

YMMS: 2002 Mercedes-Benz C230

Jun 20,  
2022

Engine: 2.3L Eng

License:

VIN:

Odometer:

## **ECM,Engine**

### **Module Location**

#### **ECM Location:**

At left side of engine compartment in Relay/fuse/module box.

#### **Special note:**

Remove cover on top of fuse/module box for access to ECM.

#### **ECM Location:**

Under glove box.

#### **Special note:**

Remove right underdash panel to access ECM.

## **Throttle Control System,Accelerator Pedal Position Sensor,Engine**

### **Operation**

APS is either a dual three wire, variable resistor or dual hall sensor type. APS has 2 main functions. To measure accelerator pedal position and pedal position rate of change.

APS signals are used by ECM for drive-by-wire operation.

For both type of sensors, depressing accelerator pedal causes both APS signal voltages to increase.

### **Location**

#### **Best Test Location:**

At APS connector.

#### **Component Location:**

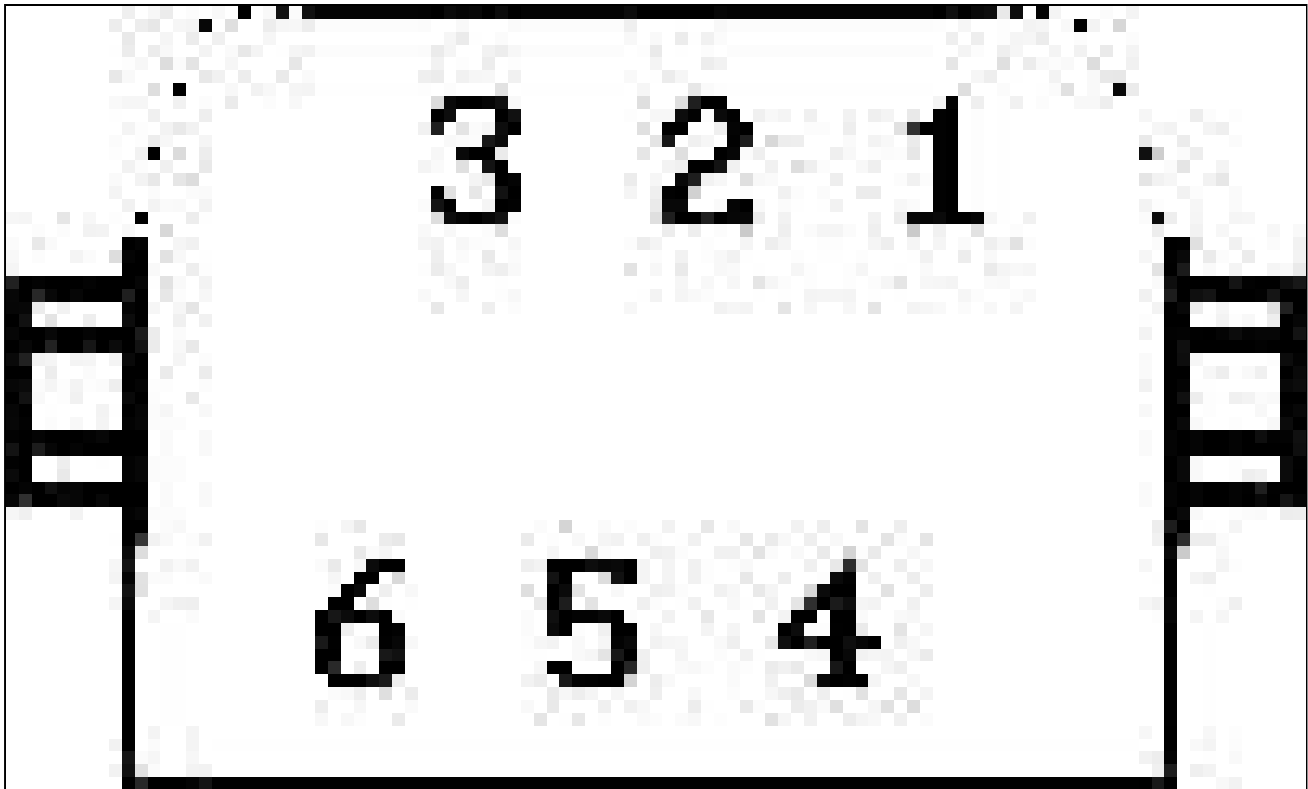
Above accelerator pedal.

#### **Special note:**

Left underdash panel must be removed to gain access to APS.

### **Connector**

VIEW: HARNESS SIDE, BACKPROBING.



1=ECM(+5V)
2=NOT USED
3=ECM(-)
4=APS SIGNAL 2
5=APS SIGNAL 1
6=ECM(-)

## Tests

### DC Voltage Test

#### Connect test leads:

Yellow=APS signal 1

Green=APS signal 2

Black=Known good ground

**Key on, Engine off with accelerator pedal released voltage should be:**

Signal 1 = 0.34 volts

Signal 2 = 0.17 volts.

**Press pedal to WOT, voltage should change with no drop outs or glitches. Voltage at WOT:**

Signal 1 = 4.68 volts.

Signal 2 = 2.37 volts.

### **Out Of Range No Signal Test**

If voltage is out of Range or no voltage signal appears then;

#### **Connect test leads:**

Yellow=ECM(-)

Black=Known good ground

Key on,voltage should be below 300mv.

If OK, Key off disconnect APS

#### **Connect test leads at harness:**

Yellow=ECM(+5V)

Black=Known good ground

KOEO, voltage should be about 5.0 volts.