

# PIMPMYBATMOBILE.COM PHOTOETCH INSTRUCTIONS

## **What are Photoetched Parts.**

Photoetched parts are tiny metal parts made (etched) by photo chemical process from a sheet of thin metal. The process allows etching the metal all the way through, or only on the surface with high precision to get very small and accurate flat parts of almost any shape and form.

## **Cleaning the Parts.**

Before parts can be used on the model, they should be cleaned, just like any other part of the model. P/E parts that are attached to the frame can be cleaned with lacquer thinner. It is essential to remove the residue left on parts from the etching process, and to help paint and glue to adhere to the parts.

After parts were cleaned, make sure they are dry before painting or attaching them to the model. You also need to remove all attachment tabs (if any) and bend the parts to shape before painting and mounting. But let's start with removing the parts from the fret.

## **Removing Parts, Tools.**

There are no special tools required to remove the parts. These were designed with the attachment frets being half-etched so they are very thin and can be cut with SHARP household scissors or a hobby knife.

Parts that are attached to the frame can be cut off with the hobby knife. Just lay the fret flat on the cutting board, I use a thick sheet of glass or hard masonite. You want a backing that won't allow the knife to bend the pieces. Carefully hold the part, and cut the tabs. Try to cut as close to the part as possible to minimize cleanup. If the part is really small, there is a possibility it can fly away when you cut all tabs that hold it and believe me - I lost a lot of parts this way! The trick is to put the fret on a piece of masking tape. The part will stick to the tape and won't fly away! It is still a good idea to hold the part while cutting.

One last thing - do not cut all the parts at once - cut only the parts you need for immediate assembly. The majority of the P/E parts are so small, it's easy to lose them if you not going to use them right away (and even then its easy to lose them). A good example is the Bat seat belt hardware - do not cut all the buckles at once. Cut one; attach it to the belt, then cut another.

## **Cleanup/De-burr.**

The tabs need to be removed (filed off) for the parts to look accurate and clean. It is not very hard to do, but be patient, do not rush.

You will need a flat sanding stick or a file, flat-nosed tweezers, and maybe few toothpicks for this operation. If the part is relatively big, you can grab it with the tweezers and carefully file the tab with the sanding stick. Do not squeeze the part too hard while holding, it may fly out of your tweezers and be forever lost. If the part has a hole, it might be a good idea to stick it on a toothpick and file the tab while holding the part with your finger.

After the part was cleaned you can bend it to shape (if required), then paint or mount on the model. If you assemble several P/E parts together, it is always good to make the assembly inside big transparent plastic bag, if you accidentally drop the part - it will be inside the bag, not on the carpet.

## **Painting.**

Most P/E parts are made from steel or brass, so naturally they are silver or brass in color. If you need the part to be painted, it is very easy to do. If the part is relatively big, scuff it with fine sanding stick, primer will stick a lot better to the part. If the part is small, no scuffing is necessary.

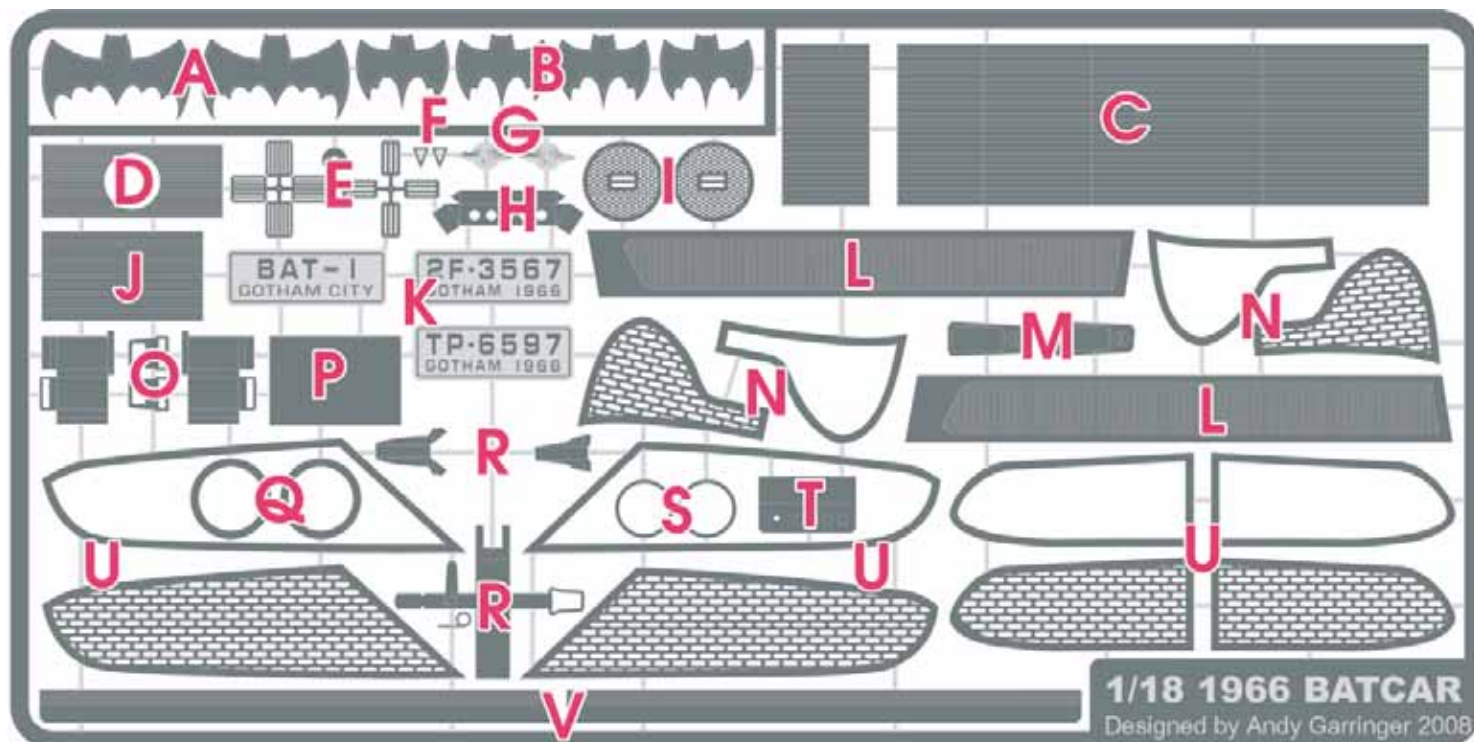
Bend the parts before painting - if you attempt to bend painted P/E part after it's painted - the paint will likely chip and fall off. Careful painting will produce incredible results, especially when painting photoetched emblems or badges. Be careful when painting P/E mesh such as the grills, it is very easy to fill the holes with paint. Always prime bigger parts with metal (etching) primer, it will help the paint to adhere to metal parts. Finally, since P/E parts are metal, it is very easy to create various effects by scraping paint from certain areas of the part.

## **Bending Photoetched Parts.**

Sometimes instructions tell you to bend or fold P/E parts at a certain angle to make a part fit properly on the model. On car models this usually involves windshield wipers, screens, engine parts, etc. Depending on the softness of the metal, sometimes it is very hard to bend the part, especially if you need a sharp angle. There are few special photoetch bending tools on the market, and if you plan to work a lot with photoetched parts - this tool is a lifesaver. If you only use P/E occasionally, then you might use metal ruler and a hobby knife to bend parts. Another alternative is to use flat, long-nosed pliers or tweezers and a hobby knife.

## **Ways to Attach P/E to Model. Adhesives.**

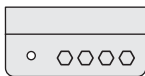
Since photoetched parts are metal, regular plastic glues won't work on them. There are several different adhesives modelers use to attach P/E parts to their models. CA glue (superglue) is widely used since it glues almost anything. I use CA glue for many tasks, including gluing P/E parts. The problem with CA Glue is that it may fog painted parts and it is not recommended for installation of P/E badges and emblems, or other parts on painted surfaces. For gluing parts to painted surfaces you can use clear epoxy - it will not adversely affect paint. Another advantage of using epoxy is that it sets up longer than most CA glues, and will leave enough time to re-position P/E part once on the model. 5-minute clear epoxy is excellent for attaching photoetched parts.



- A. Door Bats (2)
- B. Hub Bats (4)
- C. Roll Top Dash Sections to Match HW Dash\*
- D. Arch Center Etched Panel
- E. Nose Radar & Base (2 versions)
- F. Turn signal Frames (2)
- G. Original Barris Crests (2)
- H. 5 Light Arch Console\*
- I. Speaker Grills (2) (Later Version BM)
- J. Center Console Etched Panel\*
- K. CORRECT License Plates (3 versions etched with raised letters, sized to fit in HW's plate frame)
- L. Etched Door Sill Plates (2)
- M. Door Handles (2) (to use properly the ones on the HW car will need to be sanded off)\*
- N. Etched Headlight Grills and Frames (2, sized to fit on HW's BM)
- O. Seat Belts (2)
- P. Fire Extinguisher Back Panel for Center Console (will need to purchase upgrade center console)
- Q. Air Conditioning Vent Rings (2) (TV version)
- R. Fire Extinguisher Bracket, Handles and Pin\* (will need to purchase upgrade extinguisher)
- S. Parachute Pull Rings (2)
- T. Small Under Dash Panel (driver side - for the purist)\*
- U. Etched Grills and Frames (2 front & 2 back) (sized to fit on HW's BM)
- V. Etched Door Bottom Trim (2) (HW door will have to be sanded smooth)

Anything marked with an asterisk requires advanced modeling skills or is intended for upgrades parts being offered by [pimpmymbatmobile.com](http://pimpmymbatmobile.com).

## SWITCH CONSOLE



Bend down tab and apply glue.



Glues to bottom of dash to the left of the steering wheel. You will have to make the additional knob and switches.

## NOSE RADAR & BASE



BASE

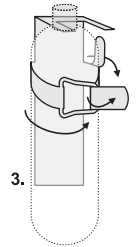
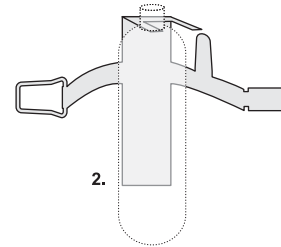
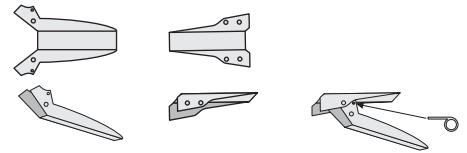
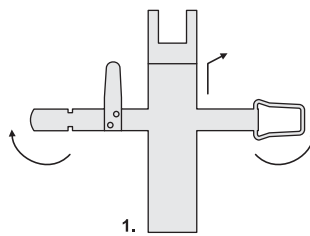


Choose style of radar. The HW would work for after series car. TV is for as seen on the show.

Carefully hold the blades in your fingers and slowly turn each "paddle" 45° in the same direction so now the paddles are vertical.

Super glue the base down over hole in HW Batmobile body and using a stiff wire, guitar string is a good choice, replicate the antenna part of the assembly. Super glue the radar to the top of the wire.

## FIRE EXTINGUISHER BRACKET AND HANDLES

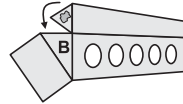
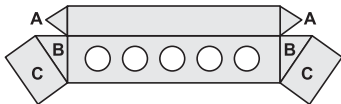


To use this piece correctly you will need to order the fire extinguisher body from [pimpmybatmobile.com](http://pimpmybatmobile.com) or scratch build your own using styrene rod. To make it screen accurate you'll need to order decals from [pimpmybatmobile.com](http://pimpmybatmobile.com) and use the silver extinguisher wrap decal and bat logo decal.

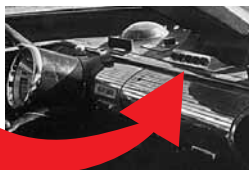
## 5 LIGHT UNDER ARCH LIGHT STRIP

1. Fold both triangular glue tabs (A) down, then side triangular tabs (B) down

2. Apply a small drop of glue to both triangular glue tabs, then fold down under side tabs (B)



3. Fold tabs C up



To replicate the 5 red lights I plan to make red epoxy bulbs and place them from inside. This way they can be lit with fiber optics. You could also get the correct thickness of fiber optic line and simply sand round the top.

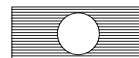
## TURN INDICATOR FRAMES



Use the photograph as a guide. Simply glue in place. To replicate the green lenses I simply use two part epoxy and mix in a very small amount green enamel paint. Then using a sharp toothpick end drop a small amount into the center of the frame and let dry.

Other lights and bases will have to be created by the modeler.

## UNDER ARCH RIBBED PANEL

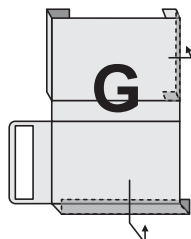
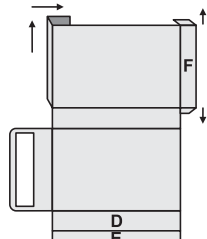
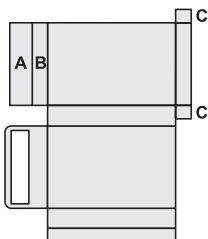


Use the photograph as a guide. Carefully pre-bend slightly to approximate curve and then glue in place. I am building my own shifter and boot to replace the stock one from the HW car.

Order a set of our decals for correct, totally legible placards from [pimpmybatmobile.com](http://pimpmybatmobile.com) to further enhance the accuracy of your car.



## BAT SEAT BELT BUCKLES



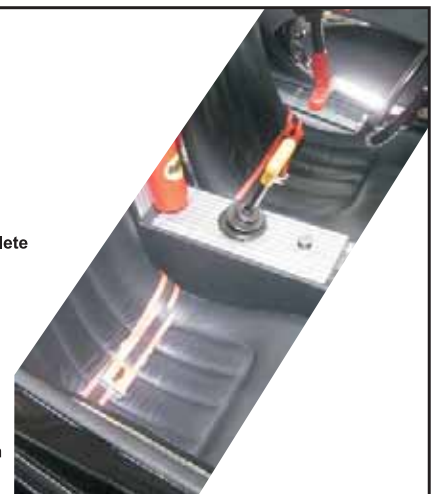
3. Fold top assembly G down then up to complete the assembly.



1. Fold tab A & B down then B up as illustrated. Then fold tabs C down as illustrated.

2. Fold tab D & E down then E up as illustrated. Then fold tab F down as illustrated.

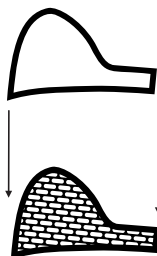
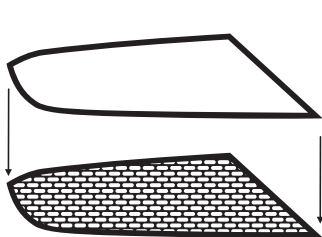
4. To really make it accurate order the Bat decals from [pimpmybatmobile.com](http://pimpmybatmobile.com) and place as shown.





## Grills

The photo etched grills and matching frames are specifically designed for each separate area of the car. You will have to carefully cut/grind away most of the plastic grills on the HW car leaving only a 1/32 or less lip to glue the grills to. You do not have to use the frames unless you want a 2D look to it. They were created to resemble the pinch welt that goes around the grills on the original car.



The headlight grills have an extra long tab allowing it to be bent and cut to different lengths based on the modelers wants. The fit may not be exact depending on how deep you place the grills.

I recommend a satin black finish to the grills as I believe that's what they were painted in 1966.

See picture for reference.



I want to thank you, the dedicated Modeler that wants to build him/her self the most accurate version of the 1966 Batmobile. I hope this set helps you in a great way to creating a model that most people will only dream about.

I would like to thank Eric Seltzer for his wonderful site <http://www.1966batmobile.com/> that has given me all the information and resources needed to make this photo etch set as accurate as I could. It is invaluable to any fan of the 1955 Futura and 1966 Batmobile.

Some of the other people I would like to thank is John Haig for his wonderful resource pictures and generosity in providing me any shot that I asked for. Mark Racop from Fiberglass Freaks who has also been a source for many unusual shots of the car. Especially Scot Fleming from [pimpmybatmobile.com](http://pimpmybatmobile.com) for hosting his website and promoting these sets for me. Without his urging, this set might not have made it into production.

Andy Garringer 2008