Installation Instructions for Chrysler LA, B, RB and Hemi V8

Ready to Run Distributor with

Mechanical Advance

Please read these instructions before installing.

You should always disconnect the battery, negative lead first, before working on the ignition system. When you are done reconnect the battery installing the positive lead first.

Included with the distributor:

1 – Machined Chrysler V8 Distributor

1 - Rotor

1 - Distributor Cap

1 - Wiring harness interface

1 - Advance curve spring kit with two silver and two black springs

How to Install the Distributor

1. If the distributor to be replaced has not already been removed from the engine, remove its cap. Do not remove the spark plug wires at this time.

2. Crank the engine slowly until cylinder #1 (front cylinder on driver's side of engine) at TDC. Note were the rotor blade is aimed at a fixed point on the engine (should be aimed at the front of the passenger side valve cover). Note this point for future reference.

3. Now put the existing cap back on the distributor. Note and mark which spark plug wire the rotor (blade) is pointing at and make sure that is going to #1 cylinder. Then number all the spark plug wires according to the firing order 1-8-4-3-6-5-7-2 and remove the spark plug wires. If in doubt you can leave the wires connected to the old cap and then transfer them to the new distributor cap later in the process (see point # 8).

4. Unplug all external connectors coming from the distributor.

5. Loosen and remove the distributor hold-down bolt and clamp. Lift the old distributor out.

6. Remove the cap form the new distributor. Apply a thin coating of engine oil to the O-ring and surround housing on the new distributor. Lower the new distributor into position. Make use the rotor blade should be aimed at the same fixed point as was the rotor from the old distributor. After the new distributor has been lowered into place, you may find that it hasn't firmly seated with the rotor pointing at the marked spot. This indicates that the lower end of the distributor shaft is not properly aligned with the oil pump drive shaft. You may have to use a screw driver to turn the oil pump drive shaft slightly so that the distributor seats firmly and the rotor lines up to with the mark. Do not attempt to force the distributor into position.

7. With the distributor properly seated, reinstall the hold-down clamp and tighten the hold-down bolt just enough so that the distributor is held in place, but can still be rotated with a little effort. Re-install the distributor cap

8. One at a time, remove the plug wires from the old cap and install them in the corresponding positions of the new cap. Note – if the old distributor cap has a female socket style towers, then you will have to change the ends of the spark plug wires over to HEI/male tower style distributor boots and terminals so that they will fit onto the new distributor cap. After all the spark plug wires have been transferred, verify that the wire on the terminal post that is aligned with the rotor leads to #1 one cylinder. If you are unsure of cylinder number position or firing order, this information can be found in the service manual that covers your particular engine.

9. Double check the air gap between the reluctor wheel and magnetic pickup assembly with a non magnetic or brass feeler gauge. The air gap should be 0.007-.010" on all eight points of the reluctor wheel. If not, loosen magnetic pickup assembly hold down screw, adjust the air gap accordingly and retighten the screw.

10. Install the cap on the new distributor and connect the wiring leads from the distributor as noted below;
    Orange lead to coil positive
    Black lead to engine ground

11. At this time you can begin timing the engine.

WHEN INSTALLING A HIGH PERFORMANCE IGNITION SYSTEM WITH THIS DISTRIBUTOR, PLEASE REFER TO THE INSTRUCTIONS THAT COME WITH THE IGNITION CONTROL BOX.

Adjusting the mechanical advance

Please keep in mind that how quickly the mechanical advance comes is controlled by the stiffness of the advance springs. Softer springs allow the advance to come in more quickly (low compression street engine) while stiffer springs delay the advance curve until higher RPMs are reached (purpose built race engine). The factory installed medium blue springs generate a performance ignition advance curve that typically begins at 1200 RPM and generates 22-24° crankshaft advance that is fully in by 3200-3300 RPM. This mechanical advance curve will work in most street performance engines.

The mechanical advance curve in your new distributor is full adjustable and can be custom tailored to meet most needs. To gain full access to the mechanical advance to change springs, it is best to have the distributor out of the engine. You can adjust the amount of mechanical advance with distributor in the engine.

1. Remove the cap and rotor from the distributor. Carefully drive the roll pin out of the stop collar and remove the stop collar and trust washer from the distributor shaft.

2. Disconnect the two wire leads to the magnetic pickup. Note that the terminals on these leads are such that you can't get them crossed.

3. Remove the two large screws and lock washers from either side of the bowl. These hold the breaker plates in place.

4. Push the shaft assembly upward until the lower advance plates are clear of the bowl – be careful as the shaft assembly is now free and can be completely removed from the bowl and lower housing. You can now see and work on the mechanical advance plates and springs. If you need the mechanical advance curve to come in more quickly, swap one or both of the blue springs for the silver springs. If you need the mechanical advance curve to come in more slowly, then swap one or both of the blue springs for the black springs. DO NOT BEND THE SPRING PERCHES.

5. The amount of mechanical advance is controlled by the two lower advance plates. There are two adjustment screws, one either side of the advance plates. To adjust the total amount of mechanical advance, loosen the two screws and rotate the two advance plates. DO NOT BEND THE ADVANCE TABS. Using the advance curve kit keys which are included with the distributor choose the total amount of mechanical advance that is needed. The amount of crank shaft degrees is marked on each key. Insert the flat side of the key toward the advance tab and rotate the adjustment plate tightly against the key. Tighten the adjustment screws to 30 in-lb.

6. Reinstall in the reverse order.

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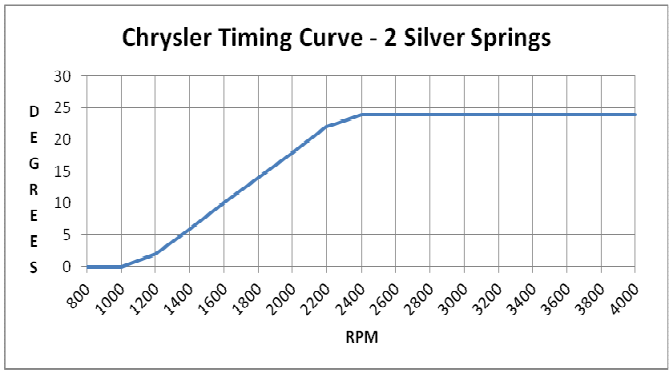
Chrysler Timing Curve - 2 Silver Springs
DEGREES
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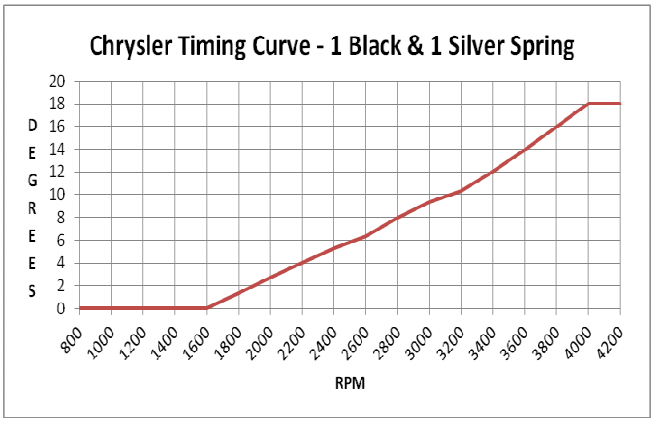
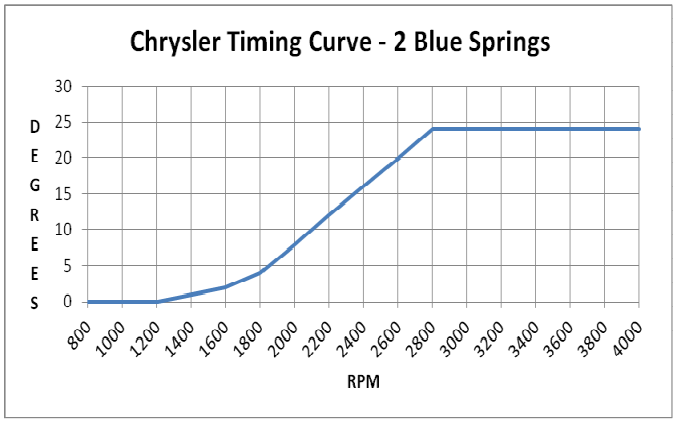
RPM


Chrysler Timing Curve - 1 Black & 1 Silver Spring
DEGREES
0 2 4 6 8 10 12 14 16 18 20
800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000 4200
RPM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DEGREES
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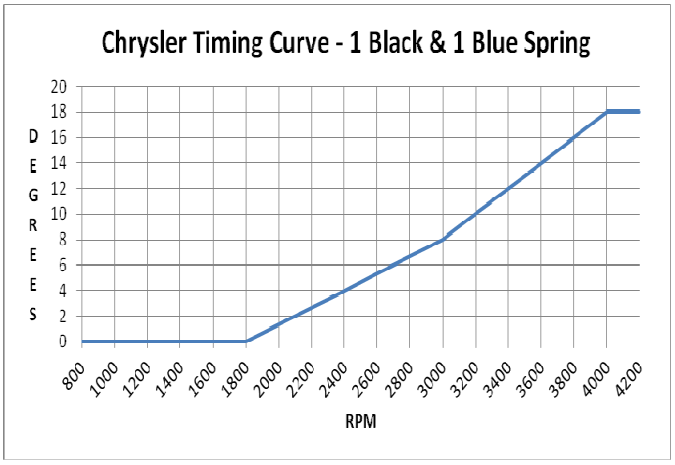
RPM


Chrysler Timing Curve - 1 Black & 1 Blue Spring
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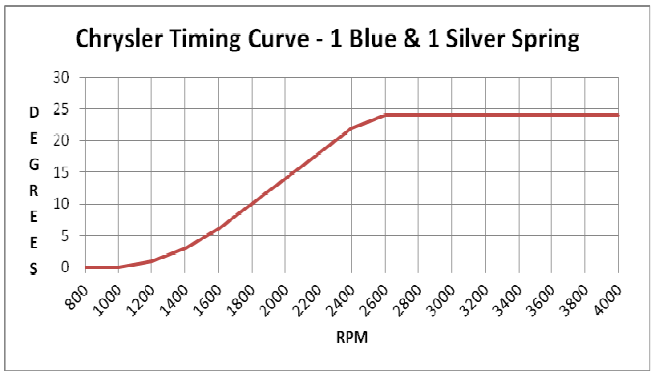
800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000 4200
RPM


Chrysler Timing Curve - 1 Blue & 1 Silver Spring
DEGREES
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800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000
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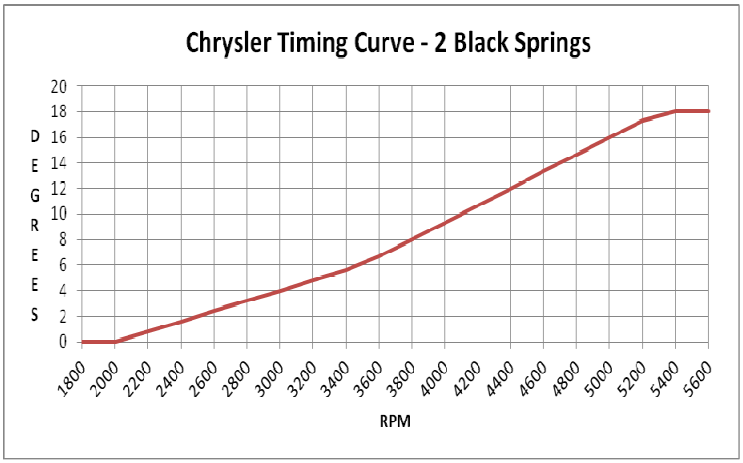
Chrysler Timing Curve - 2 Black Springs
DEGREES
0 2 4 6 8 10 12 14 16 18 20
1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000 4200 4400 4600 4800 5000 5200 5400 5600
RPM