

BB-8

Decals Tutorial

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VERSION 2.0

FORWARD

Before you start your decals installation, please be sure to read through these instructions carefully.

These vinyl wraps are made from the finest automotive grade vinyl. The vinyl is waterproof so you don't need to worry about the decals getting wet, etc. That being said, you are attempting to wrap a SPHEREICAL object with a FLAT DECAL, which can easily cause creases, extra material which may need be cut away or trimmed, etc. **DO NOT ATTEMPT TO INSTALL AS ONE PIECE.** It's recommended that each orange circle be cut in quarter segments (but not on the seams of where the hemispheres will meet).

These are time consuming to install and will take great patience. Do NOT panic, take things slow and you should be able to achieve similar results to what is shown.

NOTE: *If you're looking for a PERFECT droid... this method is probably not for you. This is meant to be a more cost effective and relatively accurate alternative to other methods such as 3-D printed pieces or hand cut panels.*

STEP ONE: HAVE EVERYTHING READY

There are a few items that you should have on hand for the installation.

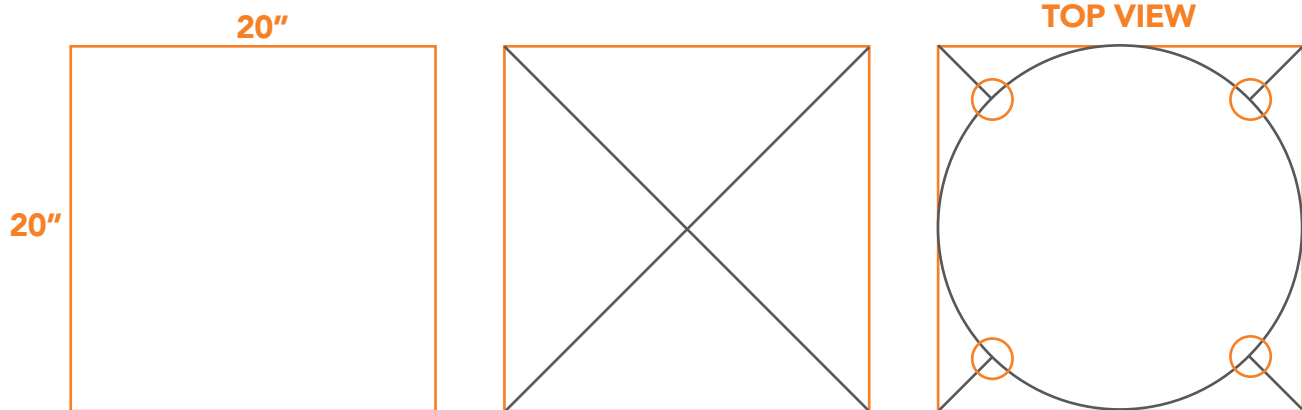
- ☐ Scissors
- ☐ Masking Tape
- ☐ Ruler
- ☐ Pencil
- ☐ Compass
- ☐ Duct Tape
- ☐ Panel Diagram (see attached)

In addition to the above items, make sure that you have your hemispheres sanded, primed and painted.

STEP TWO: MARKING YOUR HEMISPHERES

DOMES PANEL SPACING

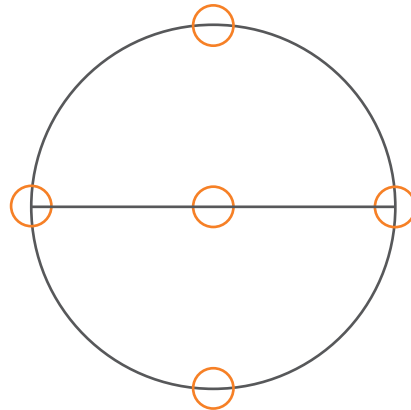
To determine the spacing for the circular panels. Measure 20" x 20" square on a piece of cardboard or plywood. Draw an X at the diagonals. Now place ONE of your hemispheres on the layout and mark where the 4 spots are. You now have equally spaced centers for your side panels. From here, take measurements to determine top dead center for the other panel. Once marked, put your



two hemispheres together, rotating until you find the best fit (as they may not be perfectly round). Once you find the best fit, mark the second hemisphere from the measurements on the first hemisphere.

Then take measurements to determine top dead center for the second hemisphere. Now you have the centers of ALL 6 panels marked and ready.

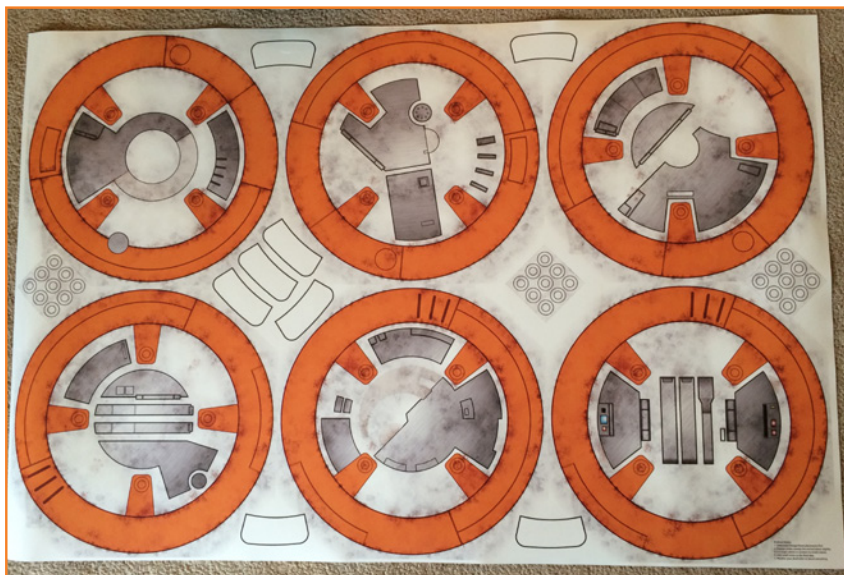
SIDE VIEW



STEP THREE: DRAW ON YOUR PANEL GUIDES

TOP PANEL

It is recommended that you choose panel 3 (top right in image below), or panel 4 (bottom left in image below) as the panels for the top of each hemisphere. Then you won't need to slit the orange tabs along the seams.



GRAB YOUR COMPASS

You're going to need guides for each panel installation. As mentioned, we're trying to wrap a flat sheet around a spherical object... so it's going to be tricky. There WILL BE excess pieces of the orange circle that you'll either be OVERLAPPING or TRIMMED away. Set your compass to 155mm and then draw the guide circle on the hemisphere.

IMPORTANT: Once you have your guide circle drawn on. Mark where the 4 orange tabs will be placed (evenly spaced quarters). When installing each quarter section, make sure the orange tabs align with the marks of where they should be and work your way out.



MARK THE GUIDES



CUT INTO SECTIONS



STEP FOUR: INSTALLING THE DECALS

Cut each circle out from the main sheet to make it easier to handle. Weed the extra sticker portion (that you don't need from each sheet) so that you're only left with the actual decal on the backing paper. Then roughly cut around the circle and determine where you'd like to cut it into sections (quarter sections are recommended).

Choose places on the decals where overlapping won't interfere with the design. Check out each circle to see where the best place to cut would be.

THE ORANGE QUARTER SECTIONS

Ok, it's very important that you don't press the decal down too tight when you're placing it on until you know it's in the right place. remove the backing paper from a section of the piece and position it where you want it. Once you've got it started, then remove the rest of the backer paper and **SLOWLY** work your way across the rest of the decal moving from the center outwards to avoid creasing.

If you do get a crease, simply pull the decal back and try again. **DO NOT PANIC**. The decal is meant to have some play involved during installation. Take your time and **DO NOT RUSH installation**.

See below for examples of how the label **COULD** look if you try to rush things... and this one eventually went on great.

REMOVE BACKER IN STAGES



DON'T PANIC



WORK YOUR WAY OUT



Continue to follow your guidelines around with the orange sections... and remember that there will be overlap or pieces that you will need to trim out.

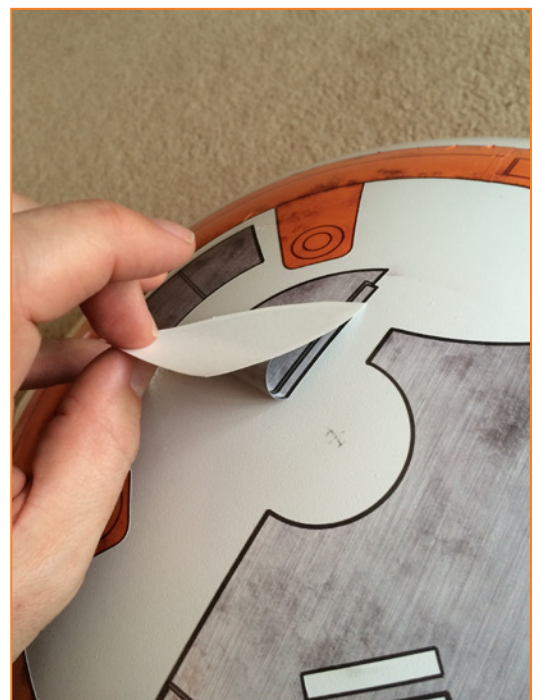
REMOVE BACKER IN STAGES



THE METAL DETAIL SECTIONS

Once you've got the first orange circle on. Then check the layout diagram and install the center (metal looking) sections. You should find that these are much easier to install. Work your way out from the center of each piece you install to avoid creases.

INSTALLING THE INNER PIECES



Once you've got the first circle panel completed, next move onto the top panel on the second hemisphere. Follow the same instructions.

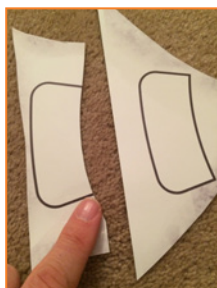
Once the top of each hemisphere has been completed, duct tape the hemispheres together in a few spots and draw on the remaining 4 circle guides. Then remove duct tape from those areas and install the remaining 4 panels while the ball is taped together. **DO NOT** slit the labels along the seam. Wait until the entire ball has been completed and then you can use an exacto knife to cut carefully along the seam. Then go over each hemisphere and press the decals firmly to make sure all decals are pressed firmly in place.

DUCT TAPE TO HOLD TOGETHER



THE OTHER DETAILS

Once you've got all 6 panels on, you can then add the little side sections to the circles that require it



(see attached diagram to see placement for these pieces. You will need to trim off the inner line and then position them in place.

Once all of those are on. Draw on panel lines to give the illusion of separate panels. Then measure for where to place the small little sensor circles. This was the most fun part as it really gives it the finished look.

INSTALLING THE INNER PIECES



STEP FIVE: WEATHERING

NOW GET TO WEATHERING

Before you weather your panels, remove the duct tape so that it's just the decals that are holding the two hemispheres together (or if you have already slit the decals along the seam, you can weather each individually). Weather the hemispheres and the labels so that everything blends together flawlessly.

And if you've made a few messups with the decals (creases, etc.), These would be great places to add a bit of extra weathering.

GOOD LUCK!

UNWEATHERED



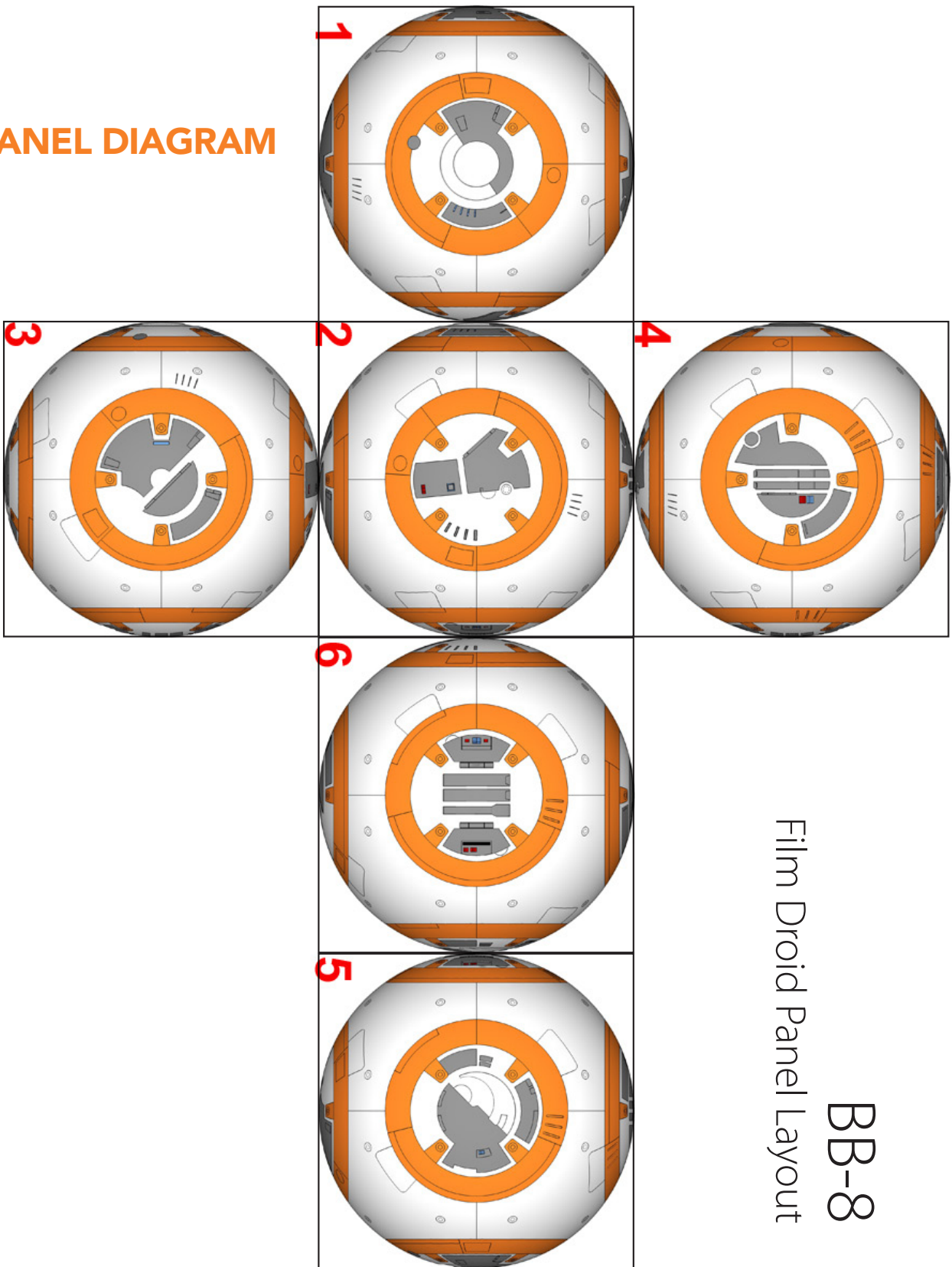
WEATHERED



WEATHERED



PANEL DIAGRAM



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Film Droid Panel Layout