

Part numbers for wiper relay mod

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Mzwijacz

Low Mileage

Location:

South Lake Tahoe

Am replacing the thottle cable and because of my size have the center console out. Since it was removed I thought i would clean up some misc. elec problems . One the wiper motor pulls lots of amps and is slow. Found the thread <http://xwebforums.com/forum/index.php?threads/21415/>

great stuff but could really use a parts list and the wire map for the factory plug. Anyone have this?

thanks,

MFZ

Last edited by a moderator: Dec 4, 2016

Mzwijacz, Sep 2, 2014 [Report](#)

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Black-Tooth

Tony Natoli

Location:

Aqua Dulce, California.
Home of Vasquez Rocks!

Well... for the parts...

I can help with a couple...

The relays are your standard 30A relays found almost anywhere. I required for each motor winding (or speed) of the WSW motor. You can also purchase pig-tailed connectors (sockets) for the relays which is recommended.

For the existing FIAT connection... those connectors can be cannibalized from another car or possibly found in a catalog or even at a well stocked parts supplier. Many off-road shops carry stuff like this. Hopefully Bob Brown or Greg will chime in on where they can be found.

As for a wire-map... off the top of my head, the car's wiring should NOT have changed from year to year for THIS circuit... but it could have. Post the YEAR of your car for more info.

As for the "insert-able" relay mod and the wiring between the connectors and the relays... I can only speak "philosophically" and not literally. Again, maybe the boys will fess up with something.

If you want the THEORY and can figure it out the literal wiring from there, come back with a response and I'll go into greater detail.

HTH...

My best,

Tony

"Black-Tooth and me since 1983"

Black-Tooth, Sep 2, 2014 [Report](#)

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Mzwijacz
Low Mileage

Location:
South Lake Tahoe

Getting the Parts

Tony,

Thanks for the response. Regarding the relays, most I've seen are square in shape and can be a size that will put a strain on the wire connections. The relays in the the picture seem to be rectangular and not much larger than the plugs.

Here is the info you requested :

1. Connectors, I live in a small town in the mountains, there are no junk yards like you have in LA. What I was hoping to find was a type, part number and location to purchase them from.

2. Plug wire map, my car is a 79 carburated X, pretty much stock. I did find a post with the Insertable relay wiring diagram <http://xwebforums.com/forum/index.php?threads/23137/>. They are basically using the power wires from the plug to switch the relays. Providing new power and grounds. The only problem is I don't know which wires in the plug they are using.

Thank you so much for your help. Got the car for my daughter, but I think my wife and I will keep it.

MFZ

Last edited by a moderator: Dec 3, 2016

Mzwijacz, Sep 2, 2014 [Report](#)

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geekdaddy
X1/9 Learner's
Permit...

Location:

NH

Tony nailed it on the relays. Seems like there are a lot of recommendations here for bosch-style relays. I ended up taking a chance on a vendor here in the U.S. on ebay that seemed to have good prices and the relay fit/finish looked good. Their std wiring harnesses also use thicker gauge wiring than many others (in some cases I still have to upgrade). I've only been using them for two years but thus far no problems.

<http://www.ebay.com/itm/5-Pack-30-4...2-Volt-Bosch-Style-SPDT-PREMIUM-/351153131033>

As for the connectors, I sourced them from autoricambi in the US. Here are the links:

<http://www.autoricambi.us/product/EL0-050/Wire-Connector---Female-6-Prong/>

<http://www.autoricambi.us/product/EL0-051/Wire-Connector---Male-6-Prong/>

Also just noticed that autoricambi has the elusive two prong connector that is SIMILAR but not the same as the two-prong trailer hitch connector that many of us use (unrelated to the wiper application but used for sensors, fans, etc.):

<http://www.autoricambi.us/product/EL0-055/Bullet-Style-Wire-Connector--1979on/>

1981 Rosso Metallic X1/9. MWB Perf Head, K&N intake, Allison's header, and custom heat shielding. Brown wire mod, starter relay, aux fuse panel with feeds for: H/L relays, Wiper relay, and Audio relay. Progressive springs, polished 6 inch sportstars, & front sway bar. White gauges, and LED upgrades.

geekdaddy, Sep 2, 2014 [Report](#)

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Black-Tooth
Tony Natoli

Location:

Aqua Dulce, California.
Home of Vasquez Rocks!

Some more... responses between the lines...

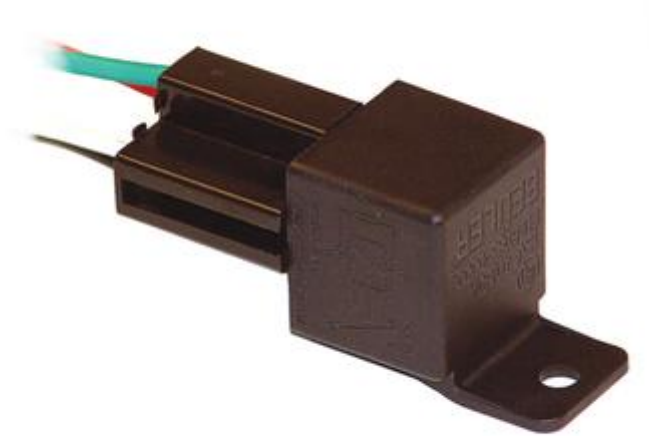
Thanks for the response.

Yur Welcome...

Regarding the relays, most I've seen are square in shape and can be a size that will put a strain on the wire connections. The relays in the the picture seem to be rectangular and not much larger than the plugs.

Yep... and can be found most anywhere. You can also order them online to be delivered to the STORE or your home. Looks like I can't find ANY examples of this though. Lake Tahoe ain't that far from Reno though...

They look something like this... SPST Relay, 12vdc 30a 4 wires...



Here is the info you requested :

1. Connectors, I live in a small town in the mountains, there are no junk yards like you have in LA. What I was hoping to find was a type, part number and location to purchase them from.

Sorry... I have tried to find a popular site or store... but I give up.

You can search locally or search ebay like this:

http://www.ebay.com/itm/4Pin-4-Wire...US_Relays_Sensors&hash=item19f3025b44&vxp=mtr

These are 40 amp but that's OK...

2. Plug wire map, my car is a 79 carbured X, pretty much stock. I did find a post with the Insertable relay wiring diagram <http://xwebforums.com/forum/index.php?threads/23137/>. They are basically using the power wires from the plug to switch the relays. Providing new power and grounds. The only problem is I don't know which wires in the plug they are using.

Well... this was a product of Bob's and you didn't haveta know... just buy it and plug it in. You still would need to supply another CLEAN and FUSED source of +12vdc to ONE relay contact though... and you are CORRECT in stating that the original power from the switch to the motor is now a TRIGGER to operate the relay, and provide the NEW CLEAN and FUSED source of power to the WSW motor. This was the "philosophy" I spoke of.

And using the pig-tailed relays I suggested is a "cut and wire-in" method that only requires the relays and their sockets, and no connectors to the original plugs. Contact Bob Brown if there is a source for these. He's all over or use the Member's List. Don't tell him I sent you though... (He may also have an Insert-able WSW Mod harness and relays laying around for a reasonable price... or could be conjured into building one for ya. And BTW, he owes me \$20 bucks and if you get it, I'll split it with ya...)

You can also determine which wire does what with a VOM and/or using a wiring schematic for your car. You should have both if yur gonna mess with this stuff... but if you are familiar with a VOM then its' not necessary.

Thank you so much for your help. Got the car for my daughter, but I think my wife and I will keep it.

Keep it... and if you think yur gonna give it to your daughter, I suggest dousing it in gas and giving it a Viking Funeral ('cause yur close to a lake...) Its just more humane...

I know I haven't researched the colors and wires and stuff for you... as its just an encouragement for you to learn and use the tools (VOM and Schematic) that you really need to have.

If this isn't enough... write PM or call me and we can discuss it further. I'm getting carpo-elbow syndrome just typing this much... (661-296-7277, open 7 days, 9 - 9)

Last edited by a moderator: Dec 3, 2016

My best,

Tony

"Black-Tooth and me since 1983"

Black-Tooth, Sep 2, 2014 [Report](#)

#5 [Like](#) [Reply](#)



kmead
True Classic

Location:
Grand Rapids, MI

This is an absolutely excellent, 5 star post!!!!

Wow thanks for posting the connectors, great finds! One of my favorite vendors, wish they sold X parts...

I agree about that seller's relay wiring, I bought some from a somewhat cheaper vendor and the relays are notably cheaper quality wise and the wires were very light gauge. They pre connected the relay ground to the 87 pin instead of going to a separate ground, so the relay ground goes to the "ground" element being

switched by the relay.

That same vendor you linked on eBay offers some other pretty decent products. Good link.

Thank you!

geekdaddy said: ↑

Tony nailed it on the relays. Seems like there are a lot of recommendations here for bosch-style relays. I ended up taking a chance on a vendor here in the U.S. on ebay that seemed to have good prices and the relay fit/finish looked good. Their std wiring harnesses also use thicker gauge wiring than many others (in some cases I still have to upgrade). I've only been using them for two years but thus far no problems.

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Karl Mead

the left coast of Michigan

1987 X1/9 Being brought back from the dead by applying parts, labor and puzzled contemplation

1985 X1/9 Pretty much as it was when delivered with the additional bouquet of old olive trees and nearly 30 years of benevolent neglect...needs paint and one rust spot fixed. Really really needs paint...

1970 124 Sports Coupe

1969 850 Sports Coupe

kmead, Sep 2, 2014 [Edit](#) [Delete](#) [Report](#)

#6 [Reply](#)



jvandyke
True Classic

Location:
West Michigan

i used a tiny screwdriver to release the OEM wire from the terminal, used standard connectors to route to the relays, then back to the OEM harness, don't need anything but two relays and some wire, an inline fuse, a ring terminal or something to ground the relays. Relays can be had at Radioshack or hardware stores and such, I get 'em off ebay in a mulit pack.

<http://xwebforums.com/forum/index.php?threads/12296/>

Last edited by a moderator: Dec 4, 2016

Jeff

jvandyke, Sep 2, 2014 [Report](#)

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Mzwijacz
Low Mileage

Weekend coming time to get this sorted

Thanks for the info guys and sorry for my absence. Just finished a work project, so my head is above water. Got the throttle cable finished last night and drove the car to work. Left all the wires hanging, kind of looks like the dash has been eviscerated.

Location:
South Lake Tahoe

I will check on the links and order parts. I'm not bad with a VOM but no EE. Tony, I'll try and get your \$20. Since I don't know him, doubt I have any pull.:lol:

If I go dark again towards the later part of next week, it's not personal. I'm volunteering at the Reno Air Races.

Thanks All,

MFZ

Mzwijacz, Sep 5, 2014 [Report](#)

#8 [Like](#) [Reply](#)



Black-Tooth

Tony Natoli

Location:
Aqua Dulce, California.
Home of Vasquez Rocks!

Mike... This 5 pack of relays that Greg posted...

is a great deal offa Ebay...

<http://www.ebay.com/itm/5-Pack-30-4...2-Volt-Bosch-Style-SPDT-PREMIUM-/351153131033>

You will actually NEED at least these 5 for the basic mods that are essentially REQUIRED for a '79.

Two for the WSW mod, Two for the Headlight Relay Mod (HRM), One for any kind of good CD player and/or amp and woofer. The Brown Wire Mod (BWM) is also needed but does not require a relay. (Named for the wiring color, but Bob Brown has the BEST suggestion on how it should be done).

I suggest that you purchase these relays, also a Fuse Holder to accommodate at least 6 fuses (any type of fuse, your preference, but late model types are preferred and fuses are easy to come by).

Lastly... you don't haveta do it all at once... but finding a good spot to mount this stuff (usually under the front hood where it can be easily serviced if needed) and the re-wiring for the BWM, WSW, HRM, Stereo, etc. can be done one circuit at a time. If you do undertake this all at once... I suggest STRONGLY you test each circuit upon its completion... and test all circuits again as you progress, ensuring you are screwing things up as you move on.

Lastly... (again) Purchase wiring, connectors, fuses and stuff from either eBay or wherever... But also order a set of TWO or THREE Air Horns from Harbor Freight for 15 - 20 bucks and install them as well. They are a SAFETY MUST... and even though others cannot see you... they will MOVE AWAY from the sound they make. Trust me on this one!

<http://www.harborfreight.com/12-volt-super-loud-air-horn-40134.html>

<http://www.harborfreight.com/three-trumpet-12-volt-air-horn-set-with-compressor-94862.html>

(Wire these in parallel with the stock horns, a light tap on the button will say "hello" to friends, leaning on the button will tell others to STOP TEXTING and GET OUT OF YOUR WAY... NOW!)

Great talking to you yesterday... enjoy the Air Races in Reno... and stop HERE on your way home:

HARBOR FREIGHT
2749 N CARSON ST STE 150
CARSON CITY, NV 89706

or HERE while in Reno

HARBOR FREIGHT
3800 Kietzke Ln #150, Reno, NV 89502

Other things to get at HF are...

<http://www.harborfreight.com/150-piece-terminal-and-connector-set-67683.html>

<http://www.harborfreight.com/catalogsearch/result?q=fuses>

Three **RADIO SHACKS** in Carson City

<https://www.google.com/search?q=rad...la:en-US:official&client=firefox-a&channel=sb>

Relays are available here:

<http://www.radioshack.com/product/index.jsp?productId=42683836>

O'Reillys Auto Parts have the MOST stuff available (electrically) over all the other Brand-Name parts stores that I have found...

Two stores in Carson...

<https://www.google.com/search?q=o'r...la:en-US:official&client=firefox-a&channel=sb>

Their website and in store computers are a BITCH to use and locate parts. Just go to their electrical section and look for wire, fuse holders, fuses, relays and terminal connectors.

Hope this all helps... no more excuses!

HA!

Oh... and if you can, SEARCH for a manual like this for your year...

http://www.ebay.com/itm/FIAT-Servic...anuals_Literature&hash=item43ced026d8&vxp=mtr

I've found them easy to use and they separate the circuits nicely.

Found this one here and it is what I have...

[ame="http://www.amazon.com/Fiat-128-X1-1971-1979-Manual/dp/B000JME6IG/ref=sr_1_2?s=books&ie=UTF8&qid=undefined&sr=1-2&keywords=clymer+manuals+fiat+x1%2F9"]500 Service Unavailable Error[/ame]

But its currently unavailable.

This is curious though... and might be worth a try...

[ame="http://www.amazon.com/Fiat-128-X1-1971-1982-manual/dp/0892872829/ref=sr_1_1?s=books&ie=UTF8&qid=1410028565&sr=1-1&keywords=clymer+manuals+fiat+x1%2F9"]Fiat 128 & X1/9, 1971-1982: Shop manual: Mike Bishop: 9780892872824: Amazon.com: Books[/ame]

Cheapest is 4 bucks plus 3.99 shipping!

My best,

Tony

"Black-Tooth and me since 1983"

Black-Tooth, Sep 6, 2014 [Report](#)

#9 [Like](#) [Reply](#)

Wilco

Thanks Tony !



Mzwijacz

Low Mileage

Location:

South Lake Tahoe

MFZ

Mzwijacz, Sep 7, 2014 [Report](#)

#10 [Like](#) [Reply](#)



Mzwijacz

Low Mileage

Location:

South Lake Tahoe

Fedex Shipping Waaaaaay too expensive

Do you have an alternate source for these :

As for the connectors, I sourced them from autoricambi in the US. Here are the links:

<http://www.autoricambi.us/product/EL...emale-6-Prong/>

<http://www.autoricambi.us/product/EL...-Male-6-Prong/>

The shipping was almost \$15 for 2 plugs.

Thanks,

MFZ

Mzwijacz, Sep 8, 2014 [Report](#)

#11 [Like](#) [Reply](#)



jvandyke

True Classic

Location:

West Michigan

Do you want the connector just for aesthetics? You don't "need" it right? I just released the wires from the connector, ran them to the relays and back to the connector.

Jeff

jvandyke, Sep 8, 2014 [Report](#)

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