

Takin' it to the shop: Making an Old Pinball Game New



Before You Begin!

Some things to have on hand.

Space!!!

Set of basic hand tools

Soldering iron

Digital camera or a phone

Printed manual

A notebook

Cleaning Supplies

Spare parts – electronic

A little bit of patience

- Optional -

PC close by

Art supplies



Semi-Special Tools

Nut Drivers

- Hollow Shaft
- Long Shaft Magnetic



Soldering Iron (Weller WESD51 Pictured)



Desoldering braid/wick



Media Tumbler



Tools For Desperate Times

Chainsaw



Good 'ol fashioned axe



Brent's Pin Shop Process

Plug it in and assess the issues

Electronics – Check it, fix it!!

- Exercise all switches and coils

Strip the playfield

Order parts

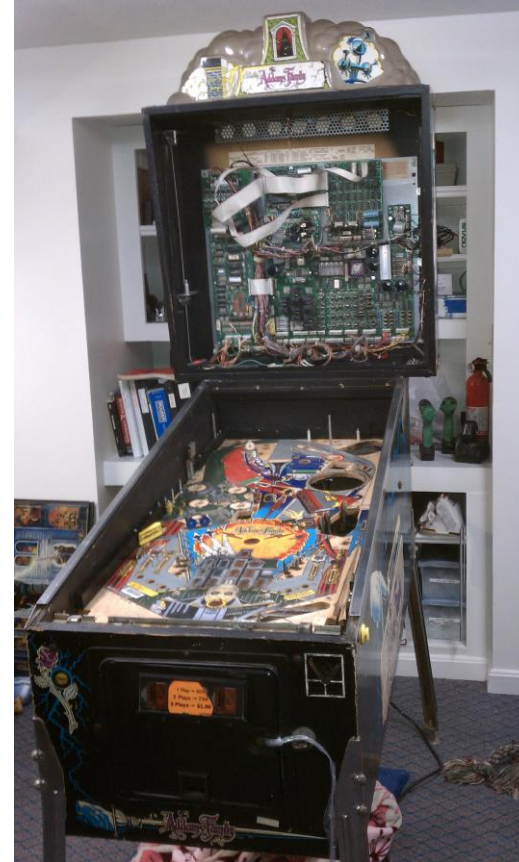
Clean everything

Touch up???

Wax

Reassemble

Tune the game



Assess The Electronics

Check the fuses

Inspect the connectors

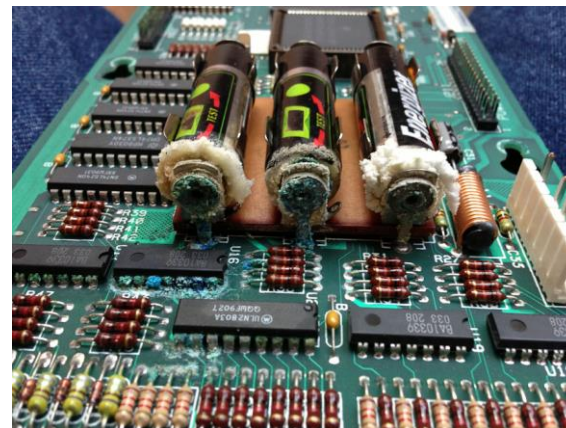
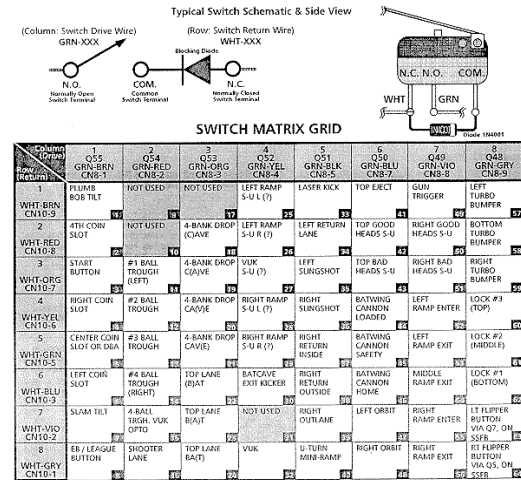
Batteries

Plug it in

Note what is not working

Use any built in self tests to check switches and coils

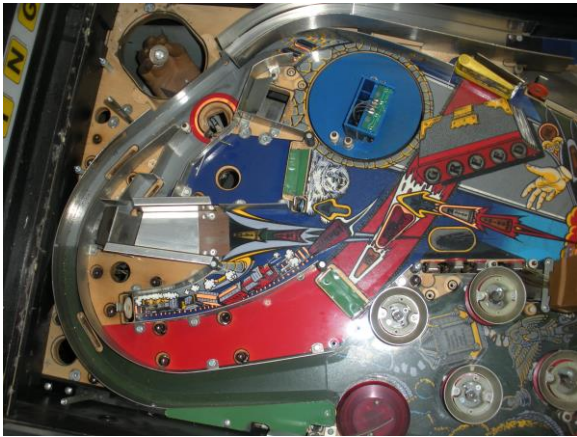
Boards – Repair Vs Replace



Strip The Playfield

Pictures. Take LOTS and LOTS of pictures.

When you think you have enough pictures, TAKE LOTS MORE.



The Addams Family

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Did I mention, take pictures??



Cue Ball Wizard

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Time For A GIVEAWAY!!

Let's have a good old fashioned
contest!!

New to pinball???

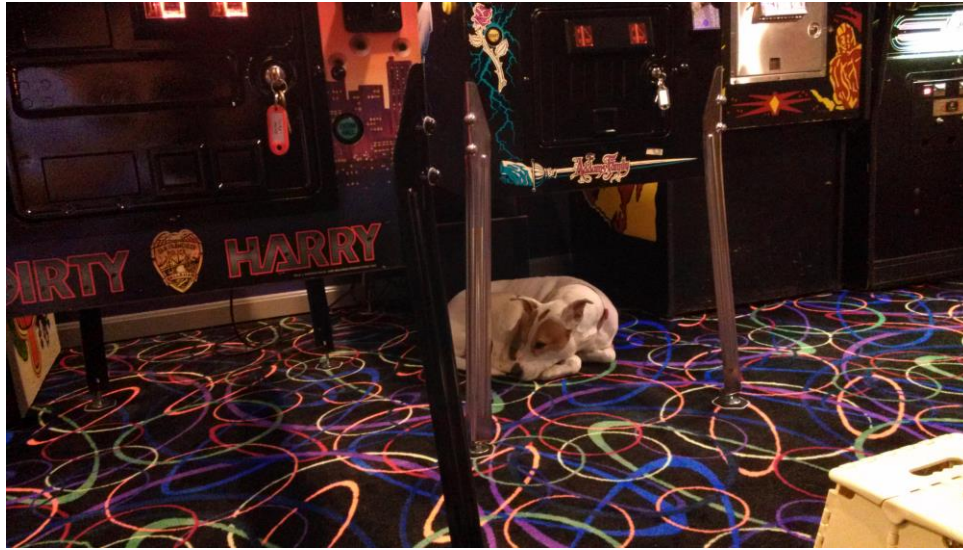
Which one of these is pinball related?



...and the answer is!!



...and if there is doubt.



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...and the (real) answer is!!

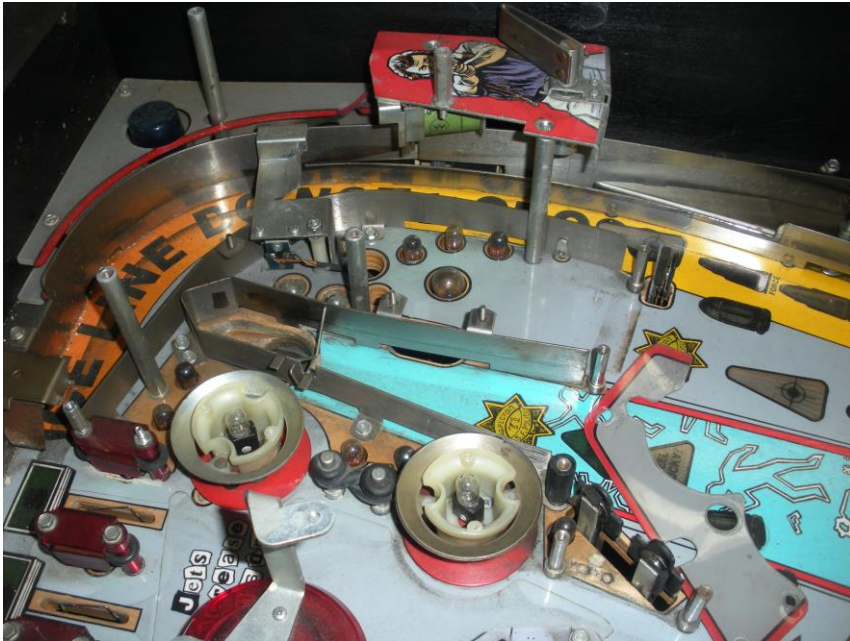
The beacon dome as used on High Speed and F14 Tomcat.



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Oh, yeah, did I mention, take pictures??



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When disassembly goes too far.



Ordering Parts

Take notes as you disassemble

- Manual is a HUGE help here
- A lot of things appear unbroken until removed
 - Plastic parts, posts, pop bumper caps and bodies, etc....



Breakdown the under playfield mechanics

- Always a couple of gremlins and "operator fixes" hiding under there
 - Incorrect parts
 - Tape
 - Check the speaker magnet

Operator and "In Field" Fixes



Slingshot arms and plungers – Williams Big Guns

ALWAYS Rebuild The Flippers



A lot of damage can hide in a flipper assembly.
Kits typically do not include bushings/bearing.

Place Your Order

A wealth of vendors.



Pinball Life

STEVE YOUNG'S
THE PINBALL RESOURCE



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Clean your heart out! - Playfield

Clean the inserts – New Lamps

Vacuum PF (and cab – body and head)

- Keep any found hardware

Novus 1 & Microfiber towel

Melamine foam and rubbing alcohol

- 91% + alcohol

Novus 3 if you feel necessary

Novus 2

Finish up with a Novus 1

- Optional buffing kit -

-Optional Touch-ups -

Ready for wax!



Clean your heart out! - Hardware



Media tumbler
Crushed walnut media



Clean your heart out! - Plastic

"Plastics" with screened art

- Clean with Novus
- 1 on underside
- 2 then 1 on the tops – no art
- If we have time, ask about how to flatten plastics



Solid color plastics with no art

- Star posts, flipper bats, etc.
- Immerse in Mean Green



Time for a GIVEAWAY!!

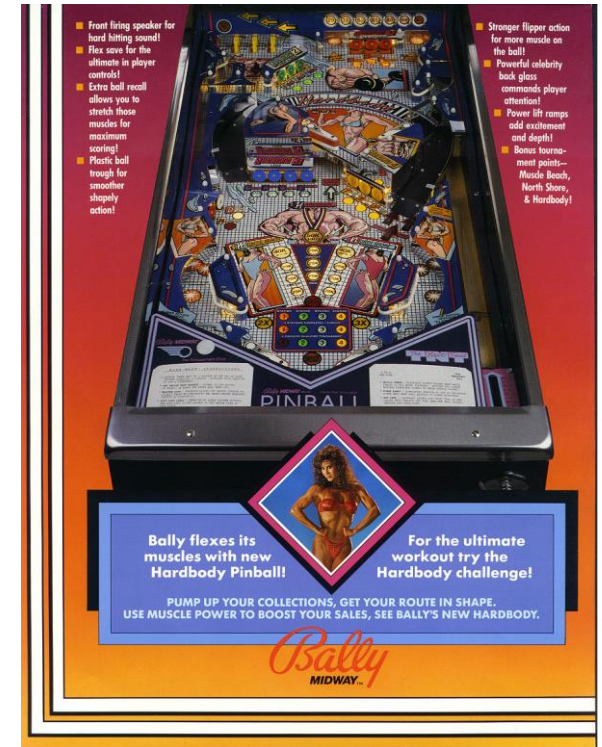
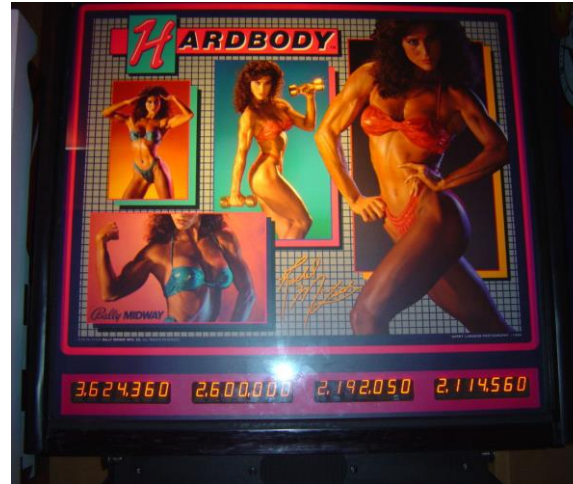
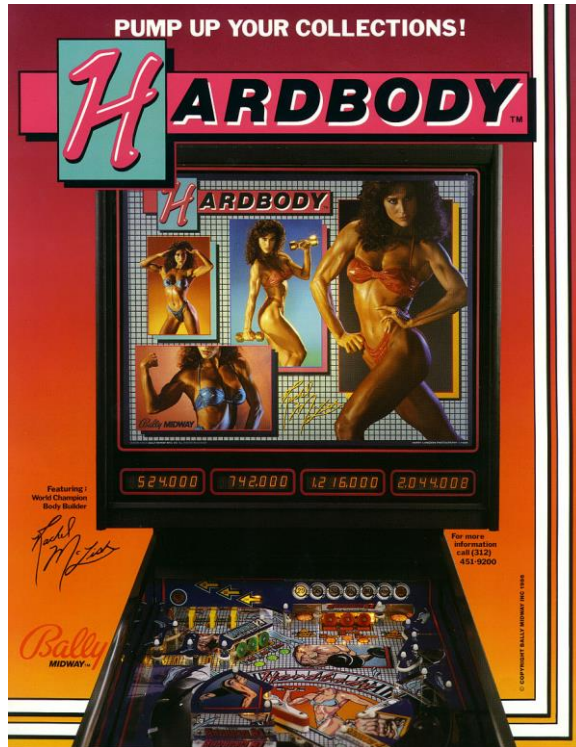
Listeners of the show!!

Time for a GIVEAWAY!!

Listeners of the show will have heard Whitney and I talk to no end about a specific pinball title. It's name has become a signature battle cry of the Brokentoken podcast.

What game is it????

..and the answer is HARDBODY!!



There will never be another Hardbody!!

- Brent – The Brokentoken Podcast.

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FaaarrParrrr!!!



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Playfield Touch-up

Determine colors needed

Use something on hand to get a close match

- Paint swatch deck
- Picture from a magazine
- Anything!!

Pick acrylic paints close to your needed color

- Hobby or craft store

Grab several whites and blacks for mixing

Tip – Paint the bottle top



Playfield Touch-up

Cut some clear Plex rectangles

- Paint a sample and label
- Use to match to the source

Use small pots or a pallet to mix

Use a blank piece to test your mixes



Playfield Touch-up

Build a library from the color samples

Use to match to the source and test mixes



Playfield Touch-up

Acrylic craft paint is easy removed / scratched

Mask to key line with painter's tape or frisket

Seal with poly

- 3 coats
- Sand between

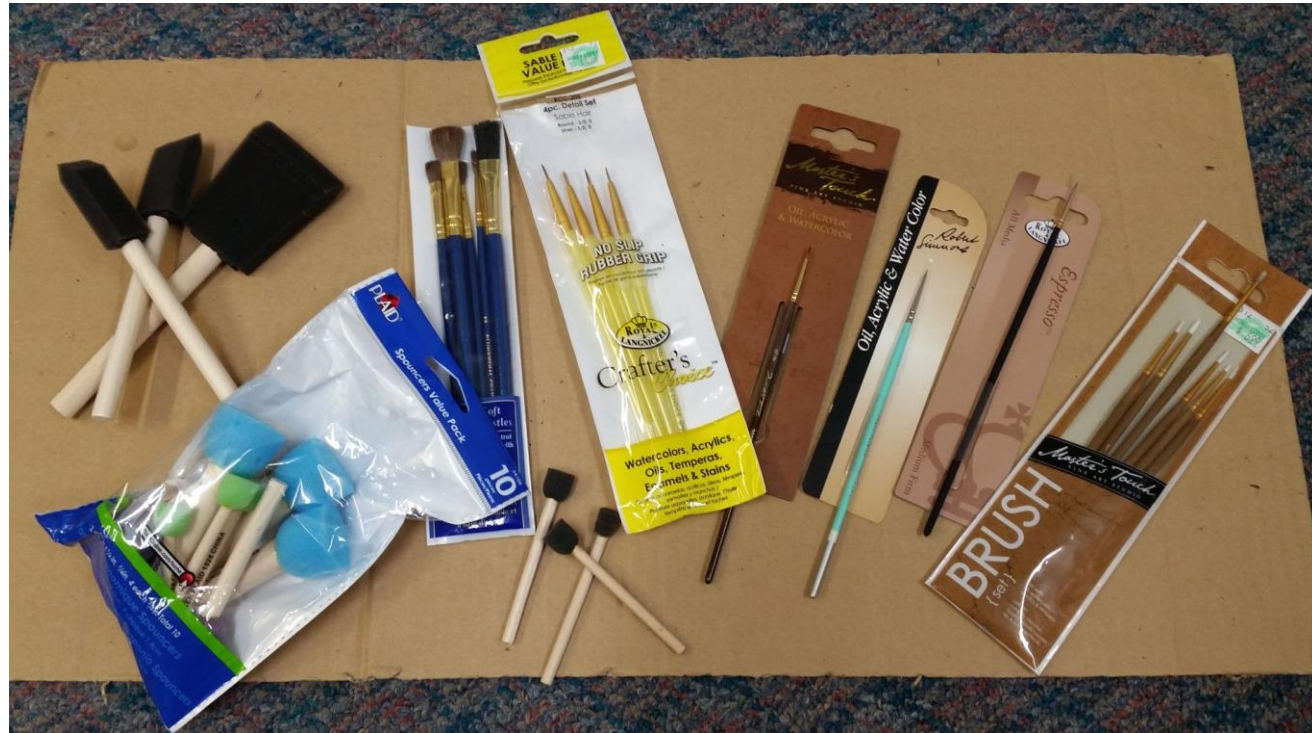
RUST-OLEUM

- Gloss 200041
- Semi 200141 *



Brushes and applicators

- I tend to use the fine tip brushes for touch up work
 - Want to paint to a key line
- Foam brushes and spouncers for poly



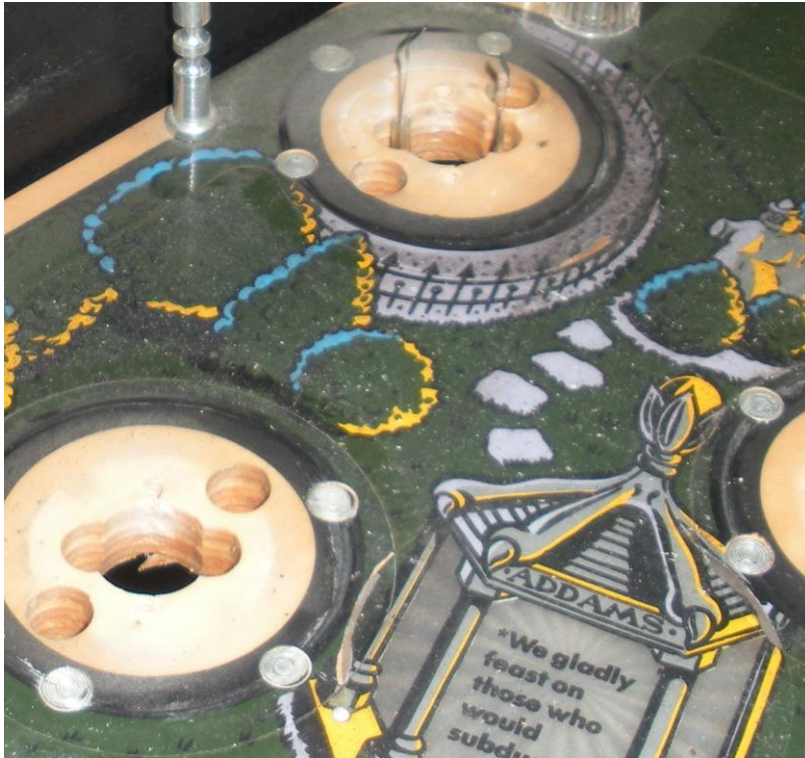
Playfield Touch-up - Results

Addams Family Vault and Bookcase



Playfield Touch-up - Results

Addams Family Graveyard - Pops



Wax That Puppy!!!

My Wax of choice is Collinite No. 885 Fleetwax

- NOT ACTUALLY INTENDED FOR USE ON PUPPIES -



Reassemble The Playfield

Remember all of those pictures?

Well, it's time to use them.

Build from the bottom up!

- I like to start with posts
- Good time to install in PF lamps
- Plastics on the rails
- Build up to larger parts and toys



Inspect Your New Parts

Even new parts can have damage!

Order extras of the lower cost, common parts

- Balls
- Posts – metal and plastic
- Coil sleeves
- Rollovers
- Pop bumper parts

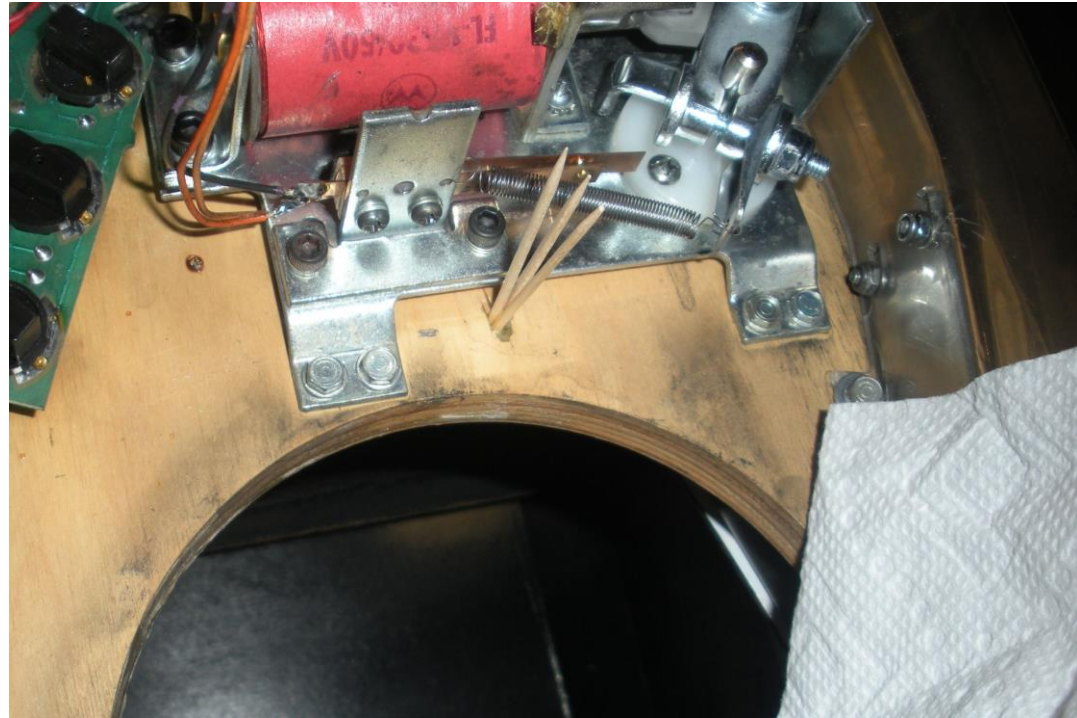


The Toothpick Trick

Stripped hole in the PF?

No problem, use the toothpick trick.

- Dab wood glue in the hole
- Dip toothpicks in wood glue and insert
- Allow glue to fully dry
- Cut off excess



Tune The Playfield

Make use of test mode

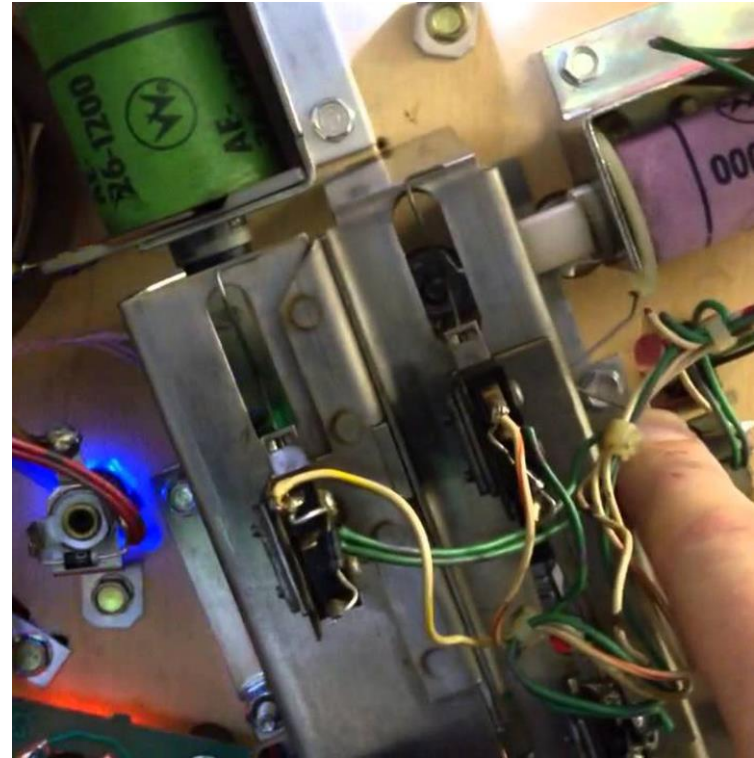
- Activate coils
- Activate motors, toys, etc.

With the glass off use the ball to:

- Activate switches
- Activate toys
- Use all ramps and subways

Verify everything several times

Play the game looking for ball traps



Bask in your accomplishment!!!

BASK I SAY...BASK IN IT!!!!



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Bask in your accomplishment!!!

More basking!!!!



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Thank you for attending!

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- ☐ There is no right of refusal on any prize – it's yours!
- ☐ If it shows up on eBay, we get 50%
- ☐ Create a cottage business on KLOV and we'll #spendbrentsmoney

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