

Kelley's Works in Progress

Pricing Current as of 01MAY2009

Prices will be honoured to the end of the calendar month above, if they have changed.

Due to variations in cost of materials, prices are subject to change at any time and without notice!

Prices do not include USPS Shipping

General Information

Shipping

USPS Shipping is the preferred method. Why? Because their prices are fair (even for international orders!) they deliver on Saturdays for free, they deliver to APO/FPO without any trouble, they don't charge brokerage fees (typically,) and I can drop things off during extended hours seven days a week. If you prefer another shipping method, please say so - but normal shipping rates will not apply, and you will be charged full price for shipping. The Postal People also allow a "flat rate" option for most cables, which simplifies things all around.

Orders are typically assembled, packed, and shipped the day after they're paid for - but there are sometimes delays. I refer to these as "logistical breaks," and I dislike them as much as you do - but they happen. What this means is that I've run out of something that I need for your order, and I've probably ordered a restock and it hasn't shown up yet. I'll let you know if that happens. Typically, I'll get an order out the next day after I receive payment - if there's going to be a delay, I'll let you know (and give you as much information as I can.) I understand what it's like to be left hanging, and I don't want to do that to anyone.

Typically, we can get cables and custom jobs into the "Flat Rate" box provided by the Postal People, which saves me a batch of trouble and saves you a wad of cash! If it doesn't look like your order will fit in the box (which would have to be a rather large order!) it will ship by weight if it can't be broken up, and will ship in more the one box if it can. I'll let you know if we need additional shipping fees before it ships.

The time involved largely depends on where it's going, and how. Cables are shipped via USPS Priority Post, and will typically get anywhere within the United States in three days or less. Books ship via USPS Bound Printed Matter rates, and will take a week or two in transit. Our policy is to get orders out the next day where possible, and to let you know it's on the way - but please allow two to four weeks for parts, and four to six weeks for books. Six to eight weeks for anything listed as "Special Order" - demand is low enough that I don't keep materials around for that sort of thing. If demand increases, I'll change the status from "Special Order" to "Stocking Item."

Shipping Weights

New addition - we've added a "shipping weights" column, because we've started getting asked what it costs to ship a few "per piece" orders. We don't mind kitting you out on a "per piece" basis, or just replacing what's shot at the moment (or just getting you that one cable you need for your upgrade...) so that's why the new column. Shipping weights are given in ounces, and are originating from San Jose, CA (use 95124 as the "origin" ZIP code for the moment.) Be sure to add four to six ounces for the packaging when you calculate total shipping weight (it's the figure I use,) and plug that in to calculate shipping. Note that the "breakeven point" for domestic Priority Post shipping is rather low (somewhere around two pounds/thirty-two ounces, usually) before using the flat rate box becomes an advantage. Also, only short cables can really ship First Class post - longer cables are more likely to go Parcel Post, where they don't go Priority. You can also use the shipping weights to figure international shipping, Express (overnight) shipping, and "contract carrier" shipping (UPS, FedEx, DHL, and the like.)

The main reason we've added shipping weights is as a convenience to our (few, still...) customers overseas. The "Flat Rate" boxes we use are limited to 70# for domestic shipping (for a \$12 rate, as long as the Postal People co-operate) and 20# for Canada and Mexico (for \$25 - same caveat.) So, as long as I can fit it all in the box and it's not overweight, we already know what shipping will be. For our Canadian customers, please note that I am told that the Postal People do *not* charge "brokerage fees" (whatever they are,) which is an added convenience for you. For those of you close to the border, I am also willing to ship to a US address that you visit regularly - for the \$12 rate - and you can save a few bucks that way as well. Ditto if you're in Mexico - just different states.

Shipping Rates

For North America, this is easy. Cables ship domestically (via Priority Post) for \$12 per box. To Canada and Mexico, you'll be in for \$25/box, via International Priority Post. I can usually get a couple of cables plus additional goodies in the box they provide for the "flat rate," so there should be no trouble. Anywhere else ships by weight and speed - but I'll ship wherever you're willing to pay for. *For international orders, a telephone number is required.* I won't call you, and I don't even write the number in my files anywhere - I just need it for the Customs paperwork. Please note that any customs duties or import tariffs are *your* responsibility - I haven't gotten hit with any "export charges" yet. USPS Priority or International Priority are our standard shipping methods - please let us know if you would prefer another method.

Custom Jobs

Unless you want some *very* long runs, we can do custom jobs! And, just because it's not listed as an application here or on the website, doesn't mean we can't do it! All WiP mains (1AWG) and secondary (4AWG) cabling is "cut to order", so it's no trouble at all for a custom job. Datasheets on mocking up and measuring a custom job will be available for download from the WiP website (www.geocities.com/Jeep16Power.) along with all other instructions and datasheets for our products. Note that we carry 1AWG and 4AWG on hand just about all the time - but we can source cable from 6AWG to 0000AWG (4/0AWG) with enough lead time - usually about a week or two. Pricing will also be quoted once we have the information needed to build the cables you need. (What's *very* long? I'd say anything over 50 feet should be checked...) Cabling can also be had in other primary colours (blue, green, yellow, ...) on a special order basis - but I won't post prices for that, because it's enough of an oddity to change more often than black and red. Don't be afraid to ask!

N.B. While we've no trouble building custom jobs, do bear in mind that, once we start cutting cable (after you've paid for it,) it's *yours*. The rule of "measure twice and cut once" certainly applies here - so do please be careful in your measurements. The instructions I provide are the same method I use to plan custom runs for myself or for jobs I work on directly - and they haven't failed yet. But, do please exercise caution... If the cabling hasn't shipped yet when you discover an error, we'll buy it back as scrap - but once it's out the door, you're going to get the cable.

Payment

You have a few options in paying for your order. You can simply use PayPal if you have an account (send payment to Jeep16Power@yahoo.com,) you can use a credit card through PayPal, you can use an "e-check" through PayPal (use either of these if you don't have an account with PayPal,) or you can use a Postal Money Order (payable in US Dollars.) Please note that your order will not ship until payment is received - which means that the money order has arrived, or that your "e-check" has cleared (the latter typically takes about three weekdays.) You will be advised when your order ships, and when you can probably expect it.

If you elect to pay by "e-check," I'll let you know that I've got it, and I'll advise when it clears and your order has shipped.

International Orders

I'm a small outfit, but I've shipped to Saudi Arabia, Canada, South Africa, Australia, and parts of Europe. If you're willing to pay for shipping, I'll ship it there! However...

Nota bene

Any customs duties, importation fees, "brokerage" fees, and the like are all your responsibility.

I *must* have your telephone number and email address for the US Customs paperwork.

International orders are shipped by weight. Where possible, I will give shipping estimates before you pay for your order.

International orders *must* be paid for with either PayPal or a Postal Money Order, payable in US Dollars

I'll provide a few estimates (cost and shipping times) using the US Postal People, unless you request some other service. This will be done before you pay for your order, so you can decide if you want to pursue other avenues.

Once it leaves my hands, I have *no* control over the order. So far, all my orders have gotten where they wanted to go by the time I've been told they'd be there - but I can add tracking onto an order. I'll pass along tracking information once I have it. It's up to you.

Product Status - Items identified with an "SI" in the far right column are "stocking" items - I should have these on hand (or the material to make them) at pretty much any given time, barring a "logistics break." Orders for these items tend to go out the day after I receive payment - although, please allow two to four weeks for delivery (If I need the time, I'll let you know.)

Items identified with an "SO" in the far right column are "Special Order" - I've got to bring materials in for these especially, or demand is not high enough for me to keep them around. Allow four to six weeks for delivery - but I'll keep you informed. There is an off chance that I've got some left over from a previous job (the vendors I deal with have minimum order requirements, I do not,) so that could go rather quickly at times.

The "stocking status" of products can change with demand - if I get a rush of orders for an "SO" item, I'll get extras and turn it into an "SI" item. The catalogue and website will be updated accordingly

Mains Cable Applications

Jeep applications are listed first, simply because I have a Jeep-centric view of the world. That doesn't mean that you can't get cables for anything else - give me measurements, and I'll make them. If they're replacing OEM cables, I'll work with you to get them to fit (if they're not, they're "custom" - make sure you let me know it's an OEM replacement when we start setting up the order.) An instruction sheet for measuring OEM cables *without* having to take anything to bits will be available from the WIP website.

If we're replacing OEM cables, please confirm that they fit for you - and I'll add them to the standard listing for other people to order as well.

As you've probably guessed, this list is subject to revision. Applications can be added easily, and when I get enough information, I'll then "simplify" the part numbers - combining years where possible. Makes it easier on all of us.

ANL Fuses, ANL Kits, and Extras for Mains Leads		Price, 1AWG		Price, 4AWG		Status Ship Wt, 1AWG		Ship Wt, 4AWG	
K-ANL-xxx	Includes fuse, fuse block, mounting hardware, and 18" lead from fuse block. If ordered with a mains cable kit, also includes a 6" extension added to the alternator output lead.	SI	22 oz						
ANL-xxx	Replacement/spare ANL fuse	SI	1 oz					1 oz	
ANL-BLK	ANL Fuse Block and Mounting Hardware	SI	5 oz					5 oz	
CLAMP-1	Battery Clamps, Cast Brass, Marine Style, Polarised, Pair	SI	6 oz					6 oz	
CLAMP-2	Battery Clamps, Cast Brass, Flat Style, Pair	SI	6 oz					6 oz	
SIDE-1	Side Terminal Accessory Post, Brass, per each	SI	2 oz					2 oz	
OX-1	Gardner-Bender Ox-Gard, 1-ounce squeeze tube	SI	2 oz					2 oz	
POST-1	Distribution Post, "Crown" style	SI							
POST-2	Distribution Post, "Passthrough" Style	SI							
WATO	ATO/ATC Fuse holder kit, single fuse, Weatherpack	SI	1 oz					1 oz	

Please note that some sort of replacement battery clamp is *required* with our mains leads. All leads are terminated using ring lugs. You can use any marine-style or ordnance-style battery clamp - the only difference between the two is that marine-style clamps have a vertical binding post. and ordnance-style clamps have horizontal posts. The vertical binding post won't cause any issues with the hoodline - I've been running them for years.

I offer the brass clamps for those who can't find them locally, or would prefer something "different" from the typical lead clamps. I've been using brass clamps for years, and I like them.

The "ANL Kit" works for you if you have a RENIX (1987-1990) XJ/MJ, or if you have an HO (1991-2001) XJ/MJ *without* cruise control. If you have cruise control, ChryCo decided to put the vacuum servo where I wanted to put the ANL fuse block, so some modification would be required. However, owners of later XJs have yet to report any significant difficulty with mounting the ANL kit, so any issues are clearly not insurmountable.

The ANL fuse block is also priced separately because it can be used for secondary distribution protection, and can also be used for amplifiers, large inverters, or other heavy-duty electronics. I typically carry ANL fuses from 100A to 200A, but that selection will be extended based upon demand. ANL fuses start down around 60-80A, and run up to at least 400A!

For the "xxx" in part numbers regarding ANL fuses, replace the "xxx" with the three-digit amp rating of the fuse you require (080, 100, 120, 140, 150, 175, 200, ...) The usual ratings for ANL fuses in stock are 100, 140, 150, 175, and 200A. I have an alternator catalogue, so I can look up your alternator if you don't know what it's rated to generate at full output.

Mains Cable Applications

After being asked enough times (I do keep track!) I've decided to offer mains cable sets in 4AWG as well. I had to consult with an electrical engineer to get the following critical datum, tho - *max alternator output 150A*. If you're going to go past that, or plan to go past that, go ahead and get the 1AWG set - they're good for about double the current throughput!

1987-1990 Jeep Cherokee & Comanche (RENIX)

[illegible]

Part #	Application	Length	Termination	Price, 1AWG	Price, 4AWG	Status	Ship Wt, 1AWG	Ship Wt, 4AWG
1XJ-242-01	B+ to Start Motor	32	3/8 x 3/8			SI	27 oz	
1XJ-242-02	B+ to Power Distribution Centre	16	3/8 x <i>note</i>			SI	15 oz	
1XJ-242-03	B- to Fenderwell	8	3/8 x 3/8			SI	9 oz	
1XJ-242-04	Engine Block to Firewall	10	3/8 x 1/2			SI	11 oz	
1XJ-242-05	B- to Engine Block	45	3/8 x 3/8			SI	37 oz	
1XJ-242-06	Alternator Output to Distro	30	1/4 x <i>note</i>			SI	26 oz	
1XJ-242-A	Set of 1XJ-242-01 to -05 (No Alternator Output)					SI	6# 3oz	
1XJ-242-ANL-xx	1XJ-242-B + K-ANL-xxx					SI	9# 3oz	

<i>PDC Note</i>	There are no less than three versions of the Power Distribution Centre in use by Chrysler. Please read the note at the end of this applications section to see which version you have - it makes a difference on cable termination.
<i>Alternator Output Lead Note</i>	Please Read the Alternator Output Lead Note at the end of the RENIX Section, above

Part #	Application	Length	Termination	Price 1AWG	Price, 4AWG	Status	Ship Wt, 1AWG	Ship Wt, 4AWG
6XJ-242-01	B+ to Start Motor	32 3/8 x 3/8				SI	27 oz	
6XJ-242-02	B+ to Power Distribution Centre	16 3/8 x <i>note</i>				SI	15 oz	
6XJ-242-03	B- to Fenderwell	8 3/8 x 3/8				SI	9 oz	
6XJ-242-04	Engine Block to Firewall	10 3/8 x 1/2				SI	11 oz	
6XJ-242-05	B- to Engine Block	28 3/8 x 3/8				SI	24 oz	
6XJ-242-06	Alternator Output to Distro	28 1/4 x <i>note</i>				SI	24 oz	
6XJ-242-A	Set of 6XJ-242-01 to -05 (No Alternator Ouput Lead)					SI	5# 6oz	
6XJ-242-ANL-xxx	6XJ-242-B + K-ANL-xxx					SI	8# 4oz	

<i>PDC Note</i>	Please refer to the <i>PDC Note</i> in the OBD-I Section
<i>Alternator Output Lead Note</i>	Please Read the Alternator Output Lead Note at the end of the RENIX Section, above

Part #	Application	Length	Termination	Price, 1AWG	Price, 4AWG	Status	Ship Wt, 1AWG	Ship Wt, 4AWG
2XJ-242-01	B+ to Start Motor	38	3/8 x 3/8			SI	32 oz	
2XJ-242-02	B+ to Power Distribution Centre	18	3/8 x <i>note</i>			SI	17 oz	
2XJ-242-03	B- to Fenderwell	8	3/8 x 3/8			SI	9 oz	
2XJ-242-04	Engine Block to Firewall	10	3/8 x 1/2			SI	11 oz	
2XJ-242-05	B- to Engine Block	28	3/8 x 3/8			SI	24 oz	
2XJ-242-06	Alternator Ouput to Distro	36	1/4 x <i>note</i>			SI	30 oz	
2XJ-242-A	Set of 2XJ-242-01 to -05 (No Alternator Output Lead)					SI	5# 13 oz	
2XJ-242-ANL-xxx	2XJ-242-B + K-ANL-xxx					SI	9# 10z	

<i>PDC Note</i>	Please refer to the <i>PDC Note</i> in the OBD-I Section
<i>Alternator Output Lead Note</i>	Please Read the <i>Alternator Output Lead Note</i> at the end of the RENIX Section, above

Part #	Application	Length	Termination	Price, 1AWG	Price, 4AWG	Status	Ship Wt, 1AWG	Ship Wt, 4AWG
1ZJ-242-01	B+ to Start Motor	38 3/8 x 3/8				SI	32 oz	
1ZJ-242-02	B+ to Power Distribution Centre	10 3/8 x <i>note</i>				SI	11 oz	
1ZJ-242-03	B- to Fenderwell	10 3/8 x 3/8				SI	11 oz	
1ZJ-242-04	B- to Engine Block	32 3/8 x 3/8				SI	27 oz	
1ZJ-242-05	Alternator Output to Distro	18 1/4 x <i>note</i>				SI	17 oz	
1ZJ-242-A	Set of 1ZJ-242-01 to -04 (No Alternator Output Lead)					SI	5# 10z	

<i>PDC Note</i>	Please refer to the <i>PDC Note</i> in the OBD-I Section
<i>Alternator Output Lead Note</i>	Please Read the Alternator Output Lead Note at the end of the RENIX Section, above

Multiple-Battery Setups

There are a number of reasons to run multiple batteries - having a great batch of lights is one. Extra capacity when winching is another. And, of course, there's always having a load of electronics onboard (of whatever sort.)

There are about as many multiple-battery setups as there are Jeeps on the road, so we don't offer a "standard kit." However, we've done a few, so we can help you plan, design, and select components for yours.

The main component in any multi-battery setup is some sort of isolator - it allows you to charge the battery when the engine is running, and run accessories off of it when the engine is off. The isolator separates your batteries so you can run accessories that you've added without draining your starting battery. There are two main ways to do this:

Isolator Types	Solid-State Isolator - This is a solid-state electronics package that automates battery isolation. These are spendy (especially if you can find one rated over 75A throughput!) they are fairly large, and they generate a fair bit of heat. They have heatsinks inbuilt into the case, but you still have to have airflow over them.		
	Solenoid Isolator - These are the ones I like. They do require a little more know-how to wire (I'll provide instructions,) but they can have override switches wired in, they're a <i>lot</i> smaller (on the order of a 3" cube,) and can be had in rather larger ratings. You can't use just "any old solenoid" for this - you have to use a "constant-duty" solenoid that is designed to run <i>all the time</i> . Typical solenoids tend to fail when they're run constantly. However, even "constant duty" solenoids are cheaper than solid-state isolators, and can be had in much higher current throughput ratings. These are the ones we offer.		
SOL-85	85A Constant, 200A Surge. Three-wire hookup, self-grounding case. I keep these on hand in small quantities. Solid copper internal contacts, 85A "make" or "break".	SI	13 oz
SOL-200	200A Constant, 400A Surge. These are the big ones - I'll order these as required, unless demand for them goes up. These are the "hard use" units for high current loads, and will pass the full output of a Mean Green 200A alternator, if you need it to.	SO	13 oz
Solenoid Selection	Which solenoid you want is going to depend, largely, on the loads you anticipate coming out of your secondary battery/ies. However, you're <i>never</i> going to put your full alternator output through your solenoid, since 30-50A is necessary for engine management and typical electronics (newer rigs are toward the upper end of that range. Unless you're planning on doing a <i>lot</i> of winching, or running a <i>lot</i> of electronics for a <i>lot</i> of the time, you'll do fine with an 85A solenoid - you're not going to see heavy charge loads very often. If you do, then get the 200A. If you're not sure - ask! I'll probably ask a lot of questions, but they're so I can make an informed decision to help you. I'm looking for, ultimately, a rock-solid reliable system for you that can handle all the use you're going to give it, and a few additions besides. So, count this as important. Information is what I need to help you.		

Heavy-Duty Booster Cables (All Vehicles)

If you're anything like me, you're wondering if you're supposed to use the booster cables you find in stores on anything larger than a lawnmower or not. They do seem awful small, don't they? And, if you've uprated your alternator and you're giving someone else a jump, you're going to want a wire that can carry your full "donated" output over its full length - and 6AWG won't do (and that's about the largest booster cable wiring I've seen!)

So, someone had to do something. And, here I am. I make my booster cables to order, using the same 1AWG cable I use for mains leads. I then use clamps with a good, strong grip on both ends - or on only one end if you select the Anderson option. I've had to deal with equipment that failed when I needed it most, and I don't want that to happen to you...

"What's an Anderson connector?" An Anderson connector is probably the only connector I've run across that's just about Murphy-proof. You'll find them used on high-current devices like forklift battery chargers (which are usually good for 100A or so - often higher.) Andersons can only be connected one way, the housing is standardised (and different for each current rating - 50A, 175A, or 350A) and all can handle surge loads of twice the listed rating. Contacts are copper, plated with tin for corrosion resistance, and are retained with stainless steel leaf springs. Housings are polycarbonate - trade name Lexan. I've run these over with my rig (by accident - I was done torture-testing them...) and they've held up. Just the sort of durability I like. I'm not alone - Warn and Ramsey use the for their winch "quick-connect" kits!

Andersons are also used to make jumper cables "quick-connect," and if you have "stubs" on your vehicles, they'll allow you to "gang" or "chain" sets together for longer reach (there are pictures on the WiP webste.) If you have several rigs (like I do,) then you can have a cableset made with Andersons on both ends - use it for a "yard jumper," or use it as an extension if you get a set with an Anderson on one end. Or, you can get a cableset to work with your Anderson-terminated stub, and get an "Anderson Adapter" - an Anderson with two two-foot cables terminated with spring clamps. Believe me, you've got options...

The section below outlines the "standard" offerings for our booster cables - but they can be made just about any way you want, if it's practical (what is "doable" isn't always "practical," what is "practical" is nearly always "doable." Don't hesitate to ask!)

Length	Termination	Price, 1AWG	Price, 4AWG	Status	Booster Cablesets will ship in their own box at current rate
10 feet				SO	
12 feet				SO	
15 feet	Spring Clamp to Spring Clamp, 1AWG			SO	
20 feet				SO	
25 feet				SO	
10 feet				SO	
12 feet				SO	
15 feet	Anderson Connector to Spring Clamp; 1AWG			SO	
20 feet				SO	
25 feet				SO	
ADAPTER	Anderson Connector to Spring Clamp; 24" Long; 1AWG			SO	
STUB	Anderson Connector to Ring Lugs, Length as Required	Contact us		SO	

Yes, I know these are all "Special Order." I order the material for these as required and make them to order - keeping them around would just kill me on

Works in Progress by Works in Progress

True to our moniker, we're always working on new ideas. Here are a few...

Project	Status	What is it?
AW4-ADAPT	DEVELOPMENT	I never did like the "quick-connect" that Ford came up with - damn thing usually leaks, and you need a new O-ring kit when you take it apart. No, thanks. I'm working on a fitting to adapt the threads in the AW4 transmission case to -6AN, allowing you to use standard fittings for the cooler lines (also eliminating the o-rings entirely!) This also allows the use of standard hose (automatic transmission cooler or power steering line) for cooler lines. I need to write CNC code for these, and they'll be made of brass for durability and corrosion resistance.
HEADLAMP HARNESS	PROTOTYPE!	OK, this one's "off hold" - where it's been for a while. I have selected users who are trialling a new headlamp harness! It's designed for a load of 200W per filament (should handle any H4 bulb that can readily be found,) is <i>fully</i> plug-and-play (no modification to existing wiring) and will fit any XJ and MJ (other models to be determined.) I am hopeful to begin production around the end of summer 2007
COPPER HEATER HOSES	DEVELOPMENT	This is one I get asked about - so I'm finally going to figure out a way to do it. If you have a RENIX XJ/MJ (1987-1990, with AMC242 engine,) you know how expensive it gets to replace heater hoses. Hell, I've got <i>five</i> . So, I finally decided to make heater hoses out of copper tube, solder joints, and use "vibration stubs" to connect the lines to the engine and heater core outlets. So, once I figure out a connection I like to "break them in half" and fit them into a box rather less than three feet long, I think I'm going to start offering these. It may be a bit spendy, but the kit will pay for itself the first time you have to service the heater hoses again (in about five years.) Besides, it will flow better than rubber hoses anyhow, hold to greater overpressure (in case you get <i>really</i> hot!) and it will have an integrated flush tee and backflush valve. I like it - you probably will too.
BELT TENSIONER KNUCKLE	DEVELOPMENT	This will be a replacement for the OEM belt tensioner knuckle, under the power steering pump on earlier XJs. The OEM part is made of powdered metal - I've managed to break several. The replacement will be machined from wrought stock, which will make it stronger. Replacements are fairly cheap from the dealer, but you get what you pay for.
FAN CLUTCH ELIMINATOR	SUSPENDED	I've gotten tired of changing my fan clutch every four years (about the useful life of the thing in an XJ.) So, I've done some noodling, and I've got to machine out a prototype or two of a replacement "knuckle" to get rid of the fan clutch. CAVEATS - Not to be used when fording. You'll lose some power and throttle response due to the direct coupling - I don't know how much yet. You'll get a little noisier - but it's a Jeep, isn't it? It may also reduce your Jeep's operating temperature slightly, due to the direct coupling with none of the "slip" associated with viscous clutches. I haven't decided if this one should go into full production...
YOUR IDEA	DEVELOPMENT?	Got an idea? Run across a part <i>you</i> think could be made better? Don't just gripe about it under your breath - gripe about it to us! WiP got started because someone noticed me doing something better than OEM, and wanted it done for them. I've noted that a lot of people like my design philosophy, and tend to appreciate overkill as an engineering discipline. And, our designs tend to be an effective compromise between "pure overkill" and "ease of installation." You tell us what's wrong with what, and we'll see what we can do from there. Deal?