
Subject: Banana plugs for 4 way binding posts
Posted by [FloydV](#) on Sat, 10 Mar 2012 19:28:22 GMT
[View Forum Message](#) <> [Reply to Message](#)

It seems like no matter how tight I torque down binding posts, if I come back in a month at least one wire will be loose. I tin the ends of the wire too.

So, I'm wondering if the wire could be soldered into a banana plug and use that instead. Will gold plate solder? I know chrome won't.

Floyd

Subject: Re: Banana plugs for 4 way binding posts
Posted by [Wayne Parham](#) on Sat, 10 Mar 2012 22:25:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

The problem is one of elasticity verses malleability. Clamping pressure requires elasticity. If the material deforms, then it sort of "bleeds off" clamping pressure. So you're up against that. Copper isn't elastic at all - It's way down there with nickel and aluminum.

I like using banana plugs or spade lugs. Banana plugs have springs made of a material that is elastic plated with an electrically conductive metal that doesn't oxidize. That allows clamping pressure from the elastic base material. If a screw connector is desired, spade lugs will provide the same sort of thing - an elastic base metal plated with an electrically conductive surface metal. Tightening down on the spade lug provides clamping pressure without deformation.

Subject: Re: Banana plugs for 4 way binding posts
Posted by [FloydV](#) on Sun, 11 Mar 2012 18:48:36 GMT
[View Forum Message](#) <> [Reply to Message](#)

Wayne Parham wrote on Sat, 10 March 2012 16:25

The problem is one of elasticity verses malleability. Clamping pressure requires elasticity. If the material deforms, then it sort of "bleeds off" clamping pressure. So you're up against that. Copper isn't elastic at all - It's way down there with nickel and aluminum.

I like using banana plugs or spade lugs. Banana plugs have springs made of a material that is elastic plated with an electrically conductive metal that doesn't oxidize. That allows clamping pressure from the elastic base material. If a screw connector is desired, spade lugs will provide the same sort of thing - an elastic base metal plated with an electrically conductive surface metal. Tightening down on the spade lug provides clamping pressure without deformation.

If the banana plug uses pressure against the copper, isn't that the same situation? That's why I was wanting to solder the wire to the banana plug.

Subject: Re: Banana plugs for 4 way binding posts
Posted by [Wayne Parham](#) on Sun, 11 Mar 2012 23:40:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

I would solder the wire into the banana plug, yes. Then the only mechanical connection is in the plug, itself, which provides clamping pressure from its little leaf springs.

Subject: Re: Banana plugs for 4 way binding posts
Posted by [FloydV](#) on Sun, 11 Mar 2012 23:58:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks. I think that is what I will do.

Subject: Re: Banana plugs for 4 way binding posts
Posted by [FloydV](#) on Wed, 21 Mar 2012 18:56:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

I tried soldering some gold plated banana jacks and plugs. This makes a great connection. The wire will break before the join does.
I had to revert to my soldering gun. The heat needs to be applied quickly, so that the plastic in a wall plate doesn't get too hot and lose its shape around the metal.

Floyd

Subject: Re: Banana plugs for 4 way binding posts
Posted by [gofar99](#) on Wed, 21 Mar 2012 23:25:33 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi, I use only banana plugs. I am always swapping things around and they are great for that. I also use IEC power connectors on all my gear that uses AC mains voltages.... even the turntables.
