



Black Nickel Plating Kit Instructions

Black Nickel Plating results in a translucent to solid black metal coating over Nickel, Copper, Brass, Tin, Steel, Stainless Steel and Zinc. Plating over Zinc will give the darkest colors. Depth of color can be varied by varying plating time and amperage used. Shorter plating times and lower amperages give a more translucent color, and vice versa.

READ MSDS AND WEAR ALL PROTECTIVE GEAR BEFORE STARTING



Tank Setup for 1.5 Gal Kit

For 3 Gal Kit, multiply by 2

For 4.5 Gal Kit, multiply by 3

For 15 Gal Kit, multiply by 10

Degreasing Tank

1. In a plastic tank, add 1.5 Gallons of Distilled Water
2. Add 12oz of SP Degreaser Powder
3. Heat in a metal pot on a hotplate and transfer back to bucket for use and storage if desired.

Plating Tank

1. In a plastic tank, add 1.5 Gallons Distilled Water
2. Add the bag of Black Nickel Crystals
3. Stir with a plastic spoon until dissolved.
4. Mark liquid level with permanent marker on outside of tank
5. Cut a small slit up each anode, about 9/10 of the way up. Bend back the strip and hang anode on tank wall so that the strip is on the outside of the tank. Make electrical connections to this strip.
6. Install a piece of copper pipe across the top of the tank to hang parts from
7. Install agitation pump

Operating the System

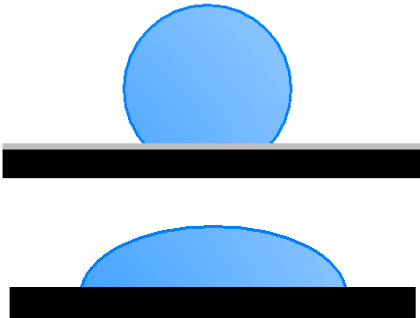
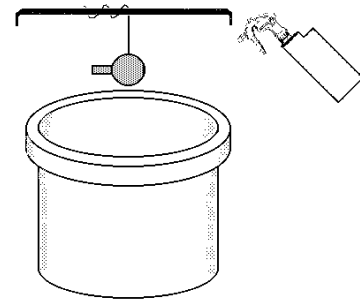
Parts **MUST** be perfectly clean before plating. If a bright plated finish is required, parts must also be polished to a high shine before plating.

Immerse the parts in the degreaser solution until clean. A soft brush may help speed the cleaning process.

Check Cleanliness by Performing a Water break Test – water should sheet off the clean part, not bead up.

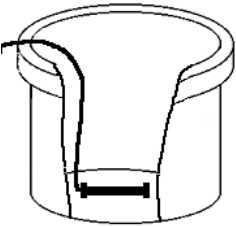

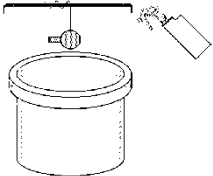


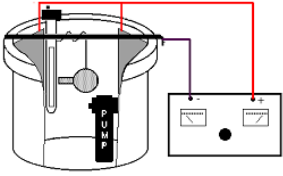



RINSING WITH DISTILLED WATER

The part should be raised out of the solution and sprayed liberally with distilled water.
The runoff should be allowed to drain into the tank.



Oil/dirt film makes water bead up

No oil/dirt film allows water to cover part

PROCEDURE	SETUP	OPERATING PARAMETERS	EQUIPMENT	SAFETY
1. SURFACE PREPARATION	Buff & Polish for a mirror finish. Bead Blast for a 'flat or Butler Nickel' finish. Nylon Abrasive wheel buff for a 'scratched brush' look.			
2. DEGREASING		140- 200 ^o F No agitation 5 mins immersion 12 oz. SP Degreaser 1.5 gal Distilled water	1 x Plastic tank 1 x tank lid SP Degreaser	Wear rubber gloves and goggles. Do not ingest 
3. RINSE IN DISTILLED WATER SPRAY				
4. WATER BREAK TEST	  <p><i>Oil/dirt film makes water bead up</i> <i>No oil/dirt film allows water to cover part</i></p>			
5. CALCULATE TOTAL SURFACE AREA AND PLATING TIME				
6. Tank Makeup		Agitation (pump) 1 pack Crystals per 1.5 gals of DISTILLED WATER 0.01 amp per 1 sq” pH = 4.5-6	1 x plastic tank 1 x tank lid 2 Nickel Anodes 2 Anode Bandages 1 x filter/pump Crystals Distilled water	Wear rubber gloves and goggles. Do not ingest   
7. Plating Times	Plate for 2-10 minutes. Longer times will give more solid color. Feel free to experiment.			
8. Replace lost water	After plating, top up the tank with DISTILLED water to the original waterline.			
9. Protect	If desired, protect finish with lacquer, Caswell Sealer or Wax.			

Troubleshooting

Problem	Cause	Remedy
No deposit	No current (or gassing from part)	Check all electrics
Plate peels off or blisters	1. Poor preparation 2. Inadequate cleaning	Check part with 'waterbreak' test. Check SP Degreaser is OK.
Pitted Plate and Orange Peel effect	1. Hydrogen bubbles formed on part	Alter agitation, or use manual agitation of the part.
Rough Plate	1. Amps too high 2. suspended particles in solution 3. pH too high or low	Reduce current Filter solution (no charcoal). Clean filter Adjust Ph to within 4.5-6
'Burnt' Plate	Too much current	Lower the amperage
Dull Plate	1. Part not polished properly	Strip the plate off and re-polish