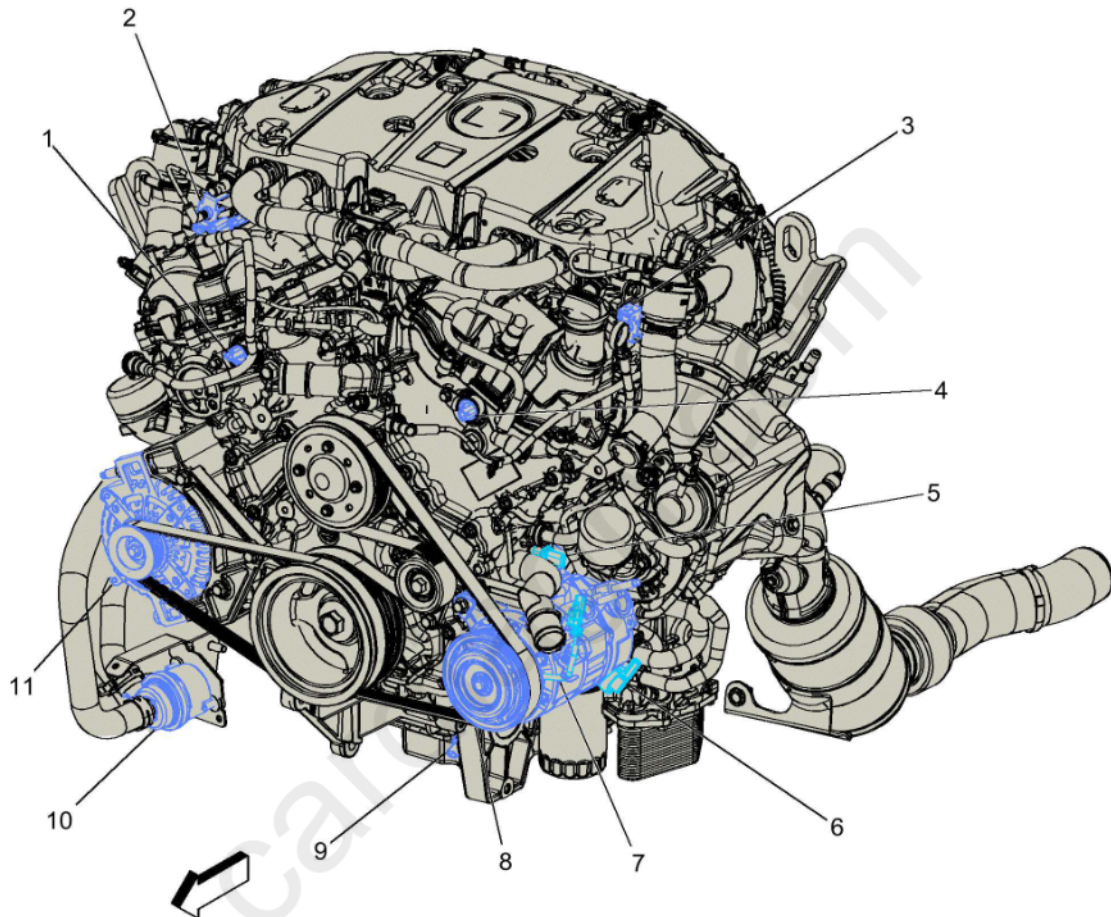


## POWERTRAIN COMPONENT VIEWS

### ENGINE COMPONENTS - LEFT FRONT (LGW)



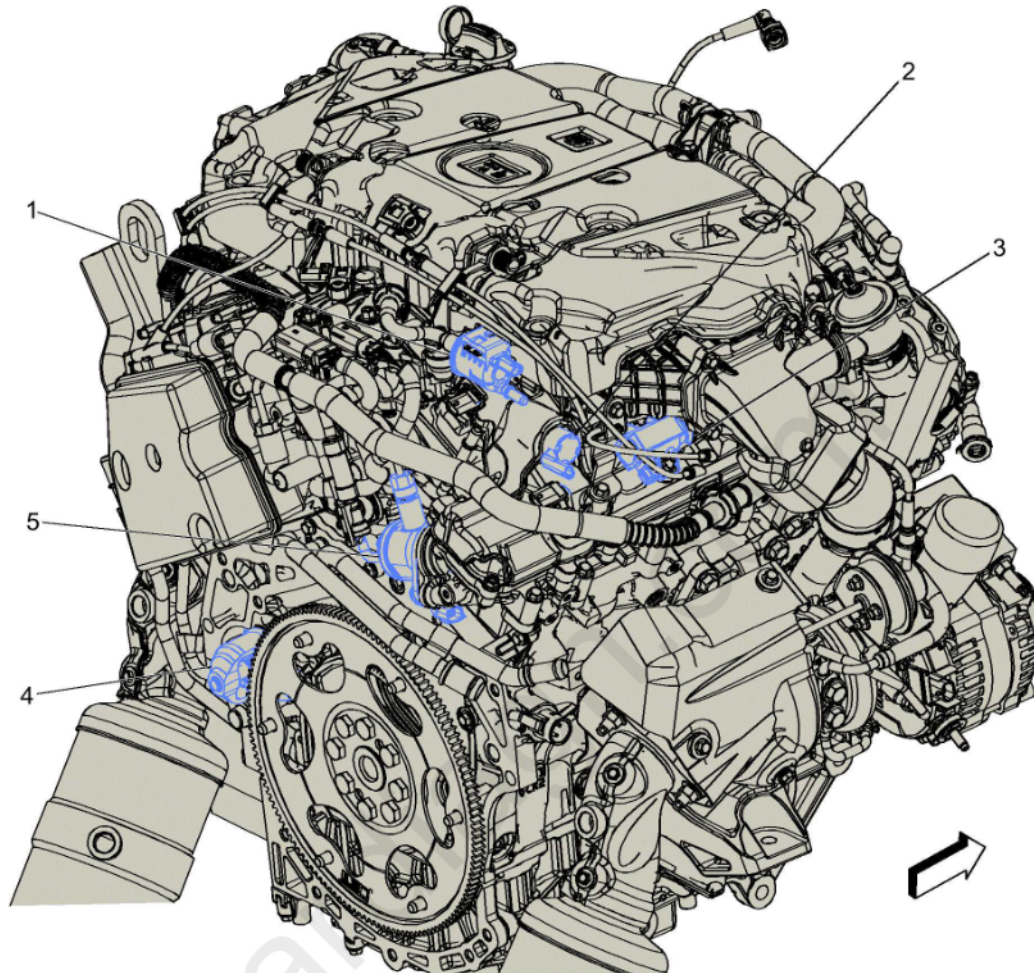
**Fig. 1: Engine Components - Left Front (LGW)**  
Courtesy of GENERAL MOTORS COMPANY

| Items                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Q84A Camshaft Position Actuator Park Lock Solenoid Valve - Bank 1 Intake (LGW/LGX) <b><u>Q84A Camshaft Position Actuator Park Lock Solenoid Valve - Bank 1 Intake (LGW/LGX)</u></b> |
| 2. Q40A Turbocharger 1 Bypass Solenoid Valve (LGW) <b><u>Q40A Turbocharger 1 Bypass Solenoid Valve (LGW)</u></b>                                                                       |
| 3. Q40B Turbocharger 2 Bypass Solenoid Valve (LGW) <b><u>Q40B Turbocharger 2 Bypass Solenoid Valve (LGW)</u></b>                                                                       |
| 4. Q84B Camshaft Position Actuator Park Lock Solenoid Valve - Bank 2 Intake (LGW/LGX) <b><u>Q84B Camshaft Position Actuator Park Lock Solenoid Valve - Bank 2 Intake (LGW/LGX)</u></b> |
| 5. B37B Engine Oil Pressure Sensor <b><u>B37B Engine Oil Pressure Sensor (LGW/LGX) B37B Engine Oil Pressure Sensor (LTG)</u></b>                                                       |
| 6. Q46 A/C Compressor Solenoid Valve <b><u>Q46 A/C Compressor Solenoid Valve (KL9)</u></b>                                                                                             |
| 7. Q2 A/C Compressor Clutch <b><u>Q2 A/C Compressor Clutch (KL9) Q2 A/C Compressor Clutch (LTG+HP9)</u></b>                                                                            |

#### Items

8. G1 A/C Compressor G1 A/C Compressor X1 (HP9) G1 A/C Compressor X2 (HP9)
9. B35 Engine Oil Level Switch B35 Engine Oil Level Switch (LGW/LGX) B35 Engine Oil Level Switch (LTG)
10. G17 Heater Coolant Pump G17 Heater Coolant Pump (LGW/LGX/(LTG+KL9))
11. G13 Generator G13 Generator X1 (KL9) G13 Generator X2 (KL9)

### ENGINE COMPONENTS - RIGHT REAR (LGW)



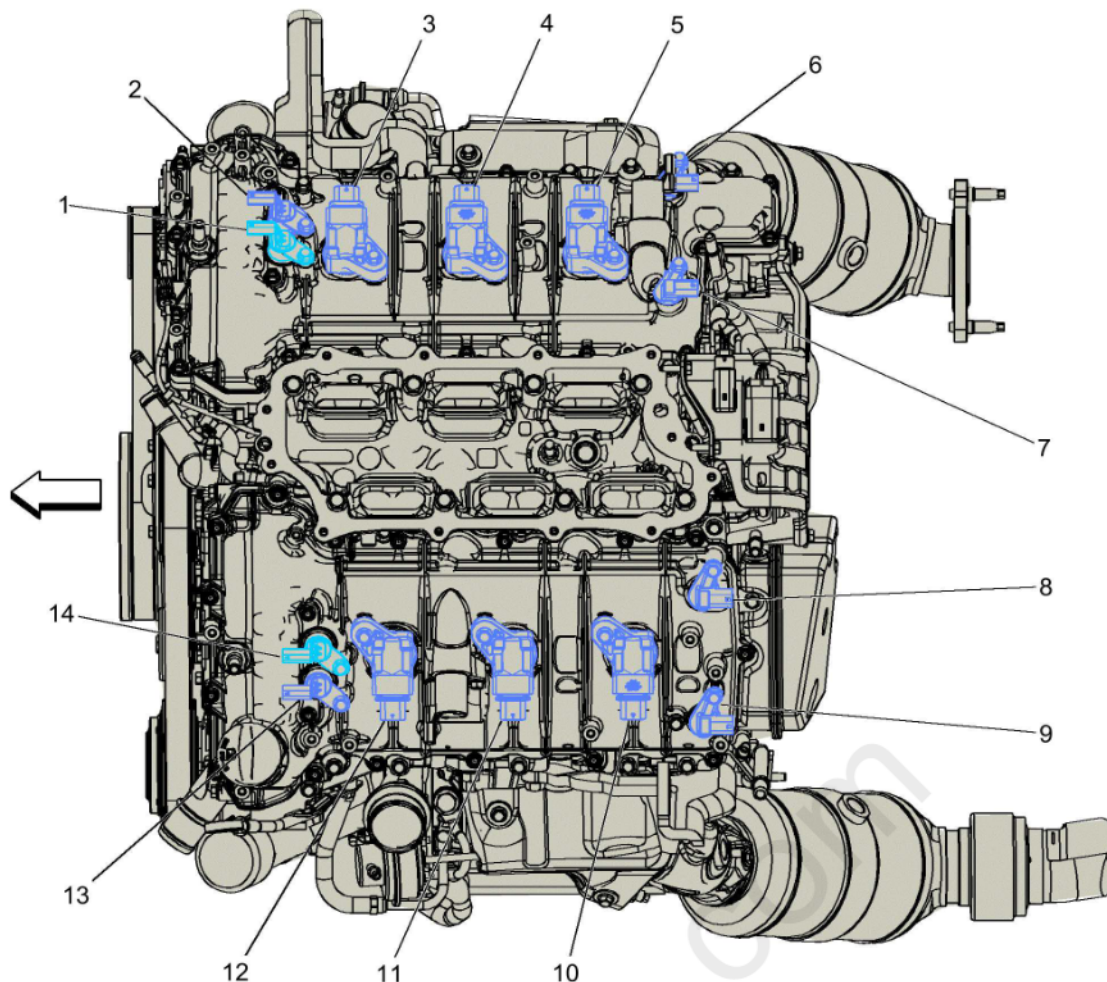
**Fig. 2: Engine Components - Right Rear (LGW)**

Courtesy of GENERAL MOTORS COMPANY

#### Items

1. Q12 Evaporative Emission Purge Solenoid Valve Q12 Evaporative Emission Purge Solenoid Valve
2. Q83A Valve Lifter Oil Solenoid Valve - Bank 1 (LGW/LGX) Q83A Valve Lifter Oil Solenoid Valve - Bank 1 (LGW/LGX)
3. Q42A Turbocharger 1 Wastegate Solenoid Valve (LGW) Q42A Turbocharger 1 Wastegate Solenoid Valve (LGW)
4. M64 Starter Motor M64 Starter Motor (LGW) M64 Starter Motor (LGX/(LTG+KL9))
5. G18 High Pressure Fuel Pump G18 High Pressure Fuel Pump (LTG)

### ENGINE COMPONENTS - TOP (LGW)

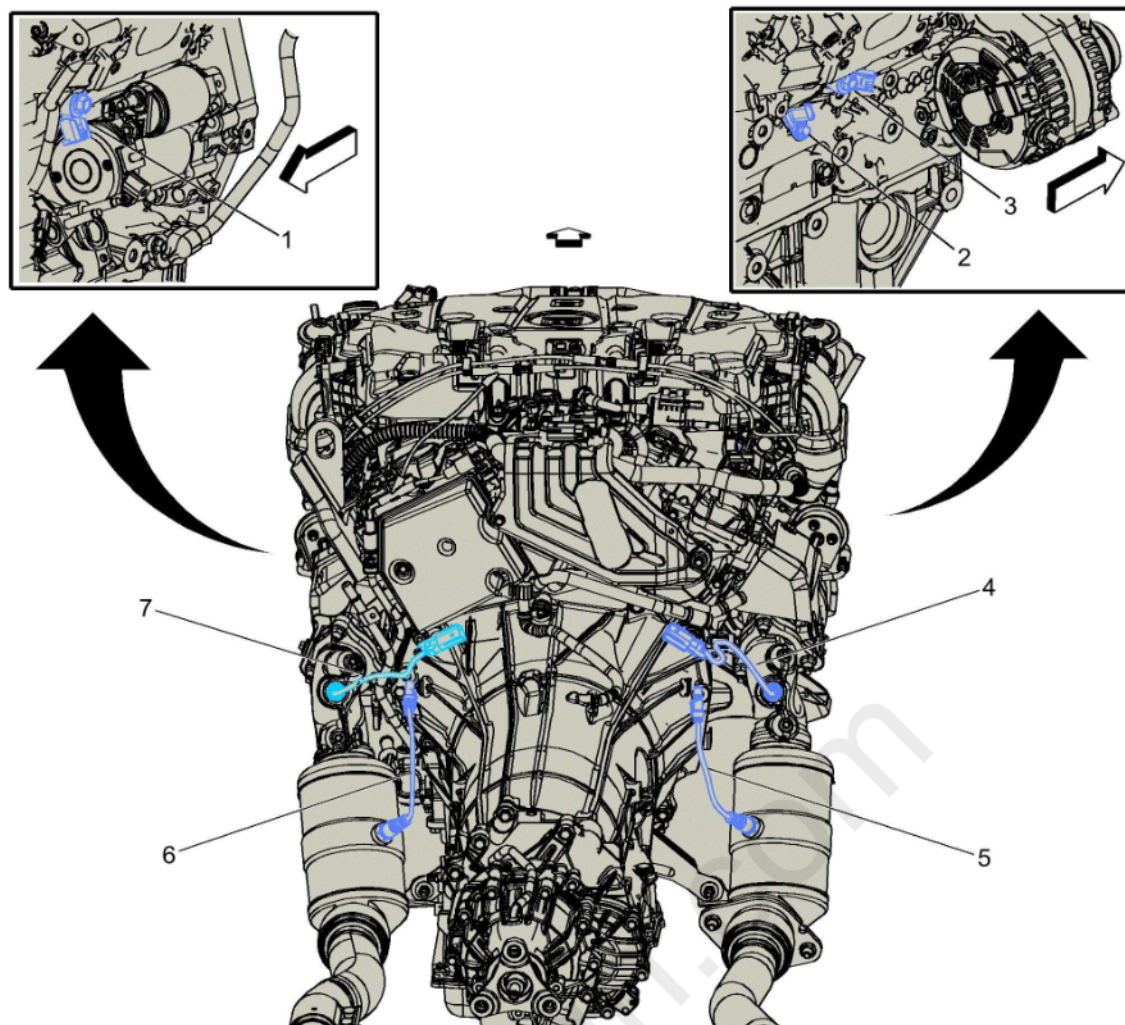


**Fig. 3: Engine Components - Top (LGV)**  
 Courtesy of GENERAL MOTORS COMPANY

#### Items

1. Q6B Camshaft Position Actuator Solenoid Valve - Bank 1 Intake (LGW/LGX) **Q6B Camshaft Position Actuator Solenoid Valve - Bank 1 Intake (LGW/LGX)**
2. Q6A Camshaft Position Actuator Solenoid Valve - Bank 1 Exhaust (LGW/LGX) **Q6A Camshaft Position Actuator Solenoid Valve - Bank 1 Exhaust (LGW/LGX)**
3. T8A Ignition Coil 1 **T8A Ignition Coil 1 (LGW/LGX) T8A Ignition Coil 1 (LTG)**
4. T8C Ignition Coil 3 **T8C Ignition Coil 3 (LGW/LGX) T8C Ignition Coil 3 (LTG) T8C Ignition Coil 3 (LTG+KL9)**
5. T8E Ignition Coil 5 (LGW/LGX) **T8E Ignition Coil 5 (LGW/LGX)**
6. B23A Camshaft Position Sensor - Bank 1 Exhaust (LGW/LGX) **B23A Camshaft Position Sensor - Bank 1 Exhaust (LGW/LGX)**
7. B23B Camshaft Position Sensor - Bank 1 Intake (LGW/LGX) **B23B Camshaft Position Sensor - Bank 1 Intake (LGW/LGX)**
8. B23D Camshaft Position Sensor - Bank 2 Intake (LGW/LGX) **B23D Camshaft Position Sensor - Bank 2 Intake (LGW/LGX)**
9. B23C Camshaft Position Sensor - Bank 2 Exhaust (LGW/LGX) **B23C Camshaft Position Sensor - Bank 2 Exhaust (LGW/LGX)**
10. T8F Ignition Coil 6 (LGW/LGX) **T8F Ignition Coil 6 (LGW/LGX)**
11. T8D Ignition Coil 4 **T8D Ignition Coil 4 (LGW/LGX) T8D Ignition Coil 4 (LTG) T8D Ignition Coil 4 (LTG+KL9)**
12. T8B Ignition Coil 2 **T8B Ignition Coil 2 (LGW/LGX) T8B Ignition Coil 2 (LTG)**
13. Q6C Camshaft Position Actuator Solenoid Valve - Bank 2 Exhaust (LGW/LGX) **Q6C Camshaft Position Actuator Solenoid Valve - Bank 2 Exhaust (LGW/LGX)**
14. Q6D Camshaft Position Actuator Solenoid Valve - Bank 2 Intake (LGW/LGX) **Q6D Camshaft Position Actuator Solenoid Valve - Bank 2 Intake (LGW/LGX)**

## ENGINE COMPONENTS - REAR (LGW)

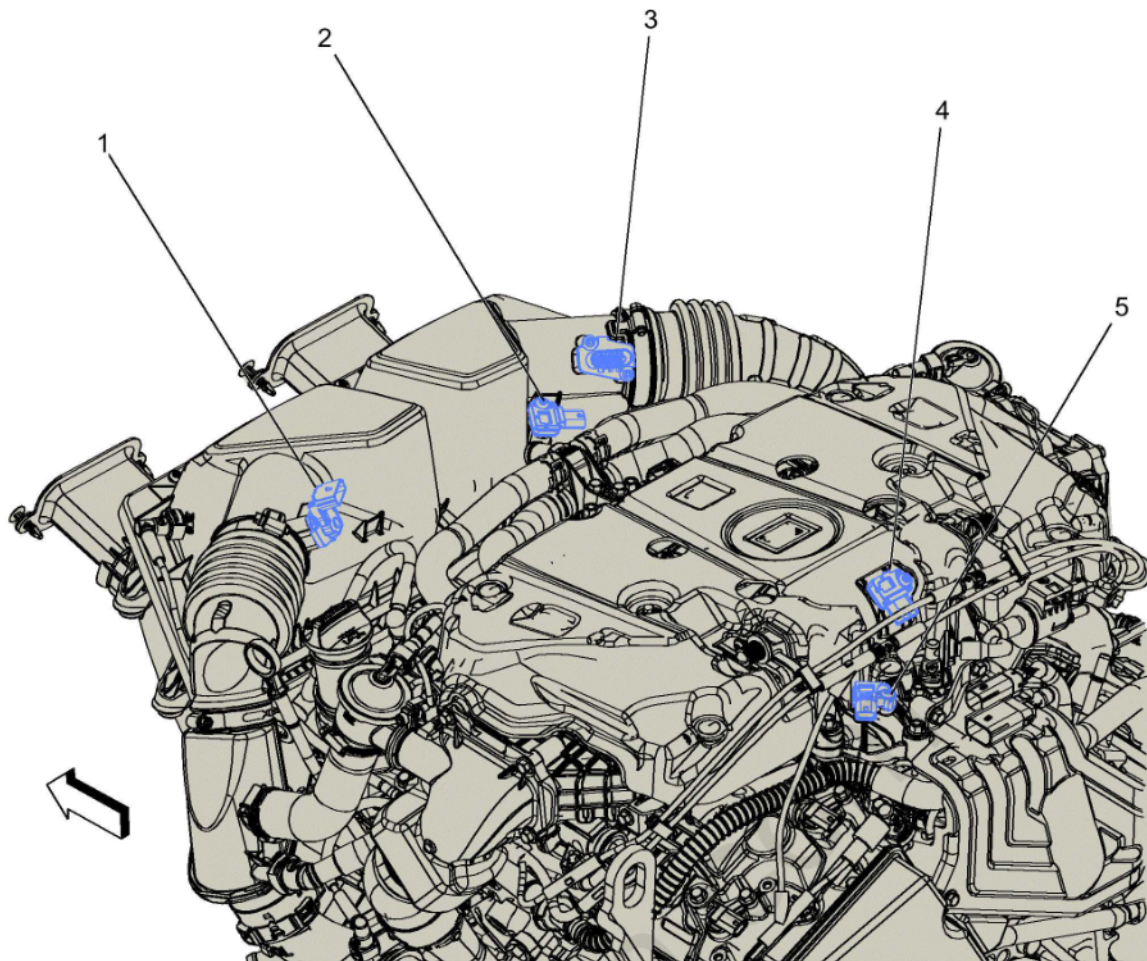


**Fig. 4: Engine Components - Rear (LGW)**  
Courtesy of GENERAL MOTORS COMPANY

### Items

1. B68B Knock Sensor 2 **B68B Knock Sensor 2 (LGW) B68B Knock Sensor 2 (LGX/LTG)**
2. B26 Crankshaft Position Sensor **B26 Crankshaft Position Sensor (LGW) B26 Crankshaft Position Sensor (LGX) B26 Crankshaft Position Sensor (LTG)**
3. B68A Knock Sensor 1 **B68A Knock Sensor 1 (LGW) B68A Knock Sensor 1 (LGX/LTG)**
4. B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGW/LGX) **B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGW) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGX)**
5. B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGW/LGX) **B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGW/LGX)**
6. B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGW/LGX) **B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGW/LGX)**
7. B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGW/LGX) **B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGW) B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGX)**

## ENGINE COMPONENTS - AIR PRESSURE/TEMPERATURE SENSORS (LGW)



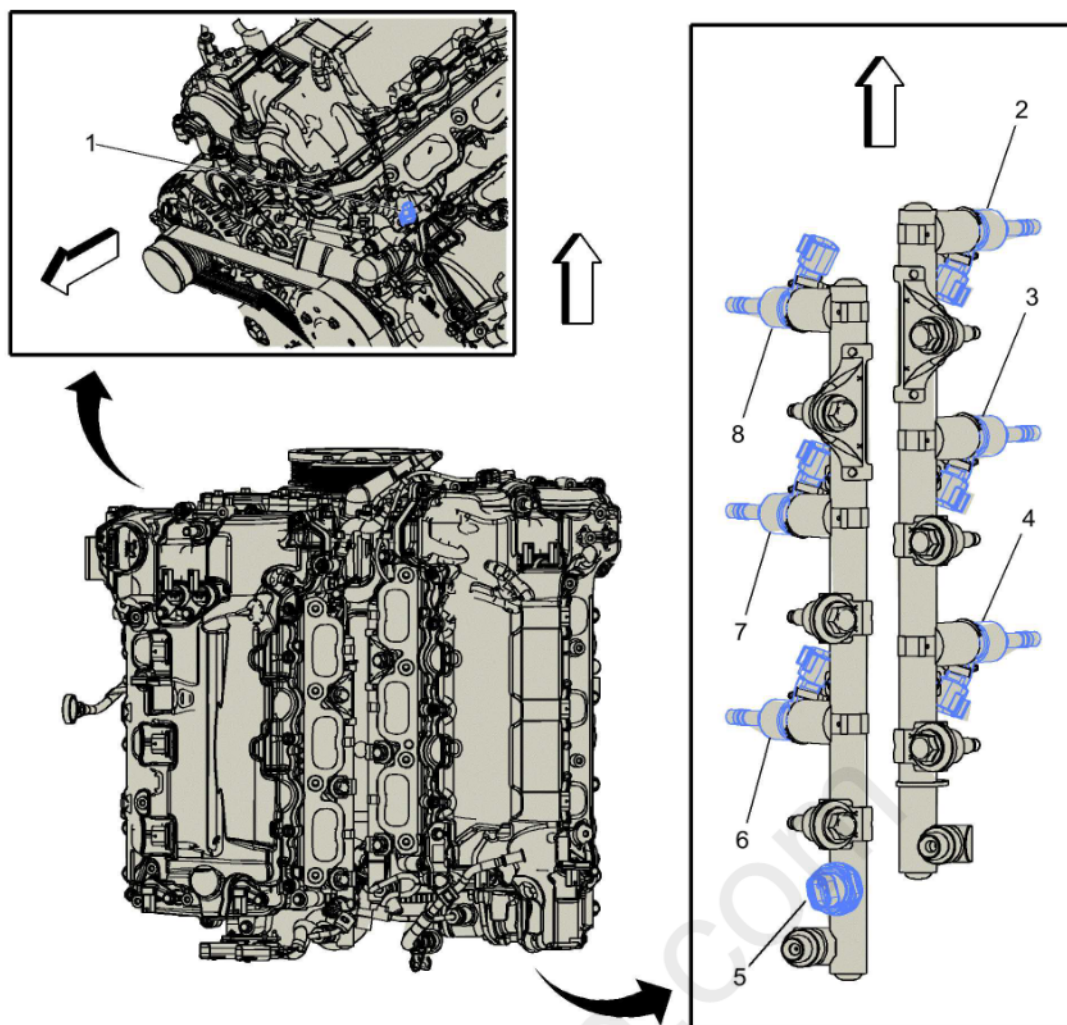
**Fig. 5: Engine Components - Air Pressure/Temperature Sensors (LGW)**

Courtesy of GENERAL MOTORS COMPANY

**Items**

1. B75C Multifunction Intake Air Sensor **B75C Multifunction Intake Air Sensor (LGW) B75C Multifunction Intake Air Sensor (LGX) B75C Multifunction Intake Air Sensor (LTG)**
2. B17 Barometric Pressure Sensor (LGW) **B17 Barometric Pressure Sensor (LGW)**
3. B75B Mass Air Flow/Intake Air Temperature Sensor (LGW) **B75B Mass Air Flow/Intake Air Temperature Sensor (LGW)**
4. B111B Turbocharger Boost/Intake Air Temperature Sensor **B111B Turbocharger Boost/Intake Air Temperature Sensor (LGW) B111B Turbocharger Boost/Intake Air Temperature Sensor (LTG+HP9) B111B Turbocharger Boost/Intake Air Temperature Sensor (LTG+KL9)**
5. B74 Manifold Absolute Pressure Sensor **B74 Manifold Absolute Pressure Sensor (LGW/LGX) B74 Manifold Absolute Pressure Sensor (LTG+(HP9/KL9))**

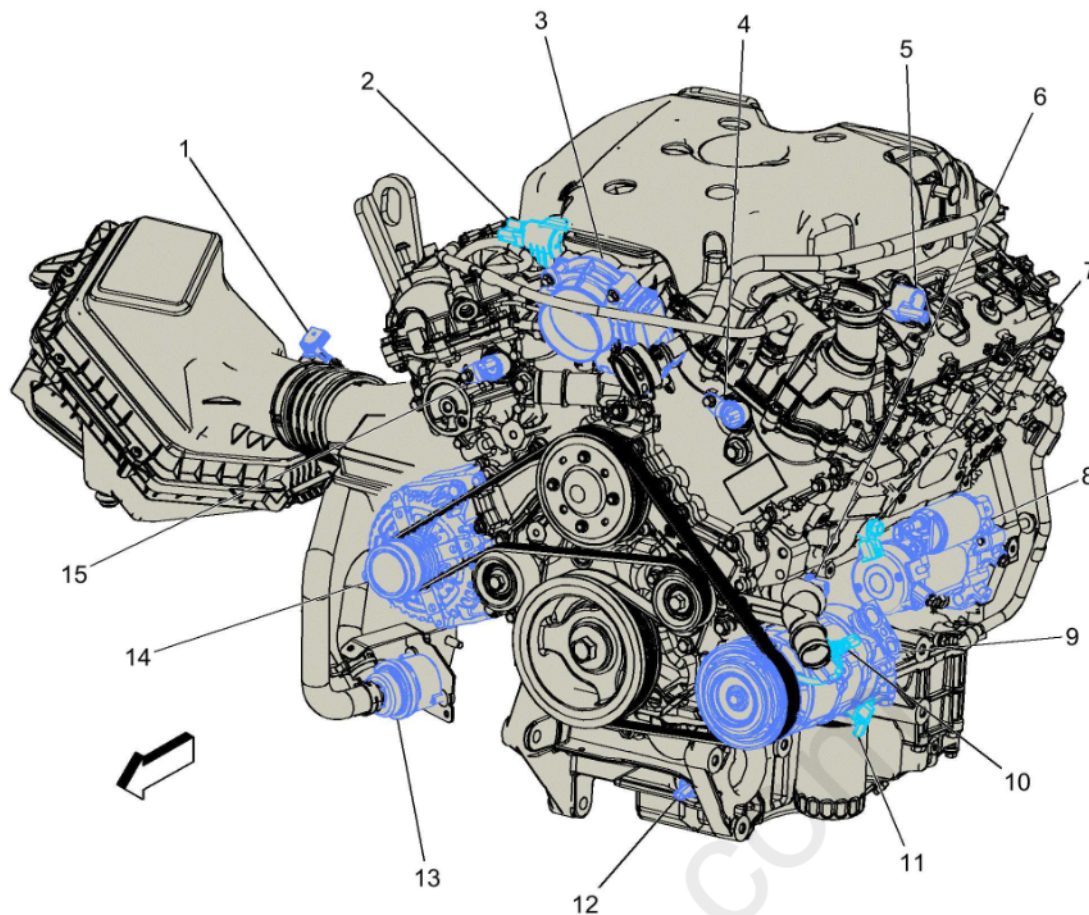
**ENGINE/FUEL RAIL COMPONENTS - UNDER UPPER INTAKE MANIFOLD (LGW/LGX)**



**Fig. 6: Engine/Fuel Rail Components - Under Upper Intake Manifold (LGW/LGX)**  
 Courtesy of GENERAL MOTORS COMPANY

| Items                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. B34 Engine Coolant Temperature Sensor <b><u>B34 Engine Coolant Temperature Sensor (LGW/LGX) B34 Engine Coolant Temperature Sensor (LTG+HP9) B34 Engine Coolant Temperature Sensor (LTG+KL9)</u></b> |
| 2. Q17A Fuel Injector 1 <b><u>Q17A Fuel Injector 1 (LTG)</u></b>                                                                                                                                       |
| 3. Q17C Fuel Injector 3 <b><u>Q17C Fuel Injector 3 (LGW/LGX) Q17C Fuel Injector 3 (LTG)</u></b>                                                                                                        |
| 4. Q17E Fuel Injector 5 (LGW/LGX) <b><u>Q17E Fuel Injector 5 (LGW/LGX)</u></b>                                                                                                                         |
| 5. B310 Fuel Pressure/Temperature Sensor (LGW/LGX) <b><u>B310 Fuel Pressure/Temperature Sensor (LGW/LGX)</u></b>                                                                                       |
| 6. Q17F Fuel Injector 6 (LGW/LGX) <b><u>Q17F Fuel Injector 6 (LGW/LGX)</u></b>                                                                                                                         |
| 7. Q17D Fuel Injector 4 <b><u>Q17D Fuel Injector 4 (LGW/LGX) Q17D Fuel Injector 4 (LTG)</u></b>                                                                                                        |
| 8. Q17B Fuel Injector 2 <b><u>Q17B Fuel Injector 2 (LGW/LGX)</u></b>                                                                                                                                   |

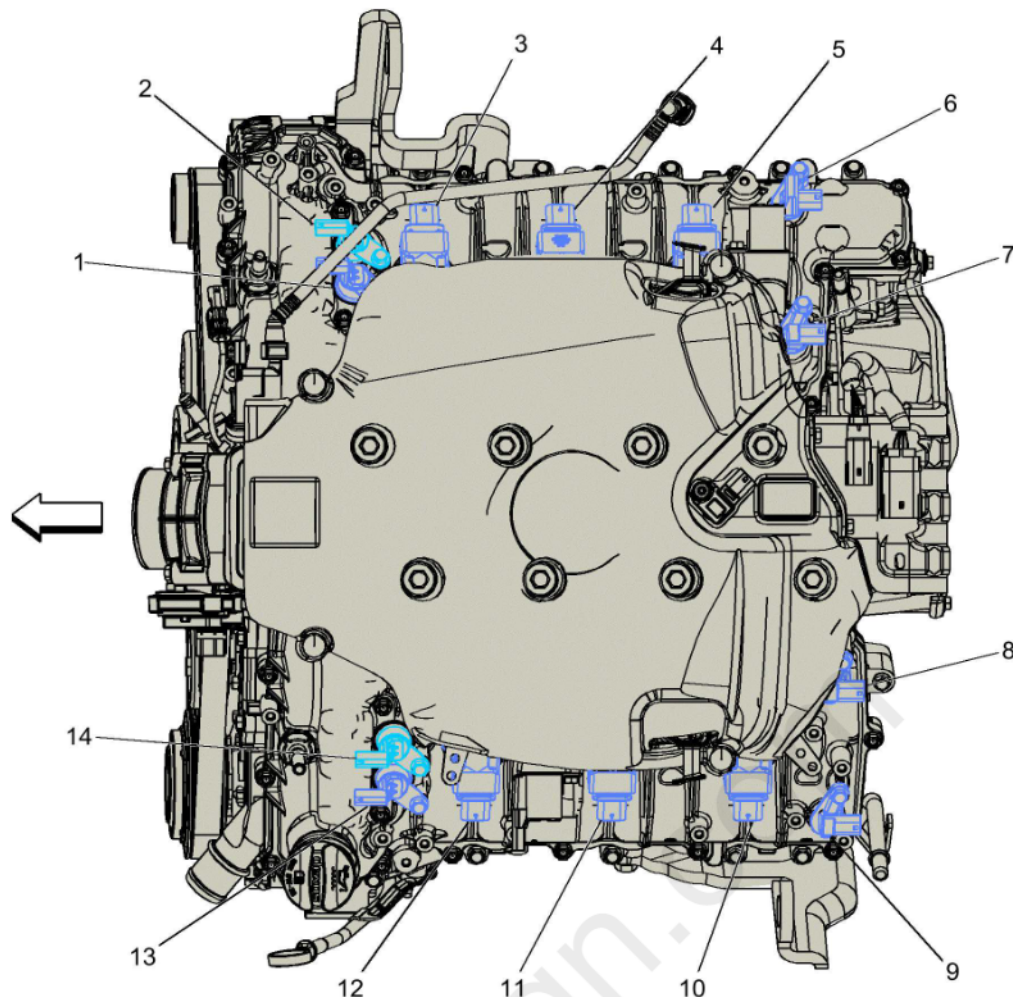
**ENGINE COMPONENTS - LEFT FRONT (LGX)**



**Fig. 7: Engine Components - Left Front (LGX)**  
 Courtesy of GENERAL MOTORS COMPANY

#### Items

1. B75C Multifunction Intake Air Sensor **B75C Multifunction Intake Air Sensor (LGW) B75C Multifunction Intake Air Sensor (LGX) B75C Multifunction Intake Air Sensor (LTG)**
2. Q12 Evaporative Emission Purge Solenoid Valve **Q12 Evaporative Emission Purge Solenoid Valve**
3. Q38 Throttle Body **Q38 Throttle Body (LGW) Q38 Throttle Body (LGX/LTG)**
4. Q84B Camshaft Position Actuator Park Lock Solenoid Valve - Bank 2 Intake (LGW/LGX) **Q84B Camshaft Position Actuator Park Lock Solenoid Valve - Bank 2 Intake (LGW/LGX)**
5. Q83B Valve Lifter Oil Solenoid Valve - Bank 2 (LGW/LGX) **Q83B Valve Lifter Oil Solenoid Valve - Bank 2 (LGW/LGX)**
6. B37B Engine Oil Pressure Sensor **B37B Engine Oil Pressure Sensor (LGW/LGX) B37B Engine Oil Pressure Sensor (LTG)**
7. B68B Knock Sensor 2 **B68B Knock Sensor 2 (LGW) B68B Knock Sensor 2 (LGX/LTG)**
8. M64 Starter Motor **M64 Starter Motor (LGW) M64 Starter Motor (LGX/(LTG+KL9))**
9. G1 A/C Compressor **G1 A/C Compressor X1 (HP9) G1 A/C Compressor X2 (HP9)**
10. Q2 A/C Compressor Clutch **Q2 A/C Compressor Clutch (KL9) Q2 A/C Compressor Clutch (LTG+HP9)**
11. Q46 A/C Compressor Solenoid Valve **Q46 A/C Compressor Solenoid Valve (KL9)**
12. B35 Engine Oil Level Switch **B35 Engine Oil Level Switch (LGW/LGX) B35 Engine Oil Level Switch (LTG)**
13. G17 Heater Coolant Pump **G17 Heater Coolant Pump (LGW/LGX/(LTG+KL9))**
14. G13 Generator **G13 Generator X1 (KL9) G13 Generator X2 (KL9)**
15. Q84A Camshaft Position Actuator Park Lock Solenoid Valve - Bank 1 Intake (LGW/LGX) **Q84A Camshaft Position Actuator Park Lock Solenoid Valve - Bank 1 Intake (LGW/LGX)**



**Fig. 8: Engine Components - Top (LGX)**  
Courtesy of GENERAL MOTORS COMPANY

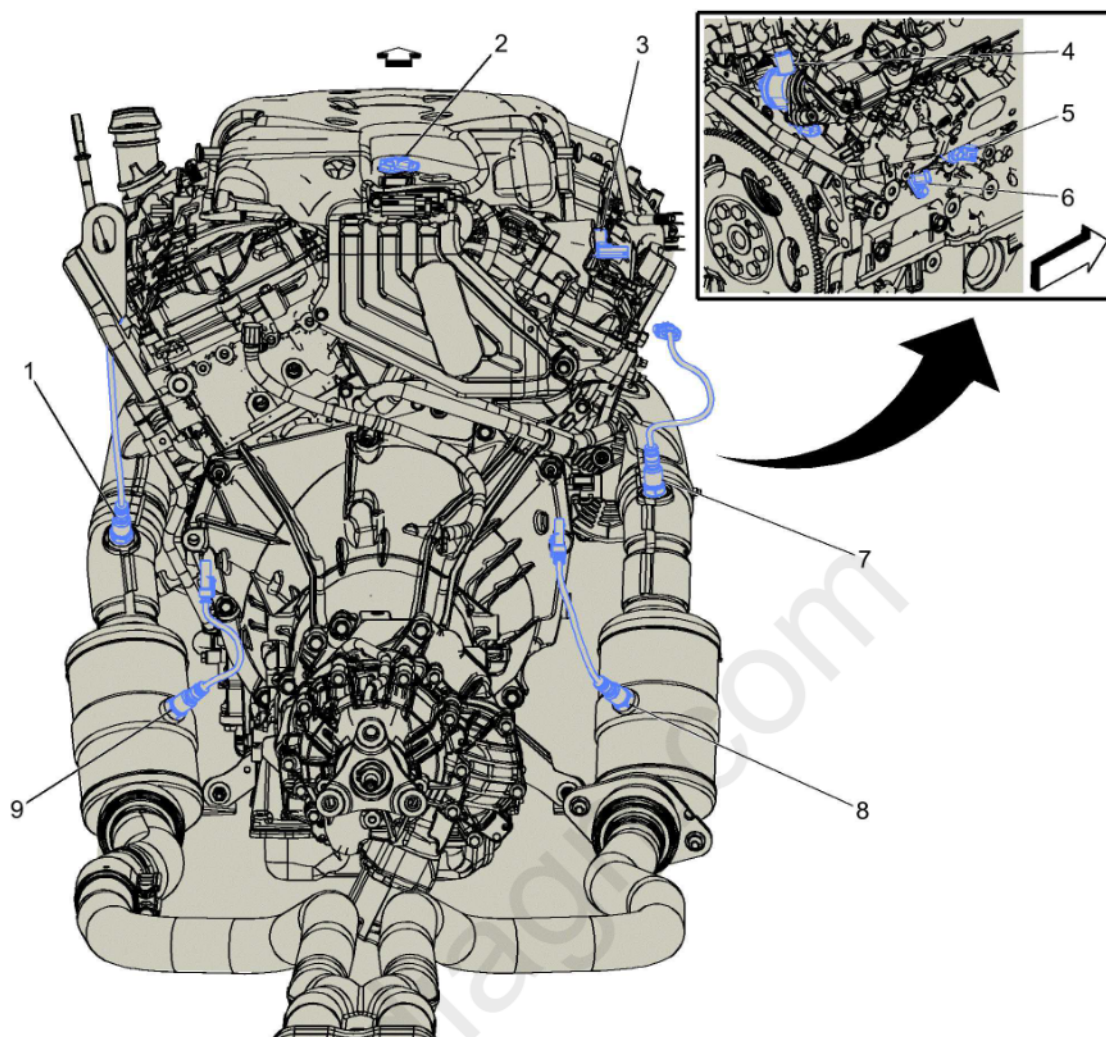
**Items**

1. Q6A Camshaft Position Actuator Solenoid Valve - Bank 1 Exhaust (LGW/LGX) **Q6A Camshaft Position Actuator Solenoid Valve - Bank 1 Exhaust (LGW/LGX)**
2. Q6B Camshaft Position Actuator Solenoid Valve - Bank 1 Intake (LGW/LGX) **Q6B Camshaft Position Actuator Solenoid Valve - Bank 1 Intake (LGW/LGX)**
3. T8A Ignition Coil 1 **T8A Ignition Coil 1 (LGW/LGX) T8A Ignition Coil 1 (LTG)**
4. T8C Ignition Coil 3 **T8C Ignition Coil 3 (LGW/LGX) T8C Ignition Coil 3 (LTG) T8C Ignition Coil 3 (LTG+KL9)**
5. T8E Ignition Coil 5 (LGW/LGX) **T8E Ignition Coil 5 (LGW/LGX)**
6. B23A Camshaft Position Sensor - Bank 1 Exhaust (LGW/LGX) **B23A Camshaft Position Sensor - Bank 1 Exhaust (LGW/LGX)**
7. B23B Camshaft Position Sensor - Bank 1 Intake (LGW/LGX) **B23B Camshaft Position Sensor - Bank 1 Intake (LGW/LGX)**
8. B23D Camshaft Position Sensor - Bank 2 Intake (LGW/LGX) **B23D Camshaft Position Sensor - Bank 2 Intake (LGW/LGX)**
9. B23C Camshaft Position Sensor - Bank 2 Exhaust (LGW/LGX) **B23C Camshaft Position Sensor - Bank 2 Exhaust (LGW/LGX)**
10. T8F Ignition Coil 6 (LGW/LGX) **T8F Ignition Coil 6 (LGW/LGX)**
11. T8D Ignition Coil 4 **T8D Ignition Coil 4 (LGW/LGX) T8D Ignition Coil 4 (LTG) T8D Ignition Coil 4 (LTG+KL9)**
12. T8B Ignition Coil 2 **T8B Ignition Coil 2 (LGW/LGX) T8B Ignition Coil 2 (LTG) T8B Ignition Coil 2 (LTG+KL9)**
13. Q6C Camshaft Position Actuator Solenoid Valve - Bank 2 Exhaust (LGW/LGX) **Q6C Camshaft Position Actuator Solenoid Valve - Bank 2 Exhaust (LGW/LGX)**

## Items

14. Q6D Camshaft Position Actuator Solenoid Valve - Bank 2 Intake (LGW/LGX) **Q6D Camshaft Position Actuator Solenoid Valve - Bank 2 Intake (LGW/LGX)**

## ENGINE COMPONENTS - REAR (LGX)



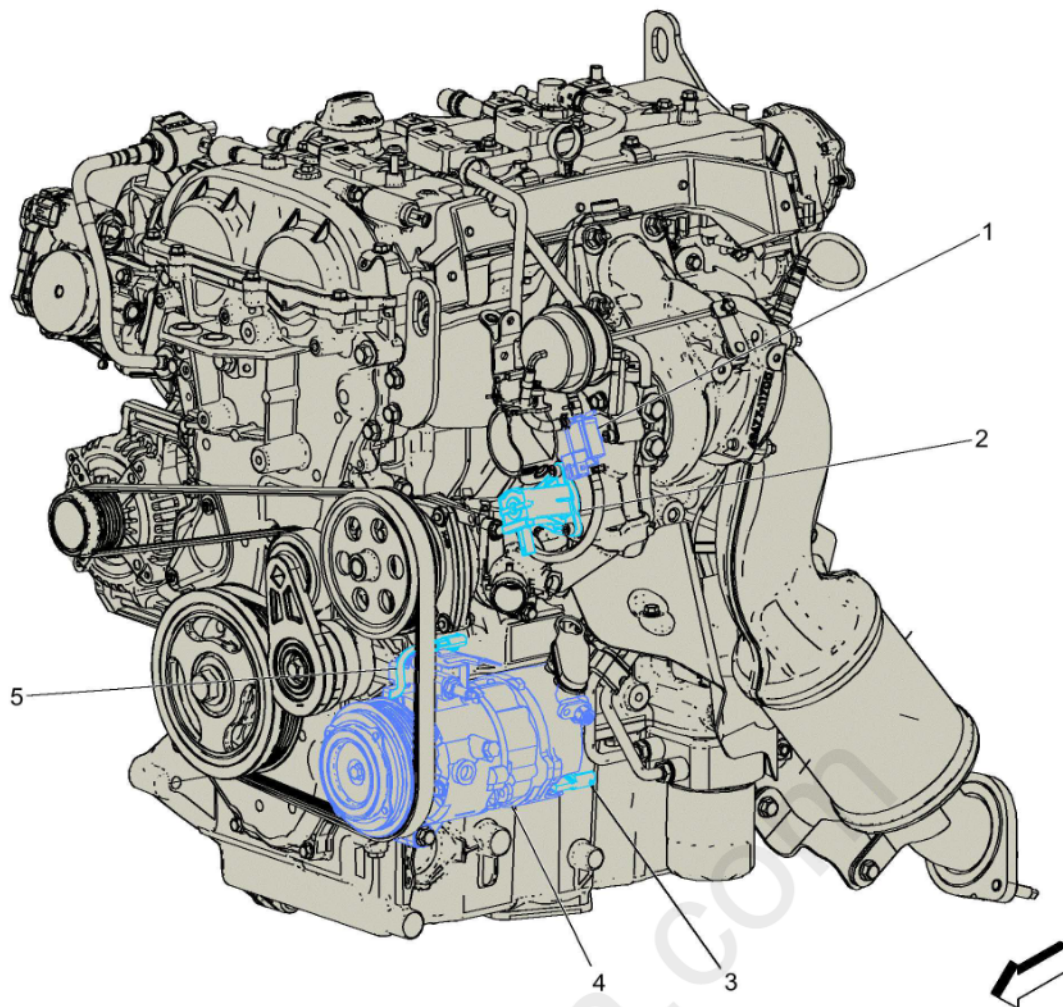
**Fig. 9: Engine Components - Rear (LGX)**

Courtesy of GENERAL MOTORS COMPANY

## Items

1. B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGW/LGX) **B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGW) B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGX)**
2. B74 Manifold Absolute Pressure Sensor **B74 Manifold Absolute Pressure Sensor (LGW/LGX) B74 Manifold Absolute Pressure Sensor (LTG+(HP9/KL9))**
3. Q83A Valve Lifter Oil Solenoid Valve - Bank 1 (LGW/LGX) **Q83A Valve Lifter Oil Solenoid Valve - Bank 1 (LGW/LGX)**
4. G18 High Pressure Fuel Pump **G18 High Pressure Fuel Pump (LTG)**
5. B68A Knock Sensor 1 **B68A Knock Sensor 1 (LGW) B68A Knock Sensor 1 (LGX/LTG)**
6. B26 Crankshaft Position Sensor **B26 Crankshaft Position Sensor (LGW) B26 Crankshaft Position Sensor (LGX) B26 Crankshaft Position Sensor (LTG)**
7. B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGW/LGX) **B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGW) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGX)**
8. B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGW/LGX) **B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGW/LGX)**
9. B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGW/LGX) **B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGW/LGX)**

## ENGINE COMPONENTS - LEFT FRONT (LTG WITH KL9)

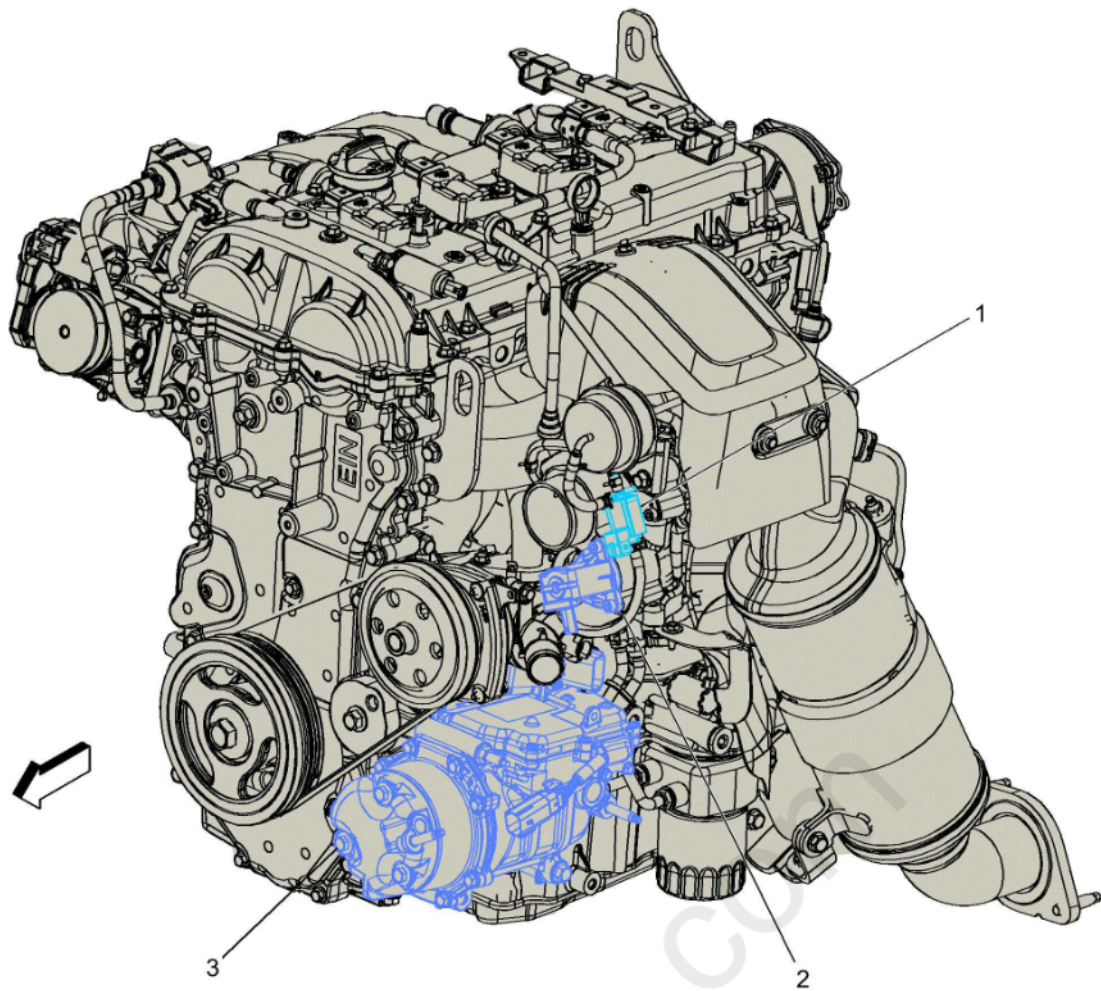


**Fig. 10: Engine Components - Left Front (LTG with KL9)**  
 Courtesy of GENERAL MOTORS COMPANY

**Items**

1. Q42 Turbocharger Wastegate Solenoid Valve (LTG) **Q42 Turbocharger Wastegate Solenoid Valve (LTG)**
- 2.. Q40 Turbocharger Bypass Solenoid Valve (LTG) **Q40 Turbocharger Bypass Solenoid Valve (LTG)**
3. Q46 A/C Compressor Solenoid Valve **Q46 A/C Compressor Solenoid Valve (KL9)**
4. G1 A/C Compressor **G1 A/C Compressor X1 (HP9) G1 A/C Compressor X2 (HP9)**
5. Q2 A/C Compressor Clutch **Q2 A/C Compressor Clutch (KL9) Q2 A/C Compressor Clutch (LTG+HP9)**

**ENGINE COMPONENTS - LEFT FRONT (LTG WITH HP9)**



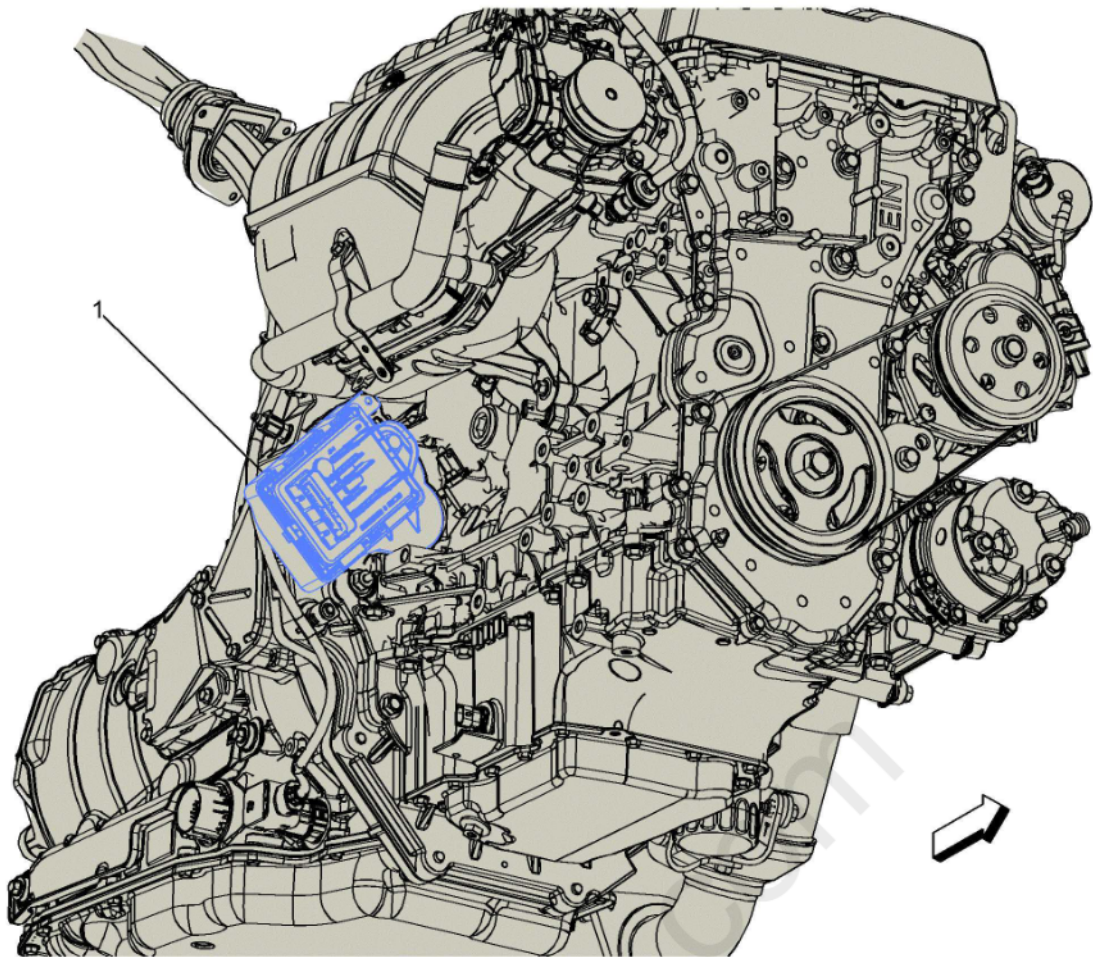
**Fig. 11: Engine Components - Left Front (LTG with HP9)**

Courtesy of GENERAL MOTORS COMPANY

**Items**

1. Q42 Turbocharger Wastegate Solenoid Valve (LTG) **Q42 Turbocharger Wastegate Solenoid Valve (LTG)**
2. Q40 Turbocharger Bypass Solenoid Valve (LTG) **Q40 Turbocharger Bypass Solenoid Valve (LTG)**
3. G1 A/C Compressor **G1 A/C Compressor X1 (HP9) G1 A/C Compressor X2 (HP9)**

**ENGINE COMPONENTS - RIGHT FRONT (LTG WITH HP9)**



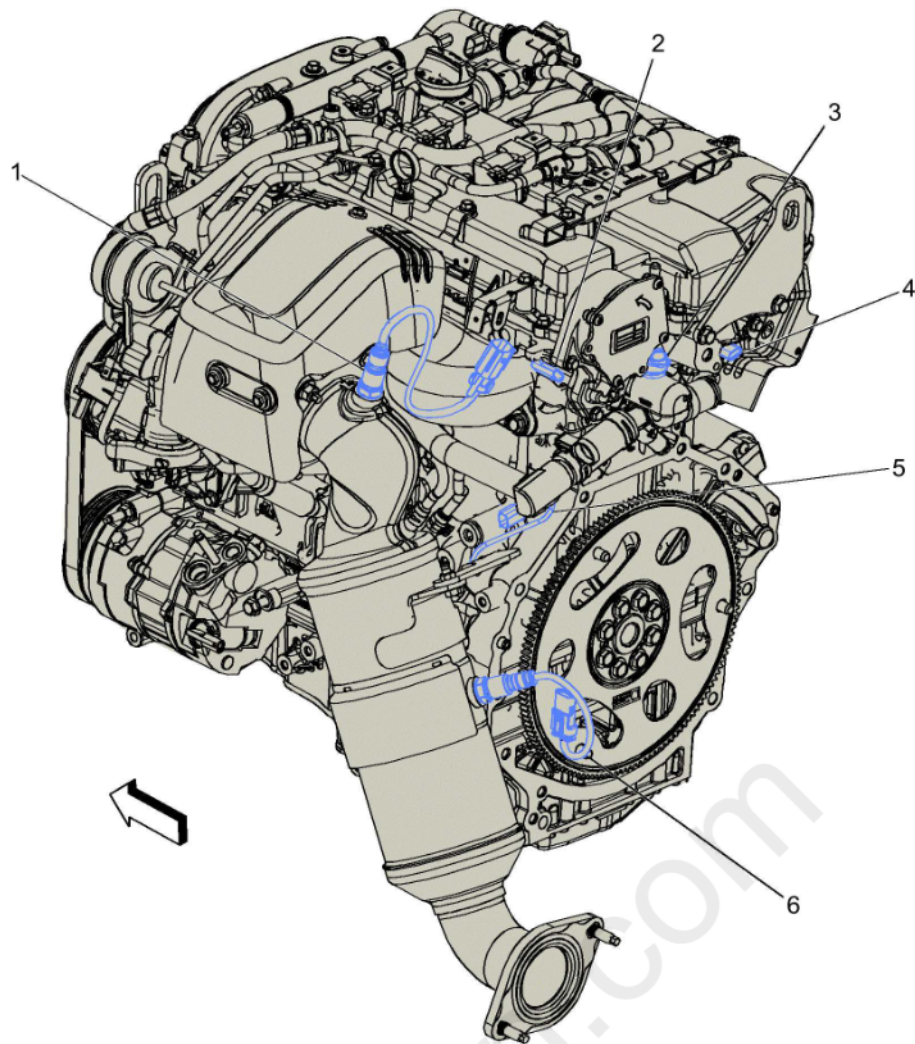
**Fig. 12: Engine Components - Right Front (LTG with HP9)**

Courtesy of GENERAL MOTORS COMPANY

**Items**

1. K71 Transmission Control Module **K71 Transmission Control Module (HP9) K71 Transmission Control Module (KL9)**

**ENGINE COMPONENTS - LEFT REAR (LTG)**

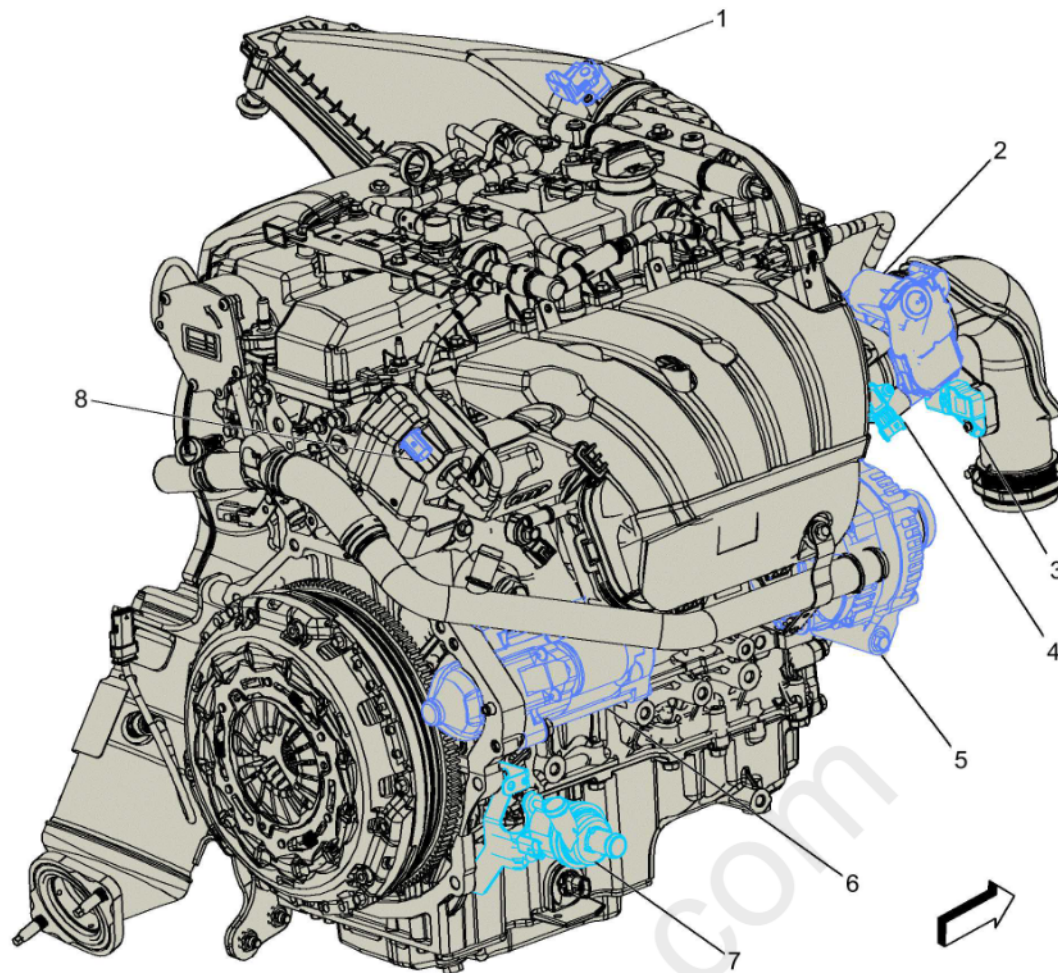


**Fig. 13: Engine Components - Left Rear (LTG)**  
 Courtesy of GENERAL MOTORS COMPANY

**Items**

1. B52A Heated Oxygen Sensor 1 (LTG) **B52A Heated Oxygen Sensor 1 (LTG)**
2. B23E Camshaft Position Sensor - Exhaust (LTG) **B23E Camshaft Position Sensor - Exhaust (LTG)**
3. B34 Engine Coolant Temperature Sensor **B34 Engine Coolant Temperature Sensor (LGW/LGX) B34 Engine Coolant Temperature Sensor (LTG+HP9) B34 Engine Coolant Temperature Sensor (LTG+KL9)**
4. B23F Camshaft Position Sensor - Intake (LTG) **B23F Camshaft Position Sensor - Intake (LTG)**
5. Q44 Engine Oil Pressure Control Solenoid Valve (LTG) **Q44 Engine Oil Pressure Control Solenoid Valve (LGW/LGX) Q44 Engine Oil Pressure Control Solenoid Valve (LTG)**
6. B52B Heated Oxygen Sensor 2 (LTG) **B52B Heated Oxygen Sensor 2 (LTG)**

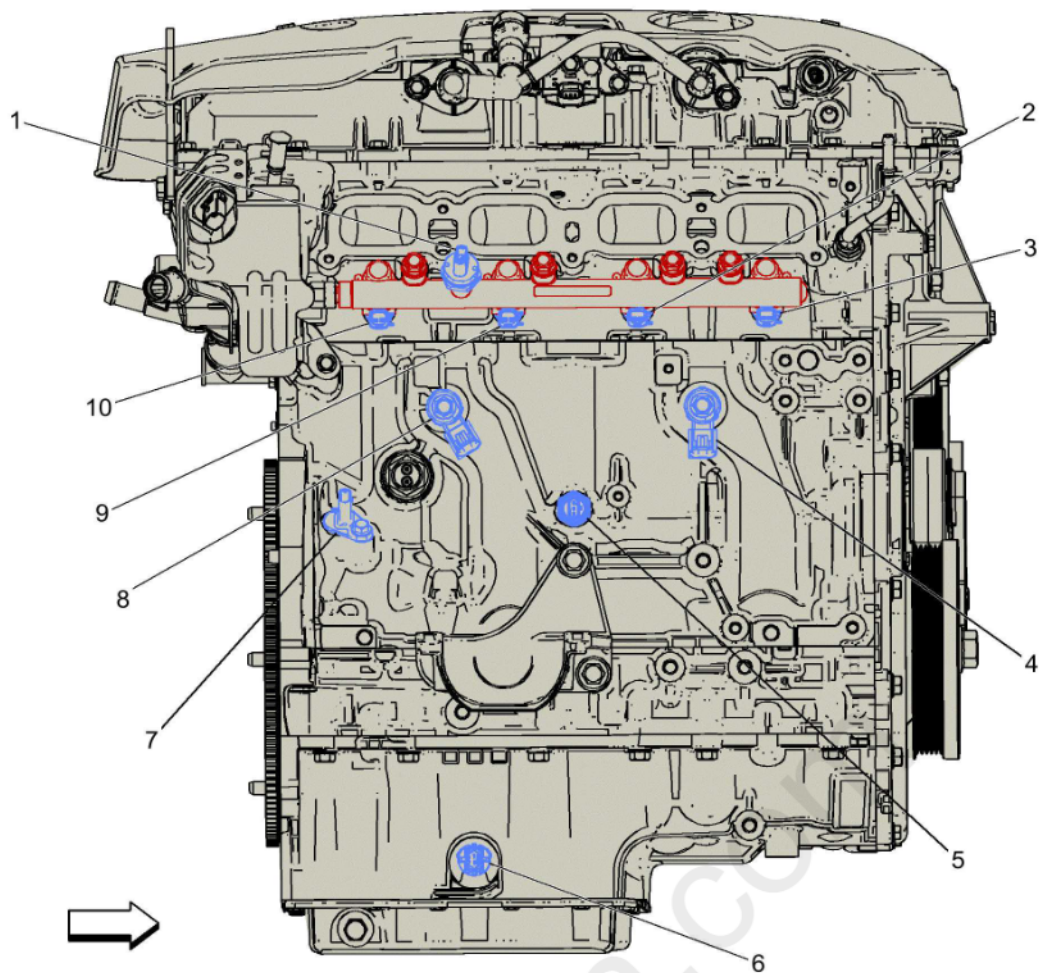
**ENGINE COMPONENTS - RIGHT REAR (LTG)**



**Fig. 14: Engine Components - Right Rear (LTG)**  
 Courtesy of GENERAL MOTORS COMPANY

| Items                                                     |                                                                                                                                                 |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. B75C Multifunction Intake Air Sensor                   | <b><u>B75C MULTIFUNCTION INTAKE AIR SENSOR (LTG)</u></b>                                                                                        |
| 2. Q38 Throttle Body                                      | <b><u>Q38 Throttle Body (LGW) Q38 Throttle Body (LGX/LTG)</u></b>                                                                               |
| 3. B111B Turbocharger Boost/Intake Air Temperature Sensor | <b><u>B111B Turbocharger Boost/Intake Air Temperature Sensor (LTG+HP9) B111B Turbocharger Boost/Intake Air Temperature Sensor (LTG+KL9)</u></b> |
| 4. B74 Manifold Absolute Pressure Sensor                  | <b><u>B74 Manifold Absolute Pressure Sensor (LGW/LGX) B74 Manifold Absolute Pressure Sensor (LTG+(HP9/KL9))</u></b>                             |
| 5. G13 Generator                                          | <b><u>G13 Generator X1 (KL9) G13 Generator X2 (KL9)</u></b>                                                                                     |
| 6. M64 Starter Motor                                      | <b><u>M64 STARTER MOTOR (LGW) M64 Starter Motor (LGX/(LTG+KL9))</u></b>                                                                         |
| 7. G17 Heater Coolant Pump                                | <b><u>G17 Heater Coolant Pump (LGW/LGX/(LTG+KL9))</u></b>                                                                                       |
| 8. G18 High Pressure Fuel Pump                            | <b><u>G18 High Pressure Fuel Pump (LTG) G18 High Pressure Fuel Pump (LGW/LGX)</u></b>                                                           |

**ENGINE COMPONENTS - RIGHT (LTG)**

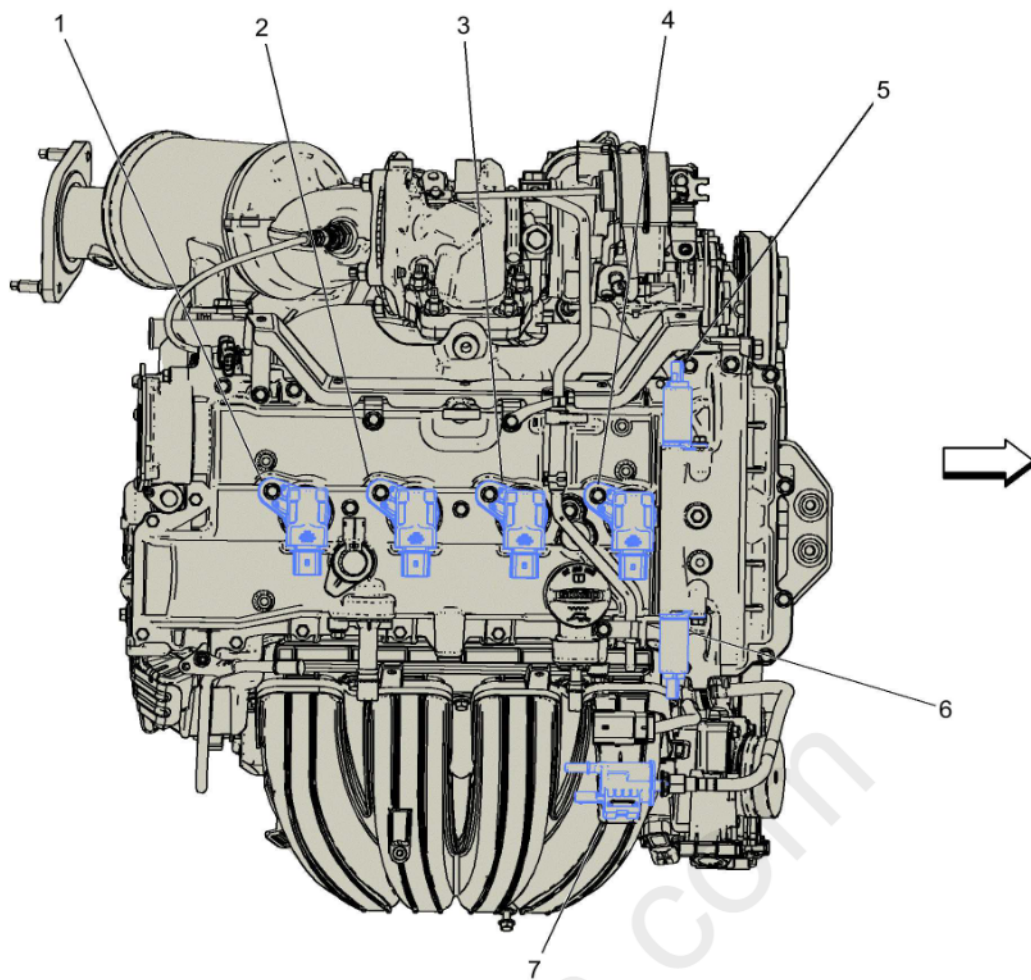


**Fig. 15: Engine Components - Right (LTG)**

Courtesy of GENERAL MOTORS COMPANY

| Items                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------|
| 1. B47B Fuel Rail Pressure Sensor <b><u>B47B Fuel Rail Pressure Sensor (LTG)</u></b>                                             |
| 2. Q17B Fuel Injector 2 <b><u>Q17B Fuel Injector 2 (LGW/LGX) Q17B Fuel Injector 2 (LTG)</u></b>                                  |
| 3. Q17A Fuel Injector 1 <b><u>Q17A Fuel Injector 1 (LTG)</u></b>                                                                 |
| 4. B68A Knock Sensor 1 <b><u>B68A Knock Sensor 1 (LGW) B68A Knock Sensor 1 (LGX/LTG)</u></b>                                     |
| 5. B37B Engine Oil Pressure Sensor <b><u>B37B Engine Oil Pressure Sensor (LGW/LGX) B37B Engine Oil Pressure Sensor (LTG)</u></b> |
| 6. B35 Engine Oil Level Switch <b><u>B35 Engine Oil Level Switch (LGW/LGX) B35 Engine Oil Level Switch (LTG)</u></b>             |
| 7. B26 Crankshaft Position Sensor <b><u>B26 Crankshaft Position Sensor (LGX) B26 Crankshaft Position Sensor (LTG)</u></b>        |
| 8. B68B Knock Sensor 2 <b><u>B68B Knock Sensor 2 (LGW) B68B Knock Sensor 2 (LGX/LTG)</u></b>                                     |
| 9. Q17C Fuel Injector 3 <b><u>Q17C Fuel Injector 3 (LGW/LGX) Q17C Fuel Injector 3 (LTG)</u></b>                                  |
| 10. Q17D Fuel Injector 4 <b><u>Q17D Fuel Injector 4 (LGW/LGX) Q17D Fuel Injector 4 (LTG)</u></b>                                 |

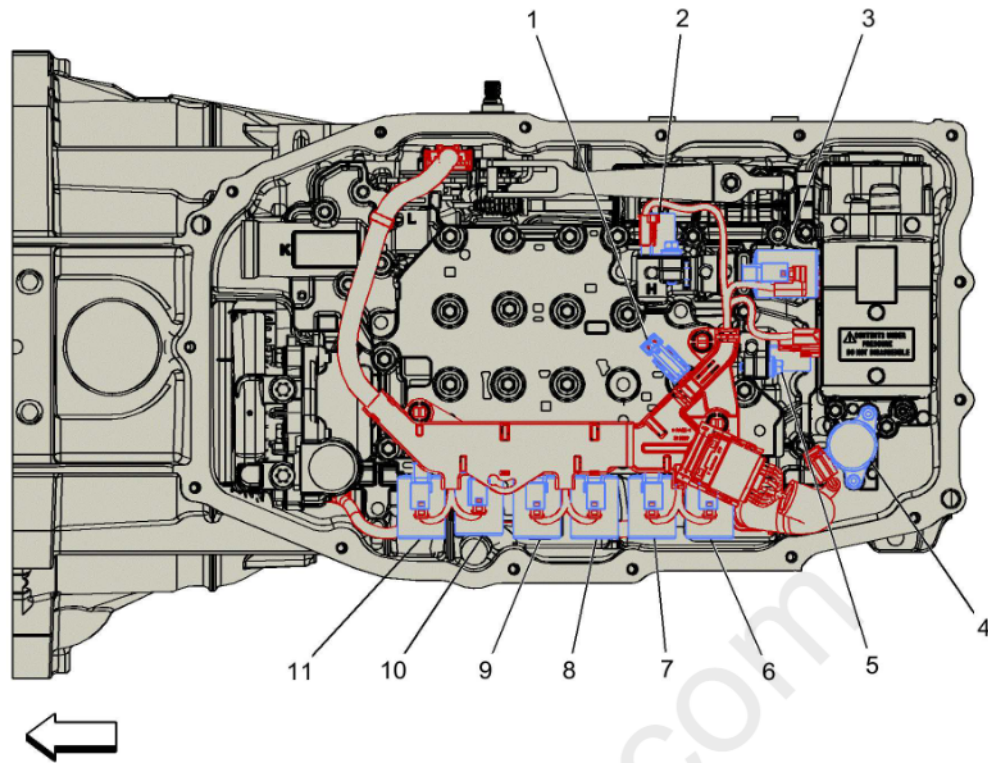
## **ENGINE COMPONENTS - TOP (LTG)**



**Fig. 16: Engine Components - Top (LTG)**  
 Courtesy of GENERAL MOTORS COMPANY

| Items                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------|
| 1. T8D Ignition Coil 4 <u><b>T8D Ignition Coil 4 (LGW/LGX) T8D Ignition Coil 4 (LTG)</b></u>                                                 |
| 2. T8C Ignition Coil 3 <u><b>T8C Ignition Coil 3 (LGW/LGX)</b></u>                                                                           |
| 3. T8B Ignition Coil 2 <u><b>T8B Ignition Coil 2 (LGW/LGX) T8B Ignition Coil 2 (LTG) T8B Ignition Coil 2 (LTG+KL9)</b></u>                   |
| 4. T8A Ignition Coil 1 <u><b>T8A Ignition Coil 1 (LGW/LGX) T8A Ignition Coil 1 (LTG)</b></u>                                                 |
| 5. Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (LTG) <u><b>Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (LTG)</b></u> |
| 6. Q6F Camshaft Position Actuator Solenoid Valve - Intake (LTG) <u><b>Q6F Camshaft Position Actuator Solenoid Valve - Intake (LTG)</b></u>   |
| 7. Q12 Evaporative Emission Purge Solenoid Valve <u><b>Q12 Evaporative Emission Purge Solenoid Valve</b></u>                                 |

## **AUTOMATIC TRANSMISSION VALVE BODY COMPONENTS**

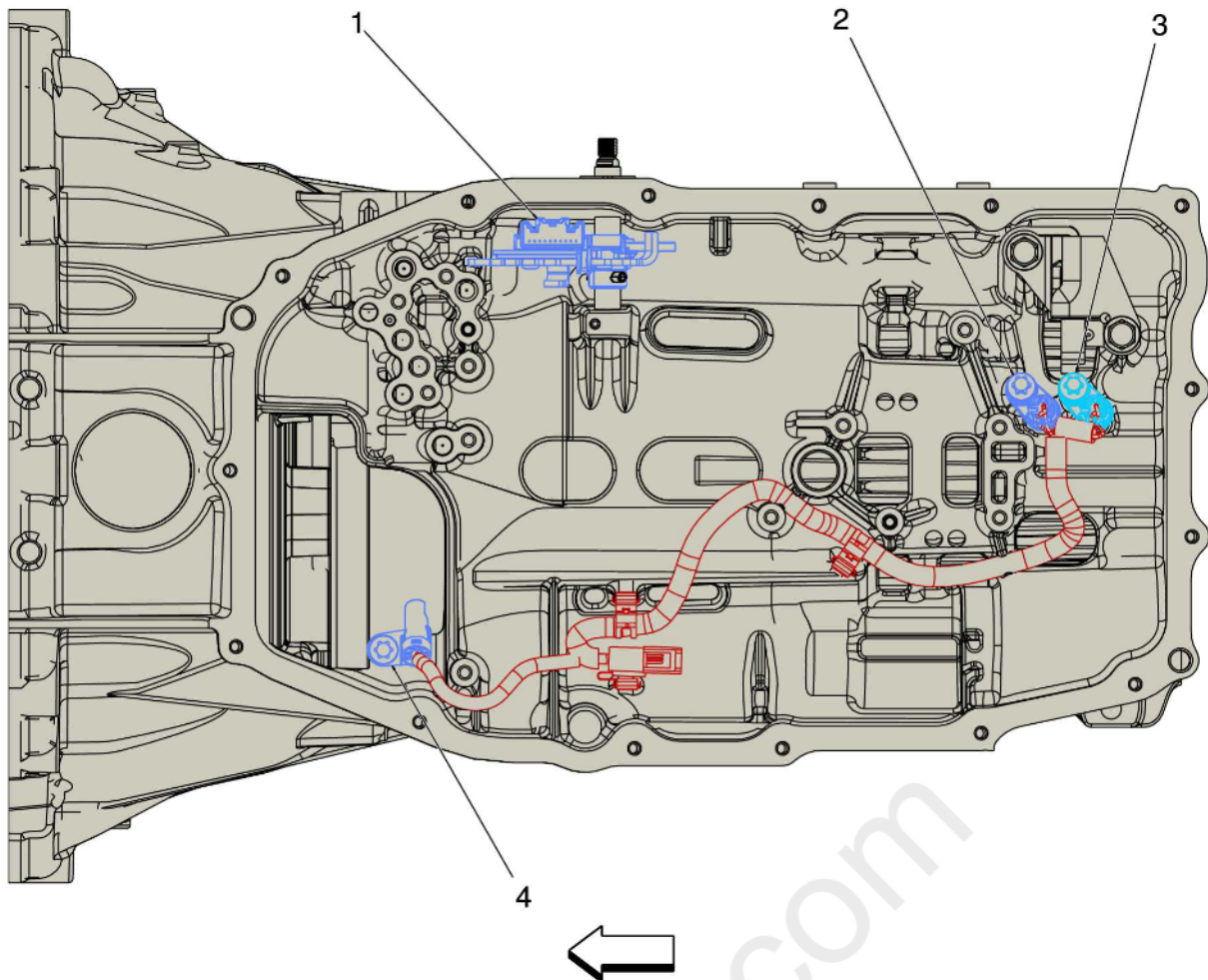


**Fig. 17: Automatic Transmission Valve Body Components**  
**Courtesy of GENERAL MOTORS COMPANY**

**Items**

1. B13 Transmission Fluid Temperature Sensor
2. Q77H Transmission Control Solenoid Valve 8 **Q77H Transmission Control Solenoid Valve 8 (M5N/M5X)**
3. Q77F Transmission Control Solenoid Valve 6 **Q77F Transmission Control Solenoid Valve 6 (M5N/M5X)** **Q77F Transmission Control Solenoid Valve 6 (MRD)**
4. B280 Automatic Transmission Accumulator Solenoid Valve **B280 Automatic Transmission Accumulator Solenoid Valve (KL9)**
5. Q77J Transmission Control Solenoid Valve 9 **Q77J Transmission Control Solenoid Valve 9 (M5N/M5X)**
6. Q77B Transmission Control Solenoid Valve 2 **Q77B Transmission Control Solenoid Valve 2 (M5N/M5X)** **Q77B Transmission Control Solenoid Valve 2 (MRD)**
7. Q77A Transmission Control Solenoid Valve 1 **Q77A Transmission Control Solenoid Valve 1 (M5N/M5X)** **Q77A Transmission Control Solenoid Valve 1 (MRD)**
8. Q77E Transmission Control Solenoid Valve 5 **Q77E Transmission Control Solenoid Valve 5 (M5N/M5X)** **Q77E Transmission Control Solenoid Valve 5 (MRD)**
9. Q77C Transmission Control Solenoid Valve 3
10. Q77D Transmission Control Solenoid Valve 4 **Q77D Transmission Control Solenoid Valve 4 (M5N/M5X)** **Q77D Transmission Control Solenoid Valve 4 (MRD)**
11. Q77G Transmission Control Solenoid Valve 7 **Q77G Transmission Control Solenoid Valve 7 (M5N/M5X)**

**AUTOMATIC TRANSMISSION CASE COMPONENTS**



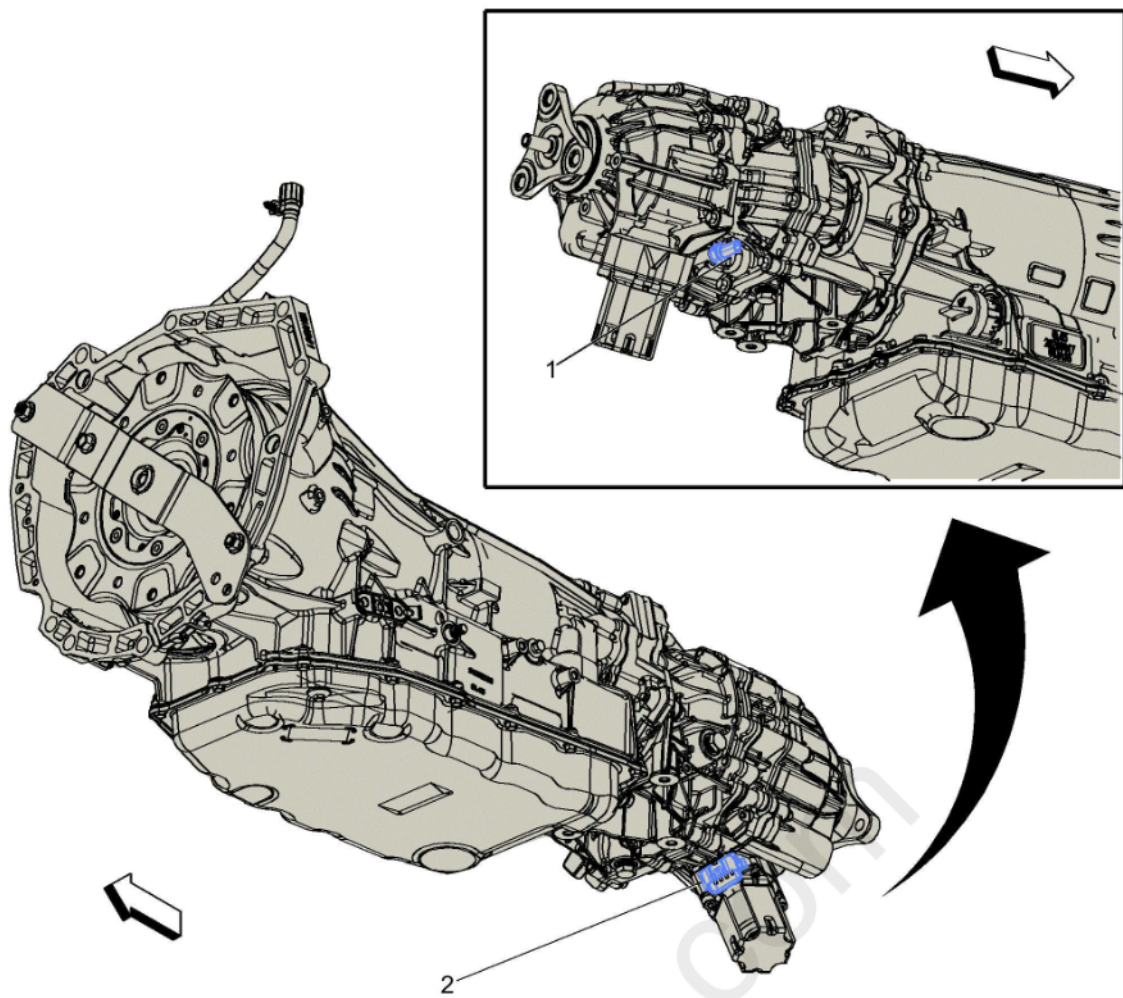
**Fig. 18: Automatic Transmission Case Components**

Courtesy of GENERAL MOTORS COMPANY

**Items**

1. B15 Transmission Internal Mode Switch **B15 Transmission Internal Mode Switch B15 Transmission Internal Mode Switch (HP9)**
2. B14D Transmission Intermediate Shaft Speed Sensor
3. B14A Transmission Output Shaft Speed Sensor
4. B14C Transmission Input Shaft Speed Sensor

**TRANSFER CASE COMPONENTS (F46)**



**Fig. 19: Transfer Case Components (F46)**

Courtesy of GENERAL MOTORS COMPANY

**Items**

1. B109 Transfer Case Fluid Temperature Sensor (F46) **B109 Transfer Case Fluid Temperature Sensor ((LGW/LGX)+F46)**
2. A16 Transfer Case Motor (F46) **A16 Transfer Case Motor (F46)**