<input checked="" type="checkbox"/> Enable	Configure	Where Used
#3	A/C Pressure Sign	5 VOLT	<input checked="" type="checkbox"/> Enable	Configure	Where Used

OUTPUTS					
	NAME	TYPE	ENABLE		
#1	Fans Low	GROUND	<input checked="" type="checkbox"/> Enable	Configure	Where Used
#2	Fans High	GROUND	<input checked="" type="checkbox"/> Enable	Configure	Where Used
#3	A/C Relay	GROUND	<input checked="" type="checkbox"/> Enable	Configure	Where Used

Fans Low [Back] [Input Triggers] [Linked Outputs] [Timer]

SWITCHED INPUT TRIGGERS

Number 1

This output will activate when A/C Clutch Status is Enabled

OR

SENSOR INPUT TRIGGERS

Number 3 All Sensor input(s) will activate switched output when enabled

This output will activate when CTS is Above 190 °F

Enable Secondary Deactivation and deactivate at 180 °F Hysteresis Mode

This output will activate when RPM is Above 500 RPM

Enable Secondary Deactivation

This output will activate when TPS is Above 0 %

Enable Secondary Deactivation and deactivate at 95 % Range Mode

Fans High [Back] [Input Triggers] [Linked Outputs] [Timer]

SWITCHED INPUT TRIGGERS

Number 1

This output will activate when A/C Clutch Status is Enabled

OR

SENSOR INPUT TRIGGERS

Number 3 All Sensor input(s) will activate switched output when enabled

This output will activate when CTS is Above 200 °F

Enable Secondary Deactivation and deactivate at 190 °F Hysteresis Mode

This output will activate when RPM is Above 500 RPM

Enable Secondary Deactivation

This output will activate when TPS is Above 0 %

Enable Secondary Deactivation and deactivate at 95 % Range Mode

Notice we chose to apply additional constraints to the control of the A/C relay. Because the A/C compressor only robs horsepower, we deactivated the output at wide open throttle.

You may choose to apply additional constraints on the operation of the A/C relay output to suit your needs.

The screenshot displays the configuration interface for an A/C Relay. At the top, there are navigation buttons: "Back", "Input Triggers" (highlighted in red), "Linked Outputs", and "Timer".

SWITCHED INPUT TRIGGERS

Number 1

This output will activate when A/C Request Sign is Enabled

AND

SENSOR INPUT TRIGGERS

Number 3 All Sensor input(s) will activate switched output when enabled

This output will activate when A/C Pressure Sign is Above 0.58 volts

Enable Secondary Deactivation and deactivate at 2.50 volts Range Mode

This output will activate when RPM is Above 500 RPM

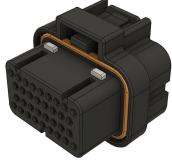
Enable Secondary Deactivation and deactivate at 4895 RPM Range Mode


This output will activate when TPS is Below 95 %

Enable Secondary Deactivation

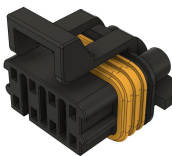
UNDERSTANDING THE CONNECTIONS WITHIN THIS HARNESS

EFI Connection does not offer a wiring diagram that represents this harness assembly. Refer to Holley LS1 Engine Main Harness (P/N 558-102) wiring diagrams for troubleshooting and integration purposes. Holley wiring diagrams are freely available through <http://www.holley.com>.


	<p>HOLLEY ECU P1A CONNECTOR This connection may be used with Holley HP ECU, Holley Dominator ECU, Holley Terminator X ECU, and Holley Terminator X Max ECU. Located in original PCM location.</p> <p>IMPORTANT! ECU switched ignition (P1A PIN 10) is routed to a loose 1W connector near C210/C220/C230. The installer will have to choose which connection to make, depending on vehicle year, to supply the ECU with switched ignition power. The harness is clearly labeled.</p>
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	<p>HOLLEY ECU P1B CONNECTOR This connection may be used with Holley HP ECU, Holley Dominator ECU, Holley Terminator X ECU, and Holley Terminator X Max ECU. Located in original PCM location.</p>
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HOLLEY INPUTS/OUTPUTS HARNESS CONNECTION
 A standard connection found within all Holley main engine harnesses, this connection gives access to available ECU inputs and outputs. Notice this engine harness assembly is using three inputs and three outputs. Located on top of passenger side strut tower.

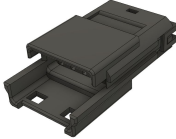
	CAVITY	WIRE	OTHER END	FUNCTION
	D	20 AWG WHT/GRN	ECU P1A PIN 4	AVAILABLE INPUT #4
	H	20 AWG GRY/GRN	ECU P1B PIN 3	AVAILABLE OUTPUT #4

HOLLEY POWER TAP HARNESS CONNECTION
 A standard connection found within all Holley main engine harnesses, this connection provides convenience to add 12V or 5V devices. The 12V source is protected by the ignition relay 20A fuse. See Holley documentation for ECU 5V limit. Located on top of passenger side strut tower.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	18 AWG BLK	CYLINDER HEAD RING TERMINAL	GROUND
	B	18 AWG BLK/WHT	ECU P1A PIN 18	SENSOR LOW REFERENCE
	C	18 AWG ORN	ECU P1A PIN 26	SENSOR 5V REFERENCE
	D	18 AWG RED	IGNITION RELAY CAVITY 1	12V IGNITION SUPPLY

HOLLEY CAN BUS HARNESS CONNECTION

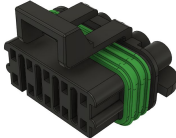
A standard connection found within all Holley main engine harnesses, this connection provides laptop and Holley add-on devices like a digital dash or touch screen display.

	CAVITY	WIRE	OTHER END	FUNCTION
	1	20 AWG BRN	C100 CAVITY F	SWITCHED 12V SUPPLY
	2	20 AWG ORN/BLK	ECU P1A PIN 32	CAN HI
	3	20 AWG ORN	ECU P1A PIN 24	CAN LO
	4	20 AWG BLK/YEL	ECU P1B PIN 14	GROUND

C100 ENGINE BAY HARNESS CONNECTION

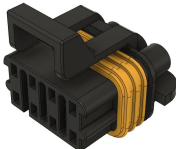
Connection in engine bay on top of passenger side strut tower for engine bay harness integration.

IMPORTANT! Because Holley inputs/outputs capabilities are different between HP/Dominator and Terminator X ECUs, Fan Relay Harness 100-05002 is required when using HP or Dominator ECU. Fan Relay Harness sold separately.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG PNK	IGNITION RELAY CAVITY 5	RELAY COIL SWITCHED 12V
	B	20 AWG GRY/BLK	ECU P1B PIN 10	A/C RELAY CONTROL
	C	20 AWG WHT/RED & 20 AWG GRN	ECU P1A PIN 3 & A/C CLUTCH CAVITY A	A/C ON INPUT & A/C CLUTCH 12V SUPPLY
	F	20 AWG BRN	CAN BUS CAVITY 1	CAN BUS 12V SUPPLY
	G	16 AWG PNK	IGN COIL HARNESS CAVITY H	IGN COILS 12V SUPPLY
	H	20 AWG BLU	ECU P1B PIN 11	FANS HIGH SPEED CONTROL
	J	20 AWG GRN	ECU P1B PIN 10	FANS LOW SPEED CONTROL

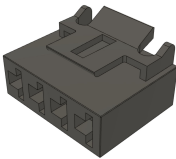
C105 ENGINE BAY HARNESS CONNECTION

Connection in engine bay on top of passenger side strut tower for engine bay harness integration. **This connection is only used with 1996-1997 Camaro/Firebird.**

	CAVITY	WIRE	OTHER END	FUNCTION
	B	18 AWG PNK	LOOSE 1W CONNECTOR NEAR C210/220/230	ECU SWITCHED IGNITION SOURCE

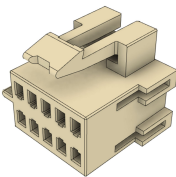
C210 INSTRUMENT PANEL HARNESS CONNECTION

Connection under dash for I/P harness integration.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	10 AWG PPL	STARTER S TERMINAL	STARTER CRANK SIGNAL
	B	18 AWG BLK	CYLINDER HEAD RING TERMINAL	GROUND

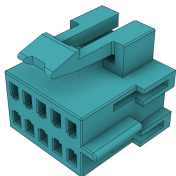
C220 INSTRUMENT PANEL HARNESS CONNECTION

Connection under dash for I/P harness integration.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	18 AWG RED	GENERATOR (ALTERNATOR)	TURN ON SIGNAL (CHARGE)
	B	20 AWG TAN	OIL PRESSURE CAVITY A	OIL PRESSURE SIGNAL
	C	20 AWG BRN	OIL LEVEL SWITCH CAVITY B	LOW OIL INDICATOR LAMP
	E	18 AWG PNK	C105 CAVITY B	BRAKE SWITCH 12V (1996-97)
	G	20 AWG GRN/WHT	DAKOTA DIGITAL SGI-100BT	SPEEDOMETER INPUT
	J	20 AWG GRN/WHT	ECU P1A PIN 2	FUEL PUMP RELAY CONTROL
	K	20 AWG GRN	COOLANT TEMP SENDER	COOLANT TEMP GAUGE

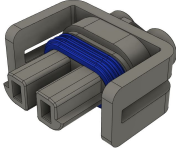
C230 INSTRUMENT PANEL HARNESS CONNECTION

Connection under dash for I/P harness integration.

	CAVITY	WIRE	OTHER END	FUNCTION
	D	18 AWG WHT	DAKOTA DIGITAL SGI-100BT	TACHOMETER (INSTRUMENTS)
	F	20 AWG WHT/BLU	ECU P1A PIN 12	A/C REQUEST
	G	18 AWG PNK	LOOSE 1W CONNECTOR NEAR C210/220/230	ECU SWITCHED 12V INPUT 1993-1995 ONLY
	H	16 AWG BRN	B/U SWITCH CAVITY A	BACKUP LAMP 12V SUPPLY
J	16 AWG LT GRN	B/U SWITCH CAVITY B	BACKUP LAMPS	

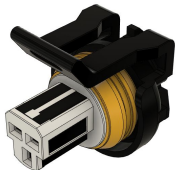
A/C CLUTCH

Located within the engine front accessories on the passenger side.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG GRN	C100 CAVITY C	A/C CLUTCH 12V SUPPLY
	B	20 AWG BLK	CYLINDER HEAD RING TERMINAL	GROUND

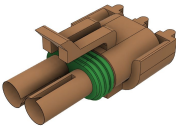
A/C PRESSURE SENSOR

Located near the ECU on the passenger side.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG BLK/WHT	ECU P1A PIN 18	LOW REFERENCE
	B	20 AWG ORN	ECU P1A PIN 26	5V REFERENCE
	C	20 AWG WHT/BLK	ECU P1A PIN 13	SIGNAL

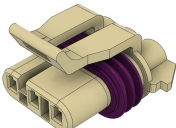
BACKUP LAMP SWITCH

Located on the passenger side of the GM T56 6-Speed manual transmission. Not used with other transmissions.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	16 AWG BRN	C230 CAVITY H	BACKUP LAMP 12V SUPPLY
	B	16 AWG LT GRN	C230 CAVITY J	BACKUP LAMPS

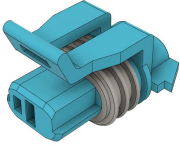
CAMSHAFT POSITION SENSOR

Located in the front of the engine within the timing cover.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG RED	ECU P1B PIN 20	12V REFERENCE
	B	20 AWG BLK	ECU P1A PIN 14	LOW REFERENCE
	C	20 AWG PPL	ECU P1A PIN 22	SIGNAL

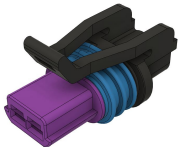
COOLANT TEMPERATURE SENDING UNIT

Located in the driver side cylinder head. Provides a signal to the coolant temperature gauge in the instrument cluster.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG GRN	C220 CAVITY K	COOLANT TEMP GAUGE

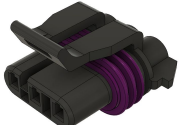
COOLANT TEMPERATURE SENSOR

Located within the front of the water pump. Provides a signal to the ECU.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG BRN	ECU P1A PIN 19	SIGNAL
	B	20 AWG BLK/WHT	ECU P1A PIN 18	LOW REFERENCE

CRANKSHAFT POSITION SENSOR

Located in the front of the engine within the bottom of the timing cover.


	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG RED	ECU P1B PIN 20	12V REFERENCE
	B	20 AWG BLK	ECU P1A PIN 14	LOW REFERENCE
	C	20 AWG PPL	ECU P1A PIN 30	SIGNAL

FIREWALL GROMMET

Located near ECU on passenger side firewall. Route the interior harness segment and grommet through the firewall. Pull the harness back toward the engine bay to seat the grommet in the firewall.

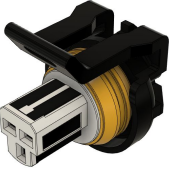
**FUEL INJECTOR**

Located within the fuel rail assembly on top of the intake manifold.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG RED	ECU P1A PIN 19	SWITCHED 12V SUPPLY
	B	VARIES	ECU P1B PIN VARIES	INJECTOR CONTROL

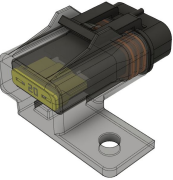
FUEL PRESSURE SENSOR

Located near the oil pressure sending unit on the driver side of the engine.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG BLK/WHT	ECU P1A PIN 18	LOW REFERENCE
	B	20 AWG ORN	ECU P1A PIN 26	5V REFERENCE
	C	20 AWG PPL	ECU P1A PIN 31	SIGNAL


FUSE HOLDER

Located near the ignition relay on the passenger side of the engine bay. Contains a 20A fuse.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	14 AWG RED	IGN RELAY CAVITY 4	IGN RELAY B+ SUPPLY
	B	14 AWG RED	BATTERY POSITIVE	IGN RELAY B+ SUPPLY

GENERATOR (ALTERNATOR)

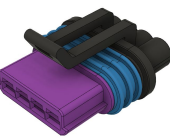
Located within the engine front accessories on the passenger side.

	CAVITY	WIRE	OTHER END	FUNCTION
	L	18 AWG RED	C220 CAVITY A	TURN ON SIGNAL (CHARGE)

IDLE AIR CONTROL MOTOR

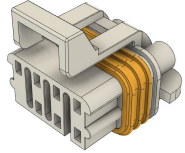
Located in the throttle body lower housing.

IMPORTANT! 1993 IAC motor will require adapter harness 100-02116. IAC adapter harness sold separately.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG PPL/WHT	ECU P1B PIN 8	IAC B LO
	B	20 AWG PPL/BLK	ECU P1B PIN 9	IAC B HI
	C	20 AWG PPL/BLU	ECU P1B PIN 1	IAC A LO
	D	20 AWG PPL/YEL	ECU P1B PIN 2	IAC A HI

IGNITION COIL HARNESS BANK 1

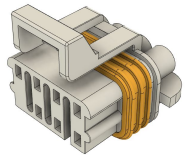
Located on the driver side valve cover.



CAVITY	WIRE	OTHER END	FUNCTION
A	16 AWG BLK	CYLINDER HEAD RING TERMINAL	GROUND
B	20 AWG LT GRN/WHT	ECU P1B PIN 24	CYLINDER 7 CONTROL
C	20 AWG LT BLU/WHT	ECU P1B PIN 23	CYLINDER 5 CONTROL
E	18 AWG BLK/YEL	ECU P1B PIN 14	LOW REFERENCE
F	20 AWG GRY/WHT	ECU P1B PIN 22	CYLINDER 3 CONTROL
G	20 AWG YEL/WHT	ECU P1B PIN 21	CYLINDER 1 CONTROL
H	18 AWG PNK	C100 CAVITY G	SWITCHED 12V SUPPLY

IGNITION COIL HARNESS BANK 2

Located on the passenger side valve cover.



CAVITY	WIRE	OTHER END	FUNCTION
A	16 AWG BLK	CYLINDER HEAD RING TERMINAL	GROUND
B	20 AWG GRN/WHT	ECU P1B PIN 15	CYLINDER 2 CONTROL
C	20 AWG ORN/WHT	ECU P1B PIN 16	CYLINDER 4 CONTROL
E	18 AWG BLK/YEL	ECU P1B PIN 14	LOW REFERENCE
F	20 AWG BLU/WHT	ECU P1B PIN 17	CYLINDER 6 CONTROL
G	20 AWG PNK/WHT	ECU P1B PIN 18	CYLINDER 8 CONTROL
H	18 AWG PNK	C100 CAVITY G	SWITCHED 12V SUPPLY

IGNITION RELAY

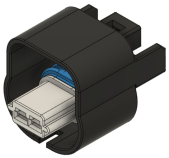
Used to provide ignition power to the fuel injectors, Holley PowerTap connector, and Dakota Digital SGI-100BT module.



CAVITY	WIRE	OTHER END	FUNCTION
1	14 AWG RED	ENGINE HARNESS	INJECTORS, POWER TAP, SGI-100BT
2	20 AWG BLK	CYLINDER HEAD RING TERMINAL	GROUND
4	14 AWG RED	FUSE HOLDER CAVITY A	B+ 12V SUPPLY
5	20 AWG PNK	C100 CAVITY A	RELAY COIL SWITCHED 12V

INTAKE AIR TEMPERATURE SENSOR

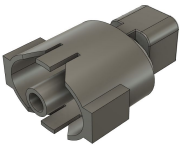
Measures the temperature of incoming air.



CAVITY	WIRE	OTHER END	FUNCTION
A	20 AWG BLU	ECU P1A PIN 11	SENSOR SIGNAL
B	20 AWG BLK/WHT	ECU P1A PIN 18	SENSOR GROUND

KNOCK (DETONATION) SENSOR

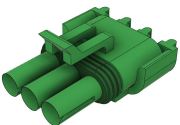
Located on the passenger side of the engine block forward of the starter.



CAVITY	WIRE	OTHER END	FUNCTION
-	20 AWG TAN/BLU	ECU P1A PIN 29	KNOCK SENSOR #1 SIGNAL

MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR

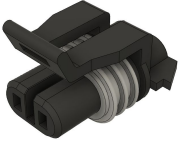
Located on the passenger side of the intake manifold near the throttle body.



CAVITY	WIRE	OTHER END	FUNCTION
A	20 AWG BLK/WHT	ECU P1A PIN 18	LOW REFERENCE
B	20 AWG RED/BLK	ECU P1A PIN 23	SIGNAL
C	20 AWG ORN	ECU P1A PIN 26	5V REFERENCE

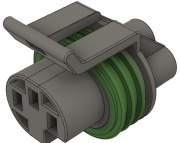
OIL LEVEL SWITCH

Located on the driver side of the engine oil pan. Illuminates the oil level telltale lamp when oil level is low.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG BLK	CYLINDER HEAD RING TERMINAL	GROUND
	B	20 AWG BRN	C220 CAVITY C	SIGNAL


OIL PRESSURE SENDING UNIT

Located on the driver side of the engine block. Provides a signal to the oil pressure gauge in the instrument cluster.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG TAN	C220 CAVITY B	OIL PRESSURE SIGNAL


OIL PRESSURE SENSOR

Located near the oil pressure sending unit on the driver side of the engine.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG BLK/WHT	ECU P1A PIN 18	LOW REFERENCE
	B	20 AWG ORN	ECU P1A PIN 26	5V REFERENCE
	C	20 AWG GRY	ECU P1A PIN 20	SIGNAL

THROTTLE POSITION SENSOR (TPS)

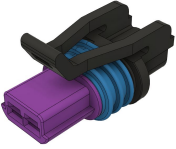
Located on the passenger side of the throttle body.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG ORN	ECU P1A PIN 26	5V REFERENCE
	B	20 AWG BLK/WHT	ECU P1A PIN 18	LOW REFERENCE
	C	20 AWG GRN	ECU P1A PIN 5	SIGNAL

VEHICLE SPEED SENSOR (VSS)

Located within the transmission tail housing.

IMPORTANT! 1995 and older automatic transmissions will require a different harness connector. Contact us with details about your VSS so that we can manufacture an adapter harness. VSS adapter harness sold separately.

	CAVITY	WIRE	OTHER END	FUNCTION
	A	20 AWG PPL	DAKOTA DIGITAL SGI-100BT	VSS LOW
	B	20 AWG YEL	DAKOTA DIGITAL SGI-100BT	VSS HIGH

See list of helpful integration-related resources below:

- Holley Technical Support
- GM Service Manuals Online through <http://www.acdelcotds.com>
- GM Service Manuals Online through <http://www.alldatadiy.com>
- Dakota Digital Support for SGI-100BT Speedometer/Tachometer Interface
- EFI Connection Support at help@eficonnection.com