

Aisin A750E 5 Speed

| Wire Colors | | Firmware | | | | Mercury2 Input / Outputs | | | | Firmware | | Wire Colors | |
|--------------------------|-----------------|-----------|-----------|---------------------|------------------|--------------------------|-----------|--------------|-------------------|-------------|--|-----------------|-----------------|
| | | Priority2 | Priority1 | | | Priority1 | Priority2 | | | | | | |
| P1 - 12 Way Input | | | | | | | | | | | | | |
| MTSX01/2 | MTWX01/2 | | | | | | | | | | | MTWX01/2 | MTSX01/2 |
| Green | Green | | | Oil Temp 3.5K | Water Temp | 7 | 1 | Air Temp | Low Range | | | Yellow | Yellow |
| Blue | Blue | | | Shifter Switch | Lambda | 8 | 2 | TPS | TPS | | | Yellow | Blue |
| Red | Red | | | | +.5 Volt Out | 9 | 3 | MAP | | | | Blue | Blue |
| Orange | Orange | | | | -.12 Volt Ign | 10 | 4 | GND | | | | N/C | Black |
| Blue | Blue | | | Speed | TDC Sensor | 11 | 5 | Cam2 Sensor | | | | N/C | N/C |
| Blue | Green | | | RPM | Crank Sensor | 12 | 6 | Cam1 Sensor | | | | N/C | N/C |
| P2 - 10 Way TCU | | | | | | | | | | | | | |
| MTSX01/2 | MTWX01/2 | | | | | | | | | | | MTWX01/2 | MTSX01/2 |
| Red/Yellow | Red/Yellow | | | S2 Shift | P2 12 Volt | 6 | 1 | P1 12 Volt | S1 Shift | | | Red/White | Red/White |
| Red/Green | Red/Green | | | Low Range LED | P4 12 Volt | 7 | 2 | P3 12 Volt | SR Shift | | | Red/Orange | Red/Orange |
| Red/Black | Red/Black | | | Overdrive LED | P6 12 Volt | 8 | 3 | P5 12 Volt | 2nd Start LED | | | Red/Blue | Red/Blue |
| N/C | N/C | | | | Electronic Relay | 9 | 4 | Relay Out | | | | Blue/Red | Blue/Red |
| Red | Red | | | | +.12 Volt In | 10 | 5 | +.12 Volt In | | | | Red | Red |
| P3 - 8 Way ECU | | | | | | | | | | | | | |
| MTSX01/2 | MTWX01/2 | | | | | | | | | | | MTWX01/2 | MTSX01/2 |
| Black/Red | Black/Red | | | | N6 Ground | 5 | 1 | N5 Ground | Retard | | | Black/Purple | Black/Purple |
| Black/Brown | Black/Brown | | | SL2 Pressure | N4 Ground | 6 | 2 | N3 Ground | SL1 Pressure | | | Black/Orange | Black/Orange |
| Black/Yellow | Black/Yellow | | | SLU Lockup Pressure | N2 Ground | 7 | 3 | N1 Ground | SLT Line Pressure | | | Black/White | Black/White |
| Green | Green | | | | RPM Out | 8 | 4 | GP1 Out | GP1 | | | Blue/Orange | Blue/Orange |
| P4 - 6 Way | | | | | | | | | | | | | |
| MTSX01/2 | MTWX01/2 | | | | | | | | | | | MTWX01/2 | MTSX01/2 |
| Blue | Blue | | | 4 Map Switch | Fuel Sensor | 4 | 1 | GP2 Out | GP2 | | | Blue/White | Blue/White |
| Red | Red | | | Up Switch | POT | 5 | 2 | Altitude | Second Start | Down Switch | | Blue | Blue |
| Red | Red | | | | +.5 Volt Out | 6 | 3 | GND | | | | Black | Black |
| P5 - 4 Way | | | | | | | | | | | | | |
| MTSX01/2 | MTWX01/2 | | | | | | | | | | | MTWX01/2 | MTSX01/2 |
| Blue | Blue | | | | N8 Ground | 3 | 1 | N7 Ground | | | | White | White |
| Green | Green | | | Tiptronic LED | P8 12 Volt | 4 | 2 | P7 12 Volt | Lockup LED | | | Yellow | Yellow |
| Comms - 6 Way USB | | | | | | | | | | | | | |
| USB | USB | | | | | | | | | | | USB | USB |
| N/C | N/C | | | | Programmer 2 | 4 | 1 | Programmer 1 | | | | N/C | N/C |
| Yellow | Yellow | | | | Receive | 5 | 2 | Transmit | | | | Green | Green |
| Red | Red | | | | +.5 Volt Out | 6 | 3 | GND | | | | Blue | Blue |

Firmware Program

Mercury2 TCU Advance 05 Lexus A750E Ver 3.3B

Used with 4L V6 and 4.7L V8 engines.

Firmware Class Advance

2 GP output available.

Only 2K oil temperature sensor selection is allowed. Trnasmisiion has a 3.5K sensor.

When overdrive or second start is selected then the tiptronic buttons will be disabled and there functions changed to these functions.

Low range, Overdrive and Second Start could be used with different map selections without connections to the tranny or buttons.

| Shifter | Gear allowed | Engine Break |
|---------|--------------|--------------|
| P | 1 | |
| R | 1 | |
| N | 1 | |
| D | 1,2,3,4,5 | |

| Shifter | Gear allowed | Engine Break |
|---------|--------------|--------------|
| P | 1 | |
| R | 1 | |
| N | 1 | |
| 4-D | 1,2,3,4,5 | 4,5 |
| 3 | 1,2,3 | 2 |
| 2-L | 1,2 | 1,2 |