



BILLETECH RACE MAGNETIC IMPULSE INSTALLATION INSTRUCTIONS

WARNING:

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE INSTALLING YOUR NEW ACCEL MAGNETIC IMPULSE DISTRIBUTOR. WE ALSO RECOMMEND THAT YOU STUDY THE APPLICABLE OEM SERVICE MANUAL BEFORE YOU BEGIN YOUR INSTALLATION. PLEASE MAKE A NOTE OF YOUR ENGINE CONFIGURATION WITH SPECIAL ATTENTION TO ALL ELECTRICAL CONNECTIONS FOR YOUR FUTURE REFERENCE.

BEFORE PROCEEDING DISCONNECT POSITIVE AND NEGATIVE TERMINALS FROM THE BATTERY.

As delivered, the mechanical advance in your new distributor is set at 12° distributor (24° engine) and totals at 2800 engine RPM.

The magnetic pickup used in this distributor is pre-set at the factory and should never need adjustment. If adjustment becomes necessary, the pickup-to-reluctor gap should be approx. .012-.015". See Fig. 4 for cap adapter removal.

The Billetech Series distributor must be used with an electronic ignition module. It is compatible with the ACCEL 300+ Ignition Box and other ignition control boxes that accept magnetic triggers. When connecting the distributor to a control box, follow control box manufacturer's instructions.

1. Remove the existing distributor cap. Do not remove the spark plug wires at this time.
2. Crank the engine slowly until the rotor blade is aimed at a fixed reference point on the engine or firewall.
3. Disconnect wiring from the ignition coil or ignition module to remove the present distributor. With the rotor installed, place the new distributor in the engine with the rotor pointed towards the same fixed reference point as the removed distributor. Distributor advance mechanism is designed so the rotor can be relocated in 45° intervals.
4. If the distributor does not drop all the way down into the engine, the oil pump drive may not be aligned with the distributor shaft. Make sure that the distributor gear is meshed with the camshaft gear and crank the engine (with the starter if necessary), maintaining light downward pressure on the distributor housing. The distributor should now drop into its proper position. Install distributor hold-down, but be sure the distributor can be rotated sufficiently to set the timing.
5. 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 order as they were on the original distributor cap. Insert high tension coil wire.
6. Follow ignition module manufacturer's wiring instructions for proper connection. If the distributor leads are reversed, the timing will be significantly advanced (approximately 20°), causing hard starting and poor engine operation. Reverse the pickup leads to correct.

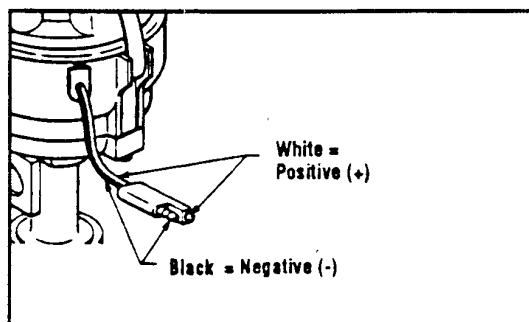


Figure 1

INSTRUCTIONS FOR MECHANICAL ADVANCE CURVE CHANGES

The factory-installed mechanical advance is set at 12° distributor (24° crankshaft). The mechanical advance plus the initial setting determines the total number of degrees of spark advance. For example, standard mechanical advance of 12° (24° crankshaft) plus 10° of initial setting would equal 34° total crankshaft spark advance (34° BTDC). The actual amount of spark advance is determined by engine requirement, and the total advance should not exceed engine builder's specifications.

To change the advance curve in your new distributor, you may either leave the distributor in the engine or remove it to a bench.

1. By using the diagram (Figure 3), determine which hole the stop screw should be located in and which direction the arrow should be pointed for your distributor advance specification. For example, if you require advance of 14° (28° engine) and your distributor is right-handed rotation (clockwise), the stop screw would be placed in the bottom hole marked 14° and the "S" plate will be installed with the arrow pointing to the 10°-13° indication on the stop bracket. If you need to change from the factory setting, proceed.
2. Remove the two screws holding the distributor bowl to the lower shaft housing and remove the distributor bowl.
3. Remove the two advance springs.
4. Bend the ears back on the locking tab and remove the center nut. Lift the entire advance assembly out if necessary.
5. With the advance assembly placed in the proper location, replace the center nut and secure the locking tabs. Replace the advance springs. Bending tabs in will start the mechanical advance at a lower RPM. Bending tabs out will delay the start of the mechanical advance. The advance mechanism should move freely and have a minimum amount of end play without binding.
6. Reattach the upper bowl to the lower shaft housing. Be sure that the tangs in the lower assembly mesh properly with the tangs in the distributor bowl and check for rotor position. Install the two screws.
7. Install distributor in engine and set timing as per "Installation Instructions".

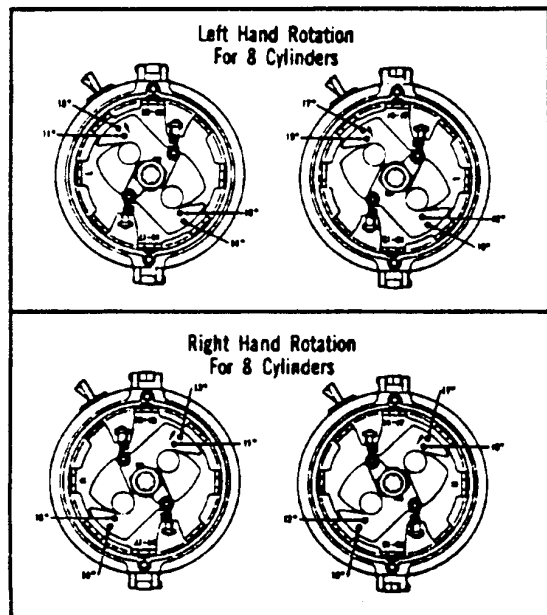


Figure 3

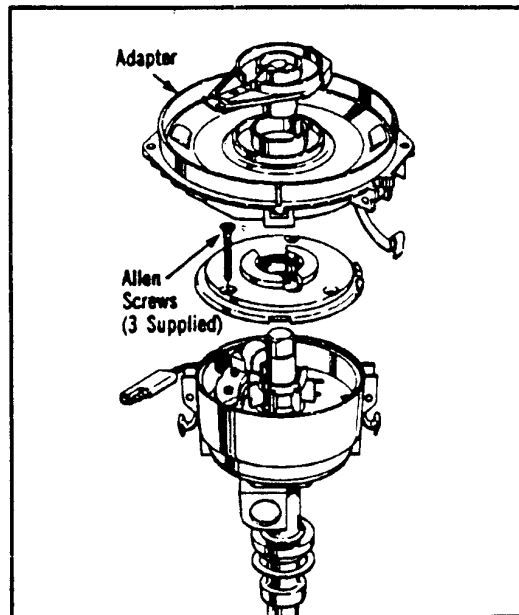


Figure 4

IMPORTANT – READ CAREFULLY

If the distributor is used for racing purposes, or if a high volume oil pump or steel billet camshaft is used in engine, it is necessary that the cast iron distributor gear be replaced with a bronze gear. This is for your engine's protection.

If timing scatter appears on the harmonic balancer when undergoing power timing, the timing chain, oil pump or cam button will have to be inspected to correct the problem.

All ACCEL distributors 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. See warranty card for details. During this period, ACCEL will repair or replace products proven defective in normal use 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
8700 Brookpark Road, Cleveland OH 44129-6899 Telephone: (216) 398-8300

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.