

# REFURBISHING A GLOBE

## Equipment/Supplies Needed

- Stove/hotplate
- Deep Large wide Pan
- 2 Large heavy 2 cup+/40ML+ Corning/Pyrex mixing cups (borosilicate glass)
- Pitcher with cover
- Large Funnel
- Gloves (preferably with sticky grip fingers)
- Bottle Brush or Equivalent
- Dawn dish soap or equivalent grease-cutting dish soap
- Replacement bottle caps
- Bottle capper
- SURF/SLES A.K.A. Surfactant (Sodium Laurel Sulfate) [https://en.wikipedia.org/wiki/Sodium\\_laureth\\_sulfate](https://en.wikipedia.org/wiki/Sodium_laureth_sulfate)
- Distilled Water (as required)
- Propylene Glycol (As required) [https://en.wikipedia.org/wiki/Propylene\\_glycol](https://en.wikipedia.org/wiki/Propylene_glycol)

## RESTORATION PROCEDURE

Heat @ 4/5" of water in the pan until boiling and then turn to simmer to maintain temperature

Open Globe

If the master fluid is good and not cloudy, save it in a pitcher and close to avoid contamination

If cloudy, dump it out to start over

Put globe in pan to heat the globe in hot water bath to melt the lava

Add or remove water accordingly so the globe does not float

**NOTE:** *Do not bother trying to heat the globe on the base.*

*It takes too long and does not get the globe hot enough so it will stick to the sides when pouring it out*

Put on Gloves

Remove globe from pan when all the Lava is melted and in a liquid state.

Pour the molten lava in a Pyrex measuring cup and place it back in the pan of water to stay warm

*Now is the time you would add dye to new wax or preform modifications to the Lava.*

Remove the coil rinse in hot water, and set aside

Take the other Pyrex measuring cup and pull out some of the hot water from the pan

Carefully pour it into the empty globe. Use funnel if necessary

Add a few teaspoons of Dawn Dish soap (degreasing)

Wash the globe thoroughly with a bottle brush

Dump Fluid

Repeat with hot water from pan

Dump Fluid

Rinse thoroughly with hot water from tap until clean and suds are gone

**DO NOT USE COLD WATER-** it will crack the globe!

Replace coil

Add a few tablespoons of SURF or Clear hand soap (NOT DAWN) and @1/2" of distilled water

Shake vigorously to COMPLETELY COAT THE INSIDE OF THE GLASS

Dump

Set globe on table or countertop near the pan of water that is holding the Pyrex cup of molten lava

With Gloves on, remove molten Lava you put in Pyrex Measuring cup from the pan of water

Take funnel (preferably with drop tube to avoid splashing) and slowly and carefully add molten lava to globe.

Cover globe opening to avoid drying out the inside of the globe and let cool.

Note: *DO NOT* let any time elapse during these last steps, I find it best to add molten lava to a hot globe freshly coated with SURF to avoid additional sticking

Add master fluid

If your master fluid was bad, use a 70/30 mix of distilled water and propylene glycol (respectively) as a starter fluid

NOTE: If you experience the Lava has bubbles from pouring it into the globe and it and wants to float immediately.

Simply return it to a Pot of boiling water (WITH GLOBE UNSEALED).

Turn on the heat and watch it heat up until all Lava is melted and floating to the top.

Let it sit on the top floating there until you see all bubbles have popped.

Depending on the size of the globe, this could be @1hr

Turn off heat to the pan.

WALK AWAY.

DO NOT TOUCH the globe!

Let it cool naturally.

The Lava will fall to the bottom of the globe with all bubbles gone.

If the room is cold or near a fan, it might cool too quickly and stay on the top of the globe.

If it did not fall, simply use an appropriate clean tool to push it down.

It will fall to the bottom.

Remove from the pan, wipe dry.

Return it to the base.

Turn on

The Lava will flow as it should.

## **TWEAKING**

Getting the proper flow is a matter of tweaking the master fluid

*(Unless you're using a formula of MT Goo or late model Lava Lamp China goo-which already has that characteristic of ball flow)*

IMPORTANT: between each addition and subtraction of additives, you need to let the lamp reach full operating temperature (@125F) in order to make a decision to change it further.

If the lava creates long undulating columns and does not break away

Add small amounts of SURF until you get enough added to break surface tension (see chart below)

If all you get are balls of lava and not the desired stringy flow, removes some fluid and replace with the 70/30 mix of master fluid. You have too much SURF in it.

If the lava sits at the bottom and does not flow, remove some master fluid and add Propylene Glycol to create a denser master fluid so the lava will float. If the Lava floats to the top and stays there and there are NO bubbles in the Lava (See above note) then remove fluid and add more distilled water, Your specific gravity is to low.

Average Surfactant amount according to globe size are as follows. If your unsure of what size globe you have please check out the section on Globe Sizes.

- 8 oz. - Don't waste your time
- 20oz. - 4-5 ml
- 32oz. - 8-10ml
- 52oz. - 15-17ml
- 250 oz. - 55-60ml
- Other globes other than lava lite globes you'll have to figure out what the fluid amount is in quarts. Then from there you can decide how much surf to use.

\*\* The more surfactant you use, the more round blobs will be produced.

\*\* The less surfactant you use, the long stretchy type of blob you'll get.

## Here is some useful information

Lava® Lamp Size Tamaño de la lámpara de lava Taille de la lampe à lave	Series Serie Modèles	Dimensions (LxWxH, inches) Dimensiones (LxAxH, pulgadas) Dimensions (L x l x H)	Weight (lbs) Peso (lb) Poids (lb)	Globe (oz) Globo (oz) Globe (oz)
11.5" / 12 oz 11.5 pulg. / 12 oz 29.21 cm (11.5 po) / 35 cl (12 oz)	1900 series Serie 1900 Modèle 1900	2.5x2.5x11.5 6,35 x 6,35 x 29 cm (2,5 x 2,5 x 11,5 po)	1.6	12
14.5" / 20 oz 14,5 pulg. / 20 oz 36.83 cm (14,5 po) / 59 cl (20 oz)	2000 series Serie 2000 Modèle 2000	4x4x14.5 10 x 10 x 36,8 cm (4 x 4 x 14,5 po)	3.2	20
17" / 32 oz 17 pulg. / 32 oz 43.18 cm (17 po) / 95 cl (32 oz)	4000, 5000 series Series 4000, 5000 Modèles 4000, 5000	4.5x4.5x17 11,4 x 11,4 x 43 cm (4,5 x 4,5 x 17 po)	3.7	32
16.3" / 52 oz 16,3 pulg. / 52 oz 41.40 cm (16,3 po) / 95 cl (52 oz)	4000, 5000 series Series 4000, 5000 Modèles 4000, 5000	6x6x16.3 15 x 15 x 41,4 cm (6 x 6 x 16,3 po)	5.4	52
18.5" / 80 oz 18,5 pulg. / 80 oz 46.99 cm (18,5 po) / 237 cl (80 oz)	8000 series Serie 8000 Modèle 8000	5x5x18.5 12,7 x 12,7 x 47 cm (5 x 5 x 18,5 po)	9.4	80
27" Grande 27 pulg. Grande Grand modèle de 0,7 m (27 po)	6000 series Serie 6000 Modèle 6000	8x8x27 20 x 20 x 68,5 cm (8 x 8 x 27 po)	18.8	252

FIRST AIN.

# What is the right size bulb for your Lava® lamp

