

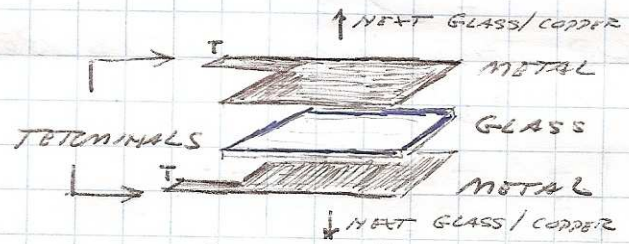
MAY 3 2010
1940 HRS UTC

FROM THE FRONT SEAT OF THE COROLLA:

O.K. ON MATERIAL SENT. BIG NEG ON PRIMARY COIL CONNECTION. THE CONDENSER LEADS MUST BE ON SAME SIDE OF PRIMARY LOOP, NOT OPPOSITE SIDES OF LOOP. NO HALF TURNS ALLOWED!



GLASS PLATES WITH COPPER SHEETS BEST "TESLA" CONDENSER. IT IS HARD TO GET A GOOD CONNECTION TO ALUMINIUM BUT OTHERWISE ITS O.K.

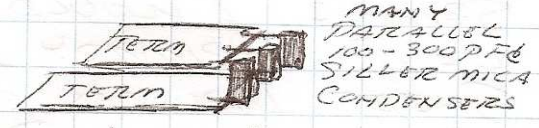


USE PARALLEL PLATE CONDENSER EQUATION AND ϵ FOR GLASS (ABOUT 6 TO 8)

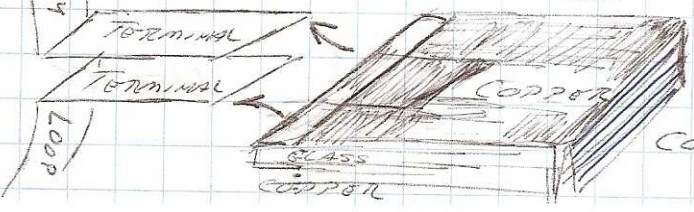
GLASS HAS A HIGH DIELECTRIC ADMITTIVITY AND LOW LOSSES. THIS IS THE BEST POSSIBLE COMBINATION. MARCONI PUT THESE IN EARTHENWARE TANKS FILLED WITH 10-C OIL TO EQUALIZE GRADIENT IN POOR METAL TO GLASS CONTACT, WHICH BY TESLA, MUST BE PERFECT.

DO NOT USE RESISTORS ANYWHERE, BAD JOO-JOO. SHUNT THE PRIMARY WITH SOME CAPACITY. THE TERMINALS MUST BE NEXT TO EACH OTHER.

SINGLE-TURN EXAMPLES CONDENSER LEAD.



COIL LEAD JUST LIKE CONDENSER CLOSE AND FLAT / WIDE

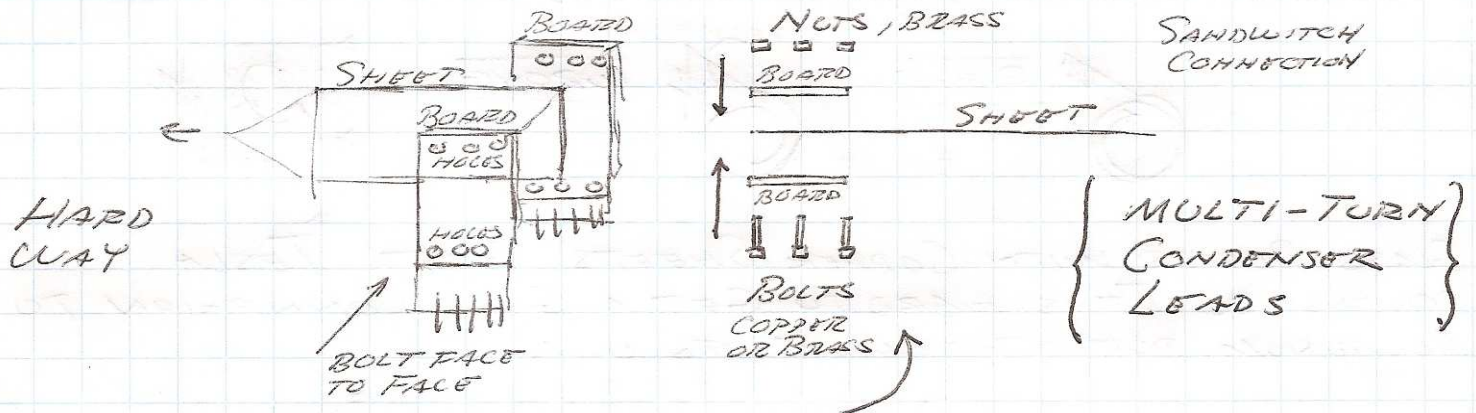


GLASS COPPER CONDENSER STACK

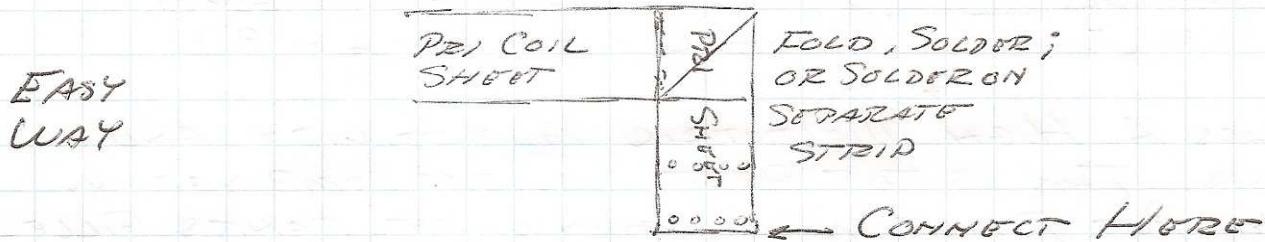
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SINCE YOU HAVE A MULTI-TURN COIL THEY'RE RIGHT ANGLE CONNECTIONS ARE REQUIRED, OTHERWISE SAME, CLOSE

USING COAX MULTILEAD CONNECTIONS TO COIL IS RIGHT BUT YOUR CONNECTOR IS NOT SO GOOD. FACE TO FACE METAL CONTACT A MUST TO KEEP MAGNETISM TRAPPED IN THE PRIMARY CIRCUIT. NO LEAKS ALLOWED JUST LIKE PLUMBING, IN YOUR SETUP ABOUT 30 PSI STRENGTH O.K.

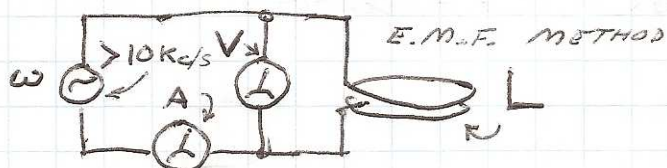


A LOT OF ROOM TAKEN UP THIS WAY, IT IS BEST TO FOLD TERMINAL LINE THIS ↓



ALSO, TRY SMALLER AND SMALLER CAPACITANCE ON THE EXTRACOIL INPUT, DOWN TO ABOUT 5 pF AND GRAPH CHANGE IN FREQUENCY VS CAPACITANCE IN PICO FARADS. THIS IS AN IMPORTANT EXPERIMENT.

YOUR PRIMARY/SECONDARY LOOKS LIKE COLORADO SPRINGS, I WOULD SAY YOU HAVE A SCALE MODEL OF IT. PRIMARY INDUCTANCE IS FOUND BY THE SHEET INDUCTANCE EQUATION IN BOOKS. THE "WHEELER" FORMULA IS NOT RIGHT, IT IS FOR SOLENOIDS ONLY



(2)

$$L = \frac{V}{A} \frac{1}{2\pi f} \text{ HENRY}$$

THAT IS JUST A MINIMUM REQUIREMENT AS A RULE OF THUMB.

SHEET INDUCTANCE IS GIVEN BY (FOR PRIMARY LOOP)

$$(A/w) N^2 \times a \quad \text{HENRY}$$

WHERE A IS LOOP AREA, W IS STRIP WIDTH, N, NUMBER OF TURNS, AND a IS A CONSTANT FROM BOOKS. I CANNOT OVER EMPHASIZE NO LEAKS OF MAGNETISM ARE ALLOWED! AND REMEMBER RESISTORS BY VERY DEFINITION ARE LOTS OF LITTLE HOLES LEAKING MAGNETISM INTO MOLECULAR DIMENSIONS. NFG.

ON A SIDE NOTE, ~~SURE~~ ^{SURE} A LOT OF SHIT ON FORUM, "LUCIFER LIGHT SHIP", COMMONWEAL, AND "JOE BLOW", L. LIVERMORE LABS. YES, BOMBS AND WHALES, ONE DOWN THE THROAT, THE OTHER UP THE ASS! THEIR TOO FUCKING MUCH! I AIM FOR THE EXPERIMENTER LIKE YOURSELF AND A SILENT MAJORITY IN GENERAL.

I HAVE TO BE A BIT TOTALITARIAN IN DEMANDING THAT THE TERMS OF STEINMETZ AND TESLA MUST BE STRICTLY ADHERED TO, IT IS AN ORDER BY THE CAPTAIN, THE NAVY WAY OR IT "JUST AINT GONNA FLOAT." SAME WITH INSTRUCTIONS REGARDING CONSTRUCTION OR TESTING PROCEDURES, THESE MUST BE FOLLOWED EXACTLY. FINALLY ALL DETAILS ARE TO BE PUT ON FORUM, IT DOES NOT MATTER IF IT IS FULL OF SHIT, THAT CAN ALWAYS BE SKIPPED OVER BY ANYONE SERIOUSLY AFTER SOME USEFUL DATA. (I HAD TO "BARF" THE SEWER SYSTEM AT SHIPYARD, SO NO BIG DEAL HERE) TRY TO FIND TUNING CONDENSERS FROM OLD RADIOS FOR YOUR EFFORTS. YOU NEED TO GET SOME CAPACITANCE ON THAT PRIMARY! YOU CAN MEASURE PRIMARY INDUCTANCE BY MEASURING ITS BACK E.M.F. AT SOME FREQUENCY BETWEEN 10 TO 100 Kc THAT IS HOW TESLA DID IT. SO KEEP SAILING FORWARD...

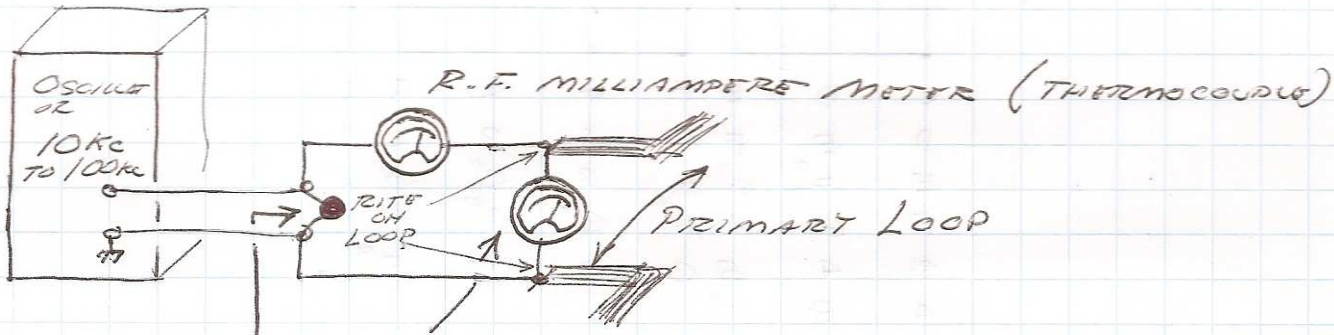
73 DE NCKPH.

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PRIMARY INDUCTANCE TEST

METER E.M.F. INDUCTANCE METHOD

TEST OSCILLATOR



$F = 10 \leftrightarrow 100 \text{ Kc}$
BEST FREQ IN
THIS RANGE

RECTIFIER
TYPE A.C.
VOLTMETER

$$E/I = \omega L$$

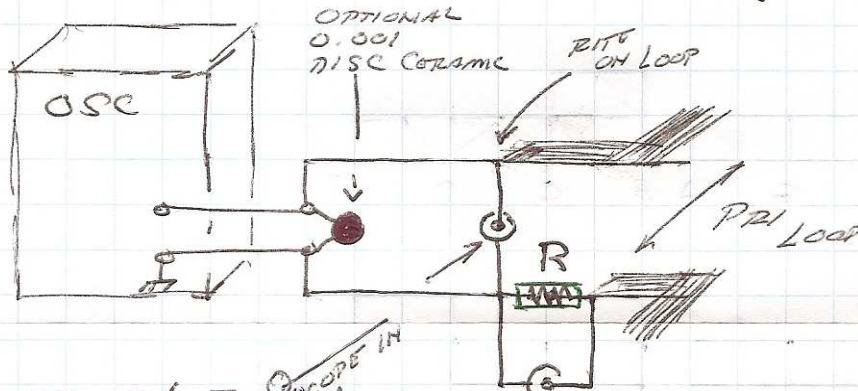
$$E/\omega I = L$$

0.001
WATT DISC CERAMIC
OPTIONAL

$$\omega = 2\pi F$$

30Kc/s SINE
WAVE GOOD START

SCOPE E.M.F. INDUCTANCE METHOD, (SERIES RESISTOR) R



$$E = e/\sqrt{2}$$

$$E/I = \omega L$$

$e_s \neq e =$ SCOPE PEAK
VOLTAGE ($1/2$)
PEAK TO PEAK)

$$I = \frac{e_s}{\sqrt{2} R}$$

$$R < 5\Omega \text{ (1 WATT) BEST}$$

R IS A CARBON
RESISTOR
5% TOLERANCE

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