



## An introduction to Customizing

There's a lot to be done about customizing Star Wars figures on the web.

You probably know that there's quite a number of sites about customizing ... [www.ffurg.com](http://www.ffurg.com), [www.thecustomalliance.com](http://www.thecustomalliance.com) to name just a few, not to mention the customs section that every self-respecting Star Wars site seem to have in its forums and the ever-increasing number of sites made by fans to show off their own artwork.

And so here you are, meaning that you're interested in the subject of customizing the Star Wars Universe, producing these good-looking toys that are not available on the retail market, be it shady characters that will never see plastic or ships, accessories and play sets that share the same ill fate. All those nifty things that you want to have on the shelf of your toy display nevertheless.

When you'll enter the world of customizing it'll probably take you a little time to blend in; there are a number of concepts and names that the experienced customizer will throw at you, without as much as blinking an eye.

You're actually supposed to just understand. And very often, you just don't ...

And so we took up the idea here at Jedi Temple Archives to introduce you to the wonderful world of customizing; taking it step by step...

Here's what this Tutorial will cover ...

- [What are Customs?](#)
- [Paint and painting techniques](#)
- [Swapping heads and limbs](#)
- [Sculpey and sandpaper](#)
- [Your tools or tools](#)
- [Pursuing movie accuracy](#)

Have fun customizing!

Joris aka Barbarian J aka Real\_Shaggy



## What are Customs?

Customs are often *display pieces* first.

If you look at pictures of customs on websites or in magazines, you very often get the feeling that an artist just produced the toy that you always have dreamt about. In reality, he didn't. It just *looks* like the toy you always have dreamt about. It's a custom and consequently not a factory-produced toy and that makes quite the difference. It's a very important first thing to know. Customizing will deliver you in most

cases *display pieces* that you certainly cannot play around with as much as a regular toy.

What? Okay, okay, you are right. In the meantime, Hasbro is trying hard to counter that wee fact, especially



since their launch of "quick draw" action figures, which basically seems to mean that you launch a figures' arm through the room when you hit a button. I find at times it is safer to *play* with my *customs* indeed...



Seriously again, if you want to build a diorama and you want Giran to stand next to Malakili when he starts manhandling Luke, then customizing is probably your only way out.

The Giran custom you see in this picture was based on the reference picture you see next to it and was constructed using parts of many other figures. As a result of all the fitting together, Giran is not able to move head, left arm and legs anymore.

Giran may then be just a display piece, but it sure looks nice to have him there. My plastic Malakili finally doesn't have to take care of the Rancor alone anymore ...

Looks exciting? I may think so!

But don't rush it! There's a lot more to be told before we'll be there...

## Paint and Painting Techniques

If you care to construct a small army of droids or beings that only look a little bit different, it's very well possible that you may only have to apply some paint to do the trick.



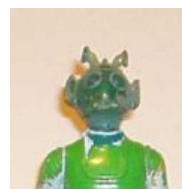
Painting that POTF2 Weequay Guard with some other colours for instance, may give you a convincing custom that will look very nice in a diorama. Jabba had tons of Weequays around and if you don't position your re-paint in the exact same stance next to the original, nobody will notice they're actually one and the same figure.

So how do you do that?

Well, of course you just pain, but first of all it's important that you will choose the right kind of paints. When a kind of paint doesn't stick well to the plastic, it may take forever to dry or start flaking off real quickly.

products that will cause the plastic of your figure to melt! And unless you plan on making a "Han threw Greedo in a bucket with nitric acid"-custom as I managed to, it's not an effect you would like to apply very often...

In the worst case, your paint may contain



When you'll ask around in a customizer's place what paints you need to use, you'll get a series of answers that will say "acrylics" and "enamels".

*Eh, come again?*

Acrylics are paints that are composed of an acrylic polymer; they are soluble in water until they dry.

Enamels on the other hand, are paints that are oil-based. This means they have to be diluted by a solvent (thinner, white spirit and the like).

Acrylic paints will dry much faster than enamels. However, enamels, once dry, will usually give a far more durable finish. Note the "once dry", because it may take a little while before an enamel paint will dry. Most of the time enamels will leave a slightly tacky surface as well. Last but not least, you should check if the paint you use would be compatible with plastic or other paints. There might be chemicals in the paint that don't mix well with other paint components or the plastic of the base figure. You have to know that a typical Star Wars figure is made of a couple of different plastics. The head and limbs make for one rather flexible kind, while the torso and pelvis usually make for a second more hard and solid kind. Both kinds may react differently to different paints.



There are a number of popular paints around and depending on where you are in the world; you may find different brands and kinds.

In Europe, the Revell (acrylic) paints are widely known, well available and are a good choice. They stick to almost all parts of a Star Wars action figure and will dry very fast.

If you're in the US, you'll likely be able to find Testors enamels first. They are equally good paints for customising, but according to the specs, it may take a long time for them to dry. If you don't want to sit out the drying process, you can seal your paint applying the Testors Dullcote.

Another important thing to keep in mind is to use *matte* paints mostly. Only use *gloss* paints when you really, and I mean *really*, want something to have a nice shine ... If you decide to ignore this healthy counsel your customs will probably look like John Travolta in Saturday Night Fever and that means they'll sparkle like a fresh-polished diamond in a bath of light ...

The most important quality for making a good paintjob then is... patience. Don't try to paint everything at once! Paint layer after layer, ground layer first (usually the bigger chunks of your figure, such as legs or



body), let it dry out completely, and only then paint the details.

One of the biggest mistakes starting customizers are making (I did, at least), is to paint layers too quickly after one another, so that colours get mixed or droop into each other. The possible effects of impatience in this case can easily be compared to a chocolate bar with banana filling in the back of your black car on a hot summer afternoon.

But there's still a bit more to be told about painting ...

## Painting Techniques

There exist a number of painting techniques that you can use to make your figure look more realistic. Mind that you will have to decide of "realism" you want to put into a custom figure well in advance. Hasbro is making its figures quite true to scale and appearance in the movies, but they are still painted in their very special own way. If you want to produce customs that fit in with the Hasbro lot, you will need to take a very hard, long look at the way they paint their figures.

If you decided to go for "more realism" then the next techniques can help; they are popularly called *weathering* techniques.

They are actually quite simple and it works great to imitate stains, wear, dirt or dust on a piece of "clothing", the wear marks on boots and other "leather" objects and the scratches of heavy use on "metal" objects.

A first technique can be applied as next:

Dip your brush (don't choose too small brushes for this job) in the color of your choice and paint something else but your figure until your brush feels almost completely "dry" again. Then "dust" the parts you want to look stained or dirty lightly with the almost empty brush. Repeat that until you are satisfied with the result. Got it? Why, let's "illustrate" that a bit better then ...

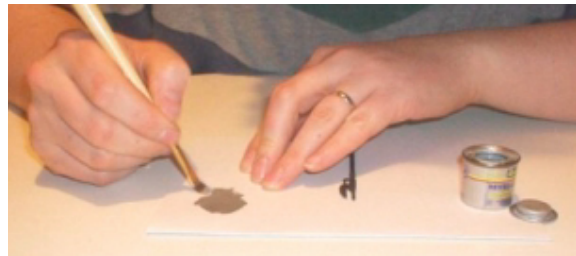


Here is your old boring and very plastic vibro-axe. Realism is still in a Galaxy far, far away ...  
Let's fix that! I painted this one black first for maximum effect.



Then open your tin of silver paint and dip your brush in it. I have been looking but it's really hard to start in any other way ...

Get rid of most of the paint on your brush again, as if cleaning it (e.g. on a piece of paper). When there's just a little residue of paint left, you can start ...



Then brush the vibro-axe very lightly ... as if you're a cop "dusting" for fingerprints.  
[Oh my God! Look how many different people were holding my vibro-axe!]



If you did this correctly, your vibro-axe will now look as pictured. The special application of the silver paint made the details in the axes' sculpt come out beautifully. As such, it is rendered a whole lot more realistic than it was when you started.



A second "weathering" technique exists in diluting the colour of your choice (very often a dark colour to imitate dirt) and putting the diluted paint on your figure. Since the paint is diluted, it will run into the folds, creases and cracks of the figure and dry up there almost exclusively; giving the figure a dirty and worn look. Of course this also means you have to be careful that "unnatural" cracks and seams caused by your customizing handiwork are not emphasized extra.

## Swapping Heads and Limbs

If what you want to do is populating your dioramas with armies of some kind, then this may be the paragraph for you.

One of the simplest customs to do is what they call a "head swap". It consists purely of getting the head from one figure and putting it onto the body of another one.

Simple?

Yes, if you know how a figure looks on the inside and how to "crack" and "boil-and-pop" ...

Lost you, aye? Okay, let's take these things one at a time.



### The entrails of an action figure



Usually the inside of a Star Wars figure looks like the picture on the left.

<Heheheh> ... just kidding, here to the right is what it really looks like...

The head and limbs are fit into the body with what is commonly called a "peg".

The pegs of the arms and legs are usually part of the arms and legs themselves. That is not always the case for the peg of the head.

I admit they are seldom cases, but it's just good to know in advance which peg you're dealing with, as they can cause you a bunch of trouble when boiling and popping.



The exceptional ones I know about are the next:

Most Chewies, including the RPG Wookiee, a few versions of Episode 1 Qui-Gon's and further in the **Episode 1** series Darth Sidious, Tatooine Darth Maul, Senator Palpatine, the Senate Guard, Nute Gunray and the first young Anakin which has an unusual long neck peg that is going until the waist.

In the **Power of the Force 2** series then you have Bib Fortuna, Ishi Tib, Garindan, Saelt-Marae (Yakface), Zuckuss, Flashback Luke, Flashback Obi-Wan, the Commtech Jawa, the Royal Guard, all of Jabba's Skiff Guards (Klaatu, Barada, Vizam), the Tie Fighter Pilot, the white-haired Ugnought and Emperor Palpatine.

In the **Expanded Universe** collection Mara Jade and the Clone Emperor suffer the same problem.

In the **Power of the Jedi** series it is Tessek, the Preview Zam Wessel and the Senate Guard.

From the **Saga** series you have to remember the Royal Guard. In the **Saga 2006** chapter, the figures that have a ball-jointed neck are tricky to work with as well.

As you can also note, the front and back of the upper body or torso are equally attached to each other with a peg. In case your custom requires that the body is "cracked" or split open, then you'll need to cut through this peg.

Knowing this, you're ready to rock and ... eh ... "boil and pop", baby!



## Boil-and-pop

"Boiling and popping" a figure is a widely known expression for the act of cooking your figure (yes, you read that right) and tearing the softened plastic limbs out. Once you master this technique, you should be able to swap limbs and heads from one figure to another quite easily.

There are a number of things you need to keep in mind when cooking your figures.

First of all, protect yourself sufficiently! Boiling water is ... well, *boiling hot* and thus a perfect way to customize your own skin into a little piece of macramé if you're not careful.

To protect yourself:

Wear heat resistant gloves. **Don't** wear plastic gloves! They will melt into your skin when exposed to a source of heat! After that, the only thing left for you is lining up in the queue when Lucas starts looking for actors to play aliens in his next movie.

Have towels nearby. Not only can you use them to dry up the place if you spilled water, but they're also great for extinguishing fires if you managed to be dumb enough to set the place on fire. Besides, every intergalactic hitchhiker should now by now that you should always ... I repeat, *always* have your towel nearby.



Don't put your face over the boiling pot of water if you like your current facial features. Boiling water produces steam. Steam is hot. Hot steam can burn your face. **Doctor Evazan** will become your favourite Star Wars character.



Use a pair of iron clippers with plastic handles to keep your figure hanging in the water.

**Don't** use clippers that are made entirely of plastic ... you are trying to melt plastic, remember?

There are probably more things you can do, but I guess that you understood by now that playing around boiling water can be dangerous. So don't be a smartass, just be smart. Don't take unnecessary risks.

So, from here, it's the basic idea that you submerge your figure in the pot when the water is boiling.

Keep it completely submerged for about one full minute. One minute was a good average for all the figures I treated so far. If your figure needs more cooking, you can just continue the exercise, no harm done. If you cook it too long ... well, we all know the story of Darth Melty.



Once your figure is sufficiently cooked, dry it up quickly in the towel and rip its head and limbs out with swift and quick movements.

**Don't hesitate** when doing this!

Either you rip the limb free as intended, or you'll tear it apart from the peg. As soon as the piece starts tearing, the damage is done anyway, so just don't hesitate.

To get the limbs back in place, but then in their new host bodies, just cut a part of the peg away, boil the limb until it gets soft again and push it in place in the new body. Because you just cut away a small part of the peg, you'll be able to fit the limb more easily into the host peg-hole. Move the limb a bit around to make sure that it's well in place and still allows for the intended articulation.

Now let it cool off and there you go, the Frankenstein operation has succeeded; your mercenary sports a new head, more muscular arms or those cool chicken legs!

Now that you master the "boil-and-pop"-skill, you can try to "flash-freeze" limbs too. Basically, "flash-freezing" means that you'll heat up a bendable body part, meaning an arm or leg, bend it into a new position and cool it off instantly so that the limb remains fixed in its new position.

My own experience is that it's best not to rely too heavily on this technique. I found that the plastic of Star Wars figures is very stubborn and will move back into its original position after a while. Hence, even though it is employed, the use of this technique is very debatable in my eyes.



## Cracking bodies



In some cases popping heads and limbs and fitting them into a new body just won't work.

Either the reduced pegs just won't fit or they will need some altering before they'll fit in. In this case, it'll be best to "crack" the body open.

Using the "cracking" technique will allow you to swap parts of figures around a lot easier and make new combinations as you like.

However, you will need to pay attention to the way limbs and body parts are positioned, when doing this exercise. It's possible that one pair of arms looks close to the ones you'd need on your custom figure, but that

their stance isn't compatible with the other body parts you collected. The result can be that your custom looks the way you wanted it, but that it appears to be "break-dancing".

Of course, you can then still put a Michael Jackson figure into your diorama and arrange the "break-dancing" figures around him. As such, nobody will ever be able to make any nasty remarks; Jackson IS an alien too, after all. Still, it probably would start getting suspicious if there is a Michael Jackson in all your dioramas.

When cracking a body, be aware that there's an additional peg keeping the front and back part of a torso together (take a look at the pictures shown before again), which you will need to cut or "crack". Also keep in mind that the plastic commonly used for torso or pelvis is of a different, sturdier kind than the ones for head, arms and legs.

You can split the torso by cutting through the seam-lines (the place where the front and back part connect always shows a thin seam, no matter how well the two parts fit together) with a thin Exacto knife.

Or you can decide to try your luck, wedge a pair of clippers in one of the peg fittings and crack the torso open by force.



I usually choose for the first option myself, cutting at least partially through the central torso peg before I'll try to crack it.

The torso plastic is usually real hard and cracking it the violent way often gave me parts and pieces that I didn't really want. The torso will "decide" to crack open in the weakest places and assuming that the weakest place is by definition the seam-line does not always produce good results.

Putting cut torso parts back together you'll need to do with good glue that dries invisibly. I have been using the Loctite instant glue for that purpose with good results so far.

But be careful with instant glues: try not to glue your fingers together; getting them separated again is an unexpectedly painful event.

If you manage to boil, pop and crack, you will still notice that just putting parts together will sometimes not entirely do the trick.

Some parts will not be completely accurate and will still need some work.

Of course, there's a way to handle that...





## Sculpey and Sandpaper

So there you are. You found a couple of arms that have the correct shoulder pads, but the wrist bracelets are just not right. Or that head looks quite okay, if the nose would just be a little bigger. And that head has exactly General Dodonna's expression, but not the required touse of hair and the beard...

Luckily there are answers to all of these problems and they're called ... *sculpey and sandpaper!*



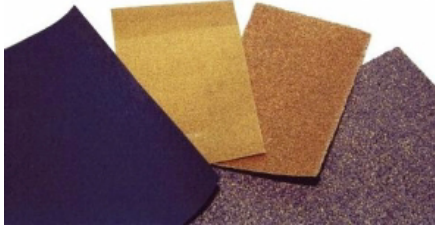
In the customizer's world, sculpey is used as a collective noun for a number of products, mostly resins, that dry out to solid pieces when exposed to the air.

The one that is most popular and easily available in my parts of the world (Europe), is a two-component resin called Milliput. When using Milliput, first knit together equal portions of both components until you have a homogeneous substance. You can then model any kind of object out of this resin and let it dry out.

You can use sculpey to fill holes or just to sculpt entire new body parts yourself. The more courageous among you can even try to customize heads, but you'll find that you'll need a lot of practice to get good in this area. Facial features are not exactly easy to sculpt...

When using sculpey to fill holes or make the connection between limbs and parts, you preferably make sure again that the stance of the limbs is correct. Don't worry immediately about superfluous sculpey clinging to your figure parts when you're in the process of applying it; just make sure it's positioned right and let it dry out. It doesn't need to look perfect and finished off from the start. As soon as the resin dried out, you can start sanding and carving away the superfluous parts until it has the looks that you like.

Sanding away sculpey or plastic parts you do best with sandpaper with a big grain if you'd need to sand away big parts; smoothing out the final result and sanding away small parts you do with paper with a fine grain, of course.



A last tip in this area is not to get too heavy on the very small details with sculpey. Some people will be inclined to use sculpey to add very small details such as shirt buttons. They'll find out that the result looks rather awkward in the end as it is very difficult to 'sculpt' such tiny details in the right proportions; painting them on afterwards is usually a better idea.

So there you are, you have put your character together, corrected the missing and wrong parts with sculpey, so all that you still need to do now is paint your figure.

## Your Touse of Tools

And so what tools do you need to do all that?



There's not a single good answer to that question.

If you read the above paragraphs well enough, you will make sure to add sandpaper with different grains, an Exacto knife, sculpey, instant glue, clippers, the necessary paint and a set of brushes to your tool set.

Except for those I'm using woodcarving tools to do the necessary sculpting that comes with customizing.

But I'm certainly not saying that you need to use the same stuff.

If you venture into your dad's garage, I'm sure you'll find the necessary items for your own customizing endeavours.

If that doesn't help, then try to visit a "do-it-yourself"-shop. They usually have plenty of good materials around that could serve as customizing tools. It will all depend on what exactly you want to achieve and how you think to do it, but make sure you don't spend too much on fancy materials and tools:

customizing is also about finding cheap alternatives and being creative.

If you think different, head for the model-building toy shops immediately. You'll usually find specialised materials for this kind of hobby ... for equally specialised prices.



Even so, a special word needs to be said about the dremel. A dremel is a small apparatus that allows using different heads for sanding away smaller and bigger chunks of any material; think of it as a dentist drill of sorts. As such, a dremel is an extremely handy tool for customizing, but again, it is not an absolute prerequisite. You can easily do without.

Considering that it'll cost you easily 30 EUR or more is then probably another good argument not to go buy one right away. Only buy a dremel when you're **very** serious about customizing.

## Pursuing Movie Accuracy

This paragraph is for the die-hard fans. When you start making movie-accurate customs, you have arrived in the final possible mental state of Star Wars fan-hood.

Allow me to introduce you to it.

It can't be said enough. When you want to make your figure movie-accurate, you will actually have to look at the movie. Having witnessed the conception of tons of customs I'm stressing this, because fans very quickly seem to *assume* having seen things and fill in details with their own imagination. That still doesn't say you won't make a good-looking custom, but *it won't be movie-accurate*. And upon meeting the likes of me, you'll probably be discouraged profoundly when your attention is put to all those little details you seem to have simply missed.

So your first mission is to look up all the references you can. I'll try to sum up here the ones that I'm using myself. "Stills" or "movie shots" and BTS (behind the scenes) images take the bulk of what to look for... and there are a number of good sources for these to be found both on-line and off-line:



Steve Sansweet's work. First *encyclopaedia*. Even though you every entry, the descriptive text as well. It also features a handy that may take you to other do find pictures.



There are always a number of photo books or sticker books that are made available with every movie, not to mention magazines which will feature detailed spoiler images of characters even before the movies are in the theatres. Shown up here are the Panini sticker book and a French Lucasfilm Magazine...



Next to that, there's there is his *Star Wars* will not get a picture with can sometimes help just index with references publications where you

Steve Sansweet also made a Toy Guide, in which he shows many movie stills that I didn't see anywhere else yet to show how accurate the latest Hasbro toy line is. It speaks for itself that these are equally a pretty good source of reference pictures.



Other great references are the "making of" CD-ROMs of the Classic Trilogy and "the Phantom Menace". Not only a bunch of actual movie stills, but equally the best source around for BTS images.

The CCG cards, of course! Not only can you also find them online ([www.Decipher.com](http://www.Decipher.com)), you can have the nitty-gritty cards themselves for your perusal. Nothing is better to do some scrutiny on details!

Except for these, there is the Internet. A simple search in an Internet Search Robot will probably yield a large number of pictures already, but you know that there are also thousands of Star Wars fan sites around. Many of those feature their own reference guides: [www.StarWars.com](http://www.StarWars.com), [TheJawa.com Picture Reference Page](http://TheJawa.com), [Iradonian's excellent Jedi Archive pages](http://Iradonian.com), [AGalaxyFarAway.com Picture Portfolio](http://AGalaxyFarAway.com) ...

It's usually a bad idea to use *drawings* (Essential Guide to Characters) or *computer-generated images* as reference pictures. Some of the time, the designer didn't care to do the necessary research on details himself when making the picture, meaning that he or she filled some of the gaps with his or her own



imagination. So don't be a lazy copy-cat, do your homework properly...



As already pointed out, the same usually goes for other people's customs, except for the ones produced by customizers that claim to pursue movie-accuracy themselves. But even then, you'll need to be careful ... an opinion of what one "sees" may differ and the eye can be easily deceived.

Once you assembled enough pictures, it's a nice idea to make a collage of them. Even if that looks a bit awkward at times, you'll see that it's very valuable to "understand" how the character you want to customize looks like. Sometimes, putting pictures in relation to each other allows you to imagine the bits you don't actually get to see in the photos.

Once you know what your next custom really looks like, you can start looking for the body parts that are already close to what the movie character looks like and start putting them together. Use all the techniques that are described here above to assemble the parts into a figure.

## Epilogue

Well, here, that's all you need to get started, young Padawans!

I hope this article wet your appetite to get up and try the wonderful hobby of customizing.

From here it's all practice, practice, and practice ... just like learning how to swing a lightsaber around properly.

*Do you think, after lecture, that there's something that needs to be added to this introductory tutorial or you just want to contact me with your customizing questions? I'm right there in the JTA customs forum along with a bunch of experienced customizers. And guess what? We're very willing to listen to any remark and answer any question you may have...*