

CHRYSLER CORPORATION

MAGNETIC IMPULSE IGNITION SYSTEM

INTRODUCTION

The Chrysler magnetic impulse ignition system is a completely new concept in ignition systems. This system offers many advantages over breaker type ignition systems. Some of these advantages are:

1. Requires less frequent tune-up
2. Increases secondary voltage
3. Improved starting
4. ~~Eliminates irregular timing (spark scatter)~~
5. ~~Eliminates distributor contacts and condenser~~
6. No dwell change with engine speed
7. No high speed misfiring when properly installed
8. Low cost
9. Longer plug life

INSTALLATION INSTRUCTIONS

A. Vacuum advance unit

1. Remove and discard original distributor (note position of rotor).
2. Remove and discard original ballast resistor.
3. Remove original wires leading to distributor and coil.
4. Maintain original coil (PN 2444241).
5. New spark plugs should be installed and gapped at .035in.
6. Be sure plug wires are in good condition. Replace if in doubt.

7. Install electronic control unit. Mount this unit away from excessive heat. Some suggested locations are: the inner fender skirt, the radiator baffle, the grille vicinity, or the outer firewall area.

When mounting the electronic control unit, remember that the exposed power transistor case is electrically hot. The unit should be mounted in an area which minimizes the possibility of shorting the transistor when working in the engine area. Shorting the power transistor to the heat sink or any ground while power is on will damage the control unit.

Also, when mounting the electronic control unit, be sure the unit box is grounded. Clean all paint from the unit mounting flange surface and from the area to which it is to be mounted. If there is any doubt as to a good ground, a wire may be run from the control unit case to any good ground.

8. Install the dual ballast resistor in any convenient area. Since this unit generates extreme heat, do not mount near rubber hoses, fuel lines, wiring harness, or on engine.

Be careful bolting this unit down. Over torquing will crack the resistor.

9. Proceed with wiring as illustrated in Figure #1 (Page 3). For various applications, it may be necessary to strip tape wrapping from supplied harness and cut individual wires to appropriate lengths for your application.

All hot wires should be #14 or larger.

10. Securely crimp and/or solder terminals of any new leads that are required. When soldering is necessary, be sure to use resin core solder only.
11. Tape all exposed bare wire joints. Use black electrical tape such as 3M #33.
12. Where possible, let new wires follow original wiring harness. New wire may be tape wrapped to original harness if desired.

Remember to consider all linkage movement and motor movement when running new wires and locate accordingly.

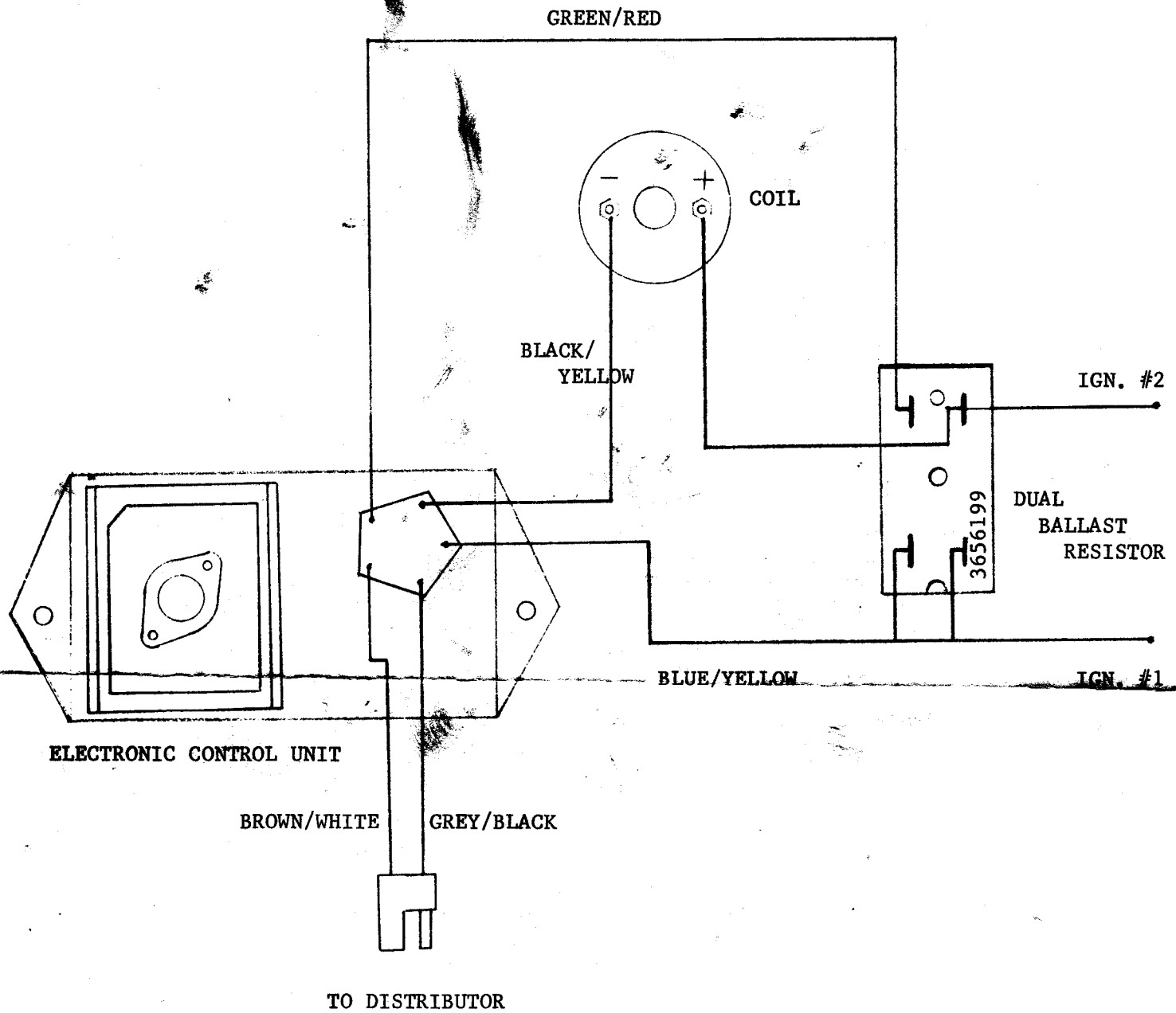


FIGURE 1

Do not run new wires near exhaust manifold.

13. Be sure terminal marked Ign. #2 (Figure 1, Page 3) receives battery voltage when ignition switch is in "START" position only.

Be sure terminal marked Ign. #1 (Figure 1, Page 3) receives battery voltage when ignition switch is in "ON" position.

Check voltages at these points with ballast resistor disconnected.

14. Install large connector in electronic control unit and secure with supplied screw.
15. Check gap in distributor between reluctor and pickup (see Figure 2, Page 4) set at .008".
16. Tighten pickup hold down screw (see Fig. 2, Page 4). Re-check pickup to reluctor clearance.

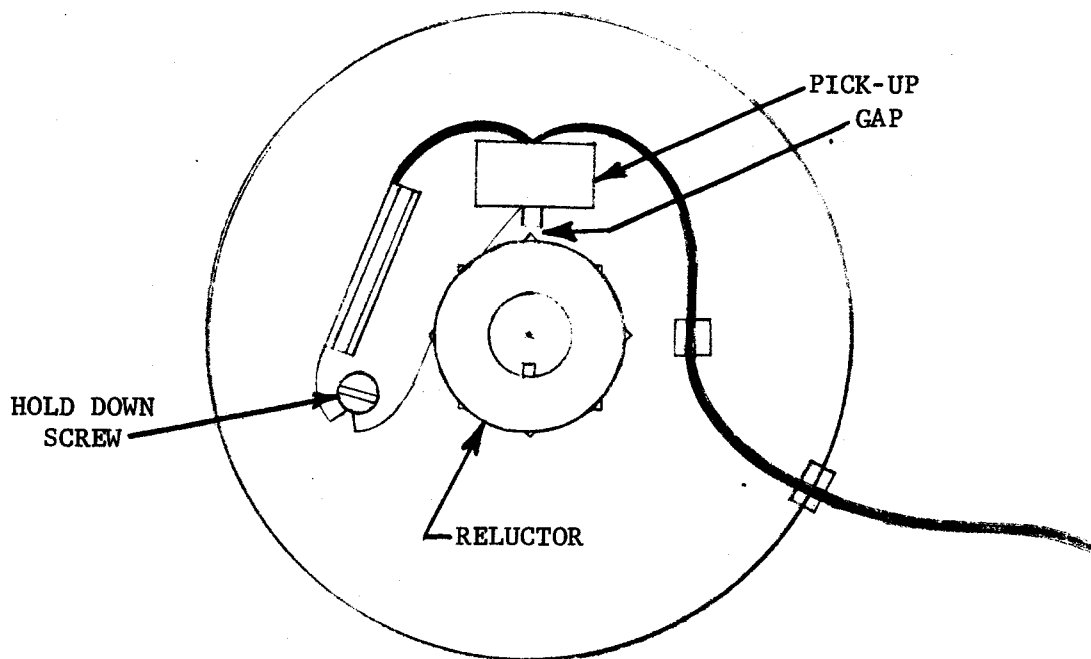


FIGURE 2

17. Install distributor with rotor in same position as in original distributor.
18. Secure distributor cap and connect distributor leads to control unit leads.
19. Start engine and set engine timing as usual.
20. Trouble shooting
 - a. Engine turns over but will not start
 - (1) Check for battery voltage at Ign. #2 terminal with switch in "START" position
 - (2) Check wiring for loose or poorly connected wires
 - (3) Check for good ground on electronic control unit
 - b. Engine idles rough and stalls
 - (1) Battery in poor state of charge
 - (2) Carbon tracked distributor cap
 - (3) Bad coil
 - c. High speed miss
 - (1) Loose connection or poor ground
 - (2) Spark plugs in poor condition
 - (3) Faulty plug wires
 - (4) Low battery voltage
21. If an electronic tachometer is used, hook tachometer lead (which originally connected to distributor lead) to negative coil.

B. Mechanical advance units with tach drive

Follow instructions for vacuum unit with the following exceptions:

1. Replace original coil with Chrysler/ACCEL coil PN 3690560 or ACCEL coil PN 140306.
2. Install both the dual and single ballast resistors as indicated in Figure 3, Page 7.
3. Wire as shown in Fig. 3, Page 7.
4. Be sure terminal "A", Figure 3, Page 7, is supplied with battery voltage when ignition switch is in both "ON" and "START" position.
5. For cars that are not equipped with alternators and/or cars that have their battery located in the trunk compartment, the wire which supplies voltage from the battery to the ballast resistor should be no smaller than a #8 stranded wire.
6. Locate coil as close as possible to distributor so as to minimize length of coil high voltage wire.
7. Solid steel or copper core spark plug wire must be used with this unit.
8. Gap plugs at .032" for most engines.
9. If car originally was equipped with a distributor with vacuum advance, be sure to plug vacuum line when installing this unit.
10. Any on/off switches in the ignition system should be capable of handling at least 20amps. Switches of this type are available from Chrysler Performance Parts -- PN 3690282.

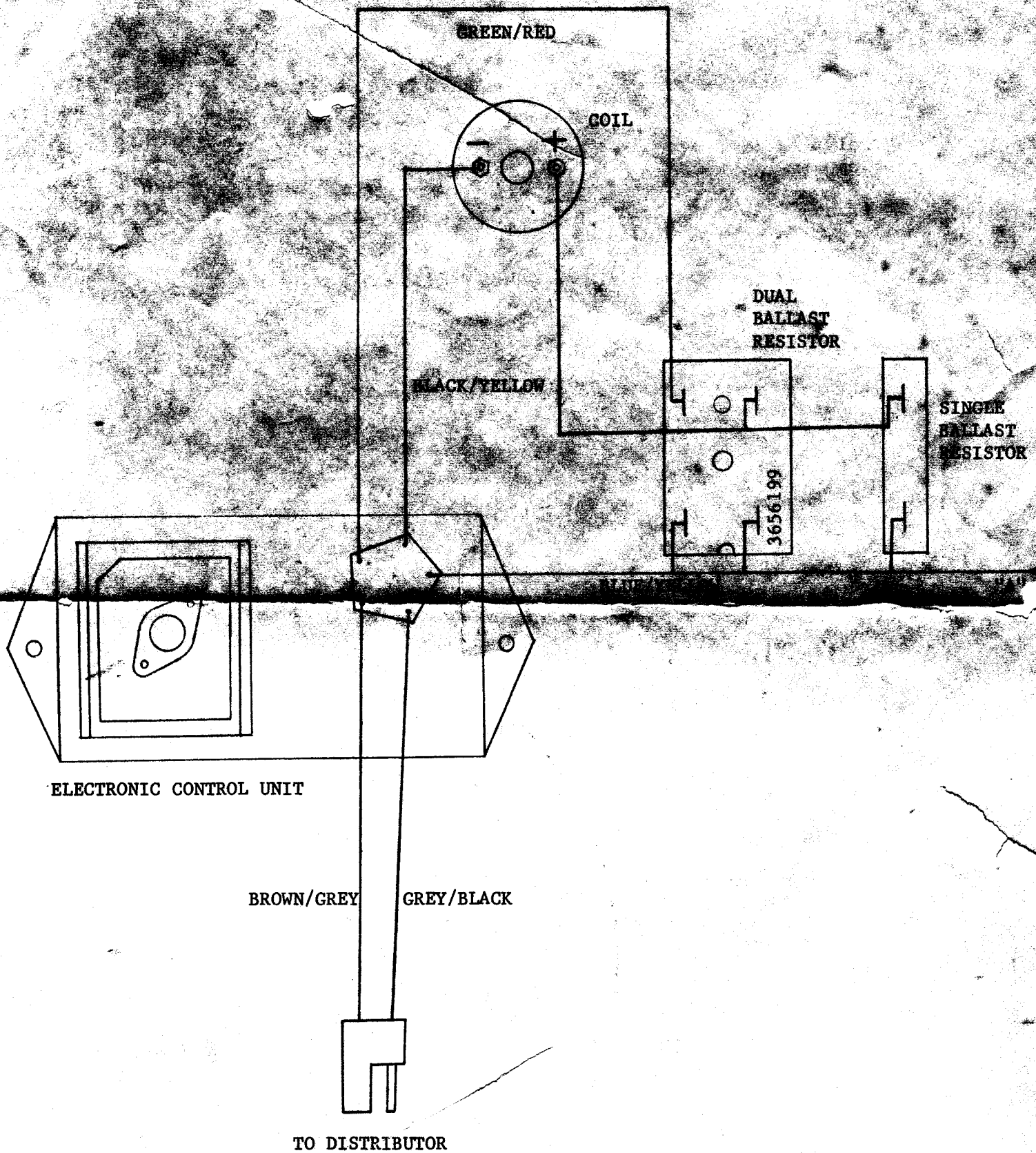


FIGURE 3

