

# Daless2 ADE-II Theft Deterrent System™

## **Installation Document**

## **Package Contents**

- ✓ Instructions
- ✓ Pre-wired ADE-II System
- √ Two (2) "Male" Crimp-On Connectors

- √ Two (2) "Female" Crimp-On Connectors
- ✓ Two (2) Magnets

Please Note: You will only need one (1) each of the crimp-on connectors. We included an extra of each in the event that you mess one up in the crimping process.

#### Introduction

Thank you for your purchase of the Automatic Disable / Enable (ADE-II) System. ADE-II will help provide a higher level of security for your Jeep or any other vehicle on which you install it.

Once installed, the ADE-II System will automatically disable multiple electrical systems that your vehicle requires to run. For the Jeep TJ, these systems are: Ignition System, Fuel Pump, Fuel Injectors, and the Automatic Shut Down Relay.

The ADE-II System will also allow you to easily enable these same electrical systems with one swipe of a magnet.

The ADE-II System can be used with any fuel-injected vehicle and many non fuel-injected vehicles. It can also be used on other +12 volt vehicle circuits.

These instructions will provide details on how to install this system and where to install this on a 1997 – 2006 Jeep TJ.

If your vehicle is a different model Jeep (XJ, YJ, ZJ, etc.) or other fuel injected vehicle, you will need to determine where to install the ADE-II System based on information provided in your vehicle Factory Service Manual wiring diagrams.

## **ADE-II System Key Features**

- All electrical systems attached to the ADE-II System will be automatically disabled whenever the ignition key is shut off.
- ☐ These electrical systems will remain disabled until the ignition is turned on AND the hidden reed switch is activated with a magnet.
- ☐ There is a "stealth look" with no visible indicators that the ADE-II System is installed. (There is no value in giving a thief any clue that a disabling system is installed and must be overcome.)
- □ The ADE-II System is installed at a key electrical point on the Jeep to "disable", or open, two or more critical circuits which are required to run. (This will make it more complex and difficult to overcome, even if a thief could determine which circuits were disabled.)
- The ADE-II System "enables" all circuits when a magnet is momentarily swiped over a reed switch hidden somewhere under the vast amount of plastic found in a TJ interior.
- □ The ADE-II System and all Jeep circuits are self-sustaining when activated and remain so until the ignition key is turned off.
- □ A simple "no-switch" by-pass is incorporated.



## Design Description

The ADE-II System is designed to be self-disabling. When you turn the Ignition Key "OFF", the Jeep cannot be restarted unless and until you turn the ignition "On" and then momentarily swipe a magnet over a hidden reed switch.

The hidden reed switch is the "Key", both figuratively and literally, to this system's success. Only you will know where the reed switch is located on your Jeep, as there is no outward visible sign.

The ADE-II System uses a 30 Amp Automotive (Bosch type) relay that is wired to your Jeep's wiring harness, a diode, a hidden reed switch and a magnet. The System is inserted in the wiring harness at a point that controls multiple critical circuits required for your Jeep to run.

The ADE-II System is wired in both parallel and series to the reed switch and the Jeep's critical circuits. This creates a self-latching circuit that allows the Relay "Coil" to be maintained in the active state once the relay has been tripped by swiping the magnet over the reed switch. (Once activated, the reed switch is no longer in the circuit.)

## **ADE-II Wiring Description and Diagram**

The ADE-II System comes pre-wired for you.

You will need to identify the Automatic Shut Down Relay Coil Wire (or any other +12 volt circuit) on your Jeep. Cut this wire. Install two (2) Crimp-on connectors and plug it in.

You will also need to mount a ground wire to your Jeep and route and glue the hidden reed switch in place.

There are a total of seven (7) wires, external to the ADE-II System.

Un-coil the ADE-II wiring harness and follow along from the top down for the wire key.

**Orange** = This is the Ground wire for the circuit. It already has a connector installed on the end. Attach this to a good chassis ground.

**Green and Brown** = ADE-II By-Pass. These two wires are different colors by design. I did not want a thief to see them and think they should be plugged in.

If you plug the Green and Brown wires together you are bypassing the ADE-II system as if it was never installed. At times you might find this convenient.

**Butt Connector** = There is a single wire with a "Butt Connector" attached. This wire can be any color. This wire is the ADE-II to Light Chaos System interface. You don't have to worry about this now. It is for future use.

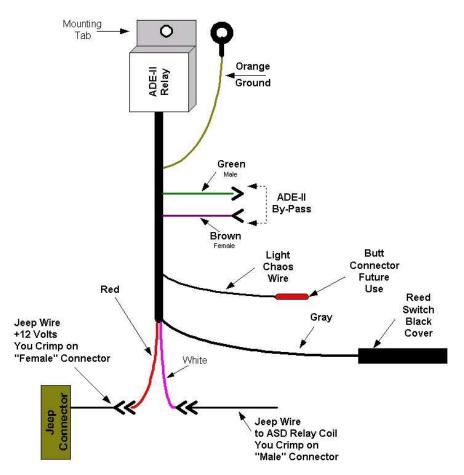
**Red with MALE Connector** = This connector will be plugged into the +12 volt side of the wire feeding voltage to the Automatic Shut Down Relay Coil. On all TJ's this will be the side of the wire attached to the connector after you cut it.

**White with <u>FEMALE</u> Connector** = This connector will be plugged into the other side of the wire you cut during the installation. This is the wire going to the Automatic Shut Down Relay.

**Gray Cable with Black End** = This is the Reed Switch Cable. The Reed switch is embedded in the last two inches of this cable, under the black heat shrink protective covering. You will route the end of this gray cable to the location you want the reed switch to live at, then simply glue the black portion in place.



## **ADE-II Wiring Diagram**



## **Installation Instructions:**

These instructions will walk you through the six (6) steps required to install the ADE-II System in a 1997 to 2006 Jeep Wrangler TJ.

If your TJ is different model year or your vehicle is not a TJ, you will have to determine which wire controls the Automatic Shut Down Relay Coil for your vehicle.

## Step 1: Insert the ADE-II System in the Automatic Shut Down Relay Coil Wire

### **ADE-II System Insertion Point**

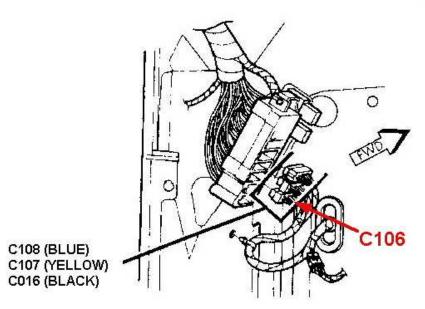
Please disconnect your Jeep's battery before continuing, and please read this entire Step 1 to make sure you select the correct wire for your year TJ.

Take a look at this table for the information you will need based on model year.

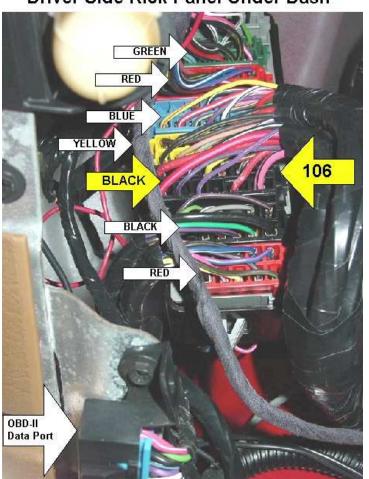
Year	Connector#	Connector Location	Connector Color	Pin#	Wire Color
1997	106	Driver Side Kick Panel	Black	10	Red/Light Green
1998	106	Driver Side Kick Panel	Black	10	Red/Light Green
1999	106	Driver Side Kick Panel	Black	4	Solid Blue
2000	106	Driver Side Kick Panel	Black	4	Solid Blue
2001	106	Driver Side Kick Panel	Black	4	Solid Blue
2002	106	Driver Side Kick Panel	Black	4	Solid Blue
2003	103	Engine Compartment Rear	Black	9	Solid Blue
2004	103	Engine Compartment Rear	Black	9	Solid Blue



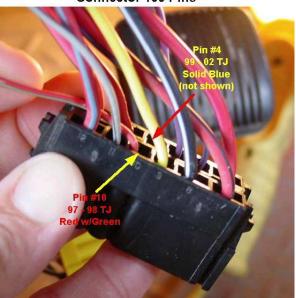
## 1997 through 2002 Jeep TJ Connector C106 is on the Driver Side Kick Panel Inside the Jeep



1997 - 2002 Connector 106 Location Driver Side Kick Panel Under Dash



Connector 106 Pins



Here is a picture of connector 106 showing the red wire with green trace in position #10, which is used for the 1997 and 98 TJ.

We have also marked the position #4 with an arrow to show the position #4 (behind the yellow wire in the photo). For 1999 - 2002 position four will have a Solid Blue wire used to connect the ADE system. You do not see the Solid Blue wire in this picture, as it is not there for the 97 - 98 model year.



## Installing on 1997 – 98 TJ

If you are installing the ADE-II System on your 1997 – 98 TJ, you need to find connector 106. It is located on the driver side kick panel under the dash area.

Connector 106 is Black and has a total of 12 pins.

You need to look for the RED wire with a LIGHT GREEN (trace) line on it coming from Pin # 10.

Stick your head down under the dash by the driver-side kick panel. (By your left foot.) You will see three plug connectors. These are connectors 106, 107 and 108.

Connector 106 is BLACK in color and is the only connector of the three that has twelve (12) pins. Connector 107 is Yellow, connector 108 is Blue, and both have fourteen (14) pins.

Find the Red wire with Light Green Trace at Pin # 10. That's the wire you will be cutting to insert the ADE-II System into for the 1997 – 98 TJ. This wire energizes the Coil of the Automatic Shut Down Relay.

## If you have not already done so, disconnect both the positive and negative terminals of your battery.

- ✓ Peel back the factory electrical tape wrapped around the wiring harness going to Connector 106.
- Cut the RED wire with LIGHT GREEN Tracer going to Pin #10 in Connector 106 about five (5) inches
  from the connector.
- ✓ Strip 1/4 –inch of insulation from each end of the wire you just cut.
- ✓ Install a "Female" Crimp-on Connector to the wire end still attached to Connector 106.
- ✓ Plug the RED wire on the ADE-II harness into this connector.
- ✓ Install a "Male" Crimp-on Connector to the other side of the wire, which you cut.
- ✓ Plug the WHITE wire on the ADE-II harness into this connector.

## Installing on 1999 - 2002 TJ

If you are installing the ADE-II System on your 1999 - 2002 model year TJ you will also need to find connector 106. It is located on the driver side kick panel under the dash area. (See drawing above for location.)

Connector 106 is Black and has a total of 12 pins.

Find the Solid Blue wire at Pin #4. That's the wire you will be cutting to insert the ADE-II System into for the 1999 – 2002 TJ. This wire energizes the Coil of the Automatic Shut Down Relay.

## If you have not already done so, disconnect both the positive and negative terminals of your battery.

- ✓ Peel back the factory electrical tape wrapped around the wiring harness going to Connector 106.
- ✓ Cut the BLUE wire to Pin #4 in Connector 106 about five (5) inches from the connector.
- ✓ Strip 1/4 –inch of insulation from each end of the wire you just cut.
- ✓ Install a "Female" Crimp-on Connector to the wire end still attached to Connector 106.
- ✓ Plug the RED wire on the ADE-II harness into this connector.
- ✓ Install a "Male" Crimp-on Connector to the other side of the wire, which you cut.
- ✓ Plug the WHITE wire on the ADE-II harness into this connector.



## Installing on 2003 - 2006 TJ

Please note the following information for the 2005-2006 models.

To install the ADE system on your 2005 or 2006 Jeep you need to locate the wire in Position #9, in connector C103 located on the firewall inside the <u>engine</u> compartment.

The color of this wire will depend on what color wire Jeep had at the time.

Wire Color For Jeep TJ, Rubicon, and Unlimited:

For ALL 2004, this wire will be Dark Blue, as stated in the instructions.

For EARLY 2005, this wire will be Dark Blue, just like the 2004 model year.

For Mid-Year 2005, this wire will be PINK with a White Tracer (line) on it.

For ALL 2006 this wire will be PINK with a White Tracer (line) on it.

PLEASE NOTE: These wires are found on the VEHICLE side of the connector!! The easy side of the connector to access is the engine side, and the wires are NOT the same color!!!

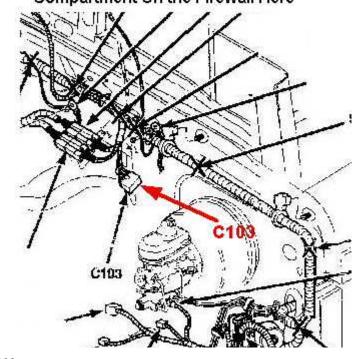
NOTE: There is an easy way to verify the harness is either early or late 2005, look at the ECM, the silver aluminum box above the battery on the firewall. There should be 3 harnesses plugged into that box for the Manual Jeeps, and 4 harnesses for the Automatics. The Manuals that have only 3 plugs will still have a 4<sup>th</sup> plug socket molded into the ECU, and therefore it is the 4 plug version. The 4 socket version is the Late 2005-2006 model.

If you are installing the ADE-II System on your 2003 - 2006 model year TJ you will need to find Connector 103. (See location drawing below.)

It is located on the firewall inside the engine compartment. Connector 103 is Black in color and has a total of 14 pins.

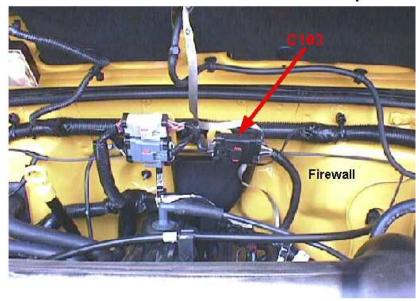
You then look for the Solid BLUE\* wire coming from Pin # 9. That's the one you will cut to insert the ADE-II System into for the 2003 - 2004 TJ.

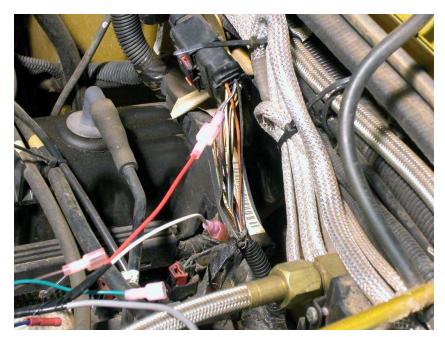
2003 and 2004 Jeep TJ
Connector C103 is Located in the Engine
Compartment On the Firewall Here





## Connector 103 for 2003 and 2004 Jeep TJ





Notice the method of slicing on the engine side of the connector. To find the color of the wire you need to cut, you need to inspect the opposite side of the connector!!

# If you have not already done so, disconnect both the positive and negative terminals of your battery.

- ✓ Peel back the factory electrical tape wrapped around the wiring harness going to Connector 103.
- ✓ Cut the BLUE wire going to Pin #9 in Connector 103 about five (5) inches from the connector.
- ✓ Strip 1/4 –inch of insulation from each end of the wire you just cut.
- ✓ Install a "Female" Crimp-on Connector to the wire end still attached to Connector 103.
- ✓ Plug the RED wire on the ADE-II harness into this connector.
- ✓ Install a "Male" Crimp-on Connector to the other side of the wire, which you cut.
- ✓ Plug the WHITE wire on the ADE-II harness into this connector.



## Step 2: Mount the Ground Wire and Relay

Connect the Orange wire on the ADE-II wiring harness to a good ground. You may want to mount the Relay, via the mounting tab on the top, to the same bolt.

There is a convenient bolt located about six inches from where you are working on the kick panel for 1997 – 2002 TJ's. If you are installing this on a 2003 – 04 TJ there is a grounding bolt centered on the firewall near connector 103.

## Step 3: Testing the ADE-II System Circuit

#### **Test A: Security Test - Disabled**

Reconnect the battery terminals.

Sit in the driver's seat and try to start your Jeep. The engine should crank over but it shouldn't run.

#### Test B: Run Test - Enabled

Turn the Ignition Key to the On position.

Take your magnet and momentarily swipe it across the reed switch. (You should hear the ADE-II relay latch shut.)

Turn the Ignition Key to Start. Your Jeep should crank over and the engine should run.

NOTE: 2005-2006 models, Jeep will not crank. There is a difference here for the later models, as the ASD relay controls more circuits than the 2003-early 2005 models.

#### **Test C: By-Pass Test**

Connect the Green and Brown wires on the ADE-II wiring harness together.

Turn the Ignition Key to the On position.

Turn the Ignition Key to Start. Your Jeep should crank over and the engine should run just as if the ADE-II system was never installed.

## Step 4: Locate Reed Switch

Hide the reed switch inside the dashboard or some other plastic part of your Jeep. Make sure you will be able to swipe the reed switch with a magnet in this location.

Once you have settled on a location, take the plastic apart so you can glue the reed switch to the underside.

Using Silicon, RTV, or even hot glue, glue the black (end) portion of the Reed Switch wire to the location of your choice. Please be sure it remains flat against the plastic until the glue sets up.

## Note: If you are installing the ADE-II System on a 2003 or 2004 TJ, you will have to route the reed switch into the cab through the oval shaped rubber grommet in the firewall.

### Step 5: Re-Test

Go back to Step 3 and re-test the ADE-II System with Test A, Test B, and Test C.

#### Step 6: Neatness Counts!

Make your installation of the ADE-II System look neat! Factory Look! Stealth is a big part of the reason this system will make your Jeep more secure.

Re-tape the wiring harness with electrical tape. When you're done, IF anyone should ever stick their head all the way under the driver side kick panel area all they should see is "factory look stuff".



## **How to Operate**

In order to start the Jeep after the ADE-II System is installed, you will need to follow this sequence.

- 1. Turn ignition key to the "On" or "Run" position
- Swipe the magnet over Hidden Reed Switch (to activate the ADE-II System and Jeep's critical circuits)
   NOTE: The Check Engine light should NOT light until you swipe the magnet with the Key in the Run position.
- 3. Turn Ignition Key to "Start"

Without swiping the magnet, or knowing where to swipe the magnet, your Jeep will crank over but it isn't going to go anywhere under its own power.

## **How to By-Pass**

The ADE-II System has a by-pass built into the wiring harness.

 Simply plug the Green wire into the Brown wire and your Jeep will operate as if the ADE-II System was never installed.

This feature may come in handy if you need to leave your vehicle for service somewhere, or valet parking, or just have to let someone drive it and don't want to deal with the magnet.

#### **Problems?**

We have bench tested every ADE-II System that we have assembled; however things can go wrong in shipping. We will do whatever it takes to make this right for you. This is vitally important to us.

Once again thank you for your purchase, and remember, a significant portion of the profits from the sale of each ADE-II system is donated annually to "The Marine Corps Toys for Tot's Program."

For more information or questions during installation, contact:

## **Off Road Only**

651.644.2323

Or on the web at www.offroadonly.com or email info@offroadonly.com

Email inquiries will be responded to in a timely manner.

