# Buick Reatta

## Cassette Deck Repair Manual



Compiled independently by: R. Lane Matte

#### Disclaimer:

A Buick Reatta Owner created this instruction manual independently. This manual is in no way associated with General Motors or Buick. The author is not responsible in any way for damages or misinformation that may lead to damages of any component of your vehicle. This manual was created to assist in a do-it-yourself project and embarking on this project is done so at your own risk.

#### **Introduction:**

I've created this manual for a few reasons, but most of all to help other Reatta Owners. Like most Reatta owners, I have a love for the car that is indescribable. As a Reatta owner, I feel like part of a family that most people will never understand unless they've owned one. It really is a love / hate relationship! After living with a few minor problems with my Reatta, I finally decided, "what the hell, I can't break it any worse than it already is", and decided to try and fix it myself. After successfully repairing my headlamp motors, I decided to try the tape deck. After a little research on the net, I concluded that replacing the drive belt would likely fix my problem. This was shortly after buying a replacement deck from a salvage yard that didn't work either. So I tore into my tape deck, replaced the belt and it worked like a charm. In the meantime, I saw several other people on the **Reatta Discussion Board** experiencing the same problem. Most were told to send their deck to an electronics repair company, which costs about sixty bucks. That's when I decided to make this manual, because I had repaired mine for a total of four dollars. So I took the non-working deck that I bought from the salvage yard and did it again, except this time I used a digital camera and a pocket recorder to make notes.

One thing that I have learned is that patience is definitely a virtue. As I tore into this deck, I really thought I was getting in over my head. It is very intimidating to look at all of these pieces as you go deeper into disassembling the unit. But I promise you, it is not as difficult as it seems. As long as you take your time, be patient, walk away when you get frustrated and come back later, you will be fine. And when you're done, you will have a great feeling of accomplishment and a repaired tape deck that only cost you about four bucks. If you decide to try it, I wish you the best of luck and if you have any questions or need any help, don't hesitate to contact me. All of my contact information is on the **Summary Page**.

This manual begins, assuming that you have already removed the unit from the car.

#### Removing the unit from the housing

Removing the mounting brackets from the side of the unit is not necessary, but it does help just getting them out of the way. To open the back panel plate, remove the two screws on the top of the unit (one on each side) and the two screws on the bottom rear. As you lift this plate off the unit, you will need to take a screwdriver and pry the light fastener off of the top plate.

#### See Photo 1

The second cover plate is attached with two screws on the bottom of the unit and two screws on the right side. The two screws on the right side can be found on top and bottom of the mounting bracket bolts. The top screw is easily accessible, but you will see a small metal rod obstructs the bottom. This rod is part of the eject mechanism and will have to be removed first. The next step is opening the cassette door.

#### See Photos 2 - 4

#### Opening the cassette door

Looking straight down onto the top of the unit, you will find a small lever with a spring attached to it located directly behind the top screw that you are about to remove (right side).

#### See Photo 5

Take a small screwdriver and gently push downward on this lever. This will release the Cassette Door.

#### See Photo 6

#### **Gear Assembly**

Next, you will need to detach the eject rod from the gear assembly. Look into the unit from the rear, on the left side and you will see a set of black plastic gears. The outermost gear has the eject rod attached to it. On that gear, you will see a very small plastic retainer, holding the gear onto the shaft. Take a small screwdriver and gently push outward on the retainer. **Be** very careful here, the retainer is very small and it is clear plastic. It's very easy to lose. I think this is one of the trickiest parts of this project. Once you have the retainer off, you can slide the gear forward and detach the rod. If you rock the cassette door almost closed, this will turn the gear and bring the attached rod closer to you, making it easier to detach it. The gear will not come all the way off just yet, it is blocked by the unit. It will come all the way out when you remove the unit from the housing.

#### See Photo 7

#### **Door Assembly**

Now you're ready to remove the door assembly and faceplate. The other end of the eject rod is, of course, attached to the cassette door. Lay the unit on it's back and look inside the tape door. You will see two black hex head screws at the top. Remove these screws and the door assembly will lift right out.

#### See Photos 8 & 9

#### **Completing Housing Removal**

Now you can remove the two Phillips head screws on the side and the two hex head screws on the bottom. Carefully remove the unit from the housing. When you lift the unit out, don't forget to watch for the plastic gear, because it's going to fall out.

#### **See Photos 10 – 13**

Remove the small plate on the bottom of the unit. It's attached with two hex head screws.

#### See Photo 14

#### **Rear Panel and Light Assembly**

On the rear of the unit, you will see a cover plate with 6 Phillips head screws, 2 of which are larger than the others. Take note of the location of the two larger screws, as they also hold on the top plate, which I believe is the light assembly. Remove all 6 screws and the cover plate will lie down.

#### See Photo 15

When you lay the cover plate back, you will see a plastic wire tie on the bottom right, holding the cover plate to a small wiring harness. You'll need to cut the wire tie to remove the cover plate completely. I really don't see the need for the wire tie, but you can replace it if you like during reassembly.

#### See Photo 16

Turn over the light assembly and find the small orange plug on the right side. Take a small screwdriver and lift the retaining tabs and remove the plug. The light assembly is still attached by another wire, but removing this plug allows you to move the assembly out of the way.

#### See Photo 17

### **Removing the Head Retraction Control Arm**

#### Now it gets tricky!

Lay the unit face down. Look at the top center from the rear of the unit. You will see a gray metal arm (see photo). I call it the Head Retraction Control Arm, because if you look on the left side, you will see two white plastic assemblies. They go up and down and push and release this arm. If you push this arm with your finger, you will see the heads go up and down. But mostly, I call it that because it sounds good...lol. Anyway, this control arm needs to come out.

#### See Photo 18

Remove the metal retainer ring with a small screwdriver, being very careful that it doesn't fly across the room.

Stand the unit upright and look down from the top. The control arm meets another gray metal lever. You'll need to push down slightly on this other lever as you remove the control arm. The control arm will then slide straight out from the rear.

#### See Photo 19

#### **Top Wire Assembly**

On the top of the unit, you will see two red wires and two blue wires neatly weaved through a plastic channel. You need to very carefully and gently remove these wires from the channel. I take a very small screwdriver and start at one end, one wire at a time. It's easiest if you start the red wires on the right side and then start the blue wires in the middle, and then left. Just take your time and be very careful. These wires are small and you definitely don't want to snap one.

#### See Photos 20 & 21

Remove the orange plug on the bottom right of the unit, beneath the circuit boards.

#### See Photos 22 & 23

#### Forward / Reverse switch:

With the unit face down, look directly blow the motor and find a small metal flat bar that extends through the pc board to a switch. The metal bar is mounted with two small Phillips head screws to the white plastic assembly, which is directly blow the motor. Remove this bar and slide it out. Now you're ready to separate the unit.

#### See Photo 24

#### Separating the unit:

Place the unit face down. You will see 6 brass Phillips head screws through the plastic housing. You will need to remove 5 of these. The screw on the top left side, one down from the corner, does not need to be removed. Just remove the 5 screws on the corners.

Below the motor, beside the plastic assembly where you just removed the metal flat bar, you will find two yellow wires leading to an electronic switch. Depressing this switch allows you to slide the white plastic assembly beside it downward. This may be necessary for the plastic assembly to clear the motor housing as you separate the unit.

#### See Photo 25

You can now very gently lift the plastic housing upwards and then towards the bottom to get around the motor.

#### See Photos 26 - 28

Now you have successfully separated the unit, you can see the main drive belt. Take note on how this belt is routed. Look under the motor mount and you will see a white plastic spindle and a stainless steel spindle. The belt goes around the right side of both spindles, over the big wheel on the right, and under the big wheel on the left. (see diagram)

#### Changing belt:

The motor is mounted with two Phillips head screws at the top. After removing these screws, the motor will not lift all the way out, but it will lift up enough for you to get the belt off the spindles and attach the new belt. You really need a magnetic tip screwdriver for the screw at the top right of the motor.

#### See Photo 29

Attach the new belt, first around the motor, then the stainless spindle and then the two wheels. After you have the belt on and the motor remounted, I suggest manually turning the wheels a few rounds, just to make sure the belt is guided on properly and doesn't fall off. After you've done that, your ready to reassemble the unit in the opposite manner you took it apart. Good Luck.

#### See Photo 30

Congratulations!! You half way through, now all you have to do is put this mess back together!

#### **Reattaching unit:**

Reattaching the plastic housing to the unit can be a little tricky.

If you look below the motor, on the right side, you will see a metal rod sticking up. This rod must slide through the rear section of the unit, and through the white plastic assembly that is below the motor (the same assembly you removed the metal flat bar from earlier). There are teeth on the big wheels that meet gears on the plastic housing, so you may have to play with it a little. But just be gentle and careful and you can snap it back together.

#### See Photo 31

#### Finding the belts:

I do not have part numbers for the belts. I believe they vary from manufacturer. I was able to find mine at a local belt company called "Belts Plus". They deal with any type of rubber belt, electronic, automotive, etc. You may look for a company similar to that in your area. I brought my old belt to them and they matched it up. It was a perfect fit. There is a photo of the label that my belt was packaged in. If you can't find a belt, you can contact me and I will have one sent to you.





#### Summary:

The black plate that mounts inside the tape door gave me some trouble. After I reattached the unit, I took it out to the car for a test run before I put the housing and cassette door back on. It worked beautifully. But after I put it all back together, it would play and then stop. It sounded like the tape was in a bind. I removed and repositioned this plate three times. Finally, I removed the plate altogether and it works great. If you experience this problem after reassembly, you may try removing the plate. I honestly don't think it will hurt anything, the plate is only there to protect the gears behind it, but I just didn't have the patience to keep repositioning the thing until I got it right.

I hope you were successful in your project. I know for me it was a great sense of accomplishment, especially saving about eighty bucks. I feel like part of a family as a Reatta owner, so I hope I helped someone by doing this. If this manual helped you, please let me know. And if I missed anything or you have any questions, please don't hesitate to call or drop me an email.

#### My Contact Information:

\*\* Please send your feedback \*\*

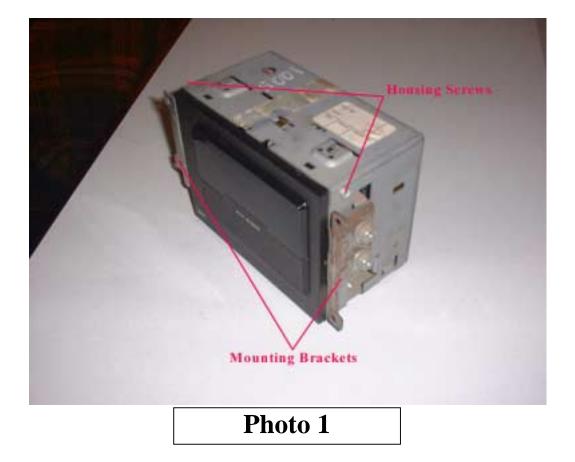
Lane Matte - <u>sp61@policeone.com</u> - if for some reason you can't reach me by e-mail you can leave a message for me at work, Sulphur Police Department, 337-527-4550, make sure you say it's in reference to a Reatta and I will call you back.

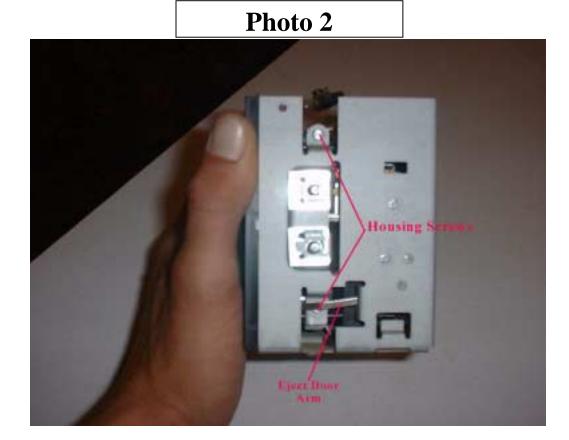
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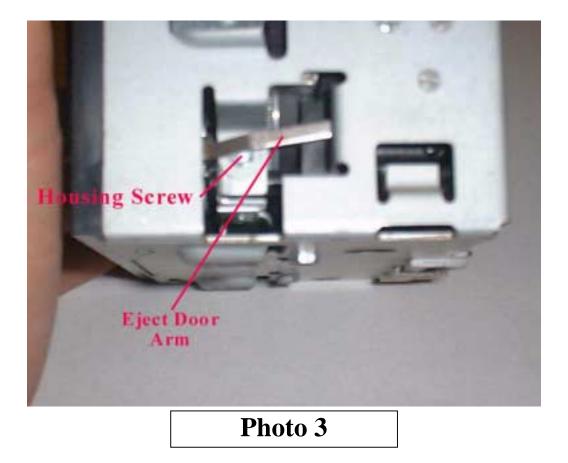
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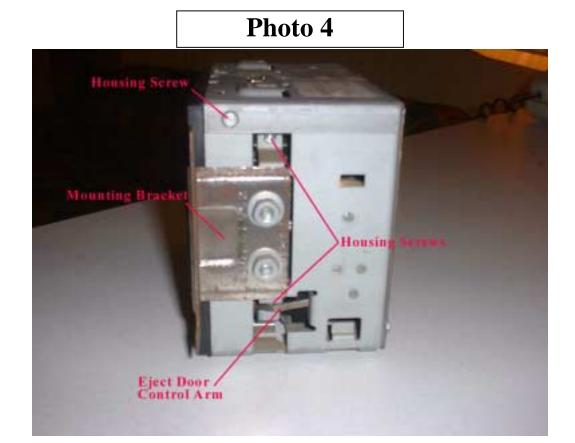
Buick Club of America - Reatta Division – (www.reatta.org)

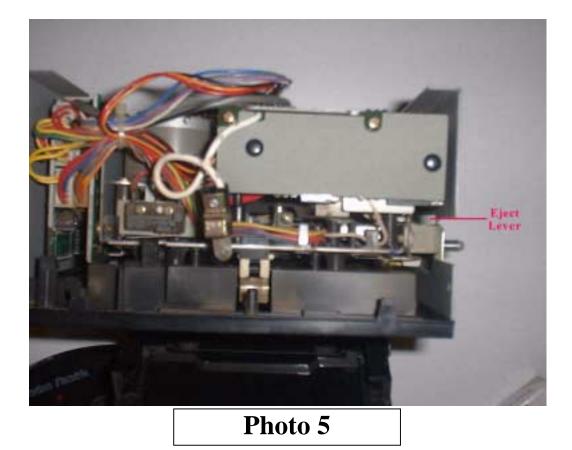
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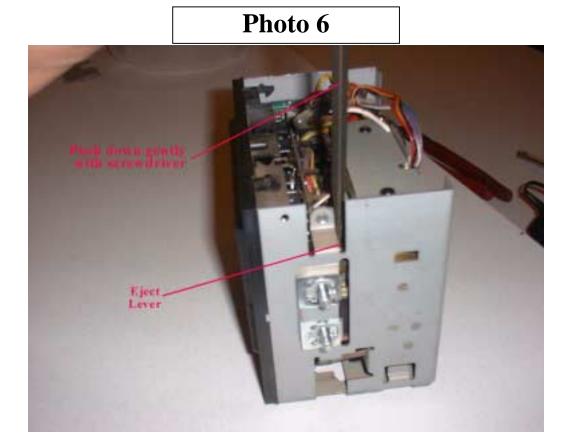


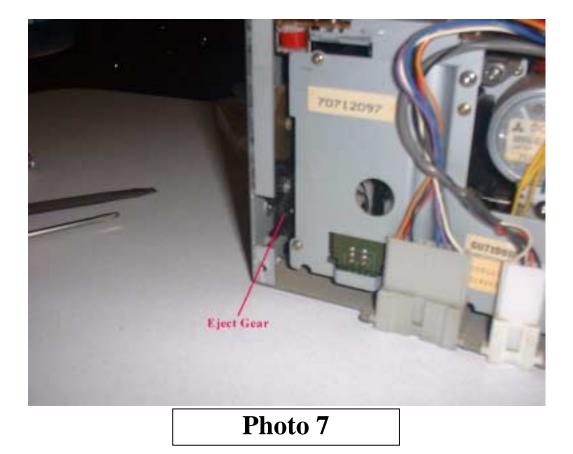


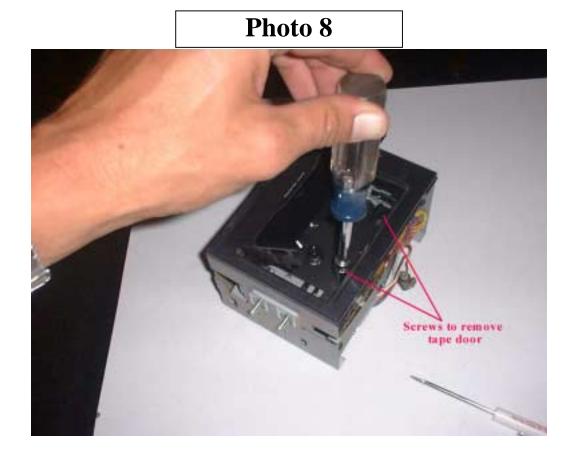


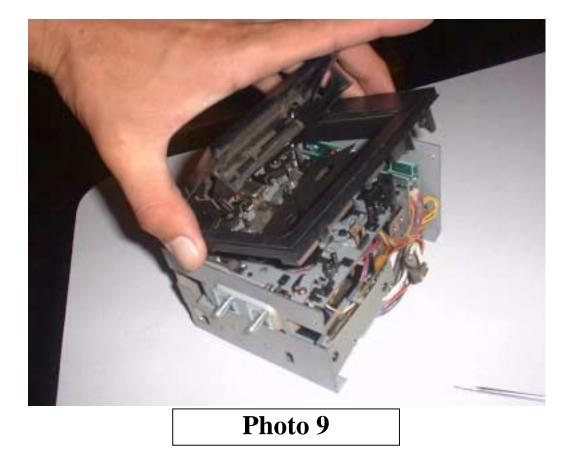


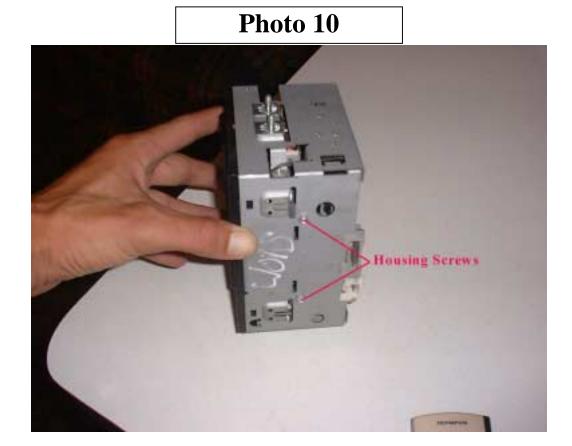


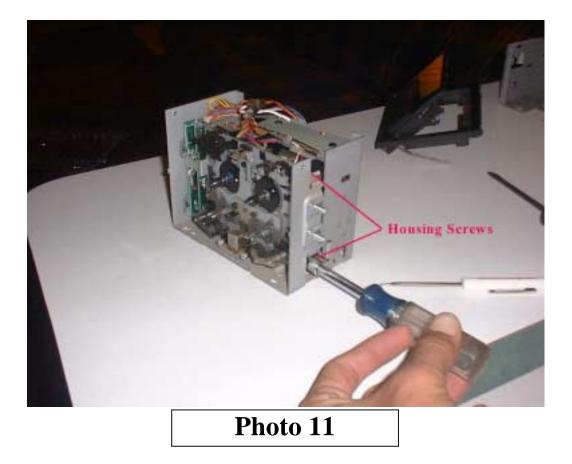




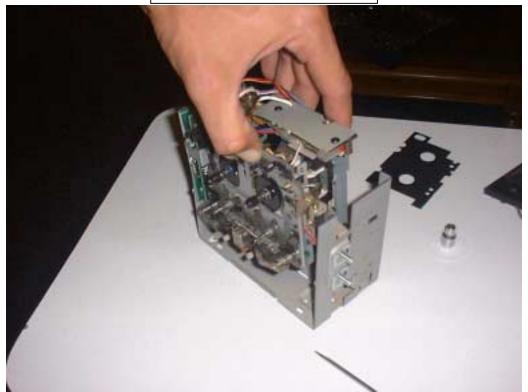


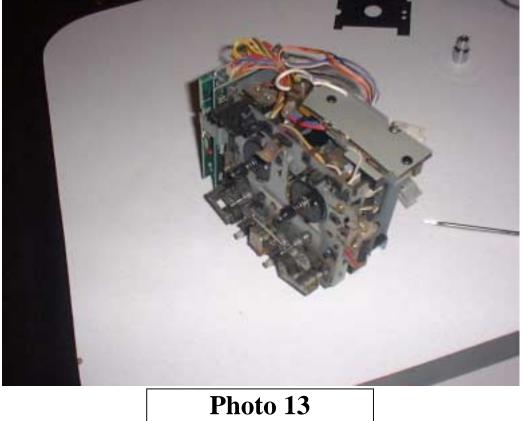




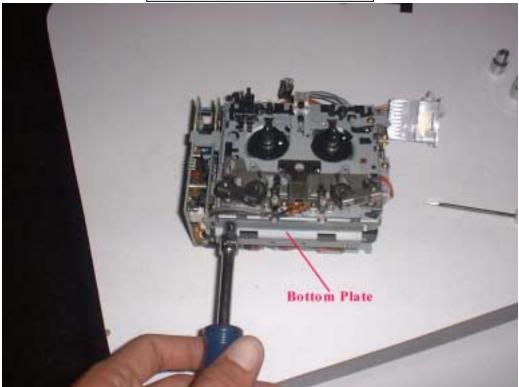


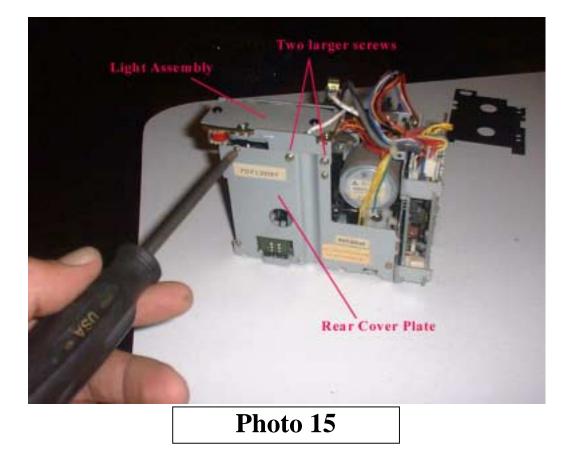




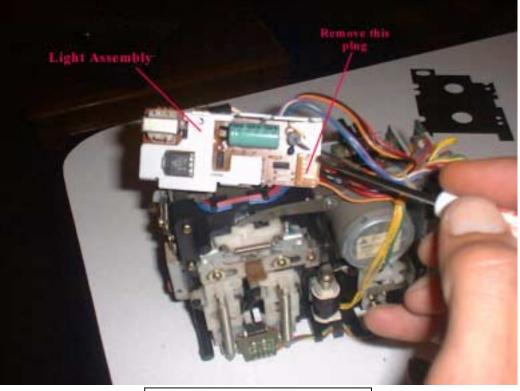


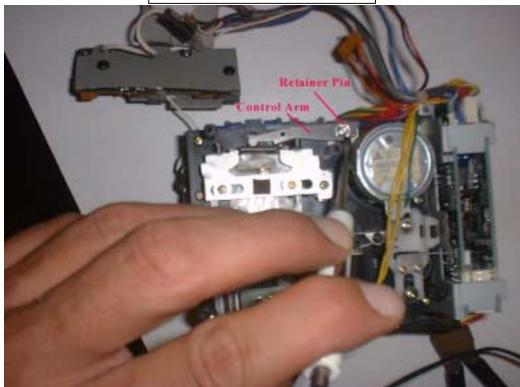


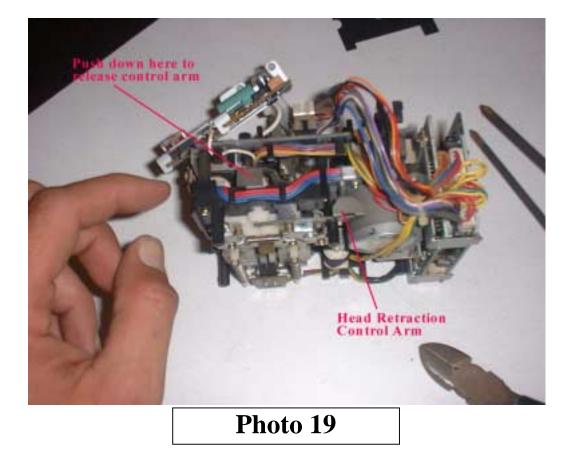


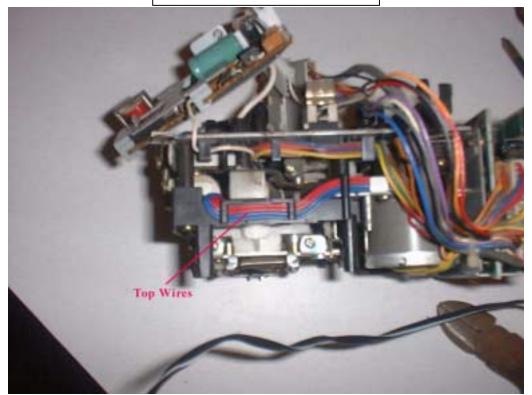


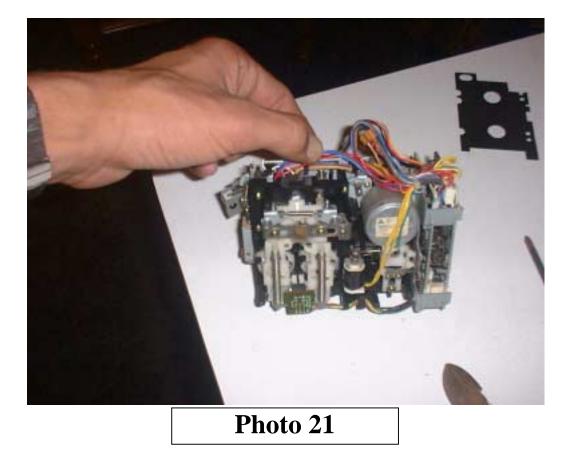


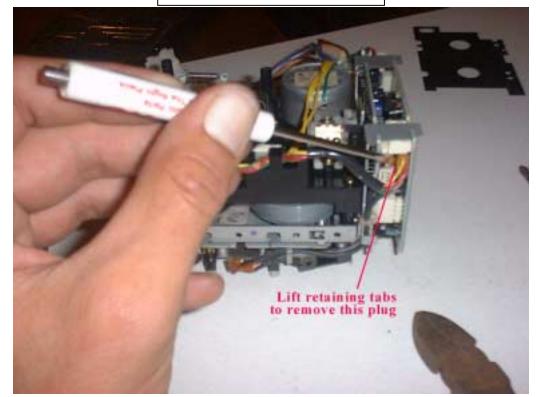


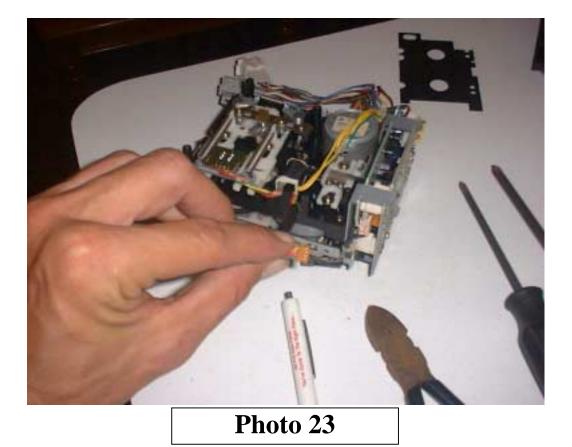


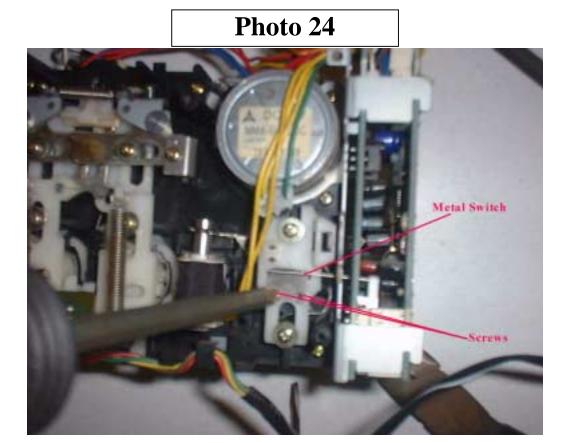


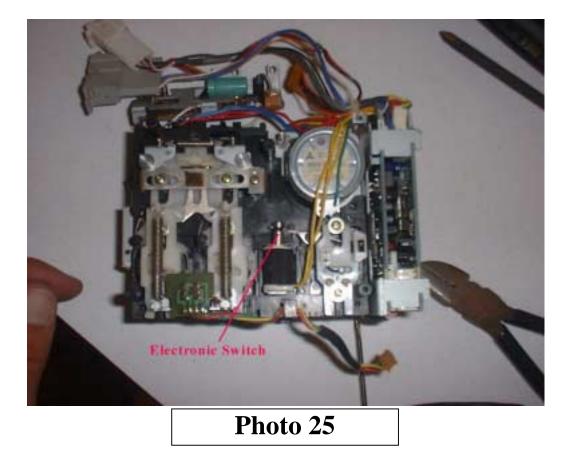


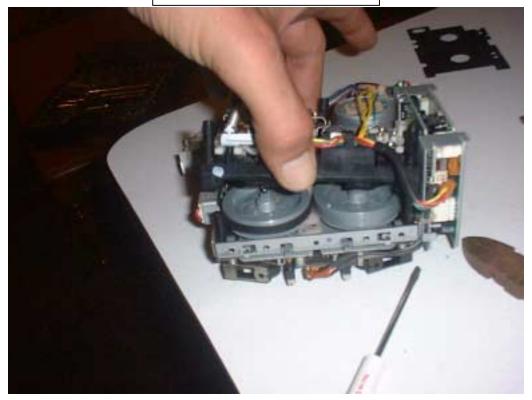


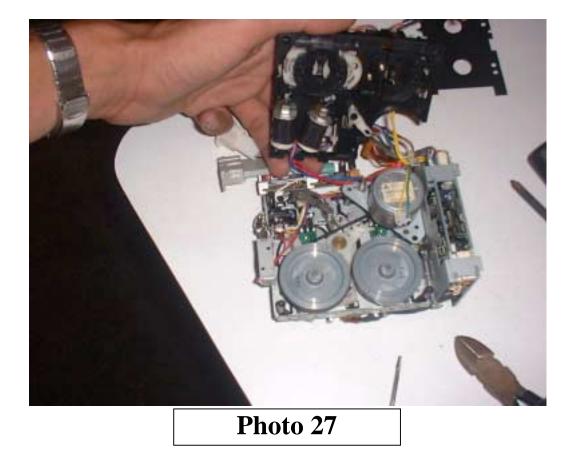




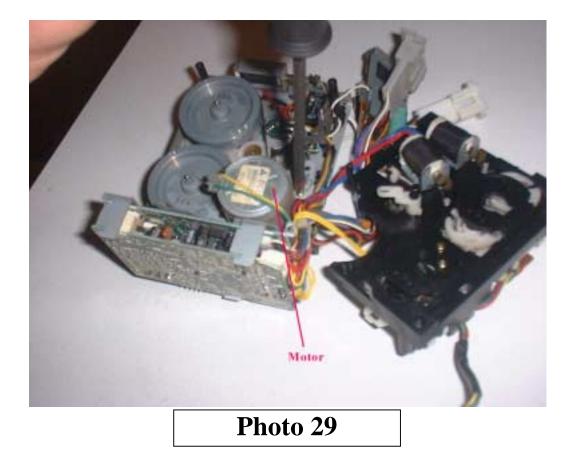


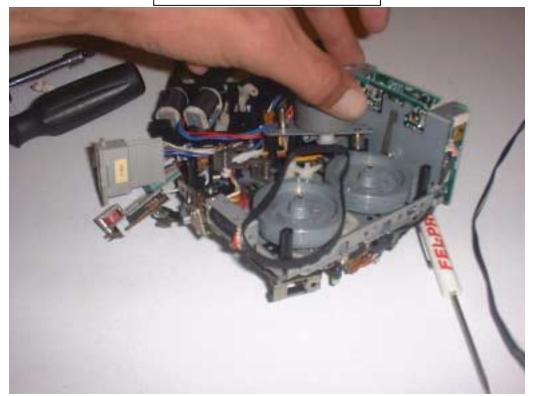


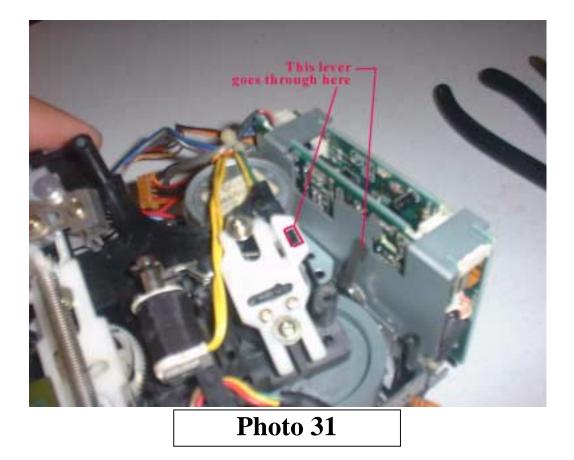












These images have been resized to 38%. Full size images can be viewed at:

www.geocities.com/reatta\_lover



Much Thanks to Padgett for providing this Schematic!

