

INSTALLATION INSTRUCTIONS FOR ACCEL 34000V SERIES VACUUM ADVANCE DISTRIBUTORS

IMPORTANT

All ACCEL distributors and Energy Intensifiers are guaranteed to be free of defects in material and workmanship for a period of ninety (90) days after the sale to the original consumer.

ACCEL will repair or replace products proven defective in a normal use or services shipped prepaid or delivered to ACCEL. The consumer must pay the cost to remove and install the ACCEL product. Proof of the date of sale to the original consumer may be required.

These products cannot be returned to the retailer for warranty. They must be sent prepaid to:

ACCEL Product Repair Department
Route 139
Branford, CT 06405
Telephone: (203) 481-5771

ACCEL does not authorize retail or wholesale outlets to determine what constitutes defective merchandise under this warranty.

FOR YOUR PROTECTION, READ, FILL OUT, AND MAIL YOUR WARRANTY REGISTRATION CARD TO THE ACCEL FACTORY NOW!!

ACCEL can only process warranty claims in cases where warranty cards are on file.

You have just purchased the finest solid state vacuum advance distributor commercially available. For peak performance from your engine, read the following carefully.

TOTAL IGNITION ADVANCE INCLUDES:

1. **INITIAL TIMING** - this is usually a low figure such as 8° to 10° to permit easy starting, however, high enough to allow a smooth idle.
2. **MECHANICAL ADVANCE** - this is a function of engine RPM and increases with RPM to assure a complete burn of the air/fuel mixture. The amount and rate of mechanical advance varies with different engine combinations. This can be adjusted in your new ACCEL distributor.
3. **VACUUM ADVANCE** - a function of engine manifold vacuum. As the manifold vacuum increases, the vacuum advance increases. At part throttle, low load conditions, timing can be advanced without developing ping, yielding more power without increasing fuel consumption. Again, requirements vary depending on engine combinations. The vacuum advance can be adjusted in your new ACCEL distributor.

As delivered, the mechanical advance is set at 12° distributor (24° engine) and totals at 2800 engine RPM. The vacuum advance is set at 7° (14° engine) starting at 5" vacuum and totals at 12" vacuum. These settings are based on street applications for both standard and automatic transmissions. To determine the best advance for your application, we recommend a procedure called "power timing". This is explained in the installation procedure.

NEW DISTRIBUTOR INSTALLATION PROCEDURE

1. Remove the existing distributor cap. Do not remove the spark plug wires from the cap at this time.
2. Crank the engine slowly until the rotor blade is aimed at a fixed point on the engine or firewall.
3. Disconnect wiring from the ignition coil and remove the present distributor. With the rotor installed, place the new distributor in the engine with the rotor pointed in the same direction as the discarded distributor. Be sure the distributor can be rotated sufficiently to set the timing. Do not connect the vacuum advance hose at this time.
4. Install the new cap furnished. Install the spark plug wires into the new cap, one at a time, being sure they are in the same physical location as they were on the original distributor cap.
5. Insert high tension coil wire and connect primary wire from the new distributor to the negative side (-) of the ignition coil.
6. Start the engine and set initial timing. Start at about 2° above the manufacturer's specifications.
7. After the engine is warm, make full throttle acceleration runs and adjust timing just below the point of engine ping. If the initial advance is satisfactory, proceed with the vacuum advance adjustment. If the initial is too high or too low, or the ping cannot be eliminated, the mechanical advance should be adjusted. See "Instructions For Mechanical Advance Curve Changes" - See Figures A & B.
8. Connect vacuum advance to intake manifold. Test drive under part throttle operation and listen for engine ping. The vacuum advance should be adjusted just below the point of engine ping or engine surge. See "Instructions For Vacuum Advance Changes" - Figures C & D.

INSTRUCTIONS FOR MECHANICAL ADVANCE CURVE CHANGES

NOTE: To change the timing advance curve, your new distributor should be removed from the engine.

1. Remove the rotor and retainer located below rotor. Make notation on which slot the keyway is in as you remove hub assembly. Remove key and spacer. Remove the two screws at bottom of bowl assembly and remove bowl.
2. Remove the two advance springs.

3. Remove the allen head screw from the center of the cam shaft assembly and lift the assembly out.
4. By using the diagram below, determine which hole the stop screw should be located in and which direction the arrow should be pointed for your distributor advance specifications. For example, if you require a distributor advance of 14° and your distributor is right-hand rotation (clockwise), the stop screw would be placed in the bottom hole marked 14° and the cam assembly would be installed with the arrow pointing to the 10°-13° indicator on the stop bracket. Note Figures A & B.
5. As received, the mechanical advance curve starts at 550 distributor RPM. This can be changed by bending the two (2) spring tabs. Bending the tabs out delays the start of the curve.
6. With the cam assembly placed in the proper location, replace the allen head screw and the advance springs. The cam cylinder assembly should move freely and have a minimum amount of end play without binding.
7. Replace distributor head assembly and component parts in reverse order to step #1. Replace the distributor in the engine and set timing as per installation instructions.

MECHANICAL ADVANCE CURVE OPTIONS

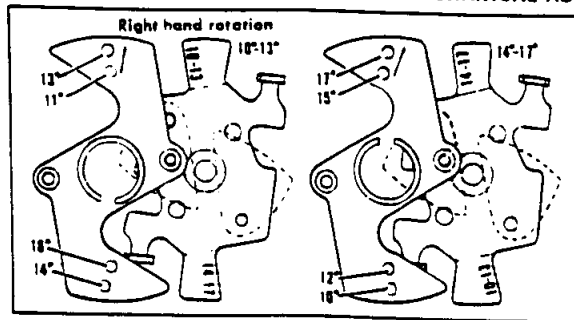


FIGURE A

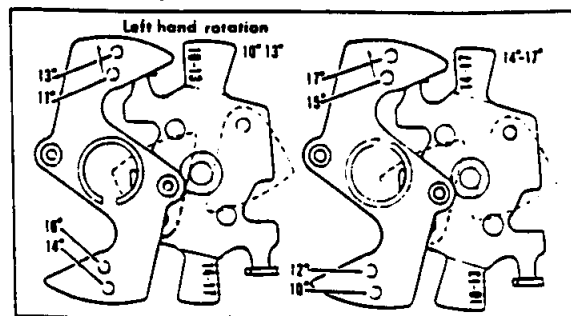


FIGURE B

INSTRUCTIONS FOR VACUUM ADVANCE CURVE CHANGES

The vacuum advance chamber on your new distributor is easily adjusted by simply inserting and turning a 3/32" allen wrench. (Figure C) The reason for an adjustable vacuum advance is to enable you to obtain maximum ignition advance under cruise conditions for your engine combination.

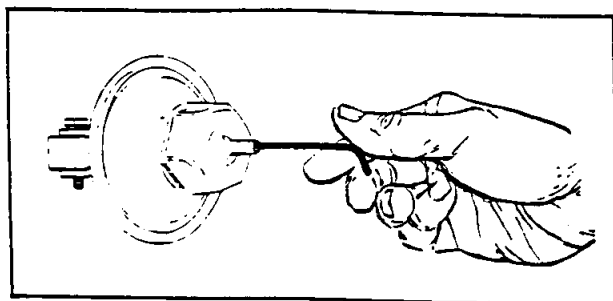


FIGURE C

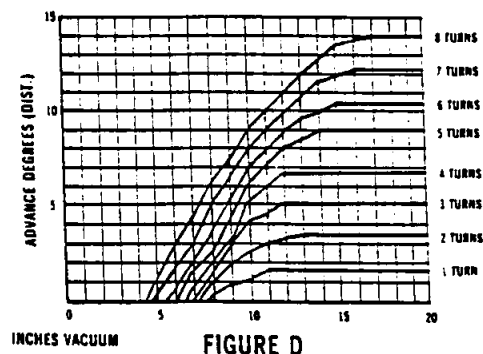


FIGURE D

As received the vacuum advance is adjusted to 4 turns clockwise. This is 7° dist (14° engine) at approximately 12" vacuum (Figure D). If surging or pinging is noticed at cruise RPM turn the adjustment counterclockwise until condition is no longer noticed. If more advance is needed turn adjustment clockwise.

ACCEL strongly recommends the use of a set of ACCEL silicone Fat Stuff ignition wires and a fresh set of ACCEL UGroove spark plugs with the installation of all new distributors. Customers desiring additional performance should consider the use of an ACCEL canister coil or the ACCEL Super Coil.

When replacing an electronic ignition with a standard point-type, care has to be taken that a resistor is installed between the ignition switch and coil positive (+). (Fig. I) Some electronic systems have a resistor and some do not. To determine if a resistor is installed, connect a voltmeter between coil (+) positive and engine ground. The reading at fast idle should be between 11.5V and 12.5V if a resistor is installed. If no resistor is installed the reading will be same as charging system voltage, around 14.0 V. If a resistor is needed ACCEL #150150 is a standard application.

ATTENTION: All ACCEL distributors are guaranteed to be free of defects in material or workmanship. However, ACCEL will not accept any warranty claims for any products unless a customer warranty card properly filled out is in our files at the time of the warranty. Please fill out and return to the ACCEL factory the enclosed warranty card as soon as possible to protect your rights under this warranty.

Insist on ACCEL starting, charging and ignition components for all your tune-up needs.

For further information regarding the installation of any ACCEL product, contact ACCEL Technical Services Manager, c/o Automotive Controls Corporation, Route 139, Branford, CT 06405.