

## KIA V36.01 Diagnostics List

Note:For reference only

| Areas                   | Vehicle       | System                  | Sub System                          | Functions    |          |           |             |           |           |              |
|-------------------------|---------------|-------------------------|-------------------------------------|--------------|----------|-----------|-------------|-----------|-----------|--------------|
|                         |               |                         |                                     | System Info. | Read Dtc | Clear Dtc | Data stream | Actuation | Air bleed | Impact Info. |
|                         | PRIDE         | Engine(~98,99,02,03,04) | 1.3L SOHC gasoline FBC before 1998  |              | √        | √         |             |           |           |              |
|                         |               |                         | 1.3L SOHC gasoline AFM1 before 1998 |              | √        | √         |             |           |           |              |
|                         |               |                         | 1.3L SOHC GASOLINE MAP              |              | √        | √         | √           |           |           |              |
|                         |               | AT(2002,03,04)          |                                     |              | √        | √         | √           |           |           |              |
|                         | VISTO         | Engine(ALL Year)        | UNLEAD ALL                          |              | √        | √         | √           | √         |           |              |
|                         |               |                         | UNLEAD IMMO                         |              | √        | √         | √           | √         |           |              |
|                         |               |                         | LEAD ALL                            |              | √        | √         | √           | √         |           |              |
|                         |               | AT(All Year)            |                                     | √            | √        | √         | √           |           |           |              |
|                         |               | ABS(All Year)           |                                     | √            | √        | √         | √           | √         |           |              |
|                         | SRS(All Year) |                         | √                                   | √            | √        |           |             |           |           |              |
|                         | AVELLA        | Engine(ALL Year)        | 1.3/1.5 GASOLINE MAP                |              | √        | √         | √           |           |           |              |
|                         |               | AT                      |                                     |              | √        | √         |             |           |           |              |
|                         |               | ABS                     |                                     |              | √        | √         | √           |           |           |              |
|                         |               | Engine(2000-06)         | 1.6 CVVT(2006)                      | √            | √        | √         | √           | √         |           |              |
|                         |               |                         | 1.4 DOHC(2006)                      | √            | √        | √         | √           | √         |           |              |
|                         |               |                         | U 1.5L VGT DIESEL(2006)             | √            | √        | √         | √           | √         |           |              |
|                         |               |                         | 1.3/1.5 GASOLINE MAP                |              | √        | √         | √           |           |           |              |
|                         |               |                         | 1.3/1.5L MAF                        |              | √        | √         | √           |           |           |              |
| 1.3/1.5L (RHD) MAP      |               |                         |                                     | √            | √        | √         |             |           |           |              |
| 1.3/1.5L (RHD) MAF      |               |                         |                                     | √            | √        | √         |             |           |           |              |
| 1.3/1.5L GASOLINE /IMMO |               |                         |                                     | √            | √        | √         |             |           |           |              |
| 1.3/1.5L GASOLINE LEAD  |               |                         |                                     | √            | √        | √         |             |           |           |              |
|                         |               | CAN BUS(2006)           | √                                   | √            | √        | √         | √           |           |           |              |
| AT(2000-06)             |               | √                       | √                                   | √            | √        | √         |             |           |           |              |

|                                    |             |   |             |   |   |   |   |   |   |
|------------------------------------|-------------|---|-------------|---|---|---|---|---|---|
| RIO                                | AT(2000-06) | TCU LHD                                 |             | √ | √ | √ |   |   |   |
|                                    |             | TCU RHD                                 |             | √ | √ | √ |   |   |   |
|                                    | ABS         | ABS (2006)                              | √           | √ | √ | √ | √ | √ |   |
|                                    |             | DLC CABLE 16<br>(2003-05)               |             | √ | √ | √ | √ | √ |   |
|                                    |             | 20PIN RED KIA<br>CONNECTOR (2003-05)    |             | √ | √ | √ | √ | √ |   |
|                                    |             | ABS LHD (2000-02)                       |             | √ | √ | √ | √ |   |   |
|                                    |             | ABS RHD (2000-02)                       |             | √ | √ | √ | √ |   |   |
|                                    | SRS         | SRS (2006)                              | √           | √ | √ |   |   |   | √ |
|                                    |             | A/BAG LHD(2000-05)                      |             | √ | √ |   |   |   |   |
|                                    |             | A/BAG RHD(2000-05)                      |             | √ | √ |   |   |   |   |
| ELEC. POWER<br>STEERING(2006~2007) |             | √                                       | √           | √ | √ |   |   |   |   |
| SEPHIA<br>(MENTOR<br>)             | Engine      | 1.6L DOHC NON IMMO<br>(2001-04)         |             | √ | √ | √ |   |   |   |
|                                    |             | 1.6L DOHC W/IMMO<br>(2001-04)           |             | √ | √ | √ |   |   |   |
|                                    |             | 1.6L DOHC LEAD<br>(2001-04)             |             | √ | √ | √ |   |   |   |
|                                    |             | 1.8L DOHC GASOLINE TED<br>(1998-2004)   |             | √ | √ | √ |   |   |   |
|                                    |             | 1.5L GASOLINE BFD/BFE<br>(1998-2000)    |             | √ | √ | √ |   |   |   |
|                                    |             | 1.5/1.6L ENG(MTM) AFM1<br>(before 1998) |             | √ | √ |   |   |   |   |
|                                    |             | 1.5/1.6L ENG(ATM) AFM1<br>(before 1998) |             | √ | √ |   |   |   |   |
|                                    |             | 1.5 GASOLINE MAP<br>(1998-2004)         |             | √ | √ | √ |   |   |   |
|                                    |             | AT                                      | before 1998 |   | √ | √ |   |   |   |

|                        |                       |                                       |   |   |   |   |   |  |  |
|------------------------|-----------------------|---------------------------------------|---|---|---|---|---|--|--|
|                        | ABS(1998-2004)        |                                       |   | √ | √ | √ | √ |  |  |
|                        | SRS(before 1998-2004) |                                       |   | √ | √ |   |   |  |  |
| SHUMA<br>(SPECTRA<br>) | Engine                | 1.6L DOHC NON IMMO<br>(2001-04)       |   | √ | √ | √ |   |  |  |
|                        |                       | 1.6L DOHC W/IMMO<br>(2001-04)         |   | √ | √ | √ |   |  |  |
|                        |                       | 1.6L DOHC LEAD<br>(2001-04)           |   | √ | √ | √ |   |  |  |
|                        |                       | 1.8L DOHC GASOLINE TED<br>(1999-2004) |   | √ | √ | √ |   |  |  |
|                        |                       | 1.5L GASOLINE BFD/BFE<br>(1999-2000)  |   | √ | √ | √ |   |  |  |
|                        | AT(1999-2004)         |                                       |   | √ | √ | √ |   |  |  |
|                        | ABS(1999-2004)        |                                       |   | √ | √ | √ | √ |  |  |
|                        | SRS(1999-2004)        |                                       |   | √ | √ |   |   |  |  |
|                        |                       | 2.0L DIESEL(CAN)<br>EURO-4(2007)      |   | √ | √ |   |   |  |  |
|                        |                       | 2.0L DIESEL(KWP)<br>EURO-4(2007)      |   | √ | √ |   |   |  |  |
|                        |                       | 2.0L/2.4L GASOLINE(2007)              |   | √ | √ |   |   |  |  |
|                        |                       | 2.0L CVVT ALL<br>(2004-05)            |   | √ | √ | √ | √ |  |  |
|                        |                       | 1.8L LPG<br>(2004-05)                 |   | √ | √ | √ | √ |  |  |
|                        |                       | 2.0L LPG<br>(2004-05)                 |   | √ | √ | √ | √ |  |  |
|                        |                       | 2.0L DIESEL<br>(2003-05)              | √ | √ | √ | √ | √ |  |  |
|                        |                       | 1.6L DOHC W/IMMO<br>(2003-05)         |   | √ | √ | √ |   |  |  |

CARENS

|                         |                                       |                     |   |   |   |   |   |  |
|-------------------------|---------------------------------------|---------------------|---|---|---|---|---|--|
| Engine                  | 1.6L DOHC EURO-IV<br>(2003-05)        |                     | √ | √ | √ |   |   |  |
|                         | 1.8L DOHC NON IMMO<br>(2003-05)       |                     | √ | √ | √ |   |   |  |
|                         | 1.8L DOHC W/IMMO<br>(2003-05)         |                     | √ | √ | √ |   |   |  |
|                         | 1.8L DOHC EURO-IV<br>(2003-05)        |                     | √ | √ | √ |   |   |  |
|                         | 1.8L DOHC LEAD<br>(2003-05)           |                     | √ | √ | √ |   |   |  |
|                         | 1.8L DOHC M/T<br>(2001-02)            |                     | √ | √ | √ |   |   |  |
|                         | 1.8L DOHC<br>(2001-02)                |                     | √ | √ | √ |   |   |  |
|                         | 1.8L DOHC GASOLINE<br>TED (1999-2000) |                     | √ | √ | √ |   |   |  |
|                         | AT                                    | DIESEL<br>(2003-05) |   | √ | √ | √ | √ |  |
| GASOLINE<br>(1999-2005) |                                       |                     | √ | √ | √ |   |   |  |
| 1.8L LPG<br>(2004-2005) |                                       |                     | √ | √ | √ |   |   |  |
| 2.0L LPG<br>(2004-2005) |                                       |                     | √ | √ | √ | √ |   |  |
| 2007                    |                                       |                     | √ | √ |   |   |   |  |
| ABS                     | DLC CABLE 16<br>(2003-05)             | √                   | √ | √ |   |   |   |  |
|                         | 20PIN RED KIA CONNECTOR<br>(2003-05)  | √                   | √ | √ |   |   |   |  |
|                         | 1999-2002                             |                     | √ | √ | √ | √ |   |  |

|                |  |                                    |   |   |   |   |   |  |  |
|----------------|--|------------------------------------|---|---|---|---|---|--|--|
|                |  | 2007                               |   | √ | √ | √ | √ |  |  |
| SRS(1999-2004) |  | 2003-2005                          | √ | √ | √ | √ |   |  |  |
|                |  | 1999-20022007                      | √ | √ | √ | √ |   |  |  |
| A/C(2007)      |  |                                    | √ | √ | √ | √ | √ |  |  |
| Engine         |  | 2.0L DIESEL(CAN)<br>EURO-4(06~07)  |   | √ | √ |   |   |  |  |
|                |  | 2.0L DIESEL(KWP)<br>EURO-4(06~07)  |   | √ | √ |   |   |  |  |
|                |  | 2.0L DIESEL ALL<br>(2004-2007)     | √ | √ | √ | √ | √ |  |  |
|                |  | 2.0L CVVT EOBD<br>(2004-2007)      | √ | √ | √ | √ | √ |  |  |
|                |  | 2.0L CVVT GEN<br>(2004-2007)       | √ | √ | √ | √ | √ |  |  |
|                |  | 2.0L CVVT LEAD<br>(2004-2007)      | √ | √ | √ | √ | √ |  |  |
|                |  | 2.7L V6 EOBD<br>(2004-2007)        | √ | √ | √ | √ | √ |  |  |
|                |  | 2.7L V6 GEN<br>(2004-2007)         | √ | √ | √ | √ | √ |  |  |
|                |  | 2.7L V6 LEAD<br>(2004-2007)        | √ | √ | √ | √ | √ |  |  |
|                |  | 2.0L DOHC(HFM) BOSCH<br>(2001-03)  |   | √ | √ | √ |   |  |  |
|                |  | 2.0L DOHC(HFM) LEAD<br>(1998-2003) |   | √ | √ | √ | √ |  |  |
|                |  | 2.0L DIESEL RF-TCI<br>(1998-2003)  |   | √ | √ | √ | √ |  |  |
|                |  | 2.0L GASOLINE<br>(before 1998)     |   | √ | √ | √ | √ |  |  |

SPORTAG  
E

|     |   |   |   |   |   |   |   |  |
|-----|---|---|---|---|---|---|---|--|
|     | 2.0L Diesel RF-TCI<br>(before 1998)     |   | √ | √ |   |   |   |  |
|     | 2.0L DOHC(HFM) UNLEAD<br>(1998-2000)    |   | √ | √ | √ |   |   |  |
|     | UNLEAD(AUS)<br>(2000)                   |   | √ | √ | √ |   |   |  |
| AT  | 2.0L DIESEL(VGT)<br>EURO-4(06~07)       |   | √ | √ |   |   |   |  |
|     | 2.0L DIESEL/2.7L<br>GASOLINE(2004-2007) | √ | √ | √ | √ | √ |   |  |
|     | 2.0L GASOLINE(PCM)<br>(2004-2007)       | √ | √ | √ | √ | √ |   |  |
|     | (1998,99,01)                            |   | √ | √ | √ |   |   |  |
|     | TCU GASOLINE<br>(2002,03)               |   | √ | √ | √ |   |   |  |
|     | TCU DIESEL<br>(2002,03)                 |   | √ | √ | √ |   |   |  |
|     | GASOLINE/DIESEL<br>(2000)               |   | √ | √ | √ |   |   |  |
|     | UNLEAD(AUS)<br>(2000)                   |   | √ | √ | √ |   |   |  |
|     | before 1998                             |   | √ | √ |   |   |   |  |
| ABS | ABS/TCS/ESP<br>(2004-2007)              | √ | √ | √ | √ | √ | √ |  |
|     | ABS GASOLINE<br>(2001-03)               |   | √ | √ | √ | √ | √ |  |
|     | ABS DIESEL<br>(2001-03)                 |   | √ | √ | √ | √ | √ |  |
| SRS | 2004-2007                               | √ | √ | √ |   |   | √ |  |
| A/C | 2004-2007                               | √ | √ | √ | √ | √ |   |  |

|                              |                |                                     |   |   |   |   |   |   |  |
|------------------------------|----------------|-------------------------------------|---|---|---|---|---|---|--|
|                              | 4WD            | 2004-2007                           | √ | √ | √ |   |   |   |  |
| CLARUS                       | Engine         | 1.8L GASOLINE<br>(before 1998-2000) |   | √ | √ | √ | √ | √ |  |
|                              |                | 2.0L GASOLINE<br>(before 1998-2000) |   | √ | √ | √ | √ | √ |  |
|                              | AT             | (1998-2000)                         |   | √ | √ | √ |   |   |  |
|                              |                | before 1998                         |   | √ | √ |   |   |   |  |
|                              | ABS(1998-2000) |                                     |   | √ | √ | √ | √ |   |  |
| SRS(up to 2000)              |                |                                     | √ | √ |   |   |   |   |  |
| Engine                       | Engine         | 2.0L DIESEL(VGT)<br>EURO-4(06-07)   | √ | √ | √ | √ | √ | √ |  |
|                              |                | UNLEAD 2.0L EOBD(06-07)             | √ | √ | √ | √ | √ | √ |  |
|                              |                | UNLEAD 2.0L GEN(06-07)              | √ | √ | √ | √ | √ | √ |  |
|                              |                | LEAD 2.0L ALL(06-07)                | √ | √ | √ | √ | √ | √ |  |
|                              |                | UNLEAD 2.4L EOBD(06-07)             | √ | √ | √ | √ | √ | √ |  |
|                              |                | UNLEAD 2.7L EOBD(06-07)             |   | √ | √ | √ | √ | √ |  |
|                              |                | UNLEAD 2.7L GEN(06-07)              |   | √ | √ | √ | √ | √ |  |
|                              |                | LEAD 2.7L ALL(06-07)                |   | √ | √ | √ | √ | √ |  |
|                              |                | 2.7L V6 GASOLINE<br>(2002-04)       | √ | √ | √ | √ | √ | √ |  |
|                              |                | 2.5L V6(TIO2) EURO-III<br>(2003-04) | √ | √ | √ | √ | √ | √ |  |
|                              |                | 2.5L V6(ZRO2) EURO-II<br>(2003-04)I | √ | √ | √ | √ | √ | √ |  |
|                              |                | 2.5L V6 GENERAL<br>(2000-04)        | √ | √ | √ | √ | √ | √ |  |
|                              |                | 2.5L V6 LEAD<br>(2000-04)           | √ | √ | √ | √ | √ | √ |  |
| 2.4L DOHC MELCO<br>(2000-04) | √              | √                                   | √ | √ | √ | √ |   |   |  |

Non-Korea

|                                   |                               |   |   |   |   |   |  |  |
|-----------------------------------|-------------------------------|---|---|---|---|---|--|--|
| <b>OPTIMA<br/>(MAGENTIS)</b>      | 2.0L DOHC A/T MELCO (2000-04) | √ | √ | √ | √ | √ |  |  |
|                                   | 2.0L DOHC A/T LEAD (2000-04)  |   | √ | √ | √ | √ |  |  |
|                                   | 2.0L DOHC M/T MELCO (2000-04) | √ | √ | √ | √ | √ |  |  |
|                                   | 2.0L DOHC M/T LEAD (2000-04)  |   | √ | √ | √ | √ |  |  |
|                                   | 1.8L DOHC SIEMENS(2004)       | √ | √ | √ | √ | √ |  |  |
|                                   | 2.0L LPG SILIUSI(2004)        | √ | √ | √ | √ | √ |  |  |
|                                   | 2.0L LPG BETA(2004)           | √ | √ | √ | √ | √ |  |  |
|                                   | 2.5L V6 EURO-III (2000-02)    |   |   |   |   |   |  |  |
| AT(2000-07)                       | 2.0L DIESEL(VGT)              |   | √ | √ |   |   |  |  |
|                                   | 2.0L CVVT(06-07)              |   | √ | √ |   |   |  |  |
|                                   | 2.4L CVVT(06-07)              |   | √ | √ |   |   |  |  |
|                                   | 2.7L CVVT(06-07)              |   | √ | √ |   |   |  |  |
|                                   | TCU FOR 2.5L/2.7L GASOLINE    |   | √ | √ |   |   |  |  |
|                                   | TCU FOR 2.4L GASOLINE         | √ | √ | √ | √ | √ |  |  |
|                                   | TCU FOR 2.0L GASOLINE         | √ | √ | √ | √ | √ |  |  |
|                                   | CVT                           | √ | √ | √ | √ | √ |  |  |
|                                   | 1.8/2.5 SIEMENS REGAL         | √ | √ | √ | √ | √ |  |  |
| ABS(2000-07)                      | √                             | √ | √ | √ | √ |   |  |  |
| SRS(2000-07)                      | √                             | √ | √ | √ |   |   |  |  |
| A/C(2006-07)                      |                               | √ | √ |   |   |   |  |  |
| ELEC. CONTROL SUSPENSION(2006-07) |                               |   | √ | √ |   |   |  |  |
| <b>ELAN</b>                       | Engine(1997-98)               |   | √ | √ | √ | √ |  |  |
|                                   | SRS(1997-98)                  |   | √ | √ |   |   |  |  |
| Engine(All Year)                  | 2.0L DOHC(HFM) UNLEAD         |   | √ | √ | √ |   |  |  |

|               |                                      |                         |   |   |   |   |   |  |  |
|---------------|--------------------------------------|-------------------------|---|---|---|---|---|--|--|
| POTENTIAL     | Engine(All Year)                     | 2.0L DOHC(HFM) LEAD     |   | √ | √ |   |   |  |  |
|               | AT                                   |                         |   | √ | √ |   |   |  |  |
|               | ABS                                  |                         |   | √ | √ | √ |   |  |  |
| ENTERPRISE    | Engine(All Year)                     | 2.5L GASOLINE J5D       |   | √ | √ | √ |   |  |  |
|               |                                      | 3.0L GASOLINE JED       |   | √ | √ | √ |   |  |  |
|               |                                      | OBD-II 98-99MY          |   | √ | √ | √ |   |  |  |
|               | AT(All Year)                         |                         |   | √ | √ |   |   |  |  |
|               | ABS(All Year)                        | 3.0L GASOLINE JED       |   | √ | √ | √ |   |  |  |
|               |                                      | 3.6L GASOLINE J6D       |   | √ | √ | √ |   |  |  |
| SRS(All Year) |                                      |                         | √ | √ |   |   |   |  |  |
|               | Engine(2006~2007)                    | 2.7/3.8L GASOLINE       |   | √ | √ |   |   |  |  |
|               |                                      | J2.9 WGT(DIESEL) C/RAIL |   | √ | √ |   |   |  |  |
|               |                                      | J2.9 VGT(DIESEL) C/RAIL |   | √ | √ |   |   |  |  |
|               | AT(2006~2007)                        | TCU 2.7/3.8L(GASOLINE)  |   | √ | √ |   |   |  |  |
|               |                                      | TCU 2.9 WGT(DIESEL)     |   | √ | √ |   |   |  |  |
|               |                                      | TCU 2.9 VGT(DIESEL)     |   | √ | √ |   |   |  |  |
|               | ABS(2006~2007)                       |                         | √ | √ | √ | √ | √ |  |  |
|               | SRS(2006~2007)                       |                         |   | √ | √ |   |   |  |  |
|               | A/C(2006~2007)                       |                         |   | √ | √ |   |   |  |  |
|               | FUEL FIRED HEATER(2006~2007)         |                         |   | √ | √ |   |   |  |  |
|               | POWER SLIDING / TAIL GATE(2006~2007) | POWER SLIDING – LH      |   | √ | √ |   |   |  |  |
|               |                                      | POWER SLIDING – RH      |   | √ | √ |   |   |  |  |
|               |                                      | POWER TAIL GATE         |   | √ | √ |   |   |  |  |
|               | BODY CONTROL MODULE(2006~2007)       | IN PANEL MODULE         |   | √ | √ |   |   |  |  |
|               |                                      | FRONT AREA MODULE       |   | √ | √ |   |   |  |  |
|               |                                      | REAR AREA MODULE        |   | √ | √ |   |   |  |  |
|               |                                      | DRIVER DOOR MODULE      |   | √ | √ |   |   |  |  |
|               |                                      | ASSIST DOOR MODULE      |   | √ | √ |   |   |  |  |
|               | INTEGRATED MEM SEAT                  |                         | √ | √ |   |   |   |  |  |

**CARNIVAL  
L  
(SEDONA)**

|        |  |  |   |   |   |   |   |  |
|--------|--|--|---|---|---|---|---|--|
| Engine | 3.5L GASOLINE M/EAST<br>(2003-04)        |  | √ | √ | √ | √ |   |  |
|        | 2.5L V6 EURO-III                         |  | √ | √ | √ | √ |   |  |
|        | 2.5L GASOLINE(EUROPE)<br>KV6(1998-2004)  |  | √ | √ | √ | √ |   |  |
|        | 2.4/2.5L GASOLINE(GEN)<br>KV6(1998-2004) |  | √ | √ | √ | √ |   |  |
|        | 2.9L DIESEL C/RAIL<br>(2002-04)          |  | √ | √ | √ | √ |   |  |
|        | 3.0L DIESEL(EUROPE)<br>J3TCI (1998-2004) |  | √ | √ |   |   |   |  |
|        | 3.0L DIESEL(GEN) J3TCI<br>(1998-2004)    |  | √ | √ |   |   |   |  |
| AT     | 3.5L GASOLINE M/EAST<br>(2003-04)        |  | √ | √ | √ | √ |   |  |
|        | GASOLINE<br>(2002-04)                    |  | √ | √ | √ | √ |   |  |
|        | DIESEL<br>(2002-04)                      |  | √ | √ | √ | √ |   |  |
|        | TCU(GENERAL) GAS<br>(1998-2001)          |  | √ | √ | √ | √ |   |  |
|        | TCU(EUROPE) GAS<br>(1998-2001)           |  | √ | √ | √ | √ |   |  |
|        | TCU(GENERAL) DIESEL<br>(1998-2001)       |  | √ | √ | √ |   |   |  |
|        | TCU(EUROPE) DIESEL<br>(1998-2001)        |  | √ | √ | √ |   |   |  |
|        | ABS(2002-04)                             |  | √ | √ | √ | √ | √ |  |
|        | ABS EURO-II(2002-04)                     |  | √ | √ | √ | √ | √ |  |
|        | ABS C/RAIL(2002-04)                      |  | √ | √ | √ | √ | √ |  |

|                 |                  |                                    |   |   |   |   |   |   |  |  |
|-----------------|------------------|------------------------------------|---|---|---|---|---|---|--|--|
|                 | ABS              | ABS(EUROPE)<br>(1998-2001)         |   | √ | √ | √ | √ | √ |  |  |
|                 |                  | ABS(GENERAL) GAS<br>(1998-2001)    |   | √ | √ | √ | √ | √ |  |  |
|                 |                  | ABS(GENERAL) DIESEL<br>(1998-2001) |   | √ | √ | √ | √ | √ |  |  |
|                 | SRS              | (2002-2004)                        |   | √ | √ |   |   |   |  |  |
|                 |                  | A/BAG(Europe)<br>(1998-2001)       |   | √ | √ |   |   |   |  |  |
|                 |                  | A/BAG(GENERAL)<br>(1998-2001)      |   | √ | √ |   |   |   |  |  |
| <b>RETONA</b>   | Engine(ALL Year) | 2.0L GASOLINE                      |   | √ | √ | √ |   |   |  |  |
|                 |                  | 2.0L DIESEL RF-TCI                 |   | √ | √ | √ | √ |   |  |  |
|                 | AT(ALL Year)     |                                    |   | √ | √ | √ |   |   |  |  |
|                 | ABS(ALL Year)    |                                    |   | √ | √ | √ | √ |   |  |  |
| <b>JOICE</b>    | Engine(ALL Year) | 2.0L GASOLINE EURO-III             |   | √ | √ | √ | √ |   |  |  |
|                 | ABS(ALL Year)    |                                    |   | √ | √ | √ | √ | √ |  |  |
|                 | SRS(ALL Year)    |                                    |   | √ | √ | √ |   |   |  |  |
| <b>TOWNER</b>   |                  |                                    |   |   |   |   |   |   |  |  |
| <b>PREGIO</b>   | Engine(2002-04)  |                                    |   | √ | √ | √ | √ |   |  |  |
| <b>FRONTIER</b> | Engine(2002-04)  |                                    |   | √ | √ | √ | √ |   |  |  |
|                 | Engine(2007)     | 3.3L/3.8L                          |   | √ | √ |   |   |   |  |  |
|                 |                  | 2.5L DIESEL(CAN) EURO-4            |   | √ | √ |   |   |   |  |  |
|                 |                  | 2.5L DIESEL(KWP) EURO-4            |   | √ | √ |   |   |   |  |  |
|                 |                  | 2.5L DIESEL EURO-3                 |   | √ | √ |   |   |   |  |  |
|                 | AT(2007)         | GASOLINE (CAN) BOSCH               |   |   | √ | √ |   |   |  |  |
|                 |                  | GASOLINE (KWP) BOSCH               |   |   | √ | √ |   |   |  |  |
|                 |                  | A2.5L DIESEL JATCO                 |   |   | √ | √ |   |   |  |  |
|                 | ABS(2007)        |                                    | √ | √ | √ | √ | √ |   |  |  |

**SORENTO**

|                               |                         |   |   |   |   |   |   |  |
|-------------------------------|-------------------------|---|---|---|---|---|---|--|
| SRS(2007)                     |                         | √ | √ | √ | √ |   |   |  |
| A/C(2007)                     |                         |   |   |   |   |   |   |  |
| ELEC. POWER STEERING(2007)    |                         |   |   |   |   |   |   |  |
| 4WD(2007)                     |                         |   |   |   |   |   |   |  |
| FUEL FIRED HEATER(2007)       |                         |   |   |   |   |   |   |  |
| Engine(2003-04)               | ENGINE DIESEL(A-ENG)    |   | √ | √ | √ | √ |   |  |
|                               | 3.5L V6 GASOLINE ALL    |   | √ | √ | √ | √ |   |  |
|                               | 2.4L GASOLINE UNLEAD    |   | √ | √ | √ | √ |   |  |
|                               | 2.4L GASOLINE LEAD      |   | √ | √ | √ | √ |   |  |
| AT(2003-04)                   | AUTO.TRANSAXLE(4 GEARS) |   | √ | √ | √ | √ |   |  |
|                               | AUTO.TRANSAXLE(5 GEARS) | √ | √ | √ | √ | √ |   |  |
| ABS(2003-04)                  |                         | √ | √ | √ | √ | √ | √ |  |
| SRS(2003-04)                  |                         | √ | √ | √ | √ |   |   |  |
| ELEC. POWER STEERING(2003-04) |                         | √ | √ | √ | √ |   |   |  |
| 4WD(2003-04)                  |                         |   | √ | √ |   |   |   |  |
| FUEL FIRED HEATER(2003-04)    |                         |   | √ | √ | √ | √ |   |  |
| Engine(2004~2005)             | 3.5L V6 EOBD            |   | √ | √ | √ | √ |   |  |
|                               | 3.5L V6 GEN             |   | √ | √ | √ | √ |   |  |
|                               | 2.7L                    |   | √ | √ |   |   |   |  |
|                               | 2007                    |   | √ | √ |   |   |   |  |
| AT                            | (2004~2005)             |   | √ | √ | √ | √ |   |  |
|                               | 2007                    |   | √ | √ |   |   |   |  |
| ABS/TCS/ESP (2004~2007)       |                         |   | √ | √ | √ | √ |   |  |
| SRS                           | (2004~2005)             |   | √ | √ | √ |   |   |  |
|                               | 2007                    |   | √ | √ |   |   |   |  |



|                                   |                                    |                                  |   |   |   |   |   |   |   |
|-----------------------------------|------------------------------------|----------------------------------|---|---|---|---|---|---|---|
| <b>CREDOS</b>                     | AT(All Year)                       | CREDOS II 1.8 DOHC AT            |   | √ | √ | √ |   |   |   |
|                                   |                                    | CREDOS II 2.0 SOHC AT            |   | √ | √ | √ |   |   |   |
|                                   |                                    | CREDOS II 2.0 DOHC AT            |   | √ | √ | √ |   |   |   |
|                                   |                                    | CREDOS II V6 AT                  |   | √ | √ | √ |   |   |   |
|                                   | SRS(All Year)                      | CREDOS 1.8 DOHC SRS              |   | √ | √ | √ |   |   |   |
|                                   |                                    | CREDOS 2.0 SOHC SRS              |   | √ | √ | √ |   |   |   |
|                                   |                                    | CREDOS 2.0 DOHC SRS              |   | √ | √ | √ |   |   |   |
|                                   |                                    | CREDOS II 1.8 DOHC SRS           |   | √ | √ | √ |   |   |   |
|                                   |                                    | CREDOS II 2.0 SOHC SRS           |   | √ | √ | √ |   |   |   |
|                                   |                                    | CREDOS II 2.0 DOHC SRS           |   | √ | √ | √ |   |   |   |
|                                   | CREDOS II V6 SRS                   |                                  | √ | √ | √ |   |   |   |   |
| <b>CARSTAR</b>                    | Engine(All Year)                   | CARSTAR FBM(LPG) ENG             |   | √ | √ | √ |   |   |   |
|                                   | ABS(All Year)                      | CARSTAR DOHC ABS                 |   | √ | √ | √ | √ |   |   |
|                                   |                                    | CARSTAR FBM(LPG) ABS             |   | √ | √ | √ | √ |   |   |
|                                   | SRS(All Year)                      | CARSTAR DOHC SRS                 |   | √ | √ | √ |   |   |   |
|                                   |                                    | CARSTAR FBM(LPG) SRS             |   | √ | √ | √ |   |   |   |
| <b>K2500</b>                      | Engine(2004~2005)                  | 2.5L Diesel Eng.<br>( 4D56 TCI ) |   | √ | √ | √ | √ |   |   |
|                                   | Engine(2003)                       | 2.5L Diesel Eng.<br>( 4D56 TCI ) |   | √ | √ | √ | √ |   |   |
|                                   | Engine(2002)                       | 2.5L Diesel Eng.<br>( 4D56 TCI ) |   | √ | √ | √ | √ |   |   |
| <b>PICANTO<br/>(MORNIN<br/>G)</b> | Engine(2006~2007)                  | 1.1L VGT DIESEL CAN              |   | √ | √ |   |   |   |   |
|                                   |                                    | 1.1L VGT DIESEL KWP              |   | √ | √ |   |   |   |   |
|                                   | AT(2006~2007)                      | GASOLINE                         |   | √ | √ | √ |   |   |   |
|                                   |                                    | DIESEL                           |   | √ | √ |   |   |   |   |
|                                   | ABS(2006~2007)                     |                                  | √ | √ | √ | √ | √ | √ |   |
|                                   | SRS(2006~2007)                     |                                  | √ | √ | √ |   |   |   | √ |
|                                   | ELEC. POWER<br>STEERING(2006~2007) |                                  |   | √ | √ |   |   |   |   |

|                |                       |                                   |   |   |   |   |   |   |   |
|----------------|-----------------------|-----------------------------------|---|---|---|---|---|---|---|
| g)             | Engine(2004~2005)     | 1.0L/1.1L SOHC EOBD               |   | √ | √ | √ |   |   |   |
|                |                       | 1.0L/1.1L SOHC GEN                |   | √ | √ | √ |   |   |   |
|                |                       | 1.0L/1.1L SOHC Lead               |   | √ | √ | √ |   |   |   |
|                | AT(2004~2005)         |                                   |   | √ | √ | √ |   |   |   |
|                | ABS(2004~2005)        |                                   | √ | √ | √ | √ | √ | √ |   |
|                | SRS(2004~2005)        |                                   | √ | √ | √ |   |   |   | √ |
| CERATO         | Engine(2004~2007)     | 2.0L/1.6L GASOLINE                |   | √ | √ |   |   |   |   |
|                |                       | 1.6L DIESEL(VGT) EURO-4           |   | √ | √ |   |   |   |   |
|                |                       | 2.0L Diesel Eng. All              | √ | √ | √ | √ | √ |   |   |
|                |                       | 1.6L DOHC EOBD                    | √ | √ | √ | √ | √ |   |   |
|                |                       | 1.6L DOHC general                 | √ | √ | √ | √ | √ |   |   |
|                |                       | 1.6L DOHC lead-content            | √ | √ | √ | √ | √ |   |   |
|                |                       | 2.0L DOHC (+CVVT) EOBD            | √ | √ | √ | √ | √ |   |   |
|                |                       | 2.0L DOHC (-CVVT) EOBD            | √ | √ | √ | √ | √ |   |   |
|                |                       | 2.0L DOHC (+CVVT) general         | √ | √ | √ | √ | √ |   |   |
|                |                       | 2.0L DOHC (-CVVT) general         | √ | √ | √ | √ | √ |   |   |
|                |                       | 2.0L DOHC (+CVVT)<br>lead-content | √ | √ | √ | √ | √ |   |   |
|                |                       | 2.0L DOHC (-CVVT)<br>lead-content | √ | √ | √ | √ | √ |   |   |
|                | Engine(2005)          | 1.5L DIESEL ALL                   | √ | √ | √ | √ | √ |   |   |
|                | AT(2004~2007)         | 1.6LDOHC ALL                      |   | √ | √ | √ | √ |   |   |
|                |                       | 2.0LDOHC ALL                      |   | √ | √ | √ | √ |   |   |
| ABS2004~2007)  |                       | √                                 | √ | √ | √ | √ | √ |   |   |
| SRS(2004~2007) |                       | √                                 | √ | √ |   |   |   | √ |   |
| A/C(2007)      |                       |                                   | √ | √ |   |   |   |   |   |
| Engine(2007)   | BETA 2.0L             | √                                 | √ | √ | √ | √ |   |   |   |
|                | GAMMA 1.4L/1.6L       | √                                 | √ | √ | √ | √ |   |   |   |
|                | U 1.6L DIESEL (- CPF) | √                                 | √ | √ | √ | √ |   |   |   |
|                | U 1.6L DIESEL (+ CPF) | √                                 | √ | √ | √ | √ |   |   |   |

|                      |                            |                          |   |   |   |   |   |   |   |  |
|----------------------|----------------------------|--------------------------|---|---|---|---|---|---|---|--|
| CEE'D                |                            | 2.0L DIESEL(CAN) EURO-4  | √ | √ | √ | √ | √ |   |   |  |
|                      | AT(2007)                   | 1.4/1.6 GASOLINE         | √ | √ | √ | √ | √ |   |   |  |
|                      |                            | 2.0 GASOLINE             | √ | √ | √ | √ | √ |   |   |  |
|                      | ABS(2007)                  |                          | √ | √ | √ | √ | √ |   |   |  |
|                      | SRS(2007)                  |                          | √ | √ | √ |   |   |   | √ |  |
|                      | A/C(2007)                  |                          | √ | √ | √ | √ | √ |   |   |  |
|                      | BODY CONTROL MODULE(2007)  |                          | √ |   |   | √ | √ |   |   |  |
|                      | ELEC. POWER STEERING(2007) |                          | √ | √ | √ | √ |   |   |   |  |
| PRIDE(~0             | Engine                     | NEW STYLE ENGINE SIEMENS |   | √ | √ | √ |   |   |   |  |
|                      | Engine                     | 1.6 CVVT                 |   | √ | √ | √ | √ |   |   |  |
| 1.4 DOHC             |                            |                          |   | √ | √ | √ | √ |   |   |  |
| U 1.5L VGT DIESEL    |                            |                          |   | √ | √ | √ | √ |   |   |  |
| PRIDE(05 ~)          | AT                         |                          |   | √ | √ | √ | √ |   |   |  |
|                      | ABS                        |                          | √ | √ | √ | √ | √ | √ |   |  |
|                      |                            |                          |   |   |   |   |   |   | √ |  |
|                      | HYBRID                     | Hybrid Control(HCU)      |   |   | √ | √ | √ | √ |   |  |
|                      |                            | Motor control(MCU)       |   |   | √ | √ | √ | √ |   |  |
| Battery Control(BMS) |                            |                          |   | √ | √ | √ | √ |   |   |  |
|                      | AT                         |                          |   | √ | √ | √ |   |   |   |  |
| VISTO                | Engine                     | ENGINE 0.8 SOHC          |   | √ | √ | √ | √ |   |   |  |
|                      | ABS                        |                          |   | √ | √ | √ | √ | √ |   |  |
|                      | SRS                        |                          |   | √ | √ | √ |   |   |   |  |
| MORNIN G             | Engine                     | ENGINE 1.0 SOHC          |   | √ | √ | √ |   |   |   |  |
|                      | ABS                        |                          | √ | √ | √ | √ | √ | √ |   |  |
|                      | SRS                        |                          | √ | √ | √ |   |   |   | √ |  |
| AVELLA               | AT                         |                          |   | √ | √ |   |   |   |   |  |
|                      | ABS                        |                          |   | √ | √ | √ |   |   |   |  |
| RIO                  | Engine                     | ENGINE 1.3/1.5 SIEMENS   |   | √ | √ | √ |   |   |   |  |
|                      | AT                         |                          |   | √ | √ | √ |   |   |   |  |

|               |                         |                         |   |   |   |   |   |   |  |
|---------------|-------------------------|-------------------------|---|---|---|---|---|---|--|
| RIO           | ABS                     |                         |   | √ | √ | √ | √ |   |  |
|               | SRS                     |                         |   | √ | √ |   |   |   |  |
| RIO SF        | Engine                  | ENGINE 1.3/1.5 SIEMENS  |   | √ | √ | √ |   |   |  |
|               | AT                      |                         |   | √ | √ | √ |   |   |  |
|               | ABS                     |                         | √ | √ | √ | √ | √ | √ |  |
|               | SRS                     |                         |   | √ | √ |   |   |   |  |
| ELAN          | Engine                  | ENGINE 1.8 DOHC BOSCH   |   | √ | √ | √ | √ |   |  |
|               | SRS                     |                         |   | √ | √ |   |   |   |  |
| SEPHIA        | AT                      |                         |   | √ | √ |   |   |   |  |
|               | SRS                     |                         |   | √ | √ |   |   |   |  |
| SEPHIA II     | Engine                  | ENGINE 1.5 SOHC SIEMENS |   | √ | √ | √ |   |   |  |
|               |                         | ENGINE 1.5 DOHC BOSCH   |   | √ | √ | √ |   |   |  |
|               |                         | ENGINE 1.8 BOSCH        |   | √ | √ | √ |   |   |  |
|               | AT                      |                         |   | √ | √ | √ |   |   |  |
|               | ABS                     |                         |   | √ | √ | √ | √ |   |  |
|               | SRS                     |                         |   | √ | √ |   |   |   |  |
| SPECTRA(WING) | Engine                  | ENGINE 1.8 BOSCH        |   | √ | √ | √ |   |   |  |
|               |                         | ENGINE 1.5 BOSCH        |   | √ | √ | √ |   |   |  |
|               | AT                      |                         |   | √ | √ | √ |   |   |  |
|               | ABS                     |                         |   | √ | √ | √ | √ |   |  |
|               | SRS                     |                         |   | √ | √ |   |   |   |  |
| SHUMA         | Engine                  | ENGINE 1.5 SOHC SIEMENS |   | √ | √ | √ |   |   |  |
|               |                         | ENGINE 1.5 DOHC BOSCH   |   | √ | √ | √ |   |   |  |
|               |                         | ENGINE 1.8 BOSCH        |   | √ | √ | √ |   |   |  |
|               | AT                      |                         |   | √ | √ | √ |   |   |  |
|               | ABS                     |                         |   | √ | √ | √ | √ |   |  |
|               | SRS                     |                         |   | √ | √ |   |   |   |  |
| Engine        | ENGINE 2.0 CVVT SIEMENS | √                       | √ | √ | √ |   |   |   |  |
|               | Diesel ENG. 1.6LVGT     | √                       | √ | √ | √ |   |   |   |  |
|               | Engine 1.5/1.6 CVVT     | √                       | √ | √ | √ |   |   |   |  |

|        |                               |                 |                                    |   |   |   |   |   |  |  |
|--------|-------------------------------|-----------------|------------------------------------|---|---|---|---|---|--|--|
| CERATO |                               | Engine 2.0L(MT) | √                                  | √ | √ | √ |   |   |  |  |
|        |                               | Engine 2.0L(AT) | √                                  | √ | √ | √ |   |   |  |  |
|        | AT                            |                 | 1.5 IMPROVED TYPE<br>(INTEGRATION) |   | √ | √ | √ | √ |  |  |
|        |                               |                 | 1.6 L(new)                         | √ | √ | √ | √ |   |  |  |
|        |                               |                 | 2.0 L(new)                         | √ | √ | √ | √ |   |  |  |
|        |                               |                 | Diesel                             | √ | √ | √ | √ |   |  |  |
|        | ABS                           |                 | √                                  | √ | √ | √ | √ |   |  |  |
|        | SRS                           |                 | F/L new                            | √ | √ | √ | √ |   |  |  |
|        |                               |                 | SRS old                            | √ | √ | √ | √ |   |  |  |
|        | AC                            |                 | √                                  | √ | √ | √ | √ |   |  |  |
| CARENS | Engine(2006-)                 |                 | LPI(EMS ECU)                       | √ | √ | √ | √ | √ |  |  |
|        |                               |                 | LPI(IFB ECU)                       | √ | √ | √ | √ | √ |  |  |
|        |                               |                 | DIESEL                             | √ | √ | √ | √ | √ |  |  |
|        | AT(2006-)                     |                 | LPI                                | √ | √ | √ | √ | √ |  |  |
|        |                               |                 | DIESEL                             | √ | √ | √ | √ | √ |  |  |
|        | ABS(2006-)                    |                 |                                    | √ | √ | √ | √ |   |  |  |
|        | SRS(2006-)                    |                 | √                                  | √ | √ | √ |   |   |  |  |
|        | A/C(2006-)                    |                 | √                                  | √ | √ | √ | √ |   |  |  |
|        | BODY CONTROL<br>MODULE(2006-) |                 | √                                  |   |   | √ | √ |   |  |  |
|        | Engine                        |                 | ENGINE 1.8 BOSCH                   |   | √ | √ | √ |   |  |  |
|        |                               |                 | ENGINE 1.8 LPG                     |   | √ | √ | √ | √ |  |  |
|        |                               |                 | MODERN AUTONET                     |   |   |   |   |   |  |  |
|        |                               |                 | ENGINE 2.0 LPG                     |   | √ | √ | √ | √ |  |  |
|        |                               |                 | MODERN AUTONET                     |   |   |   |   |   |  |  |
|        | AT                            |                 |                                    | √ | √ | √ |   |   |  |  |
| ABS    |                               |                 | √                                  | √ | √ | √ |   |   |  |  |
| SRS    |                               |                 | √                                  | √ |   |   |   |   |  |  |
|        |                               | ENGINE 1.8 LPG  |                                    | √ | √ | √ | √ |   |  |  |
|        |                               | MODERN AUTONET  |                                    |   |   |   |   |   |  |  |

Korea

|           |                         |                                  |   |   |   |   |   |   |  |
|-----------|-------------------------|----------------------------------|---|---|---|---|---|---|--|
| CARENS II | Engine                  | ENGINE 2.0 LPG<br>MODERN AUTONET |   | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 1.8                       |   | √ | √ | √ |   |   |  |
|           |                         | ENGINE 2.0 CVVT SIEMENS          |   | √ | √ | √ | √ |   |  |
|           | AT                      | 1.8LPG/1.8 GASOLINE              |   | √ | √ | √ |   |   |  |
|           |                         | 2.0LPG/2.0 GASOLINE              |   | √ | √ | √ | √ |   |  |
|           | ABS                     |                                  | √ | √ | √ | √ | √ | √ |  |
| SRS       |                         | √                                | √ | √ | √ |   |   |   |  |
| CREDOS    | Engine                  | ENGINE 1.8 DOHC BOSCH            |   | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 2.0 SOHC BOSCH            |   | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 2.0 DOHC BOSCH            |   | √ | √ | √ | √ |   |  |
|           | SRS                     |                                  |   | √ | √ | √ |   |   |  |
| CREDOS II | Engine                  | ENGINE 1.8 DOHC BOSCH            |   | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 2.0 SOHC BOSCH            |   | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 2.0 DOHC BOSCH            |   | √ | √ | √ | √ |   |  |
|           | SRS                     |                                  |   | √ | √ | √ |   |   |  |
| OPTIMA    | Engine                  | ENGINE 1.8/2.0 MELCO             |   | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 1.8 DOHC SIEMENS          | √ | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 2.5 V6 SIEMENS            |   | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 2.0 LPG<br>SIRIUS ENGINE  | √ | √ | √ | √ | √ |   |  |
|           |                         | ENGINE 2.0 LPG<br>BETA ENGINE    | √ | √ | √ | √ | √ |   |  |
|           |                         | 1.8/2.0/2.5 ALL                  |   | √ | √ | √ | √ |   |  |
|           | AT                      | CVT                              | √ | √ | √ | √ | √ |   |  |
|           |                         | MANDO TYPE                       |   | √ | √ | √ | √ |   |  |
|           | ABS                     | BOSCH TYPE                       |   | √ | √ | √ | √ |   |  |
|           |                         |                                  |   | √ | √ | √ |   |   |  |
| SRS       |                         |                                  | √ | √ | √ |   |   |   |  |
| Engine    | ENGINE 1.8 DOHC SIEMENS | √                                | √ | √ | √ | √ |   |   |  |
|           | ENGINE 2.0 DOHC MELCO   |                                  | √ | √ | √ | √ |   |   |  |

|                             |        |                               |   |   |   |   |   |   |   |
|-----------------------------|--------|-------------------------------|---|---|---|---|---|---|---|
| <b>OPTIMA<br/>(REGAL)</b>   | Engine | ENGINE 2.5 V6 SIEMENS         |   | √ | √ | √ | √ |   |   |
|                             |        | ENGINE 2.0 LPG<br>BETA ENGINE | √ | √ | √ | √ | √ |   |   |
|                             | AT     | 2.0                           |   | √ | √ | √ | √ |   |   |
|                             |        | 1.8/2.5 SIEMENS               | √ | √ | √ | √ | √ |   |   |
|                             |        | CVT                           | √ | √ | √ | √ | √ |   |   |
|                             | ABS    | BOSCH TYPE                    |   | √ | √ | √ | √ |   |   |
|                             | SRS    |                               | √ | √ | √ | √ |   |   |   |
| <b>SPORTAGE</b>             | Engine | ENGINE 2.0 BOSCH              |   | √ | √ | √ | √ |   |   |
| <b>SPORTAGE<br/>(98-03)</b> | Engine | ENGINE 2.0 BOSCH              |   | √ | √ | √ |   |   |   |
|                             | AT     |                               |   | √ | √ | √ |   |   |   |
|                             | ABS    |                               |   | √ | √ | √ | √ | √ |   |
| <b>SPORTAGE<br/>(04-)</b>   | Engine | 2.0 WGT EURO 3 DIESEL         | √ | √ | √ | √ | √ |   |   |
|                             |        | 2.0L CVVT SIEMENS<br>DIESEL   | √ | √ | √ | √ | √ |   |   |
|                             |        | 2.0L DIESEL BOSCH             | √ | √ | √ | √ | √ |   |   |
|                             | AT     | 2.0L CVVT SIEMENS             | √ | √ | √ | √ | √ |   |   |
|                             |        | ABS/TCS/ESP                   |   | √ | √ | √ | √ | √ | √ |
|                             | A/C    |                               | √ | √ | √ | √ | √ |   |   |
|                             | 4WD    |                               | √ | √ | √ |   |   |   |   |
|                             |        | WIPER SENSOR(VVALID)          | √ |   |   | √ | √ |   |   |
|                             |        | WIPER SENSOR(INVALID)         | √ |   |   | √ | √ |   |   |
| <b>SORENTO</b>              | Engine | 2.5L CRDI DIESEL WGT(~03)     |   | √ | √ | √ | √ |   |   |
|                             |        | 2.5L CRDI DIESEL WGT(04~)     |   | √ | √ | √ | √ |   |   |
|                             |        | 2.5L CRDI DIESEL WGT(05~)     |   | √ | √ | √ | √ |   |   |
|                             |        | 3.5 GASOLINE                  |   | √ | √ | √ | √ |   |   |
|                             |        | 2.5L DIESEL(EURO3) CAN        | √ | √ | √ | √ | √ |   |   |
|                             |        | 2.5L DIESEL(EURO3) KWP        |   | √ | √ | √ | √ |   |   |
|                             | AT     | Automatic transmission(4S)    |   | √ | √ | √ | √ |   |   |

|                                  |                          |                         |   |   |   |   |   |   |   |
|----------------------------------|--------------------------|-------------------------|---|---|---|---|---|---|---|
|                                  | ABS                      |                         | √ | √ | √ | √ | √ | √ |   |
|                                  | SRS                      |                         | √ | √ | √ | √ |   |   |   |
|                                  | ELEC. POWER STEERING     |                         | √ | √ | √ | √ |   |   |   |
|                                  | 4WD                      | 4WD(TOD-AUTO)           |   | √ | √ |   |   |   |   |
|                                  | FUEL FIRED HEATER        |                         |   | √ | √ | √ | √ |   |   |
| <b>CARNIVAL/<br/>CARNIVAL II</b> | Engine                   | ENGINE 3.0 DIESEL       |   | √ | √ |   |   |   |   |
|                                  |                          | ENGINE 2.5 LPG          |   | √ | √ | √ | √ |   |   |
|                                  | AT                       |                         |   | √ | √ | √ | √ |   |   |
|                                  | ABS                      |                         |   | √ | √ | √ | √ | √ |   |
|                                  | SRS                      |                         |   | √ | √ |   |   |   |   |
| <b>GRAND CARNIVAL</b>            | Engine                   | KJ 2.9 CRDI WGT DIESEL  |   | √ | √ | √ | √ |   |   |
|                                  |                          | KJ 2.9 CRDI VGT DIESEL  | √ | √ | √ | √ | √ |   |   |
|                                  |                          | 2.7 LPI(EMS ECU)        | √ | √ | √ | √ | √ |   |   |
|                                  |                          | 2.7 LPI(IFB ECU)        | √ | √ | √ | √ | √ |   |   |
|                                  | AT                       | KJ 2.9 CRDI VGT DIESEL  | √ | √ | √ | √ | √ |   |   |
|                                  |                          | KJ 2.9 CRDI WGT DIESEL  | √ | √ | √ | √ | √ |   |   |
|                                  |                          | 2.7 LPI                 |   | √ | √ | √ | √ |   |   |
|                                  | ABS                      |                         |   | √ | √ | √ | √ |   |   |
|                                  | SRS                      |                         |   | √ | √ |   |   |   | √ |
| A/C                              |                          |                         | √ | √ | √ | √ |   |   |   |
| <b>POTENTIAL</b>                 | Engine                   | ENGINE 2.0 DOHC BOSCH   |   | √ | √ |   |   |   |   |
|                                  | AT                       |                         |   | √ | √ |   |   |   |   |
|                                  | ABS                      | ABS 5                   |   | √ | √ | √ |   |   |   |
|                                  |                          | ABS/ASR 5(TCS INCLUDED) |   | √ | √ | √ |   |   |   |
| Engine                           | ENGINE 2.0L(before 2001) |                         |   | √ | √ |   |   |   |   |
|                                  | ENGINE 2.0L(after 2001)  |                         |   | √ | √ | √ |   |   |   |

|                         |                 |                                      |   |   |   |   |   |  |  |
|-------------------------|-----------------|--------------------------------------|---|---|---|---|---|--|--|
| <b>NEW POTENTIAL A</b>  | Engine          | ENGINE 2.5 V6<br>JAPAN ELECTROMOTION |   | √ | √ | √ |   |  |  |
|                         | AT              |                                      |   | √ | √ |   |   |  |  |
|                         | ABS             | ABS 5                                |   | √ | √ | √ |   |  |  |
| ABS/ASR 5(TCS INCLUDED) |                 |                                      | √ | √ | √ |   |   |  |  |
| <b>ENTERPRISE</b>       | Engine          | ENGINE 2.5 V6                        |   | √ | √ | √ |   |  |  |
|                         |                 | ENGINE 3.0 V6<br>JAPAN ELECTROMOTION |   | √ | √ | √ |   |  |  |
|                         |                 | ENGINE 3.6 V6<br>JAPAN ELECTROMOTION |   | √ | √ | √ |   |  |  |
|                         |                 | ENGINE 2.5 V6<br>BOSCH(00MY~)        |   | √ | √ | √ |   |  |  |
|                         |                 | AT                                   |   |   | √ | √ |   |  |  |
|                         | ABS             | ABS 5                                |   | √ | √ | √ |   |  |  |
|                         |                 | ABS/ASR 5(TCS INCLUDED)              |   | √ | √ | √ |   |  |  |
|                         | SRS             |                                      |   | √ | √ |   |   |  |  |
| <b>OPIRUS</b>           | Engine          | ENGINE 3.0/3.5 ETS MELCO             |   | √ | √ | √ | √ |  |  |
|                         |                 | 2.7L                                 |   | √ | √ |   |   |  |  |
|                         |                 | F/L new                              | √ | √ | √ | √ |   |  |  |
|                         |                 | Old Lamda                            |   | √ | √ | √ | √ |  |  |
|                         |                 | LPI(EMS ECU)redo car                 | √ | √ | √ | √ |   |  |  |
|                         |                 | LPI(EMS ECU) delta                   | √ | √ | √ | √ | √ |  |  |
|                         |                 | LPI(EMS ECU)                         | √ | √ | √ | √ |   |  |  |
|                         | AT              |                                      |   | √ | √ | √ | √ |  |  |
| ABS                     | 2.7/3.0/3.5 TCU |                                      | √ | √ | √ | √ |   |  |  |

|                  |                      |                      |   |   |   |   |   |   |  |
|------------------|----------------------|----------------------|---|---|---|---|---|---|--|
|                  | SRS                  |                      |   | √ | √ | √ |   |   |  |
|                  | A/C                  |                      |   | √ | √ | √ | √ |   |  |
|                  | ELEC. POWER STEERING |                      |   | √ | √ |   |   |   |  |
|                  | ELEC. CONTROL        |                      |   | √ | √ |   |   |   |  |
|                  | AHLS                 |                      | √ | √ | √ | √ |   |   |  |
|                  | SMART KEY            | INTERBASE UNIT (IFU) | √ |   |   | √ | √ |   |  |
| <b>LOTZE</b>     | Engine               | 1.8/2.0 & 2.4+ET     |   | √ | √ | √ | √ |   |  |
|                  |                      | LPI (EMS ECU)        |   | √ | √ | √ | √ |   |  |
|                  |                      | LPI (IFB ECU)        |   | √ | √ | √ | √ |   |  |
|                  | AT                   | 1.8/2.0 & 2.4+ET     |   | √ | √ | √ | √ |   |  |
|                  |                      | Diesel CAN BUS       |   | √ | √ | √ | √ |   |  |
|                  | ABS                  |                      |   | √ | √ | √ | √ |   |  |
| SRS              |                      |                      | √ | √ |   |   |   | √ |  |
| <b>BONGO III</b> | Engine               | 2.5 (TCI)            | √ | √ | √ | √ | √ |   |  |
|                  |                      | 2.9 (COMMON RAIL)    | √ | √ | √ | √ | √ |   |  |
|                  | AT                   |                      | √ | √ | √ | √ |   |   |  |
|                  | ABS                  |                      | √ | √ | √ | √ | √ |   |  |

(\*):Tested;

(?):Manual on website([www.x431.com](http://www.x431.com))

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