



# Chevrolet Express GMC Savana Passenger Swivel Installation Instructions



**WARNING: While the vehicle is in motion, the seat MUST be in the forward facing position with the threaded lock securely engaged.**



**Thank you for your purchase and for choosing "Mo' Better"...**

This document contains detailed installation instructions for your Ironcloud Metalworks Express/Savana Passenger Swivel Base!

If you have any questions regarding the installation – email our support lead (aka me) at: [Info@IroncloudMetalworks.com](mailto:Info@IroncloudMetalworks.com)

Thank you once again for your business – without you Ironcloud Metalworks would only be an idea.

-Derek  
*Owner, Ironcloud Metalworks*

**WE'D LOVE TO SEE PHOTOS OF YOUR INSTALL!**

SHARE THEM WITH US ON INSTAGRAM [@IRONCLOUDMETALWORKS](https://www.instagram.com/IRONCLOUDMETALWORKS).

**NOTE:** We wrote these instructions based on an install in a 2020 Chevrolet Express with a gas engine. As such–your van may differ from these instructions, but the basic concept is the same.

If you encounter difficulties that are not addressed by this installation guide–contact us and we'll get you sorted!



## STEP #0 – ACCOUNT FOR ALL HARDWARE

### Hardware List

Your package should contain two bags with the following hardware contents. These instructions will reference the item numbers where applicable. If any hardware is missing – please contact support.

Item No.	Item	Quantity	Description
1	5/16-18 Female Threaded Lock Handle	1	Part #1 of Lock Handle
2	1/4-20 Serrated Flange Bolt	1	Part #2 of Lock Handle
3	Threaded Lock Handle	1	Threaded Lock Assembly
4	3/8-16 Jam Nuts	2	Retention Nuts for Threaded Lock Handle



#1



#2



#3



#4

## STEP #1 – INSTALL THE TAPERED GRAB HANDLE

1. The tapered grab handle consists of a female-threaded handle (#1) and a serrated flange bolt (#2).
2. Place the bolt through the hole in the lock arm as below.

TIP: Due to varying thickness on the powder coat – you may need to persuade it through the hole by spinning the bolt or using a few light taps with a hammer.



3. Once the bolt is through the hole – thread on the plastic handle until it completely seats.



4. Using a wrench on the bolt and holding the handle with you hand – tighten the bolt until it is good and tight. Don't overdo it – the handle threads are brass and will strip if you put too much "oomph" into this step.

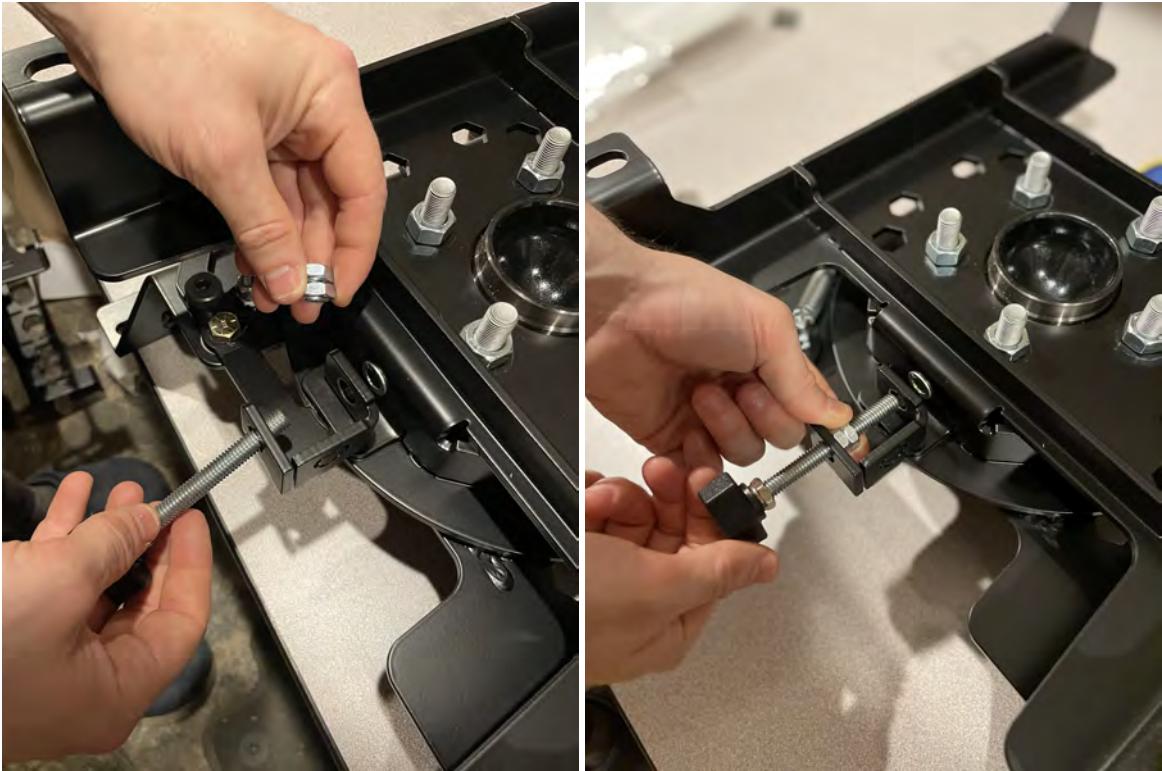


## STEP #2 – INSTALL THE THREADED LOCK ASSEMBLY

1. The threaded lock handle consists of the threaded lock arm (#3) and two 3/8-16 jam nuts (#4). The jam nuts are used to retain the lock handle.



2. Flip over the swivel assembly and place the threaded lock handle (#3) through the outermost hole on the lock arm and thread on the two 3/8-16 jam nuts (#4)



Are you worried that your swivel looks different than the pictures in this section? The pictures in this section are from our Astro/Safari unit – but the same steps apply to every model we manufacture! So don't worry – be happy.

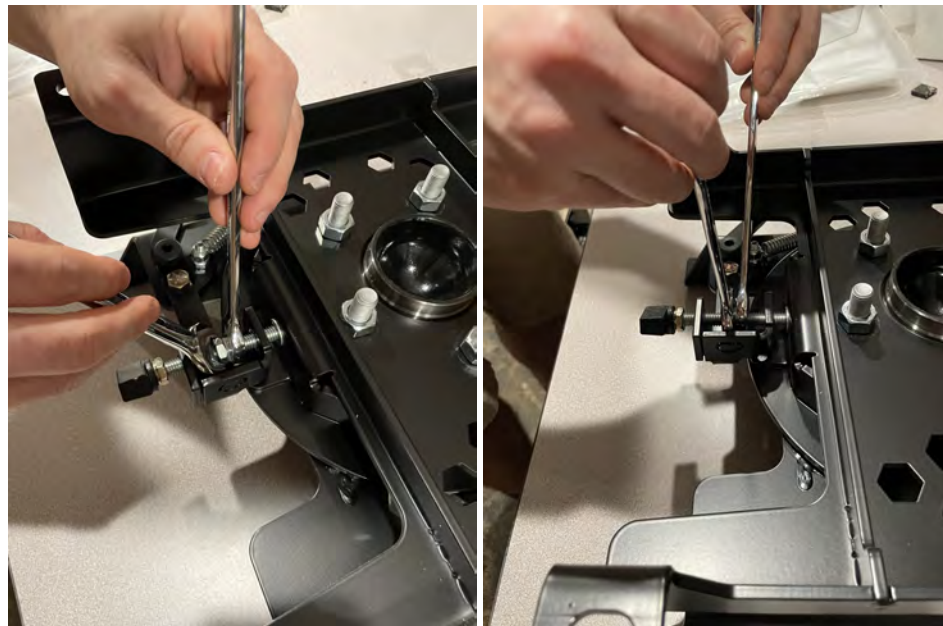


3. Keep threading the jam nuts (#4) onto the threaded lock handle (#3) until the front of the threaded lock handle is flush with the innermost hole on the lock arm while the jam nuts are flush with the outermost hole. See the picture below for how it should look.



4. Grab two 9/16 wrenches. With the jam nuts (#4) in the correct position, use one wrench to hold the outermost (i.e. the one furthest from the center of the swivel) jam nut stationary and use the second wrench to turn the innermost jam nut *counter clockwise* to lock or "jam" the nuts together.

In the pictures below – I am holding the outermost jam nut with the wrench in my right hand and the innermost jam nut with the wrench in my left hand.





**This step have you confused?**

Check out this video about how to use jam nuts

<https://youtu.be/ilbQ0xMfYQg>

it should definitely help!! Clear as mud, right?

5. Test the threaded lock by threading it into the base and then proceed to the next step!



### STEP #3 – INSPECT SWIVEL

Conduct the following steps to ensure your swivel is ready for installation:

1. Using a 19MM socket, ensure that all the unit bearing/hub nuts and bolts are firmly fastened. There are 4x bolts on the top of the swivel and 5x nuts on the bottom of the swivel.

NOTE: Unlike the picture below, your swivel will not have washers on the bottom nuts.



2. Familiarize yourself with the locking mechanism. Ensure the spring is attached between the lock arm and the top of the swivel base. Unscrew the threaded lock and release the locking arm. Ensure the spring-loaded lock arm locks into all 6 detent positions.

**BUSTED KNUCKLE WARNING:** If the lock is difficult to release by hand – don't force it! There are some serious pinch hazards while the swivel is not mounted in the van (don't ask me how I know). Save your knuckles and use a light blow with a soft mallet or deadblow hammer to shock it free (see photos below).

NOTE: The threaded lock may be a bit "tight" due to machine tolerances but you should be able to thread it in both directions by hand. If you cannot securely engage the threaded lock – please reach out to support before continuing.



If anything else seems irregular or problematic – contact support before proceeding with your installation.



## STEP #5 – REMOVE WIRING

Before you will remove your OEM seat and seat pedestal and prepare your seat tracks for installation onto the swivel base—you will need to disassemble the SRS wiring (Yellow Pigtails) to remove the seat...

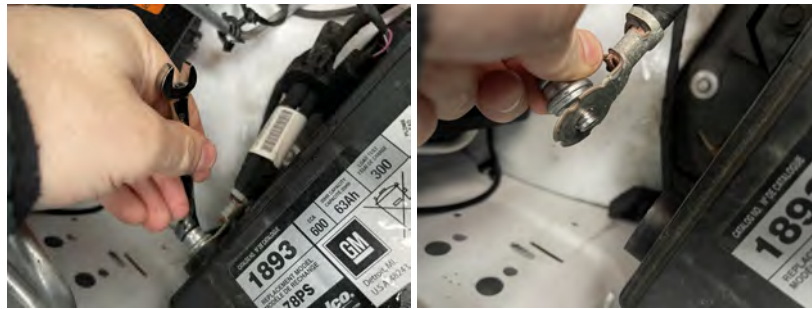
**YOU MUST DISCONNECT THE BATTERY AND ENSURE THE VEHICLE HAS NO POWER BEFORE DISCONNECTING YELLOW CONNECTORS/PIGTAILS.**

**A FAILURE TO FOLLOW THESE INSTRUCTIONS MAY LEAD TO AIRBAG OR SEATBELT PRETENSIONER DEPLOYMENT. PROCEED WITH EXTREME CAUTION!**

**WE ARE NOT RESPONSIBLE FOR ANY DAMAGE OR INJURY THAT OCCURS IF YOU DO NOT FOLLOW THESE INSTRUCTIONS.**

Follow the steps below to remove the SRS/passenger seat wiring in preparation for your swivel base installation:

1. Open the hood and disconnect your battery negative cable.



Leave the battery disconnected for 15 minutes to ensure any remaining load in capacitors or other components has time to drain. You want to make sure there is no power remaining in the system before messing with the yellow connectors/pigtails.

2. Now you're going to remove the seat from the vehicle. You need to start by disconnecting the wiring underneath the seat.
3. Remove the trim cover from the seat as indicated below. There are two phillips head screws on this trim assembly. Once the screws are removed, rotate the top of the trim cover towards the center of the vehicle and then slide the trim cover forward.



4. Now, **DOUBLE CHECK YOU'VE DISCONNECTED YOUR BATTERY AND ALL POWER IS DRAINED** and remove yellow pigtail attached to the seat belt.

Yours may look different from the picture – and you may need to access it from underneath the seat. On the model in the picture, you have to pull up on tangs on both sides of the connector and then “pull” the pigtail to remove it from the seat belt pretensioner.

Fun fact – the thing you are disconnected in the step above is called a “Seat Belt Pretensioner” – it legitimately is a small explosive charge that locks your seatbelt in the event of a crash!

5. Disconnect the male and female ends of black connector attached to the trim piece.



6. Remove the metal wire retaining clip from the trim piece.



7. Remove the black connector from the trim piece by sliding it forward on it's retaining tang/track.



8. Set the trim piece aside until later when you reinstall it on the seat. Be sure to keep the Phillips head screws with it, too. Don't lose 'em!



9. Now start by removing the wire retaining clips near the belt pre-tensioner. You need to remove these as you need to completely disconnect the SRS harness from the seat and pedestal. See the photos below...



10. Next, go under the seat and disconnect the seat occupancy sensor connector. You need to pull out the red tab before disconnecting the connector. Be sure to retain the red tab – as you will reinstall it when you reassemble this connector later.



11. Now that the connectors are disconnected – remove the remaining wiring retaining pin clips. There are two for the seat occupancy sensor (see the photos above) and 4 on the rear of the pedestal (see photo below for an example)





**PRO TIP:** Before you conduct the next step – take a mental note and/or picture(s) of the wire routing. You'll want to reinstall the wires with the EXACT same routing.

12. Now feed the pigtail through the gap between the seatbelt pretensioner and seat so that the pigtail is no longer attached to the seat or pedestal—or caught up on any components of the seat or pedestal. Coil it up underneath the seat when you are finished!!



## STEP #6 – REMOVE SEAT AND PEDESTAL

In this step, you'll remove the seat with the adjustment sliders/tracks attached and remove the OEM seat pedestal from the van.

1. With a 15MM socket–remove the 4x nuts that attach the seat adjustment rails to the seat pedestal. There are two in front and two in rear. Retain these nuts as you will re-use them during installation.







2. After all 4x nuts are removed and securely stashed away—seriously, don't lose them—remove the seat and adjustment rails/sliders from the pedestal. Leave the adjustment sliders attached to the seat—there is no reason to remove them.

**PRO-TIP:** Lay the seat down on its back – that way the studs from the adjustment sliders don't puncture anything. The seat is quite heavy and cumbersome and those studs can do damage to the carpet or cargo liner (or that freshly installed laminate floor)!!

3. Now that the seat is removed, use an 18MM socket to remove the 4x nuts that securing the seat pedestal to the floor pan of the van. Keep these nuts as you will reuse them during installation.



4. Remove the seat pedestal and set aside. Congratulate yourself for getting this far with a cold beverage of your liking... and do yourself a favor – grab a vacuum and clean the area around your seat.



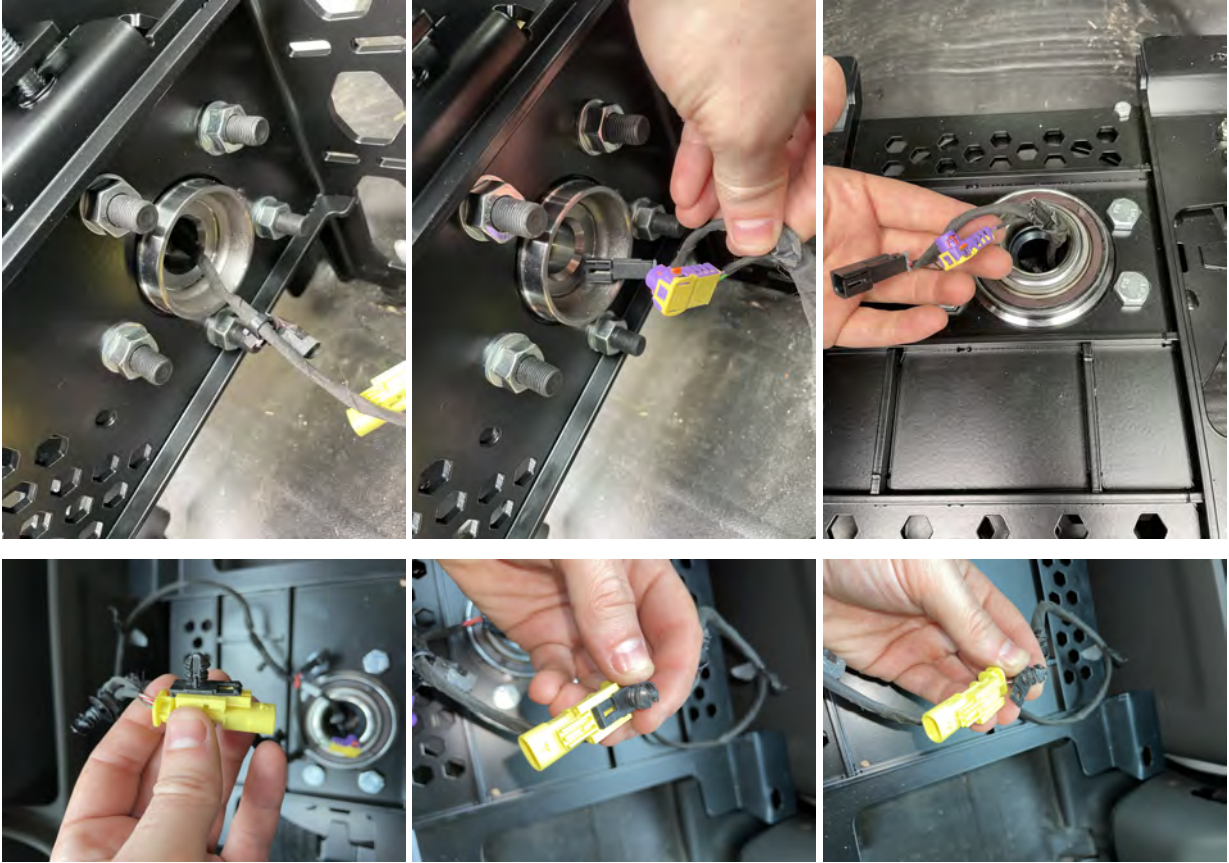
**BONUS POINTS:** Now is a great time to grab a vacuum and clean up the area around your seat.

I know you just want to install your swivel and start doing it "mo' better" – but those Cheetos from your Moab roadtrip last year aren't aging well. Or wait – was that 2 years ago? Just get the darn vacuum already.

## STEP #5 – INSTALLING THE SWIVEL BASE

The moment you've all been waiting for—the installation of your Ironcloud Metalworks swivel seat base...

1. Place the swivel in the van with the bottom of the base facing the front of the van (see photos below)
2. Feed the wiring pigtail through the hole in the center of the pivot bearing on the swivel base. You may need to remove connector retaining clips to ensure they fit – but the pigtails should fit.



**ALERT:** I tested this using all the vans I could get my hands on—but that doesn't mean your pigtails are going to fit for sure. I know this works on the 2020 van and I think the early 2000s vans—but I haven't verified. If you cannot get the pigtails through the center of the bearing – please contact [Info@Ironcloudmetalworks.com](mailto:Info@Ironcloudmetalworks.com) and we'll get you sorted!

Also – if you ARE able to get the pigtail through the bearing – please email [Info@IroncloudMetalworks.com](mailto:Info@IroncloudMetalworks.com) with information about your van (model year/engine type/etc.) so that I can start to compile a list of vans that work without splicing the wiring...

Thank you!!

**OPPORTUNITY FOR BEER MONEY:** If you CANNOT fit the pigtails through the bearing – I want to know! I'm working on creating a database of vans that work without any depinning/splicing – but I need you to help me do this!!

So if your pigtails do not fit – there is a \$5 bounty waiting for you in exchange for an email with the following: 1) year/make/model/engine and cargo/passenger, 2) a picture of the offending pigtail(s) (showing the part number if you can find it), and 3) a picture of the center of the bearing on your swivel.

Send it to [Info@IroncloudMetalworks.com](mailto:Info@IroncloudMetalworks.com) and I'll send you your money!!





Thank you!!

3. Once the wiring pigtail is through the center of the bearing, snap the large yellow connector into the seat base in the oblong slot near the bearing studs. You may need to either disconnect this large yellow connector or move the seat base closer into place as this pigtail is not that long.



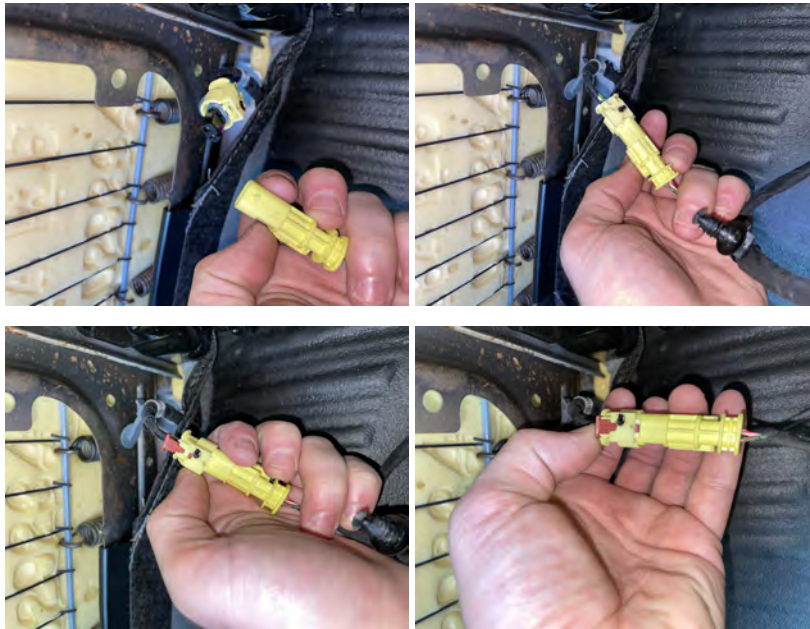
4. Once the large yellow connector is fastened to the seat base, place the seat base onto the 4x studs that secured the OEM seat pedestal. Reinstall the nuts and torque to manufacturer specification. Be careful with your wire routing as to not smash any wires.



5. Now install the seat with sliders attached onto the swivel base. Install the 4x nuts and torque to manufacturer specification. It can help to have a partner here as the seat is a bit heavy. Again, be careful with your wire routing as to not pinch anything.



6. Next, reconnect the seat occupancy sensor connector. You **MUST** re-install the red retaining lock. If you cannot find it – call your dealership and get a new one.



7. Reconnect the wire and connector retaining pins into their holes on the underside of the seat. There are two of them.



8. Next, feed the wiring pigtail between the seat and the swivel base in preparation for reinstalling the pigtails to the seat belt pretensioner and seat belt indicator. Recall the routing you noted in Step #3.12. Re-seat all wiring retaining clips.





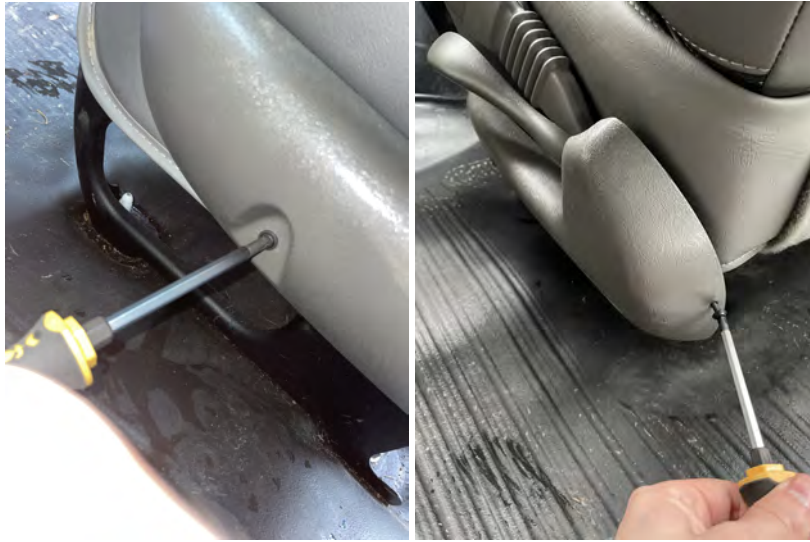
9. Grab the lower trim piece that you removed in the first step. Reconnect the black seat-belt indicator connectors and reinstall the mated black connector back onto its retaining tang/slide. Clip the wires to the trim piece via the metal wire retainer. Reinstall the seat belt pretensioner pigtail.



10. Once all the wiring is reinstalled, place the trim piece into place. You need to slide the trim piece "along" the pretensioner to install. Start with it further forward and then slide it "backwards" onto the pretensioner.



11. Double check you aren't pinching any wiring – and then reinstall the two phillips head retaining screws on the trim piece.



12. Reconnect your battery.
13. Celebrate. Your Ironcloud Metalworks Savana/Express Swivel Seat is installed!!

## STEP #7 – USING YOUR SWIVEL

Now it's time to familiarize yourself with the swivel.

1. Start with the locking mechanism. The lock arm is spring loaded and contains an auxiliary lock that is threaded. The threaded lock only operates in the forward facing position.

**WARNING: While the vehicle is in motion, the seat MUST be in the forward facing position with the threaded lock securely engaged.**

2. The spring-loaded lock has 6 detents – 0, 90, 165, 180, 195 and 270 degrees – with 0 degrees being the forward facing position. You must NOT operate the vehicle with the swivel in any position other than 0 degrees with the threaded lock securely engaged.
3. The swivel is intended to swivel "towards" the door in the clock-wise direction. If you try to spin it the other way, you will likely damage your door trim – so don't do it!!
4. I have verified fitment using OEM seats, but if you have aftermarket seats, it may not swivel without opening the door. If you have serious fitment issues, please contact me at [Info@IroncloudMetalworks.com](mailto:Info@IroncloudMetalworks.com).
5. **ENJOY YOUR IRONCLOUD METALWORKS EXPRESS/SAVANA SWIVEL!**



**HELP US HELP YOU:** Were these instructions helpful? Useless? Utterly infuriating? Were they "Mo' Better"? We want to know. Your feedback is important and we take it seriously.

If you liked this guide or if there is something we can do better—we're listening!!

Email us at [Info@IroncloudMetalworks.com](mailto:Info@IroncloudMetalworks.com)

