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BEMF Recoil Recovery Battery Charger Circuit By KoneheadX

Overview

Quote- *This works great and is very simple. This is better than ANYTHING YOU CAN DO to increase power of motor and charge 2nd battery stack, with NO REFLECTION on prime mover - in fact lower's input draw while 2nd batteries charge also if 2nd battery stack has batteries that are very flat it works good too.* – Doug Koneheadx End quote.

Doug's Nephew Samuele

Gary Porter (AKA the "captain" or "skipper" from the EVGRAY yahoo energy group) is credited by Doug (Koneheadx) as the one who first told him about the switched AC leg recovery scheme. Kone came up with the "re gauging" magnets in the old days but states he was not fully aware of the potential to what he was doing. Plus that he could not explain it except for "one polarity of magnets speeds it up other slows it down". Another open source engineer named John Stout also helped by explained how it works. John stated Bedini's motors have a magnet inside coil that do same thing. These engineers are dedicated open source engineers who frequently give FREE technical support on the EVGRAY yahoo energy research groups.

Doug or "Kone" has been involved in researching open source alternative and suppressed energy for many years. Kone has worked with his own original "splatter coils", Roto verter technology", Muller generators and more. Kone's original "splatter" collector coils pickup the 90 degree flux that shoots out sideways every time you get that "dipole" happening (coil against magnet or coil against coil). This also seems to resemble what Gary Porter does with his coils around the vibrator-primary coil. This is simple stuff which can recover wasted energy and works great with no reflection to the primary. Information on Kones Splatter coils has been included below. In summary, this is document shows an "Energy recovery system using a BEMF recoil battery changing system by Doug Konheadx from the EVGRAY forum.

Kone's recovery circuits can not be underestimated; **the energy savings speak for it self.** We live in a world with technology that has not only poor power factor correction but also forces us to use systems which needlessly waste energy. **Kone's focus has been on the recovery side, making the most of what we already have.**

Given the efficiency of these energy recovery circuits this technology is an invaluable power management process which the mainstream faculties must benefit from. **As an**

emission cutting device and power savings device alone, this technology justifies (and needs) law for its mandatory implementation.

The Non profit organization Panacea-BOCAF intends to support open source engineers working with this and other suppressed clean energy technologies. These engineers require grants, resources, faculty recognition and security. All this can be created in Panacea's proposed granted research and development center. For those able to help this effort, please Contact us.

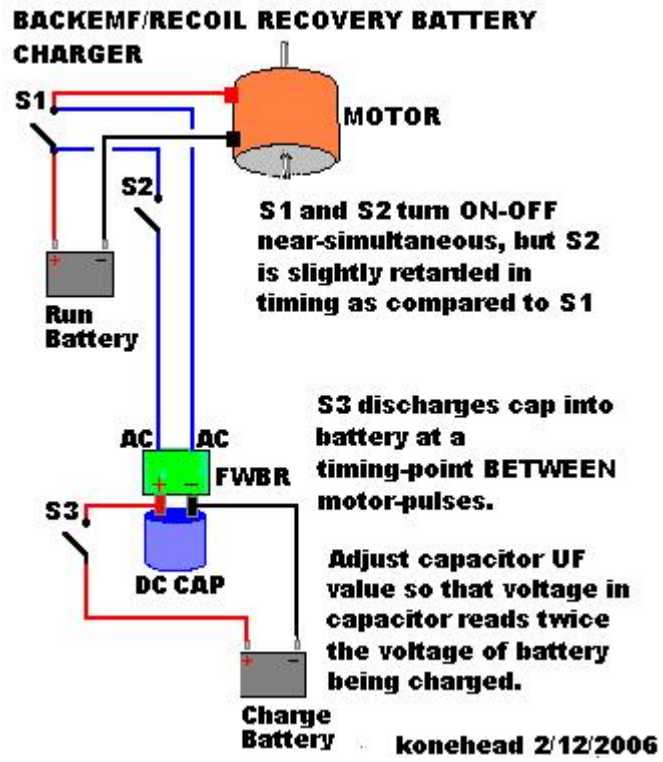
Description

The original Konehead motor is described by Kone to be a low-voltage EVGRAY motor with also magnets in the stator position, which the GRAY motor did not have. The magnets "re gauge" the polarity of the rotor (not stator) coils back to default when the rotor coils pass by and this gives the motor twice the power from free power stroke. A FWBR AC legs over motor coil switching captures the backemf/recoil of the motor coil's collapse, (switch this out in echo-pulse to motor pulse via just one AC leg with this 2nd switch on it) and the DC out of the FWBR goes into caps and or load.

The secondary "Pickup coils" go around and behind the motor coil, sharing its core, and these pulse-out into load always between motor coil firings. Coils and thin cores of iron pickup positioned 90 degrees to the air gap of coil-collision pickup up extra flux also. (Splatter coils) Splatter coils were awesome accroding to Doug - when the rotor-stator coils collide for power, they press/squeeze flux out the sides of the coils at 90 degrees - Doug placed very thin-wound coils with iron cores in them at that position - - these coils are 1500ohms too - so its practically no amps but tons of voltage (past 2000V spikes that blow meters apart) Doug put this to use lighting fluorescent lights without loading the motor with extra amp draw (this is good) and also could make a spark-jump that was about 3mm long too (this is also good)...you could adjust this gap very precise, and get the AC signal to turn DC.

Kones state it has been a learning curve experience and Doug reasons that there is no need to make any big thing of the konehead motor. This has led him to a higher understanding of recovery circuits, Doug describes that any coil-coil motor is that you can resistive LOAD the stator and pulse the rotor (the two disconnected from one another for this) and you have an ATTRACTIVE motor-event, or vice versa, load the rotor and pulse the stator, and it is still attractive event, while when you pulse both rotor and stator for bucking N-N event, you get that repulsive motor-event...so taking OUT power is a neat thing to do in this design repulsive-attractive-repulsive-attractive and every attractive event is good power-out.

Replication



These instructions are By Doug Konehead.

1) Got to radio shack, or any electronics store.

2) Purchase two identical small DC motors - cheap ones with permanent magnet stators, and simple brush-commutator.

3) Couple the shafts together - make the coupling so you can loosen it and adjust and be able to spin the shafts a little bit and then re-tighten.

4) Use 1st motor "as is", but 2nd motor needs to have the wires leading to motor coils disconnected.

5) 2nd motor becomes a "switcher" and not a motor anymore.

6) Place a FWBR AC legs across the 1st motor's switching (not the motor coils).

7) DC side of FWBR connects to 2nd battery. (no caps for this simple experiment)

8) TRICK is 2nd motor (the switcher) works as a switch, and this switcher connects JUST ONE OIF THE AC LEGS of the FWBR. (FWBR stands for full wave bridge rectifier for newbie's)

7) What you want to do is charge the 2nd battery stack, while 1st motor runs off another battery stack. (4 9V batteries would work good if you choose - two in series running motor at 19V. with two in parallel getting charged at 9V total)

8) Adjust the timing of the 2nd switcher-motor by loosening and adjusting the coupling of it to the 1st motor.

9) TRY AND CREATE AN "ECHO" PULSE into the 2nd battery stack as compared to the pulses that are feeding the "drive" motor.

10) 2nd battery will charge up like crazy, motor will increase in speed and power, and amps draw should DROP to first motor too when you get the perfect timing of that 2nd output echo-pulse. This same principle will work in any motor, AC or DC, or inverters too.....TRY IT YOU WILL SEE.

Note- if going to radio shack (a store based in the USA) to get a couple small DC motors, they have only two types - one is an 18,000rpm one, and the other was a 5000rpm one - Kone purchased a couple 5000 ones, but thinks that this will be too fast of a speed to do this experiment accurately. Try to find some DC motors that go at around 900rpm or less so that you can really nail that "echo" output pulse.

Also before beginning, the charge-stack of rechargeable batteries needs to be drained down to around 1/2 discharged, otherwise the batteries will not charge up if they are already fully charged. Then you need to switch stacks at the right time to keep the cycle going.

Try this with 24V input from primary, and 12V batteries getting charged as first simple test. It is awesome. Also id DOES NOT MATTER if you don't get "full-OU" from battery-stack "rocking"...the thing is you save lots of power no matter what and you extend the run-time of the primary, you are going to need a generator on the shaft too, in order to make it without-doubt OU system that runs forever - so do that and make the generator "sine wave peak output" type which doesn't lug the primary down too.

There must be some of batt1 going into batt2 since the FWBR AC legs are right across the switching - that is why I recommend beginner-experiment with no caps at all, and just 24V batteries running it, and 12V batteries getting charged: With this recovery circuit the amps draw of the MOTOR goes down – way down - and the speed of the motor goes up too (way up also) and that 2nd battery stack gets charged up great - especially since it is similar to dumping in pulses from 24V to 12V battery. (You are the one who advised me to have 23V in the charge cap for 12V batteries)I think it is a "mechanical" thing really - basically you fire only -attractive, and where the repulsive pulse "would be" is where you happen to time that AC leg switch to turn on/off...pretty simple...and it also catches collapsing field, and also seems to catch the bakcemf too, which is different animal than recoil spikes....different motors might like those AC legs different places too - try across both switch and coils, and also AC legs across coils-only too...try repulsive-only pulses too, besides attractive-only pulses too - I have notices Adams-type motors like the AC legs across the coils more than their switching.... every motor is different it seems.

Operating instructions

There are two motors - you go in and disconnect the motor coils to one of them, but keep the switching in it as is (brush/commutator) Then you connect both motors at shafts so they spin in synch, and then fire up the untouched-motor as normal, spinning that 2nd motor too...then you put the AC legs of FWBR of the "untouched" motor right across its brush/commutator (switching)...this does go across the motor coils too, more or less as you question - also sometimes it is better to place those FWBR AC legs across the motor-coils only, or other possibility is across both the switching AND the motor coils - just try all three ways out and see which is best for you particular motor...

OK so now you have a FWBR that catches and rectifies the backemf recoil of that motor, and DC out of it goes into cap and/or 2nd battery stack (or back into first motor coils too - whatever you want) then the only purpose of that 2nd motor is for it to work as SWTICHER of just one of the AC legs - this disconnects and connects the "recovery circuit" and you can find that sweet spot where the motor wil double in speed and power as you output to load (very cool experiment)

Actually you just need a 2nd switch triggered by shaft rotation – you don't need a 2nd motor but this is supposed to be simple experiment using 2 motors...look in files section here in EVGRAY under "recovery circuits" by koneheadx and study all the others too if you want like Hectors "transverter" with it diode plug - plus look up how John Bedini does it also look into Ian Coke Richards does it by sending it back into motor coils - look on mintankafulcrum site of is for "butterfly' circuit.Difference between mine and theirs is mine is "switched" (active0 while theirs is more or less "passive" but you could always add switch somewhere in theirs too but I think you will find that FWBR with switch on AC leg switching in echo pulse to motor coil pulse is the best way to go if you do experiments with all this.

You can also try "passive" backemf/recoil recovery where you just collect through diodes and fill caps and dump them into batteries, instead an "active" one where you switch ON-OFF the recovery circuit (such as at AC leg of FWBR) to its load in am echo pulse to the initial motor coil pulse. This does it all - speeds up motor, lowers draw, and at same time slams batteries hard to charge (not just surface charge either)....use a 24V feed to motor and 12V batteries getting charged for best results.

I have been pushing this circuit for years - no one ever tries it. Its in recovery circuits folder in FILES section by koneheadx the "switched AC leg recovery circuit" You can capture more than goes in - when in resonance is one way, or with ultra short pulse width to primary that gets its BEMF/recoil rectified.

Reed switches

Magentic reed switches can work for low power stuff and you can send power straight through them - at 24v/200ma amps op-range they will be reliable, and with BEMF /recovery circuit hooked up and working you can pump about 2A through them but if the BEMF /recovery circuit is not hooked up for just second the switches will fry. Also regular carbon-brush/copper commutator works well too for switching motor coils like they have in most any small DC motor and if you have two motors, you can gut one out of its motor coils and use this second one for a BEMF recoil switcher into caps or load with motor connected at shaft or with belt. The switch at the 2nd motor would go on one of the AC legs of a FWBR capturing the BEMF /recoil.

Tips

When doing those switched AC leg of FWBR BEMF /recoil recovery tests in your DC pulse motor. Also it could be in AC mode too - just double it up and have it fire both ways. For Roto-Vertor work, do this all hacked inside an inverter. Make sure you have an ammeter on the input of your motor so you will also see the draw go DOWN when you charge that 2nd battery stack. It works really well on really discharged batteries too.

It is possible that are getting really good results as you know now, but having the draw drop way down when you motor speeds way up is what you want to see. Keep that pulse width narrow for sure - make the pulse width into the charge-battery be the same pulse width as what goes into the motor coils.

Search for that perfect "echo" timing too - you will need an ammeter at the input to find it. You could have good battery charging of the 2nd stack, and really good extra shaft power and RPMS too when you connect that switching at the AC leg of the FWBR, but you might be getting lots of extra input amps too, so you are not "gaining" much really - so that is why you want to search for that timing sweet spot of the AC leg switch of the FWBR that makes your input drop.

You will find even better results with alternating polarity rotors too. Remember to fire the motor coils only on the N magnets or only on the S magnets if you have a rotor like that.

Also what you can do is have two reed switches (or hall effects) simultaneously be triggered by that rotor of 6 small magnets. Then you can drift the timing of one to the other to make a simple pulse-width adjustment too to the "switched AC leg of FWBR over motor coil switching.

Also besides the AC legs of that FWBR over the motor coils switching itself, try also those AC legs across just the motor coils themselves, and also both the motor coils and the switching (3 ways to do it) you might find one is better than others. Also to make your first experiment really simple, run your motor on 24V (two 12V batteries in series) and dump your DC out from that FWBR directly into two other 12V batteries in parallel, for a 24V into 12V sort of thing.

Also if it doesn't work like "guaranteed" then fire your motor coils only repulsive or only attractive, your (3 pulses per revolution then in your particular "reversing polarity" DC motor described) and then do the same thing with the FWBR (echo pulse out via switched AC leg of FWBR) This might make an even more dramatic increase in the motors power, also lowering draw too while charging that 2nd battery stack.

One way I found to increase performance maybe around X4 is to put magnets that will PULL against the just-energized ROTOR COILS that has just turned OFF -these positioned in between the existing stator coils. So no magnets are in the rotor then, just in between the STATOR coils.

If you think about it, the rotor coil's soft iron cores, and the stator coil's cores, once being energized for instance both NORTH for a power-"stroke" will remain NORTH upon the APPROACH to the next firing. THE polarity is not going to "reset/regauage" on its own before the next firing! This will take a little time to happen...so if the rotor cores are both N, then you will have a N-N CLASH and slow-down of rotor on APPROACH to next power-stroke.

BUT, when you place magnets in-between stator coils in the STATOR position, they will RESET/REGAUAGE that ROTOR CORE. and if the coils are made to fire N-N then you have the magnets facing the rotor coils/cores so that they will POLARIZE/RESET/REGAUGE that rotor core to be SOUTH!

Now guess what - upon approach the stator and rotor cores and coils will PULL THEMSELVES TO ONE ANTOHTER! (FREE POWER STORKE) then you energize both coils again for another "bucking" N-N power stroke as usual.

What's nice about this "regauging magnet" technique to increase power in these type of bucking-coil motors is that the coils are actually OFF when the magnets to their work to the rotor cores, so you don't have to worry about the magnets losing their magnetism and degaussing as you would if you hit the magnets with a huge HV power pulse directly against them such as if the rotor was permanent magnets.

Also this "regauging the rotor cores" technique with stator-magnets increases rpms X3 or X4 or so looking with no load on shaft and lowers draw maybe 50% since the rotor spins much freely. That is big increae in shaft power and lower draw at same time.

Its best to have the "regauaging" stator magnets adjustable in their "downstream" position in the rotation direction, since at high rpms you want them very close to the coil just energized, and at low rpms, you want them a bit further away but you don't have to make them adjustable in position.

Also one other improvement is to time PICKUP WINDS wound around the HV motor coils to pulse into a heavy load at the ATTRACTIVE point in rotoration between the stator and

rotor coils - have the PICKUP WINDS wind only wrapped around the stator coils, so now when you load those winds with heavy load, they essentially short out and cause and attracive-PULL to the rotor and stator coils since you cannot get a bucking N-N power stroke unless both coils are same strength of flux - otherwise it is an attractive pull!!

Also one more thing is to do what Ismael does in his motors, SHORT TOGEHTE THE COIL LEADS QUICKLY WITH MORE SWTICHING (I assume the pickup wind coils would be easier to short) 5 times "per peak" tocreate even more power from them. One last thing - in the backemf/recoil recovery circuit catching the collapsing fields of the coils at turn-OFF, use recovery circuit of FWBR AC legs connected directly across the switching, and DC into load or caps. DELAY the timing of this "connection" of the recovery circuit to the load just a little bit, have it work like an ECHO...via simply a switch on just one AC leg of the FWBR.

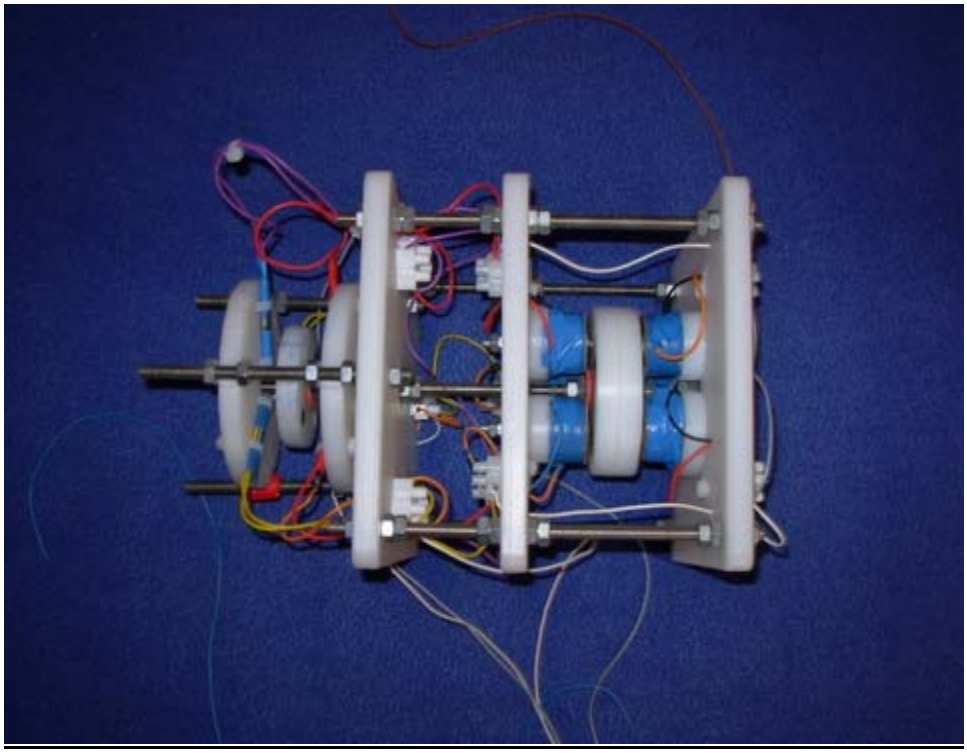
The Roto Verter side

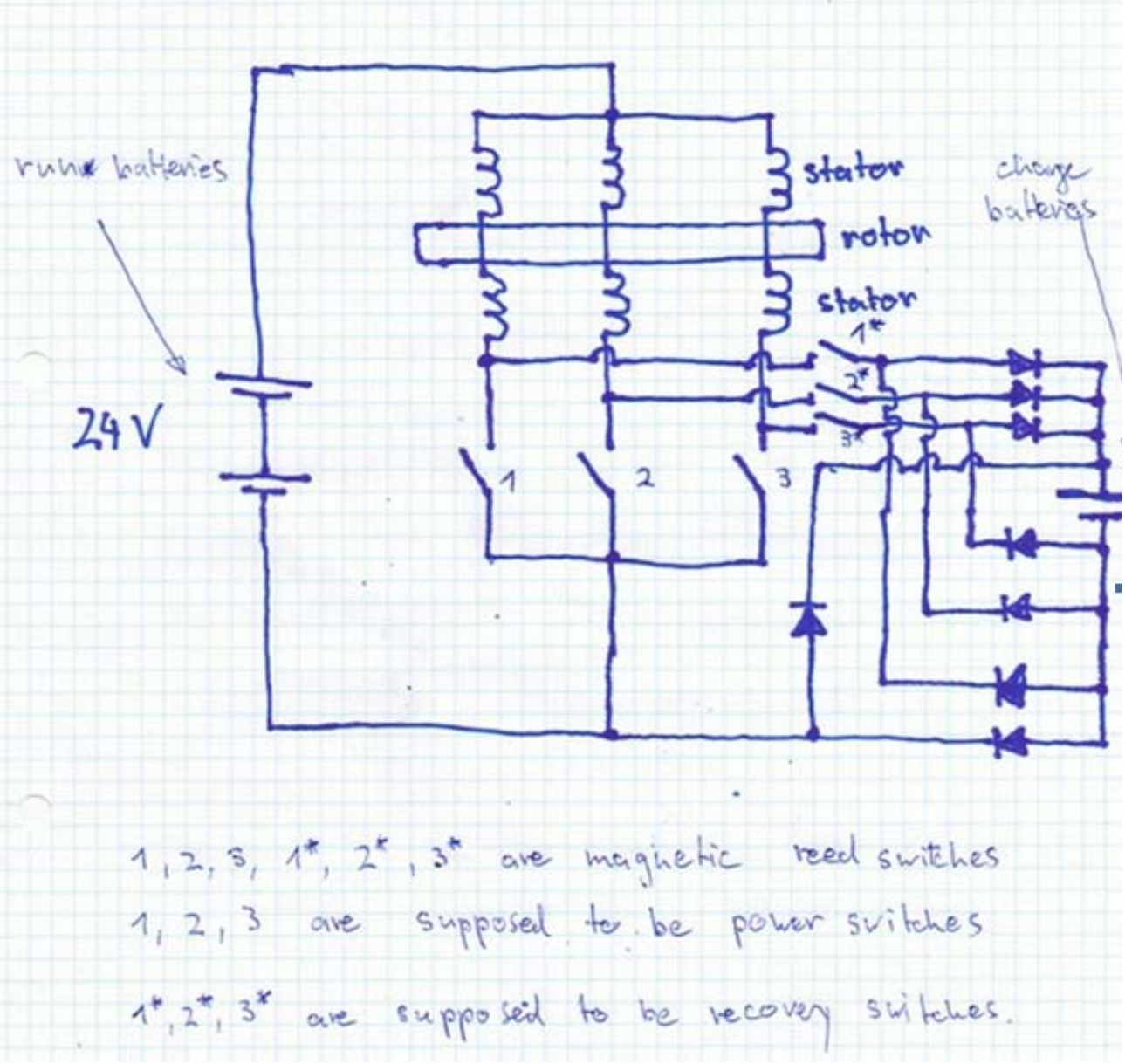
For RV(**Roto verter**) battery charging, what you do is drape a transformer across the run-cap phase (lines 2 and 3) and have it knock the volts down to 15V or so (the run cap phase will probably be around 88VAC) then rectify the LV side with FWBR, and then switch it on-off in synch with sine wave peaks with neon bulb trigger circuit, or it can be done with transformer and zener diodes and switches too - you just want to have the peaks-only appear to the trigger in whatever you do. Now when you charge 2nd battery stacks, its "no reflection" to RV/AC motor input - again, if nothing else and it doesn't create an OU system just by this alone, it WILL extend the run time of the system, so IT DOES WORK.

Replication

With this I was able to replicate all three claims made by Kone about his AC-leg switching recovery circuit – Matthias

Replication by Matthias





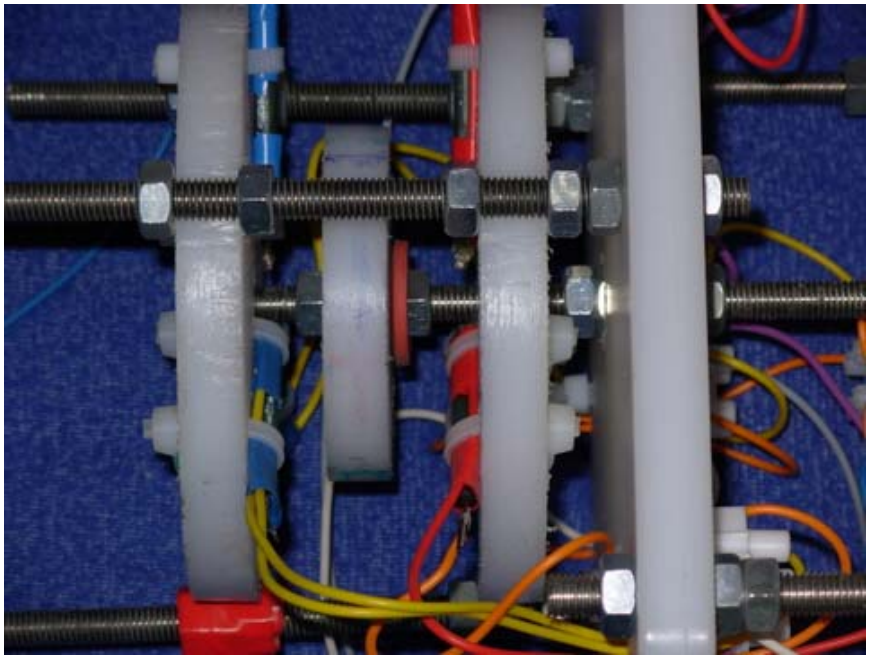
Updated -I've just uploaded some pictures concerning my new motor. It's quite similar to my last motor. I use even the same coils for it. Like my last one, it has three stator positions with two coils (series connected) per position facing each other, with the rotor running between them. And like my last one, it has a four magnet N-S rotor using grade 42 neos with 2 cm diameter. But in my new motor I implemented two new features that make it a good setup for demonstrating Kones FWBR AC-leg switching idea.

First, I made the switching in a way that allows for pulse width and timing adjustments both for power and recovery switches while the motor is running. This makes finding the proper setting of the motor very easy. Second, I built for the first time an N-S rotor where two neighboring magnets are exactly one magnet diameter apart of each other. My impression is that rotors built with this ratio are amazing. My last four magnet rotor had a

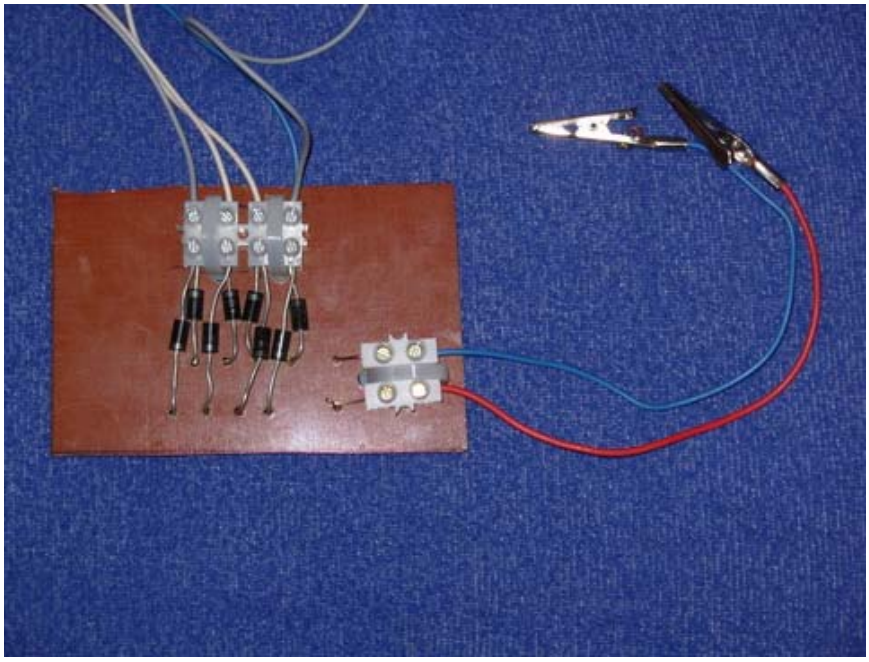
larger magnet to magnet distance and therefore a larger radius. I would expect a larger rotor to have less rpm but more torque than a smaller one with the same number of magnets.

But not so here. The smaller one had more rpm and more torque. I just made my first run with an analogue amp meter at motor input. I started with power switches and recovery switches exactly in sync (no recovery this way). The draw was 980 mA in this configuration, the torque so weak I could slow down the motor easy by grabbing the axle. I started to play with the timing of the recovery switches. Within seconds I found a timing where the pitch of the motor went up about half an octave (indicating rpm going up), voltage on my 4.8 Ah NiCd battery stack started to rise quickly, torque went up dramatically (tested by slowing down by hand) and draw went down to 580 mA (with my last motor, I couldn't see the draw going down even after days of trying). Retried this many times, always with same results.

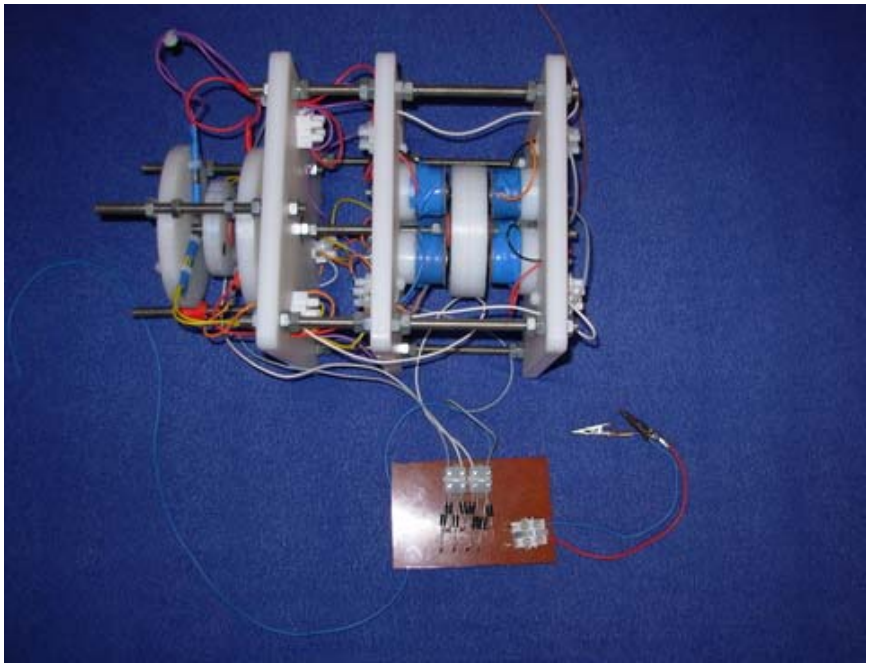
Now I am in the mood for serious measurements (rpm and serious charge testing easy in my estimate, mechanical output measurement more of a challenge to me). This will take some time, but I'll do it and report.



Close up



FWBR



Comments form Kone

Just as "advertised" draw goes way down (almost 50% here!) while 2nd battery stack charges way up at same time. Anyone will tell you draw should go up when charging battery stack!(but not true) Also important "impossible" occurrence is SPEED AND POWER of motor GO WAY UP...yeah!

This can go INSIDE INVERTORS too if you have the skills....(world's first super-invertors) Ismael is using this sort of circuit in his HV car motor too! (at least he was maybe he found something even better)

To test shaft power:

- make lightweight arm that is center-of-shaft to tip of arm exactly one foot in length. MAke a "collar" of TEFLON (it won't melt and is very slippery too) on one end of this one-foot arm.

Have a bolt and nut through the collar, so that you can fine-adjust TENSION of the collar around the shaft of your motor. Place other end of arm right on top of gram-scale.

See what the arm weighs resing on scale.

Start up motor, tighten teflon collar around a bit so that the motor slow some in rpms, and you have some pressure on the scale - try different tensions of collar and resulting different pressures reading on scale - find two or three "sweet spots" is what I like to do (some pressure, moderate pressure, and lots of pressure)

Note SIMULTANEOUS exact rpms to motor, weight of pressure on scale, and amps-draw to motor - get all three measurements at same time...put it all into this formula;

"Pounds per Foot" pressure X RPMS / 5250 = HORSEPOWER x 746 = watts pounds per foot is the weigh on your scale form that one-foot arm...rpms you can check accurate with scope if you want...remember to subtract the weight of the arm on the scale while the motor is not running, from what you get in your tests.

Nice work! You construction resembles my DC pusle motor stuff for sure - I see an influence! that is nice rotor you built...those 6 magnetic reed switches (I assume they are).... - If you have those mounted onto a thin disc that rotates, and you can lock it in place, then you can adjust timing while the motor is running instead of having to stop it ant re-adjust the tining disc you have on the shaft in order to change the timing as is now.

Also when you go with 3 coils on each side for the 2vs3 set up, try using just two of those coils to receive power to spin the rotor, (one will push and one will pull) and then use the third "unpowered" coil to be like an "inboard" generator coil - fill a cap with it, and blast the cap into a load or batteries to charge at a timing in rotation that doesn't affect the draw to the motor – probably sometime between motor coil pulses during OFF TIME it will be at - there might be a pinpoint in rotation timing where unloading that cap might improve speed of motor and lower draw too.

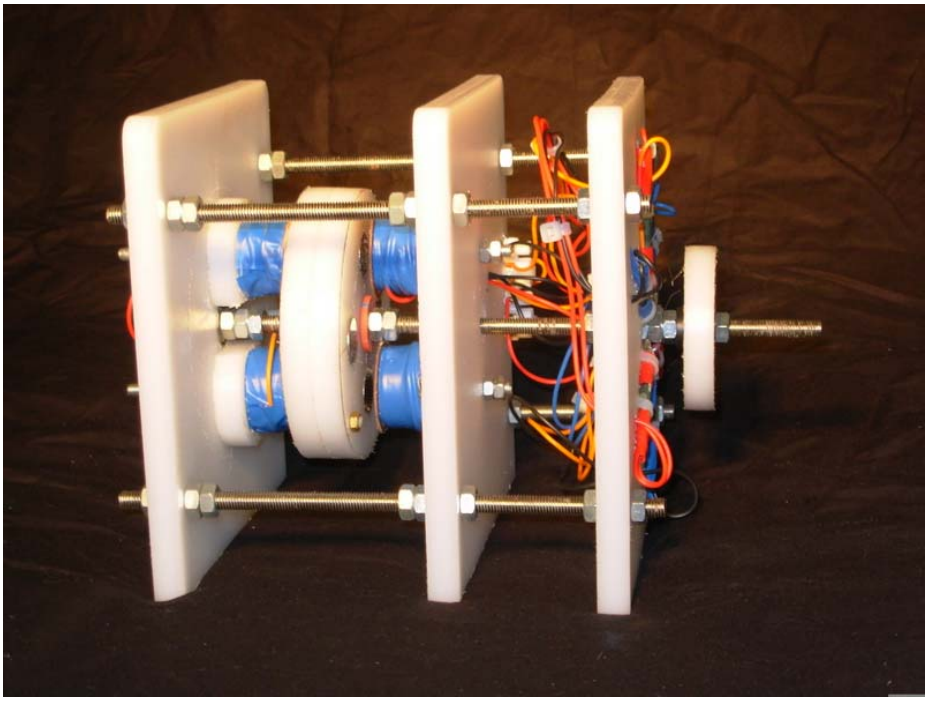
Using this third coil as a gen-coil is similar to what people do with the AC rotovertor; tapping out that "run cap phase" which doesnt actually receive power either. Only 2 of three phases receive power in the rotovertor circuit the third is the "runcap/rotary transformer" phase.

Also it is possible you might be able to run that motor on AC signal if you geometry is compatible with AC - you might need all 3 coils to pull-push it around for this probably won't work since you magnets are not spaced right for it but it might.

If you had 3 magnets in the rotor, and the diameter of the magnets is the same distance as the spacing between them, measured edge to edge, then you could run that motor on AC no problem - it would be three complete sine waves per revolution (pullpushpullpushpullpush) and you can figure out how fast it will spin in rpms by whatever the hz/frequency of the AC signal is...60hz is a complete AC sine wave of 16.6 milliseconds to help you out with the math.

SO you could bring it up to the exact speed for AC operation needed with your DC pulsing, perhaps varying voltage input or the timing to adjust speed, and once you get to the AC-cruise speed, then pull that DC circuit off and insert AC signal quick and it should work like that. Maybe you can use start caps like they do in rotovertor that would be nice if possible (AC caps across that third "un-connected" phase of high UF value to get it started like in rotovertor start-up)look at my youtube video - part 2 near end to see how start caps work (type in doug konzen)

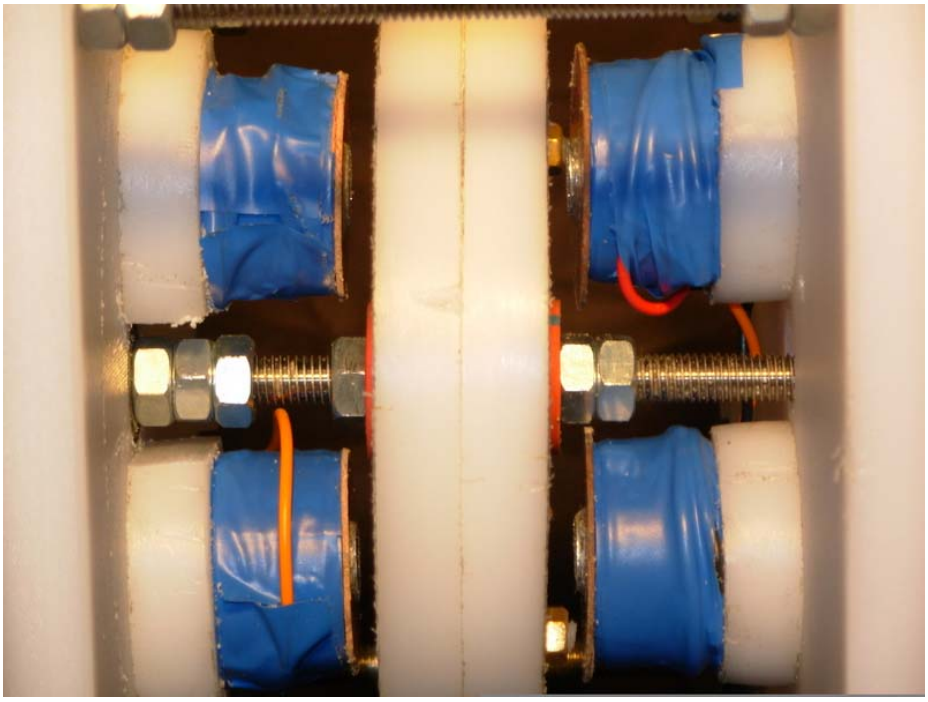
Older construction

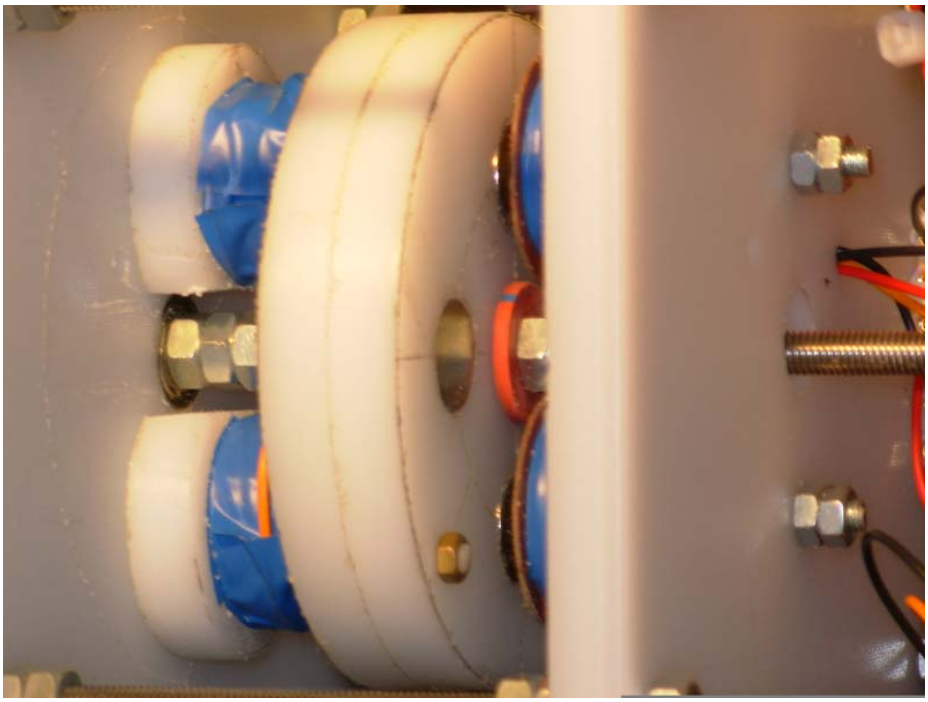


Good news. I improved the quality of my switching and it seems to make a big difference. So far I used just one timing disk to trigger my reed switches, and I was changing the timing of the AC-leg switching by changing the position of its reed switch. With this setup I had trouble with inconsistent behavior of my motor and was not able to see current draw going down when I switched on the recovery on. Now I use two timing disks, one for coils, and the other for recovery. For a first test of this I adjusted the two disks in a way that should roughly work no fine adjustment at all, just naked eye estimate. I started the motor with the recovery circuit off.

After current draw and rpm stabilized I switched the recovery on. Rpm went up immediately about 100%, charging battery voltage went up and current draw went down immediately exactly by 25%. When I switch off the recovery, everything returns to initial configuration, without intermediate current drop. So I think Kone was right with his explanation this could be due to switching problems. I am happy I could witness a beyond any doubt current drop accompanied by battery charging and increased rpm in my all but perfect pulsemotor. With this I was able to replicate all three claims made by Kone about his AC-leg switching recovery circuit.

The "switching plate" is already laid out for the 3X2 (three stator positions, two coils per position) configuration I have operational since yesterday (no BEMF/recoil-extraction so far). I will report any results as soon they are there.





Faculty information

This experiment describes the functions based on the circuit drawing of an intended AC leg recovery circuit. This works great and is very simple. This is better than ANYTHING YOU CAN DO to increase power of motor and charge 2nd battery stack, with NO REFLECTION on prime mover - in fact lower's input draw while 2nd batteries charge also

if 2nd battery stack has batteries that are very flat it works good too. NOTE: the way you can get a perfect echo of sound in certain conditions, is also how you can achieve a perfect echo of ELECTRICAL POWER, in certain conditions. GET IT!!? This is a "pulsed" DC motor (actually they are all pulsed really)...there is off-time between each pulses to the motor coils if you look at any DC motor with a scope.

Once you disconnect the motor coils, your "switch" (brush/commutator) will still work, it just has nothing to switch now, so use those leads from the switch to connect that AC leg of the FWBR (SIMPLE) - this turns on-off the "recovery circuit" (which is basically a FWBR AC legs across the motor switching, and DC side of FWBR into caps and/or load. Then you just stagger the timing a bit retarded as compared to the motor switching, and you get the at extra power, less draw, and also filling caps or charging batteries too.

That echo pulse is CREATED by the TIMING of this 2nd switch on the AC leg of the FWBR over the motor switching...the collapsing field is gathered by the diodes in the FWBR and put into cap or into battery to charge. Single diode way of recovering back emf/recoil works, but there are problems with it affecting the draw and creating lug to the prime mover, and also if your batteries being charged are very low and flat it really drags down the prime mover. Then With the "switched AC leg" recovery you don't have these problems, and in fact the speed and power of the motor increases.

What you would want to do is do this "switched AC leg of FWBR over switching" trick at the INVERTOR side of it...this would be a way of filling caps to charge batteries from the back emf/recoil of the switching inside the inverter, as it fires the coils of the RV prime mover one polarity then the other (AC)...you would just need to double-up the whole thing so it works in AC instead of just DC is all...Also what Brian Prather did with the belt-driven RV alternator on his RV setup might be also very similar to this - since it staggers just a bit in time the power coming from the alternator side of it.

The MOTOR (prime mover) has the AC legs of a FWBR right across its switching. - Which would be across the brushes in it. Then, you "turn on-off" that FWBR as its DC legs charge that 2nd battery stack via another switch that connects and disconnects just one of the AC legs of that FWBR, and this switch is actually that gutted-out 2nd motor, which when connected to shaft of 1st motor, makes it so that it is perfectly in synch with that first motor, and since they are identical motors, the commutators and timing will be exactly the same, so all you have to do is find that slightly staggered timing (the echo) where to set the 2nd motor to switch the output pulse into the charge-battery stack. It is very simple and works great - no reflection to prime mover in extra draw as you slam that charge-stack with DC from the FWBR....in fact in the outboard boat motor that I tested this with, it double the power and lowered the draw - when you nail that precise delay-timing.

BEMF

BEMF Is HV HF and can be either + or - checked with an ion detector. [Similar to a Geiger counter in principle].

Kones Splatter coils

"Splatter" collector coils pickup the 90 degree flux that shoots out sideways every time you get that "dipole" happening (coil against magnet or coil against coil) also seems to resemble what Gary Porter does with his coils around the vibrator-primary coil too. This is simple stuff to recover wasted energy works great with no reflection to primary. Anyone with a small Bedini motor or similar machine just try some regular coils up close pointed 90 degrees to air gap and see what you get in voltage in those for quick test of the potential of this and then think of a whole lot of coils all around and add it up.

Working with "splatter coils" on my pulse motors (very similar to what GaryPorter is doing with those coils around his primary coils in his runs-forever vibrator circuit) these were very thin wires wound in coils with thin iron cores in them -1500 ohms per coil - I got these coils from surplus place and so anyways I positioned clusters of them facing that air gap at 90 degrees in a DC pulse motor (coils against coils in these ones but coils against magnets also works) Anyways with cluster of 5 coils on each side of motor coil, I could get 2000V spikes, and also got a nice spark-arc too, with 24V feed to motor it was 1/4 in long in length...this stuff would rip right through rubber gloves- you had to wear 2 pair to prevent shocks...What i found is that you could make the spark-ard adjustable in distance, and a certain distance, (not too much and not too little) it would change the AC-looking signal they make looking with scope into all-DC just by fine-adjustment of that gap. Just wondering if what you are doing with those stainless steel plates also makes the "raw AC" turn into DC too.

Splatter coils are really good since it is lots extra power-out no one thinks to do (thin cores pointed at coil-coil/magnet air gap at 90 degrees) The way I wound coils then isn't how I do it now - now I just wind back and forth, no directional-way to it, and its 8 or more very thin wires in parallel (LITZ) these are way better..Also in the old days I didn't know about neodymium magnets (learned about them later from ill Muller) and with steel bolt cores, that konehead motor isn't going to handle the latch of Neos.

Splatter coils were awesome. When the rotor-stator coils collide for power, they press/squeeze flux out the sides of the coils at 90 degrees - I place very thin-wound coils with iron cores in them at that position - - these coils are 1500ohms too - so its practically no amps but tons of voltage....(past 2000V spikes that blow meters apart)

I put this to use lighting fluorescent lights without loading the motor with extra amp draw (this is good) and also could make a spark- jump that was about 3mm long too (this is also good)...you could adjust this gap very precise, and get the AC signal to turn DC.

Splatter coils do not share same core, and usually will have thin iron cores inside of them, and these splatter coil/cores point directly at the air-gap between the magnet-coil (or coil-coil) collision in a motor...usually splatter coil/cores will point in at 90 degrees or 45 degrees, or both (two sets of splatter coils can be rimmmed around that air gap)

Also with splatter coils, the rotor-spin of the rotor will be affected by that iron "in the way" so usually in a motor, you want to mount splatter coils just on the "sides" of it...in a piston-type pulse motor, like what Peter made (shown in photos a few posts back) it seems that you could rim the whole air-gap area easily in a circle without slowing anything.

Ian is the one who told me that as long as you don't go past the "henries-value" of your coil in saturation-time (henries measured in seconds) you can recover more energy OUT than what goes IN to your coil...power out as measured by joules released from the recovery-cap.

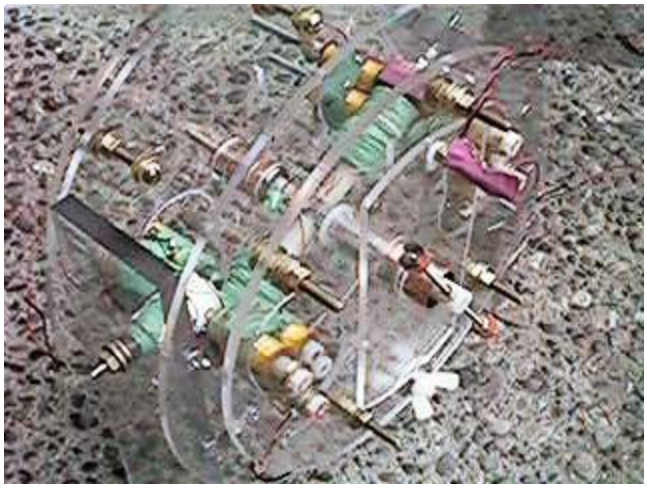
So keep the pulse-width as small as possible, don't let that coil ever get hot or warm with however you are firing it, and then use a diode "recovery circuit" to gather and steer the BEMF and recoil that is released "backwards" every time the coil turns off into a DC capacitor...then pulse that capacitor into a load, like a battery that needs charging, or 2nd motor coils or motor.

This documents device (BEMF Recoil battery charger) is the evolution of this knowledge. You put a FWBR AC legs over you motor coil switching, the DC out of the FWBR goes into cap - then you switch on-off one of the AC legs of the FWBR so that you can time the completion of the circuit to happen just a bit after the motor coil fires - this will improve the motor's power, lessen draw, and charge 2nd battery stacks. If nothing else for starters, use a single diode, and fill DC cap with your BEMF /recoil...see what volts you get in that cap...always monitor your input amps to your motor coil...try to get it to go down when you fill cap.

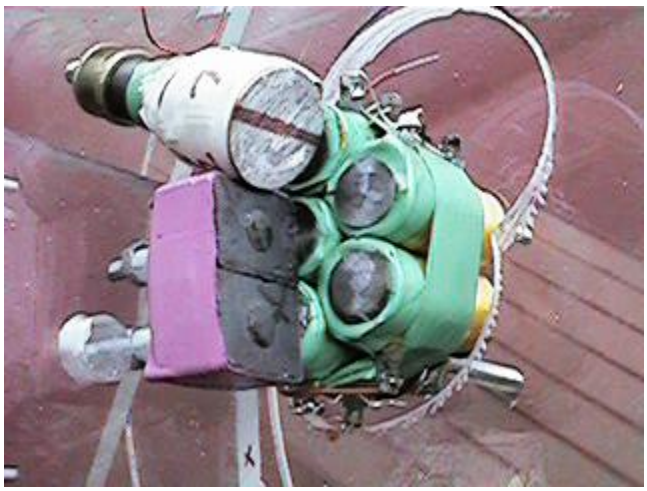
Original HV splatter coil explanation

When the motor-coils of this particular design of a "coil-against-coil" DC pulse motor collide N-N there is allot of stray-flux energy emitting in a fan-like pancake pattern at 90degrees to the air gap of the colliding coils. This can be collected, instead of wasted, using clusters of steel cores with coils of magnetic wire around them. These "splatter" coils are then connected in series or parallel to be used for lighting fluorescents for instance, or to fill caps or recharge batteries. Here is a clear plastic plate with a pair of splatter-coil clusters mounted onto it:

Below is a view of a DC pulse motor with two rotating rotor coils mounted at the ends of a rotating arm; and these coils have are pulsed and collide against two outer stationary stator coils for rotational power...there are also permanent magnets mounted right next to the stationary coils that give the motor much more power.(see "permanent magnet flux bridges" link) This motor has two "saplatter plates" mounted onto it on each side of the rotor and stator coils as shown - and these plates pickup the normally-wasted flux that emits out the sides during the rotor-stator coil flux-collision:

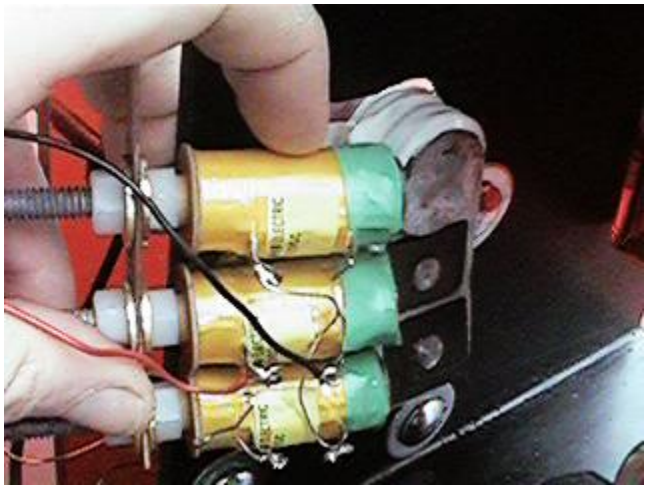


Here is a close up showing the positioning of permanent magnets, a stationary outer motor coil and its core, and the splatter clusters at the sides on this DC pulse motor. The rotor coil would rotate downwards in this photo:

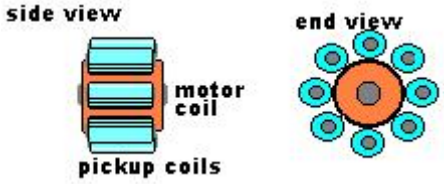


Below is a close-up of this motor that has its stationary motor coils and permanent magnets totally surrounded by clusters of splatter coils:

Here is a cluster of three splatter-coils wired in series being held in position by hand which collects the most energy as the motor runs:



Here is an optional positioning of splatter coils that can done in combination with the splatter coil clusters as shown in the above photos to recover even more energy:



Variant of splatter coils by Phil

Winding 2 coils on the one core is the easiest way of having the true center of the wire resistance exactly in the center of the core. The easiest ways too do this is:

Start your winds at one end of the core, and then wind back and forth to the middle of the core until your preferred diameter is obtained. It's easier with a thin plastic washer with a slit for your next winding being glued half way along the core. Then continue winding with the same wire (No joins) by running the finished wire of the first coil down the washer slit and continue to wind in the "same" direction as your first coil on the other side of your core.

Make sure it has the same amount of turns and layers as the first coil. Now you have a kick ass coil that is tuned and balanced on your core. As I mentioned before if you want to increase the power of this coil much higher again, then run an outer cast sleeve or soft steel wire over the length of the coil where all 4 poles are now operating properly.

This prevents all the losses and also increases the field strength where splatter pickup coils are now not needed, as we have no splatter wastage. The coil in this configuration is extremely powerful and efficient where expect to have near twice the output. The same coil is also ideal in a generator configuration.

Splatter coils are something I have also used for many years. But I did find they were not required if you build your own motor with a different coil configuration. This is where the outer of each coil has a soft metal sleeve or you wind a layer of soft steel wire over the copper winding. If for EG: you energize a coil and the center core becomes north, the outer sleeve on the same end will become a south. Now if this is a drive coil there are many combinations where you can use the outer sleeve too interact with the correct magnet positions on the rotor in harmony with the center core. This can be calculated easily by winding or fixing a soft steel or iron piece at the end of the sleeve outer, being offset to one side or by just using part of the outer sleeve.

The reason there is splatter in a coil is because they are only working with 2 of the magnetic pole potentials, being on each end from the center core and are not using the other 2 potentials on the outer of the coil. There are always 4 magnetic pole dimensions with a coil. -Phil

From -kone

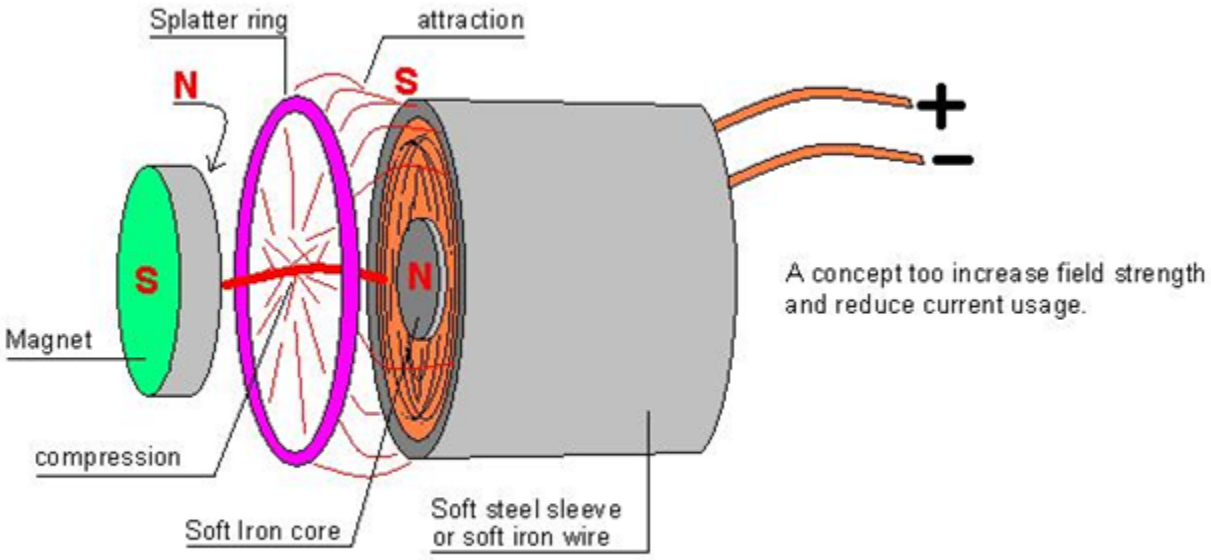
This seems different concept to me, and for sure is more additional trickeries you can do to a coil to recover more lost external flux -Splatter coils that I worked with get their most power pointed 90 degrees right at the air gap when two facing motor-coils against one another ignite N-N or a coil and a magnet facing one another ignite N-N....it shoots out the sides of the facing coil "tips" at 90-degrees after being compressed....maybe it's all the same and your soft metal sleeves makes even more power but can't say...I think the two ways can both happen at same time is what I am thinking...I was getting spikes of around 2000V form very thin-wire coils with iron cores....add up 20 or so coils ringing that motor-coil air gap and you have lots of voltage but not many amps is what I was doing and fluorescents were something that you could power easy...didn't affect the input draw at all.

-From Phil

Yes this is where the outer sleeve comes into play, as the splatter field with a round magnet and coil being N,N looks like the ring around Saturn. This generated field is naturally and perfectly aligned with the outer sleeve end, and being unlike poles this attraction gives the center core a new boost of energy as it all interacts with the winding. I know there are many combinations and variations of what the coils or magnets are being used for, but in a direct opposing magnetic field the outer sleeved coil is the most perfect aligned collection zone.

From Kone Here is a drawing showing what I which should make sense to everyone if you also look at the Phil did. Phil's irons sleeve I think against very strong Neos will cause too much drag, so it should probably be made of low hysteresis material, in fact even better replace that iron sleeve with WINDINGS (I call them pickup winds) and then load them between motor-coil firings.

Now you are producing lots of "secondary" power while running a motor...loading only between motor firings is the easy ticket to OU.As for Phils splatter ring, doing it like my drawing will give both some more power in the coil-magnet collision, and also give you lots and lots of power to feed into lights or back into motor or wherever you want - they don't lug under load if you split it as shown.



Related Concepts to Apply To Other Pulse Motors

Instead of "passive" BEMF /recoil recovery where you just collect through diodes and fill caps and dump them into batteries, instead try an "active" one where you switch ON-OFF the recovery circuit (such as at AC leg of FWBR) to its load in am echo pulse to the initial motor coil pulse. This does it all - speeds up motor, lowers draw, and at same time slams batteries hard to charge (not just surface charge either)....use a 24V feed to motor and 12V batteries getting charged for best results.

I have been pushing this circuit for years - no one ever tries it. You can capture more than goes in - when in resonance is one way, or with ultra short pulse width to primary that gets its BEMF /recoil rectified.

Look at "Bedini self runner" on you tube - looks to me what I have been talking about with a SWITCHED AC leg of FWBR recovery circuit" he has going - the thing attached to the belt doesn't seem to be a generator, rather a commutator used as a switcher. Most people never use golf cart batteries in their systems either.

Robert Calloway speaking about Radiant energy

"Electron flow by itself won't get the job done. You yourself have talked about splatter coils. They contribute some but not enough. The splatter is a small variant of radiant electricity. The only problem is splatter does not care for a normal coil for receiving the current. Most is never received thus wasted. There is way more there than you may think. Tesla knew this. That is why he patented a special coil. (nobody really knew why) It is a bifilar series connected coil. It will receive this splatter or radiant electricity completely. These bifilar coils have confused everyone that has experimented with them. They are useless for receiving magnetic flux, you can pump electrons through them with ease but for what? They are just a heater coil. Useless correct? Wrong....:) They will receive and collect radiant electricity.

To create radiant electricity, you will have to modify your pulse motor just a bit. Think of gas running through your wires instead of electron flow while doing this. Tesla always referred to radiant electricity as a fluid nature. What you want is to pulse your coils very hard and fast. Double your supply voltage to your coils at least. You want to push them to their limit with voltage and amps without destroying the coils. I start with normal voltage to get the motor going, then switch to a higher voltage to prevent coil and switch burn out. Don't worry..your EMF collection wiring will still collect and run the BEMF back to your batteries. (You may have to go to larger diodes) This will drive your motor to a very high rpm, which is what you want. Make sure your pulse switches can handle the extra speed and amps. They will float if you don't. The higher the speed, the lower the amps draw.

But something new will begin to happen. You will start to feel a stinging on your hands and face. Wear your safety glasses. Nothing can shield this effect. It goes through anything. It won't hurt you but it is irritating. You are getting close. Get your speed up more until this quits happening. Stop the motor and build a bifilar coil wired (coreless) in series.(I can send you a diagram if you wish) Or several of them. Place these coils around the motor. Not around the pulse coils!!! Just start out putting them a foot or so around the motor and measure voltage. (Set your meter on AC) Bifilar coils don't want or like magnetic flux, they are a receiver coil of the radiant electricity.

Now when you have done that, place one clear across the room and measure voltage. Surprise!!!!!!! You will have to play with your setup awhile to get it right. The stinging sensation will let you know that you are headed in the right direction. You have sampled a very small fraction of radiant electricity in your motors and may never have even known it. This procedure will allow the full effects to show itself. You can pass this on to fellow experimenters if you wish. Let me know if you try this or need help. Regards, Robert.

Technical support group

http://groups.yahoo.com/group/EVGRAY/

Videos

OverUnity Pulse Motor - Doug Konzen

Links

http://www.geocities.com/koneheadx/

Site explaining BEMF, fundamentals pertaining to Hall IC's, Transistors and the reactive characteristics of Induction coils in pulsed motor system

http://www.totallyamped.net/adams/index.html#top

Credits

The open source energy community

If you are able to contribute to this document in ANY way, IE- replication details, faculty info and or additional data please contact the non profit organization.

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