

## Technical Bulletin

### Idleright Applications in Non-Supported Vehicles

Havis-Shields provides a list of fully supported vehicles for the Idleright Fuel Management System shown in our Applications Guide. There are many thousands of types of vehicles (by make and model year) on the roads, and it is simply not possible for Havis-Shields to be familiar with all details of every vehicle in every application. Therefore, the scope of the Idleright product launch was limited to only the most common vehicles so that we can provide complete support to customers during installation in these specific vehicles. However, there is no technical reason why the Idleright must be limited to just the vehicles in the Application Guide, so customers that do not require total installation support from Havis-Shields can install the Idleright in a far greater number of applications. This document explains where the Idleright can best be used and provides general guidelines for installation in non-supported applications.

In general, the Idleright can be installed in any application meeting the following requirements:

- The vehicle must have a fuel-injected engine and an automatic transmission.
- The battery must be able to power all critical equipment on the vehicle (equipment that needs to keep running continuously) for an extended period of time—typically 30 minutes or more—without the engine running.
- The Idleright must be installed so that it can be activated safely when needed, and provide a clear indication that it is turned on at all times, so there is no risk of unknowingly turning on the Idleright while the vehicle is indoors. The preferred implementation is to only allow the Idleright to be turned on when a lightbar is lit.
- The vehicle must have a standard key-style ignition (e.g. not pushbutton start) and must not have a transponder key or other security system installed. If a transponder key or other security system are installed, then a suitable interface kit will be needed for the vehicle, and the customer will need to identify and purchase this interface kit separately. Interface kits are available for most passenger cars, but may not be available for all commercial vehicles.
- The vehicle must use standard communications protocol (e.g. not CANBUS or resistance-based communications.) If a non-standard communications protocol is used, then the customer will need to identify and purchase a suitable interface kit separately. Note that most interface kits include both communications protocol conversions and transponder/security system overrides together in one package when both functions are needed.

Benefits of installing an Idleright:

Any vehicle that needs to keep relatively low current draw equipment (such as a lightbar or warning lights) operating for an extended period of time on a parked vehicle will benefit from installing an Idleright. The Idleright will allow the vehicle to run critical equipment on battery only as long as possible, and will only idle the engine just enough to keep the battery sufficiently charged. This can result in a 40% to 80% reduction in engine idle time, which significantly reduces engine wear and fuel consumption.

The Idleright does NOT do the following, regardless of whether the application is supported:

- The Idleright does not measure cabin temperature, and cannot idle the vehicle specifically to control cabin comfort.
- The Idleright does not attempt to comply with anti-idling laws requiring vehicles to be shut down after a specific period of time. These laws do not typically affect emergency vehicles, but may apply to large commercial vehicles, such as delivery trucks. It is the responsibility of the purchaser and end user of an Idleright to comply with all applicable laws in their jurisdictions.
- The Idleright does not produce power, so if equipment can't be powered by the battery alone, the Idleright can't keep it operating. For example, most ambulances and large fire apparatus are not able to keep critical equipment operating without alternator power, so these would not be recommended applications.

Additional information needed to install an Idleright:

The only additional information needed to install the Idleright in a non-supported application is interface kit requirements and wiring diagrams for the ignition system. Wiring diagrams may be supplied by interface kit manufacturers, or may be found in commercial (licensed) databases. We strongly recommend against trusting wiring information that is freely available on the Internet, unless it is provided by a reputable interface kit manufacturer or Havis-Shields. If an interface kit is not needed, then it is possible to probe the wires in the ignition harness to identify starter, accessory, and other relevant wires. When probing wires, take extreme caution to ensure that no airbag wires are touched. Keep in mind that the wiring layout may change by model year and vehicle. Havis-Shields only has access to wiring information from interface kit manufacturers and commercial databases, and these databases do not normally include commercial vehicles.

About diesel engines:

Many Diesel vehicles are supported by the Idleright. For optimal performance, we recommend changing the Idleright programming options to the recommended values for diesel vehicles shown in the Idleright installation manual. Wiring information for commercial vehicles is typically not available publicly, so we would recommend contacting the vehicle manufacturer for further information. In most cases, the wires in the ignition harness can be probed for a quick and easy installation, although care must be taken to not touch an airbag wire.

RE: Idleright IR-1001 in Ford F-250, 350, 450 and 550 or Larger Ford Trucks with a Diesel Engine. **The current Idleright System cannot be used in a Ford Truck with a 7.3L Diesel engine.** This is due to the longer "Crank Time" required by this engine.

Idleright has successfully been installed into Chevy and International Diesel trucks by programming the Idleright crank time to the maximum 1.5 seconds.

(standard / default crank time is .7 seconds)

1.5 seconds is still not enough time to start this specific type of Ford vehicle.

**All Idleright orders do require Year , Make and Model details.**

**We also need to know if the vehicle has a Gas or Diesel engine.**

***Consolidator® • Kwik-Raze® • Collins Dynamics® • Kwik-Kit™ PrisonerTransports • K-9Transports***

*75 Jacksonville Rd • P.O. Box 2099 • Warminster, PA 18974 • 800.524.9900 / 215.957.0720(P) • 215.957.0729 (F)*

***www.Havis.com***

IR-1001\_TECH\_5-09

Technical support available:

Havis-Shields provides technical support for all installations, even if the application is not supported. However, if the application is not supported, we cannot guarantee familiarity with a non-supported vehicle, and therefore we can only offer assistance on a best-effort basis. For commercial vehicles, ignition wiring information is generally not available, so we would recommend contacting the vehicle manufacturer for assistance.