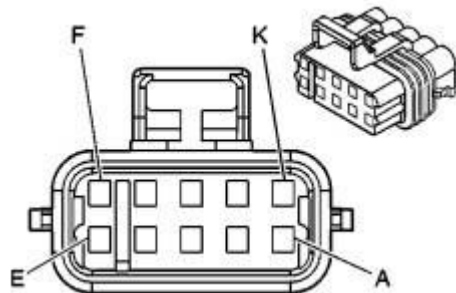


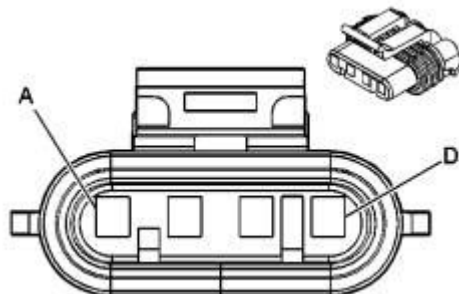
## Engine Controls Connector End Views

### Accelerator Pedal Position (APP) Sensor



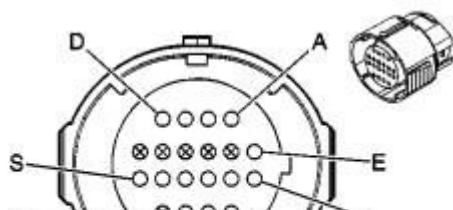
Connector Part Information		15326830 6-Way F GT 150 Series, Sealed (BK)		
Position	Wire Color	Pin	Circuit No.	Function
A	GY	TAC2-A	1273	5-Volt Reference
B	PU	TAC2-B	1272	5-Volt Reference
C	BL	TAC2-C	1162	APP Sensor 2 Signal
D	BR	TAC2-D	1274	Low Reference
E	GR	TAC2-J	1271	Low Reference
F	BL	TAC2-F	1161	APP Sensor 1 Signal
G	WH	TAC2-G	1164	5-Volt Reference
H	--		--	Not Used
J	YE	TAC2-E	1275	Low Reference
K	--		--	Not Used

### Alternator - Gas (w/ SBA)



Connector Part Information		12186568 4-Way F Metri-pack 150 Series Sealed (BLK)		
Position	Wire Color	Pin	Circuit No.	Function
A			5668	Engine On Signal
B	BR	G15	25	Charge Indicator Control
C	GY	G75	23	Generator Field Duty Cycle Signal
D	--		--	Not Used

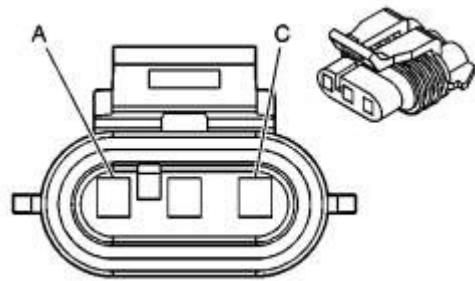
### AT Inline 20-Way Connector, Engine Side





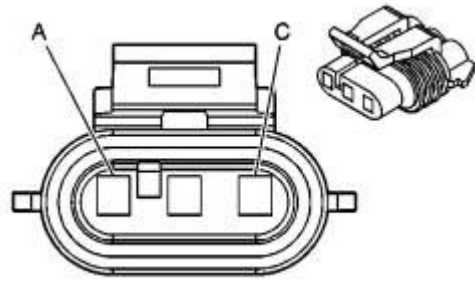
Connector Part Information			12160493 20 Way F Micro-Pack 100 W Series (GY)	
Position	Wire Color	Pin	Circuit No.	Function
A	GR		1222	1-2 Shift Solenoid Valve Control
B	YE		1223	2-3 Shift Solenoid Valve Control
C	OR		1228	PC Solenoid Valve High Control
D	BL		1229	PC Solenoid Valve Low Control
E	RD		1020	OFF/ON/START Voltage
F-K	--		--	Not Used
L	GR		1227	TFT Sensor Signal
M	PU		720	Low Reference
N	GY		1224	TFP Switch Signal A
P	RD		1226	TFP Switch Signal C
R	BL		1225	TFP Switch Signal B
S	WH		687	3-2 Shift Solenoid Valve Control
T	BR		422	TCC Solenoid Valve Control
U	GY		418	TCC Pulse Width Modulation Solenoid Valve Control
V-W	--		--	Not Used

Camshaft Position (CMP) Sensor



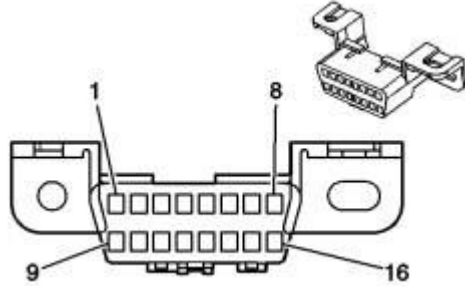
Connector Part Information			12059595 3-Way F Metri-Pack 150 Series Sealed (BK)	
Position	Wire Color	Pin	Circuit No.	Function
A	BR	B73	633	CMP Sensor Signal
B	BK	B61	632	Low Reference
C	RD	G39	631	12-Volt Reference

Crankshaft Position (CKP) Sensor



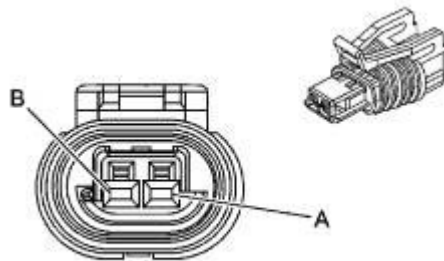
Connector Part Information			15324165 3-Way F Metri-Pack 150 Series (WH)	
Position	Wire Color	Pin	Circuit No.	Function
A	BU	B12	1869	CKP Sensor 1 Signal
B	YE	B21	1868	Low Reference
C	GN	B2	1867	12-Volt Reference

Data Link Connector (DLC)



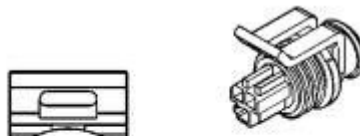
Connector Part Information			12110250 16-Way F Metri-Pack 150 Series (BLK)	
Position	Wire Color	Pin	Circuit No.	Function
1	--		--	Not Used
2	GR	B58	1132	DLC Class 2 Serial Data
3	--		--	Not Used
4	BK		1850	Ground
5	BK		451	Ground
6-15	--		--	Not Used
16	OR	FUSED ENGSEN	640	Battery Positive Voltage

Engine Coolant Temperature (ECT) Sensor



Connector Part Information			15336024 2-Way F GT 150 SLD (BK)	
Position	Wire Color	Pin	Circuit No.	Function
A	BK	B80	720	Low Reference
B	YE	B74	410	ECT Sensor Signal

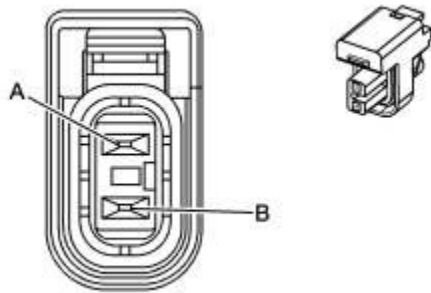
Engine Oil Pressure (EOP) Sensor





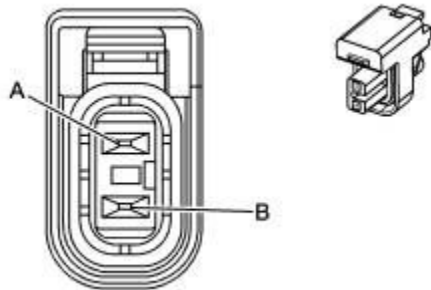
<b>Connector Part Information</b>			<b>15466099</b> <b>3-Way F GT 150 Sealed 5.2 (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
1	BK		407	Low Reference
2	GY		705	5-Volt Reference
3	BR/WH		332	Oil Pressure Sensor Signal

### Fuel Injector 1



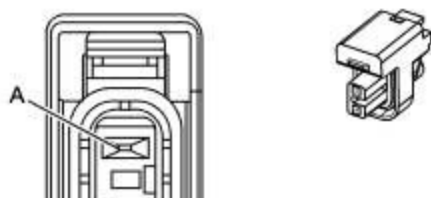
<b>Connector Part Information</b>			<b>15326181</b> <b>2-Way F Micro-Pack 064 Series Sealed (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
A	RD	FUSE INJ1	1239	Ignition 1 Voltage
B	BK	B26	1744	Fuel Injector 1 Control

### Fuel Injector 2



<b>Connector Part Information</b>			<b>15326181</b> <b>2-Way F Micro-Pack 064 Series Sealed (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
A	RD	FUSE INJ2	1339	Ignition 1 Voltage
B	GR	B4	1745	Fuel Injector 2 Control

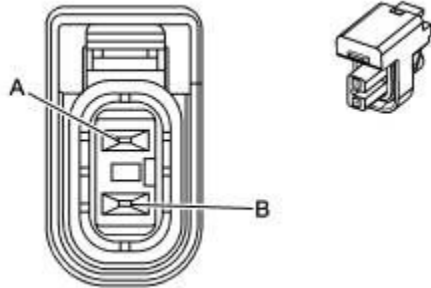
### Fuel Injector 3





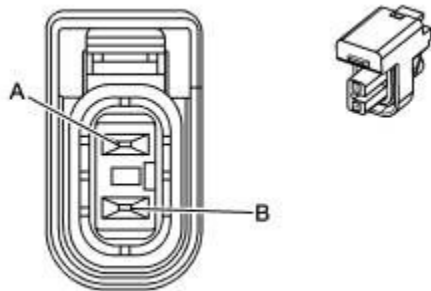
<b>Connector Part Information</b>			<b>15326181</b> <b>2-Way F Micro-Pack 064 Series Sealed (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
A	RD	FUSE INJ1	1239	Ignition 1 Voltage
B	RD	B3	1746	Fuel Injector 3 Control

#### Fuel Injector 4



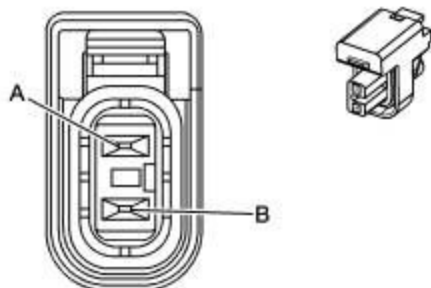
<b>Connector Part Information</b>			<b>15326181</b> <b>2-Way F Micro-Pack 064 Series Sealed (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
A	RD	FUSE INJ2	1339	Ignition 1 Voltage
B	BU	B44	844	Fuel Injector 4 Control

#### Fuel Injector 5



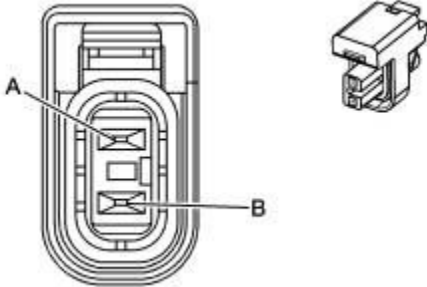
<b>Connector Part Information</b>			<b>15326181</b> <b>2-Way F Micro-Pack 064 Series Sealed (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
A	RD	FUSE INJ1	1239	Ignition 1 Voltage
B	/WH	B76	845	Fuel Injector 5 Control

#### Fuel Injector 6



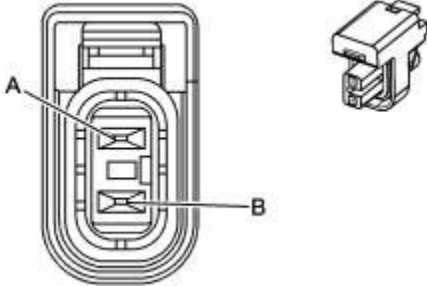
<b>Connector Part Information</b>			<b>15326181</b> <b>2-Way F Micro-Pack 064 Series Sealed (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
A	RD	FUSE INJ2	1339	Ignition 1 Voltage
B	YE	B37	846	Fuel Injector 6 Control

Fuel Injector 7



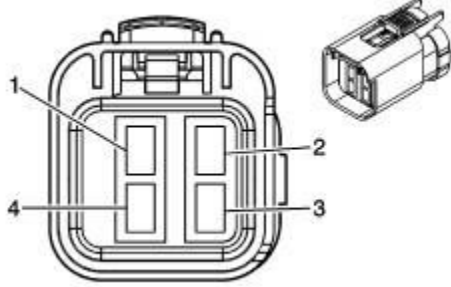
<b>Connector Part Information</b>			<b>15326181</b> <b>2-Way F Micro-Pack 064 Series Sealed (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
A	RD	FUSE INJ1	1239	Ignition 1 Voltage
B	OR	B43	877	Fuel Injector 7 Control

Fuel Injector 8



<b>Connector Part Information</b>			<b>15326181</b> <b>2-Way F Micro-Pack 064 Series Sealed (BK)</b>	
Position	Wire Color	Pin	Circuit No.	Function
A	RD	FUSE INJ2	1339	Ignition 1 Voltage
B	PU	B77	878	Fuel Injector 8 Control

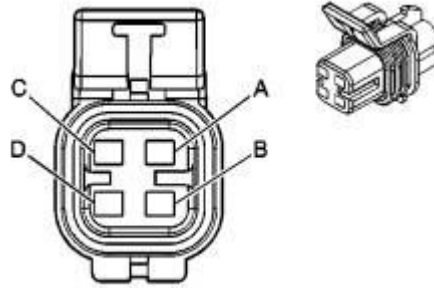
Fuel Pump and Sender Assembly



<b>Connector Part Information</b>			<b>15324862</b> <b>4-Way F 2.80 Apex Series (LT GY)</b>	
Position	Wire Color	Pin	Circuit No.	Function

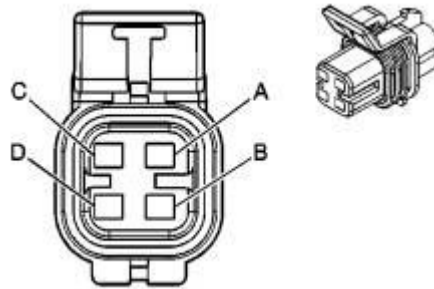
Position	Wire Color	Pin	Circuit No.	Function
A	BU		1589	Fuel Level Sensor (250ohm FULL)
B	BR		120	Fuel Pump Supply Voltage
C	BK		2450	Ground
D	GR		2759	Fuel Level Sensor (Ground)

### Heated Oxygen Sensor (HO2S) Bank 1 Sensor 1



Connector Part Information			12176897 4-Way F Metri-Pack 150 Sealed (GY)	
Position	Wire Color	Pin	Circuit No.	Function
A	BR	B29	1664	HO2S Low Signal B1S1
B	PU	B69	1665	HO2S High Signal B1S1
C	BK	G72	3113	HO2S Heater Low Control B1S1
D	RD	FUSE ENGSSEN	539	Ignition 1 Voltage

### Heated Oxygen Sensor (HO2S) Bank 2 Sensor 1



Connector Part Information			12176897 4-Way F Metri-Pack 150 Sealed (GY)	
Position	Wire Color	Pin	Circuit No.	Function
A	BR	B26	1667	HO2S Low Signal B2S1
B	PU	B66	1666	HO2S High Signal B2S1
C	GN	G74	3212	HO2S Heater Low Control B2S1
D	RD	FUSE ENGSSEN	539	Ignition 1 Voltage