



FIRST STREET IGNITIONS
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Testing

If the vehicle will not start after installation or vehicle quits after starting, the following test may be done to check the system.

1. Connect the positive (+) lead of a voltmeter to the negative side of the coil. Connect the negative (-) lead of a voltmeter to an engine ground. Set the voltmeter to a 15-volt DC scale.
2. Disconnect the high voltage wire from the center of the distributor cap, and ground it to the engine block or chassis.
3. Crank the engine over a few turns while watching the voltmeter.
4. The voltmeter should fluctuate from 1 or 2 volts of battery voltage as the engine rotates.
5. If the voltmeter does not fluctuate, one of the following problems exist:
 - a. If the voltmeter shows a constant 0 reading, there is an open circuit somewhere in the primary ignition. Check to make sure all connections are good and correct.
 - b. If the voltmeter shows a constant voltage, either low or high, the power transistor or hall cell may be damaged. (This could have been caused by a coil without a ballast resistor, the key being left on, or reversed polarity connection.)
 - c. If the voltmeter shows a fluctuation from 1 to 12 volts, and the engine does not run, check to insure all other parts and functions of the engine are proper.

External Timing – FSI Electronic Ignition Conversion Kits:

Initial timing should be at Top Dead Center at idle: 450 – 500 RPM.

External Timing – FSI & FSI Zipper Electronic Ignition Centrifugal Advance Distributor:

Set the engine on top dead center using the cam pin as you would normally. Find a very heavy gauge wire and bend a loop on one end. Use one of the top timing cover bolts to attach this wire to the cover. Point the sharp end of the wire towards the crankshaft pulley almost touching it. Where it is pointing, put a small dot of white paint and allow it to dry. Measure the outside diameter of the crank pulley, multiply this number times 3.1416 - this will give you the circumference of the pulley. Divide this number by 360 - this will give you the distance. 1° is from the top dead center mark. Multiply this number by 28 and this will give you the distance around the pulley where 28° is located. Depending on the accuracy of your math and measurements this should give you total advance. It's a good idea to remove the wire when you are finished with the procedure. Initial timing should be at Top Dead Center at idle of 450 – 500 RPM.

(Stock Pulley: .045" = 1 crankshaft degree approx)

Example: Pulley diameter 5.25 X 3.1416 = 16.4934 divided by 360 (degrees) = 0.045815 X 28 (degrees) = 1.28282 inches. This distance represents full distributor advance of 28°. This distance can be measured with a flexible machinist's scale with some accuracy.

These units have been in use since 1995 and have had very few problems. If you follow the directions you will have many years of service from the unit.

Never hesitate to contact us if you have questions (580-762-8322).

Enjoy!

J. D. Hanks and Mel Mallory, FSI Partners

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