



Technical Bulletin

SPDi Temperature Considerations

www.spdispark.com

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Overview:

This Technical Bulletin contains important information regarding the temperature considerations for our SPDi units. It is important to read and understand the material below to prevent damage to your SPDi unit as well as to ensure the best performance from the device. Listed below are details demonstrating the importance of selecting an appropriate mounting location to allow SPDi to be in a cool location such that it does not overheat and shutdown as well as troubleshooting suggestions in the event the system becomes overheated.

Considerations:

1. SPDi should be installed in a cool location with ambient temperatures below 60°C. The mounting bracket provided with the SPDi system acts as a heat sink to aid in system cooling.
Ideal Mounting Locations
 - a. Mount to air intake. The cool air travelling through the intake will help cool the system during operation.
 - b. Mount the SPDi unit to the cars body.
 - c. Mount the SPDi unit outside the engine bay.**Non-Ideal Mounting Locations**
 - a. Engine block or head.
 - b. Near exhaust headers or turbo charger.
 - c. Location with no airflow.
2. SPDi is equipped with a thermal protection feature which enables system shut down if the temperature of the unit exceeds 100°C and will reset once the internal temperature has cooled down to 96°C. Note: This feature has been implemented to protect the internal circuitry of the SPDi unit. When the unit shuts down this will result in a loss of spark causing the engine to stop.
3. Under the hood temperature within an engine bay is typically 60°C however for some vehicles that are turbo charged, super charged or race vehicles under the hood temperatures can become in excess of 80°C. In these situations we highly recommend the SPDi unit to be installed outside the engine bay.

Troubleshooting:

In the event that your engine quits and you have no sparks try these troubleshooting suggestions:

1. Check the under the hood temperature. If the temperature is too hot it could be a sign that the SPDi systems has shut down to prevent damage to its circuitry. The system should automatically restart once it cools and reaches 96°C.
2. To help cool the SPDi system lift the hood. With the hood open the system typically takes 5 to 10 minutes before it can be restarted.
3. Move the SPDi system to a different, cooler, location. If required extended harnesses are available from www.spdispark.com

Safety Precautions:

(Please read and understand these safety precautions thoroughly prior to use)



1. SPDi engine kits are available for specific engine types. To prevent complications and damages to the engine and SPDi unit it is recommended that the SPDi is only installed on a vehicle for which it was designed.
2. Take caution when installing or altering the SPDi unit by ensuring that your vehicle is situated in a safe manner:
 - a. Place vehicle on a flat level surface.
 - b. Turn the engine off and allow it to cool.
 - c. Remove the ignition key.
 - d. Automatic transmissions should be placed in park,
 - e. Manual transmissions should be placed in gear or in neutral with the emergency brake engaged.
3. SPDi should only be installed on engines in good operating condition. Engine defects should be corrected (repaired) prior to SPDi installation.
4. **Hazard:** The SPDi module does not contain any user replaceable parts. Do not attempt to open, dismantle or modify the SPDi module for any reason. An electrical shock risk exists even when the unit is not powered.

For Further Information Contact:

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