2003 KIA

Sorento

BUZZERS, RELAYS & TIMERS

BUZZERS, RELAYS & TIMERS LOCATION

| Component | Component Location |
|---------------------------|--|
| Air Con Relay | In engine room fuse box. |
| Back Glass Opener Relay | Integral to integrated control module. |
| Cigar Lighter Relay | Behind left kick panel. See Fig. 3. |
| Condenser Fan High Relay | In engine room fuse box. |
| Condenser Fan Low Relay | In engine room fuse box. |
| Condenser Fan No. 2 Relay | In engine room fuse box. |
| Door Lock Relay | Integral to integrated control module. |
| Door Unlock Relay | Integral to integrated control module. |
| Front Blower Relay | In engine room fuse box. |
| Front Defroster Relay | Behind left kick panel. See Fig. 2. |
| Fuel Pump Relay | In engine room fuse box. |
| Hazard Relay | In relay block. |
| Headlight Relay (High) | In engine room fuse box. |
| Headlight Relay (Low) | In engine room fuse box. |
| High Blower Relay | Behind lower right side of dash. See Fig. 3. |
| Horn Relay | In engine room fuse box. |
| Main Relay | In engine room fuse box. |
| Power Outlet Relay | Behind left kick panel. See Fig. 3. |
| Power Window Relay | In engine room fuse box. |
| Rear Defroster Relay | In engine room fuse box. |
| Seat Warmer Relay (Left) | Integral to integrated control module. |
| Seat Warmer Relay (Right) | Integral to integrated control module. |
| Starter Relay | In engine room fuse box. |
| TCCS Relay | In relay block. |
| TNS Relay | In engine room fuse box. |
| Wiper Relay | Integral to integrated control module. See Fig. 3. |

CIRCUIT PROTECTION DEVICES

CIRCUIT PROTECTION DEVICES LOCATION

| Component | Component Location |
|----------------------|-------------------------------------|
| Engine Room Fuse Box | At left side of engine compartment. |

CONTROL UNITS

CONTROL UNITS LOCATION

| Component | Component Location |
|----------------------------|--|
| ABS Control Unit | At left rear of engine compartment. |
| Air Bag Control Unit | At rear of center console. See Fig. 3 . |
| Auto Cruise Control Unit | At left rear corner of engine compartment. See Fig. 1. |
| DRL Unit | Behind left side of dash. See Fig. 2. |
| EC-AT Control Unit | Behind left kick panel. See Fig. 3. |
| Engine Control Unit | Behind lower right side of dash. See Fig. 3. |
| EPS Unit | Behind center of dash. |
| ETACS | Below center of dash. See <u>Fig. 2</u> . |
| Flasher Unit | Behind left side of dash. See Fig. 3. |
| Integrated Control Module | Behind left kick panel. See Fig. 3 . |
| Rear Wiper Control Unit | At lower center of back door. See Fig. 6 . |
| Transfer Case Control Unit | Below front of center console. See Fig. 3. |

MOTORS

MOTORS LOCATION

| Component | Component Location |
|---------------------------------------|--|
| Back Glass Actuator | At lower center of back door. See Fig. 6. |
| Blower Motor | Behind right side of dash, on blower unit. See Fig. 3. |
| Condenser Fan Motor | Behind right side of radiator. See Fig. 1. |
| Free Running Differential Air Pump | At left front of engine compartment. See Fig. 1 . |
| Front Wiper Motor | On left side of firewall. |
| Fuel Pump | On top of fuel tank. |
| Idle Speed Actuator Motor | At right rear of engine compartment. See Fig. 1 . |
| Intake Actuator | Behind right side of dash, on blower unit. See Fig. 3 . |
| Mix Actuator | Behind center of dash, on bottom of HVAC unit. See Fig. 3. |
| Mode Actuator | Behind center of dash, on bottom of HVAC unit. See Fig. 3. |
| Rear Wiper Motor | At lower center of back door. |
| Sun Roof Unit | At front center of roof. |
| Transfer Solenoid & Motor | At transfer case. See Fig. 1 . |
| Washer Motor | At right front corner of engine compartment. |

SENDING UNITS & SENSORS

SENDING UNITS & SENSORS LOCATION

| Component | Component Location |
|--|--|
| Airflow Sensor | Right side of engine compartment. See Fig. 1 . |
| Ambient & AQS Sensor | At center front of engine compartment. See Fig. 1 . |
| Auto Light Unit | At top right end of dash. See Fig. 2. |
| Brake Fluid Level Sensor | On brake master cylinder reservoir assembly. See Fig. 1. |
| Camshaft Position Sensor | At front of engine. See Fig. 1 . |
| Crankshaft Position Sensor | At front of engine, next to crankshaft sprocket. See Fig. 1. |
| Driver Track Sensor | Under driver's seat. |
| Evaporator Core Sensor | Behind center of dash, at center of HVAC unit. See Fig. 3. |
| Front Impact Sensor (Left) | At left front corner of engine compartment. |
| Front Impact Sensor (Right) | Behind right side of front bumper. |
| Fuel Cut Sensor | At right side of engine compartment. |
| Fuel Tank Pressure Sensor | At top of fuel tank. |
| Fuel Temperature Sensor | Near top of fuel tank. |
| Humidity & In-Car Sensor | Behind center of dash. See Fig. 2. |
| Ignition Failure Sensor | At top rear of engine. See Fig. 1 . |
| Input Speed Sensor | At top of transmission. See Fig. 1 . |
| Knock Sensor | At top rear of engine. See Fig. 1 . |
| MAP Sensor | On intake manifold. See Fig. 1 . |
| Oil Temperature Sensor (Transmission) | At right side of transmission. See Fig. 1 . |
| Output Speed Sensor | At top of transmission. See Fig. 1. |
| O2 Sensor (Front Left) | On left rear side of engine. |
| O2 Sensor (Front Right) | On right rear side of engine. |
| O2 Sensor (Rear Left) | On left rear side of engine. |
| O2 Sensor (Rear Right) | On right rear side of engine. |
| Passenger Track Sensor | Under passenger's seat. |
| Side Impact Sensor (Left) | At base of left "B" pillar. See Fig. 5 . |
| Side Impact Sensor (Right) | At base of right "B" pillar. See Fig. 4 . |
| Speed Sensor | On rear of transmission. See Fig. 1. |
| Sun Sensor | At top left end of dash. See Fig. 2. |
| Throttle Position Sensor | On throttle body. See Fig. 1 . |
| Transfer Speed Sensor | At transfer case. See Fig. 1. |
| Washer Fluid Level Sensor | On washer fluid reservoir. |

| Water Temperature Sensor | At top front of engine. See Fig. 1 . |
|----------------------------|---|
| Wheel Speed Sensor (Front) | On respective front steering knuckle. |
| Wheel Speed Sensor (Rear) | On respective rear brake backing plate. |

SOLENOID & SOLENOID VALVES

SOLENOID & SOLENOID VALVES LOCATION

| Component | Component Location |
|--------------------------------|---|
| EC-AT Solenoid | At top of transmission. See Fig. 1 . |
| EPS Solenoid | At left side of engine compartment. See Fig. 1 . |
| Purge Solenoid Valve | At left side of engine. See Fig. 1 . |
| Purge Vent Solenoid | At right side of transmission. |
| Variable Intake Solenoid Valve | At left side of engine. |

SWITCHES

SWITCHES LOCATION

| Component | Component Location |
|----------------------------|--|
| Driver Seat Belt Switch | In driver's seat belt buckle. |
| Inhibitor Switch | At top of transmission. See Fig. 1. |
| Oil Pressure Switch | At left front of engine. See Fig. 1. |
| Parking Brake Switch | At base of parking brake lever. See Fig. 3. |
| Passenger Seat Belt Switch | In passenger's seat belt buckle. |
| Power Steering Switch | At right front of engine. See Fig. 1. |
| Stoplight Switch | Above brake pedal, on bracket. |
| Triple Switch | On top of A/C receiver-drier assembly. See Fig. 1 . |

MISCELLANEOUS

MISCELLANEOUS LOCATION

| Component | Component Location |
|---------------------|---|
| Auto Glass Antenna | Behind right rear quarterpanel. See Fig. 6 . |
| Condenser | At top left of engine. See Fig. 1 . |
| Diagnosis Connector | At left rear of engine compartment. See Fig. 1 . |
| Diode No. 1 | Behind left side of dash. See Fig. 3. |
| Diode No. 2 | Behind left end of dash. |
| ECM Home Link | At front of overhead console. See Fig. 5 . |
| Flasher Unit | Behind left side of dash. See Fig. 3. |
| Multi-Meter | At front of overhead console. |
| OBD-II Check | At right of steering column. See Fig. 2 . |

| Connector | |
|---------------------|---|
| Power Transistor | Behind right side of dash. See Fig. 3. |
| Resistor | Behind right side of dash, on bottom of blower unit. See Fig. 3. |
| Transfer Speed Coil | At transfer case. |

CONNECTORS

CONNECTORS LOCATION

| Component | Component Location |
|---------------------|---|
| X02 (Black, 16 Pin) | At left side of engine compartment, near battery. See Fig. 1. |
| X03 (Gray, 16 Pin) | At left side of engine compartment, near battery. |
| X04 (Black, 12 Pin) | At left side of engine compartment, near battery. |
| X05 (20 Pin) | Behind left side of dash. See Fig. 2. |
| X06 (Blue, 22 Pin) | Behind left side of dash. See Fig. 2. |
| X07 (Black, 24 Pin) | Behind left side of dash. See Fig. 2. |
| X08 (20 Pin) | Behind left side of dash. See Fig. 2. |
| X09 (21 Pin) | Behind left side of dash. See Fig. 2. |
| X10 (22 Pin) | Behind right kick panel. See Fig. 3 . |
| X11 (Black, 24 Pin) | Behind right kick panel. See Fig. 3 . |
| X12 (22 Pin) | Behind right kick panel. See Fig. 3 . |
| X13 (22 Pin) | Behind left kick panel. See Fig. 3. |
| X14 (4 Pin) | Behind left kick panel. See Fig. 3. |
| X15 (Yellow, 4 Pin) | Behind left kick panel. See Fig. 5 . |
| X16 (20 Pin) | Behind right kick panel. See Fig. 4 . |
| X17 (8 Pin) | Behind right kick panel. See Fig. 3. |
| X18 (4 Pin) | Behind right kick panel. See Fig. 4. |
| X19 (Gray, 18 Pin) | Behind left kick panel. |
| X20 (Black, 21 Pin) | Behind left kick panel. |
| X21 (Gray, 18 Pin) | Behind right side of dash. |
| X22 (Black, 21 Pin) | Behind right side of dash. |
| X23 (20 Pin) | Behind left kick panel. |
| X24 (Yellow, 4 Pin) | At base of left "A" pillar. See Fig. 5 . |
| X25 (Black, 10 Pin) | At right rear corner of engine compartment. See $\underline{\mathbf{Fig. 1}}$. |
| X27 (Blue, 22 Pin) | Behind right kick panel. See Fig. 2. |
| X28 (18 Pin) | Behind left kick panel. See Fig. 2. |
| X29 (Black, 22 Pin) | Behind right kick panel. See Fig. 2 . |
| X30 (14 Pin) | At left "B" pillar. |
| X31 (14 Pin) | At right "B" pillar. |
| | |

| X32 (14 Pin) | Behind left rear quarterpanel. See Fig. 5. |
|----------------------|---|
| X33 (4 Pin) | At left side of back door. See Fig. 5. |
| X34 (16 Pin) | At rear of roof. See Fig. 6 . |
| X35 (Gray, 2 Pin) | At left side of engine compartment, near battery. |
| X36 (Black, 6 Pin) | On right side of steering column. |
| X37 (Yellow, 14 Pin) | Behind center of dash. |
| X39 (6 Pin) | Below front of center console. |
| X40 (14 Pin) | Behind center of dash. |
| X41 (6 Pin) | Behind lower right side of dash. |
| X42 (8 Pin) | Behind lower right side of dash. |
| X44 (Black, 6 Pin) | At left rear of engine compartment. See Fig. 1. |
| X45 (Black, 8 Pin) | At right rear of engine compartment. See Fig. 1. |

GROUNDS

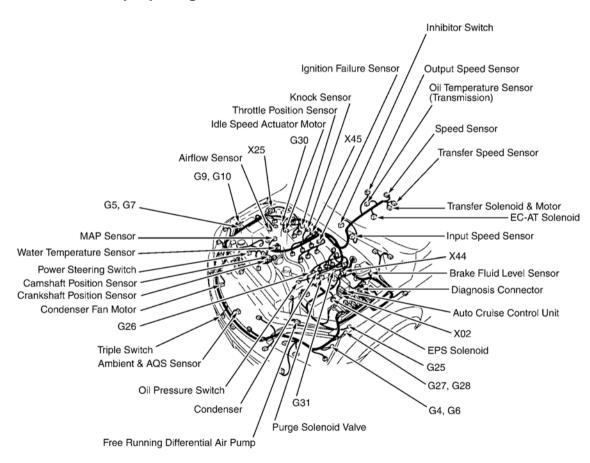
GROUNDS LOCATION

| Component | Component Location |
|-----------|---|
| G1 | Behind left kick panel. See Fig. 3. |
| G2 | Behind right kick panel. See Fig. 3 . |
| G3 | Below center console, rear of shift lever assembly. See Fig. 3. |
| G4 | Behind left headlight. See Fig. 1 . |
| G5 | At right front of engine compartment, on right shock tower. See Fig. 1. |
| G6 | Behind left headlight. See Fig. 1. |
| G7 | At right side of engine compartment, on right shock tower. See Fig. 1. |
| G9 | At right side of engine compartment, on right shock tower. See Fig. 1. |
| G10 | At right side of engine compartment, on right shock tower. See Fig. 1. |
| G11 | Behind lower left center of dash. See Fig. 2. |
| G12 | Behind lower right center of dash. See Fig. 2. |
| G13 | Behind lower left center of dash. See Fig. 2. |
| G14 | Behind lower right center of dash. See Fig. 2. |
| G15 | Behind lower right side of dash. See Fig. 3. |
| G16 | Behind lower right side of dash. See Fig. 3. |
| G17 | Behind lower right side of dash. See Fig. 3. |
| G18 | Behind lower right side of dash. See Fig. 3. |
| G19 | Behind left taillight assembly. See Fig. 5 . |
| G20 | Behind left taillight assembly. See Fig. 5 . |
| G21 | Behind right taillight assembly. See Fig. 6 . |
| G22 | At right "C" pillar. See Fig. 4 . |
| G23 | Behind left taillight assembly. See <u>Fig. 6</u> . |

| G24 | At top right of tailgate. See Fig. 6 . |
|-----|---|
| G25 | At left front of engine compartment, on left shock tower. See Fig. 1. |
| G26 | At left front of engine. See Fig. 1 . |
| G27 | At left front of engine compartment, on left shock tower. See Fig. 1. |
| G28 | At left front of engine compartment, on left shock tower. See Fig. 1. |
| G30 | At right rear corner of engine compartment. See Fig. 1. |
| G31 | At left rear of engine. See Fig. 1 . |

COMPONENT LOCATION GRAPHICS

NOTE: Figures may show multiple component locations. Refer to appropriate table for proper figure references.



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Fig. 1: Engine Compartment Courtesy of KIA MOTORS AMERICA, INC.

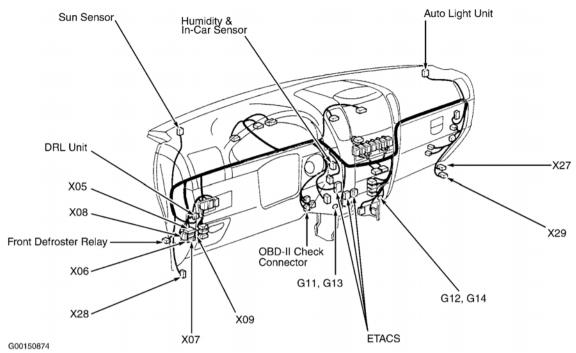


Fig. 2: Dash Courtesy of KIA MOTORS AMERICA, INC.

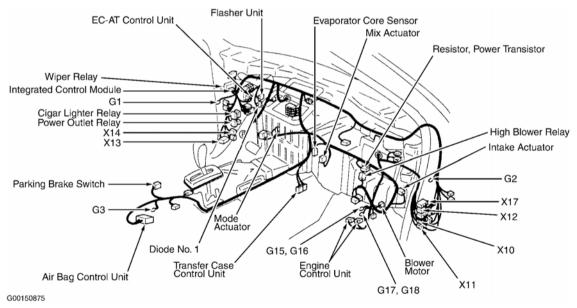


Fig. 3: Dash Courtesy of KIA MOTORS AMERICA, INC.

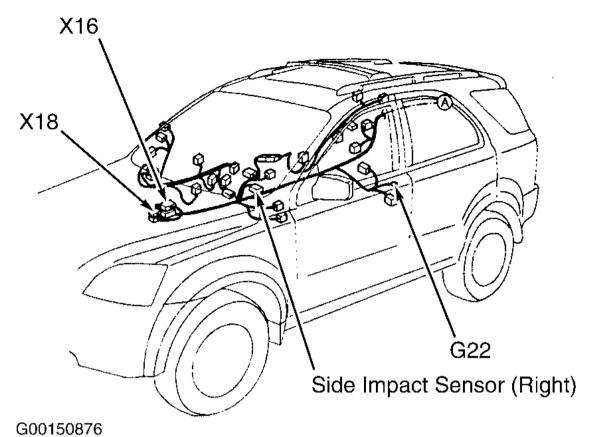
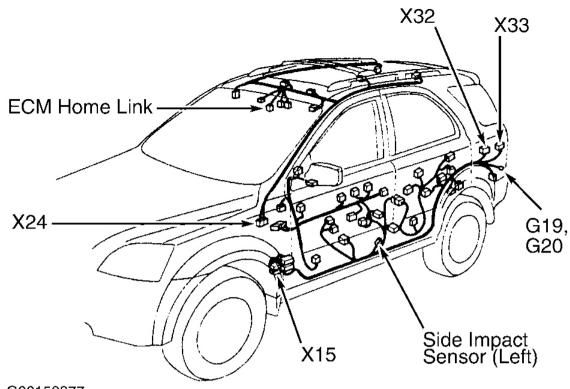
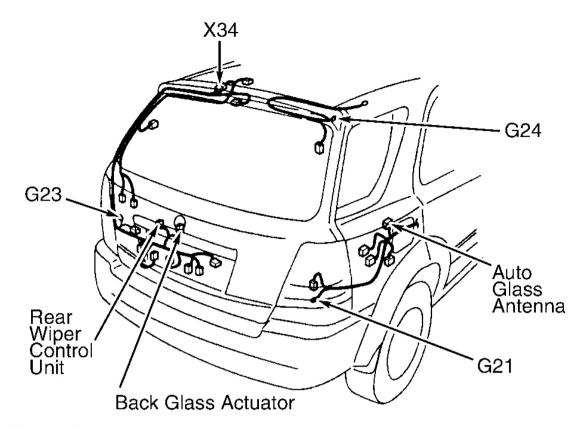


Fig. 4: Left Side Of Vehicle Courtesy of KIA MOTORS AMERICA, INC.



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Fig. 5: Left Side Of Vehicle Courtesy of KIA MOTORS AMERICA, INC.



G00150878

Fig. 6: Rear Of Vehicle Courtesy of KIA MOTORS AMERICA, INC.