

The HULL EFFECT and The HULL SWITCH

its application to the internal combustion engine.

progressive construction and method document.

known dangers are written in red, in the relevant category.

These are ONLY THE FEW, we are aware of at this time. There could be more, so be careful.

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The HULL EFFECT and HULL SWITCH were discovered and designed respectively by Robert Hull, with aid of Nathan (not the author). Robert tells us the discovery was an accident, as was the switch. This is not to say Robert and Nathans extensive knowledge of old school mechanics, free energy principles and years of research were not significant, to the now much discussed HULL SWITCH.

The HULL EFFECT (term coined by Robert) is simple on the surface, although we are yet to truly understand it fully. It is basically a means of charging the a carburated internal combustion engine (ENGINE), with the alternator signal, In such a way as to utilize the petrol vapour from the tank, combined with the incoming air, to run the engine using next to no fuel. But it doesn't end there.

Its also been noted that: The engine runs cool, It has much more power, it envelops the driver with a sense of heightened awareness, Reduces inertia and the list goes on. As you may have noted, all these things are attributes of the Joecell as well.

Some definitions

charge or charged: when in italics, will refer to the state in which the engine or its components are put into an excited state. Making it possible to do the things attributed to the Hull Effect.

Frequencies: when in italics, will refer to the theoretical magic frequencies that are produced by a combination of the alternator and the hull switch.

excited vapours: when in italics, will refer to the state in where the petrol becomes an electrically charged vapour, that will interact with the noble gasses of the incoming air , to produce the anomalous effect

THE SWITCH

The HULL SWITCH is just a simple 120volt 60hz combination 3speed fan controller, light dimmer switch. This switches internals are not known at this stage. Except we do know the light dimmer is controlled by triac and diac method of semiconductor control. The exact switch used is available in the U.S. from Home Depot (**Lutron skylark S2-LFSQH-WH**).

Smokey, in Australia, is close with a replication as of 6/4/09 (oz dating)

The switch has 4 wires. One active input and one active output for each of the two controllers. And one ground wire. **The ground wire is removed** and discarded. **The two output actives are wound together into one wire.** The **input wire is connected to the alternator charging output** that goes to the battery positive. **The one combined output wire is connected in direct contact with the oil in the engine, via the "oil probe"** This has been done with a solid or stranded wire, but solid seems to be the go, because we are transmitting *frequencies*. A **316l stainless tig filler wire**, is Roberts wire of choice for his engine. Some have used hollow copper fridge thermostat tube, others stranded wire. This wire, and all other wires, **needs to be insulated** as much as possible before it gets to the oil probe (explained next). **The connection to the oil needs to be in a high pressure oil passage, to pass the *frequencies* most effectively.**

One consideration that Robert provides is to place an **on-off switch** in the line from the alternator to the switch. This is a safety mechanism to stop the flow of *frequencies*. All observations have been that when the dimmer and fan switches are set to “off”, the frequencies still flow. Robert tells us **an 1.5 inch gap in this wire, is required to stop the flow of frequencies all together**. A low magnetic field is the result if the switch has been successfully disconnected. A compass is used to determine this by mapping a field before and during the conversion. This will be explained here later on in RUNNING AND TUNING.

OIL PROBE

Our soild or standed wire from the output of the switch, needs to contact the oil some how. The oil probe is the instrument we use to do just that. You will need to construct a probe. The probe consists of a “tee” pipe fitting and a fine stiff metal strand (hyperdermic needle wire) that can protrude from the end of the tee to contact the oil flow mid stream. the “tee” fitting will need to match the thread dimensions of your oil pressure switch, if you are choosing this as your connection point. The needle will need to be installed in the tee, protruding from each end. The wire connection end will need to be sealed with a non conductive , but strong sealer, like JB Weld so oil can't leak out. Make sure a little part of the needle is left protruding through the sealent, to fix the insulated switch output wire to. Then install “tee” to the oil pressure switch hole in the engine, making sure the needle is in the oil stream, but doesn't contact the block once fully seated. Then the oil pressure switch can be mounted to the free end of the “tee” connection. Badabing, one high pressure oil connection.

PCV ALTERATION

Part of the system includes replacing the PCV valve with a manual valve to adjust the pressure between the engine oil sump area and the carb vacuum. This gives a manual control but also creates a possible safety hazard if not understood.

Backfire Condition:

If vacuum is lost in the carb, particularly during starting where vacuum is low. Vaporized fuel may back feed through the PCV bypass valve and fill the engine oil, or crank case, or valve cover area. This can create a dangerous condition where explosion may happen inside the engine, and outside the combustion chamber.

PCV is a one way valve for a reason, however during running it creates a pulse that is undesirable between the carb vacuum and the oil sump. Replacing with a manual valve is Robert's solution to having a fine adjustment for pressures.

Become aware of monitoring the engine oil, both for water content and for fuel contamination. Presence of water causes oil to move towards the white color, sometimes cream color. Presence of gas fumes can be smelled usually.

Next thing to modify is the PCV valve. We are told to remove it altogether. Literally pull it from the rocker cover and throw it against the wall. You won't be needing this again... i hope. The PCV valve vents the built up pressure in the crankcase, this occurs when air/fuel from the cylinder bypasses the piston rings on the compression stroke.

We are going to be *charging* our oil in the engine, which happens to also reside in the crank case. So what you need to do is **place a ball valve in place of the PCV valve**. This ball valve now controls the pressure between the inlet manifold and crankcase. This valve needs to be **set around 50% open at first**, (be sure to look inside the uninstalled valve. Some times the handle position doesn't reflect the true percentage of flow) **then gradually closed off as the charging takes place**. This is only a guide. This ball valve is a point of tuning and will be used to get things synchronized.

The PCV system of each individual engine needs specific attention. So understand your particular system for best results.

FUEL

The fuel is probably the main focus of this system and also the most radical and reactive component. We are going to slowly wean the engine off liquid fuel and onto only fuel vapour. This needs to be done little by little so as not to shock the engine or de-stabilize the conversion. The slower we convert the motor the more stable the end product will be. We need to take great care when building, modifying and running this adapted fuel system. Fuel burns stuff and goes bang. **BE CAREFUL.**

Robert uses an electric fuel pump and separate regulator capable of delivering one pound of pressure or lower to the carburetor for control over our fuel supply. **Rob has simply installed a ball valve after the fuel pump in the fuel line and then placed a pressure gauge after that to monitor the pressure.**

There needs to be a fuel return line to the fuel tank from the carby. If your carby doesn't provide this option, then a hole needs to be drilled and tapped, on the opposite side of the carby to the inlet line, and ran back to the tank. The return fuel line should enter the tank, as far from the fuel pick up as possible. This method of running the fuel through the carby and back to the tank, *charges* the fuel passing through the float bowl, and then passes that *charge* to the fuel in the tank. The *charge* in the fuel bowl causes the fuel to vaporize and become *excited*. This fuel can become too *excited*. The fuel return line provides a relief for that *charge/excited vapour*. It is supposed that the fuel is an aether magnet, hence the coldness of the metal fuel lines.

During the progress of fuel reduction, **the carburetor jets will need to be reduced in stages**, to minimize the amount of fuel allowed to enter the intake mixture. **The air intake should be decreased proportionately via an air restrictor.** More on that later.

FUEL TANK VAPOUR LINE

The fuel vapour is a key element to the stability of system.

When the fuel has been removed to the point where smaller jets are needed, it might be hard to start in cold conditions. This is where the fuel vapour line becomes necessary. **A line from the top of the fuel tank to a ball valve or needle valve, then to the base of the carburetor (the old PCV connection) this line can be opened to assist a cold start but needs to be closed soon after start up.** Care needs to be taken to assure the fuel tank cap is removed or properly vented so that the fuel tank doesn't collapse when vacuum from the venturi is applied to the vapour recovery line.

There has been talk of a vapour line from the top of the carburetor fuel bowl to the fuel return line. This is to remove any built up, or excess, *excited vapours* from the carb to the tank. A true "wye" connector is needed to create the siphon effect for this. I would imagine a small valve could be placed in this line to limit or stop its effects.

Fuel System Related Posts:

Post#26065;

Post#25370: The return line, in conjunction with the electric fuel pump, Allow the frequencies to build up in the fuel.

Post #25611 "i turn on the electric fuel pump for few seconds to fill the fuel bowl, and use the vapour line from the fuel tank to get it started. Then when it gets to the right temperature i turn off the vapour line"

Post#26525: Robert mentions the fuel needs to be circulated through the carb so its doesn't build up to much vapour. This is worth another look.

Post #26116: Also a vortexing dev engine in the fuel delivery line is used in Roberts conversion.

Remember though, the fuel has to be gradually removed, otherwise the sudden shock and lack of lubrication could cause the engine to over heat and create an unstable conversion.

Another consideration is to not give the engine too much fuel as Dan found out. It can accumulate in the oil and back fire causing a rupture somewhere. Be careful.

CARBURETORS

The carburetor that is used needs to be a fully adjustable one. Rob said his Mustang had a Elderbrok carb and manifold. The jets need to be able to be reduced in size. To accommodate the depreciating need for fuel. The choke can be used as a restrictor of sorts. Slowing the air flow and lowering the venturi effect on the fuel bowl. This can also be done by use of an air restrictor , explained next. There does need to be a fuel return line from the carby bowl to the fuel tank. As explained above, under the heading: FUEL.

AIR RESTRICTOR

The carby air-intake will need to be decreased as the charge takes hold of the engine. This is because the engine simply requires less and air and fuel. Building an adjustable restrictor is a great idea. It's also relatively simple to construct from plumbing supplies or sheet metal. Just something that can easily be opened or closed to lower the mass airflow into the engine.

THERMOSTAT

Engine Temperature:

Also a temperature gauge is recommended. Many are getting the new digital IR hand held units, and others are mounting engine temp gauges.

Holes are drilled in the thermostat to increase the water flow. Monitoring engine temp is highly recommended for tweaking adjustments. As the engine starts to move into the running colder range this is indication of successful adjustments and tweaks.

When the engine becomes *charged* it wants to run colder. So the thermostat won't function properly. There needs be holes drilled in it, to allow the water to circulate through the water channels of the ENGINE. As the water becomes *charged* it helps keep the *charge* even throughout. Start with one hole and work your way up. Two seems to be the consensus. Too many can cause a runaway effect. So be careful and don't be reckless with this modification.

ALTERNATOR

The alternator could be where these *frequencies* are coming from. **The alternator is not modified**. Although it should be noted that the alternators that have been used in conversion are of the straight forward type. No sensors or any fancy gear attached to them, just straight up magnets and wire. There has been some talk of Robert isolating the body of the alternator from ground, but he says he no longer does that and says it is not necessary.

BATTERY

There has been some talk of putting the battery in the boot. This would make sense as the magnetic field created would definitely play havoc with the ions in the battery.

GROUND LEADS

Robert says he uses three ground leads to his V8 motor. One running to each head from the body. And one running from the negative of the battery, to the starter motor

OTHER ELECTRICAL MODS

The parts of the exposed ignition system wiring, in the cabin area are areas for the field to interact with the occupant. It's suggested that the bare wires found on the back of the ignition barrel need to be insulated. And any where else that there is an open air connection from the ignition circuit.

TIMING

Timing is something we haven't had much info on. Robert does say that **some retarding is necessary**, and that he adjusted his by ear, until he was happy. **The vacuum advance and mechanical advance will need to be disabled** around the same time as it is necessary to install smaller jets in the carby. Robert says that he only changes timing in 2 degree increments. The timing being slowed seems to cool the heads, as viewed by the temperature gauges installed on the head, engine block and radiator. Or by an IR temp gauge. When the power is removed from the coil (explained next). This may require a timing adjustment to stabilize the plasma production.

COIL

This is where its gets freaky... i mean more freaky. **Disconnecting the positive side of the coil from the battery is a step toward the end of the conversion.** This enables the cold plasma generation to take place. Producing a cold plasma spark which is the crux of all our efforts. I won't go into cold plasma here as there is plenty of info on the web about it. Rob has put a fiber optic cable into

his intake manifold and seen evidence that it is occurring. To know “when is the right time to do this” is a matter of trial and error. I would think the timing has a lot to do with this being made possible. Just give it a bash!

RUNNING and TUNING

As the vehicle is *charged* by the switch , the *tuning* needs to be altered. This can be over a few days or weeks, depending on your vehicle, drive time, vigilance and situation. Rob tells us that a speedy conversion won't be as stable , as a conversion that has been taken slow. So no rush. Make a small amount of change to one item, take it for a drive and then monitor for the change to take effect. Always allow the engine to idle for a few minutes at first before making any changes.

And bare in mind at all times when an engine is *charged*, a sudden opening of the throttle will kill the engine.

Remember *tuning* is referring to the manipulation of the following:

- PCV valve
- Retarding ignition timing.
- Number of holes drilled in thermostat
- Idle mix and air/fuel mix, screws on carby
- Vapour line from tank adjustments.
- Fuel pressure regulation
- Air intake volume
- HULL SWITCH settings

There are things that can tell us the vehicle is becoming *charged*, and what *tuning* actions to take:

- **Get a magnet** and do a quick reading of the engine and vehicles affects towards it, before you do anything. This will give you a baseline for any changes that occur later. **Make a magnetic field map**, like Smokey posted. As the *charge* increases, the magnetic field of the car and engine will grow. This method of using the compass can be used to map that intensity of the *charge*.
- **The engine will heat up**. This can be determined by the manual temp gauges on each head as well as on the radiator. Or with an IR (infrared) temp gauge. **This is when we need to remove fuel and air proportionally**. **As well as altering the tuning** correctly to keep the engine smooth. Make a change, take a drive, note the affect. **Drops in temperature, indicate correct tuning**. When properly converted the engine will run cool (around 95C [200F] for the engine and 35C [95F] for the radiator) with only fuel vapour and very little air. But this has to be done in lots small steps. The tuning changes take time to manifest. So only one at a time, and **be patient**.
- **A feeling of alertness can be felt by the driver**. As well as a drop in wind noise while driving. This would indicate the growth of the magnetic field that seems to be a by product of the *charged* engine. These two components (*charge* and magnetic field) are proportional to each other. Use your compass to confirm this here.
- **The car feels lighter and more powerful**. This is what we want to see. Revel in it.
- **Oil pressure increases with acceleration** (this is the opposite of normal oil pressure behavior)
- **Engine becomes quieter**. Normal engine noise decreases.

TUNING THOUGHTS

Tuning.... i dont know what to tell you. I haven't done this conversion my self yet so i have no first hand experience to draw on. Basically we can assume this... Robert is of the old school mechanic mind. He has done everything through intuition and previous observation. This is where Robert keeps his cards close to his chest. He tells us that with the proper tuning, a large v8 truck can do "0-60 m/phr in 5 sec without using all the pedal or spinning the wheels". With no modifications except this switch and the things we have just discussed. Robert says he knows all the internal parameters change, to make this conversion even more potent, but would like something in return for his efforts. Which i guess, is fare enough. And if all works the way it seems to, for some, then there is a good chance I might take him up on this offer.

We are told bits and pieces like:

The switch needs to be applied in doses. The effect can be overwhelming for the engine. So measurements with a compass need to be taken at the beginning and during to detect the radius of the magnetic field. Eventually the switch can be used only at start up, and turned off when the field has established itself, soon after idling for a few minutes.

Make constant temperature and oil pressure readings, all over the ENGINE. Robert uses mechanical temperature gauges on each head. This helps him tune the engine. And he says it shows him the stability of the magnetic field.

The oil pressure will rise with acceleration, and temp will decrease.(opposites of the norm)

Changing the pcv ball valve, just a little bit, will affect the A/F ratio.

Driving is the best way to realize if the changes made are effective. Do the change, take a drive, check the resultant.

OTHER CONSIDERATIONS

Oil Pressure Rise:

Oil may become saturated with water. Robert indicates running the engine hot if this happens to dry out the oil and then restrict the PVC bypass valve to regulate this condition properly. Vacuum must be adjusted to perfection on the manual valve.

Expect if the oil cell is working correctly the oil pressure will rise and can blow out engine seals if allowed to rise too far too fast.

Oil charge is measured over time with both an oil pressure gauge and a magnetic compass around the engine compartment where a larger-than-life, weak magnetic field will appear.

The one thing we need to grasp here is that the engine becomes magnetized when it is converted. This is from the oil being *charged* and the crank rotating in and out of the oil. Like a magneto produces electricity by passing through magnetic field (a major consideration when timing is changed). This magnetic field then affects all the engines metallic elements and produces the cold plasma spark after the coil is disconnected by the positive terminal.

It seems as though once you have a *charged* engine, the magnetic field will diminish over night. When the engine is started again the next day, it will quickly return to its former strength. If all is tuned well. As long as the kill switch between the alternator and switch is off overnight. Just like a magnet spinning, then stopped suddenly. This magnet will only take a small amount of the original force to get it to the same velocity again. As if the aether was spinning in its place while the magnet was stopped. This effect is inversely proportional to time.

Post#24700 "The common link has to be the *charged* oil maintaining the magnetic strength of the crankshaft."

The internal oil pumps rate-of-flow is regulated by the oil's temperature.

post#24842 The oil pressure increases with acceleration and the temperature decreases

The accelerator pedal becomes extremely responsive and will need to be “geared down”.

A sudden opening of the throttle will kill the engine.

With out the fuel vapour the engine would be uncontrollably powerful and unpredictable, so the vapour is used as a control mechanism.

This is a draft and will be updated as new information becomes available.

nath