

ADVANCE

Defi-Link ADVANCE System sensor set installation manual

This product is a repair/optional part for Defi-Link ADVANCE System. This product alone does not function. Please refer to Defi-Link ADVANCE System operation manual as well



This product contains sensor, sensor wire, attachments and additional parts to provide gauges that reads and displays vehicle information with sensor signals. When installing and operating this product, be sure to read the cautionary items of this operation manual as well as those given in the operation manual for the vehicle in which this product will be installed. Please obtain a full understanding of the cautionary items and use the product accordingly.

In the event that this product (or the vehicle in which it is installed) is lent to or transferred to another person, please be sure this operation manual accompanies the product

Lineup (for customer)			
Product name	Product No.	Components	
Turbo sensor set	PDF07806SS	turbo sensor, turbo sensor harness (2.5m), 3-way joint, rubber hose (0.5m)	
Oil pressure sensor set	PDF08106SS	pressure sensor, oil pressure sensor harness (3m)	
Fuel pressure sensor set	PDF08205SS	pressure sensor, fuel pressure sensor harness (2.5m)	
Oil temperature sensor set	PDF08305SS	temperature sensor, oil temperature sensor harness(3m)	
Water temperature sensor set	PDF08405SS	temperature sensor, water temperature sensor harness(3m)	
Exhaust temperature sensor set	PDF08505SS	exhaust temperature sensor, exhaust temperature sensor harness(2.5m), fitting	

^{*}Turbo sensor set is used for intake manifold pressure.

Safety Warning (Please read carefully.)

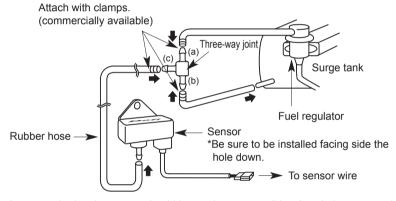
In this manual, the degree of hazard arising from actions such as improper operation is separated into the 3 levels "Danger," "Warning," and "Caution." In addition, instructions that must be followed for safe and proper use of this product as well as practices that must be maintained are marked with a "Confirmation" heading. Please read and become familiar with these sections.

<u> </u>	Indicates the imminent dangerous situation of death or serious injury if the product is mishandled.
Marning	Indicates the possibility of death or serious injury if the product is mishandled.
A Caution	Indicates a conceivable source of personal injury or damage to equipment if the product is improperly operated.
Confirmation	Indicates an instruction that must be performed or practice that must be maintained.

Properties for safety warning

\triangle	⚠ Indicates attention needs to be paid. (Including warnings)
○ Prohibited	NIndicates restricted actions. (PROHIBITED actions)
• Must	Indicates actions that need to be carried out. (MUST actions)

How to attach boost sensor set



- 1) The rubber hose attached to the sensor should be as short as possible. Attach the sensor with bolts (M6) in the engine compartment in an area where it will not be subject to excess heat or vibration.
- 2) Access to the air pressure intake may be obtained between the surge tank and the fuel regulator. (A)Detach the vacuum hose from the surge tank side that has less pressure oscillations and connect it to the point (a) or (b) of the three way joint.
 - (B)In order to connect the surge tank with three way joint, cut the required length of the hose from the included rubber hose.
 - (C)Use the remaining rubber hose to connect the sensor to the three way joint.

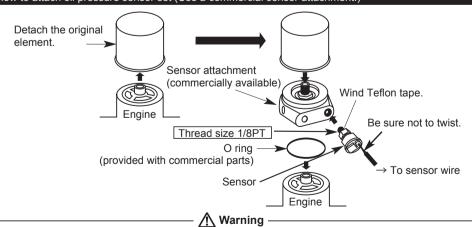
Marning

To avoid disconnection of rubber hose and air leak, attach hose clamps or use tie-wraps to secure the adjacent hose in the engine compartment. Disconnected hose or air leak could cause damage to the engine.

Confirmation

- The length of the included rubber hose is 0.5m. Please adjust appropriately.
- The included three-way joint can be used only for the piping inner diameter of Φ4 between the surge tank and fuel pressure regulator. In case of other than Φ4, use another joint that fits properly.
- The sensor must be installed being the rubber hose connection side faced down.
- For vehicles which have a solenoid valve between the surge tank and the fuel pressure regulator, place a three-way joint closer to the surge tank side than to the solenoid side.

■How to attach oil pressure sensor set (Use a commercial sensor attachment.)



• Be sure the sensor wire is not twisted when installing the sensor. The sensor wire will be cut.

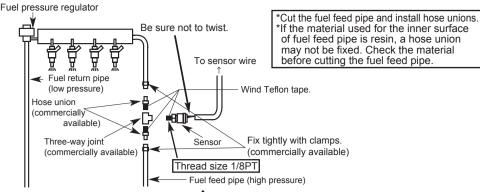
- Oil spills by the installation work. Please replenish the engine with oil. The engine might overheat
- To avoid oil leaks by installing of the sensors, use Teflon tape. Before driving, inspect oil blocks for
- leaks. Leaks could cause a fire or damage the engine.

 O Do not install the sensor near oil pump. Do not install the sensor to pressure switch directly. Failure to do so could damage the sensor because the pressure pulsation is too big and exceed three times
- To avoid the damage of the sensor wire, please fix the waterproof connector on the vehicle body and do not bend the sensor wire near the sensor.

Confirmation

- The thread size of the pressure sensor is 1/8PT. Use a sensor attachment of 1/8PT.
- Tighten the sensor into the sensor attachment and then connect it to the sensor wire.

How to attach fuel pressure sensor set (Use a commercial three-way joint and hose unions.)



⚠ Warning

- Be sure the sensor wire is not twisted when installing the sensor. The sensor wire will be cut.
- Before cutting the fuel feed pipe, be certain to remove the gas cap to relieve any pressure built up in the fuel tank.
 When cutting the fuel feed pipe, be certain to discharge static electricity. Otherwise, there is a possibility of the ignition in gasoline.
- Wear glasses to protect eyes when cutting the fuel filter pipe.
- To avoid fuel leaks during installation of the sensor, use Teflon tape. Attach hose connection and fuel feed tubing with clamps. Inspect pipes and hose connections for leaks before driving.
- To avoid the damage of the sensor wire, please fix the waterproof connector on the vehicle body and do not bend the sensor wire near the sensor

Confirmation

- The sensor must be installed on the feed (high pressure) pipe side between the fuel tank and the fuel pressure regulator. It is not possible to obtain accurate fuel pressure from the return (low pressure) side at the rear of the fuel pressure regulator.
- The thread size of hose unions and the three-way joint need to be 1/8PT. Use hose unions and a three-way joint of 1/8PT.
- Tighten the sensor into the sensor attachment and then connect it to the sensor wire.

■How to attach oil temperature sensor set (Use a commercial sensor attachment.) Detach the original element. Sensor attachment (commercially available) Wind Teflon tape. Be sure not to twist Senso

Do not put the sensor in the side O ring (provided with hole. The depth of the hole for the → To sensor wire sensor must be more than 30mm. commercial parts Thread size 1/8PT

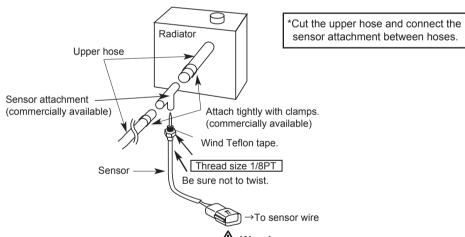
∠!\ Warning

- Be sure the sensor wire is not twisted when installing the sensor. The sensor wire will be cut.
 Oil spills by the installation work. Please replenish the engine with oil. The engine might overheat when oil is too little.
 To avoid oil leaks by installing of the sensors, use Teflon tape. Before driving, inspect oil blocks for
- leaks. Leaks could cause a fire or damage the engine. To avoid the damage of the sensor wire, please fix the waterproof connector on the vehicle body and do not bend the sensor wire near the sensor.

Confirmation

- The thread size of the temperature sensor is 1/8PT. Use a sensor attachment of 1/8PT.
- The depth of the hole for the sensor must be more than 30mm.
- Tighten the sensor into the sensor attachment and then connect it to the sensor wire.

■How to attach water temperature sensor set (Use a commercial sensor attachment.)



⚠ Warning -

- Be sure the sensor wire is not twisted when installing the sensor. The sensor wire will be cut. Ocolant spills by the installation work. Please replenish the engine with coolant and bleed the air from the system, or the engine might overheat.
- To avoid water leaks during installation of the sensors, use Teflon tape. Attach the sensor attachment and upper hose with clamps. Inspect hose connections for leaks before driving
- To avoid the damage of the sensor wire, please fix the waterproof connector on the vehicle body and do not bend the sensor wire near the sensor.

Confirmation

- The thread size of the temperature sensor is 1/8PT. Use a sensor attachment of 1/8PT
- Tighten the sensor into the sensor attachment and then connect it to the sensor wire

IHow to attach exhaust temperature sensor set Make a threaded screw hole (1/8PT). Fitting(a) Bushing Fitting(b) Exhaust temperature sensor Exhaust Sensor wire manifold Thread size 1/8PT

- 1) Make a 1/8PT threaded screw hole in the exhaust manifold pipe. (Weld if the pipe wall thickness is not enough)
- 2) Dismantle the fitting. Do not crush the bushing inside the fitting.
- 3) Tighten the fitting(a) to the hole of the exhaust manifold.
- 4) Pierce the sensor through the fitting(b) and the busing.
- 5) Insert the edge of the sensor into the fitting(a) and position it at the center of the exhaust pipe.
- 6) Tighten the fitting(b).

⚠ Warning •

○To avoid personal injury, do not install the exhaust temperature sensor while the engine is hot. • When making a hole, make sure no chip remains in the exhaust pipe or turbine. It may result in damage to the engine, exhaust pipe, or turbine.

Confirmation

- The thread size of the fitting is 1/8PT. Make a threaded screw hole of 1/8PT.
- Tighten the sensor into the sensor attachment and then connect it to the sensor wire.