

August 22, 1986

Mr. Len Miller
P.O. Box 955
San Carlos, California 94070

Dear Len:

I have just finished the installation of points, rotors, and condensers on the G.T.F. and thought that some of the information gained would be of interest.

Diagnosis: The car started and ran well but sounded weak and had absolutely no power, even after the attempted "Italian tune-up". Spittle on each of the exhaust manifold pipes showed that the whole left bank was not firing. Removing the distributor cap showed one set with a broken spring and the outer spring about to break on the second set.

Information: These articles were found to be very helpful.

"Ignition Points" F.M.L. October 6, 1984, by Jim Riffand Dyke Riogley

"Distributor Tune-Up" F.C.A. Bulletin June 1982, by Hinckley & Badurski

"Ignition Timing For V-12's" F.A.F. Catalog (Note: Item 1 and 2 are the lugs on the bottom of the distributor shown at the top of the exploded parts sketch)

"Distributor Timing" Prancing Horse #37, by Thomas W. Herren Jr.

"Value Adjustment in The Ferrari V-12 Engine" Prancing Horse #59-60, by Jeff Rothman

"Distributor Rebuild" Prancing Horse #68, by Bill Badurski

Comments and Suggestions:

1. Pull the plugs, take off the distributor cap on the right bank (1-6) distributor, rotate the engine to "A.F.10" just ahead of "PML/6" with the rotor pointing ahead. Remove the distributor from the right angle drive.
2. Mark the location of each piece relative to the next and make a sketch.
3. Plug the timing hole with a paper towel when it does not need to be open.
4. Paint the marks in accordance with the F.A.F. article. The marks are hard to distinguish when the car is running.

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5. The fiber block on the points will probably have to be drilled out and sanded to fit the post. Use the old set as an indication of how tight the new set should be.
6. There are 5 possible locations for alignment adjustment: Points (gap and location), distributor location, drive lug (top has slotted holes for rotation versus the bottom), vertical drive gear, horizontal splined drive shaft.
7. Under normal conditions all of the adjustments will be centered at the "10AF" position, for static timing. If something does not line up, follow the systematic sequence of adjusting one piece then the next.
8. Lay out all the new parts and place the old ones in an orderly sequence opposite them. Check all the parts prior to buttoning up the distributors. Anything left over is suspicious.
9. Loosen the screws prior to removing the distributor bodies. Points (6), bearing support web (3), bearing retainer (2). This is easier while the distributor is bolted down solidly.

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Tools & Supplies:

10mm wrenches (every odd shape, u-joint, socket - nuts on back of distributor rt. angle drive are very difficult to reach)

7mm wrench for condenser nut

14mm socket w/12" extension for distributor nuts

7.6cm to 9cm diameter can to support distributor

Rotor/cardboard degree wheel - for point adjustment

Feeler gauge

Distributor cam lube

Screw starter - magnet or grabber type, for starting point screws

Paint and brush - white, green, and red

6mm drill

600, 240 sandpaper

Scratch awl or razor blade for marking housing

"O" rings - 5mm cross section, 50mm I.D.

Silicon sealer

Timing light and flashlight

Solvent

Two rolls of paper towels

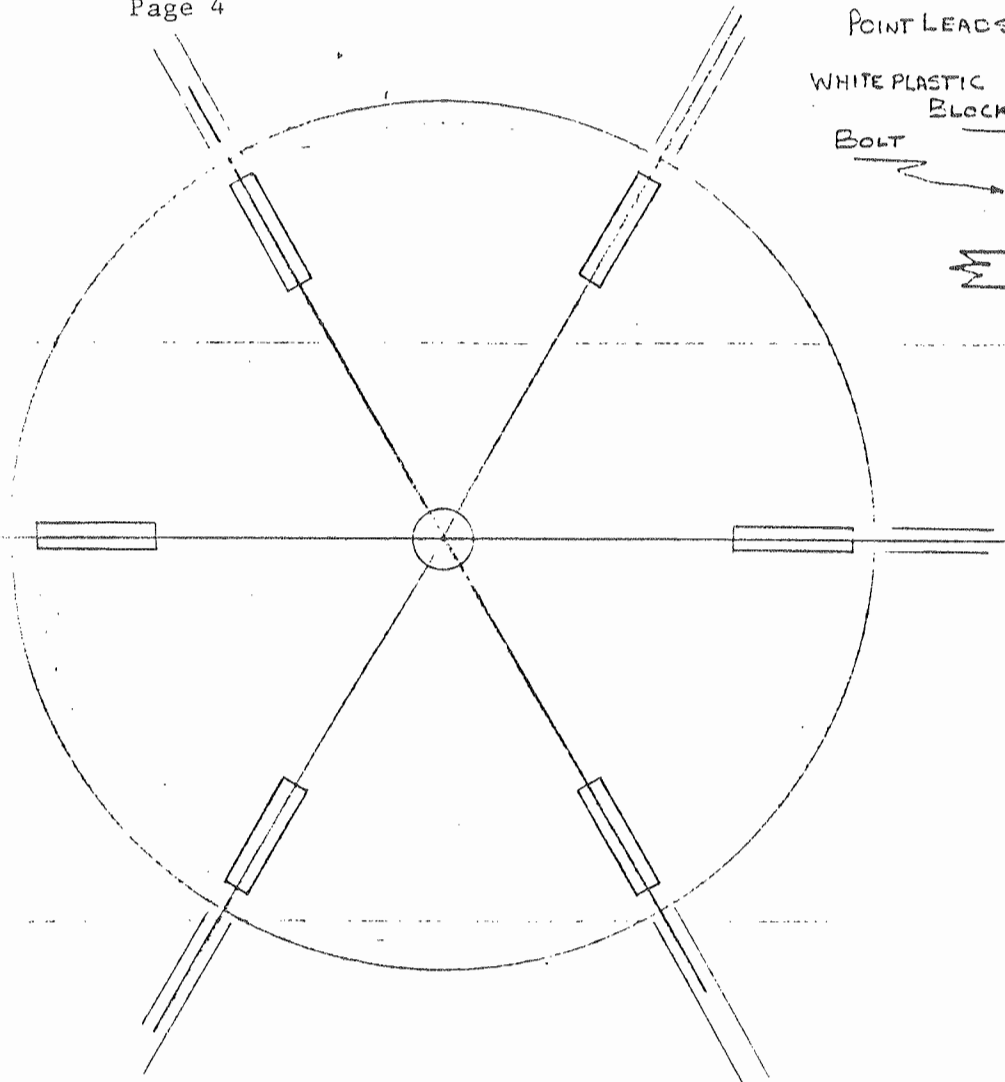
8mm sockets, 6" extension for distributor cap

Points, condensers, rotors, distributor caps

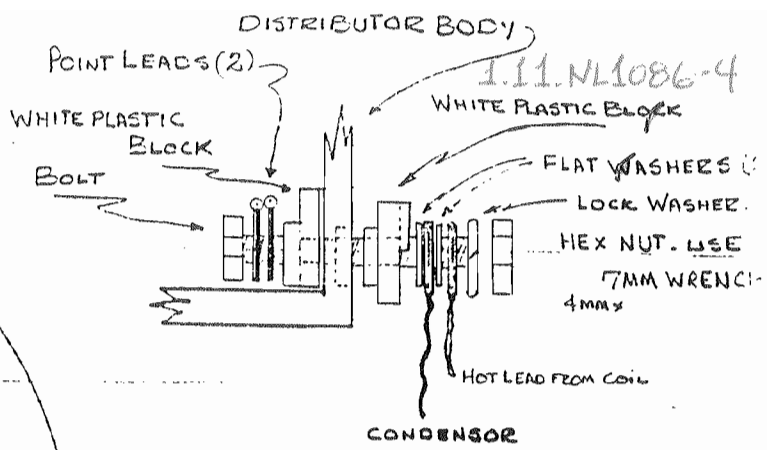
Spare screws, nuts, washers ...

A good set of screwdrivers



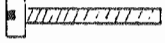

6 volt battery, bulb and two 12" wires with alligator clips



HINCKLEY - BADURSKI DISTRIBUTOR MACH.
 O.D. 4 1/2" Windows 1 1/2 to 2 1/3" RADIUS
 HOLE SIZE 8mm = 5/16" 1/8" WIDE - @ 60°
 FULL SCALE FOR DUPLICATION

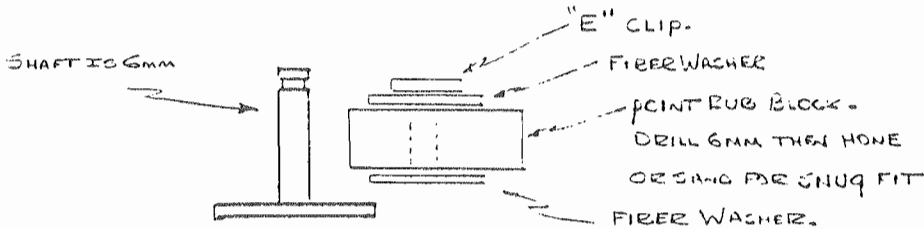


CONFIGURATION OF ELEMENT ON DISTRIBUTOR

-  BOTTOM PLATE HOLD DOWN SCREWS. 4mm x COARSE TH. 5mm THREAD LENGTH - 8 pcs.
-  TOP PLATE HOLD DOWN SCREW 4mm x COARSE TH. x 4mm THREAD LENGTH 4 pcs. TOTAL
-  BEARING RETAINER SCREW 2mm x COARSE THREAD x 15mm L. 4 pcs.
-  2mm STAR WASHER FOR SCREW ABOVE - 4 pcs.

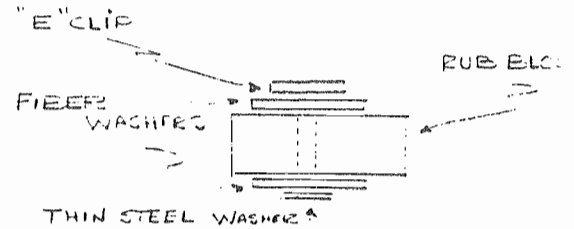
LAYOUT OF ELEMENTS ON POINT SHAFT

LONG WIRE SET, TO FRONT



SAND FIBER WASHERS W/ 240 SAND PAPER TO GET SNUG - NON BINDING FIT.

SHORT WIRE SET, TO REAR



POINTS K-710071-06 SHORT WIRE
 K-710071-07 LONG WIRE
 CONDENSORS CE-1E
 ROTORS 703 880 01

DETAILS OF ELEMENTS INVOLVED IN POINT CHANGE LIMITED CASE