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## **ADD ON T.B.I. EMISSIONS KIT**

### **Part #60101, 60201, 60310 & 60311**

THE EMISSIONS WIRES IN THIS KIT INCLUDE: THE WIRING FOR THE CHARCOAL CANISTER, THE AIR PORT SOLENOID AND THE AIR PUMP DIVERter VALVE.

#### **STEP 1 - INSTALLATION OF CONNECTORS IN THE ENGINE COMPARTMENT**

INSTALL THE FOLLOWING CONNECTORS INTO THESE LOCATIONS:

THE RED CONNECTOR WITH THE DARK GREEN/YELLOW AND BLACK/PINK WIRES PLUGS INTO THE CHARCOAL CANISTER MOUNTED IN THE ENGINE COMPARTMENT.

THE BLACK CONNECTOR WITH THE BROWN AND BLACK/PINK WIRES PLUG INTO THE AIR PORT SOLENOID LOCATED ON THE BACK OF THE AIR PUMP.

THE GRAY CONNECTOR WITH THE BLACK/RED AND BLACK/PINK WIRES PLUG INTO THE AIR PUMP DIVERter VALVE LOCATED BEHIND THE AIR PUMP.

#### **STEP 2 - ROUTING THE WIRES**

ROUTE ALL OF THE WIRES FROM THE FRONT THREE CONNECTORS UP TO THE COOLANT TEMPERATURE SENDING UNIT LOCATED AT THE FRONT OF THE ENGINE NEXT TO THE THERMOSTAT HOUSING. USING TIE WRAPS SECURE THE WIRING TO THE COOLANT TEMP SENSOR (BLACK AND YELLOW) WIRES ALL THE WAY BACK TO THE COMPUTER LOCATED INSIDE THE VEHICLE. BE SURE TO LEAVE ENOUGH SLACK FOR ANY POSSIBLE ENGINE MOVEMENT.

**CAUTION:** BE CAREFUL ROUTING THE WIRES THROUGH THE FIREWALL TO AVOID DAMAGING THE TERMINALS ON THE ENDS OF THE WIRES.

#### **STEP 3 - ATTACHING THE B+ POWER WIRES**

YOU WILL FIND THAT THE THREE BLACK/PINK WIRES END NEAR THE BACK OF THE ENGINE BLOCK. THESE WIRES SHOULD BE SPLICED INTO THE PINK/BLACK WIRE COMING FROM THE EGR SOLENOID CONNECTOR. THESE WIRES CAN ALSO BE EXTENDED AND CONNECTED TO A 12 VOLT IGNITION ONLY SWITCHED) POWER SOURCE IF YOU WISH TO DO SO.

#### **STEP 4 - UNPLUGGING THE COMPUTER**

**CAUTION:** REMOVING THE COMPUTER CONNECTORS FROM THE COMPUTER WHILE THE IGNITION IS ON WILL DAMAGE THE COMPUTER!

FIRST MAKING SURE THAT THE IGNITION IS OFF, UNPLUG THE TWO COMPUTER CONNECTORS BY PUSHING DOWN ON THE BLUE RETAINING TAB AND THEN PULLING STRAIGHT OUT AND AWAY FROM THE COMPUTER. BE CAREFUL NOT TO DAMAGE THE COMPUTER PINS! REMOVE THE BLUE SECONDARY LOCKS FROM THE BLACK COMPUTER CONNECTORS BY RELEASING THE RETAINING CLIPS AND PULLING THEM OUT FROM THE BACK (WIRE) SIDE OF THE CONNECTORS.

#### **STEP 5 - CONNECTING THE CHARCOAL CANISTER WIRE AT THE COMPUTER**

LOCATE THE 24 PIN (THE SMALLER OF THE TWO) COMPUTER CONNECTOR. USING THE ATTACHED WIRING DIAGRAM FOR REFERENCE, LOOK ON THE WIRE SIDE OF THE CONNECTOR HOUSING FOR THE CORNER MARKED "A-1". ONCE YOU HAVE LOCATED THIS, COUNT DOWN THE OPENINGS ON THE SAME SIDE UNTIL YOU REACH "A-3". YOU WILL INSERT THE TERMINAL ON THE DARK GREEN/YELLOW WIRE (CHARCOAL CANISTER) INTO THIS OPENING, PUSHING IN UNTIL THE LOCKING TANG ENGAGES.

NOTE: THE TERMINAL WILL ONLY FIT ONE WAY INTO THE CONNECTOR, DO NOT TRY TO FORCE THE TERMINAL.

#### **STEP 6 - CONNECTING THE AIR DIVERTER WIRE AT THE COMPUTER**

LOCATE THE 36 PIN (THE LARGER OF THE TWO) COMPUTER CONNECTOR. IN THE SAME MANNER AS YOU DID IN STEP 5, LOCATE THE "C-1" SIDE. THIS IS THE OPENING YOU WILL INSERT THE TERMINAL ON THE BLACK/RED WIRE INTO. (AIR PUMP DIVERTER VALVE)

#### **STEP 7 - CONNECTING THE AIR PORT SOLENOID WIRE AT THE COMPUTER**

ON THE SAME CONNECTOR, LOCATE "C-2". THIS IS THE OPENING THAT YOU PLUG THE TERMINAL ON THE BROWN WIRE (PORT SOLENOID) INTO, USING THE SAME PROCEDURE AS IN STEP 5 AND 6.

NOTE: THIS WIRE HAS A SECOND BROWN WIRE SPLICED INTO IT THAT SHOULD BE SET ASIDE UNTIL STEP 9.

#### **STEP 8 - REPLACING THE COMPUTER CONNECTORS AT THE COMPUTER**

REPLACE THE SECONDARY LOCKS ON BOTH CONNECTORS. BE CAREFUL TO LINE UP THE "FINGERS" ON THE LOCKS WITH THE CONNECTOR OPENINGS. ONCE YOU HAVE THE SECONDARY LOCKS IN PLACE THEN YOU CAN REINSTALL THE COMPUTER CONNECTORS INTO THE COMPUTER.

CAUTION: USE CARE WHEN RE-INSTALLING THE THE CONNECTORS, TO AVOID DAMAGING THE COMPUTER PINS.

#### **STEP 9 - ATTACHING THE AIR PUMP DIAGNOSTIC WIRE AT THE ALDL**

THE BROWN WIRE SET ASIDE IN STEP 6 GOES TO THE ALDL CONNECTOR (DIAGNOSTIC PLUG). ROUTE THIS BROWN WIRE ALONG THE EXISTING ALDL WIRING UNTIL YOU COME TO THE CONNECTOR ITSELF. THE WIRE IS INSERTED INTO THE OPENING LABELED "C" ON THE CONNECTOR.

NOTES:

DOUBLE CHECK ALL ROUTING MAKING SURE THAT THERE IS ENOUGH SLACK TO ALLOW FOR ANY ENGINE OR OTHER MOVEMENT. REINSTALL ANY GROMMETS OR OTHER PARTS TAKEN OFF.

START AND DRIVE THE VEHICLE FOR AT LEAST THIRTY MINUTES, THEN CHECK FOR ANY TROUBLE CODES STORED IN THE COMPUTER.

PAINLESS WIRING OFFERS A TECHNICAL ASSISTANCE LINE TO ANSWER ANY QUESTIONS YOU MAY HAVE. THE NUMBER IS (817)560-8324. PHONES ARE ANSWERED MONDAY THROUGH FRIDAY FROM 8 AM TO 5 PM CENTRAL TIME, NOT INCLUDING HOLIDAYS.

PLEASE LEAVE A MESSAGE IF YOU ARE UNABLE TO REACH US AND WE WILL RETURN YOUR CALL AS SOON AS POSSIBLE.

9/29/95

## **Painless Performance Limited Warranty and Return Policy**

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