

27 October 2020 – Kentucky 4-H Virtual Experience – Wiring a Plug

1

00:00:13.559 --> 00:00:23.490

Torey Earle: Hi everybody, welcome to the Kentucky 4-H Virtual Experience. Today we're going to concentrate on SET, or Science, Engineering and Technology programs.

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00:00:24.270 --> 00:00:34.740

Torey Earle: My name is Torey Earle and I am an Extension Specialist for 4-H Youth Development with University of Kentucky College of Agriculture, Food and environment Cooperative Extension Service.

3

00:00:48.930 --> 00:00:58.500

Torey Earle: In today's Virtual Experience. We're going to look at some concepts that relate to the Electric Excitement project three book Wired for Power.

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00:00:59.310 --> 00:01:20.310

Torey Earle: Now these concepts are related to about three of our State Fair projects as well. The first two are the simple and complex farm and home wiring project. And the third is the original design lamp project. What we're going to do today is talk about wiring a plug

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00:01:22.260 --> 00:01:28.770

Torey Earle: The things that you will need to have on hand for today's project are a short piece of lamp cord.

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00:01:30.090 --> 00:01:31.650

Torey Earle: And by the way, this is

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00:01:32.790 --> 00:01:34.170

Torey Earle: 16 – 2 lamp cord.

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00:01:36.090 --> 00:01:43.290

Torey Earle: You need to have a short piece of 12 – 3 cabling

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00:01:45.180 --> 00:01:49.260

Torey Earle: Or some would call this extension cord wire.

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00:01:52.470 --> 00:02:01.920

Torey Earle: You'll need to have a standard household polarized plug. Notice that it's got two prongs on it.

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00:02:04.320 --> 00:02:05.520

Torey Earle: You'll need to have

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00:02:06.690 --> 00:02:08.130

Torey Earle: A heavy duty.

13

00:02:09.810 --> 00:02:14.760

Torey Earle: Corn plug, which you'll notice that it's got three different prongs on it.

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00:02:16.380 --> 00:02:22.380

Torey Earle: You'll need to have some wire strippers and a Philips and standard screwdriver as well.

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00:02:24.090 --> 00:02:36.480

Torey Earle: And you might want to get your parents help and using this part, you will need a knife of some time to remove the outer shielding from the 12 – 3 cabling

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00:02:39.570 --> 00:02:45.600

Torey Earle: The first plug that we're going to wire today is one that will work with the

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00:02:46.680 --> 00:02:49.230

Torey Earle: Original design lamp project.

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00:02:51.120 --> 00:03:10.530

Torey Earle: You'll notice that this is the standard polarized household plug. The reason it is polarized is because it has one larger prong and one smaller prong. The larger prong is for your neutral or white wire and the smaller prong is for the black or hot wire.

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00:03:13.050 --> 00:03:21.960

Torey Earle: And you'll notice on our lamp cord. We don't have black and white wires. But if you remember back to us wiring the lamp socket.

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00:03:23.490 --> 00:03:26.850

Torey Earle: The tip that I gave you was to use the ridged

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00:03:27.930 --> 00:03:38.730

Torey Earle: Side of the wire for your white wire or your neutral wire and the smooth side that had the printing on it for your black or your hot wire.

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00:03:40.080 --> 00:03:43.620

Torey Earle: And that's the way we're going to wire this plug today.

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00:03:45.660 --> 00:03:48.810

Torey Earle: The first thing I want to do is I want to take a knife.

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00:03:49.860 --> 00:03:52.560

Torey Earle: And I want to split

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00:03:56.310 --> 00:04:03.720

Torey Earle: The lamp cord down the center, just a little bit so I can pull it apart. Now you don't want to pull it apart too far.

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00:04:06.060 --> 00:04:21.990

Torey Earle: Because you don't want the split to come out the back of the plug itself. You also want to visually check it and make sure that you have not nicked the insulation on either side, so you don't have any bare wires exposed

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00:04:24.240 --> 00:04:34.200

Torey Earle: From there, since this is a 16-gauge wire. I'm going to look on my wire strippers and I'm going to pick

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00:04:36.720 --> 00:04:45.450

Torey Earle: The stripping notch for 16-gauge wire make a couple of turns and strip the insulation off one side

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00:04:46.500 --> 00:05:01.380

Torey Earle: And then twisted, like we did with our lamp cord while wiring the lamp socket. You twist it, because this is a stranded wire and you don't want it fraying out

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00:05:02.970 --> 00:05:11.850

Torey Earle: You want to do the same thing with the other side. If you notice I have stripped between three quarter and one inch of insulation off the wire.

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00:05:13.950 --> 00:05:15.300

Torey Earle: You go to the other side.

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00:05:21.060 --> 00:05:30.540

Torey Earle: twist and pull that will get your installation off of that particular wire and then twist it as well.

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00:05:33.660 --> 00:05:39.630

Torey Earle: I'm willing to live my wire aside for a second. If you notice. Both of these have

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00:05:41.730 --> 00:05:53.430

Torey Earle: The installation stripped off of them at the same length. That's one of the important things that you want to make sure of because that's one of the things that our judges take into account for the State Fair projects.

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00:05:54.840 --> 00:06:00.900

Torey Earle: Now I will say that you can use a prewired molded

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00:06:02.160 --> 00:06:06.540

Torey Earle: Lamp cord with a plug that's molded on it. But in order to

37

00:06:07.590 --> 00:06:14.310

Torey Earle: Demonstrate another skill that's why we're showing you how to wire your own plug safely.

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00:06:15.900 --> 00:06:33.780

Torey Earle: You notice that this plug has two screws on it. We're going to take our Phillips screwdriver and we're going to remove both of those screws. Now different plugs may have different designs. This particular one is designed in this way. And when you open it up, you'll get to see

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00:06:35.640 --> 00:06:36.930

Torey Earle: Why it has this design.

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00:06:38.520 --> 00:06:40.770

Torey Earle: It as you open the plug.

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00:06:42.960 --> 00:06:56.730

Torey Earle: It folds out on both sides. And you'll see that there is a silver which will be your neutral wire silver screw and there is a gold or brass colored through which will be your hot wire

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00:06:57.990 --> 00:07:14.730

Torey Earle: But on this one. If you take a little closer look, you'll see that the silver screw even has the word white written on the little metal tab just to make sure that you know which wire would go on that, that it would be your neutral wire.

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00:07:16.560 --> 00:07:25.650

Torey Earle: The next thing that I'm going to do is take my Phillips screwdriver. Actually, I want to take my standard screwdriver. I apologize. And I'm going to loosen

44

00:07:29.610 --> 00:07:31.770

Torey Earle: The screw on the neutral wire side.

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00:07:34.800 --> 00:07:41.550

Torey Earle: It will not come out all the way it will stop, but I've loosened it enough that I can get the wire underneath it.

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00:07:45.480 --> 00:07:48.660

Torey Earle: Going to look at my lamp cord. Again, this is the side with the

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00:07:50.250 --> 00:07:51.360

Torey Earle: ridges on it.

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00:07:52.590 --> 00:07:54.930

Torey Earle: I'm going to make a small loop.

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00:07:56.790 --> 00:08:14.010

Torey Earle: And if you remember on wiring our lap socket, we want to put the loop in the direction the screw is going to tighten. So we go back, we make sure we know which direction the screen is going to tighten it will turn to the right.

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00:08:16.110 --> 00:08:18.750

Torey Earle: To tighten. So we will put our loop.

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00:08:20.430 --> 00:08:22.770

Torey Earle: Facing the right side.

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00:08:25.650 --> 00:08:27.480

Torey Earle: And as we tighten our screw down

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00:08:30.510 --> 00:08:37.020

Torey Earle: It will pull that loop underneath the screen instead of pushing it out from under the screw.

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00:08:38.160 --> 00:08:39.690

Torey Earle: Now, and looking at that.

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00:08:41.010 --> 00:08:49.800

Torey Earle: Your installation comes right up to the screw itself. So you don't have any bare wire exposed and we'll move to the other side.

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00:08:52.530 --> 00:08:55.470

Torey Earle: Take our standard screwdriver loosen

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00:08:57.360 --> 00:08:58.710

Torey Earle: The gold colored screw.

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00:09:02.850 --> 00:09:05.580

Torey Earle: Take the other side of our lamp cord.

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00:09:07.350 --> 00:09:09.210

Torey Earle: Make a hook or loop in it

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00:09:12.450 --> 00:09:13.530

Torey Earle: Put it around.

61

00:09:15.510 --> 00:09:19.080

Torey Earle: The gold screw in the direction the screen will tighten

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00:09:22.770 --> 00:09:31.470

Torey Earle: And then will tighten it down and the screen itself will pull the wire underneath the screw.

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00:09:34.380 --> 00:09:37.620

Torey Earle: Now what's left to do is reassemble unplug

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00:09:38.790 --> 00:09:45.060

Torey Earle: You'll notice that this plug has two notches right here. And that's where your split wire.

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00:09:46.080 --> 00:09:46.860

Torey Earle: will fit.

66

00:09:49.770 --> 00:10:02.100

Torey Earle: Back this way so you can see it split wire will fit right in those two notches and he noticed that I don't have any of the split of the wire coming out past the edge of the plug.

67

00:10:03.330 --> 00:10:04.620

Torey Earle: Going to push this down.

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00:10:05.910 --> 00:10:09.630

Torey Earle: And you may notice that it's a little hard to push together.

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00:10:10.800 --> 00:10:18.960

Torey Earle: What this is doing, whereas we tied our underwriters not for strain relief in our lamp socket.

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00:10:20.160 --> 00:10:21.000

Torey Earle: This

71

00:10:22.770 --> 00:10:24.540

Torey Earle: We're going to use the screws.

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00:10:25.920 --> 00:10:33.990

Torey Earle: With our Phillips screwdriver to pull this plug together on both sides.

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00:10:40.560 --> 00:10:47.550

Torey Earle: And you may have to apply a little pressure to get it done. But, pull the plug together on both sides.

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00:10:50.670 --> 00:10:52.890

Torey Earle: And this provides a

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00:10:53.970 --> 00:10:54.900

Torey Earle: Strong

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00:10:56.250 --> 00:11:01.140

Torey Earle: Strain resistant connection from your plug to your wire.

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00:11:02.220 --> 00:11:04.620

Torey Earle: And that's what it's going to look like when you get done with it.

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00:11:06.120 --> 00:11:07.440

Torey Earle: Properly wired.

79

00:11:08.820 --> 00:11:09.570

Torey Earle: Lamp plug

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00:11:11.430 --> 00:11:15.360

Torey Earle: Our second plug that we're going to wire today is for the heavier duty.

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00:11:16.590 --> 00:11:19.530

Torey Earle: Cable and it is

82

00:11:20.640 --> 00:11:34.650

Torey Earle: Can be used for an extension cord, but for our State Fair projects. This is the preferred method to get electricity into your farm or home wiring project.

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00:11:36.330 --> 00:11:38.790

Torey Earle: We've seen a lot of people use the

84

00:11:40.140 --> 00:11:48.480

Torey Earle: Romex cable which is what is you the 12 – 2 with ground Romex cable or the yellow sheet. The cabling

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00:11:49.710 --> 00:12:04.260

Torey Earle: To wire an inlet for their project itself which is acceptable, but the preferred way to do it is with some of the extension cord cabling like this with the 12 – 3

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00:12:05.640 --> 00:12:12.780

Torey Earle: This particular plug in those has three prongs on it. One, the rounded prong is for grounding.

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00:12:13.860 --> 00:12:36.060

Torey Earle: And you notice that this plug is not polarized, like the previous plug, we did with the lamp cord that's because the grounding plug will allow the hot and the neutral plugs to go in the correct outlets on a duplex receptacle.

88

00:12:38.940 --> 00:12:45.960

Torey Earle: What we're going to do is go through how to wire this one and it's a little more difficult than the other but

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00:12:47.550 --> 00:12:54.510

Torey Earle: Once you learn how to do it it's fairly simple and straightforward. Once you will do for

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00:12:56.100 --> 00:13:02.520

Torey Earle: The first thing I want to do is I want to take the outer sheathing off of my cabling

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00:13:03.840 --> 00:13:08.040

Torey Earle: And with this one. Again, you might want to get your parents help and using a knife.

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00:13:08.880 --> 00:13:19.980

Torey Earle: And you're very carefully going to score around the outside of the cabling. Now scoring, it just is making a small cut but you don't want to cut too deep

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00:13:20.490 --> 00:13:29.970

Torey Earle: Because if you make a very deep cut it's going to get into the insulation that are it is around the wires on the inside. So, you just want to very carefully.

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00:13:30.270 --> 00:13:38.850

Torey Earle: And with this version. We've talked about, about an inch. Before I want to go back just a little further, maybe an inch and a quarter to an inch and a half.

95

00:13:39.990 --> 00:13:52.680

Torey Earle: To give us a little wire to work with on the inside of the plug. So, I'm just going to very carefully score the outside of this protective insulation.

96

00:13:56.190 --> 00:13:58.020

Torey Earle: Got a very slight cut in it.

97

00:14:00.870 --> 00:14:02.490

Torey Earle: And I'm going to just

98

00:14:05.070 --> 00:14:25.980

Torey Earle: Pull that insulation off to expose the wires that are on the inside. Now it's not pull this apart, you know, there's, there is a white wire a black wire and a green wire and there's also some filler material inside the cabling itself.

99

00:14:27.420 --> 00:14:36.150

Torey Earle: What you're going to want to do is cut that film material off so bring your wires back kind of like you would be pulling pedals on the flower back

100

00:14:37.500 --> 00:14:47.670

Torey Earle: And then I'm going to take a pair of scissors and just cut that filler material off. So, it's out of our way because we don't need it anymore.

101

00:14:50.100 --> 00:14:53.340

Torey Earle: That leaves my three wires exposed

102

00:14:55.140 --> 00:15:05.040

Torey Earle: And as I opened the plug. You'll see what the difference in these three wires are you notice we have a black wire wire and a green wire.

103

00:15:06.360 --> 00:15:08.790

Torey Earle: The white is our neutral wire.

104

00:15:09.840 --> 00:15:14.100

Torey Earle: The Black is our hot wire and the green is our ground wire.

105

00:15:15.300 --> 00:15:21.330

Torey Earle: And that relates to the three different plus are three different poems that are on our plug

106

00:15:25.290 --> 00:15:32.070

Torey Earle: While I've still got my wire in my hand. I'm going to go ahead and strip the installation off of the copper wiring.

107

00:15:34.020 --> 00:15:41.730

Torey Earle: And since this is 12-gauge wire. I'm going to go to my wire strippers to my 12-gauge notch.

108

00:15:42.840 --> 00:15:57.810

Torey Earle: And I'm actually going to strip off about three quarters of an inch of the wiring on our of the installation on the wiring and then since this is stranded wire. I'm going to twist it so it doesn't fry.

109

00:15:59.820 --> 00:16:05.760

Torey Earle: Again, my 12-gauge slot on my wire strippers.

110

00:16:07.710 --> 00:16:14.760

Torey Earle: Squeeze twist and pull the insulation off, then I will twist my wire together.

111

00:16:18.660 --> 00:16:19.950

Torey Earle: I go to my third wire.

112

00:16:21.480 --> 00:16:26.850

Torey Earle: 12-gauge slot. Squeeze twist. Pull the installation off.

113

00:16:29.100 --> 00:16:33.390

Torey Earle: And then twist my wires together so they don't frame.

114

00:16:35.400 --> 00:16:46.350

Torey Earle: The next thing I'm going to do is take my plug apart so I can get the wires on the inside of it knows that it has a strain relief clamp on the back of the plug.

115

00:16:47.820 --> 00:16:51.180

Torey Earle: I'll take my Phillips screwdriver, remove

116

00:16:53.610 --> 00:16:54.810

Torey Earle: These two screws.

117

00:16:55.860 --> 00:16:56.640

Torey Earle: And if you

118

00:16:57.840 --> 00:17:03.480

Torey Earle: Set them to the side so you'll know where they are. Because you're going to have to have them again. when you put the plug back together.

119

00:17:08.040 --> 00:17:09.810

Torey Earle: Remove that screw.

120

00:17:11.040 --> 00:17:16.500

Torey Earle: And then I will take the strain relief clamp off and lay it off to the side.

121

00:17:19.080 --> 00:17:35.730

Torey Earle: You'll kind of start to see the inside of the plug here what it looks like. But in order to get to that we have three more screws that we're going to have to loosen. Now the screws will not come all the way out. But if you'll notice when I, they have a very

122

00:17:37.740 --> 00:17:48.270

Torey Earle: Coarse thread on them so they back out really quickly. So I get them back that like that and then I can take

123

00:17:50.190 --> 00:17:59.820

Torey Earle: The outer covering of the plug and the inner workings of the plug out you know this. Why do that discouraged don't come out, they stay right where they are.

124

00:18:02.040 --> 00:18:04.500

Torey Earle: Now let's look at the inner workings of the plug itself.

125

00:18:05.700 --> 00:18:07.320

Torey Earle: There is a green screw.

126

00:18:08.880 --> 00:18:11.040

Torey Earle: There is a gold colored screw.

127

00:18:12.150 --> 00:18:25.020

Torey Earle: Up. Excuse me. That is the second one. I apologize. And there's a gold colored screw. We know from previous lessons that are gold colored crew is for our hotwire

128

00:18:26.670 --> 00:18:29.880

Torey Earle: Our silver colored screw is for our neutral wire.

129

00:18:31.110 --> 00:18:40.500

Torey Earle: And the green screw is for our ground wire and that matches up with the colors that are on the cabling itself.

130

00:18:43.800 --> 00:18:54.690

Torey Earle: With this type plug. You're actually not going to have to worry about putting a loop in your wire, because you'll notice that there are small holes.

131

00:18:55.710 --> 00:19:04.890

Torey Earle: Really related to each one of the screws and what you're going to do is you will slide your wire into that hole and there's a clamp.

132

00:19:06.120 --> 00:19:11.430

Torey Earle: Related to the screw itself that when you tighten it down it will clamp the wire underneath that screw.

133

00:19:13.380 --> 00:19:15.540

Torey Earle: That's why we gave a little extra

134

00:19:16.680 --> 00:19:35.010

Torey Earle: Installation of our cabling. So we'll have enough wire to work with to get it into the screws on the plug and still allow installation to be inside the plug itself. So you don't have exposed wires on the outside of the plug.

135

00:19:38.010 --> 00:19:40.740

Torey Earle: One of the things that you'll want to remember to do

136

00:19:42.420 --> 00:19:49.620

Torey Earle: Is put the housing of your plug on to the cabling before you start wiring.

137

00:19:51.750 --> 00:20:11.040

Torey Earle: If you start hooking up the plug before you put the outside housing on you're going to have to take it all apart again or work the housing, all the way from the other end or wire back on to the plug itself. First one of these. I'm going to put on is my ground wire.

138

00:20:13.800 --> 00:20:20.610

Torey Earle: In order to do that, if I hold the plug up with the grounding screw on top.

139

00:20:22.860 --> 00:20:33.600

Torey Earle: That actually lets the clamp inside of the plug fall to the bottom of that hole. So I'm going to have to turn the plug over, so gravity helps me

140

00:20:35.040 --> 00:20:37.230

Torey Earle: And slide.

141

00:20:38.490 --> 00:20:40.560

Torey Earle: My ground wire in

142

00:20:41.910 --> 00:20:47.580

Torey Earle: So its underneath the clamp can see that on the inside and then

143

00:20:48.600 --> 00:20:50.430

Torey Earle: I'm going to tighten

144

00:20:53.340 --> 00:20:54.810

Torey Earle: My grounding screw down

145

00:20:56.250 --> 00:20:59.430

Torey Earle: Make sure it's nice and snug and

146

00:21:01.530 --> 00:21:04.590

Torey Earle: The ground wire is in and clamped down tight.

147

00:21:06.180 --> 00:21:08.550

Torey Earle: Going to look at my two other screws.

148

00:21:10.110 --> 00:21:14.010

Torey Earle: If you notice I move the wires around because my gold screw is over here.

149

00:21:15.390 --> 00:21:17.880

Torey Earle: Do the same thing I did with

150

00:21:20.190 --> 00:21:20.940

Torey Earle: The ground.

151

00:21:23.280 --> 00:21:24.720

Torey Earle: Wire screw.

152

00:21:25.890 --> 00:21:27.180

Torey Earle: I'm going to

153

00:21:28.530 --> 00:21:31.440

Torey Earle: Turn the plug upside down. So gravity helps me

154

00:21:33.120 --> 00:21:41.280

Torey Earle: Want to make sure that that wires twisted nice and tight so it doesn't fray out as you put it into

155

00:21:45.090 --> 00:21:46.260

Torey Earle: The hole for

156

00:21:49.380 --> 00:21:50.340

Torey Earle: Your hot wire.

157

00:21:52.830 --> 00:21:58.950

Torey Earle: You also want to make sure that that clamp is backed out all the way, so you don't get it.

158

00:22:00.840 --> 00:22:06.060

Torey Earle: Get your wire fraying in there with it. And this part takes a little practice.

159

00:22:07.350 --> 00:22:08.550

Torey Earle: So I put that in.

160

00:22:11.040 --> 00:22:18.300

Torey Earle: I look to see that my wire is underneath the clamp on the inside and

161

00:22:22.260 --> 00:22:23.310

Torey Earle: Tighten it down.

162

00:22:25.170 --> 00:22:25.830

Torey Earle: Snug

163

00:22:27.540 --> 00:22:30.210

Torey Earle: So my hot wire is underneath the clamp .

164

00:22:32.130 --> 00:22:34.380

Torey Earle: The last one is my neutral wire.

165

00:22:36.000 --> 00:22:37.620

Torey Earle: Turn my plug upside down.

166

00:22:40.050 --> 00:22:41.850

Torey Earle: So gravity helps me out.

167

00:22:43.080 --> 00:22:44.400

Torey Earle: Slide the wire in

168

00:22:46.710 --> 00:22:49.230

Torey Earle: Flip it back over. It's underneath the clamp.

169

00:22:50.760 --> 00:22:52.380

Torey Earle: And tighten this one down.

170

00:22:54.300 --> 00:23:05.790

Torey Earle: Before reassemble everything I want to check and make sure by tugging on just a little bit to see if all of my wires are underneath their proper screw clamps.

171

00:23:08.070 --> 00:23:13.350

Torey Earle: It was slide the housing for my plug back up. Now if you want to take a look at it.

172

00:23:15.750 --> 00:23:29.790

Torey Earle: Pull this back. You'll notice that around the grounding problem, the screws, a little closer together than they are from one side to the other. So you can look inside.

173

00:23:30.930 --> 00:23:38.670

Torey Earle: Your plug housing and get the plug itself turned correctly because there's only one way that it will fit in there.

174

00:23:40.200 --> 00:23:41.610

Torey Earle: We slide it back together.

175

00:23:43.530 --> 00:23:44.400

Torey Earle: And we tighten

176

00:23:45.750 --> 00:23:48.120

Torey Earle: These screws down

177

00:23:51.000 --> 00:23:55.950

Torey Earle: To secure our plug inside our plug housing.

178

00:23:57.780 --> 00:23:58.530

Torey Earle: Just like that.

179

00:24:00.510 --> 00:24:00.840

Torey Earle: Now,

180

00:24:02.310 --> 00:24:03.300

Torey Earle: strain relief.

181

00:24:04.470 --> 00:24:13.740

Torey Earle: We want to make sure that our installation is pushed inside up plug housing. Notice there is just a little gap right there. So I want to make sure that that's pushed back in

182

00:24:16.110 --> 00:24:17.490

Torey Earle: Put one side

183

00:24:19.620 --> 00:24:20.820

Torey Earle: Of my clamp on

184

00:24:22.890 --> 00:24:25.170

Torey Earle: The side that doesn't have the screw holes on it.

185

00:24:28.380 --> 00:24:31.170

Torey Earle: And now put the other side of my clamp on

186

00:24:32.790 --> 00:24:36.030

Torey Earle: And use your table or your workbench to help you with this.

187

00:24:38.520 --> 00:24:39.900

Torey Earle: Put our two screws in.

188

00:24:41.820 --> 00:24:42.480

Torey Earle: And

189

00:24:43.950 --> 00:24:44.880

Torey Earle: tighten them down.

190

00:24:45.960 --> 00:24:48.570

Torey Earle: The strain relief clamp will pull together.

191

00:24:51.390 --> 00:24:56.130

Torey Earle: It is still just a little bit loose so we're going to tighten it down all the way

192

00:24:57.930 --> 00:24:58.530

Torey Earle: Until

193

00:25:00.150 --> 00:25:02.340

Torey Earle: Our strain relief clamp is tight.

194

00:25:03.360 --> 00:25:06.630

Torey Earle: Around the outer installation.

195

00:25:08.340 --> 00:25:09.150

Torey Earle: Of our cord.

196

00:25:11.730 --> 00:25:22.590

Torey Earle: Say they will pinch it together. Just a little bit like that. That way you know that it's tight. It's not going to pull out. And there you have your properly wired.

197

00:25:23.730 --> 00:25:24.870

Torey Earle: three prong plug

198

00:25:25.890 --> 00:25:26.370

Torey Earle: On

199

00:25:27.480 --> 00:25:28.470

Torey Earle: extension cord wire.

200

00:25:30.480 --> 00:25:50.070

Torey Earle: I hope you've enjoyed our lesson today on how to wire two different types of plugs. Our standard polarized plug for household use on the state for original design lab project and also a heavier duty three prong plug to be used on the farm and home circuit wiring.

201

00:25:51.630 --> 00:26:07.320

Torey Earle: As with all electricity projects, please make sure that before you work on it, you disconnected from any electrical circuit. You do not want to be working on electricity while it is a live circuit.

202

00:26:07.890 --> 00:26:16.890

Torey Earle: Electricity can be dangerous, but if you take the proper safety precautions you will be able to work on it yourself.

203

00:26:18.630 --> 00:26:32.070

Torey Earle: Make sure to stay tuned for our next segment, which will be dealing with the farm and home wiring project and properly wiring an electrical receptacle.

204

00:26:34.170 --> 00:26:52.380

Torey Earle: Thank you for joining me today for the Kentucky 4-H Virtual Experience focused on Science, Engineering and Technology. For more information about the 4-H SET program, please check out your local University of Kentucky Cooperative Extension Service.