RV Family Travel

Flat-Towing

A look at our personal journey in research, deciding and preparing to flat-tow behind the RV.

Table of Contents

To Tow or Not To Tow?

Since our family began making longer RV trips part of our life, we have always traveled without a tow vehicle.

It seemed normal. After all, my entire childhood, my family never towed a car behind our RV. When we went somewhere, we drove the RV. So, now that I was grown and was using my own rig, we just did it the same way.

Less stuff to worry about.

On our first summer trip, it went OK. However, there were some annoyances to it.

- Visiting Mammoth Cave, we were camping about 10 miles from the park at a KOA. So, for 2 days straight, we had to tidy up the rig and drive the 10 miles to the park. And back.
- In Gettysburg, we used the RV as our car. We even went around the road that encircles the battlefield in the rig. We were the biggest vehicle out there, by far. ;)
- In Philly, we went to visit a family member. We actually rented a car here and it was pretty easy using Enterprise's pickup service.

Anyway, it goes on. However, the following summer it became more of a hassle not having a car.

- In Boston, we stayed at a KOA about 30 miles out of town. Best way into town was the train, but the nearest station was about 2 miles away. So, yep... we had to fold everything in and drive the RV to the train station and leave it in the parking lot all day.
- In Plymouth, we drove the motorhome there because we had no car. And it was a bit of a beast to get around down there. At one point, I had to do a 3-point turn in the middle of a road which was a bit too freakin' small. Yay.
- In Maine, we were lucky enough to be able to borrow my father-in-law's car. However, if that weren't the case, it'd be quite difficult.
- In Watkins Glen, it was HARD to find a car because of a race going on. Only

got one by the skin of our teeth.
- In Bennington, VT, we drove through. We decided to visit the old house of my grandmother who grew up there, and see some family grave sites. So, we took the rig up into a residential area and into this cemetery. The vehicle was just.... too big, really. I got it done, but... yeah.
- In Niagara Falls, we once again drove the rig into the park.

The thing about this summer trip is that we noticed it was harder to find a car. Several times, it took several phone calls to find a car we could rent. And, in a couple cases, they charged us a higher daily rate simply because of the last-minute booking. We probably easily spent a few hundred bucks on rental cars.

But, there's also logistics.

For instance, grocery shopping. I can't count the number of times I've had to navigate that RV into a small grocery store parking lot to go shopping. Why? Because we have no car.

Or be in a place where it would be cool to go check out more things, but it is too inconvenient because of the hassle of moving the rig. Or it won't fit.

Now, it isn't all hassle using your motorhome for visiting destinations. After all, many times we had lunch in the RV parking lot, generator running, quite comfortable. To me, that's one of the joys of having an RV is being able to do stuff like that. :)

That said... when all is said and done, it is definitely easier having a car with you than not.

Let's face it...

RVs have gotten big.

When I was a kid, our family RV was a 19-footer. Today, you have pickup trucks almost that long. ;)

It is easier to drive around town with a smaller vehicle. This is why Class B's are growing in popularity. But, for people who don't wish to pay the sky-high prices for these Class B's on a Mercedes chassis, you're likely going to have a larger rig. Even with a Class C in the 27-foot range, it's still a bit of a bear to drive around many cities. And if you have a Class A like I do, it can be interesting.

So, I think it is the growing size of RVs that has made it much more necessary to tow a vehicle with you.

For us, the final nail in the coffin was just recently, up in Tallahassee. We wanted a car to go check out the city for the day. So, we booked an Enterprise. Well, I get over there the next day to pick it up and literally had to wait about an HOUR to get the damn vehicle. The place was so poorly run it was insane. In the end, I ended up taking a brand new Ford F150 to drive around. Nice wheels, but it wasn't because I wanted that. I reserved a compact car, but I told them just give me ANYTHING to get me out of there. I didn't want to wait for them to clean a car. It was about a 90-minute deal just to pick up a car to go into town for one day.

I looked at it as the final sign that I simply have to begin towing a car with me.

I need the flexibility. I think it will completely change how we look at the experience.

Once that decision was made, it was time to confront the logistics.

First up... tow dolly or flat-row "4 wheels down"?

I'll talk about that decision in Part 2. ;)

Tow Dolly or Flat-Tow "4 Wheels Down"?

So, we had decided to begin bringing a car with us on our longer RV trips. Next up...

Get a tow dolly or flat tow?

Two very different ways to do it. And for me, it was a big decision.

See, my main car was a Toyota Prius. And ironically, my wife's car is also a Prius. So, there we are... a family with 2 damn Priuses (or is it Prii?).

The problem with the Prius is that you can't tow it on all 4 wheels. It is a hybrid with a CVT transmission and this particular hybrid just can't be towed that way. Which was a shame because I really liked the car. Hell, I'm a family man now. I've long since stopped worrying about my car being cool. I came off an Acura TL that guzzled gas and required 93-octane and I just knee-jerked into a Prius. All jokes aside, it is a very well-built car, requires very little maintenance, and it is insanely practical.

But, you can't tow it on 4 wheels. Bummer.

So, do I get a dolly and tow it with the front wheels up?

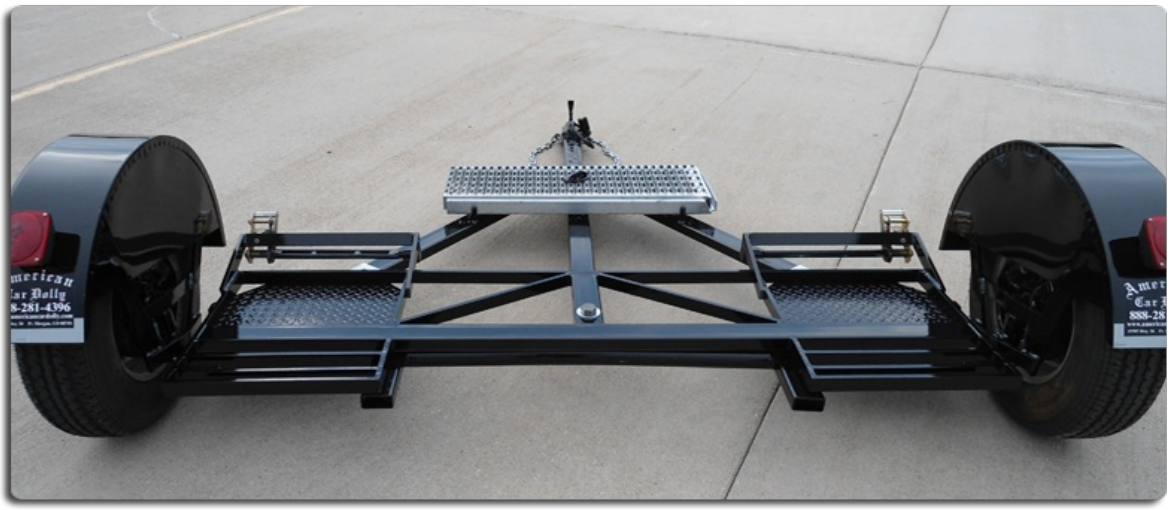
The Pros and Cons of a Tow Dolly

Certainly a viable option. And by all accounts, the most financially sensible option.

One little potential issue is that the Prius is a low-profile vehicle and it rides pretty low to the ground. So, getting it up on some dollies would mean that it would drag and scrape on the ramps and mess things up. Some people would solve that issue by getting ramp extenders, but seems like more hassle to me.

I looked at various options. There's the Stehl dollies you see all over the place. You've got the high-end dollies, like the KarKaddy SS which can fold up when you're not using it.

But, the one that stuck out to me was from American Car Dolly. This is a small company that will build your dolly and deliver it to you for free, with upfront pricing of $1495 brand new. And the design of this dolly is ideal for low-riding vehicles such as the Prius.



So, that's the dolly.

But, then...

Do I really want one?

I started looking at the cons of having a dolly

- Seems to me that the process of putting a car on and off this thing is going to be more involved. Straps, ratchets, ramps, yada yada.
- I have to STORE this dolly somewhere when I'm not using it. In my garage at home, or on the campsite somewhere when out.
- It is another thing to maintain.

The time on and off the dolly was a big factor for me. We are a young family who moves around alot. We don't do the kind of RVing where we go to one campground and stay put for days at a time. So, the time to deal with logistics would be magnified by how often I'd have to do it.

By most accounts, it can be about a 10 minute affair (give or take) to get the

vehicle ready to go, and maybe 5 minutes to get it off again.

So, I'm envisioning being in a place overnight. We need to grab a few things at the grocery store. To take that little trip, I'd have about 15 minutes of logistics just to have the car ready to drive over there. And I'd be doing that alot, since like I said we don't tend to stay put very long.

Which brings me to the idea of flat-towing...

Pros and Cons of Flat-Towing "4 Wheels Down"

First, let's state the obvious...

For this to work, you need to have a car which CAN be towed 4 wheels down. And many of them can't be. You can download (for free) the Dinghy Guides for various vehicle years to see if your car can be towed this way.

These guides by Motorhome Magazine really are the gold standard for figuring out if your car can be flat-towed.

As already stated, the Prius I have can't be towed this way. Which means... get another car.

Do I replace the Prius or buy a third older vehicle just for towing? I was looking at CR-Vs and ideally I would just get rid of the Prius and get a new-ish CR-V. I especially liked the 2012-2014 models. I mean, it's probably not a car I would buy if not for the RV tow thing, but it is a nice vehicle.

Or, I buy an older car. I looked into an older Saturn. It would work. But, most

of them had well over 100k miles on it. And, well, I'm just not a fan of having a ton of vehicles. I like to have less stuff that does multiple things.

Then, there's the cost of actually towing. I'd need to buy:

- The base plates for the car (unless it is already installed)
- A towcar
- The braking system
- The lighting kit
- the labor to install all this stuff

As you can see, towing "4 wheels down" is clearly the more expensive option. It isn't even close.

But, then there's the benefits...

It will be much faster and easier to hook/unhook the vehicle. I mean, perhaps 2-3 minutes and I'm ready to roll. Even faster to unhook it.

How fast you can do it depends on your choice of equipment, but we'll get into that later.

The Choice You Have To Make

Depending on your choice of towing hardware, it is a fairly good estimate that prepping to flat-tow is going to cost *at least* double what it will cost to dolly tow. Probably more like 3X.

I mean, there is absolutely no bones about it: Dolly towing is far cheaper. Even more so if the vehicle you own isn't capable of being flat-towed.

If money and upfront cost is the primary driver of your decision here, then clearly buying a tow dolly is the way to go. You can even get tow dollies used on Craigslist and save yourself some money. The used ones will look kinda rusty sometimes, but they'll do the job. And if you have a low-profile vehicle, pay attention to the brand of dolly and do some research on whether it'll go on without dragging.

If speed, ease and convenience are more important to you than the upfront costs, then flat-towing is the preferred way to go.

What Did I Ultimately Decide?

Well, I decided that I would incur the upfront cost for the convenience. My family does a lot of RV traveling and the speed of working with the flat-tow setup is just far preferable for me - especially with how often we move around.

For me, this upfront cost was fairly substantial seeing as it meant getting rid of my Prius. Not a move I was excited about because I actually liked the car.

I decided to switch to a Honda CR-V.

I found a pretty good deal on a 2012 CR-V EX. That gave me the current body style, which I preferred. The 2012-2014 models of the CR-V are towable (as well as earlier models). Starting in 2015, Honda decided to go with a CVT transmission on the CR-Vs which means it is no longer towable on all four's. That's unfortunate, however I was planning to buy used anyway.

So, CR-V in hand, it was time to begin looking into prepping this thing to be flat-towed.

Which brings me to the research phase of which gear to get. And that can be a nerve-wracking experience.

More on that in part 3...

Researching and Deciding On Flat-Tow Equipment

With a 2012 Honda CR-V as my future tow vehicle (or "toad"), it was now time to figure out how to prep it up for towing. After all, even though the CR-V CAN be towed on all 4 doesn't mean it comes prepared to do so.

Here's the parts that are needed for this:

- **Base Plates:** These are the hooks on the front that the towbar will attach to. They are custom made for each vehicle make and are installed to attach to the chassis.
- **TowBar**. The actual connection between the towed vehicle and the RV.
- **Brake**. Provides a supplementary braking system that ties the brakes of the toad to the brakes of the RV. When you hit the brakes in the RV, the toad brakes, too. This is a legal requirement in many U.S. states, and I consider it a safety matter.
- **Brakeaway Cables.** Will cause the vehicle to stop itself if it somehow gets away from the motorhome. Not likely, honestly.
- **Taillight wiring.** So that the taillights of your toad will act like trailer lights and react to braking of the RV.
- **Fuse Disconnect.** Not really necessary, but is a convenience item. In some cases, you need to disconnect a fuse so that the battery isn't drawn down during tow. This switch makes it so you don't have to get down on your knees and pull the fuse all the time.

Let's go through each...

#1 - Base Plates

Base plates are designed specifically for your brand of car. For instance, the plates that are made for a Jeep would not fit on my CR-V. So, you have to buy plates designed for your particular vehicle.

Baseplates are made by a few different manufacturers, including Blue Ox, Demco and Roadmaster. The average price for plates will run you $350-$400.

They have to be installed as well. It can be an involved process, including removal of the bumper, yada yada. I'm no expert on stuff like that, but I'm definitely going to hire it done.

As of now, I'm leaning toward the Blue Ox baseplates for my Honda. I want something that doesn't stand out like a sore thumb when I'm driving the vehicle. Some plates stick out alot and you could ram your knee into it or something.

#2 - Tow Bar

The tow bar is perhaps the easiest component to shop for. It doesn't require any installation on the vehicle since it is an exterior component. However, you do need to have the towbar matched up to your baseplates.

Buying a new one is most likely preferable, however you can find them used on Craigslist. If you want to save a few bucks, you can go that way. For instance, I saw a Blue Ox towbar on Craigslist for about $400 - cheaper than the $650 or so the same bar would cost new. Saving $250 is always nice. The only reservation here is the history of the towbar. For instance, did they ever try to go in reverse with it? That could cause a little damage that you wouldn't see. Not a huge risk here, but if you want to be sure it is new and have it covered under warranty, buy new. Keep in mind, many manufacturers will recondition it for you pretty cheaply if you meet them at an RV rally or something.

For any towbar, I think it is important that it has:

- Quick disconnects
- Ability to hook/unhook even if the vehicle isn't straight or is on an incline.

It just has to be easy.

Right now, I'm leaning toward the Blue Ox Aventa LX towbar. It has the quick-disconnects and it has a ball-in-socket design which will easily deal with uneven surfaces or vehicle being off-center.

#3 - Brake

Some people say you don't need a brake. And technically, that's probably correct. However, it is a legal issue in many states. The likelihood of being pulled over in an RV isn't high, but still.

Bigger factor for me is the safety. Let's say you have to make a quick stop at a traffic light turning yellow. That car back there is just dead weight unless it has some ability to stop itself. Your RV can do it, but it is going to lengthen

your required stopping distance. With a braking system, the RV won't even notice it.

Now, researching brakes can be confusing as hell, to be honest. At least it was to me.

They tend to come in 3 different styles:

- **Surge brakes via cable.** Basically, when the RV stops, the forward inertia will cause a cable to be pulled, therefore pulling on the brake pedal and stopping your car. It is a simple mechanical setup.
- **Built-in systems.** These systems tie into the brake system of the car, actually using the vacuum assist to stop the car. It would be no different than you sitting in the car and pressing the brake while it is running. These systems are convenient. Some systems are almost completely out of sight (under the hood) while some have a little box which you can hide under the seat.
- **Portable systems.** These systems are attractive because they can be moved to different vehicles easily. No install necessary. However, they sit on the floor of the car when you're driving and literally press the pedal like your foot would. And you have to remove it from the car every time you want to drive it. It is portable, but that also means you have to take it in and out every time.

During my research, I rather quickly ruled out the portable systems. BrakeBuddy is a popular one. Thing is, I'm going to all this trouble to flat-tow rather than dolly tow specifically because I want it to be quick and easy. If I have to set up a brake every time, it kinda defeats part of my intention. There'd be this big box I have to put into the car and attach to the pedal every damn time. And do the reverse to remove it and then store that big brake box in an RV compartment when we're using it.

Plus, I read all kinds of annoyances with these portable systems. So, I simply decided it wasn't for me.

Next up... surge brakes.

The one that got my attention was theReadyBrute Elite, from NSA. It is a combined towbar and surge brake all in one. Very cost effective. It attaches to the vehicle via a simple mechanical cable that you run through the engine compartment, through the firewall, and attach to the pedal. Very simple system.

The interesting thing was that the installers I talked to were definitely less than enthused about doing it for me. :) One outright told me that if I wanted to stay away from trouble, I should avoid cable brakes. The other told me they didn't recommend this system and that it was a real pain to install on many vehicles with tight engine compartments. I imagine my CR-V is one of those. The price she quoted me to install wasn't too far off of a built-in system, which I found surprising.

When you ask users of the ReadyBrute Elite what their thoughts are, most of them tell you they really love the system. But, I did find some who told me it gave them some trouble.

Being a cable system, anything that causes that cable to bind up a bit can result in problems. Either the brake won't activate properly, or it'll activate too much and drag the vehicle and cause damage. Also, apparently how well the systems works is very dependent on how well it is adjusted at the get-go. It is easy to over do it and drag your brakes. Plus, as I said, if the cable begins to bind, it would present problems. Humid environments, salty environments... they could cause a cable to bind unless you routinely check the flow of that cable and ensure it is moving freely.

So, as of now, I'm leaning away from the ReadyBrute Elite. Onto the built-in systems...

Two of the popular ones are the Invisibrake and the SMI Stay-in-Play DUO. Both systems are installed into the vehicle and become part of the car. They integrate directly into the car's existing brake. They operate very similarly. Both seem highly convenient. Literally plug it in and turn it on... and you're done. Its about as "install it and forget it" as you can get.

The upfront cost of these systems is about the same as the portable boxes, however it comes with installation costs as well. So, it is more expensive.

Seems to me like the best kind of system however. I'm currently leaning toward the SMI Stay-in-Play Duo.

#4 - Brakeaway Cables

Honestly, not much to say about this. They're cables.

Whoever installs this stuff for you will gladly sell them to you.

#5 - Taillight Wiring

Once again, not much research needs to go into this. You'll buy a wiring kit and they'll put it in for you.

'Nuf said.

#6 - Fuse Disconnect

You may not need this. It depends on your vehicle and your choice of braking system. From what I can tell, some systems do a little trickle charge on the battery as you go so you don't need to worry about the fuse. But, until I talk to the installer and make the final decisions, I'm still a bit unclear on this one.

Next Steps: Install

Some of the little details here in my research process will be filled in when I

Final Decisions And Purchases

I went out and visited several hitch installers in the Tampa Bay area. I talked to:

- Hitch King
- Hitch World (in Pinellas Park)
- Camping World

The estimates were all roughly in the same ballpark. Buying all equipment through them and having them install it, the ballpark figure we were looking at was around $3600. With taxes, around $3900.

Camping World came in a bit higher, but that was because they were recommending Roadmaster products rather than Blue Ox. They came in around $4,100.

Hitch World surprisingly recommended I go with theBlue Ox Patriot braking system. I was surprised to hear that seeing as this is a portable system. I did some research on it myself and fairly quickly ruled it out. I'm just not interested in a portable system I have to take out and remove.

So, taking what I learned by talking to each of these stores, I made some decisions.

I went online and found that I could get many of my items via Amazon and save some money doing it.

So, here's what I purchased...

The Stuff I Purchased

==> Blue Ox Avail BX7420 Towbar

The Avail towbar is the newest model from Blue Ox. It has some improvements over the Aventa towbar I was initially planning on getting. Smoother operation, little longer which allows for tighter turns, and the release latches are better designed to be easier as well as completely non-binding.

This means that no matter what the orientation of the vehicle compared to the RV, the latches won't get stuck.

Hitch King told me about it and I could buy it from them for around $1,000. But, I found it on Amazon for $778.

Considering the Aventa retails for $800, I figure I'm basically getting a free upgrade by buying it through Amazon. Same price, but I get the Avail model.

==> Blue Ox Baseplates

Nothing special here. They retail for $445, although it seems you can buy them from most places around $395.

I picked it up on Amazon for $343.

Just be very sure you buy the plates for YOUR vehicle. It is unique for every model.

==> SMI Stay-In-Play Duo Brake System

The braking system was one of the hardest decisions to make. So many different opinions out there. I got every recommendation there was, ranging

from the SMI... to cable systems... to even portable systems.

Opinions are like a**holes, as they say. Everybody has one. ;)

So, in the end, I had to go with my gut here. The portable systems would be a pain for me since we get up and go a fair amount. The cable systems seem simple, but contain some potential issues and I found that many installers weren't keen on doing it. The built-in systems seemed the easiest. Basically plug it in and turn it on and you're done.

So, I went with the SMI system. Normal price of around $999, but picked it up on Amazon for $823.

==> Blue Ox BX8869 Bulb and Socket Tail Light Wiring Kit

Hitch King quoted me $250 to install the light kit, including material. I figure I might as well buy it myself and save some money. I still plan to have them install it, but I can save some money on material.

==> Blue Ox BX88206 Coiled Cable with Female Receptor

For bringing power from the RV to the road. Would buy it for $90 from Hitch King, but got it for $76 on Amazon.

==> Blue Ox BX88309 Tow Bar Cover

This is the vinyl cover that protects the towbar when it is folded in. It is built to fit the Avail towbar. Saved about $9 by ordering through Amazon.

So, All In All...

All in all, I spent $2,150.56. This included a small gift card balance that I already had.

Total savings on the order was around $568. Actual savings were greater because I saved money on sales taxes. Only paid $90 in sales taxes on the

Towing Equipment Installed... and DONE! (Photos)

My journey to get our CR-V ready to be flat-towed is now complete. Here's how it went down...

I hired Hitch King, in St. Petersburg FL, to install the equipment that I purchased. Here's what I had them do:

1. Install the baseplate.
2. Install the braking system.
3. Install the lighting kit wiring.
4. Install the fuse bypass switch.
5. Install the hitch on the RV (since it didn't already have one).

I took the CR-V over there on a Monday. By Tuesday afternoon they were done and ready for the RV. The plan was to bring the RV on Wednesday but weather delayed it. I took the RV over on Thursday and by about 3PM they were done and I was on my way home towing the CR-V behind the motorhome.

The RV sitting at Hitch King getting the hitch installed.

The work on the CR-V seemed to be done well. The towing hardware is visible if you look for it, but otherwise doesn't alter the look of the car much at all.

The baseplate installed and the electric hookup for the lights and brake.

The switch they installed as a fuse bypass. Basically, it allows me to put the car in accessory mode but not have to worry about electronics draining the battery.

The attachment to the brake pedal for the SMI Stay-in-Play Duo. Aside from this and a little switch box, there's nothing visible inside the car.

When all was done, it was time for a test. We hooked up the CR-V to the RV for the first time so that I could take it around the block. The guy from Hitch King rode in the CR-V while I drove the RV. The main purpose was for him to watch the brake system respond to the RV and adjust the sensitivity as needed.

Hooked up for the first time.

The full towbar setup.

Once that was done, I paid them and drove home.

The RV drives a little different with the vehicle attached, as you might expect. It is a little heavier and you can tell. But, aside from that, you can basically forget it is back there.

I did notice that the little braking light that comes with the SMI system can barely be seen. This indicator light hooks to the rear view mirror in the CR-V and it illuminates when I hit the brake on the RV. This is supposed to show me when the brakes are being activated. It is supposed to be visible in my rear camera. Problem is...

It isn't.

I can't see it. It is a bunch of sun glare back there and I simply can't see it. In all likelihood, this isn't a problem. However, I would feel more comfortable knowing when the brakes are on. I may see about running a wire up forward to the RV dashboard and put an indicator light up front with me to get around this issue.

The trip home was pretty uneventful. Well, except for the awning beginning to open as I was about to go over the Sunshine Skyway! Yay! :) I think the guy who waxed and buffed the RV knocked the clamp loose which holds the awning locked. Luckily, I caught it in time. I pulled over on the side of 275 in the emergency lane and re-secured the awning before heading over the bridge.

About 50 miles of driving later... and I was home.

In front of the house, the full setup.

So, let's talk final costs.

I paid Hitch King a total of $1,000 labor to install everything. Then I paid $617.99 on a separate ticket which included the fuse relay install and the entire hitch installation and equipment on the RV. All in all, I paid Hitch King $1,661.25.

As I mentioned in my equipment purchasing post (see part 4), I paid a total of $2,150.56 for all the hardware.

So, all in, the sum total of the whole setup was **$3,811.81**.

Expensive? Well... hell yes! :) I mean, there's no getting around that this was the most expensive way to go. It would have been cheaper just to keep the Prius and throw it on a dolly. But, for reasons I already explained, that's not what I wanted to do.

All in all, the price wasn't bad at all. *Camping World* had quoted me more than this (about $300 more) and that didn't even include the hitch on the RV. To get this whole setup with the hardware I selected - and the hitch installed

on the RV - all for $3800. Actually, it isn't bad.

Plus, my daughter approves (although, she didn't have to pay for it ;))

The daughter seal of approval.

So, done deal!

At this point, I've only hooked it up and unhooked it once. So, I'll get faster at it. But, I can tell it'll be easy and fast. And that was the entire point.