

Supply Pump

Special for Bosch system

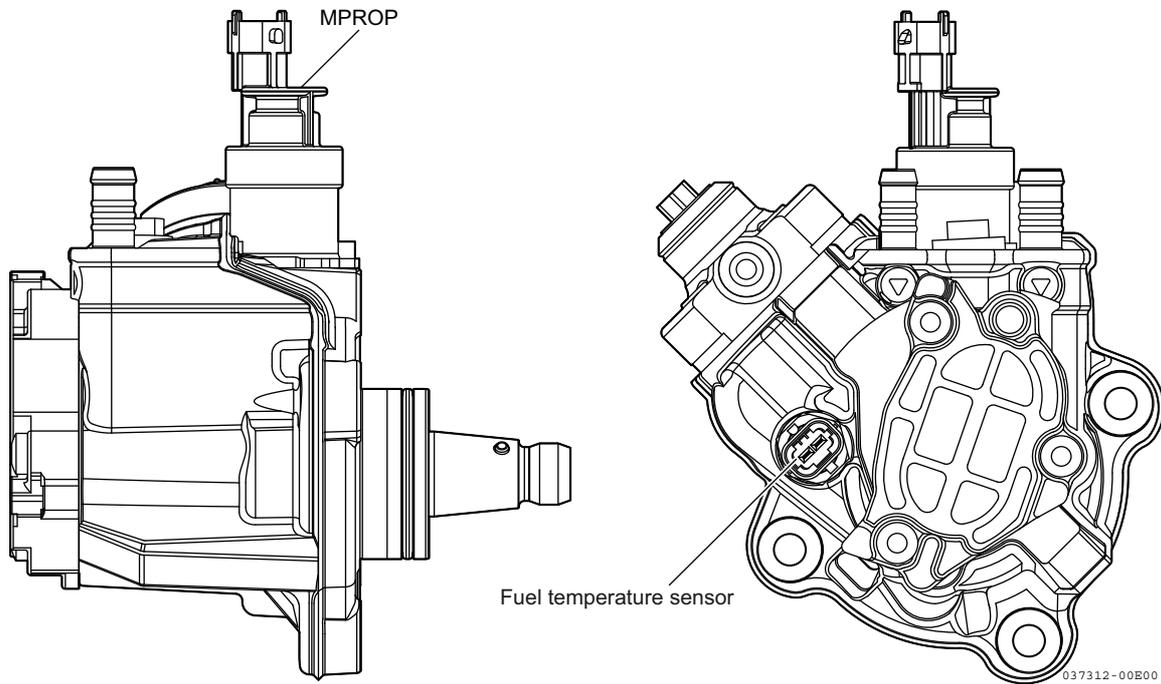


Figure 14-58 Supply pump (special for Bosch system)

Item	Supply pump (MPROP)	Fuel temperature sensor
Part number	129A00-51000	129A00-51000
Water resistance	–	IPX4K equivalent
Temperature	-20 to 100 °C	-20 to 100 °C
Vibration	*Under investigation	*Under investigation

Special for Denso system

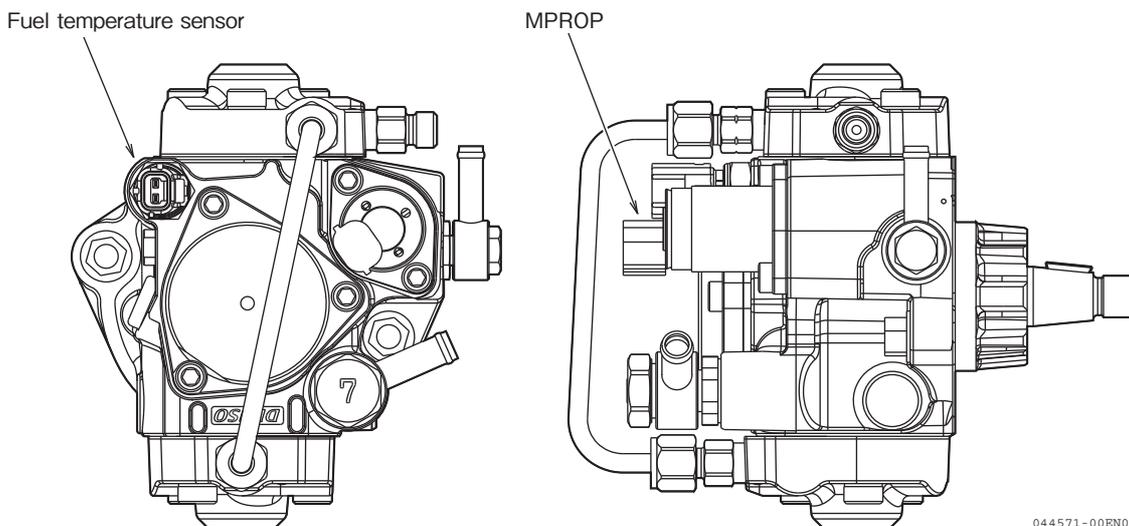


Figure 14-59 Supply pump (special for Denso system)

Item	Supply pump (MPROP)	Fuel temperature sensor
Part number	129978-51000	129978-51000
Water resistance	*Under investigation	*Under investigation
Vibration	*Under investigation	*Under investigation

Rail Pressure Sensor

Special for Bosch system

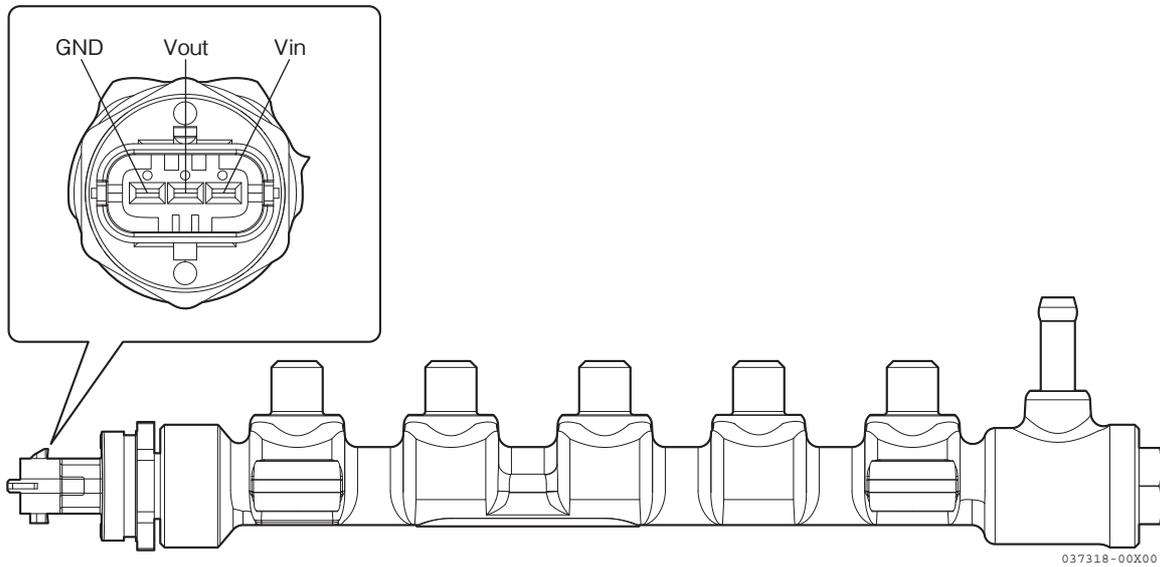
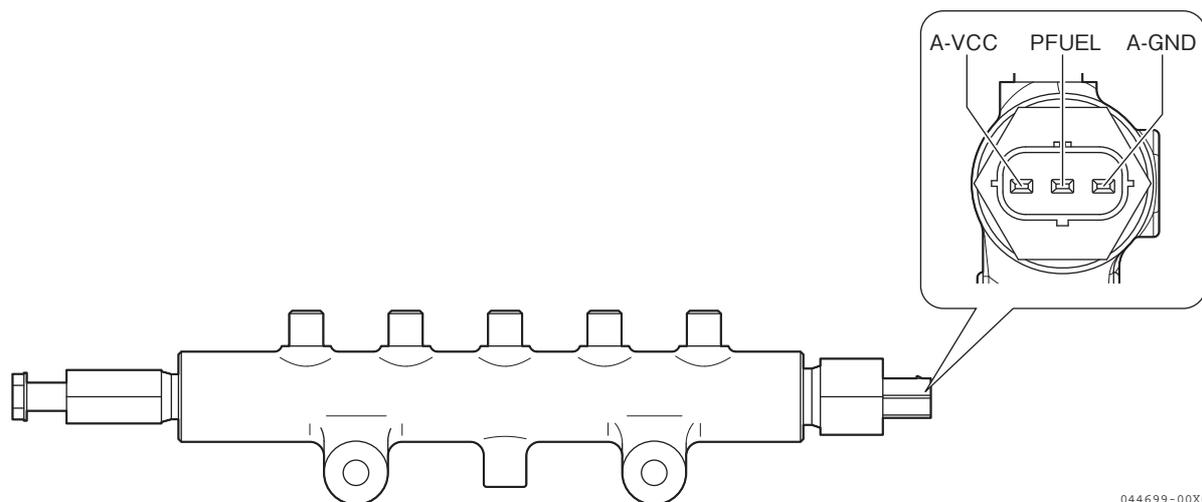


Figure 14-60 Rail pressure sensor (special for Bosch system)

Item	3TNV88C, 3TNV86T	4TNV88C, 4TNV86CT 4TNV98C, 4TNV98CT
Part number	129A00-57000	129C00-57000
Water resistance	IPX6K/9K equivalent	IPX6K/9K equivalent
Temperature	-20 to 100 °C	-20 to 100 °C
Vibration	*Under investigation	*Under investigation

Special for Denso system



044699-00X00

Figure 14-61 Rail pressure sensor (special for Denso system)

Item	Content
Part number	129978-57000
Water resistance	*Under investigation
Vibration	*Under investigation

Crank Rotation Sensor

Special for Bosch system

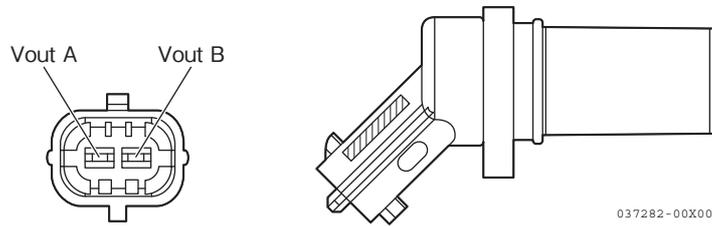


Figure 14-62 Crank rotation sensor (special for Bosch system)

Item	Content
Part number	529A00-21710
Water resistance	IPX6K/9K equivalent
Sensor installation tightening torque	8 ± 2 N·m
Temperature	-20 to 100 °C
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped.

Special for Denso system

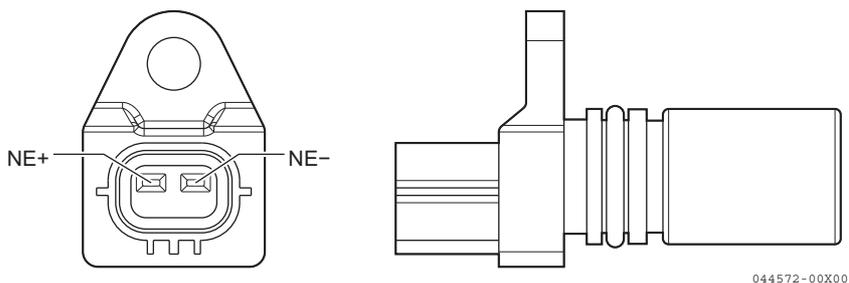


Figure 14-63 Crank rotation sensor (special for Denso system)

Item	Content
Part number	127677-91260
Water resistance	*Under investigation
Sensor installation tightening torque	5 to 8 N·m
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped.

Cam Speed Sensor

Special for Bosch system

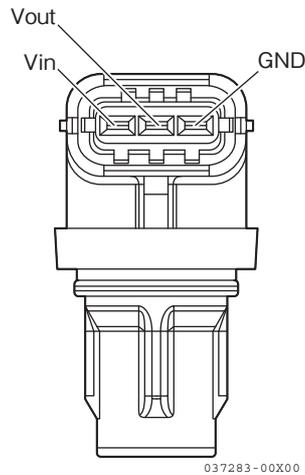


Figure 14-64 Cam rotation sensor (special for Bosch system)

Item	Content
Part number	529A00-14710
Water resistance	IPX9K equivalent
Sensor installation tightening torque	8 ± 0.5 N·m
Temperature	-20 to 100 °C
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped.

Special for Denso system

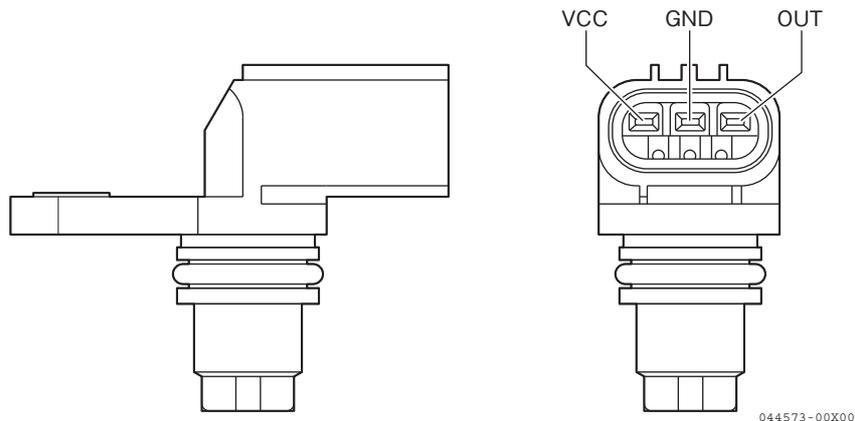


Figure 14-65 Cam rotation sensor (special for Denso system)

Item	Content
Part number	129978-25710
Water resistance	*Under investigation
Sensor installation tightening torque	8 to 12 N·m
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped.

Cooling Water Temperature Sensor

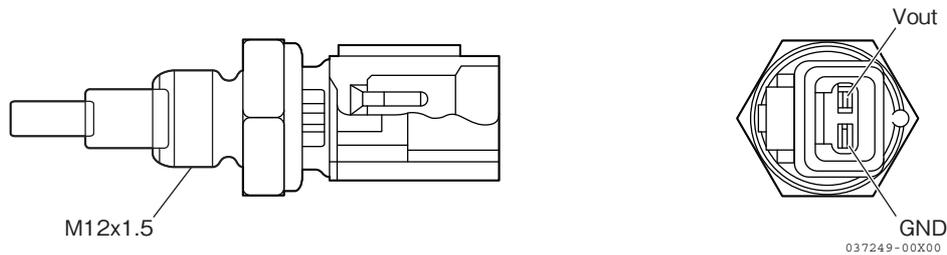


Figure 14-66 Water temperature sensor

Item	Content
Part number	129927-44900
Mating part connector	Housing: AMP 178390-2 Clamping contact: AMP 171662-5 Rubber plug: AMP 172746-2
Sensor installation tightening torque	22 ± 2 N·m
Temperature	*Under investigation
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped.

New Air Temperature Sensor

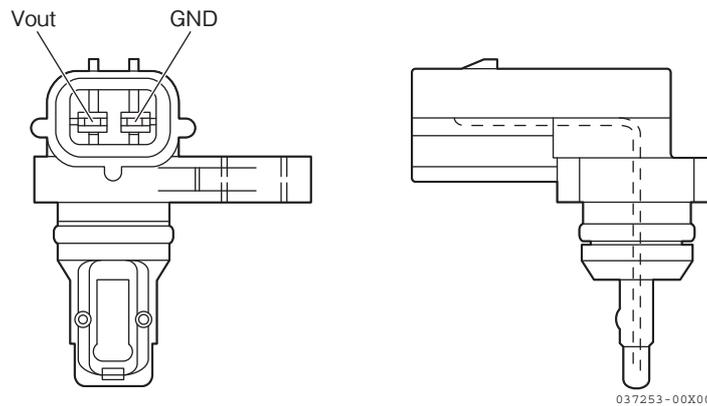
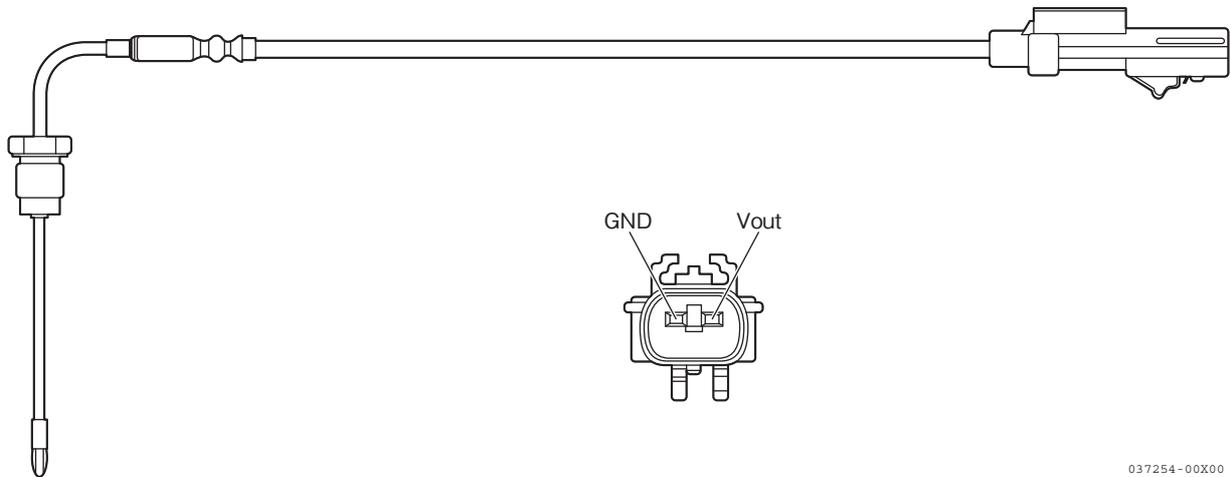


Figure 14-67 New air temperature sensor

Item	Content
Part number	129A00-12710
Mating part connector	AMP: 174352
Water resistance	JIS D0203 S2 equivalent
Sensor installation tightening torque	7 ± 1.4 N·m
Temperature	*Under investigation
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped.

Diesel Particulate Filter (DPF) Inside/Inlet and Exhaust Temperature Sensors

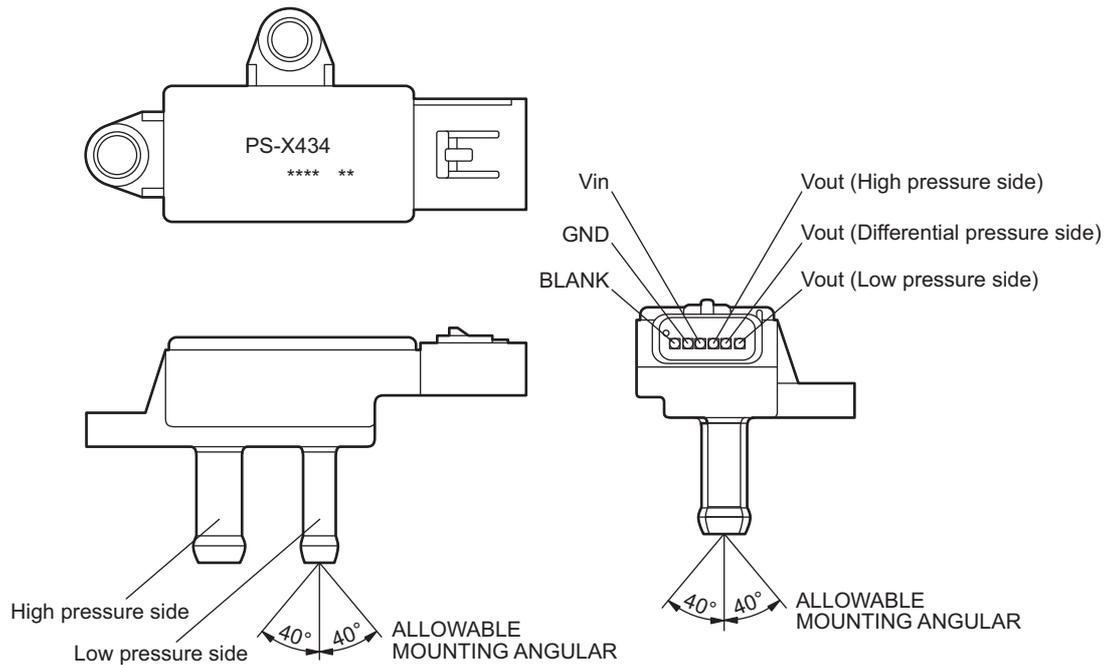


037254-00X00

Figure 14-68 DPF inside/inlet and exhaust temperature sensors

Item	Exhaust temperature sensor	DPF intermediate temperature sensor	DPF inlet temperature sensor
Part number	129A00-13760 (Representative)	129A00-13980	129A00-13990
Mating part connector	FCI 54200 207 "B"	FCI 54200 206 "A"	FCI 54200 208 "C"
	*To avoid mistakes, the coupler keys are different		
Water resistance	JIS D0203 S2 equivalent	JIS D0203 S2 equivalent	JIS D0203 S2 equivalent
Sensor installation tightening torque	25 ± 40 N·m	25 ± 40 N·m	25 ± 40 N·m
Vibration	*Under investigation	*Under investigation	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped. Do not lift the DPF by holding the sensor part. 		

Diesel Particulate Filter (DPF) Differential Pressure Sensor



037255-00E00

Figure 14-69 New air temperature sensor

Item	Content
Part number	129A00-17700
Mating part connector	AMP: 1438153-5
Sensor inlet gas temperature	≤ 120 °C
Water resistance	JIS D0203 S2 equivalent
Sensor installation tightening torque	7 ± 1.4 N·m
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped. Install the differential pressure switch so that the allowed angle shown in the above figure is met even when the vehicle is tilted. If you install a pipe to the DPF differential pressure sensor, do not install it as shown in the below figure. If water collects, the pressure cannot be detected. <p style="text-align: right;">037256-00E00</p>

EGR Pressure Sensor

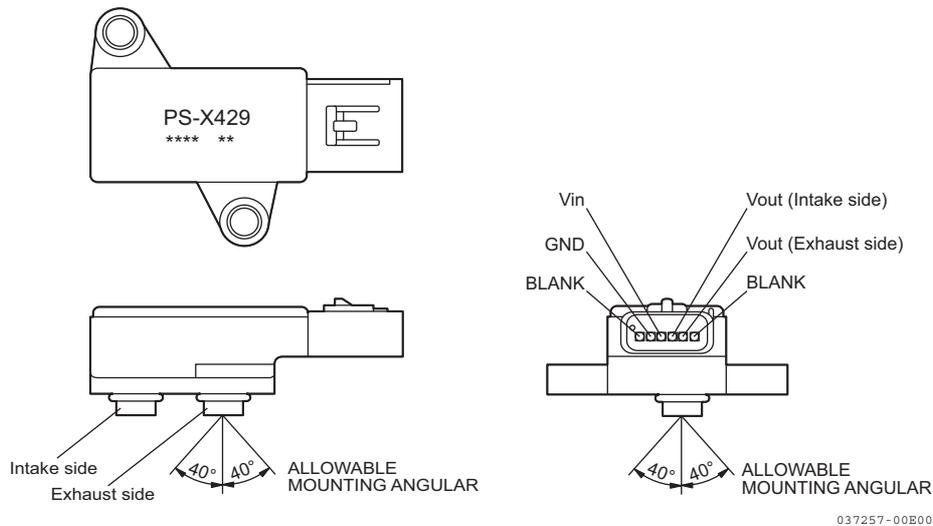


Figure 14-70 EGR pressure sensor

Item	Content
Part number	129A00-12700
Mating part connector	AMP: 1438153-5
Water resistance	JIS D0203 S2 equivalent
Sensor installation tightening torque	7 ± 1.4 N·m
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped. Install the differential pressure switch so that the allowed angle shown in the above figure is met even when the vehicle is tilted.

Intake Temperature Sensor

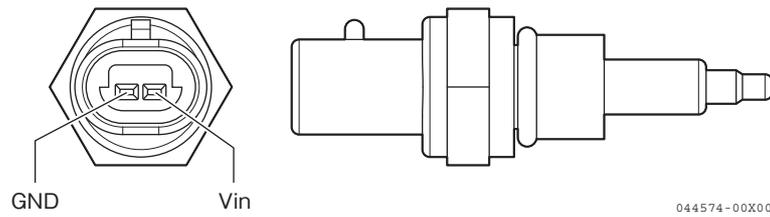


Figure 14-71 Intake temperature sensor

Item	Content
Part number	129A00-12720
Mating part connector	DELPHI: GT15335987
Water resistance	*Under investigation
Sensor installation tightening torque	14 ± 3 N·m
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped.

EGR Temperature Sensor

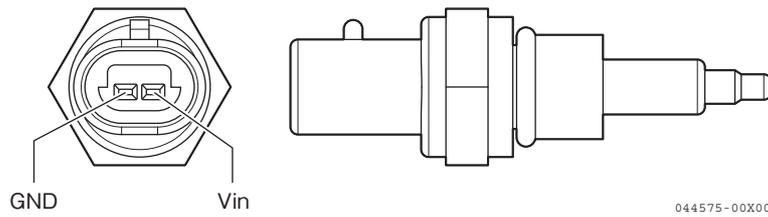


Figure 14-72 EGR temperature sensor

Item	Content
Part number	129A00-13750
Mating part connector	DELPHI: GT15336004
Water resistance	*Under investigation
Sensor installation tightening torque	14 ± 3 N·m
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use sensors that dropped.

EGR Valve

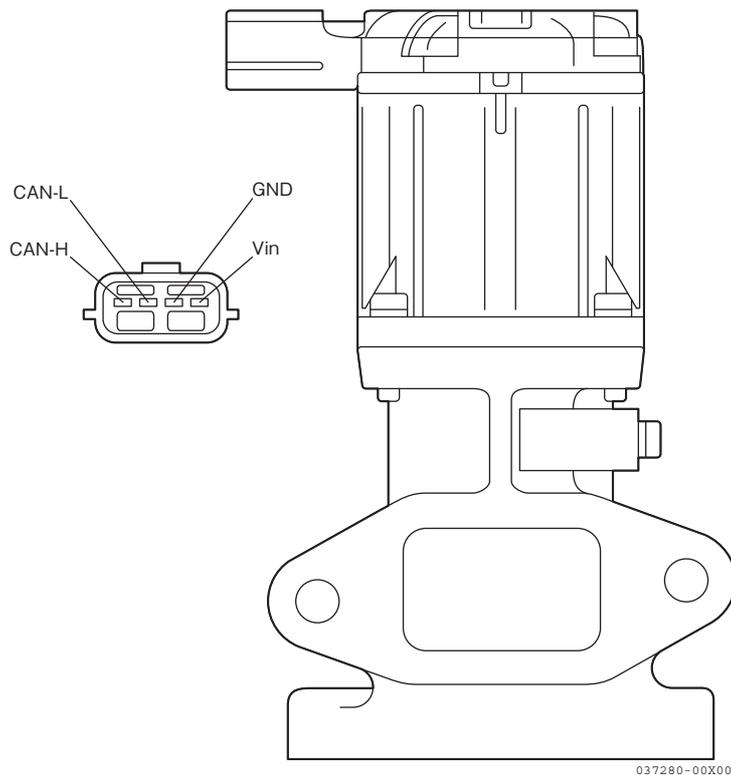


Figure 14-73 EGR Valve

Model	Part Number
3TNV88C, 3TNV86T	129A00-13900
4TNV88C, 4TNV86CT	129C00-13900
4TNV98C, 4TNV98CT	129E00-13900

Item	Content
Mating part connector	Sumitomo Wiring Systems: 6195-0030
Water resistance	JIS D0203 S1 equivalent
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use EGR valves that dropped. Do not do high-pressure cleaning.

intake Air Throttles

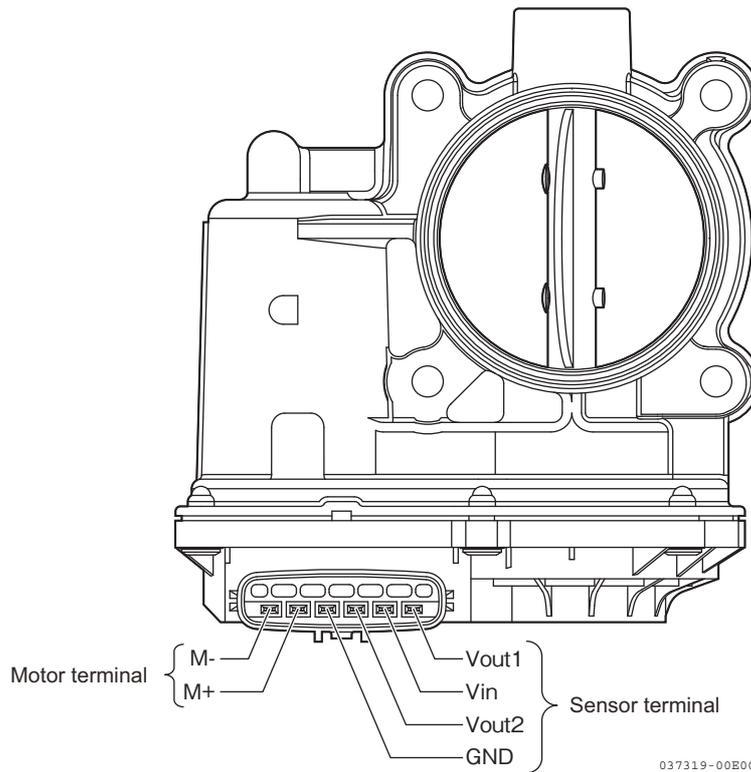


Figure 14-74 Intake air throttles

Item	Content
Part number	129A00-12900
Mating part connector	Yazaki Corporation: 7283-1968-30
Water resistance	JIS D0203 S2 equivalent
Sensor installation tightening torque	9.0 ± 1.8 N·m
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use intake air throttles that dropped. Do not expose to excessive impact or load. Do not touch moving parts. Do not forcefully retain moving parts.

Exhaust Air Throttles

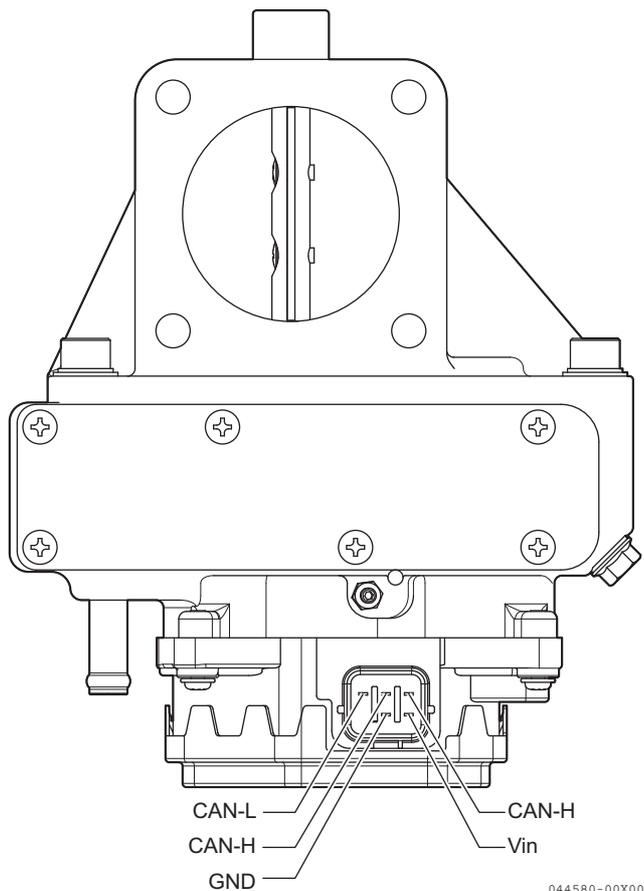


Figure 14-75 Exhaust air throttles

Item	Content
Part number	529C00-13510
Mating part connector	Yazaki Corporation: 7283-1968-30
Water resistance	JIS D0203 S2 equivalent
Vibration	*Under investigation
Safety precaution	<ul style="list-style-type: none"> Do not use throttles that dropped. Do not expose to excessive impact or load. Do not touch moving parts. Do not forcefully retain moving parts.

Acceleration Sensor

The acceleration sensor you use may be YANMAR standard acceleration sensor shown in **Figure 14-76** or equivalent. For general requirements regarding the acceleration sensor, refer to **Figure 14-2**, **Table 14-8**, *Electric acceleration on page 14-56*.

The acceleration sensor may be omitted for generator engines (which are provided as standard engines to be installed on driven machines for generators) and other constant speed engines; for more information, contact YANMAR.

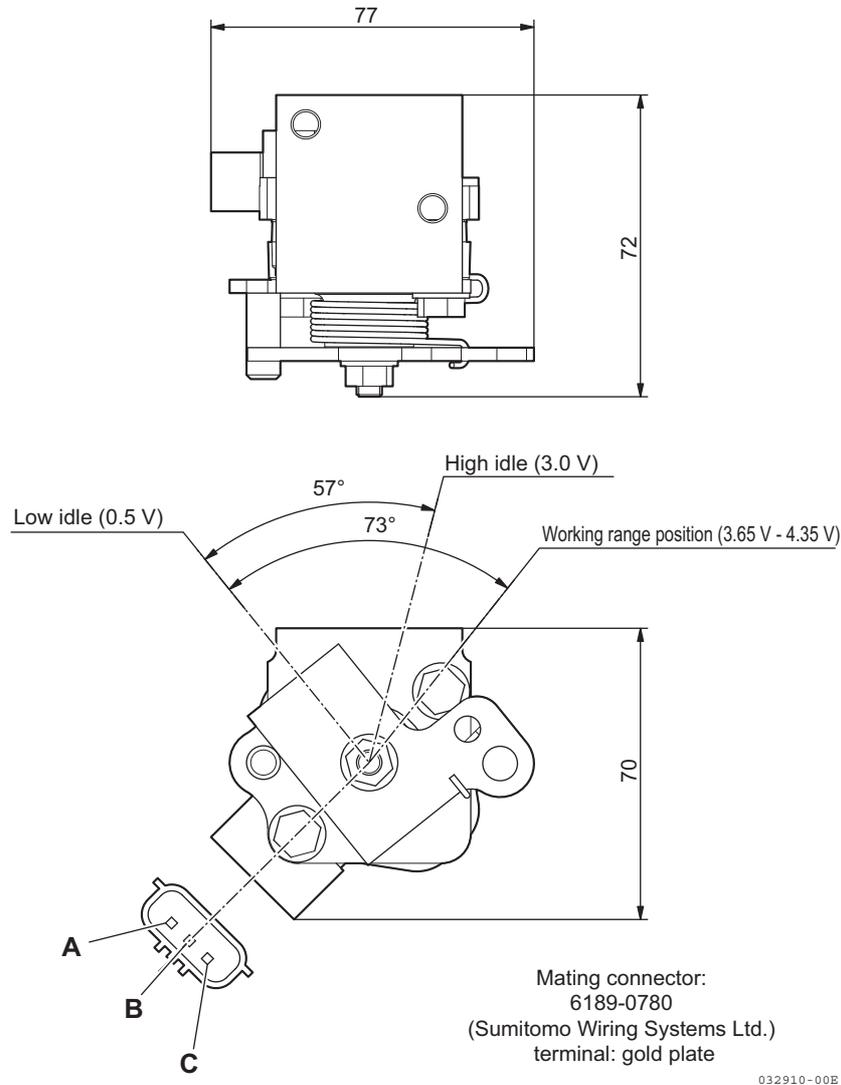


Figure 14-76 YANMAR standard acceleration sensor (129938-77800)

Terminal	Wire
A	GND GND-A
B	OUTPUT APS
C	INPUT AVCC