



SHACKNEWS

HIGHVELD AMATEUR RADIO CLUB

Member of the SARL

JUNE 2010

COMMUNICATION IS THE NAME OF THE GAME

Meeting There was no club meeting this month. The upcoming meeting is a bring-and-demonstrate as discussed on Sunday's bulletin.

There is a change to the annual events calendar. The SSC meeting will now take place on the 21 August and the HARC AGM will be held on the 18 September.

July						
Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August						
Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September						
Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

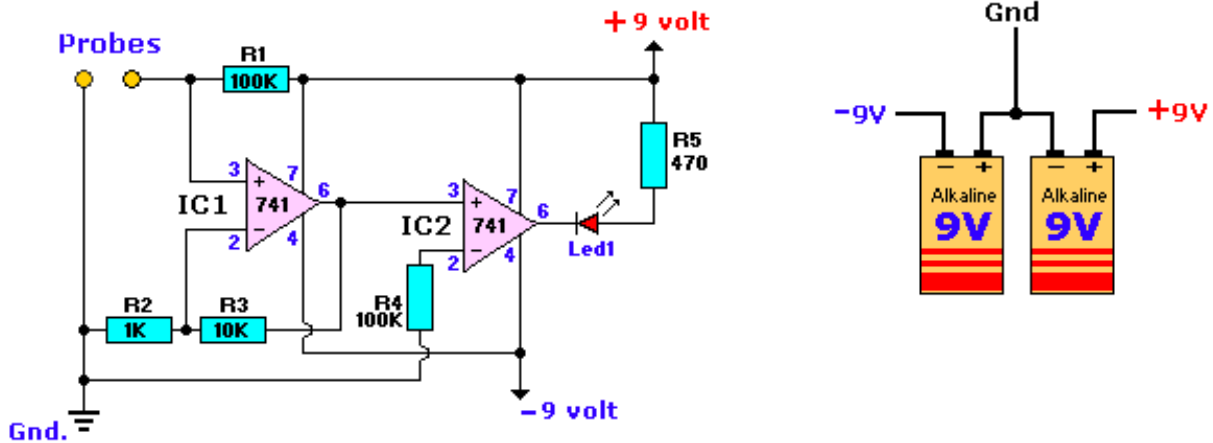
SSC Meeting Thanks to Rex & Ingrid for the use of their home for the SSC braai which was held on Sunday 20 June. Seems a bobo was made regarding the date which was Fathers day. (I have never had a calendar that shows that date hi. Ed.)

The next meeting to be held on the 21 August will be at the QTH of Doug and Merle. Don't forget your eats contribution.

---oooOOOooo---

1. The roundest knight at King Arthur's round table was Sir Cumference. He acquired his size from too much pi.
2. I thought I saw an eye doctor on an Alaskan island, but it turned out to be an optical Aleutian .
3. She was only a whisky maker, but he loved her still.
4. A rubber band pistol was confiscated from algebra class because it was a weapon of math disruption.
5. The butcher backed into the meat grinder and got a little behind in his work.
6. No matter how much you push the envelope, it'll still be stationery.
7. A dog gave birth to puppies near the road and was cited for littering.
8. A grenade thrown into a kitchen in France would result in Linoleum Blownapart.
9. Two silk worms had a race. They ended up in a tie.
10. Time flies like an arrow. Fruit flies like a banana.
11. A hole has been found in the nudist camp wall. The police are looking into it.
12. Atheism is a non-prophet organization.
13. Two hats were hanging on a hat rack in the hallway. One hat said to the other, 'You stay here; I'll go on a head.'

Smart Continuity Tester



Gnd., +9V, and -9V NEEDS to be connected or the circuit will **NOT** work!

Parts List:

- R1 = 100K
- R2 = 10K
- R3 = 1K
- R4 = 100K
- *R5 = 470 ohm (see text)
- Led1 = Your choice. I used High Brightness LED, RED, 5mm
- IC1, IC2 = LM741, Op-Amp
- 9 volt Alkaline battery, case, probes

Occasionally you need a continuity test between two points in an electronic circuit. Unfortunately, most continuity testers are prone to "lie". They don't do that deliberately, but if they see a small resistance, they still tell you that you have continuity. They just don't know any better.

This unit is different. If you have continuity it will tell you so. And if you're reading even a low resistance through a component, the unit will tell you that as well.

The unit uses two LM741 op-amps. It offers a short-circuit test current of less than 200µA. It detects resistance values of less than approximately 3 ohms. Nicest of all, it will not break down a PN junction. In building this circuit, use good electronic practice, mounting the 741's in suitable ic sockets on perf-board. While there's nothing critical here, keep the work neat, and leads nice and short. *If needed, reduce the value of R5 to 330 ohms if you are using an older type led. When you're done, mount the unit in a small plastic box. A small dab of silicon rubber adhesive keeps the 9-volt battery in place at the bottom of the case, and will last a long time.

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A bit off the beaten track

Bananas containing three natural sugars - sucrose, fructose and glucose combined with fiber, a banana gives an instant, sustained and substantial boost of energy. Research has proven that just two bananas provide enough energy for a strenuous 90-minute workout. No wonder the banana is the number one fruit with the world's leading athletes. But energy isn't the only way a banana can help us keep fit. It can also help overcome or prevent a substantial number of illnesses and conditions, making it a must to add to our daily diet.

Depression:

According to a recent survey undertaken by MIND amongst people suffering from depression, many felt much better after eating a banana. This is because bananas contain tryptophan, a type of protein that the body converts into serotonin, known to make you relax, improve your mood and generally make you feel happier.

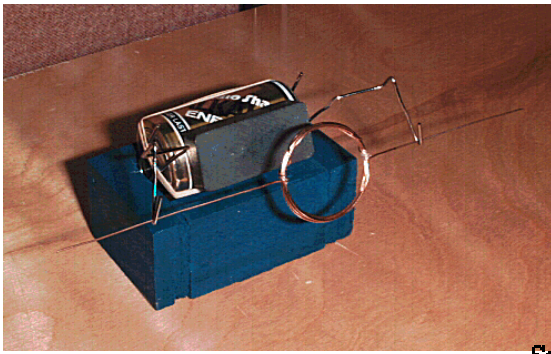
Hangovers:

One of the quickest ways of curing a hangover is to make a banana milkshake, sweetened with honey. The banana calms the stomach and, with the help of the honey, builds up depleted blood sugar levels, while the milk soothes and re-hydrates your system.

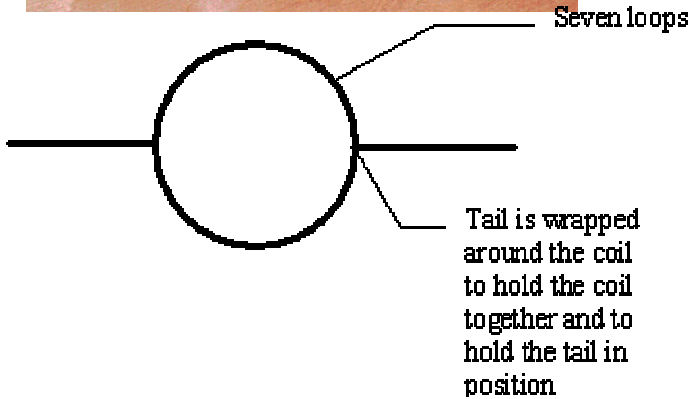
(use at own risk)

A simple electric motor

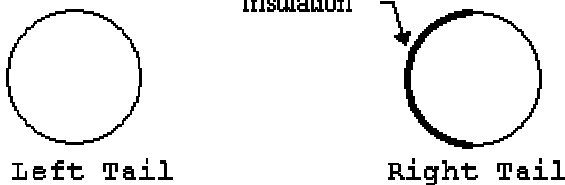
(built it and it worked. Ed)



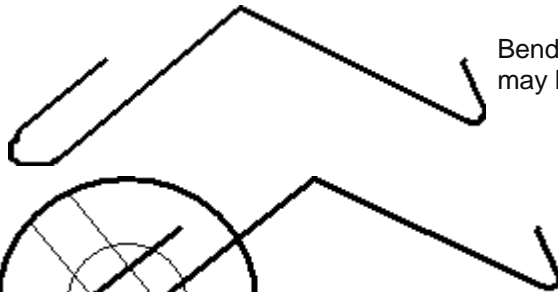
- Materials Required:
- * One 'D' Cell Alkaline Battery
 - * One Wide Rubber Band
 - * Two Large Paper Clips
 - * One Rectangular Ceramic Magnet
 - * Heavy Gauge Magnet Wire (the kind with red enamel insulation, not plastic coated)
 - * One Toilet Paper Tube
 - * Fine Sandpaper
 - * Optional: Glue, Small Block of Wood for Base



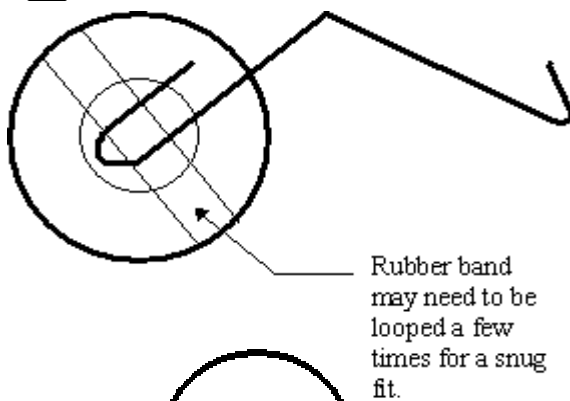
Starting about 3 inches from the end of the wire, wrap it 7 times around the toilet paper tube. Remove the tube (you don't need it any more). Cut the wire, leaving a 3 inch tail opposite the original starting point. Wrap the two tails around the coil so that the coil is held together and the two tails extend perpendicular to the coil. See illustration left



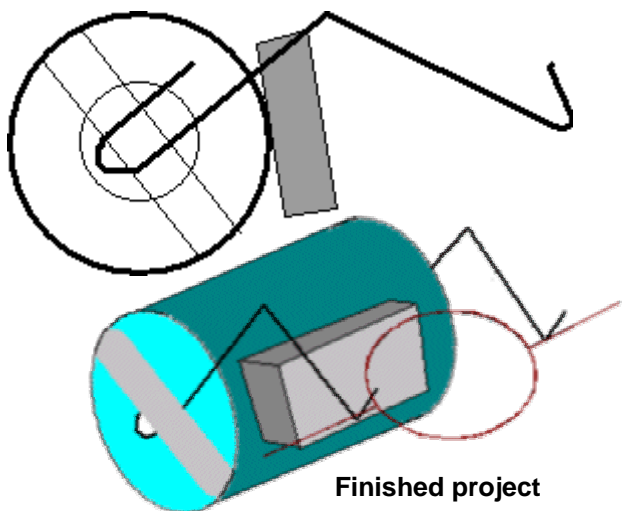
On one tail, use fine sandpaper to completely remove the insulation from the wire. Leave about 1/4" of insulation on the end and where the wire meets to coil. On the other tail, lay the coil down flat and lightly sand off the insulation from the top half of the wire only. Again, leave 1/4" of full insulation on the end and where the wire meets the coil.



Bend the two paper clips into the following shape (needle-nosed pliers may be useful here):

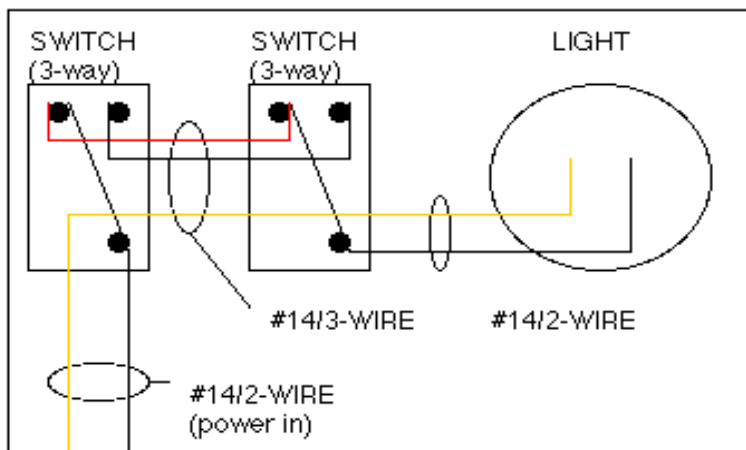


Use the rubber band to hold the loop ends (on the left in the above drawing) to the terminals of the "D" Cell battery and stick the magnet to the battery as shown below



Place the coil in the cradle formed by the right ends of the paper clips. You may have to give it a gentle push to get it started, but it should begin to spin rapidly. If it doesn't spin, check to make sure that all of the insulation has been removed from the wire ends. If it spins erratically, make sure that the tails on the coil are centered on the sides of the coil. Note that the motor is "in phase" only when it is held horizontally (as shown in the drawing). For display, you will probably need to build a small cradle to hold the motor in the proper position. It might also help to bend the ends of the coil a bit so that as it slips right or left, the bends keep it in the proper position:

A 3-way switch light switch



3-ways are used any time that you want two switches to operate one light (or lights). The best example of this would be at either end of a long hallway/passageway, or at the top and bottom of a stairwell.

CLUB INFORMATION

Postal address PO Box 19937 Sunward Park 1470

Website <http://www.qsl.net/zs6hvb/>

e-mail zs6hvb@gmail.com

Repeater 145.1875 MHz input - 145.7875 MHz output

Linked to 70 cm - 438.850 Mhz (Sunday bulletins)

Bulletins Sunday morning - 145.7875 MHz & 7062 KHz @ 08h45.
Relay - 80M - 3662KHz

Monthly meeting venue

Germiston Methodist Church
Coffee Bar
Lady Duncan Rd
Germiston

3rd Saturday of the month at 14:30

Committee

Chairman

Vice Chairman Frank Mercier ZS6MER 011-845-1146

Secretary/Treasurer Berridge Emmett ZS6BFL 011-893-1291

Assistant Secretary Marianne Treyvellan ZR6JMT 084-403-3355

Repeater/Packet/Technical Ton van Dijk ZS6ANA 011-432-5494

Shacknews Editor Berridge Emmett ZS6BFL 011-893-1291

Shacknews Printing Harry Lautenbach ZS6LT 011-888-5362

Webmaster Yvonne van Dijk ZR6TBL 011-432-5494

Assistant Webmaster Marianne Treyvellan ZR6JMT 084-403-3355

Club bank details

First National Bank - Current Account 62116557309

Branch Code 201209 - Sunward Park