

# ADVANCE ADAPTERS INC.

P.O. Box 247, 4320 Aerotech Center Way

Paso Robles, CA 93447

Telephone: (800) 350-2223 Fax: (805) 238-4201

P/N: 716138-N

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## JEEP 4.0L AUTOMATIC ADAPTER FLEX PLATE SENSOR KIT 1997-2004

### KIT CONSISTS OF:

<u>No.</u>	<u>Qty</u>	<u>Part No.</u>	<u>Description</u>
1.	1	716138-N1	SENSOR FOR '97-'04 4.0 BLOCK
2.	1	716138-SB	SENSOR MOUNTING BLOCK
3.	1	716012-S	LOOM CONNECTOR
4.	1	722543	S.H.C.S. 1/4-20 X 1-1/2
5.	1	722544	F.H.C.S. 1/4-20 X 3/4

### Warning:

Jeeps that were equipped with the 42RLE automatic will require custom PCM programming and wiring modification. The 42RLE overdrive transmission was used in 2003 and 2004 Jeeps.

### INSTALLATION INSTRUCTIONS:

The Crank Position Sensor Bracket retains the sensor in the stock Jeep location. This allows for the proper signal for the 4.0L ignition timing. The stock GM automatic bellhousing must be modified prior to installation. This is required for clearance of the sensor and bracket.

#### **Installation:**

1. This kit works with our adapter kit 716138 and 716138-1 manufactured after June 1st 2010.
2. Mount the aluminum block to the adapter plate, test fit the GM transmission to the adapter plate and mark the boundaries of the sensor block to the GM bellhousing. Measure and mark the distance that the sensor block protrudes from the adapter plate and remove the square marked area for clearance of the aluminum sensor block.



**SPECIAL NOTE:** The components packaged in this kit have been assembled and machined for specific type of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand modifications or changes that will be required to complete your conversion, we strongly recommend that you contact our sales department for more information. This instruction sheet is only to be used for the assembly of Advance Adapter components. We recommend that a service manual pertaining to your vehicle be obtained for specific torque values, wiring diagrams and other related equipment. These manuals are normally available at automotive dealerships and parts stores.

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3. Use a cutting disc in an angle grinder or a saber saw, cut the window of the bellhousing. Please be careful not to remove too much material. Always use proper safety gear while removing the material.



4. Test fit the clearance of the bellhousing indicated and the sensor bracket until proper clearance is achieved.
5. Mount the adapter kit to the engine as instructed on the 716138 instruction sheet. Install the flat head cap screw to the sensor bracket with loctite, slip the sensor into the bracket and loosely install the socket head bolt in place also with a touch of loctite on the threads.
6. We do not use the mounting hole on this sensor, it is a clamp fit; however, you will need to set the gap on the sensor to the flex plate before tightening the sensor in place.
7. Some sensors have a felt pad glued to the bottom of the sensor, on these sensors the felt pad is the spacing (air gap) that is required. So this sensor would be set by having the felt pad touching the flex plate. If the sensor does not have the felt pad then you will need to set the air gap to .030 to .035" which is basically the thickness of a credit card. Once the air gap is set, the sensor needs to be clamped into position. Note: since we are not using the stock mounting hole on the sensor it can be cut off or it will need to be positioned so it is facing towards the transmission. If the sensor is not clamped in this direction, it will not clear the bellhousing modifications you made earlier.
8. Make sure the sensor is clamped in tight as the clamp screw is not accessible once the GM transmission is bolted in place.
9. Connect the sensor plug to your stock computer lead. (2003 & 2004 Jeeps see notes page 3)



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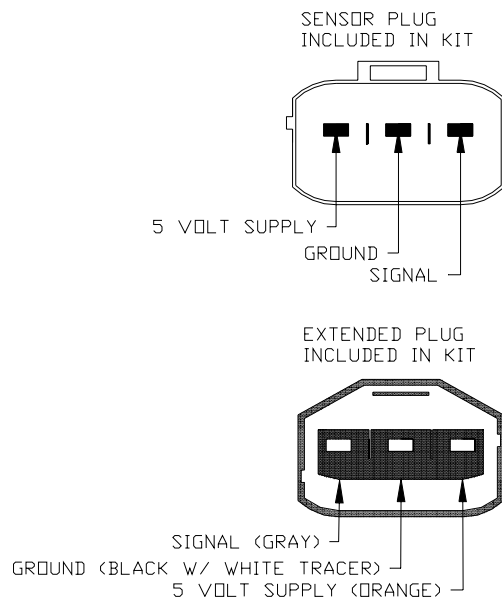
Extension loom wire colors

Orange = 5 volt supply

Gray = signal

Black with white tracer = ground

If your stock harness plug does not match the new sensor plug provided in this kit, you can splice the new loom into your stock harness. Refer to the diagrams for pin and wire locations of your factory harness, and make some notes for your reference. Cut the stock engine plug from the engine side on the harness and solder the new loom provided in the kit to the wires you marked. Note: the colors on our extension loom may not match the factory harness colors. **DO NOT USE CRIMP CONNECTORS!**



INFORMATION BELOW OBTAINED FROM THE JEEP SERVICE MANUALS  
(PLEASE VERIFY YOUR COLOR CODES)

1997-2003 JEEPS STOCK PLUG COLOR CODES  
5 VOLT SUPPLY (ORANGE)  
GROUND (BLACK/LIGHT BROWN)  
SIGNAL (WHITE/ ORANGE TRACER)

2004 JEEP STOCK PLUG CODE CODE  
5 VOLT SUPPLY (RED)  
GROUND (BLACK/ LIGHT BROWN)  
SIGNAL (GRAY/BLACK TRACER)

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