

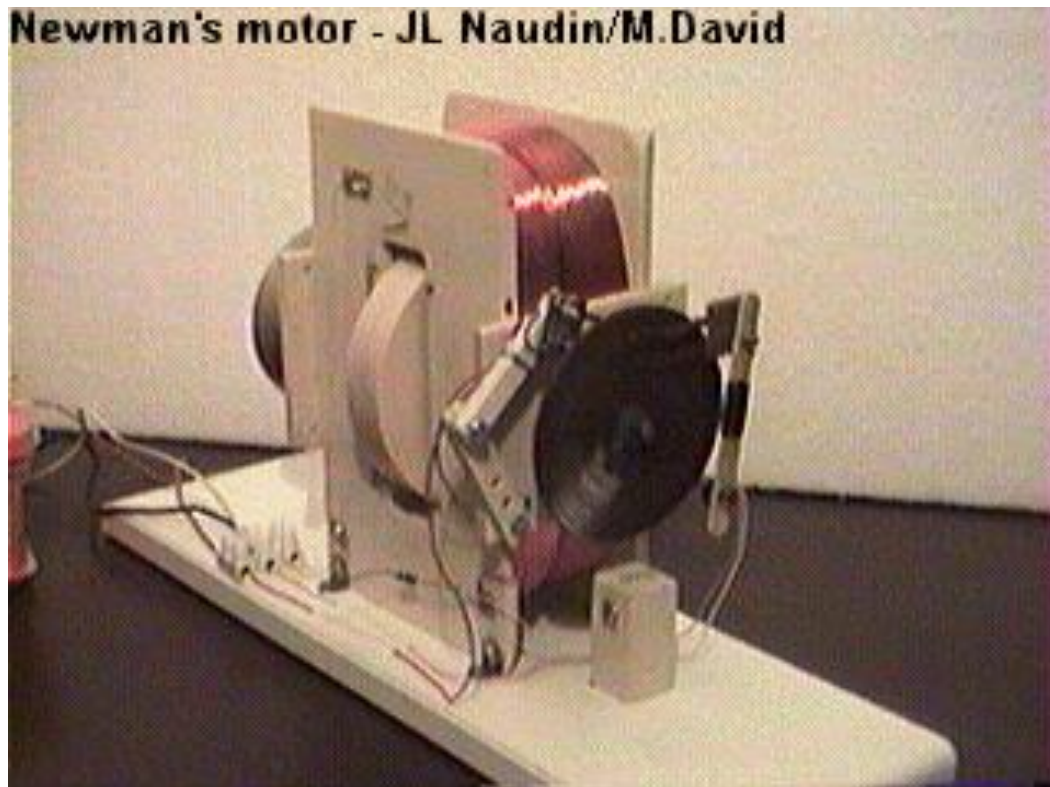
Exhibit 1

Summary

Examination board claim there is no independent validation of a Newman machine. Not true

- The Naudin independent validation was produced in 1998 and is published and available online
- The validation build and testing is of a PhD standard although it has not been published by any journals
- Naudin builds and tests a mechanical Newman Machine to a VERY HIGH SPEC
- Naudin develops machine design and tests for endothermic heat gain, the Displacement current
- Naudin validates over 100% efficiency, pages 57 - 67

The Newman's Energy Machine By JL Naudin/M.David
created on 06-12-98 - *JLN Labs* - last update on 10-22-07



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ENERGY GENERATION SYSTEM HAVING HIGHER ENERGY OUTPUT THAN INPUT

No.Publication (Sec.) :WO8300963

Date de publication :1983-03-17

Inventeur :NEWMANJOSEPH W (US)

Déposant :NEWMAN JOSEPH W

Numéro original: [WO8300963](#)

No. de depot:WO1981US0110519810828

No. de priorité :WO1981US01105 19810828

Classification IPC :H02N11/00; H02K53/00

Classification EC :[H02K53/00](#), [H02N11/00B](#)

Brevetscorrespondants :AU7583781, BR8109038,

Abstré A system for generating obvious work motion, or electromagnetic energy (fields offorce) or electric current utilizing the electromagnetic energy which makes up a matter and results in a greater output of energy, than the initial input of conventional energy means and teachings. A first exemplary embodiment (Figure1) of the generator uses a contained fluid (117) surrounding a series of aligned magnets (120); while a second exemplary embodiment (Figure 3) uses a special material (201) held stationary between two static magnets (202, 203),the special material having its atoms aligned but maintaining the resulting magnetic field at least substantially within its boundary surface; while third and fourth exemplary embodiments (Figures 5 and 6) utilize a relatively heavy coil (205) made up of relatively large diameter wire of relatively great length and number of loops and length and a relatively small energizing current to drive a rotatable permanent magnet (200).



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification: **H02N 11/00; H02K 53/00** **A1** (11) International Publication Number: **WO 83/ 00963**
(43) International Publication Date: **17 March 1983 (17.03.83)**

(21) International Application Number: **PCT/US81/01105**
(22) International Filing Date: **28 August 1981 (28.08.81)**

Published
With international search report.

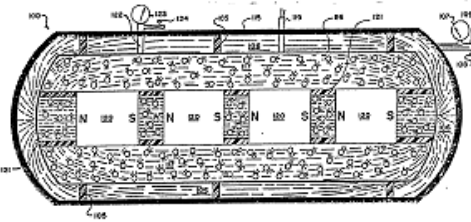
(60) Parent Application or Grant
(51) Related by Continuation
US 179,474 (CIP)
Filed on 18 August 1980 (18.08.80)

(71)(72) Applicant and Inventor: **NEWMAN, Joseph, W.**
[US/US]; Route 1, Box 52, Lucedale, MS 39452 (US).

(74) Agent: **PUGH, C., Emmett;** Suite 2200, 1250 Poydras
Street, New Orleans, LA 70112 (US).

(81) Designated States: **AU, BR, CH** (European patent), **DE**
(European patent), **FR** (European patent), **GB** (European patent), **JP, NL** (European patent), **SE** (European patent), **SU, US**.

(54) Title: **ENERGY GENERATION SYSTEM HAVING HIGHER ENERGY OUTPUT THAN INPUT**



(57) Abstract

A system for generating obvious work motion, or electromagnetic energy (fields of force) or electric current utilizing the electromagnetic energy which makes up a motor and results in a greater output of energy, than the initial input of conventional energy means and teachings. A first exemplary embodiment (Figure 1) of the generator uses a contained fluid (117) surrounding a series of aligned magnets (110); while a second exemplary embodiment (Figure 3) uses a special material (201) held stationary between two static magnets (202, 203), the special material having its atoms aligned but minimizing the resulting magnetic field at least substantially within its boundary surface; while third and fourth exemplary embodiments (Figures 5 and 6) utilize a relatively heavy coil (205) made up of relatively large diameter wire of relatively great length and number of loops and length and a relatively small emerging current to drive a reversible permanent magnet (206).

[Click on the picture to see the FULL PATENT](#)

THE NEWMAN'S MACHINE KEYS FOUNDS on 06-27-98

Key ONE : The FREE energy must be tapped from the collector (inductor) WHILE it charges itself with its own magnetic energy,

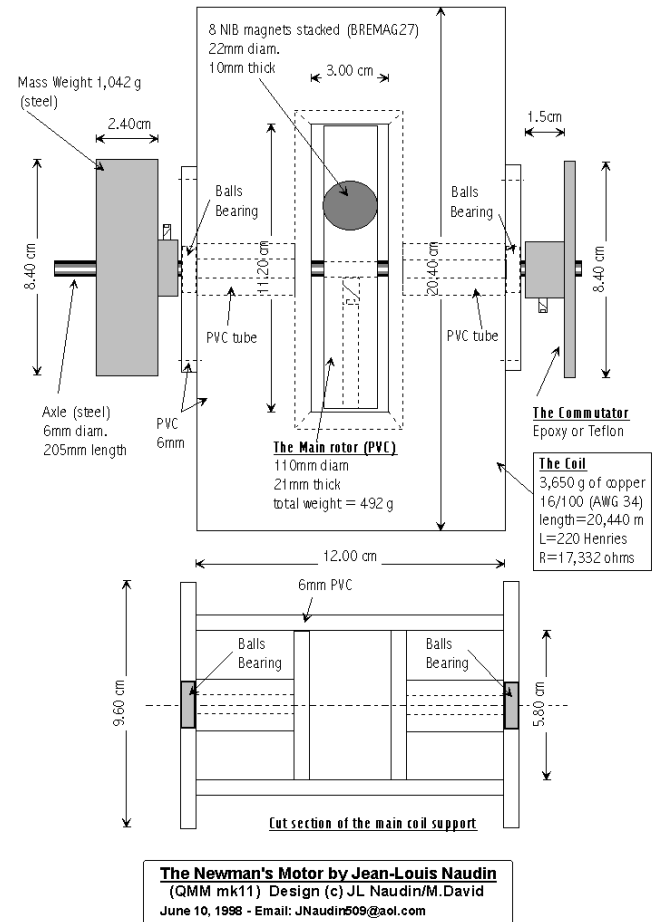
Key TWO : HIGHER the POTENTIAL, HIGHER the NEGATIVE POWER tapped.

Key THREE : GREATER THE NUMBER of STEPS (Broken flow) DURING THE CHARGING PHASE of the "collector", GREATER the efficiency.....

Key FOUR : To get more electrical power back from the coil, the pulse duration must be at least 1/20th of the L/R timeconstant and, at the same time, a very big _changing_ magnetic field must be applied (generated by a rotating permanent magnet rotor).

Key FIFTH : The negative current comes from the DISRUPTIVE EFFECT caused by the "Broken segments" or a bumpy surface during the firing sequence. The negative energy (the real Free Energy) is pumped from the vacuum DURING THE DROPS OF POSITIVE CURRENT. These drops create a kind of "syphon effect" in the Aether which pumps free energy and creates these deep and strong spikes showed in my scope picture.

Key SIX : The duration or the "life" of this negative current can be SUSTAINED by SMALL FLUCTUATIONS in the dropping potential, just after the disruption. This can be done by some SPECIAL SPARK-GAP DESIGN or a SPECIAL SHAPE of the "Broken segments".



Technical Specifications:

Coil Inductance = 220 Henries

Coil resistance = 17,332 ohms

Copper used = 20,440 m of AWG 34 (16/100)

Weight of copper : 3,650 gr

Magnets : 8 NIB (Bremag 27MGoe) (2x4 magnets stacked)

Magnet spec (one unit), ref: BREMAG27

diam 22mm and 10 mm thick,

BH Max : 27MG Oe 208 Kj/m³

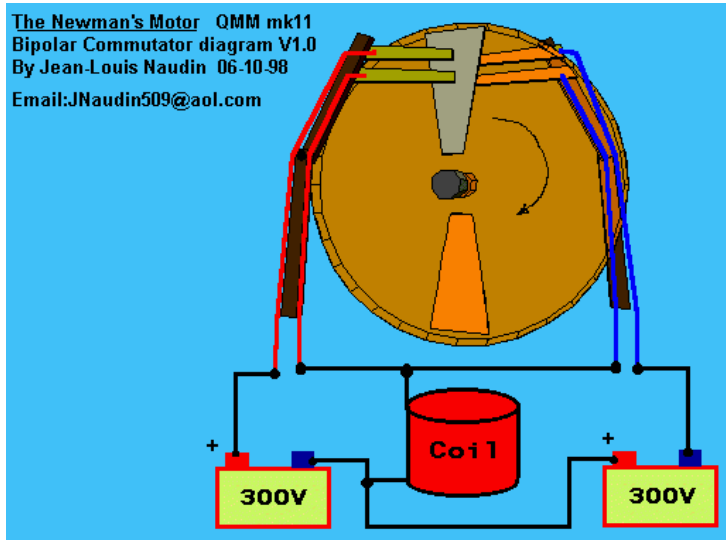
Br : 10500 G 1050 mT

Hc : 10000 Oe 800 kA/m

Pulsed coil voltages : about 300 Volts DC (with BackEMF spikes up to 1500 Volts..)

Speed = 230 RPM

The Commutator design and the power supply

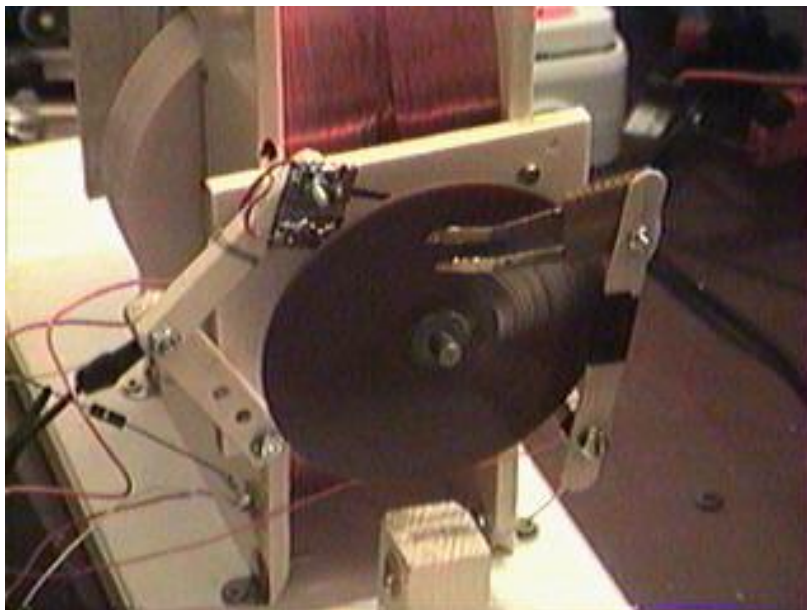


The main commutator wheel is made with an insulating material like Bakelite, Epoxy, Teflon, Ertalon.

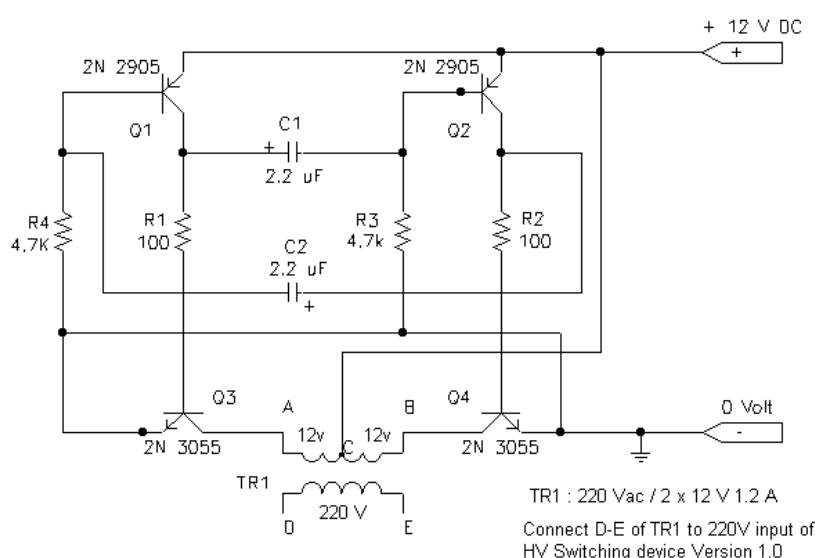
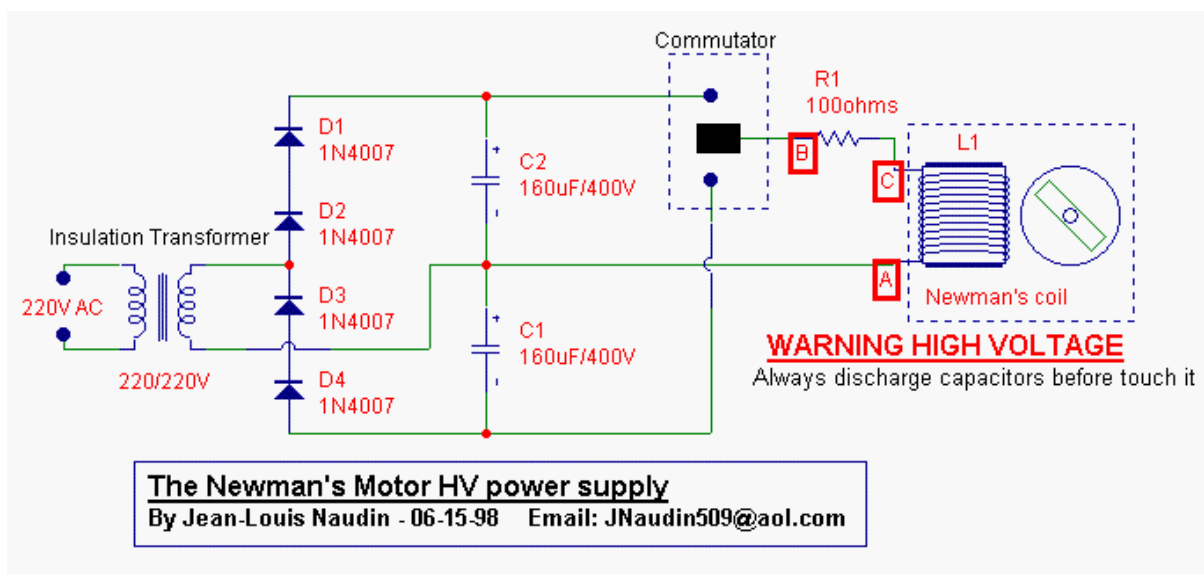
The rotating contacts are made with copper or silver sheet and have *rectangular shape* glued on the wheel.

These rotating contacts are at 180 degrees and one on each side of the wheel, thus, when the brushes touch these contacts, the circuit will close. The polarity of the current is reversed in the coil for each half turn.

Each pair of brushes are made with a copper or silver sheet and must be separated by at least 10mm to prevent eventual sparks.



If you want to use the Newman's motor with a 12V DC Battery, you need only to connect the 12V DC power supply (below) instead of the 220/220V insulator transformer from the main power supply (above).



**CAUTION !!! : USE EXTREME CAUTION,
 ALWAYS DISCHARGE AND DISCONNECT THIS
 DEVICE BEFORE TOUCH IT**

12 Volts drivers circuit for HV Switching device

Version 1.0 - Jean-Louis Naudin
 Email : JNaudin509@aol.com

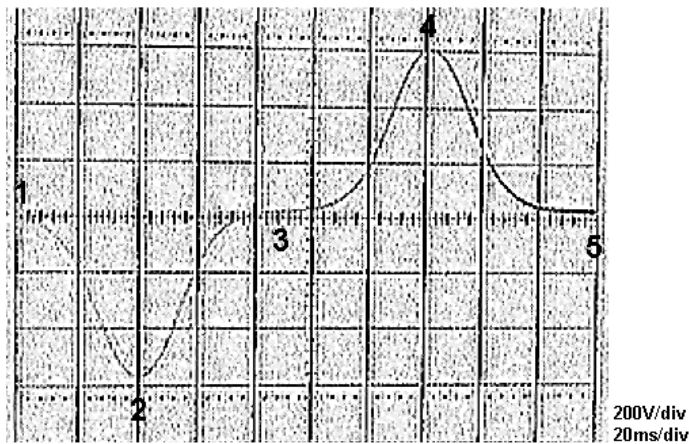
The picture above shows the voltage induced in the coil without pulse (Free run).

You can notice that the voltage induced reaches its maximum when the rotating magnet is at 90 degrees from the axis of the coil (positions 2 and 4).

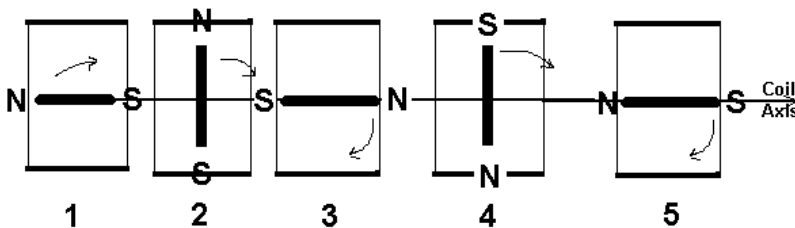
You can also notice that the voltage induced is null when the rotating magnet is at 0 degrees from the axis of the coil (positions 1, 3 and 5).

The "firing pulse" (when the current is sent to the coil) timing and duration depends of your initial choice :

The Tuning and the oscilloscope pictures



The Induced Voltage (without pulse)



Induction in the Newman's motor Vs the Rotor angle (Free run) Email : JNaudin509@aol.com

sophisticated for the design and the tuning of the commutator. In this case, all the magnetic energy stored in the coil and the magnetic energy from the rotating magnet will be used for producing *HIGH EFFICIENCY TORQUE* and also for producing STRONG BackEMF, this *RECHARGES THE BATTERY SOURCE*.

The Newman's Energy Machine V1.0, that I am glad to present you, has been designed only for the case 1 and 2. The case 3 can be done with an *enhanced and more sophisticated commutator*.

For tuning the timing of the "firing pulse" Vs the angle of the rotating magnet you must :

- 1) Adjust and lock the commutator wheel, so that the "contact sheets" must be parallel with the axis of the rotating magnet,
- 2) The phase adjustment can be finely tuned by moving left and right the arms which maintain the pair of contacts. You need to check this with an oscilloscope connected across the coil. Be careful of the High Voltage, the spike can reach up to 1500 Volts, so I suggest you to add a 1 M ohms resistor in series with your scope probe (you see this resistor in the picture above),

- Case 1: The Newman's machine runs as a MOTOR. In this case, all the magnetic energy will be used for producing *HIGH EFFICIENCY TORQUE*.
- Case 2: The Newman's machine runs as a GENERATOR. In this case, all the magnetic energy will be used for producing STRONG BackEMF which *RECHARGES THE BATTERY SOURCE* and *also produces usable electricity*.
- Case 3: The Newman's machine runs as a MOTOR/GENERATOR. This is the best case, but the more

3) The Pulse duration can also be finely tuned by moving up and down the arms with the pair of contacts. So, by this mean, you will be able to adjust the pulse duration of the "firing pulse". The closer to the circumference, the shorter will be the pulse duration.

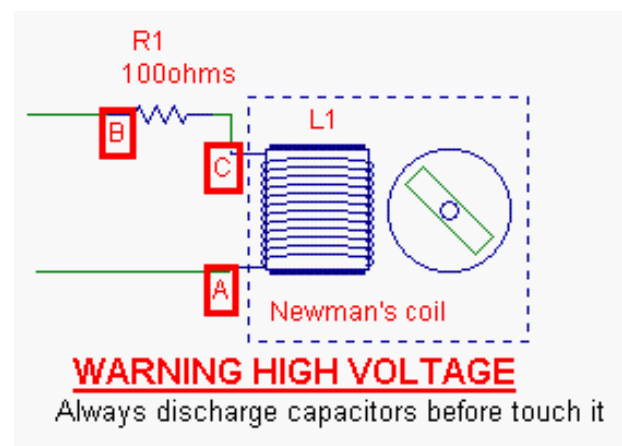
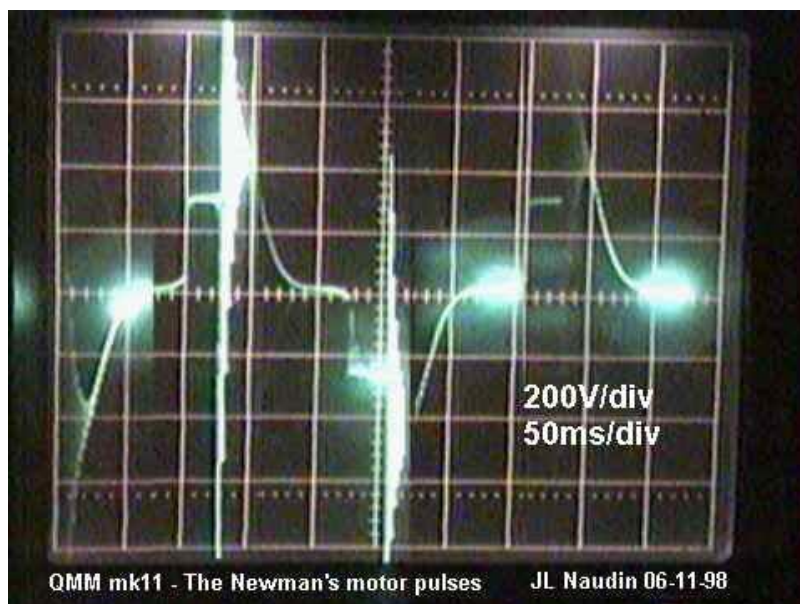
In this case, the Newman's Machine acts as a GENERATOR (see the strong backEMF spikes)

Rotor speed : about 230 RPM, (one turn in 260 milliseconds)

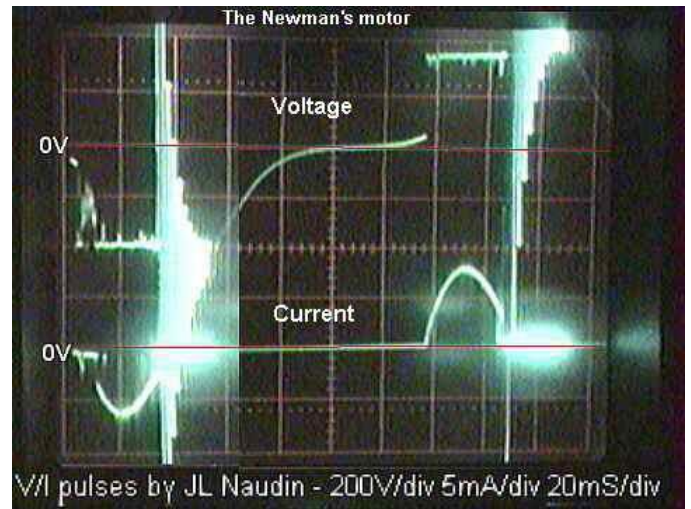
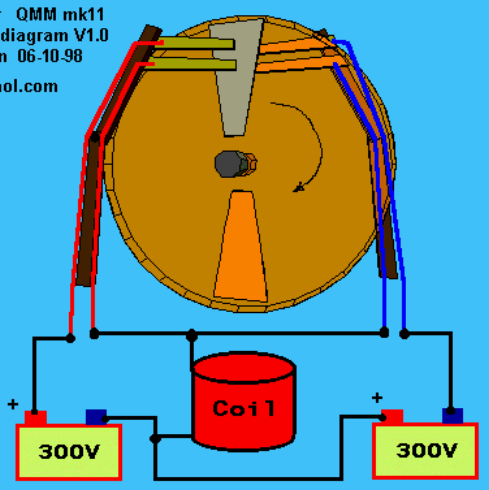
Pulses duration : 30 milliseconds at 275 Volts

TWO pulses sent by turn (in opposite direction): One pulse each 180 degrees, when the axis of the magnets are at 90 degrees from the coil axis.

Working cycle : 26% by turn



The Newman's Motor QMM mk11
 Bipolar Commutator diagram V1.0
 By Jean-Louis Naudin 06-10-98
 Email:JNaudin509@aol.com



Some Tips for the tuning :

For the best tuning you need to add a 100 ohms resistor in series with the coil, so you will be able to measure the Voltage and the Current accross the coil.

The scope ground is connected on point C

The Current probe is connected on point B (in reverse mode)

The Voltage probe is connected on point A

If you want the Newman's machine to run as a GENERATOR you need to adjust the firing pulse, so that the commutator is opened at the points 2 and 4 (see the "Free Run" picture above). With this tuning you get very STRONG SPARKS (see the scope picture above) and you can use this BackEmf energy for recharging the capacitor/battery.

If you want the Newman's machine to run as a MOTOR you need to adjust the firing pulse, so that the commutator is opened when the CURRENT is nullified by the magnetomotive energy resulting from the BackEmf and the Rotating magnet. So the motor will "regauge" itself each 180 degrees and will be able to give its best efficiency in mechanical power.

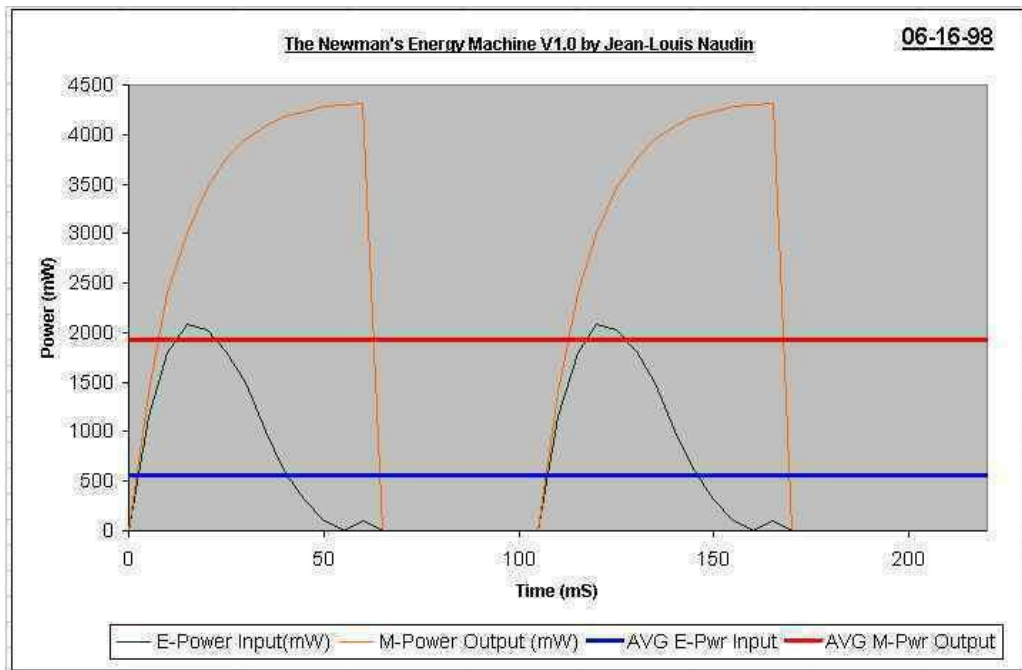
The preliminary tests results (June 17, 1998)

PRELIMINARY TEST : RUN 1 (06-17-98)

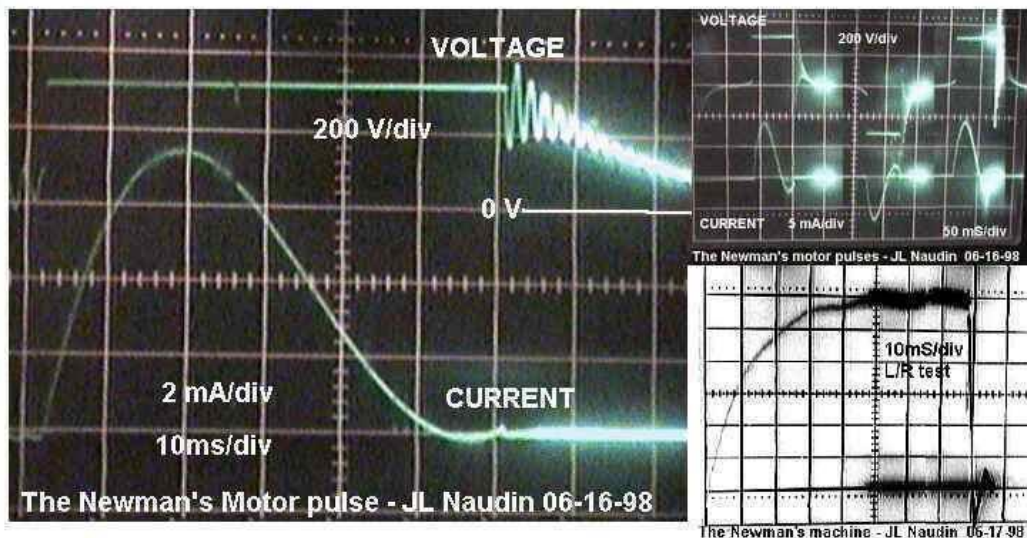
Note from Jean-Louis Naudin :

This is only a PRELIMINARY TEST of my Newman's Energy Machine 1.0, so all the measurements need to be checked and rechecked again for a better proof of the result showed below.

I have chosen my Newman's machine to run as a MOTOR, so the commutator was opened when the CURRENT in the coil was nullified by the magnetomotive energy resulting from the BackEmf and the rotating magnet.



But I agree with all of you, *"In theory, there is no difference between theory and practice, but in practice, there is."* So, only a deep and accurate testing (by measuring the mechanical torque output Vs the Electrical Power Input) of this device will prove if my theory exposed above is really true.



The Newman's Energy Machine: [Original tests setup and scope pictures](#)

Suj :	UPDATE AND OSCILLOSCOPE PHOTOGRAPHS!
Date:	18/11/98 01:14:17
From:	josephnewman@earthlink.net (Evan Soule)

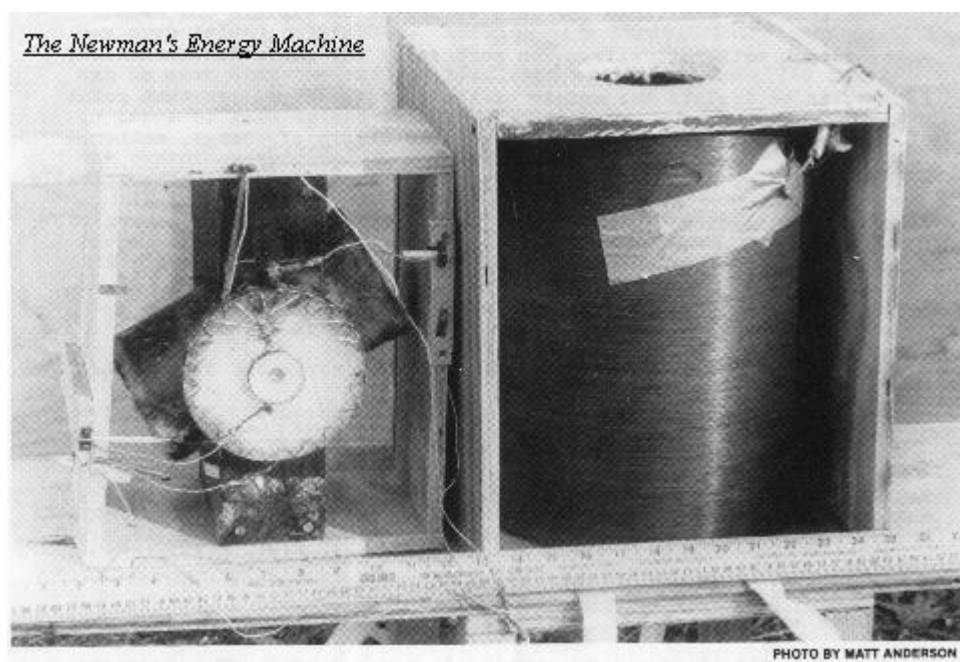
Dear Stefan and Jean-Louis,

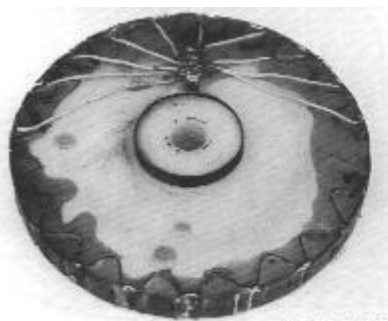
I wanted to send you a number of gif images of oscilloscope photographs --
I don't know if you have seen these (only one of them is in Joe's book -- the others are not).

You are welcome to post them on your site for comparison purposes.

Best regards,

[Evan Soule'](#)





PHOTOGRAPHS OF COMMUTATORS

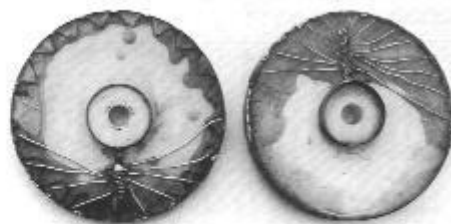
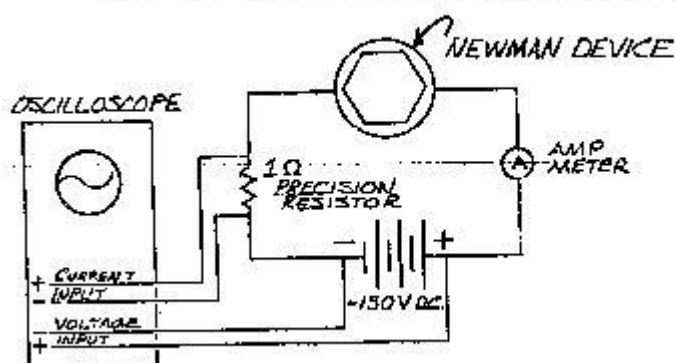


PHOTO BY MATT ANDERSON

The Newman's Energy Machine

INPUT ELECTRICAL ARRANGEMENT



OUTPUT PHYSICAL ARRANGEMENT

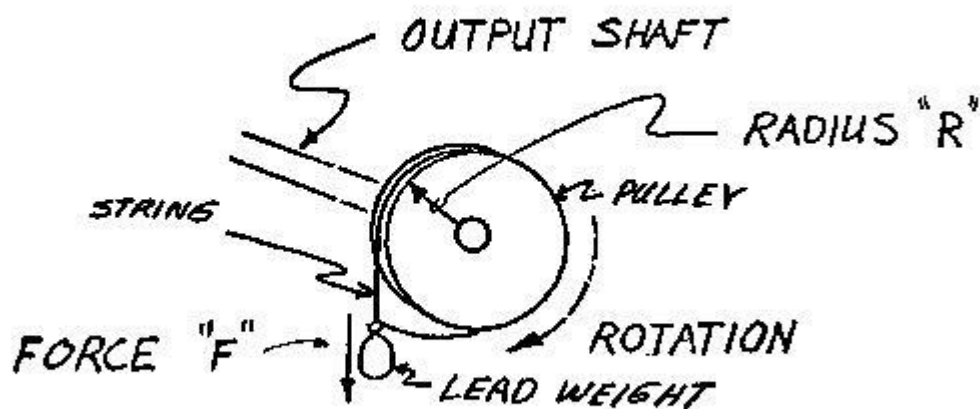


EXHIBIT 8

48

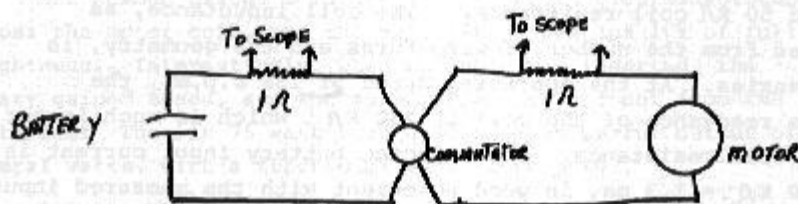
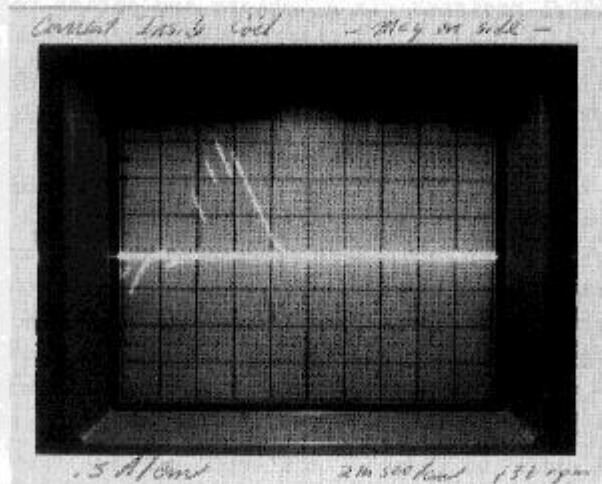
THE ENERGY MACHINE OF JOSEPH NEWMAN

1. Demonstration of Large Current Spikes Produced by the Motor

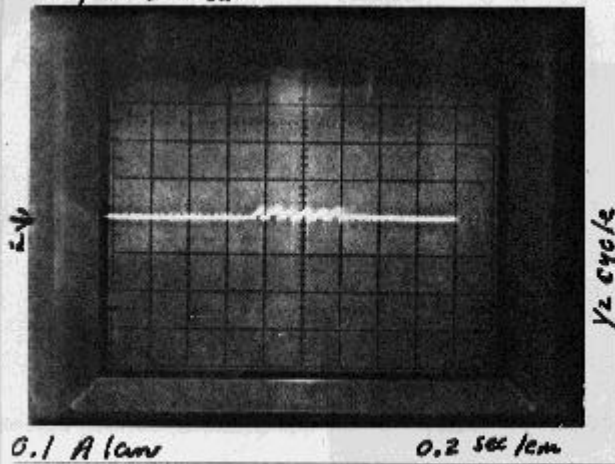
A. Oscilloscope Readings

The oscilloscope showed large (*1 Amp) staircase current spikes of significant time duration, which were initiated when the commutator switched, and flowed both in the coil and battery portions of the circuit. A picture of this spike taken on the coil side of the commutator is attached. A block diagram of the circuit is shown below.

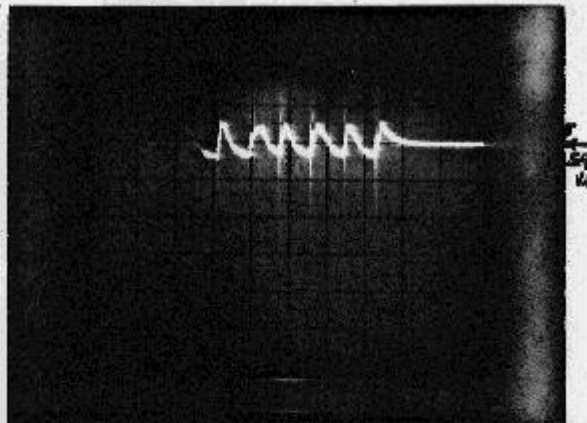
For
145#
Newman
Unit
(Early
Design)



Input Current



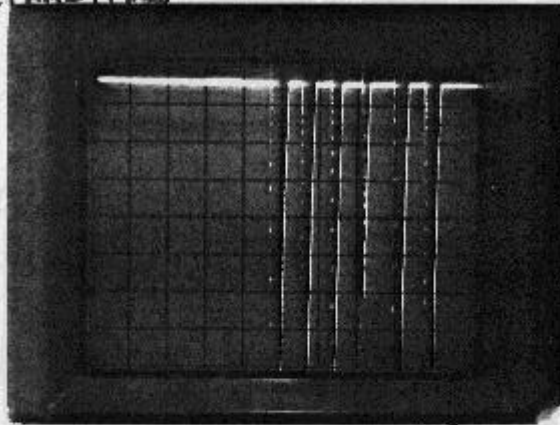
1. Motor input current, on 0.1 Amp/div scale. The input current averaged over one cycle is about 0.002 Amps. Note that the scope is set on d.c.. (Back current has been grounded out.)



Bat. Voltage 5V/cm (on a.c.) 0.1 sec/cm

2. Battery Voltage. The average battery voltage is 590 volts. This yields an average d.c. input power of 1.2 watts.

11 AM - 14 Dec



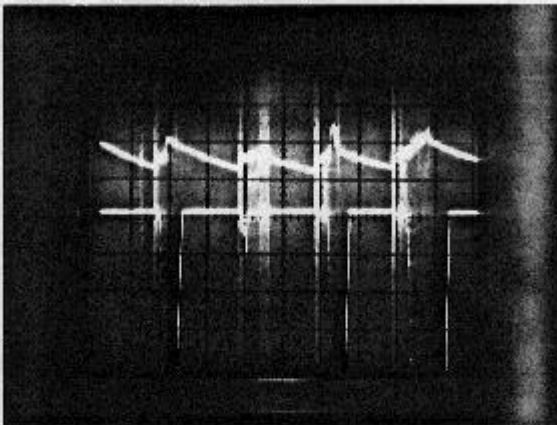
1 Amp X 20

1 Sec.

3. Current at battery on 2 amp/div. Input current cannot be seen on this scale. The back current spikes averaged over one cycle yields 0.055 Amps. This figure is verified by heating water. The net back power is -32 watts! This means that the output power is 25 times the external input power of 1.2 watts.

Top Volts 10 V/cm (msec)

P.H.



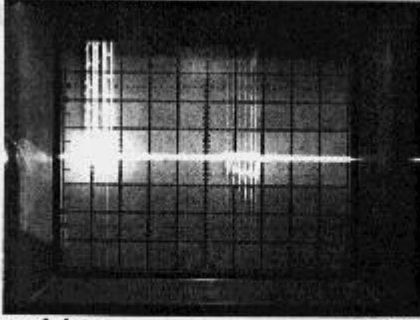
Bottom Current 1 Amp/cm (msec)

.05 sec/cm

4. Simultaneous voltage and current. Note that the battery voltage rises when the back current is generated. This means that the back current is generated externally. The back power is 25 times the input power.

Current produced within the Nansen Motor Coil

Coil Current

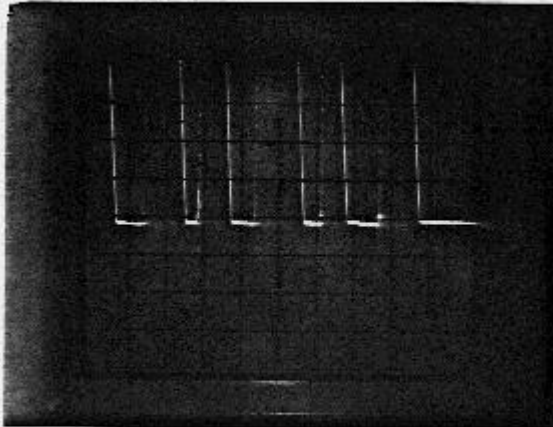


0.10 A/cm

0.5 sec/cm

1. Photo of current generated within the motor coil. The average current measured by heating water is 0.055 Amperes. Power dissipated in coil resistance (770-ohms) is 2.3 Watts. Compare to battery input of 1.2 watts. (Total output power is 32 watts.)

Coil Current



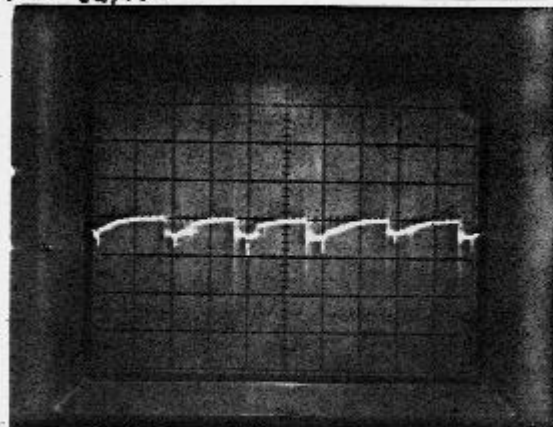
0.1 A/cm

0.1 sec/cm

1/2 cycle

2. Expanded view of the coil current during 1/2 cycle of commutator firing. (0.1 Amperes/div.)

Coil Current

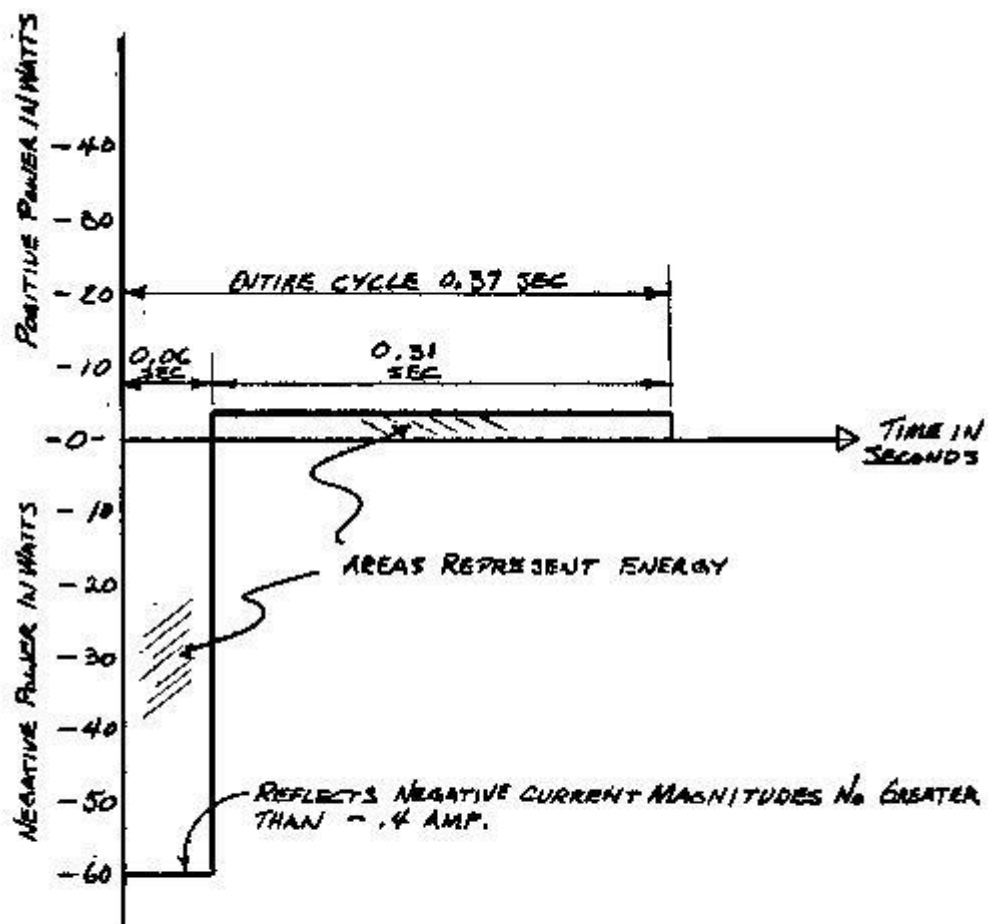
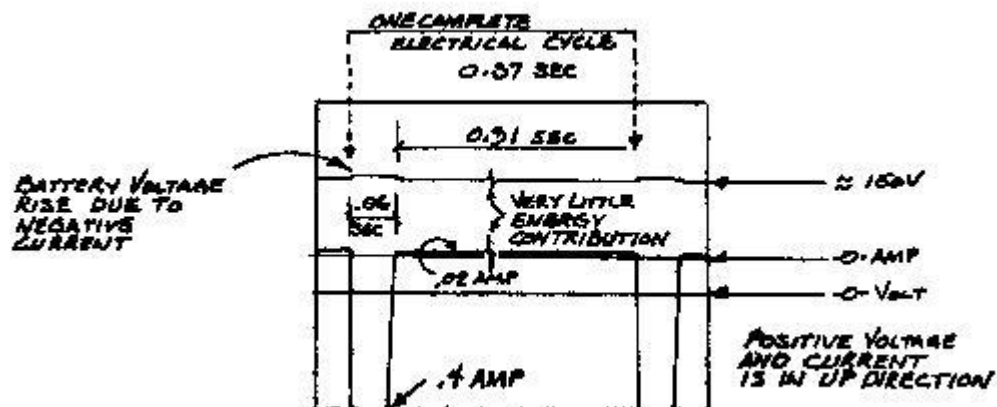


0.1 Amps/cm

0.1 sec/cm

1/2 cycle

3. Expanded view of coil current during the second 1/2 cycle of commutator firing. (0.1 Amperes/div)



POWER IN WATTS AS A FUNCTION OF TIME

ONE CYCLE

Towards Free Energy ?

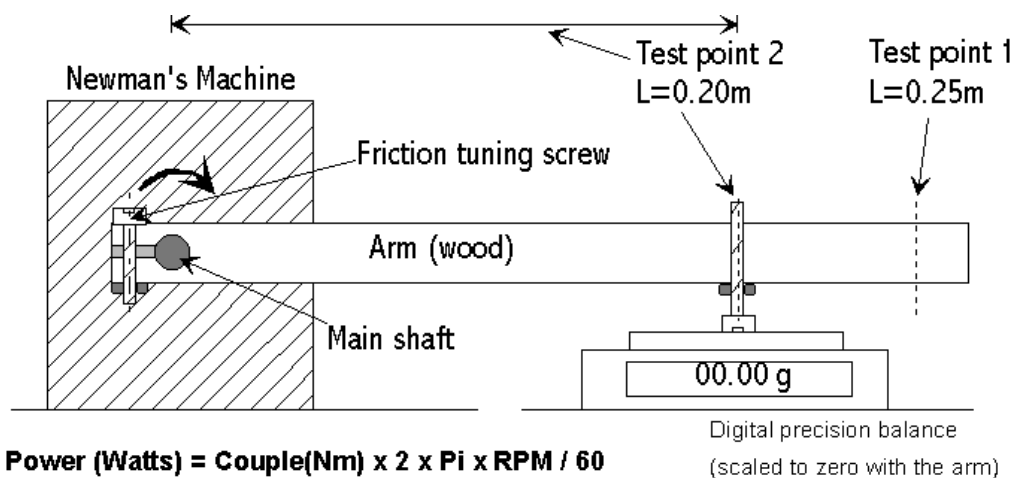
New Efficiency measurements by JL Naudin (11-21-98)

1-20-98 - FIRST OVERUNITY RESULTS (Mechanical Output Power > AVG Electrical Input Power)

Today (11-20-98), I have reconducted new measurements about the mechanical efficiency of my Newman's Energy machine v2.0. I have used a new digital oscilloscope (Tektronix THS720P), with this instrument, I have been able to measure in real time and accurately the electrical power input, in spite of the strong and short spikes of back current.

The mechanical power power output has been measured with the Prony Brake method.

The mechanical power output from the Newman's machine was measured by calculating the frictional torque load on the motor shaft and multiplying this by the rotational speed of the motor (measured with the scope). The mechanical brake used in this test was the simplest and most straight forward technique to measure and vary shaft power, which is very simply defined as torque times rotational speed (Power=Torque * Rotational speed).

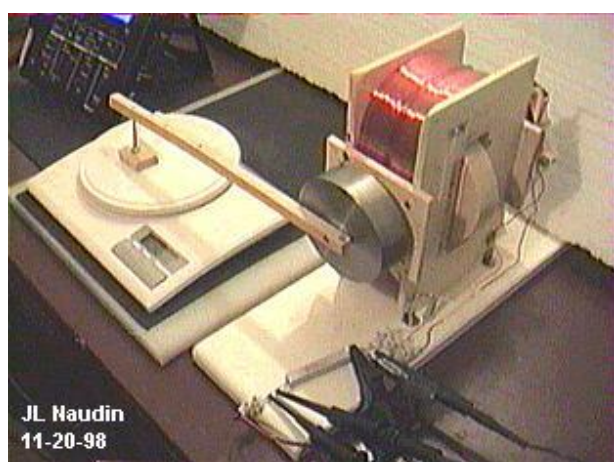
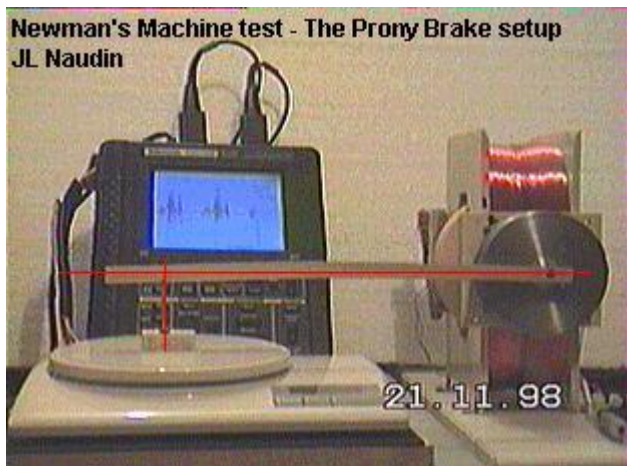


$$\text{Power (Watts)} = \text{Couple(Nm)} \times 2 \times \text{Pi} \times \text{RPM} / 60$$

$$\text{Power (Watts)} = \frac{61.638 \times M \text{ (g)} \times L \text{ (m)}}{T \text{ (ms)}}$$

T= One turn period in ms

The Prony Brake method
by Jean-Louis Naudin 06-22-98
Email: JNaudin509@aol.com

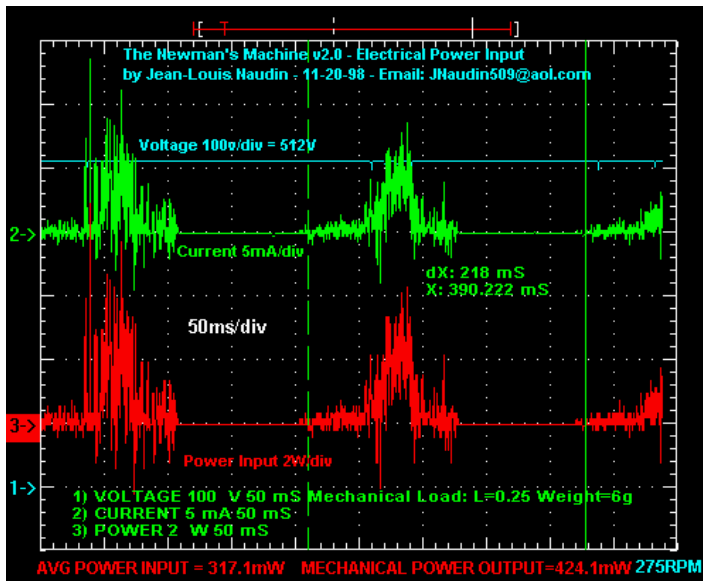


The Prony brake installed on my Newmans' Machine v2.0 with a digital electronic balance.

I have used only an length of 0.25m for the Prony brake lever and conducted 5 measurements. Between each measurements, I have checked that the balance has been previously set to zero.

I have used a Tektronix THS720P Isolated Channel Scope/DMM (tm). It combines a full-featured 100Mhz bandwidth and 500 MS/s sample rate digital realtime scope. This scope includes features specially for electric/power electronics measurements which allow testing and measuring the electrical power in realtime with statistics and math calculations.

My first "historical" test was conducted with the Prony Brake set to 6 grammes:



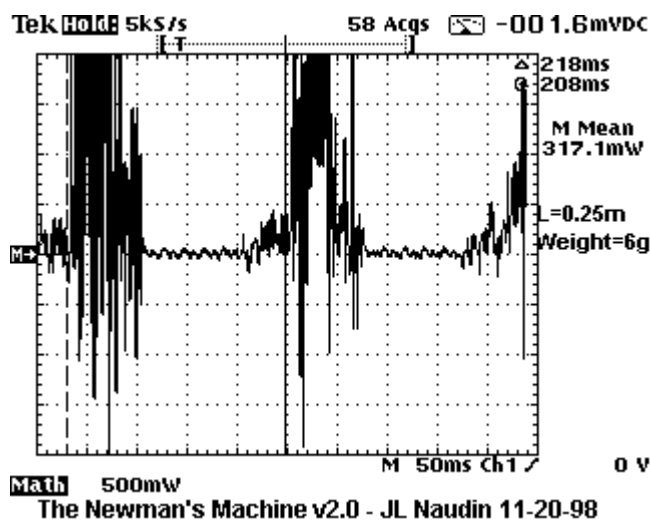
This is the Voltage/Current/Power measurement on the THS720P scope

The scope picture above shows the voltage across the power supply (blue curve), the current input (green curve), and the real time calculated power input (red curve). The prony brake level lenght was 0.25 meter and the weight measured was 6 grammes. The rotation speed was 275 RPM (period=218 ms).

The average power input measured with the scope was 317.1 mW.

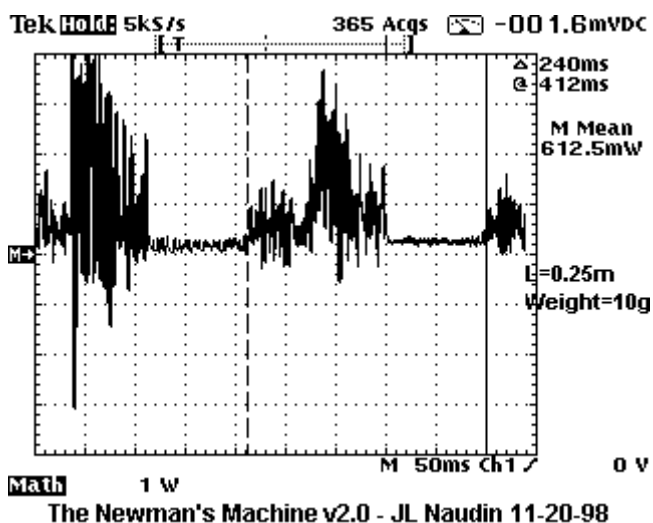
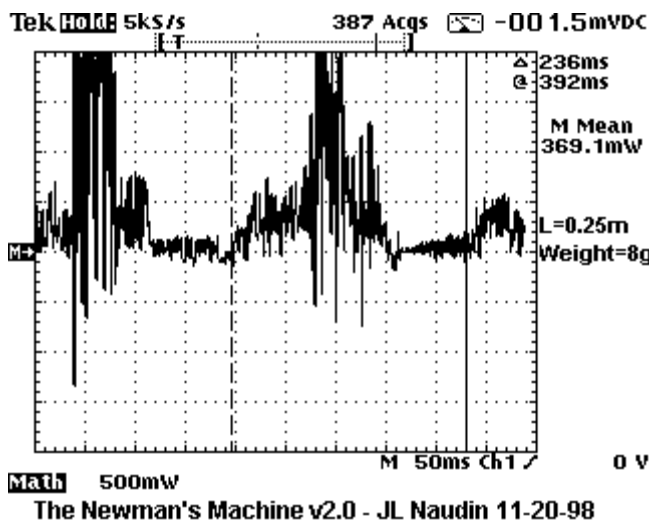
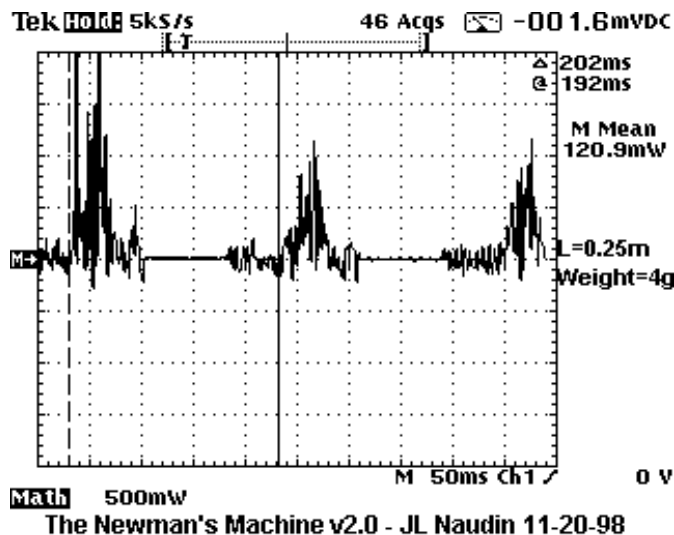
The mechanical power output measured on the shaft was 424.1 mW.

This give a mechanical efficiency of 134% (see the hardcopy of the scope picture bellow)



Encouraged with these interesting results, I have decided to conduct others measurements.

So, I have conducted 3 others tests :



Without mechanical load on the shaft, the electrical Power Input was about 205.2 mW at 333RPM

The Joules losses in the coil are included in the Electrical Power Input.

You may see also: Back current flow measurement with various setups of scope grounding (12-01-98)

Tests are not yet finished, the way is now open.....

Jean-Louis Naudin

[Back current flow measurement with various setups of scope grounding](#) (12-01-98)

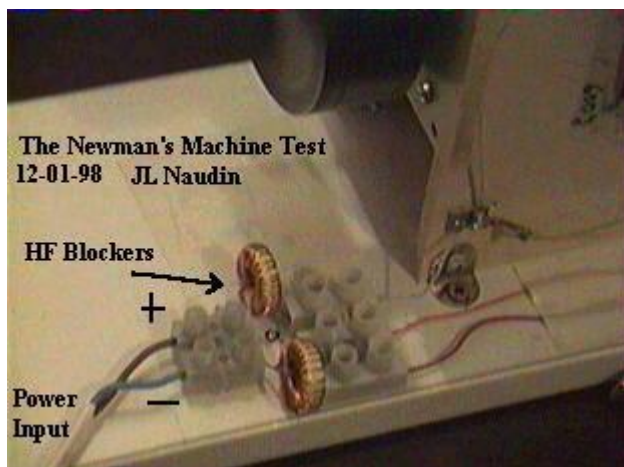
Tracking the negative current...

created on 12-01-98 - *JLN Labs* - last update on 12-01-98

12-01-98 - Back current flow measurement with various setups of scope grounding

The main purpose of these series of tests is to find if the negative spikes of current (the back current) previously measured by some experimenters and myself are real or only scope artefacts...

For the measurements, I have used a Tektronix oscilloscope [THS720P](#), this is an independently floating and isolated channels scope and it has full floating measurement capability. The power supply of my Newman's Machine v2.0 was completely isolated from the ground by an insulation transformer, so nothing in the test circuit was grounded. I have also added two HF Choke coils directly connected at the input of my Newman's machine for blocking the RF spikes and avoiding some EMI (Electro-Magnetic Interferences in the power supply).

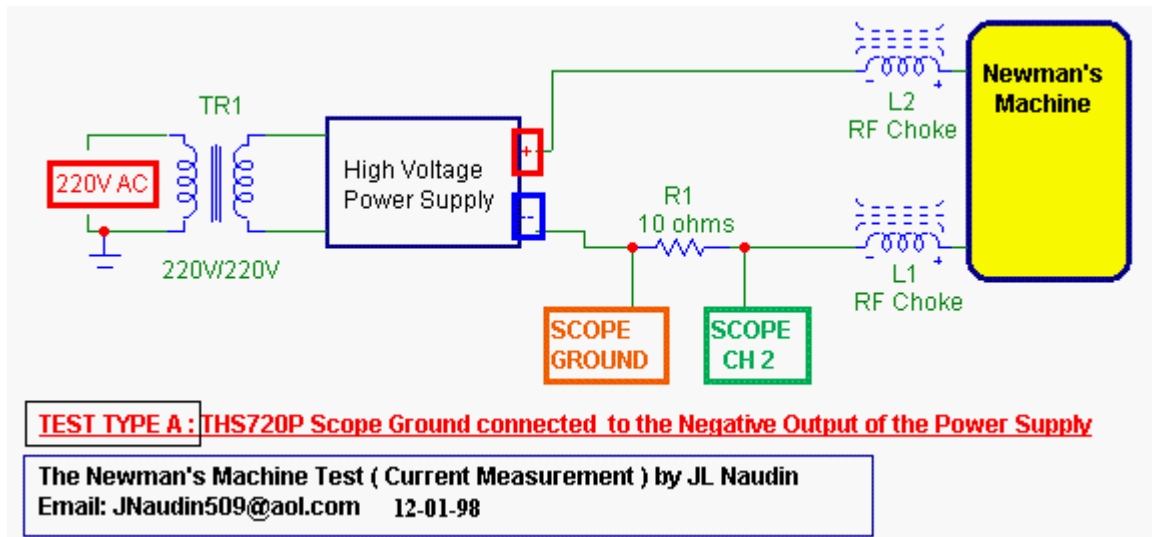


Two HF blockers has been put in series with the Newman's Machine

So, I have conducted TWO differents setups :

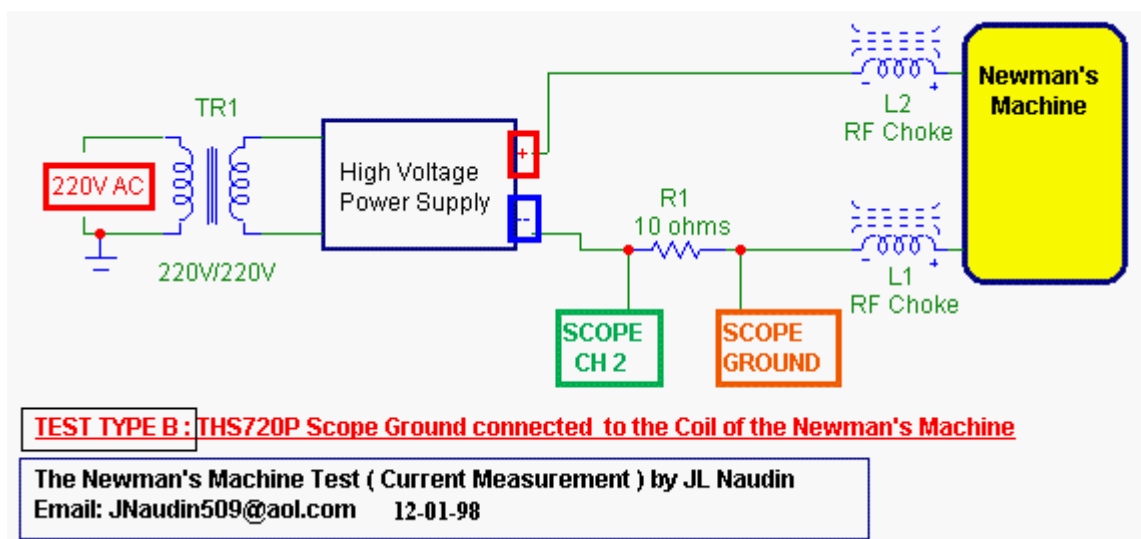
1) The TEST type A :

- The current was measured across a 10 ohms ceramic resistor with the scope ground connected to the negative output of the power supply. The voltage was 612 Volts DC and stable.



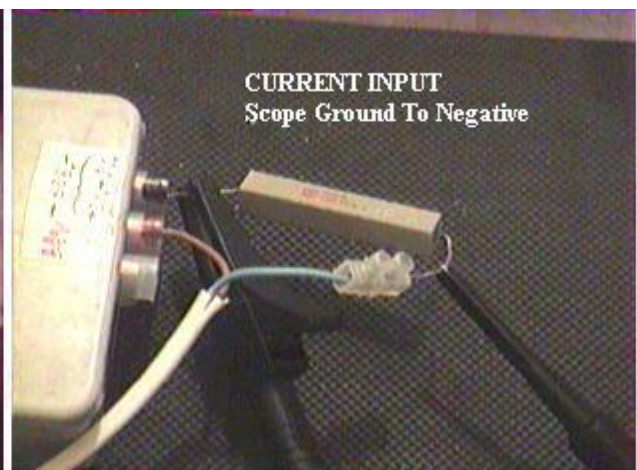
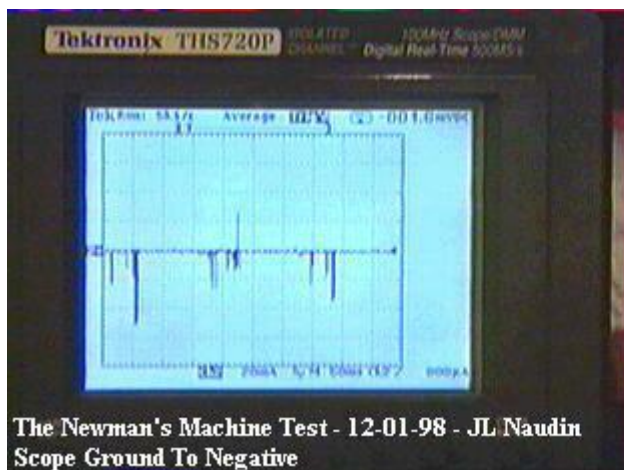
2) The TEST type B :

- The current was measured across a 10 ohms ceramic resistor with the scope ground connected to the input the Newman's Machine. The voltage was 612 Volts DC and stable.

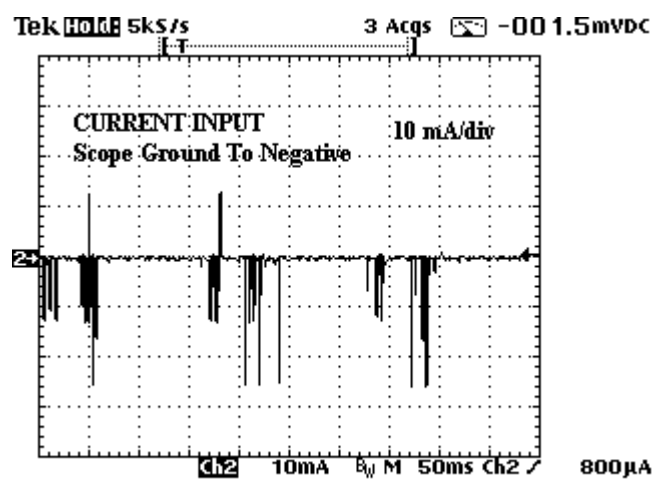


TEST TYPE A, Measurements :

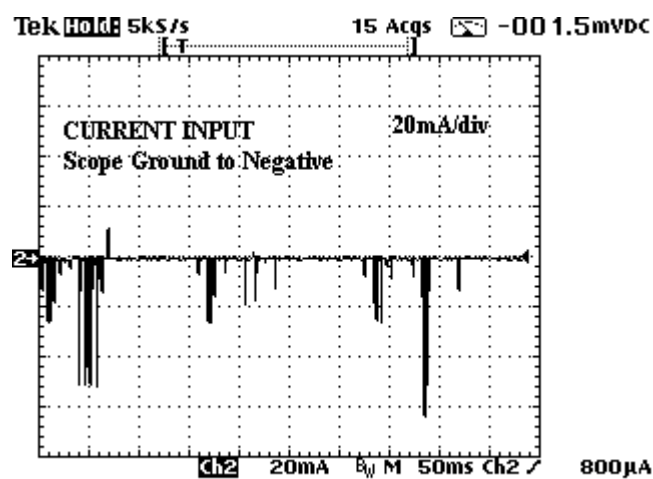
- The current was measured across a 10 ohms ceramic resistor with the scope ground connected to the negative output of the power supply. The voltage was 612 Volts DC and stable.



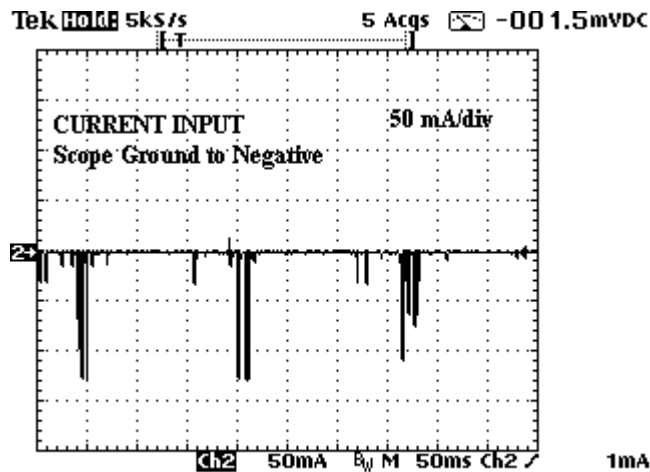
TEST TYPE A: *setup and scope picture*



Test Type A: 10mA/div 50ms/div



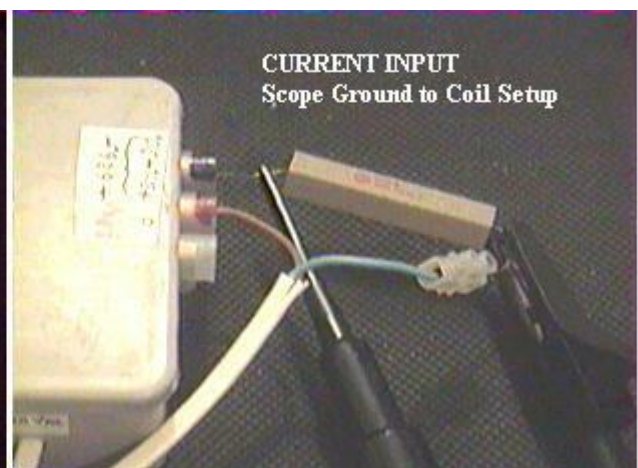
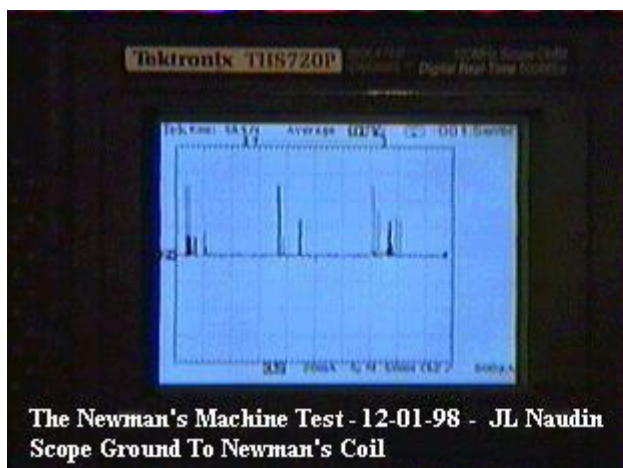
Test Type A: 20mA/div 50ms/div



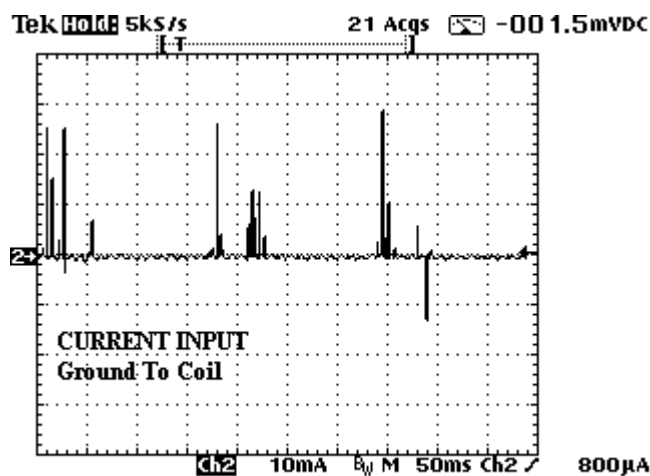
Test Type A: 50mA/div 50ms/div

TEST TYPE B, Measurements :

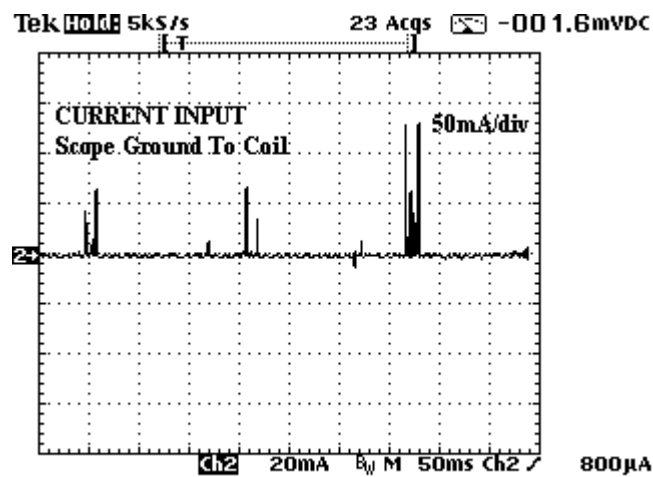
- The current was measured across a 10 ohms ceramic resistor with the scope ground connected to the input the Newman's Machine. The voltage was 612 Volts DC and stable.



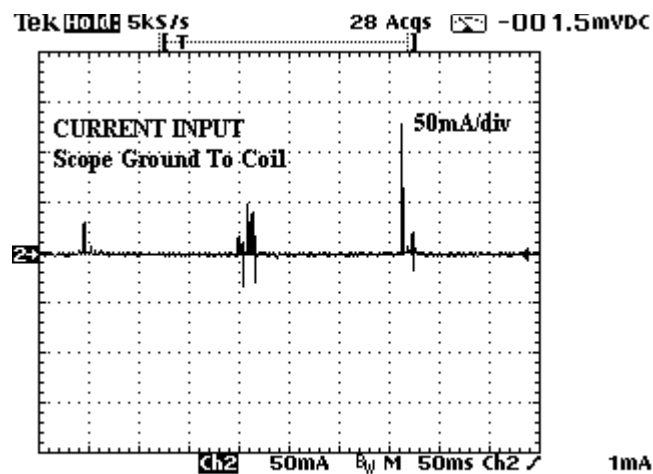
TEST TYPE B: setup and scope picture



Test Type B: 10mA/div 50ms/div

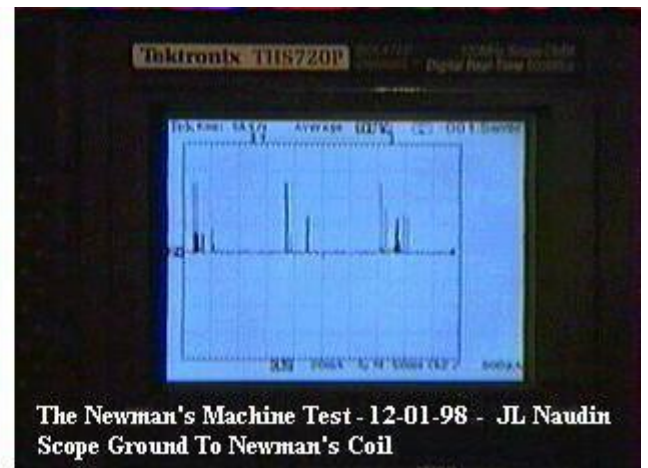
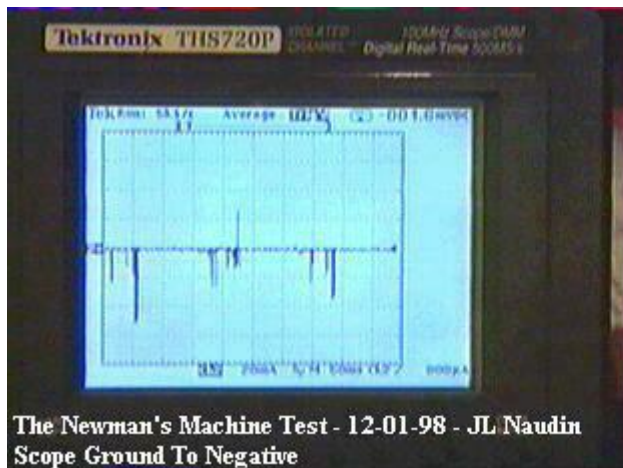


Test Type B: 20mA/div 50ms/div



Test Type B: 50mA/div 50ms/div

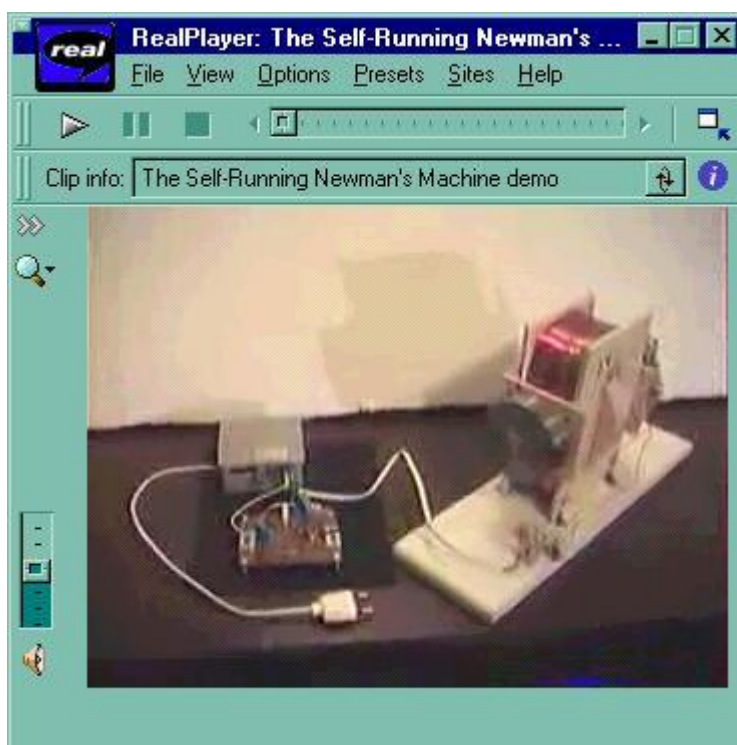
You may notice that, in spite of scale changing during the measurement (from 10mA/div to 50mA/div) and the swapping of the ground scope position Vs the power supply (Test A and Test B setup), the negative current spikes seems always presents and seems really generated by my Newman's Machine....



[Demonstration of the Self-Running Newman's Machine \(12-03-98\)](#)

I am glad to present you, a video demonstration with my personal comments about the Newman's Machine v2.0 working in self running mode. After that the power supply was disconnected the machine is able to run itself for few minutes at 330 RPM while its generates mechanical and electrical power. This is the first step, I need to increase this effect for a real self-sustained and durable self-running....

If you have already installed the ReaVideo player (tm), fasten your seat belts and watch the self-running demo video of the Newman's Machine v2.0.



See the Self-Running ONLINE video demo with ENGLISH subtitles and additional comments,

See the Self-Running ONLINE video demo with GERMAN subtitles and additional comments,

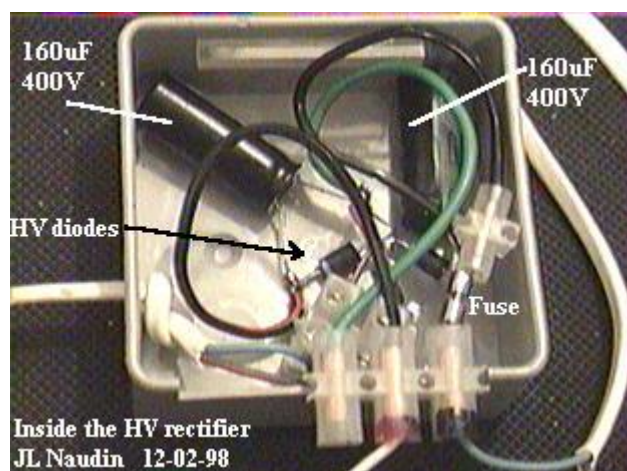
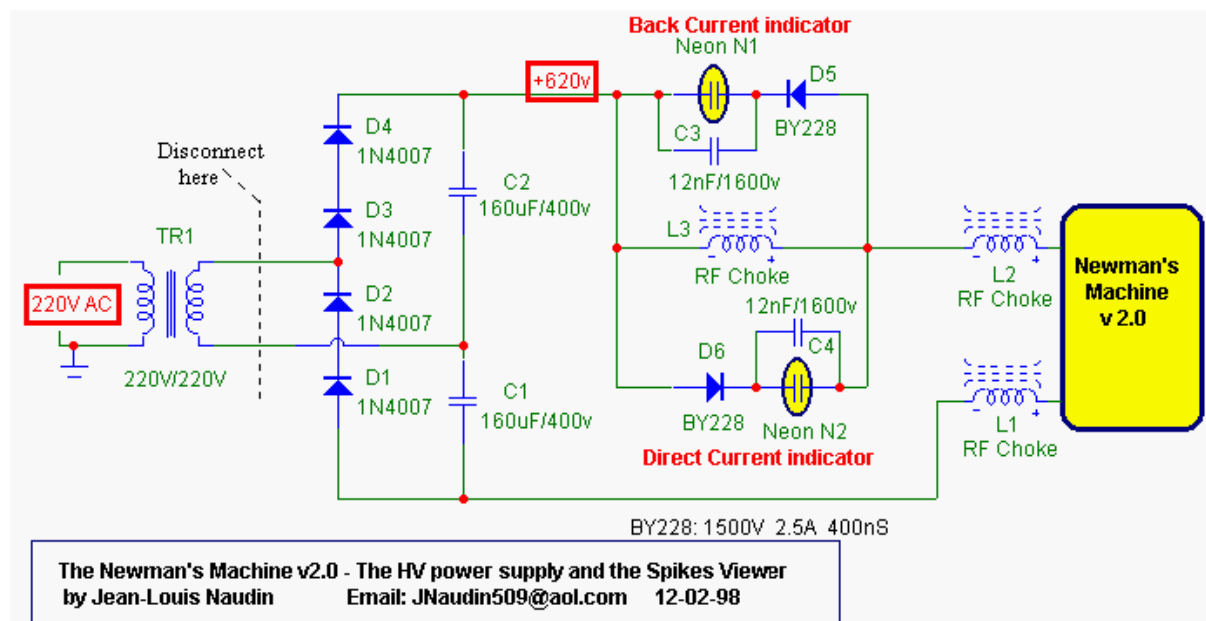
See the Self-Running ONLINE video demo with FRENCH subtitles and additional comments,

(if you don't have the RealPlayer 5.0, you may download it freely at :
<http://www.real.com/products/player/>)

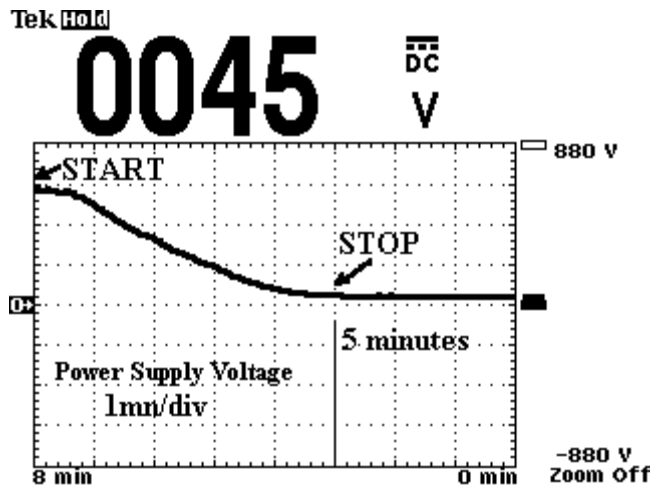
Additional comments about the demonstration (12-03-98):

The Newman's Machine speed was about 330RPM, without mechanical load on the shaft, the electrical power input needed was about 210 mW. This is the power needed for overcoming the mechanical frictions and the Joule's losses. This has been mesured during the previous test report (on 11-22-98).

You will find below, the power supply diagram :



The self-running time during the demo was about 5 minutes. You may notice that the power supply uses two 160uF capacitors in series, thus this give a 80uF capacitance at 620 Volts. This give a stored energy in the capacitors (C1,C2): $W = 0.5 * 80e-6 * (620 ^ 2) = 15.3$ Joules.



The Newman's Machine self-running test - JL Naudin 12-03-98

When I have disconnected the 220 Vac input, the Newman's Machine had only 15.3 Joules of energy for running itself. I have previously measured that, the power needed for overcoming the mechanical losses and Joules losses was 210 mW, with the neon bulbs this give about 220mW of electrical power.

So, this give a calculated working time of $T = W / P = 15.3 / 0.22 = 70$ seconds. This mean that after 70 seconds the capacitors voltage has dropped to 0 Volt (this is not the case in this test). The diagram below

shows the record of the voltage with respect to time of the power supply during the self-running test.

You may notice that the Newman's Machines has stopped at 45 volts and after 5 minutes of self-running.

If there is no voltage in the power supply and that the Newman's machine has been previously set at the same rotation speed, the time needed to stop completely was 30 seconds.

For more informations about the Spikes Viewer ([click here](#))

You may see also: New Power measurements: the self-running effect, now explained ? (12-14-98)

12-14-98 - New Power measurements: now, the self-running effect explained

In this test, I have conducted different measurements about my Newman's Machine v2.1.

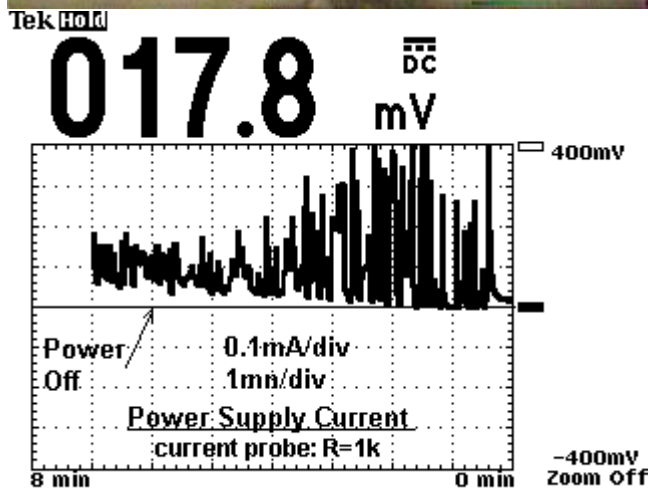
This is an enhanced version of the V2.0

All the measurement has been done with the Tektronix THS720P as a Digital MultiMeter in recorder mode and ALSO been checked with an ANALOG METER (Voltmeter Metrix EM25-1030B).

([see the analog/digital measurements pictures](#))

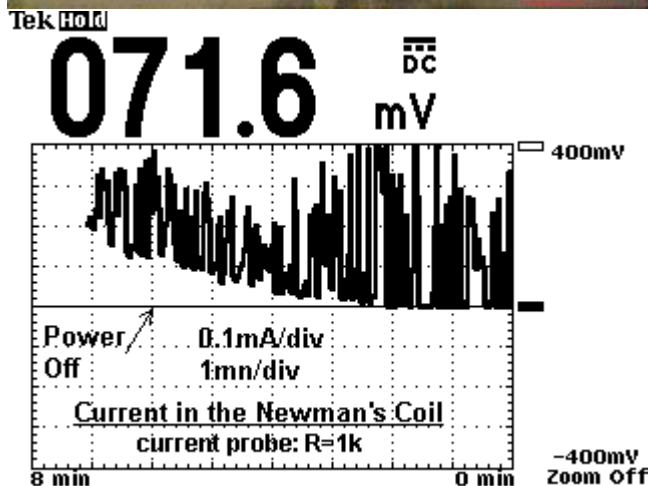
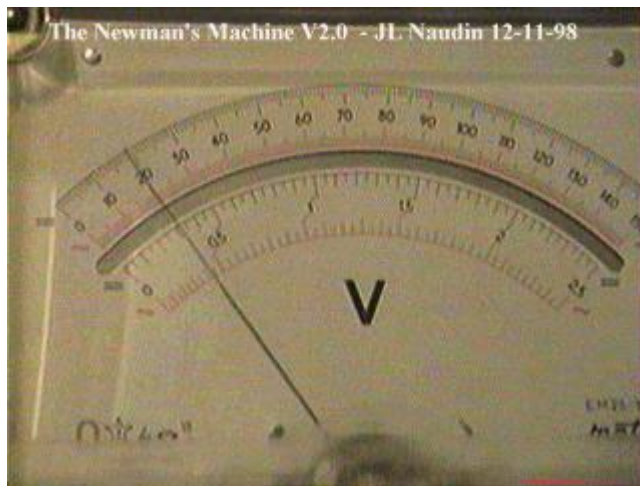
The current flow measurements

created on 12-14-98 - *JLN Labs* - last update on 12-14-98



The Newman's Machine v2.1 - JL Naudin 12-14-98

This analogue voltmeter has been connected across a 1k carbon resistor in series with the power supply output, this shows the current flow output from the power supply. The diagram above shows the current measurement with the digital multimeter.



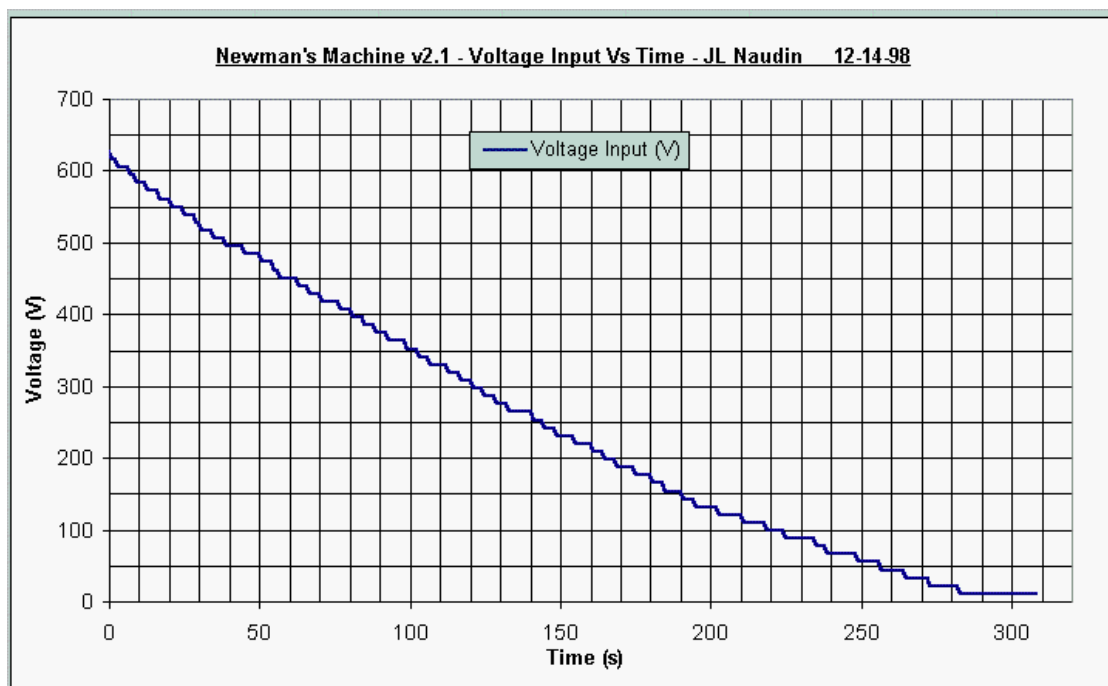
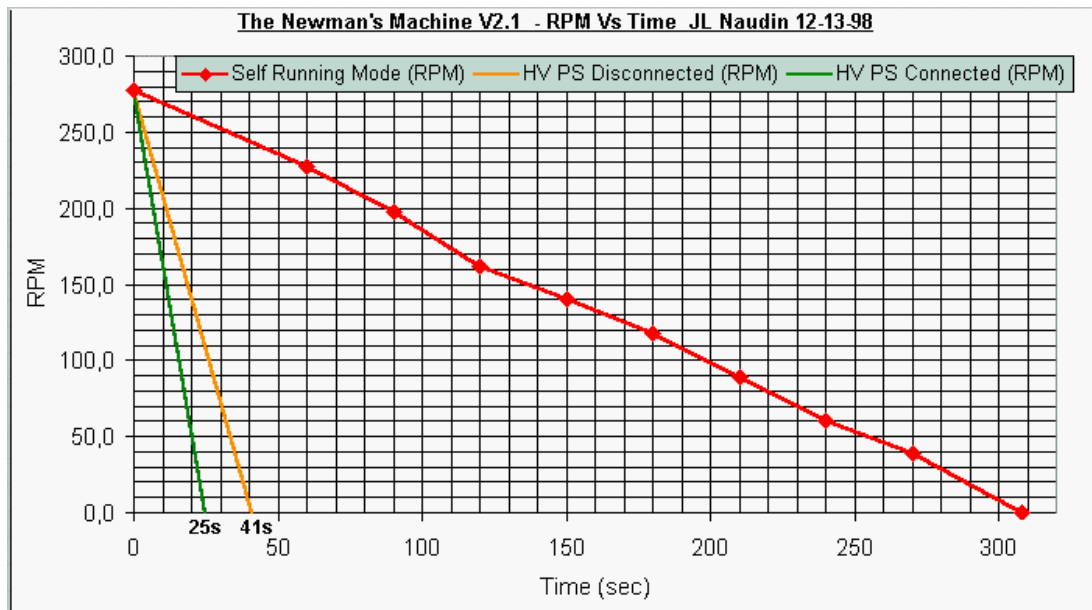
The Newman's Machine v2.1 - JL Naudin 12-14-98

This analogue voltmeter has been connected across a 1k carbon resistor in series with the Newman's Coil, this shows the current flow through the coil. The diagram above shows the current measurement with the digital multimeter.

During these two measurements the two current 1k probe resistors has been let connected during all the test for avoiding some impedance modifications in the circuit.

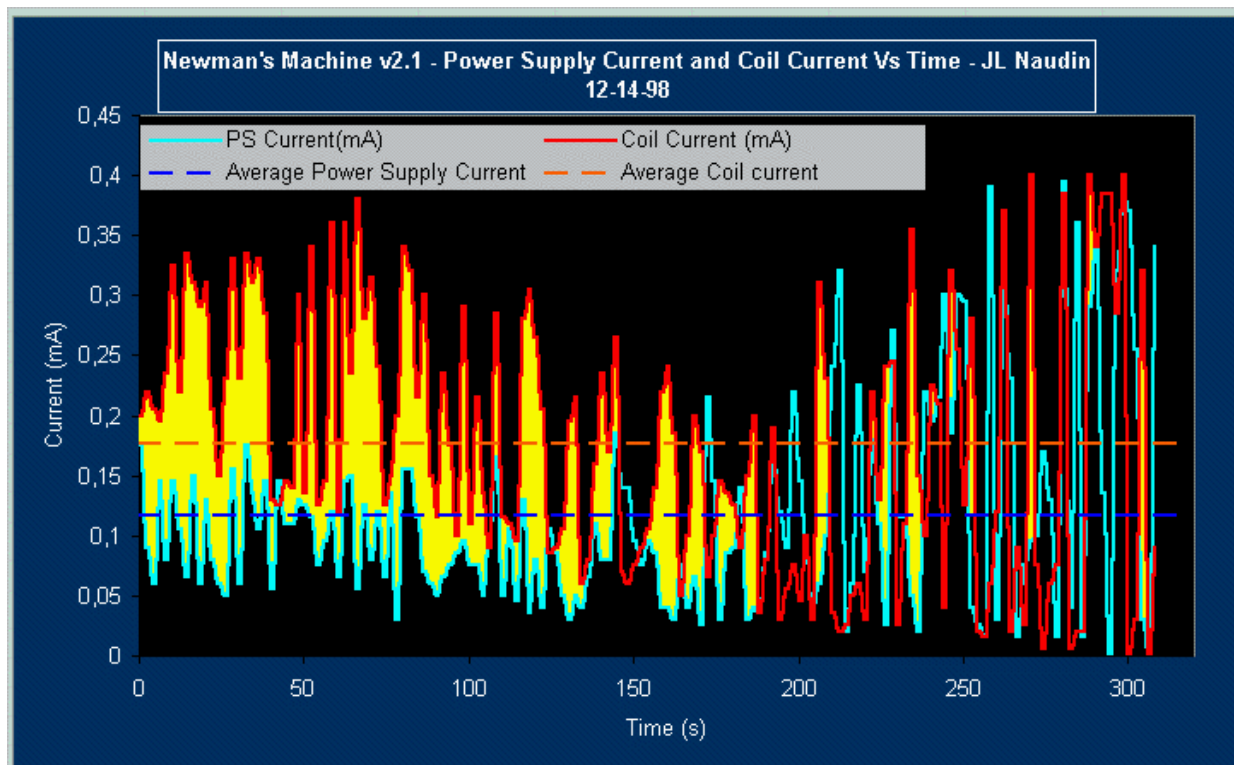
The diagram below shows the rotation speed of the machine with respect to time in three curves :

- the Green curve : The machine has been previously set at the 280 RPM with the power supply connected but with its capacitors discharged (power off state). After a free run, the machine has stopped after 25 seconds.
- the Orange curve : The machine has been previously set at the 280 RPM with the power supply completely disconnected from the machine. After a free run, the machine has stopped after 41 seconds.
- the Red curve : The machine has been normaly connected to power supply at the speed was 280 RPM and stable. After the switch off and a free run, the machine has stopped after 308 seconds. At 280 RPM the average electrical power required was 110mW.



The

diagram above shows the Voltage with respect to time at the Input of the Newman's Machine v2.1, the timer has been started when the power supply has been switched off.

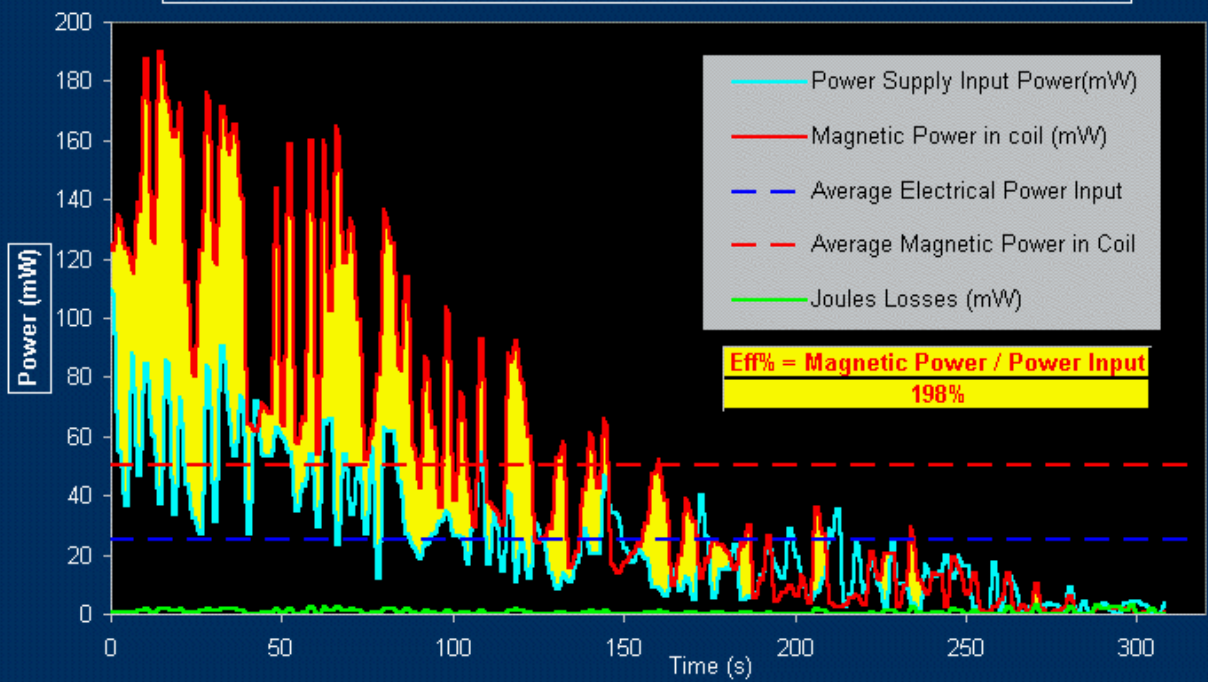


The diagram above shows the Power Supply Current and the current in the Newman's Coil with respect to time, the timer has been started when the power supply has been switched off.

You may notice that, during about 180 seconds the coil current (red curve) was always greater than the power supply current (blue curve) (this is the yellow area) this means that an additional current flow has been created in the coil, thus this creates additional magnetic power in the coil (motive power).

Now, see the diagram below, this represents the curves of the electrical power input (blue curve), the power losses by Joule effect in the coil (green curve) and the magnetic power in the coil with respect to time, the timer has been started when the power supply has been switched off. The blue dotted line shows the average of the electrical power input and the red dotted line shows the average of the magnetic power in the coil. Now, the overunity effect during the first 180 seconds can be explained because the magnetic power was always greater than the electrical power input and this adds some extra torque in the rotating magnets. Unfortunately after these 180 seconds the magnetic power begins lower than the power input and this drops dramatically the efficiency and the machine stops after a run of 308 seconds.

The Newman's Machine v2.1 - Electrical Power Input and Magnetic Power Vs Time by
JL Naudin 12-14-98



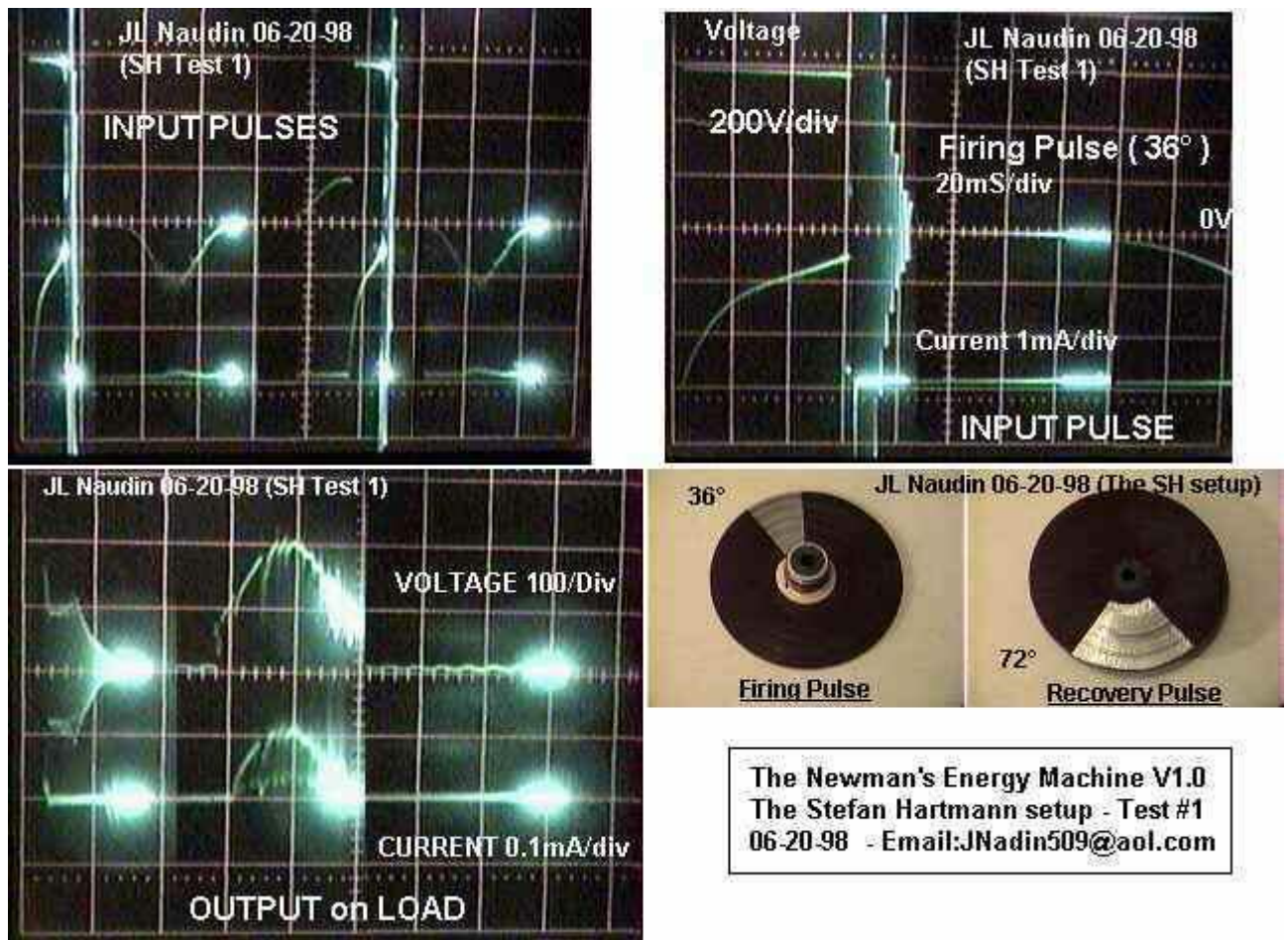
Tests of the S.Hartmann's setup (06-20-98)

06-20-98 - The Tests about the Stefan Hartmann's proposition by JL Naudin

Today I have tried to test the new setup proposed by Stefan Hartmann at:

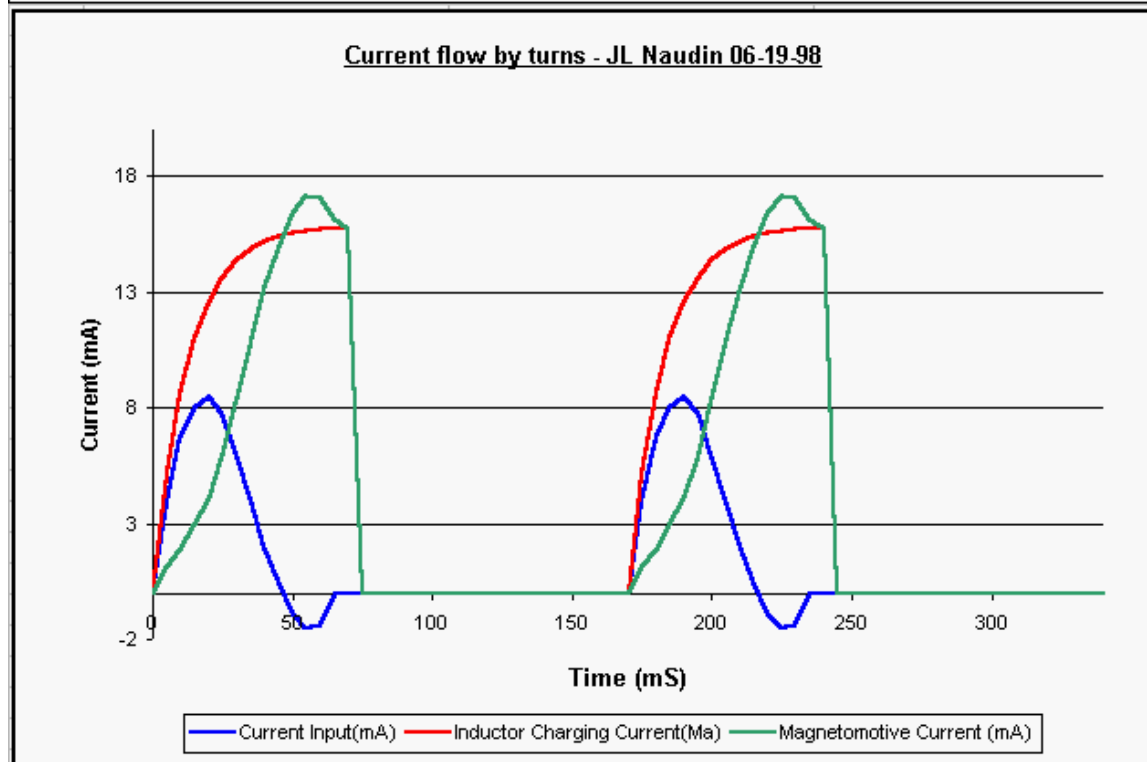
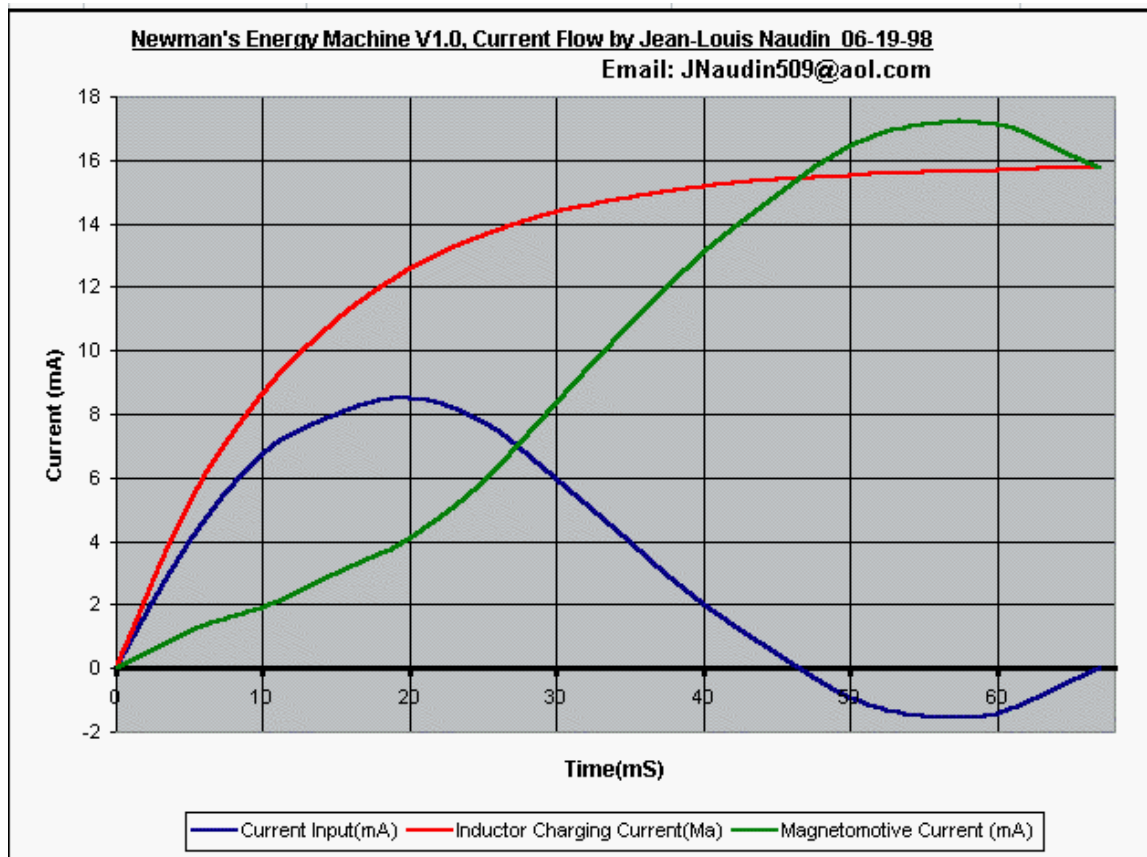
<http://www.overunity.com/nnew/newman6.htm>

This new setup of my commutator has given me these results below :



[Additional comments \(06-21-98\)](#)

06-21-98 - Additional comments from JL Naudin



In the two diagrams above you can see :

The first diagram shows three curves :

1-a) The BLUE curve (the input current) is the real current flow INPUT measured accross a 100 ohms resistor connected in series with the coil.

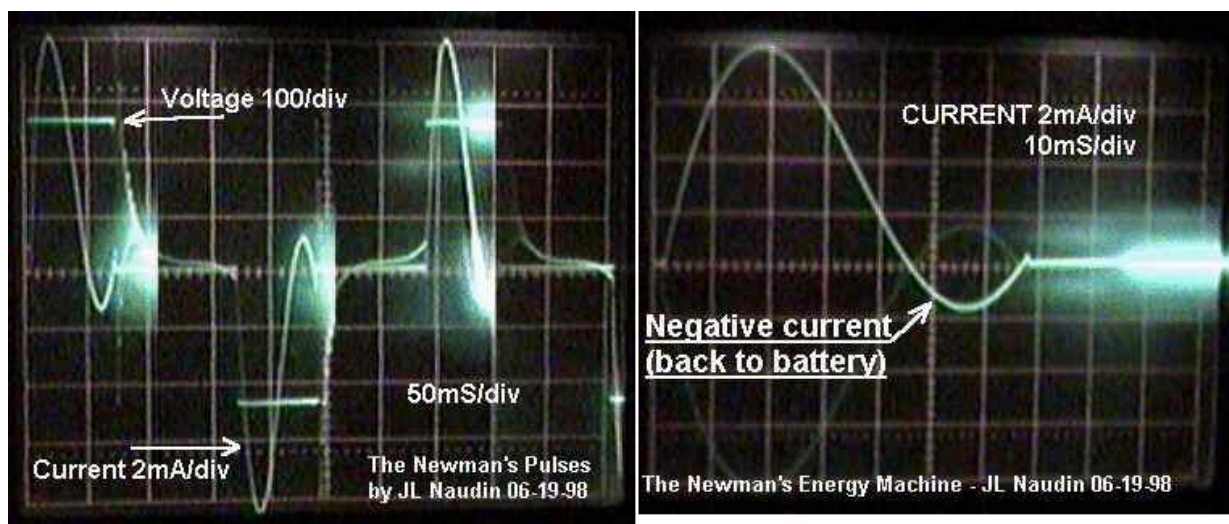
1-b) The RED curve (the "inductor charging" current) is the current needed for FILLING the COIL with magnetic energy while the voltage is maintained constant. The magnetic energy in the coil is $W_m = 0.5 \cdot L^2$ after $5 \cdot \tau = 5 \cdot L/R$ about 68 ms

1-c) The GREEN curve (the "magnetomotive" current) is the current GENERATED by the rotation of the magnet through the coil. You may notice that the shape of the curve has the SAME shape than the voltage generated in the coil shown in the "free run" diagram. This confirms the fact that this current is the real "magnetomotive" current.

Today, I think personnaly that the best way to tap electrical power on the Newman's coil is to use the ENERGY CONVERSION PROCESS (ELECTRICAL -> MECHANICAL -> ELECTRICAL). The use of two different kinds of energy (ELECTRICAL/KINETIC) is needed for obtaining a good "REGAUGING" process and thus by this way, a good efficiency....

The KEY to this type of machine is to "charge" the coil while producing mechanical work. By this way you will be able to pump "free energy".

Don't forget that IF you load the shaft of the machine for extracting usable power, this will slow the turn speed, so YOU NEED to readjust the pulses timing sequence. You must use an oscilloscope for monitoring the current/voltage input and adjust the pulse duration so that the current pulse will be the same as shown below.

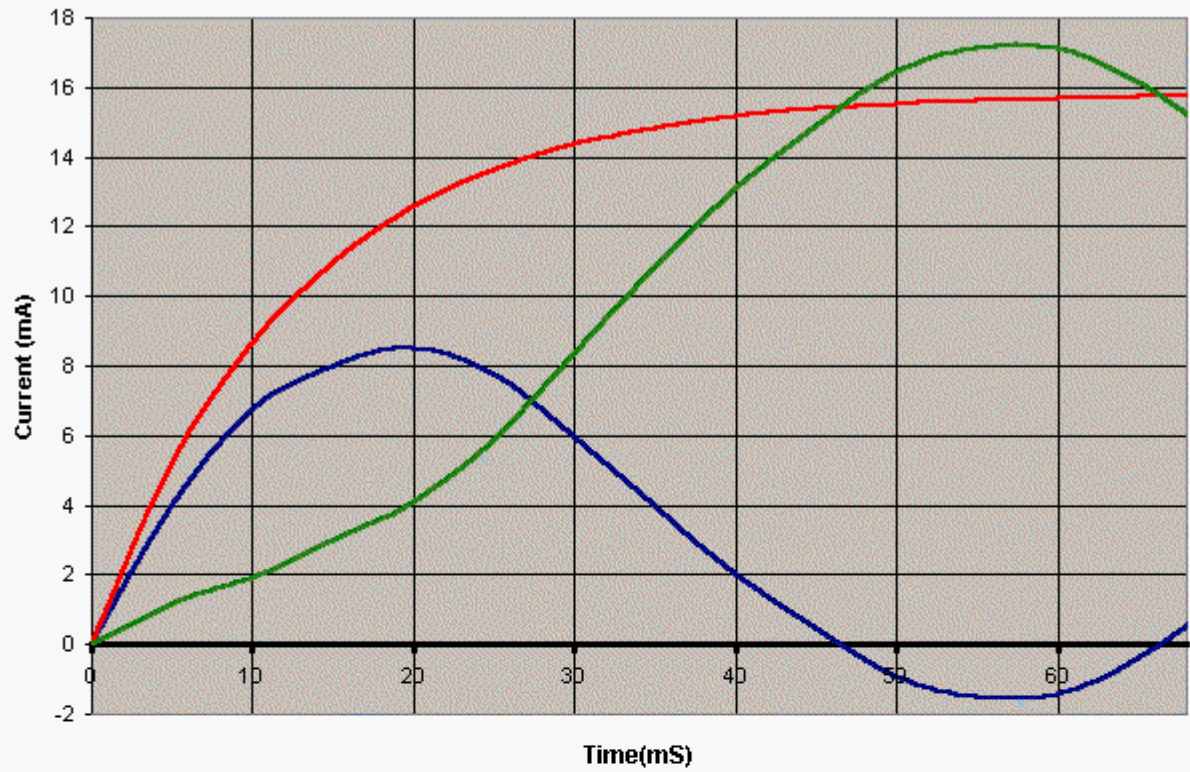


So, I think that the best way to build a good electrical overunity generator is to connect a conventional electrical generator on the main shaft of the Newman's Machine. This is the feeling that I have today....

Link to the [Additional comments](#) (06-22-98)

Newman's Energy Machine V1.0, Current Flow by Jean-Louis Naudin 06-22-98

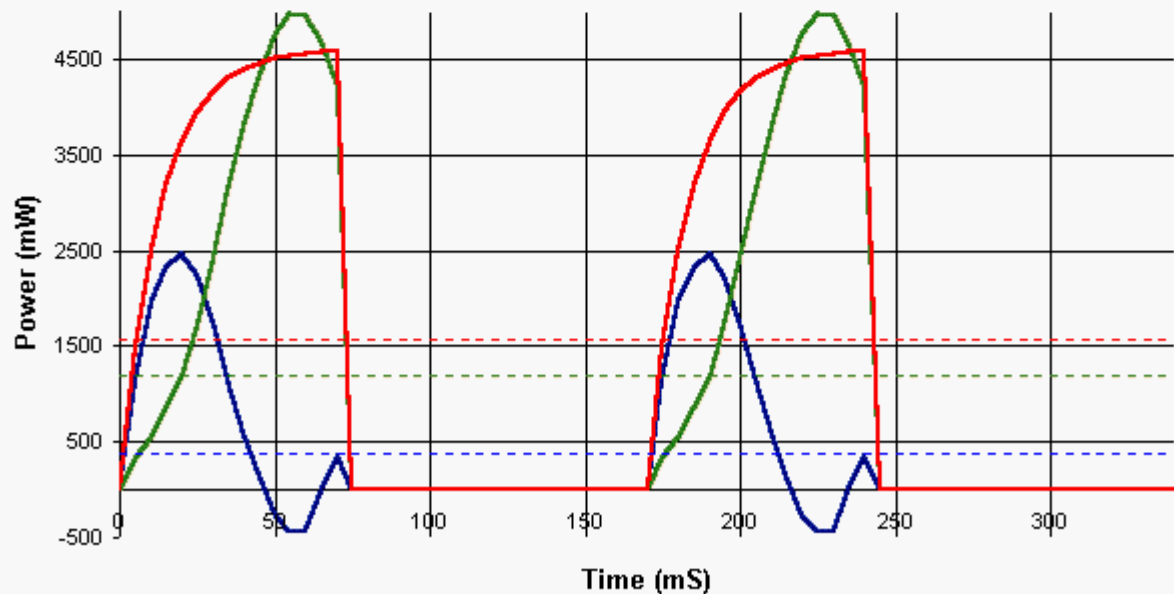
(These curves include the Joule's effect losses)



— Current Input (Rotating Rotor) — Inductor Charging Current (Static Rotor) — Motive current generated

The Curves of power of the Newman's Machine - JL Naudin 06-22-98

(These curves include the power losses by Joule's effect)



— E-Power Input (Rotating Rotor) — Motive Power — Magnetic Power (Static Rotor)
 - - - AVG Elec. Power Input - - - AVG Motive Power - - - AVG Magnetic Power

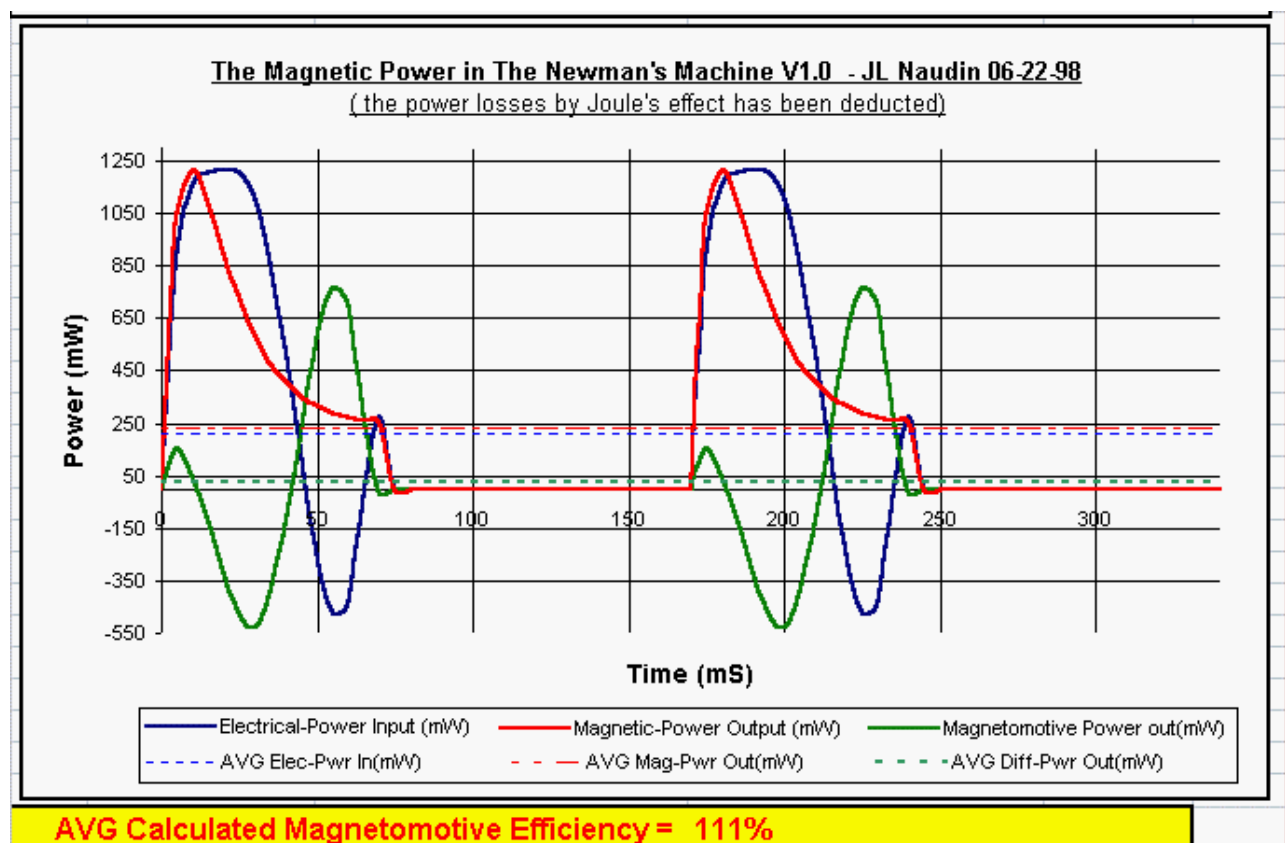
In the two diagrams above you can see :

The first diagram shows three curves :

1-a) The BLUE curve (the input current) is the real current flow INPUT measured accross a 100 ohms resistor connected in series with the coil. This current input is measured while the rotor is rotating in the coil.

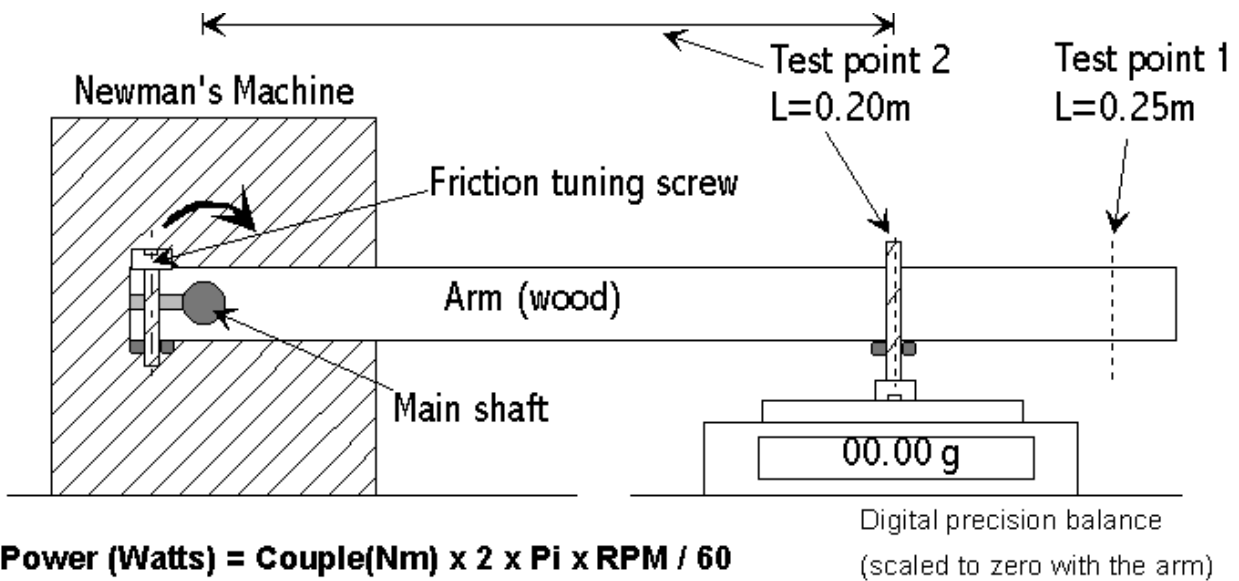
1-b) The RED curve (the "inductor charging" current) is the current needed for FILLING the COIL with magnetic energy while the voltage is maintained constant. The magnetic energy in the coil is $W_m = 0.5 \cdot L^2$ after $5 \cdot \tau = 5 \cdot L/R$ about 68 ms. This is the Magnetic energy charging current when the rotor does not rotate in the coil.

1-c) The GREEN curve (the "magnetomotive" current) is the current GENERATED by the rotation of the magnet through the coil. You may notice that the shape of the curve has the SAME shape than the voltage generated in the coil shown in the "free run" diagram. This confirms the fact that this current is the real "magnetomotive" current.



Efficiency testing - Test RUN 1

06-23-98 - Mechanical Efficiency test by using the "Prony Brake" method (TEST RUN 1)

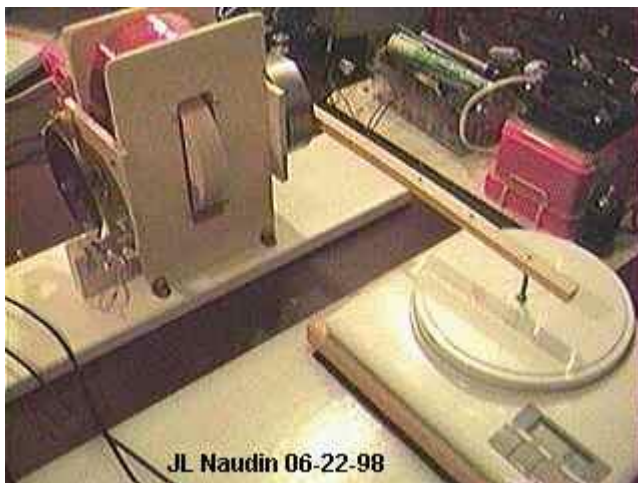


$$\text{Power (Watts)} = \text{Couple(Nm)} \times 2 \times \text{Pi} \times \text{RPM} / 60$$

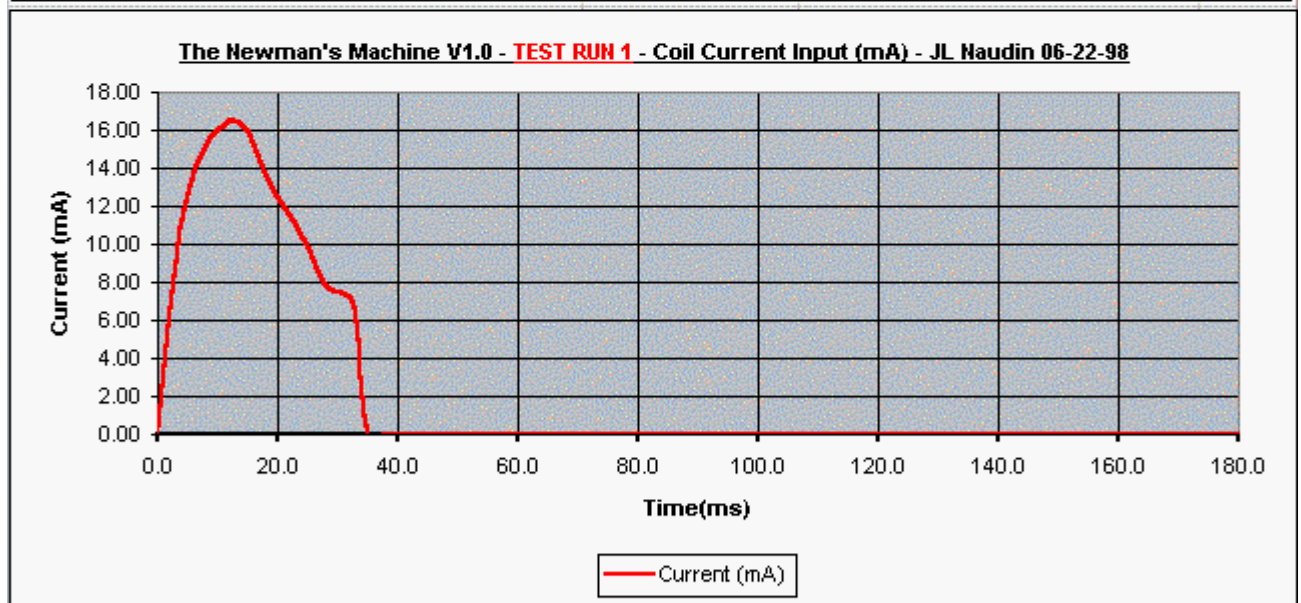
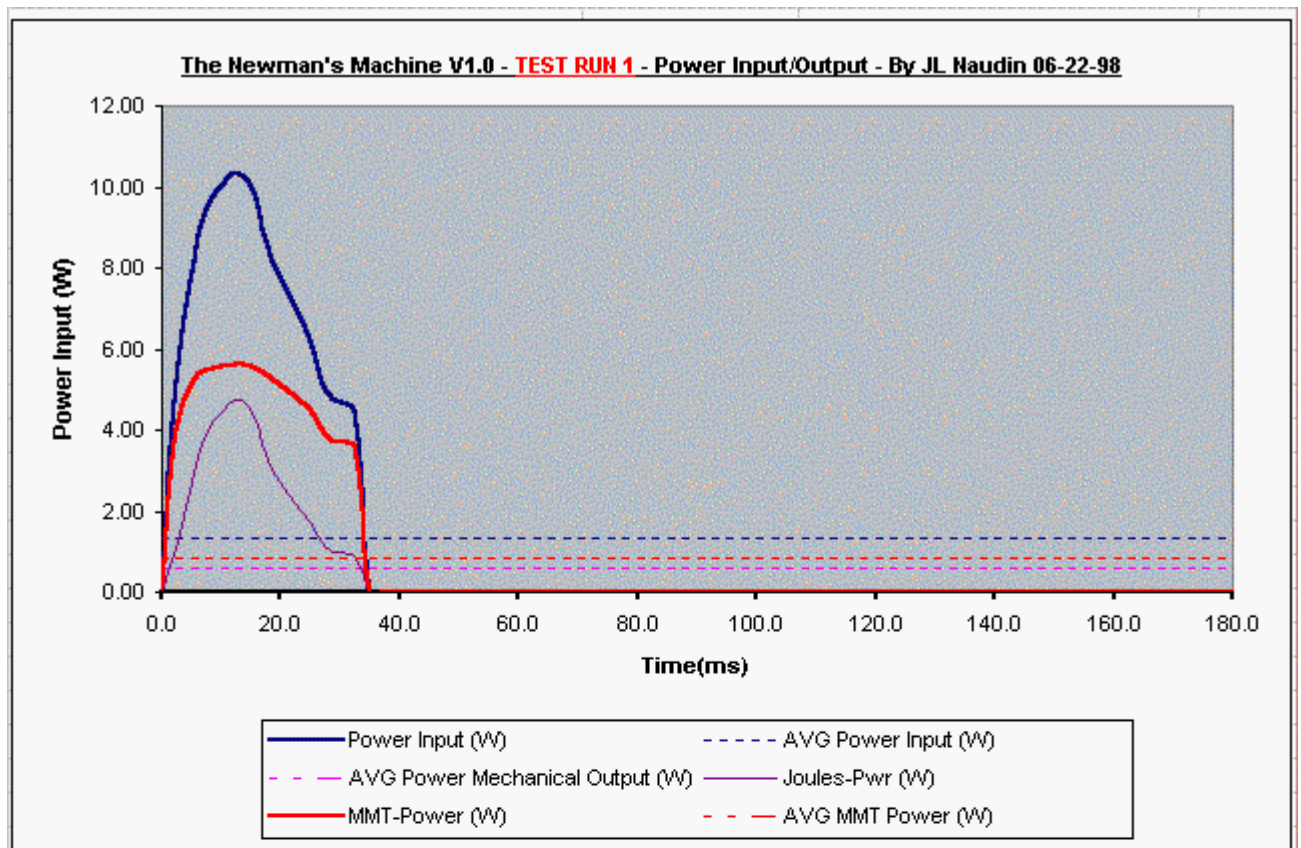
$$\text{Power (Watts)} = \frac{61.638 \times M \text{ (g)} \times L \text{ (m)}}{T \text{ (ms)}}$$

T= One turn period in ms

The Prony Brake method
by Jean-Louis Naudin 06-22-98
Email: JNaudin509@aol.com



The prony brake testing setup for the Newman's machine v1.0



MMT Conversion EFFICIENCY=		67%	AVG Elec.Power Input (W)	1.323
Joules' Power Losses =		35%	AVG Joules' Power Losses (W)	0.470
Magnetomotive power Generated =		65%	AVG Magnetomotive Power (W)	0.853
Mechanical Losses in MMT power		21%	MECHANICAL POWER OUT (W)	0.574
Method used : The Prony Brake			Voltage = 626 Volts	
Arm Length = 0.25 m			Prony Brake Test RUN 1	
Weight = 7 g			Email: JNaudin509@aol.com	
Speed = 319.15 RPM			Date : 06-22-98	
Rotation Period = 188 ms				

AVG Elc.Power Input (W) : This is the average electrical input power which use the current accross a 100 ohms resistor in series with the coil and the voltage measure accross the coil. This power is the average of all the power during one turn of the rotor.

AVG Joules'Power Losses (W) : This is the average power dissipated by Joules' effect in the coil
AVG of $P = R * I^2$ during one turn of the rotor.

AVG Magnetomotive Power (W) = AVG Elc.Power Input (W) - AVG Joules'Power Losses (W) This is the "real magnetic power", the "Magnetomotive" which produces the rotation of the magnet and by this way generates the mechanical torque on the shaft.

MECHANICAL Power out (W) : This is the mechanical power measured by the "Prony brake" method.

MMT Conversion Efficiency = MECHANICAL Power out (W) / AVG Magnetomotive Power (W)
This shows the magnetic power conversion and this show how much the Magnetomotive power is really converted into mechanical torque by the rotating magnet.

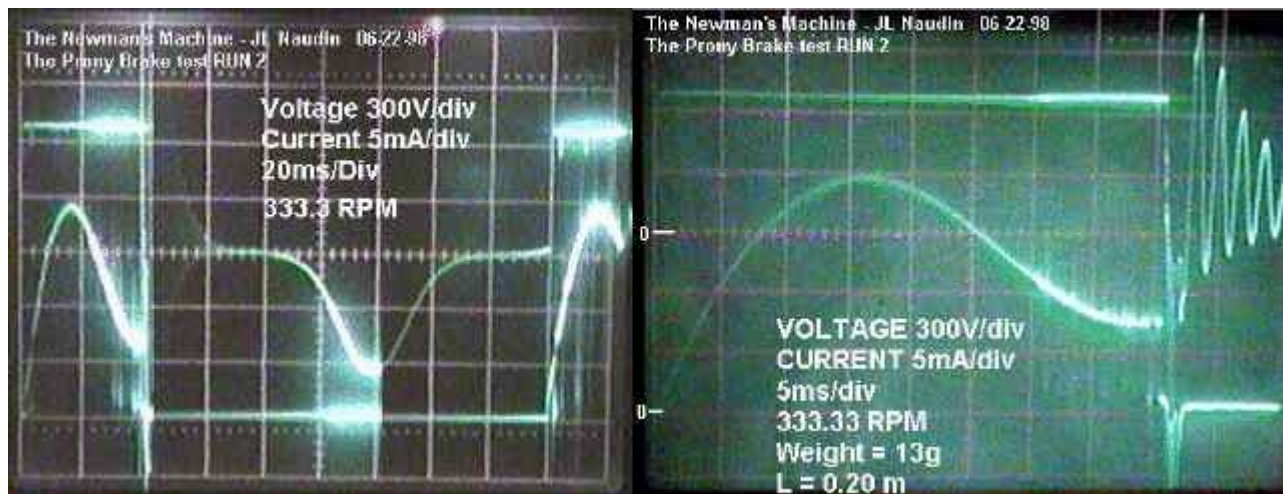
Joules' Power Losses = AVG Joules'Power Losses (W) / AVG Elc.Power Input (W) This shows how much (in %) the electrical power input has been dissipated into Joules's effect.

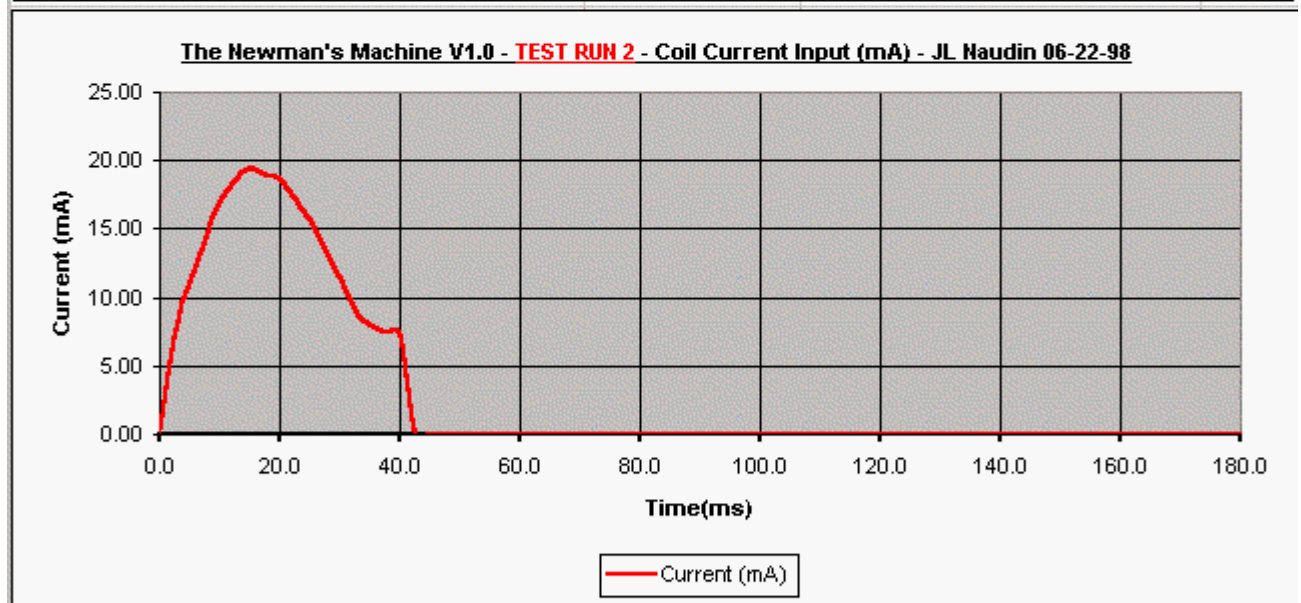
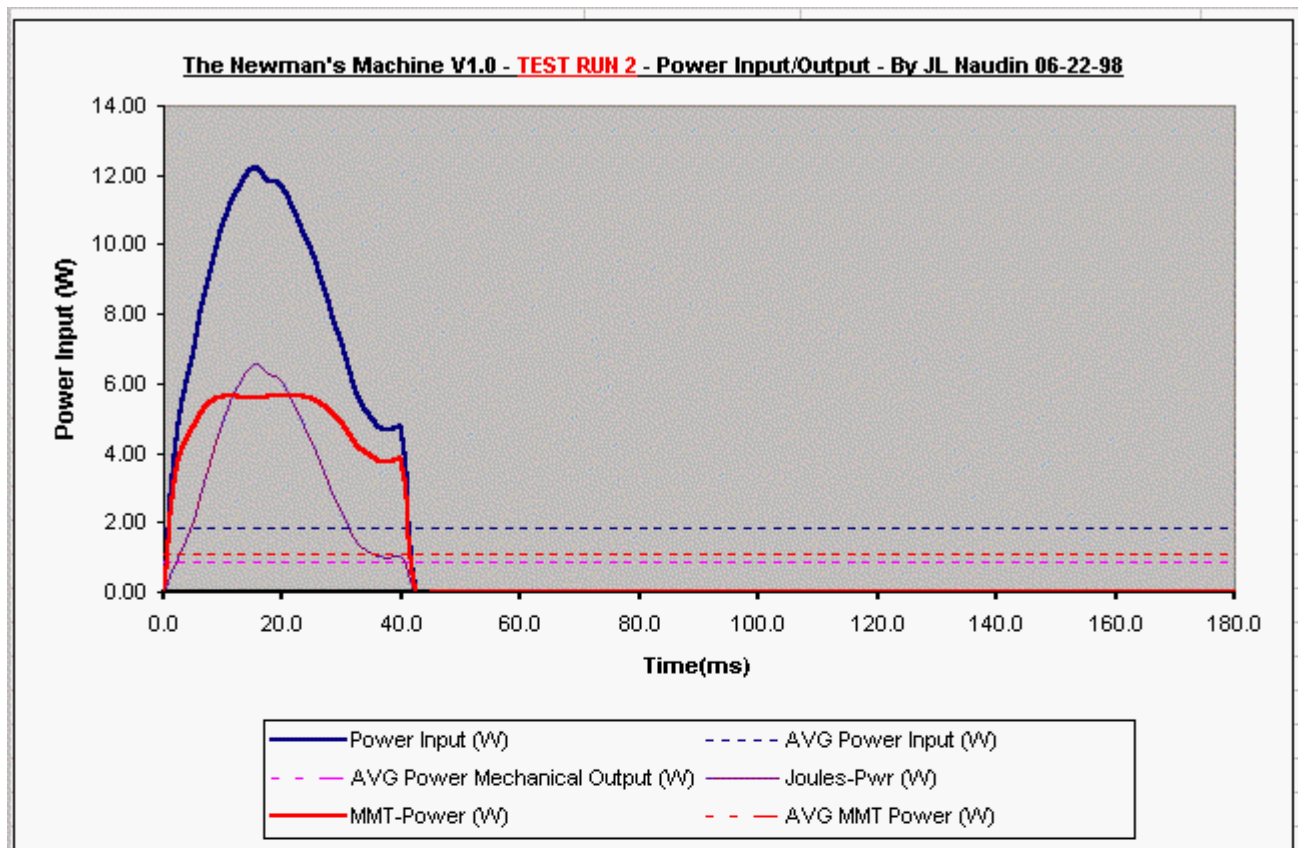
Magnetomotive power generated = AVG Magnetomotive Power (W) / AVG Elc.Power Input (W)
This shows how much (in %) electrical power input has been converted into magnetomotive power.

Mechanical Losses in MMT power = (AVG Magnetomotive Power (W) - MECHANICAL Power out (W)) / AVG Elc.Power Input (W) This shows how much (in %) power is lost either in mechanical frictions or in not used electromagnetic radiations (sparks)...

[Link to the Efficiency testing - Test RUN 2 \(06-23-98\)](#)

6-23-98 - Mechanical Efficiency test by using the "Prony Brake" method (TEST RUN 2)





MMT Conversion EFFICIENCY=		82%	AVG Elec.Power Input (W)	1.847
Joules' Power Losses =		41%	AVG Joules' Power Losses (W)	0.764
Magnetomotive power Generated =		59%	AVG Magnetomotive Power (W)	1.083
Mechanical Losses in MMT power		10%	MECHANICAL POWER OUT (W)	0.890
Method used : The Prony Brake			Voltage = 626 Volts	
Arm Length = 0.20 m			PRONY BRAKE TEST RUN 2	
Weight = 13 g			Email: JNaudin509@aol.com	
Speed = 333.33 RPM			Date : 06-22-98	
Rotation Period = 180 ms				

AVG Elc.Power Input (W) : This is the average electrical input power which use the current accross a 100 ohms resistor in series with the coil and the voltage measure accross the coil. This power is the average of all the power during one turn of the rotor.

AVG Joules'Power Losses (W) : This is the average power dissipated by Joules' effect in the coil
AVG of $P = R * I^2$ during one turn of the rotor.

AVG Magnetomotive Power (W) = AVG Elc.Power Input (W) - AVG Joules'Power Losses (W) This is the "real magnetic power", the "Magnetomotive" which produces the rotation of the magnet and by this way generates the mechanical torque on the shaft.

MECHANICAL Power out (W) : This is the mechanical power measured by the "Prony brake" method.

MMT Conversion Efficiency = MECHANICAL Power out (W) / AVG Magnetomotive Power (W)
This shows the magnetic power conversion and this show how much the Magnetomotive power is really converted into mechanical torque by the rotating magnet.

Joules' Power Losses = AVG Joules'Power Losses (W) / AVG Elc.Power Input (W) This shows how much (in %) the electrical power input has been dissipated into Joules's effect.

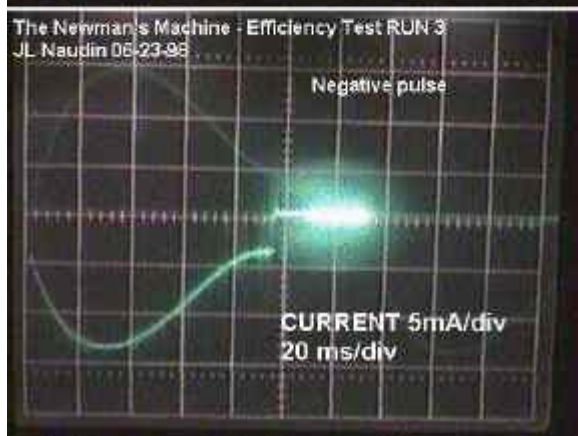
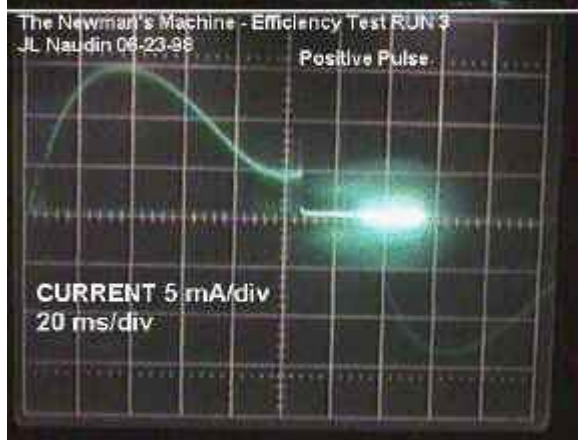
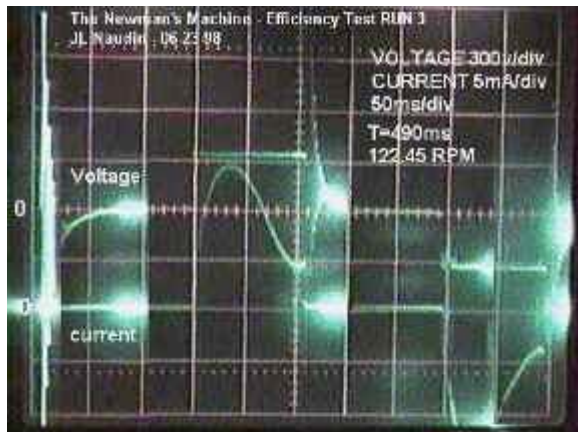
Magnetomotive power generated = AVG Magnetomotive Power (W) / AVG Elc.Power Input (W)
This shows how much (in %) electrical power input has been converted into magnetomotive power.

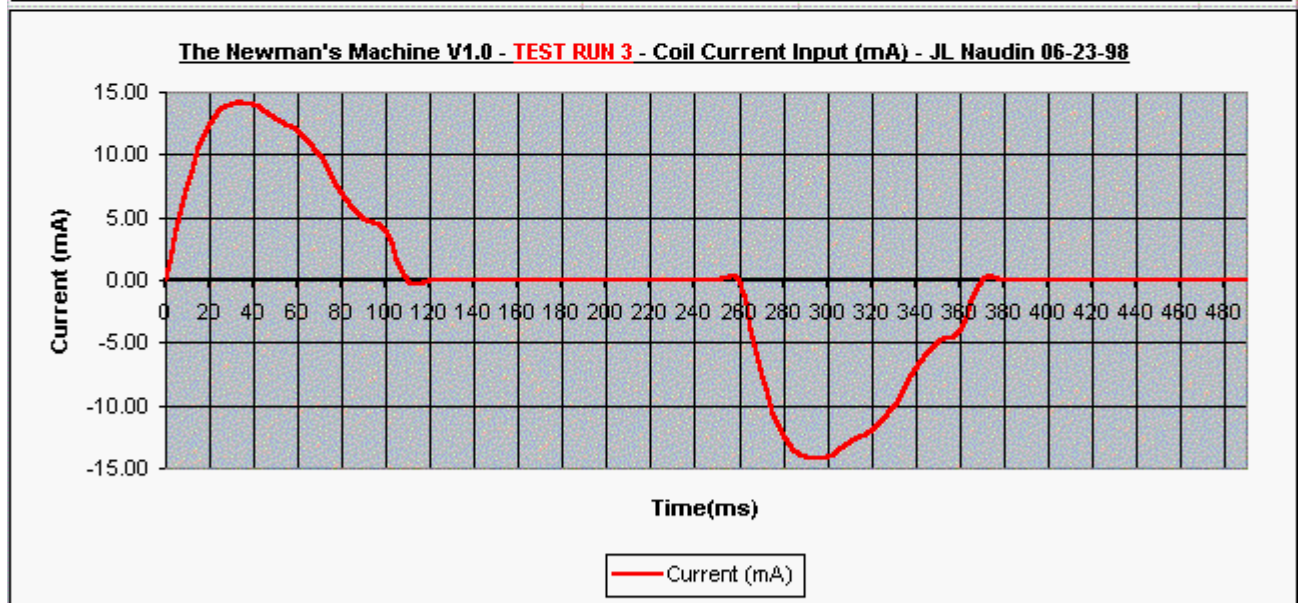
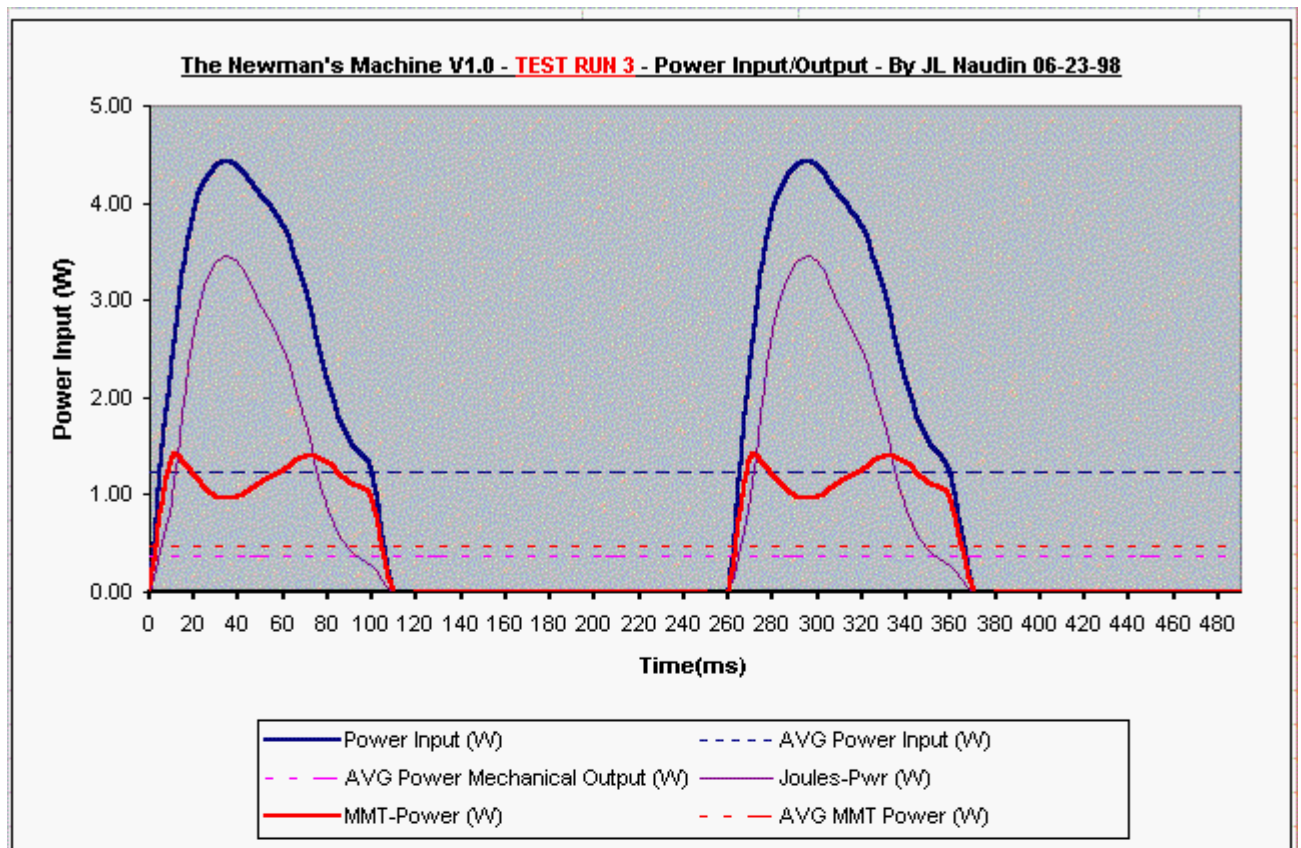
Mechanical Losses in MMT power = (AVG Magnetomotive Power (W) - MECHANICAL Power out (W)) / AVG Elc.Power Input (W) This shows how much (in %) power is lost either in mechanical frictions or in not used electromagnetic radiations (sparks)...

[SEE THE DATAS SHEET OF THE TEST RUN 2](#)

[Link to the Efficiency testing - Test RUN 3 \(06-23-98\)](#)

06-23-98 - Mechanical Efficiency test by using the "Prony Brake" method (TEST RUN 3)





MMT Conversion EFFICIENCY=	80%	AVG Elec.Power Input (W)	1.239
Joules' Power Losses =	62%	AVG Joules' Power Losses (W)	0.768
Magnetomotive power Generated =	38%	AVG Magnetomotive Power (W)	0.472
Mechanical Losses in MMT power	8%	MECHANICAL POWER OUT (W)	0.377
Method used : The Prony Brake		Voltage = 313 Volts	
Arm Length = 0.15 m		PRONY BRAKE TEST RUN 3	
Weight = 20 g		Email: JNaudin509@aol.com	
Speed = 122.45 RPM		Date : 06-23-98	
Rotation Period = 490 ms			

AVG Elc.Power Input (W) : This is the average electrical input power which use the current accross a 100 ohms resistor in series with the coil and the voltage measure accross the coil. This power is the average of all the power during one turn of the rotor.

AVG Joules'Power Losses (W) : This is the average power dissipated by Joules' effect in the coil
 $AVG\ of\ P = R * I^2$ during one turn of the rotor.

AVG Magnetomotive Power (W) = *AVG Elc.Power Input (W)* - *AVG Joules'Power Losses (W)* This is the "real magnetic power", the "Magnetomotive" which produces the rotation of the magnet and by this way generates the mechanical torque on the shaft.

MECHANICAL Power out (W) : This is the mechanical power measured by the "Prony brake" method.

MMT Conversion Efficiency = *MECHANICAL Power out (W)* / *AVG Magnetomotive Power (W)*
This shows the magnetic power conversion and this show how much the Magnetomotive power is really converted into mechanical torque by the rotating magnet.

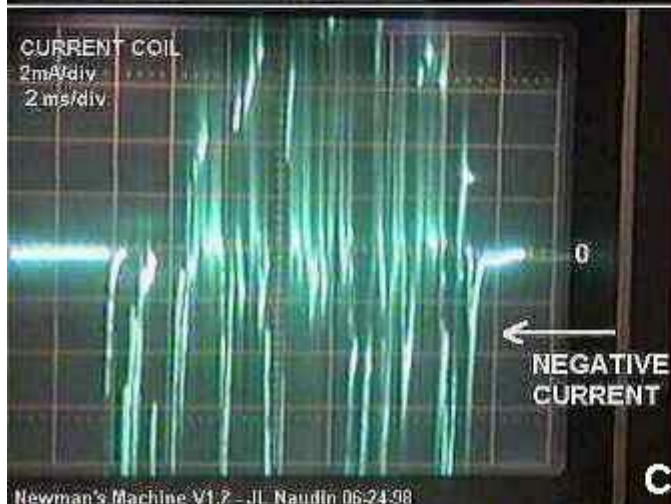
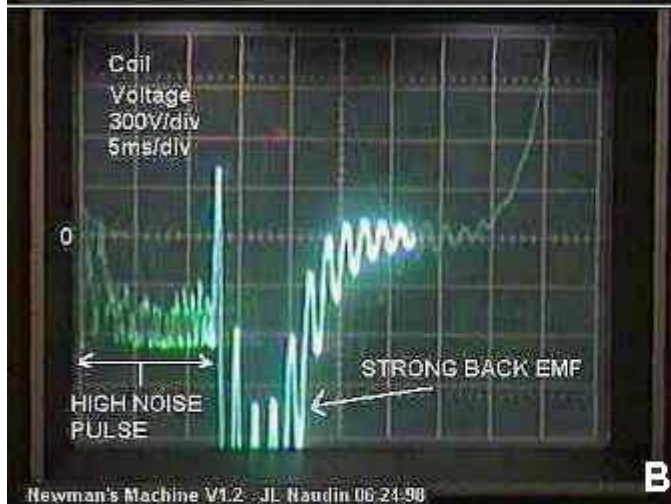
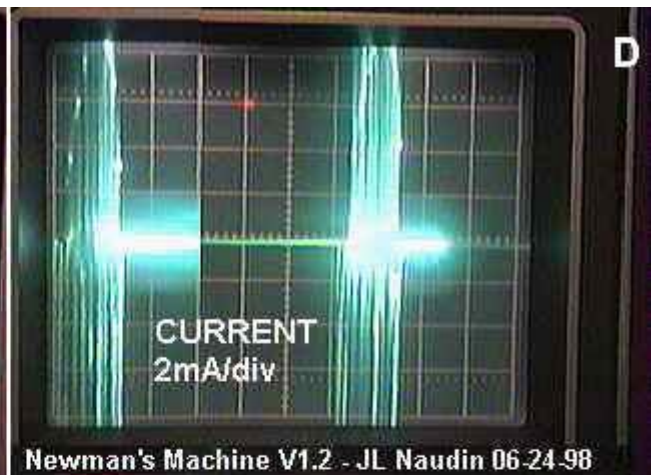
Joules' Power Losses = *AVG Joules'Power Losses (W)* / *AVG Elc.Power Input (W)* This shows how much (in %) the electrical power input has been dissipated into Joules's effect.

Magnetomotive power generated = *AVG Magnetomotive Power (W)* / *AVG Elc.Power Input (W)*
This shows how much (in %) electrical power input has been converted into magnetomotive power.

Mechanical Losses in MMT power = (*AVG Magnetomotive Power (W)* - *MECHANICAL Power out (W)*) / *AVG Elc.Power Input (W)* This shows how much (in %) power is lost either in mechanical frictions or in not used electromagnetic radiations (sparks)...

[Negative current from the coil - Test RUN 4 \(06-24-98\)](#)

06-24-98 - The new commutator design shows negative current coming from the coil to the power supply



Email: JNaudin509@aol.com

Picture A: This is the voltage measured across the coil, the turn speed is about 937 RPM and the firing voltage is 626V. You can notice the HIGH VOLTAGE (greater than 1500V)induced in the coil by the rotating magnet during the "free run" phase.

Picture B: This is the magnified view of the voltage measured across the coil. You may notice the STRONG BACK EMF generated by the firing pulse. There is also a "strange" damped wave generated during this BackEMF phase...Today, I can't explain this, may be this damped wave, superimposed to the backEMF, has been generated by the noisy pulse sent before.

Pictures C,D,E,F: This is the "Noisy current" passing through the coil. You may notice the HIGH negative current value generated. This negative current COME BACK TO THE POWER SUPPLY and this can explain why the original Newman's machine has been able to keep its battery charged. The negative current is *FREE NEGATIVE POWER* and you may notice in the pictures E and F that the negative current spikes in most case are bigger than the positive current spikes.

For obtaining the "noisy current" which produces the negative current , I have built new firing segments on the commutator (all the rest of the machine remains the same as the V1.0). The firing segment (only one by turn) is made with an adhesive aluminum rubber (40mm wide). I have used emery paper for making a "noisy" surface on the firing segment. So, when the brushes pass above the segment this gives some bad contacts and by this way creates this "noisy" current.

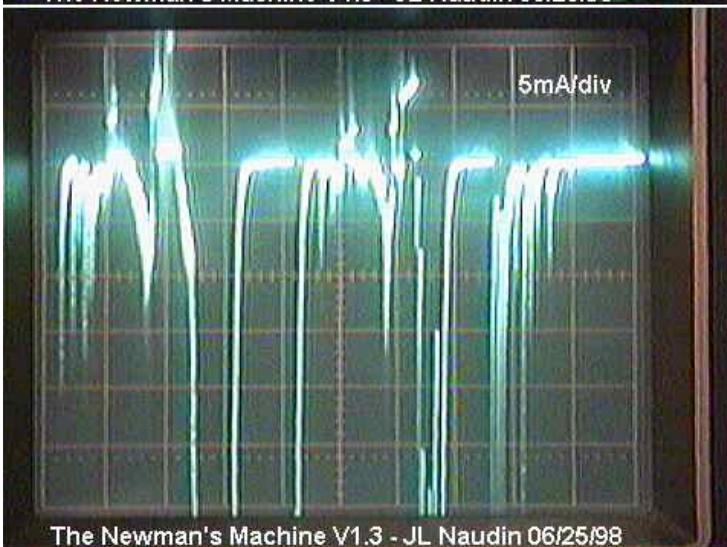
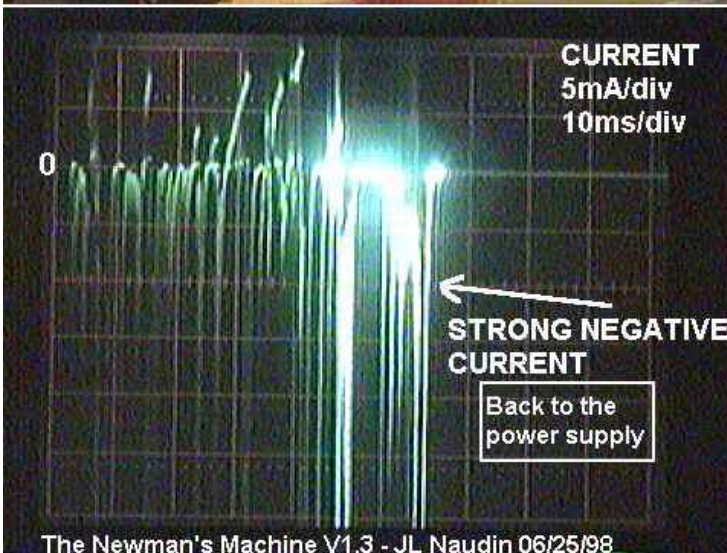
I have been surprised that THERE IS NO SPARKS on the surface of the segment, in spite of the high voltage used. This is due to the short duration time of the pulses sent. These "noisy" pulses have a time duration lower than the time constant of the inductance ($5 L/R$) and by this way the current has no time to climb up in the coil, this is a kind of magnetic energy step charging....

New commutator : STRONG NEGATIVE CURRENT (06-25-98)



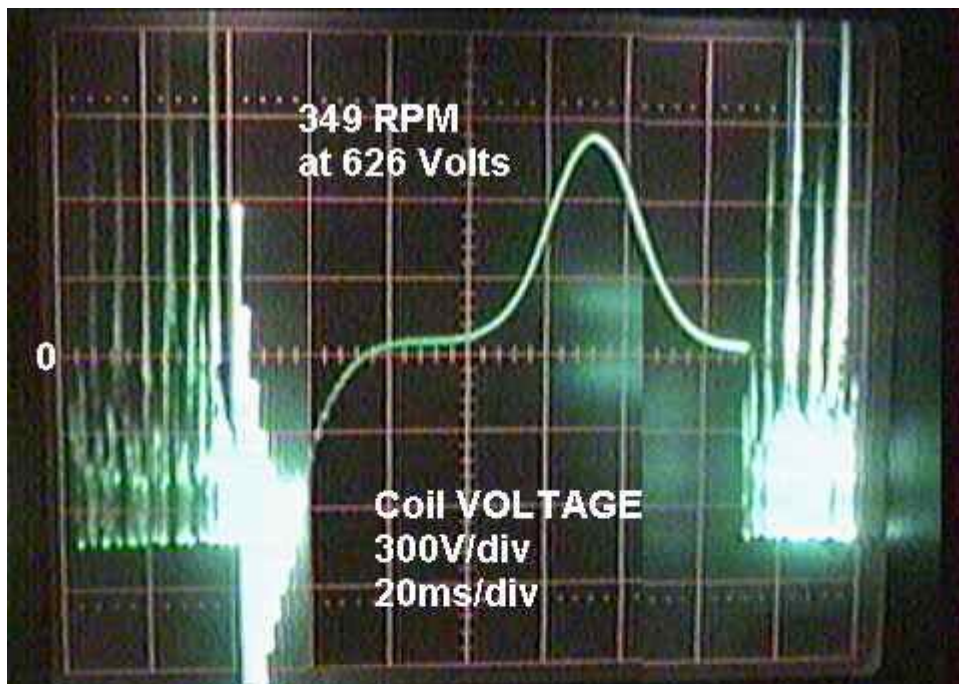
06-25-98 - The new enhanced commutator shows STRONG NEGATIVE CURRENT back to the power supply

As you can see in the first picture above, with my new segmented commutator, I am now able to get STRONG PULSES OF NEGATIVE CURRENT to the Newman's Machine (this means that the current flows from the Newman's Machine into the Power Supply).

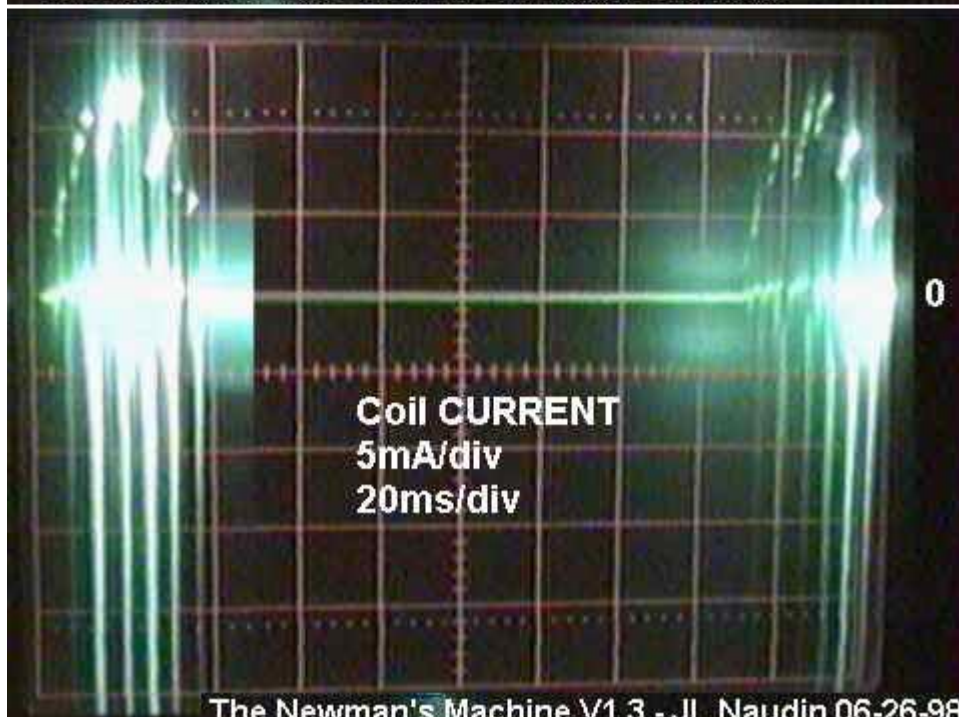


[Towards a continuous negative current flow ?....](#) (06-26-98)

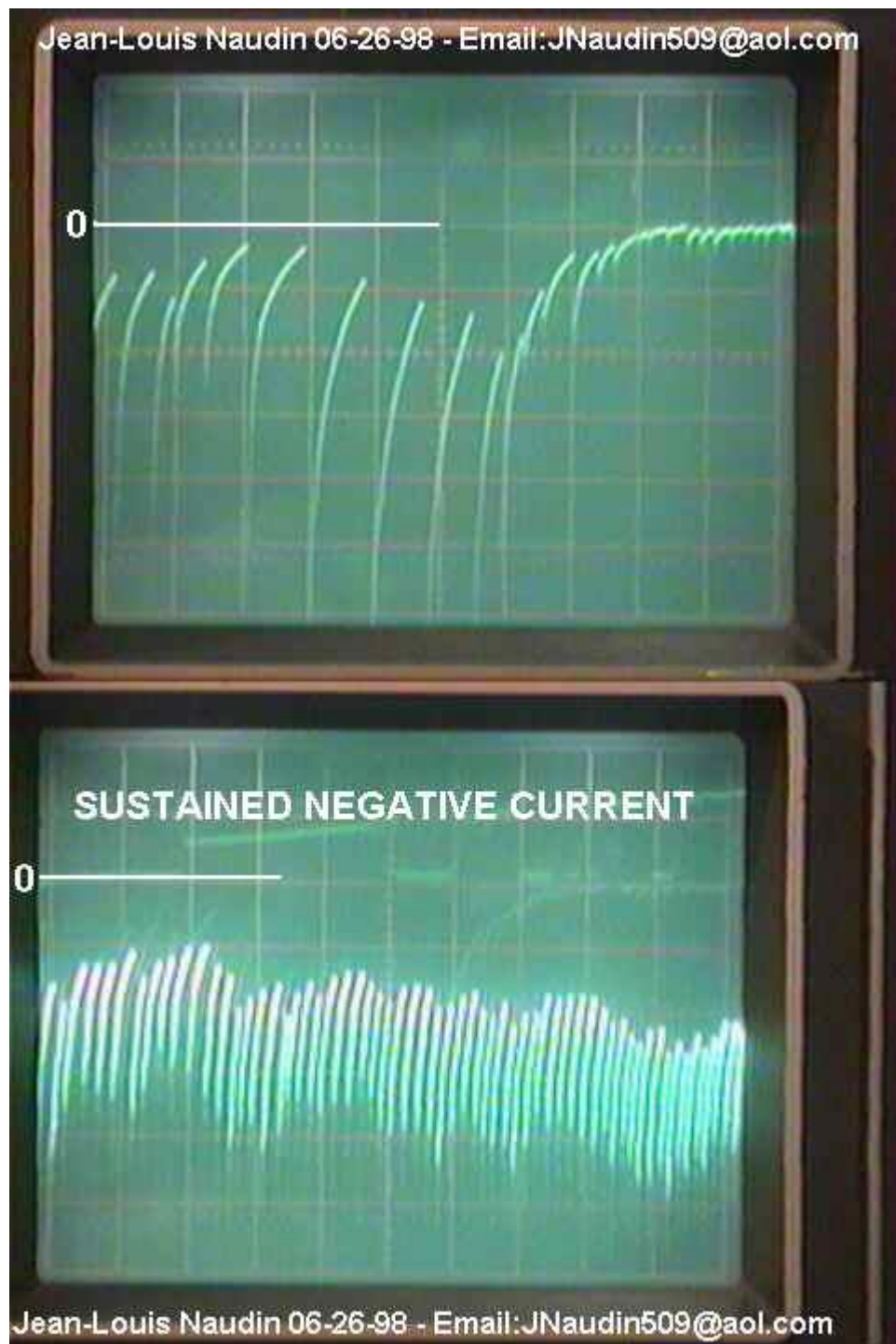
06-26-98 - The Newman's Machine V1.3: Towards a continuous negative current flow ?....



The Newman's Machine V1.3 - JL Naudin 06-26-98



The Newman's Machine V1.3 - JL Naudin 06-26-98

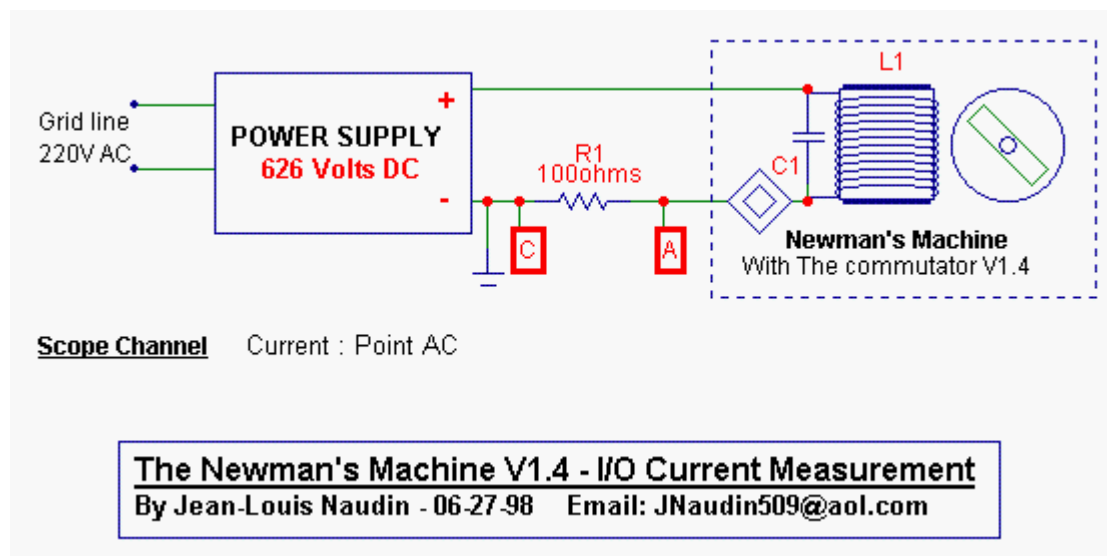


As you can see in the first picture above, with my new segmented commutator V1.3, I am now able to get STRONG PULSES OF NEGATIVE CURRENT to the Newman's Machine (this means that the current flows from the Newman's Machine into the Power Supply).

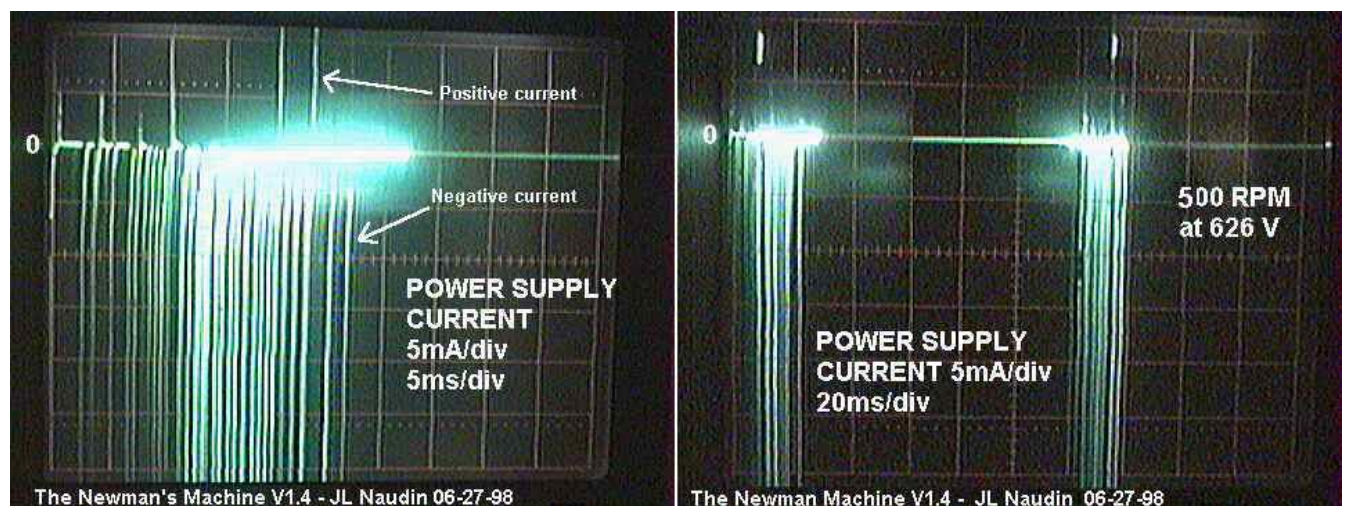
Now, the Negative current flow can be stable and continuous for a short time. The interesting fact to observe is the pseudo-periodic pulsations of the negative current (below the zero line).....

THE FIRST SIGNS OF OVERUNITY ?... (06-27-98)

6-27-98 - The Newman's Machine V1.4: The first signs of Overunity ?....



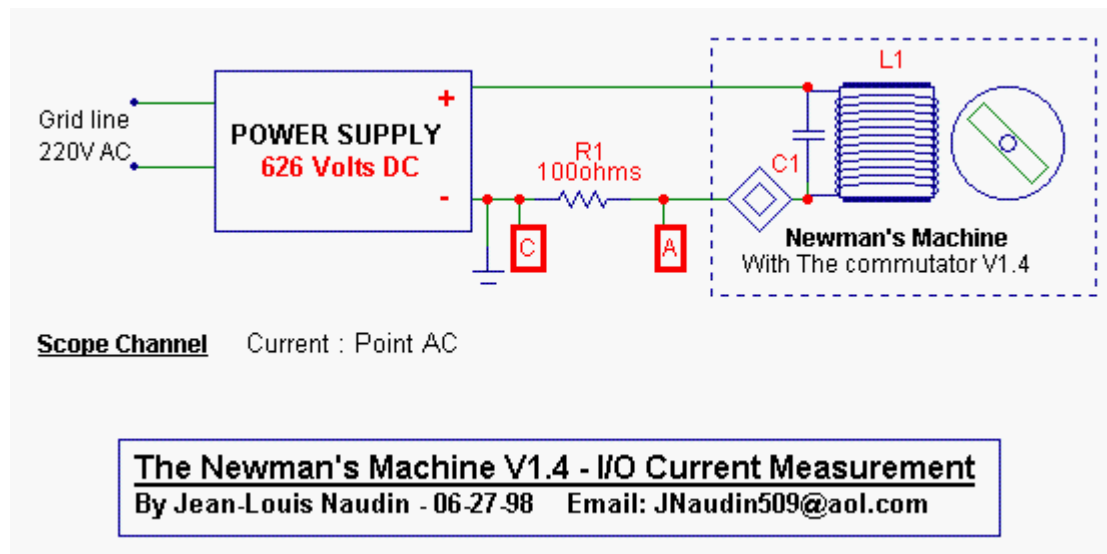
Now, the new enhanced commutator V1.4 shows some interesting results. The I/O current flow from the power supply has been measured across a 100 ohms resistor between the points A-C. You may notice that there are LESS POSITIVE CURRENT PULSES THAN NEGATIVE CURRENT PULSES as shown in the picture below. Today my power supply is not able to convert these negative spikes of current in reusable power, this will be done soon with a new enhanced power supply circuit.



SHOULD IT BE THE FIRST PROOF OF OVERUNITY ?

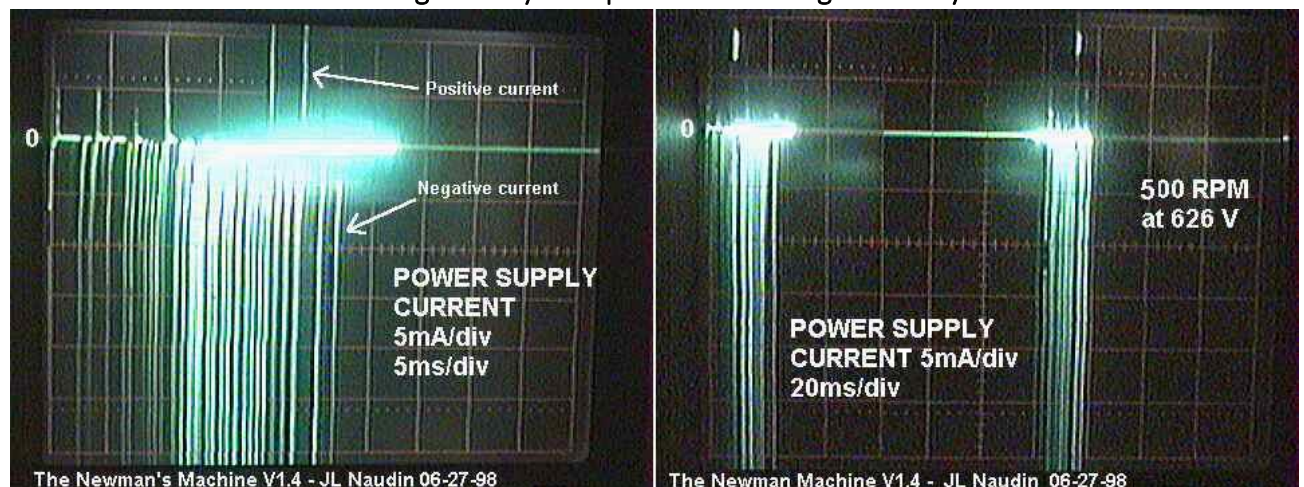
[The New Design of my commutator v1.4 \(06-27-98\)](#)

[06-29-98 - The New Design of the commutator v1.4](#)



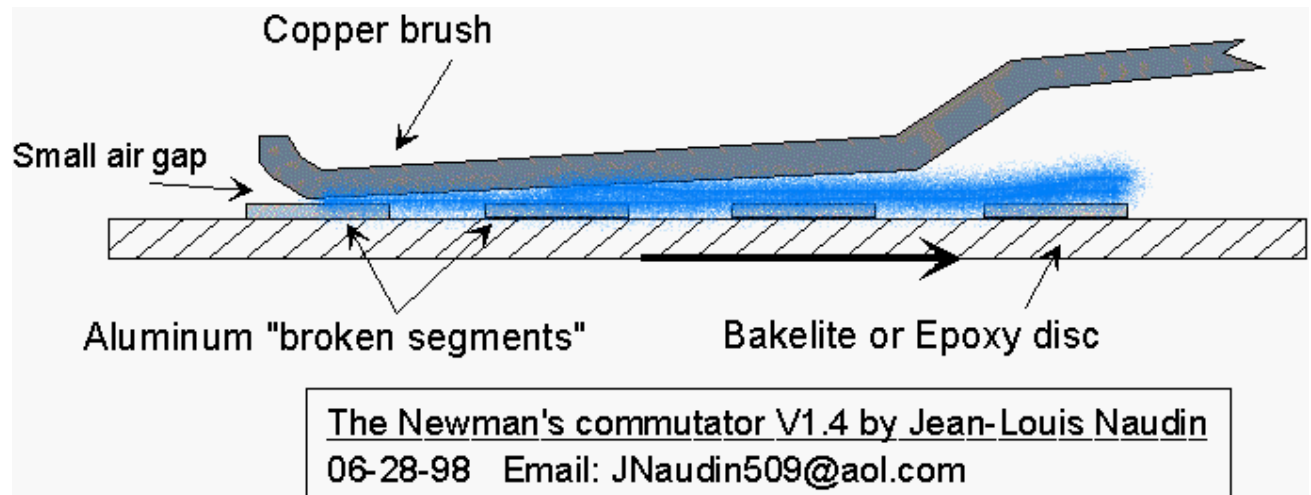
In my Newman's v1.4 setup, I have put a HV capacitor in parallel with the coil (I have used a HV mica capacitor coming from a neon tube "starter").

In spite of very WEAK positive current flow, I got strong and stable NEGATIVE current flow... I am now convinced that this is a good way to explore for reaching Overunity....

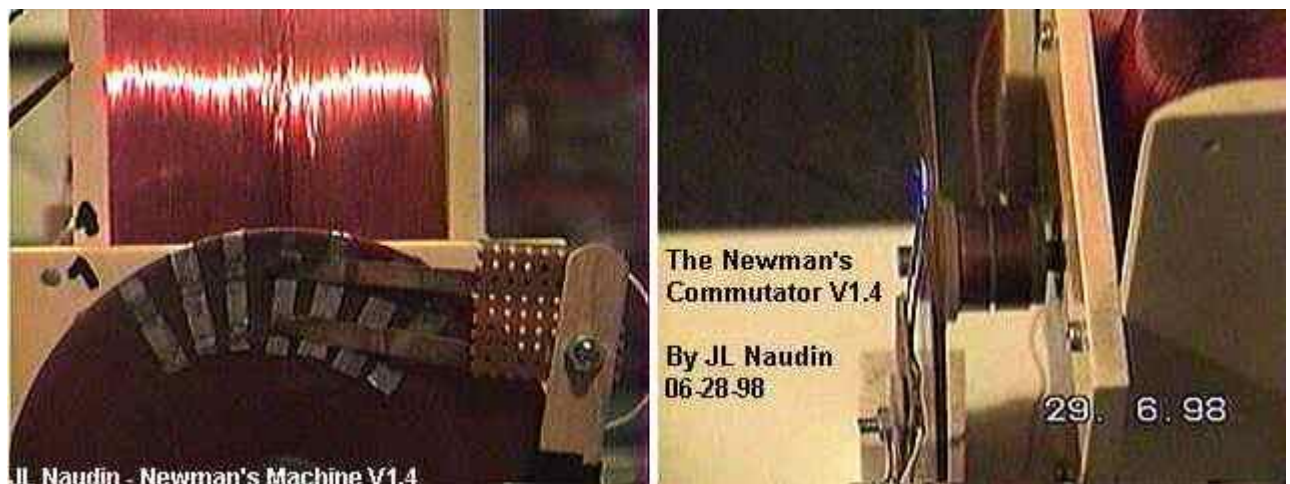


I have also redesigned the brushes setup for optimizing the current flow and this has given me the result showed in the scope pictures above. The *secret of a good tuning* reside in the brushes slope above the surface of the broken segments. The brushes must FLY ABOVE the surface of these contacts, like the R/W heads of a hard disk drive used in computers. The lower gap must be adjusted for obtaining some very weak sparks at the running voltage and the slope of the brush must be very gradual. So, by this way, you build up an gradual spark gap Vs the angle of rotation. The positive current will be considerably reduced and the negative current flow will be amplified.....

The speed is now 500 RPM at 626 Volts and the interesting effect noticed, is that the MOTOR RUN ITSELF FOR about 4 mn 30 sec AFTER that the power supply has been switched off. In the previous version (v1.3) my Newman's machine, has stopped after 1 mn maximum. This mean that the average current flow in this new version (v1.4) is very very weak in spite of the apparent mechanical power generated.

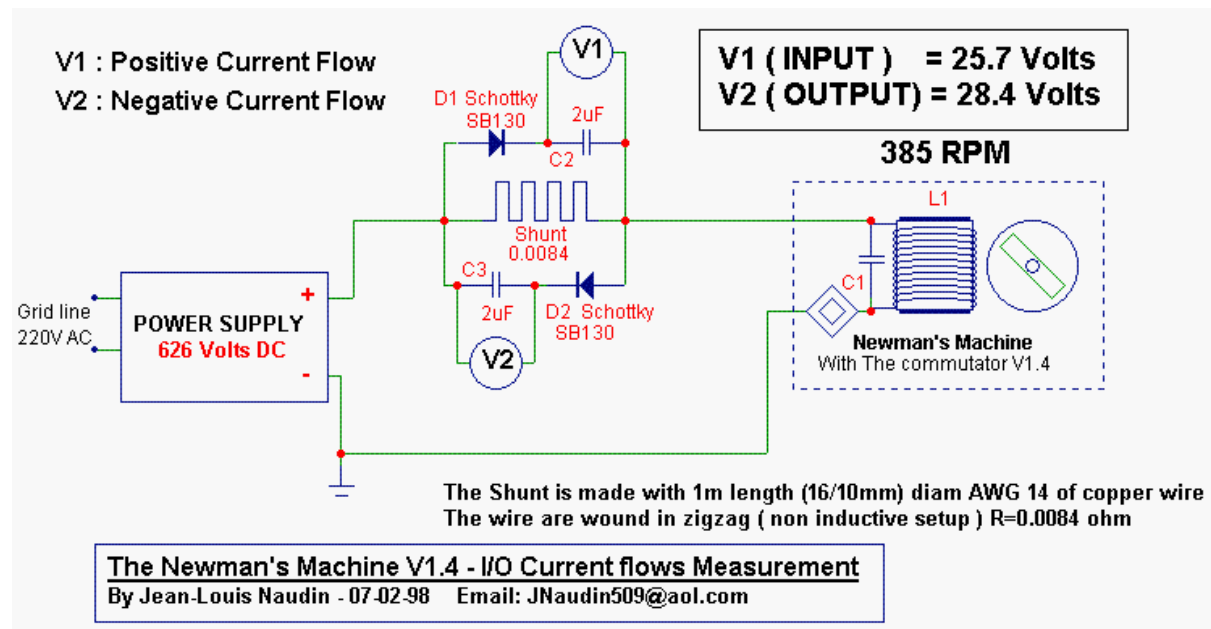


The segments are 4 mm wide with a 3 mm gap between them. The firing sequence must be between 0 and 90 degrees (between the points 1 and 2 showed in the ["Free Run" diagram](#)).



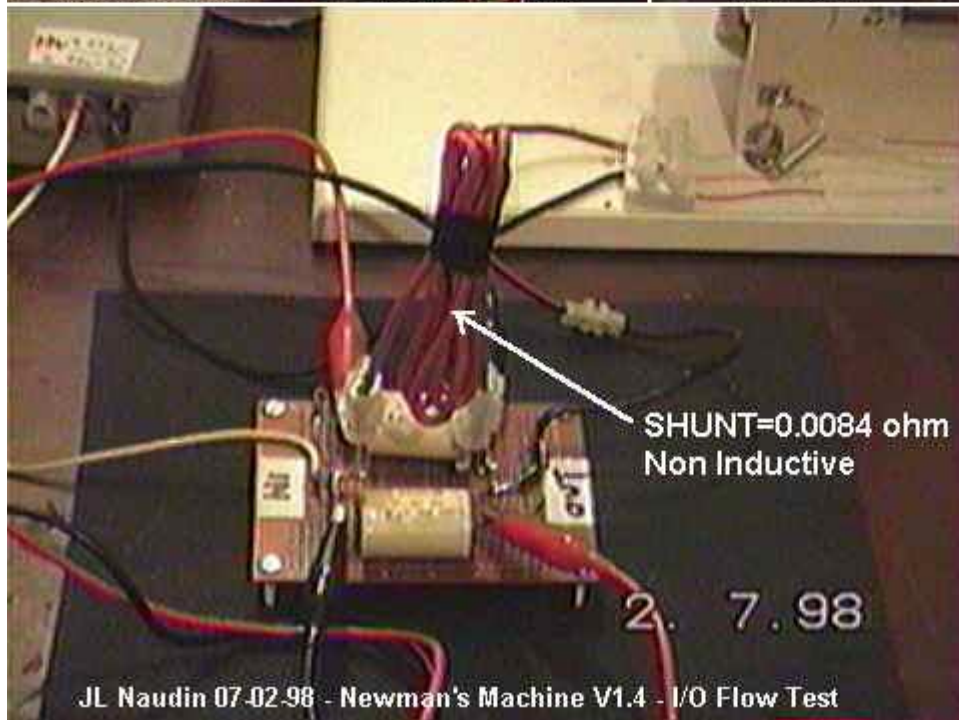
THE FIRST SIGNS CONFIRMED ?...(07-02-98)

07-02-98 - Measuring the CURRENT FLOW (Positive current (Input) Vs Negative current (Output))



The purpose of this test is to check if the measurements [previously done with the oscilloscope](#) about the current I/O flow (Negative and Positive currents) can be confirmed with the use of a simple digital multimeter (DVM).

For this test, I have built a special SHUNT with 1 meter of copper wire wound in zigzag for avoiding some inductive effects. I have used high speed schottky diodes and the signal has been integrated with 2 uF capacitors. An 1 Mohm resistor can also be added in parallel with each capacitor, these resistors are facultative because the internal resistance of the DVM is sufficient in this case. (see the main diagram of this test above)



Email:
JNaudin509@aol.com

Digital Multimeter
M 830B
Accuracy 0.5%

The power supply voltage is 626 Volt and the Machine turns at 385 RPM. So, as you can see in the pictures above the measured voltage OUTPUT (the integrated Output current) is GREATER than the measured voltage INPUT (the integrated Input current). This confirms the measurements that I have conducted [previously with my oscilloscope](#).

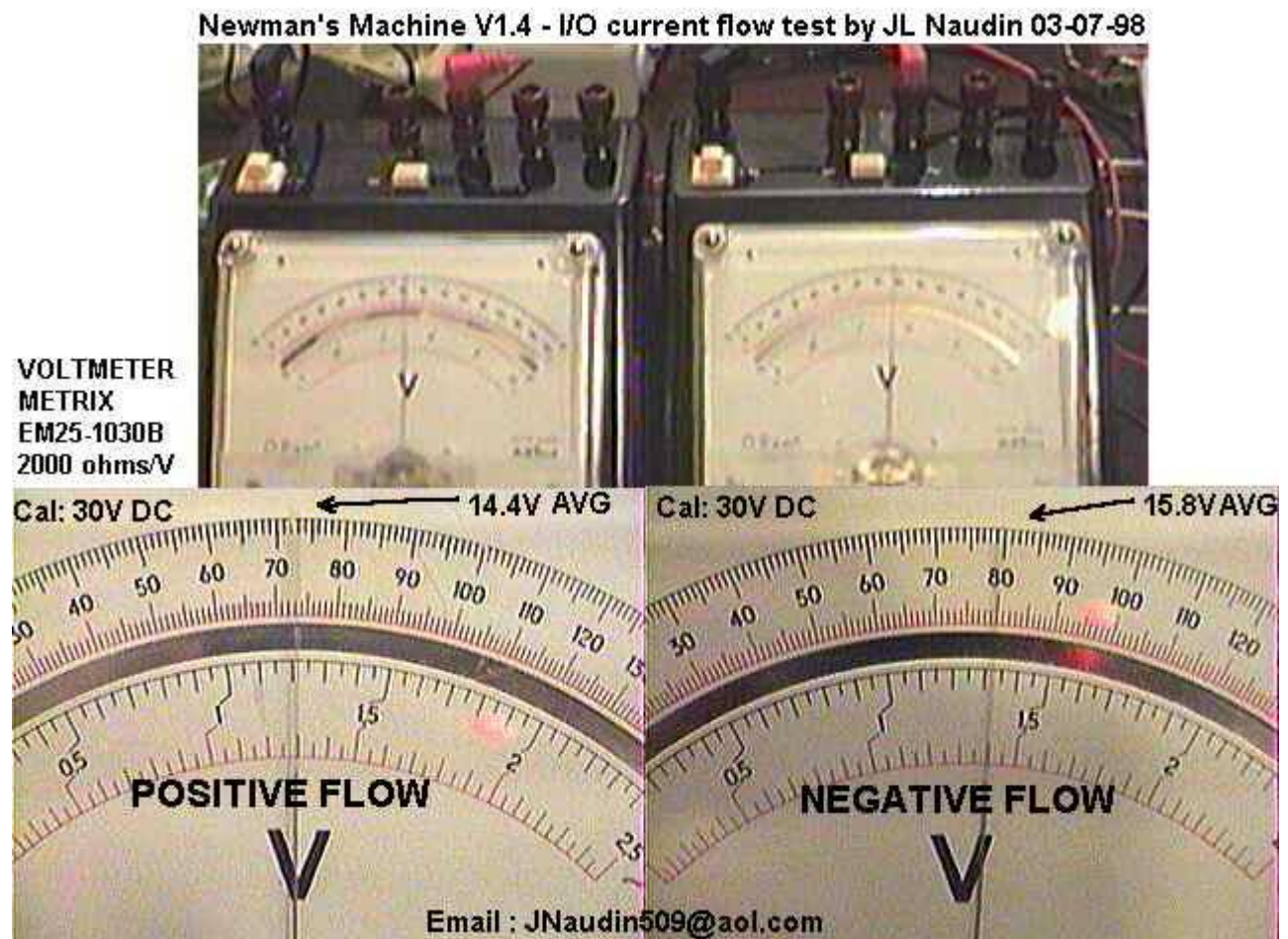
Additional Notes: You must use a very low resistive shunt for a successful test result.

I have used 2uF NP capacitors (2% accuracy). I have also checked the asymmetrical effect due to the eventual capacity difference by swapping the Input and Output (the I/O measurement bridge has been rotated of 180 degree. I have also swapped the DVM. The RESULT WAS THE SAME. (Output>Input)

This is a kind of INTEGRATOR which adds all spikes (positive or negative for each branch), the resistance in parallel is the DVM high internal resistance, if I put a 100 kohms resistor in parallel with each capacitor, the average DC drops at about 2V, but with the same asymmetrical effect, Out > In.

This I/O bridge measurement setup works also with a simple resistive rectilinear wire (0.1

ohm). The I/O measurement bridge has been put close to the Newman's machine only for the photo. In the real measurement I have also checked the influence of the rotating magnet and the RF induction effect by putting the bridge up to 1 meter far from the Newman's Machine.



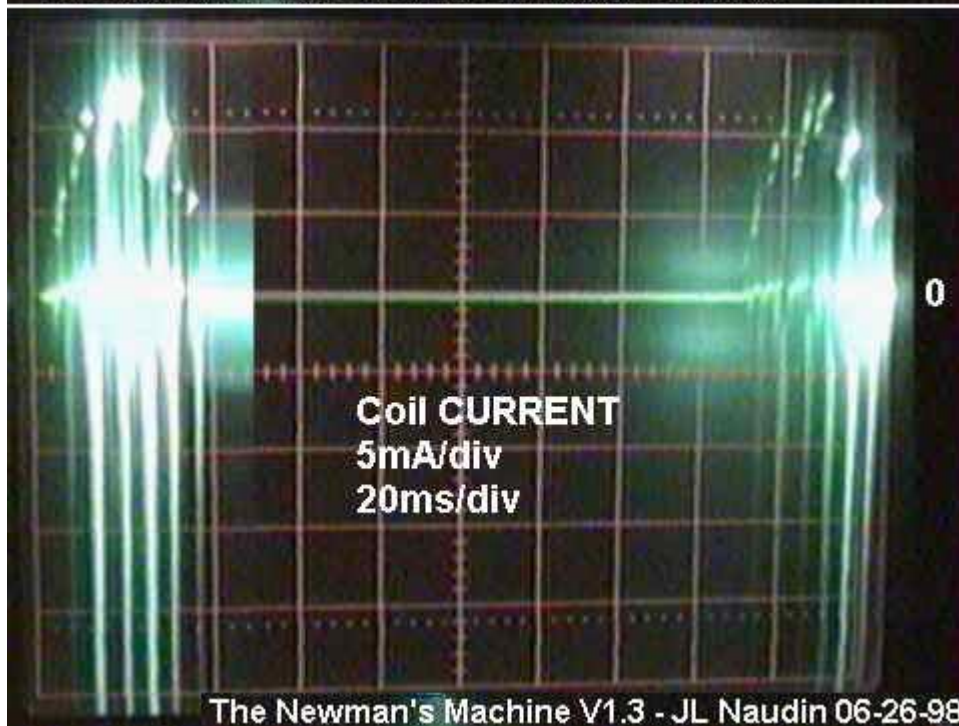
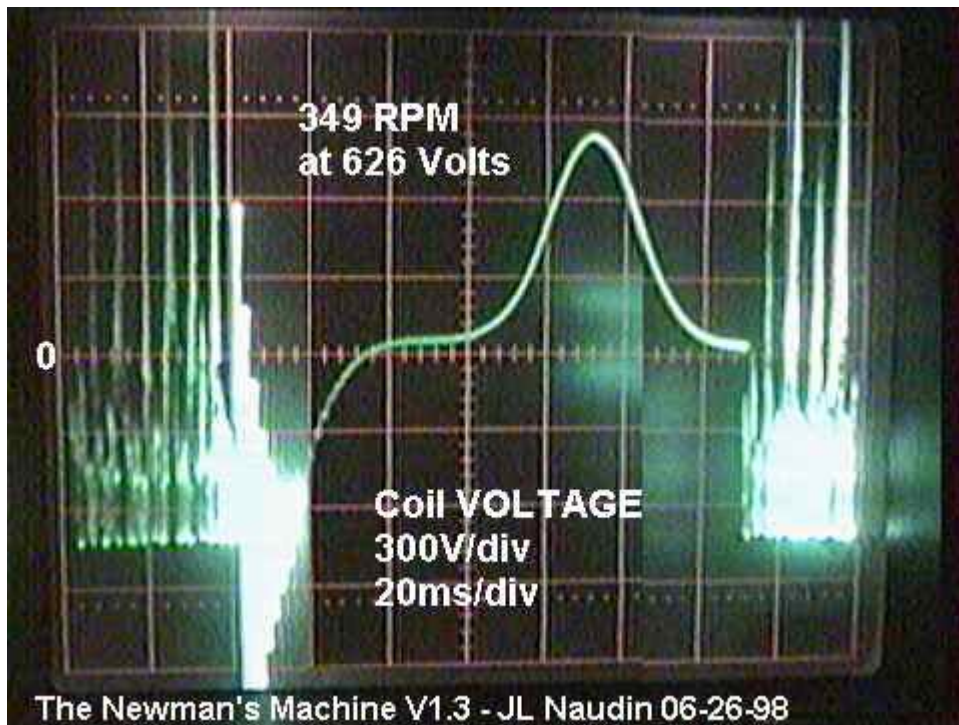
The I/O Flow testing has also been tested with two analog voltmeters (Metrix) connected instead of the previous digital multimeters. This test also confirms the asymmetrical I/O flow of the current.

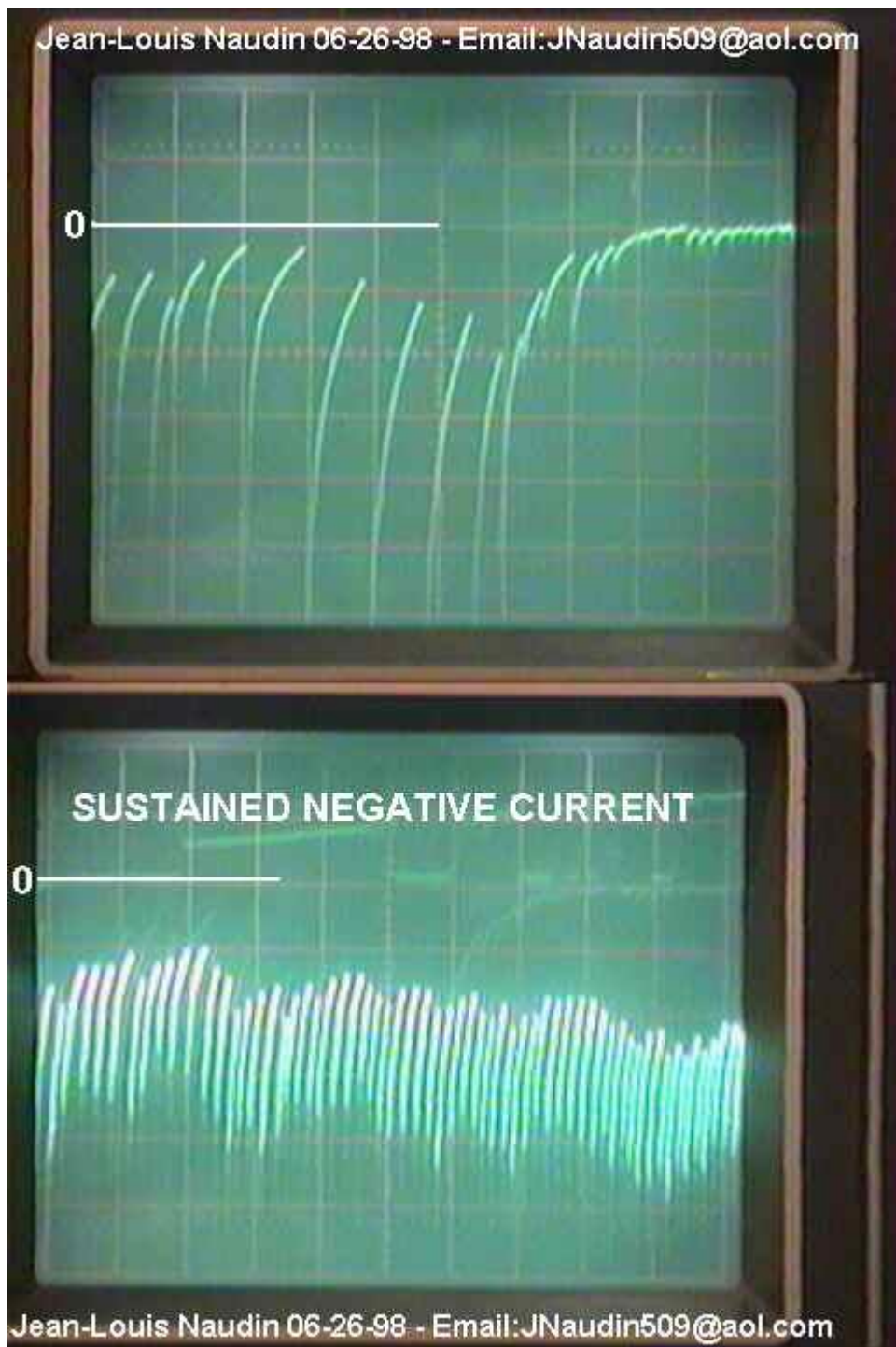
The entropy changes while the Machine runs, a COOLING effect has been observed...

- [Additional comments](#) (0)

[Towards a continuous negative current flow ?....](#) (06-26-98)

06-26-98 - The Newman's Machine V1.3: Towards a continuous negative current flow ?....





As you can see in the first picture above, with my new segmented commutator V1.3, I am now able to get STRONG PULSES OF NEGATIVE CURRENT to the Newman's Machine (this means that the current flows from the Newman's Machine into the Power Supply).

Now, the Negative current flow can be stable and continuous for a short time. The interesting fact to observe is the pseudo-periodic pulsations of the of negative current (below the zero line)....

[The entropy changes while the Machine runs, a COOLING effect has been observed...](#)(07-09-98)

7-09-98 - The entropy changes while the Machine runs, a COOLING effect has been observed...

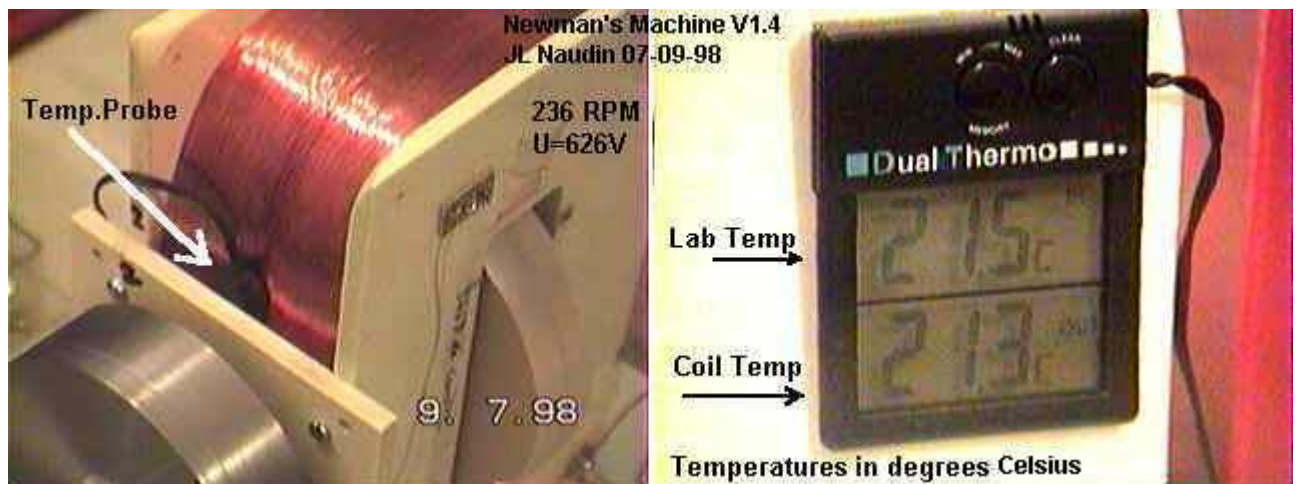
The purpose of this test is to check some eventual changes in the entropy of the Newman's Machine.

I have used a dual probes digital thermometer (resolution 0.1 degree Celsius) :

- The first temperature probe has been used as reference for the lab temp (21.5 degrees Celsius)
- The second temperature probe has been glued directly on the Newman's coil.

I have waited one hour before starting the test for equalizing the temperatures (LabTemp = 21.5 degrees, Coil Temp = 21.5 degrees)

The test has been conducted during one hour.



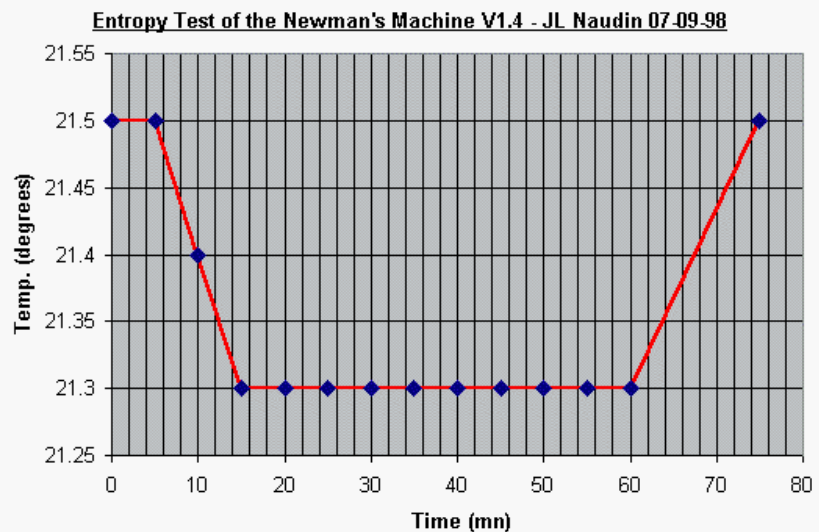
The Entropy Test of the Newman's Machine by JL Naudin

0709-98

Email: JNaudin509@aol.com

Time (mn)	Temperature (degrees)
0	21.5
5	21.5
10	21.4
15	21.3
20	21.3
25	21.3
30	21.3
35	21.3
40	21.3
45	21.3
50	21.3
55	21.3
60	21.3
75	21.5

Lab Temp.=21.5 degrees



The Newman's Machine has been stopped after a 60 Minutes run

During all the test phase, the lab temperature was constant (21.5 degrees). The observation of the Newman's Machine and the collect of the temperature datas has been done at a distance at least of 2 meters for avoiding any change in the surrounding of the experiment.

The Newman's machine has been stopped after the test (a 60 mn run) and 15 mn after the temperatures were EQUALIZED AGAIN at 21.5 degrees. This confirms the cooling effect observed in spite of the mechanical work generated and the joules' effect dissipated in the coil.

The rotation speed was 286 RPM and the coil voltage used 626 V

The differential voltages I/O measured on the "[current control flow bridge](#)" were 32V (Input) and 88V (Output) accross the 2uF cap with my new fast HV diodes.

[A cooling effect explanation ? by Tim Vaughan](#)
[Some Newman's Machine Keys](#) (updated 06-27-98)

Suj :	Cooling Effect Explanation ?
Date:	23/08/1998 05:59:43
From:	tv@juno.com (Tim Vaughan)

Transient Electron Coherence

by Tim Vaughan

The following is prompted by a recent experimental observation by Jean-Louis Naudin of an anomalous cooling effect in a large coil of wire.

I would like throw out an idea to the members of this open forum to consider and comment on.

It came to me in an attempt to explain the cooling effect in a large coil of wire observed by the physicist Leon Dragone in an experiment he called the electroentropic device in 1989, as well as in his investigations of a Joseph Newman type electric motor. Sadly, his experiments were cut short by a heart condition that caused him to die at an early age.

Leon measured a temperature drop of up to 2 degrees F. (0.8 C) in a large coil of wire connected to his special cold cathode arc switch.

I met Leon Dragone at a conference hosted by the Planetary Association for Clean Energy in Canada. Leon and I immediately became friends as I stayed up all night talking to him about energy ideas at the conference.

We had very similar ideas about the possibility of organizing (or cohering) fluctuation energy such as thermal and quantum zero point fluctuation energy. Sadly, he died a few months later he died of a heart attack. He did not publish much information but I had many phone conversations with him in which he described his ideas and experiments.

At the conference Leon showed me and others, his "electroentropic device" which seemed to show an excess energy gain. It consisted of a Neon sign transformer secondary coil connected in series with a micrometer adjustable spark gap also in series with a light bulb and a 575 volt battery pack. The battery pack also had a 3.5 uFD 4000 volt capacitor connected in parallel across it. The spark gap device was a small black box with a micrometer adjustment knob and two wires sticking out. The wires were connected with alligator clips and small gauge wire.

When the spark gap was shorted, the bulb would not glow at all as only 25 milliamperes was

flowing through it due to the 18000 ohms of resistance in the neon sign transformer. When Leon would carefully adjust the spark gap device the light would glow quite brightly and the current would increase to over 1000 milliamperes.

Leon told me that he would get the same effect with a Newman type coil connect instead of the Neon sign transformer. Leon told me and this was later confirmed by Dr. P.T. Pappas (a physicist from Athens, Greece) that when the spark gap was operating in "excess energy mode" they were able to measure a drop in temperature of the coil of about 2 degrees Fahrenheit or (0.8 Celsius). The spark gap was what they called cold cathode glow discharge spark.

Leon Dragone also told me that he had measured a similar temperature drop in the coil of the Newman motor he had constructed. As far as I know he never attempted to thermally insulate the coil from its surroundings.

Leon thought maybe he was cyclically robbing the magnet inside the coil of some of its thermal energy in someway. However, Leon told me that he was puzzled by the his observation of a temperature drop in large coil of wire with no core at all. Also the temperature drop was measured on the coil itself and not the rotating permanent magnet armature when the magnet was present.

Since I had not heard of anyone else observing these effects, I considered that Dragone and Pappas had made an error in the temperature measurements or there was some other kind phenomena at work like the Peltier Effect.

Most recently, Jean-Louis Naudin made a very exciting discovery of a temperature drop in a large coil when running experiments with a Joseph Newman type motors. Great work Jean-Louis !

(see: <http://ourworld.compuserve.com/homepages/jlnaudin/html/NMac0709.htm>)

This is indeed an exciting discovery. Your work has encouraged me that this area of investigation needs more attention. Leon faxed me some ideas he had about the Newman motor effect with I posted on the Web at:

<http://www.geocities.com/CapeCanaveral/Lab/4810/dragone1.html>

I am sorry about the quality of this as it was scanned from a fax.

This paper proposes the idea that that the excess energy comes from magnet in the coil. However, Leon told me that he also measured the temperature drop from a Newman type coil with no magnet or ferromagnetic core !

I believe these temperature drops are very significant.

I wish to throw out this idea I call **TRANSIENT ELECTRON COHERENCE**.

First here are some known facts about the free electrons in metals:

THE FREE ELECTRON MODEL

Some of the electrons in a metal conductor called FREE ELECTRONS are constantly moving about within the crystal structure of a metal, not just in the atomic orbits but also between the atoms.

The motion of the free electrons through the metal is statistically random with as many going in one direction as another. Therefore there is no net current.

Some of the motion of the electrons is due to thermal energy, however the electrons move around in the metal crystal even at absolute zero temperature. This is called the zero point energy of the free electrons.

For this reason, a metal can be thought of as a "solid state plasma" consisting of positive metal ion cores held in a crystal matrix surrounded by an electron gas.

Electrons act as both particles and waves.

The wavelength of an electron depends on its energy (speed)

The wave nature of electrons causes them to interact with the atoms in a metal conductor or semiconductor differently depending on their speed.

At certain energies (speeds) the electrons resonate with the periodically spaced atoms in a metal crystal lattice and will be reflected or scattered.

Due to the Pauli exclusion principle of quantum mechanics. Two electrons with same speed (wavelength) and direction (and spin) cannot occupy the same space. Therefore the energies (speeds) of the free electrons are distributed over a range of values.

Electrons can have any energy (speed) within a range of allowed values. This range of values is called a band.

Certain energy values are not allowed in a given crystal because they resonate with periodically spaced atoms. These missing energy values are called "forbidden energy bands".

A band of allowed energy levels (speeds) will then have an upper and lower limit bounded by the forbidden regions.

Because of the Pauli exclusion principle the bands fill up with electrons from the lowest to the highest allowed values.

An insulator has electrons that are confined to stay within individual atoms or molecules and are not free to move throughout the material.

These bound electrons can be said to exist inside energy bands which are filled so they do not allow more electrons to move in one direction than in another. So there can be no current flow. These filled energy bands are called VALENCE BANDS.

Conductors also have electrons in valence bands some of which are in atomic orbits and some that are free.

When an electric field is applied to a conductor such as a wire, the electrons in the valence bands can accelerate or gain energy as long as there is an allowed energy level to fill which would be the next higher level that has been vacated by another electron that has also been accelerated.

Electrons with the highest allowed energy level in a given valence band will be reflected (in a perfect crystal) or at least scattered when they reach a forbidden energy level. If they are reflected they may occupy an energy level that has been vacated by an electron that was traveling in the opposite direction and has been slowed by the electric field.

In this way electrons in valence bands simply exchange energy levels such that there is not net gain in energy (speed) in a single direction and therefore no net current flow due to the electrons in the valence bands. Therefore, because of this "energy musical chairs", electrons in valence bands do not contribute to current flow.

In a conductor, the highest energy band is not filled by electrons. In other words, all of the available energy states in this highest energy band are not occupied. This energy band is called the **CONDUCTION BAND**.

Electrons in the conduction band can contribute to a net current flow because of the available energy levels.

Now here is where a possible way to cohere the free energy of electrons comes in.....

Actual energy bands contain enormous numbers of allowed energy levels. However, imagine for purposes of understanding, that a certain conductor has a conduction band that has only the first two energy levels occupied. Therefore, there would be two electrons going in the forward direction with energy level 1 and 2 and two electrons going in the reverse direction with energy level 1 and 2. (I am disregarding spins here)

Now suppose an electric field is applied to the conductor so that the electrons will be accelerated in the forward direction. Some time later the electrons moving in the forward direction will gain an amount of energy such that they then occupy energy levels 2 and 3 in

the forward direction. At the same time the two electrons traveling in the reverse direction will be decelerated so that the fastest electron moves from energy level 2 to 1 as soon as level 1 is available. The electron at level 1 however is not allowed to go to a lower level in the reverse direction and is reflected so that it would now occupy level 1 of the forward direction.

As a net result, the originally forward moving electrons simply gain energy as expected by the accelerating electric field. At same time though, an additional electron is added to the forward moving group because the slowest (least energetic) conduction band electron that was moving in the reverse direction has been reflected so that it moves in the forward direction as well.

As a result of this selective reflection of the slowest (lowest energy) electrons in the conduction band we would now have 3 electrons moving in the forward with only one moving in the reverse direction.

A short time later the single electron moving in the reverse direction would try to occupy the forbidden level below level 1 and would also be reflected joining the others in the forward direction.

At this point all 4 of the electrons in the conduction band will be moving in the forward direction. Part of the added energy of the electrons moving in the forward direction will have been contributed by the applied electric field with an additional amount added by the selective reflection of the slowest conduction band electrons originally moving in the reverse direction. This results in an amplification of the net forward current by energy contributed by the zero-point energy of the originally reverse moving electrons.

This amplification effect would be short lived because the population of eligible reverse moving conduction bands electrons would be quickly depleted.

In short an abruptly applied high voltage potential applied to a conductor should cause the selective reflection of the lower energy conduction band electrons traveling in opposition to the applied electric field which will contribute their kinetic energy to the forward moving current.

Now if my hypothesis is correct, when a strong electric field is abruptly applied to a conductor, a transient current surge will occur that consists of a quantity of energy that has been cohered from the energy of the free electrons in the metal. If this energy can be captured somehow before it degenerates into heat or radiation, it can be utilized. This captured energy would then be replenished by the ambient energy inside and surrounding the conductor. Therefore, the entropy and temperature of the conductor would be reduced (a cooling effect).

A device capturing such free energy of the electrons would constitute a macroscopic violation

of the 2nd Law of Thermodynamics. However, it would really be a coherence of many microscopic heat engines (electron-ion interactions).

If this hypothesis is correct, it should be possible to cohere and extract some of the fluctuation energy of the free electrons of a conductor (or semiconductor). In order to enhance this effect it would be best to use a long conductor. The effect might be best seen in a large coil of wire at lower frequencies or in a transmission line (or antenna) at higher frequencies. Abrupt switching might be accomplished with, among other things, a commutator or an appropriate spark gap. The surge might be captured by some form of diode, electronic switching device, or commutator.

Please, I welcome your comments and criticisms about this hypothesis.

Sincerely,

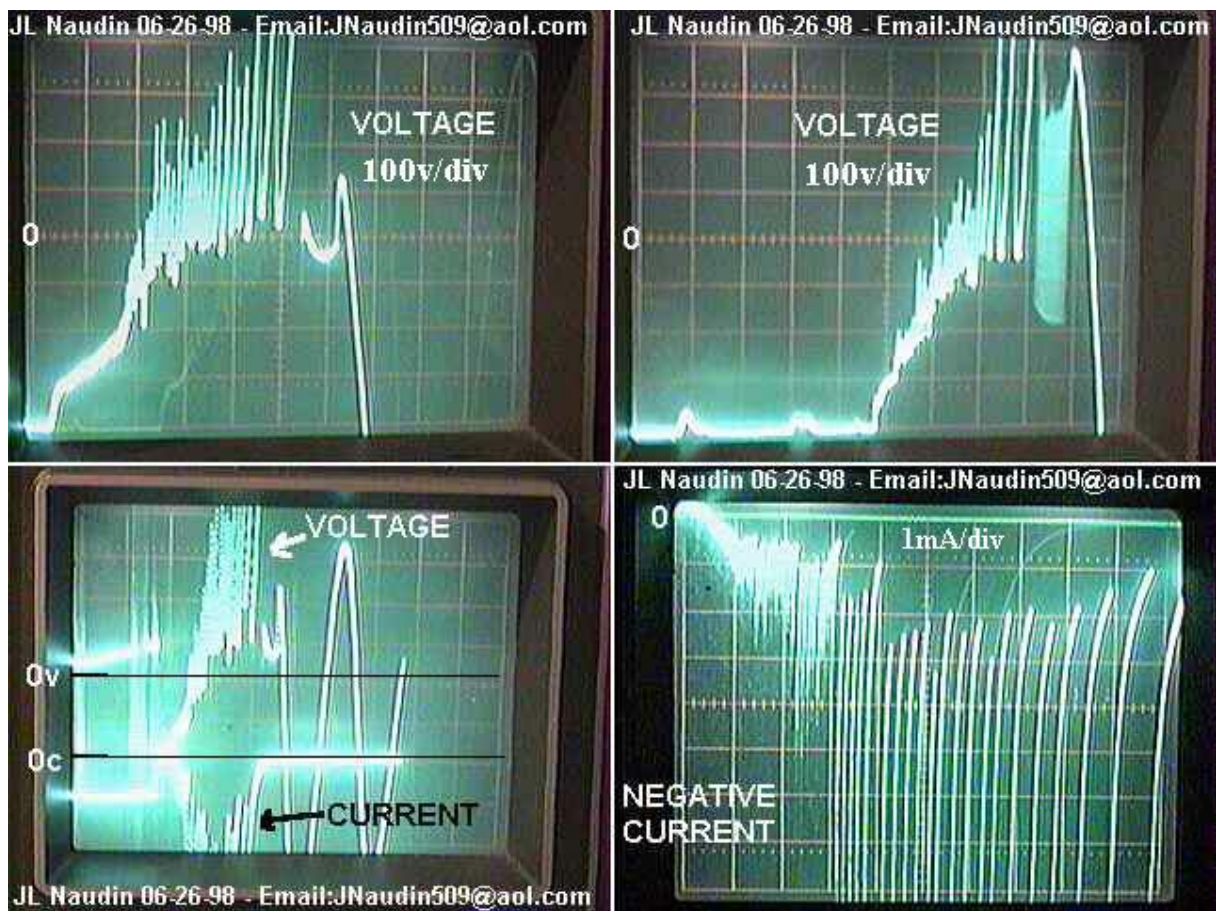
Tim Vaughan



(Email : tv@juno.com)

Back current flow measurement confirmed by Stefan Hartmann (11-18-98)

- 11-18-98 - **Back current flow measurement also confirmed by Stefan Hartmann**
- On June 26th, 1998 I have noticed that strong a continuous back current (negative spikes of current) was generated by my special commutator v1.4 (see NMac0629.htm)
- Now, the new enhanced commutator V1.4 shows some interesting results. The I/O current flow from the power supply has been measured accross a 100 ohms resistor between the points A-C. You may notice that there are **LESS POSITIVE CURRENT PULSES THAN NEGATIVE CURRENT PULSES** as shown in the picture below. Today my power supply is not able to convert these negative spikes of current in reusable power, this will be done soon with a new enhanced power supply circuit. This negative current **COME BACK TO THE POWER SUPPLY** and this can explain why the original Newman's machine has been able to keep its battery charged. The negative current is *FREE NEGATIVE POWER* and you may notice in the pictures E and F that the negative current spikes in most case are bigger than the positive current spikes.



- For obtaining the "noisy current" which produces the negative current , I have built new firing segments on the commutator (all the rest of the machine remains the same as the V1.0).

The firing segment (only one by turn) is made with an adhesive aluminum rubber (40mm wide). I have used emery paper for making a "noisy" surface on the firing segment. So, when the brushes pass above the segment this gives some bad contacts and by this way creates this "noisy" current. "

- So today, on 11-18-98 Stefan Hartmann from Berlin has now confirmed again that this effect is real and reproducible :

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Suj :	Newman machine test pics and MPEGs Online !
Date:	18/11/98 16:19:16
From:	harti@harti.com (Stefan Hartmann)

- Hi All,

I have now uploaded my recent test results from my Newman machine to my server at:

<http://www.overunity.com/newman2>

There are a few pics and MPEG movies.



-
- The scope pics show the input current into the coil during operation of my Newman machine.

Note, that the center line on the scope is the ground position and that all current spikes go downward and all normal input current goes upward.

The input current was sampled via a 10 Ohm shunt, so 1 div = 50 mA and the timebase was set to 5.33 msec /div.

Note, that the negative current spikes always occurred, when there was a spark at the commutator.

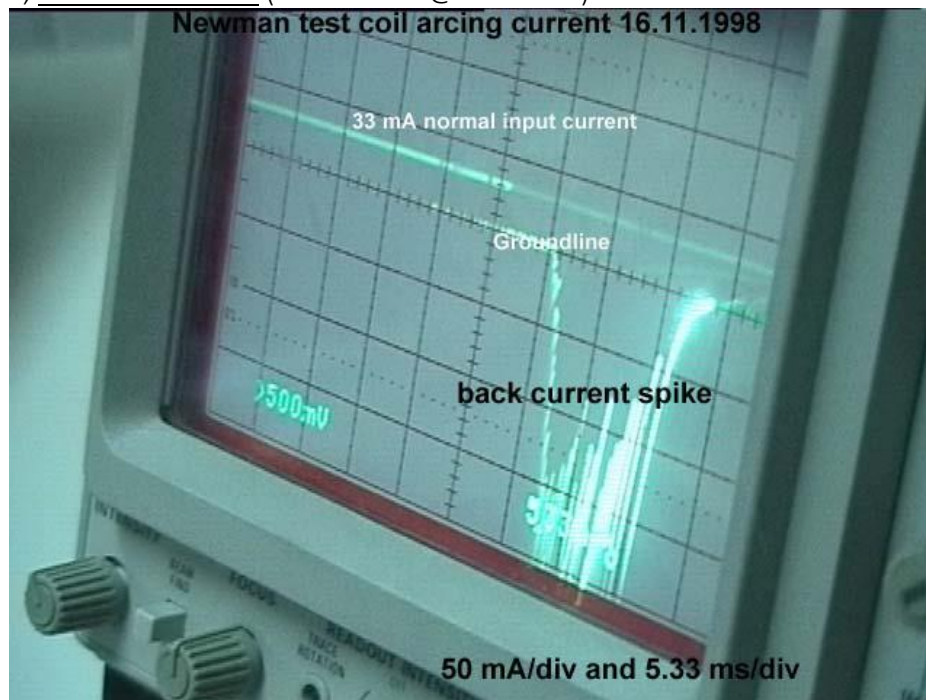
Without a spark, it did not occur !

So I think it is related to this hissing sound spark at the commutator.

Also just powering the coil via a spark gap produced these negative current pulses, so the real Newman effect is NOT the motor, but a big coil running on a "tuned hissing sound" spark gap !

This is related to the work of Correa and Tchernetskij, who have claimed, that there glow discharge can also be overunity.

Regards, Stefan Hartmann (email : harti@harti.com)



- - The back current spike measured by Stefan Hartmann
 - (<http://www.overunity.com/newman2>)
- see also: [The Newman's Energy Machine](#) *Original tests setup and scope pictures*