

### Keep alive power wire (KAPWR) connections

5.0Fi, 5.8Fi, FSi

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To eliminate the possibility of losing data gained by adaptive learning strategy, the keep alive power wire (KAPWR) should be connected directly to the positive post of the starting (number 1) battery or the starting battery side of the selector switch. Ensure the grounding circuit remains connected (is not broken by a disconnect switch), to ensure a complete circuit. While the loss of this data is in no way harmful, the reacquisition of this data can result in poor performance characteristics for up to ten minutes of the running cycle whenever the power is disconnected. The power demanded by the (KAPWR) circuit is not sufficient to discharge the battery.

If a battery switch is used, care must be given to operate the engine only when the switch is in the "B1" or "BOTH" position. Operation with the switch in the "B2" position will cause a voltage mismatch between the ECA and the alternator output and result in poor performance. While these problems are temporary in nature, operation in the "B2" position is not recommended.

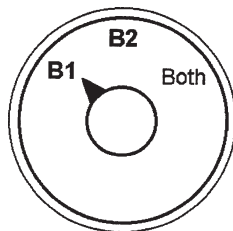


Fig. 1

**CAUTION** Do not operate the engine with the switch in the "B2" position. Do not install the (KAPWR) wire to the common terminal of the battery selector switch.

#### Wiring Harness Guidelines:

- Electromagnetic compatibility of components and interconnecting wiring is highly sensitive to location within the vehicle.
- Low voltage/current signals are especially sensitive and the following guidelines must be closely observed.

#### High Voltage Ignition Components:

- Sensitive component wiring must **not** be mounted/routed **any closer than 150 mm** to a high voltage component, e.g. spark plug wires.
- If unable to comply with this recommendation, a shielded (with the shield grounded at a point beyond 15 cm) shall be used.

#### Starter Motor:

- Sensitive components and wiring must **not** be mounted/routed **any closer than 250 mm** to starter motor high current capacity cables.

#### Alternator Output Wiring:

- Sensitive components and wiring must **not** be mounted **any closer than 10 cm** to alternator output wiring.

#### General Guidelines:

- The EEC-IV subsystem must have its own wiring harness to minimize interference.
- The (KAPWR) wire must be connected and right angles to the main battery feed when connected directly to the battery post (figure 2).
- Bundling of low level wiring and high current/voltage frequency wiring must be kept to a minimum.
- If these requirements cannot be met, low level signal wiring must be twisted pairs of 33-40 twists per meter.

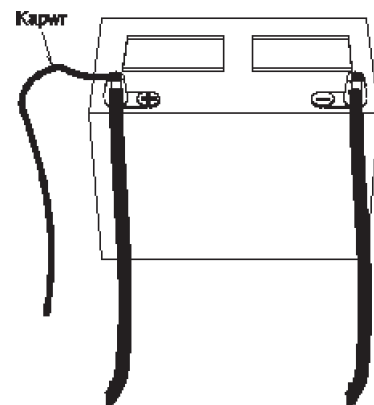


Fig 2