## Dometic SXS-1292 1282 1492 7732 7832 7130

# Gas/Elect



# Jr-Jeremy & Aaron Lambright

info@jc-refrigeration.com www.jc-refrigeration.com



And enough time to think things thru at times, so don't give up and hang in there to the end it will be all worth it. A cold fridge is about to be had!!



We at JC Refrigeration try to build these as easy to install as possible, and so these are DIY cooling units but please be aware though that our upgrades might not look quite the same, and brackets, frames, hole plates might not always line up perfectly as fridge boxes can vary at times, and so some modifications, foam shaving or tweaking might need to be done at times to install it. A thing to remember is these are made out of thick steel tube and plates so some twisting or pushing into place is very normal and nothing to be alarmed about. We offer install manuals for the cooling units to help you thru this install and feel free to send us a picture along with your question, and we will help you to the best of our ability.

JR & Jeremy Lambright

1

## Please read through these notes before starting:

- Throughout this manual, there will be times when you see (RA), (YA), or (BA). These are referring to red arrow, yellow arrow, and blue arrow. We use these to point to a certain spot or part in the pictures.
- There are some differences between this install manual and DIY install videos on YouTube. So, to avoid confusion, follow <u>only</u> the instructions in this manual.
- It a good idea to know where your fridge 12V DC fuse is located just in case you need to get to it in this process.
- Before you take any wires apart it's always a great idea to take pics of how they were. That makes it nice to look back in case something is not quite clear. Especially the icemaker wiring.

To start this process, begin by taking the cooling unit out of the box, if box appears to be damaged don't panic as we foam package them into the box (YA) and so the box can be practically destroyed and the unit is still not damaged. So, when you take the box apart you will notice a spray foam packing inside and so this needs to be removed and then the unit will slide out. Inside the box you will have the cooling unit, and parts needed to do the install (RA).



Cover up your floor with blankets and removing any door handles or smoke alarms that might hinder the exit of your refrigerator from your cabinet. Turn off the water pump (if you have an ice maker in your fridge) and the refrigerator control panel.



Make sure to turn off LP gas at the tank before starting the install.



Locate your refrigerator side vent on the outside of your RV. Using a flathead screwsdriver, loosen the 12V wires (RA). Remember which wire is positive



The color of the wires will vary but the 12V positive wire (RA) is always on the left and the 12V negative wire is on the right. Wires are not insulated so you will need to put a piece of tape or a twist cap on the 12V positive side (RA).



Remove the 120V plugs from the wall outlet (RA). If you have a icemaker then one of these is your icemaker 120V plug in so you will want to follow this back to the fridge and take pics of this hook up for later use



Remove defrost hose from the "T" (RA). Placement could vary.





Turn water pump off, remove water supply line from the ice maker valve (RA).

Make sure LP gas is turned off. Remove the LP gas line from the solenoid (RA).





Remove the mounting screws (RA). Placement and size screw can vary.

Remove top mounting screws (RA). It's a good idea to place all loose screws in a bin as you will need these later.



Remove two top mounting screws (RA).





Secure the top control panel again with the two screws to hold in place (RA).

Remove the two bottom mounting screws (RA).





Unclip the shelve holders (RA) and remove shelf that's in front of fin.

Remove the fin mounting screws (RA). Slide the defrost tray out (YA) and lay it aside until later. Unclip thermistor and leave it hang (BA)





Remove the top plate mounting screws in freezer (RA).

Remove the side plate mounting screws in freezer (RA).





Remove the two mounting bolts on bottom plate (5/16 socket) (RA).

Remove the six mounting screws on side plate (RA). Remove the plastic piece (YA) and lay it aside for later.



Remove door handles (RA). We do not show doors being taken off, but they can be taken off if this would be a better option for you.



We do not show the fridge being slid out onto the floor, as the lay out of the coaches vary greatly and so it could be misleading to your scenario. But the object is to have 1 guy on each side of the fridge and as your fridge starts to exit lift up gently so when the rear end of the fridge fully exits the cavity that it does not drop, but needs to be gently and carefully set on the floor and pushed or carried to your open floor area. Lay fridge face down on the floor, making sure doors are latched shut so they don't swing open and we normally put a pile of blankets on the floor by the top freezer door so the fridge is lying face down at an angle.



Remove burner plate mount screws (RA)

Remove burner cover (RA)





Remove the three burner mounting screws (RA).

Remove two LP bracket mounting screws (RA).





Remove board mounting screw (RA). This could vary some as Board styles vary.

Remove three wire harness plugs (RA) and heating element wires (YA).



Disconnect red wire (RA) and cut the black ground wire (YA). This is your interior light wire, so this will have to be spliced back together later



Remove the two plate mounting screws (RA).





Remove the top plate mounting screw (RA).

Remove these two mounting screws (RA).



Remove white and brown ice maker wires (RA). If ice maker is being removed the following steps can be followed but ice maker parts and wiring can be thrown away. If not follow these steps again later to put back together



Remove ice maker ground screw (RA).





Remove the 120V wires from ice maker cord (RA).

Remove the board and plates away from the unit. It should look like this.





Lift the bottom of the unit up and remove the main ground wire (RA).

Remove the defrost tube (RA).



Remove wires from the fan temp switch (RA). Some models do not have this feature.



Untangle the thermistor wire from the unit as shown (RA). Otherwise, it might get caught on unit as you lift it out





Remove side and top mounting screws (RA).

Remove water line spigot (RA) and feed water line to the bottom and swing it away from the unit.



Ice maker wires need to be fed thru the unit as it is lifted up so make sure all is loose and able to slide thru (RA).



Lift unit straight up and out of box. This can be very tight as some of the older ones are really sealed in tight. Use a pry bar (RA) and a piece of steel (YA) for a backer to break the seal on the unit. If yours has fans you will want to remove these for later, otherwise if no fans are there it will be shown later how to install new ones as these are required on all new units. (GA)



Remove the small angle plate where the LP burner was located (RA). Clean bottom of unit with a vacuum getting rid of all dust and rust.



Clean foam and debris on all four sides, make sure all excess foam is removed, check corners as well (RA). Use vacuum if needed to clean box



If you are installing a fin fan, take the fin fan out of the plastic bag. It will include two scotch locks that we will use to hookup later.



We Highly recommend adding a interior fin fan to the fridge area, skip this step if you're not adding the fan. Insert the fin fan into the fridge box through the fin opening (RA) push the defrost cup spigot into the box so it does not break off when new unit is installed (YA)



Fin fan- wire should exit the lower right corner of the foam insert (RA)



If you are using your old heating elements off your old unit lay old unit on its face and open the heater flapper by squeezing the boiler stack and opening the flapper. (RA) if you are using new heaters then skip this step



Slide heaters up towards the top out of the sockets (RA) they will have to be wiggled and maybe a WD-40 might have to be used to get them out



Now lay the new unit on its face carefully and open the heater flapper as well and push insulation to the side to find the 2 sockets (RA) that the heaters will slide into. Make sure heaters are slid in all the way down as far as they go. Tuck the insulation back around the heaters again and close the flapper



Make sure the heaters are turned towards the inside of the unit so the cover will fit better later (RA)



Now lay the unit on its back and if you are reinstalling your icemaker then the holes for the water spigot and icemaker wires will have to be predrilled in the foam. Take measurements off your old unit and use these as a guide to drill new  $\frac{3}{4}$ " holes onto the new, when drilling be careful to not hit a steel tube.



New unit, these should be drilled at a slight angle downward so the water out of the spigot runs into the icemaker.



While it's still on its back apply the thermal mastic (included) place a small bead on the freezer tubes only where shown for now. Red lines



Now the unit can be lifted and if you are reinstalling your icemaker 2 guys will be good as one holds the unit above the box while the other fishes the icemaker white power wire up thru the holes made for it. (RA) Now slide the unit down into the fridge cavity, making sure freezer tubes are inline to the hole provided in the box for it. (YA)



Keeping the icemaker wire tight push unit all the way in tight against the box.



If your new cooling unit does not slide in level with the box then this is nothing to be alarmed about as once the fridge fin is installed this will pull in tighter. (YA) Position cooling unit so you can put a screw into the side mounting bracket, If this does not line up just screw it into the box bracket for now. (RA)



Put in bottom mounting screw in as well (RA)





Clean old thermal mastic off of the refrigerator fins and freezer plates.

Set the refrigerator in the upright position. Notice: a gap between unit foam/tubes and plastic is normal, this will pull in tight as fin is installed. (YA) If you ae installing a fin fan cut a small notch in the plastic (RA) for the controller wire. Put a small bead of thermal mastic onto the fridge tubes (GL). Depending on which model you have the fin mounting bracket to screw the fin to might not be visible as it might be behind the foam. This is normal, the screw holes will still be there (BA)



Warning: Do not at any time drill new holes into the cooling unit you will hit a line and ruin the unit> Using the hex head #10X2" screws included, mount the left-hand side fin first (RA). Pull tubes in tight against the fin (BA)



Do the same with the right side (RA). Reattach thermistor clip (BA) if you have added a fin fan this can now be clipped to your fin





Insert the defrost cup (RA) don't forget to put your removed shelf back in

Have someone connect the defrost hose on the outside. You might need to enlarge the hole in the foam a tad to let the hose slide in over the spigot





Make sure defrost hose is pushed tight into the cup spigot.

Push defrost tray back into place (RA).





Level the fridge front to back for the next step:

### Place level here



Warning: if this step is not followed then your fridge cannot work for a long period of time and will eventually fail to cool until this tube is leveled up: Place your level inside the horizontal tube in the freezer



If your box has been leveled like shown above then this tube will need to be perfect level as well. If its not level with your box then take a pry bar and use the small brace welded across the back (RA) as a hook to go either up or down as needed. The one we show here needed to go up so the bar is slid between tube and icemaker plate.



Line up the secondary system mounting holes in the center to our cooling unit plate holes, tube might have to be pushed back, up or down to get it there (BA) use original screws to fasten the 2 together.



The original pc of plastic will need to be cut along this edge to place it back





Now place a bead of thermal mastic on the top and side of the freezer tubes

Fasten side plate first, top short screws in first



Lay horizontal pc on top and insert the bolts into the bottom freezer plate (YA). Using a small pry bar works very well by inserting it between the freezer sidewall and plate as shown providing pressure against side plate to eliminate gaps (RA). This may need to be pushed or pulled to get it into place.



Thread the nuts onto the bolts (YA). using the pry bar apply enough pressure to shift the plates left as far as they go (RA). Then make nuts tight



Now insert the 2 bolts to hold side plate, these can be hard to get lined up as you can't see in there, if you cannot get them in they don't have to be there as this plate is over against the cooling unit and held there by the bottom pc.



These are the holes those screws go into (BA)



When your done in the front make sure the fin in the back is close to level to the box, it does not have to be perfect but only close. You may need to remove the 2 rear mounting screws if it needs to be pushed or pulled into place. Pushing the unit to the side will not put extra pressure on the tubing, remember these units are made with thick steel tubing.



Warning: Make sure this step gets followed precisely, otherwise your fridge is unable to cool properly: Close the 2 doors again and set the unit back down on its face again. Take the can of foam (window & door sealant) from the parts box. Shake can for a few seconds and apply a bead of foam around all four sides as shown below. Make sure and seal all cracks and gaps. This will help seal all air leaks while traveling down the road. <u>Your cooling unit will not work</u> properly if this step is not done properly. In the hard to get to areas you will still need to insert the foam along this edge.



In some areas it might seem to be tight against the box, and in this area cut back enough foam on a angle to create a small gap off the unit so you can get your foam straw in to fill the void further down. We cannot stress enough on this step because if even a small 2" gap is left open it will not cool in the fridge like it should.



Make sure all 4 sides are completely sealed, add foam to the defrost hose



Follow up with covering the edges with the supplied aluminum tape. This does not serve as a seal but for cosmetic purposes only. (BA)



Re-install all rear mounting screws, these might not always line up perfect, do not be afraid to push or pull on the frame to get them in place (YA) if holes do not line up perfect you can use self-drilling screws to attach to the box.





Remove these screws from burner mounting brackets (RA)

Slide the board/burner housing into place again, same as before



Lay burner back onto bracket, make sure LP Burner is up against the bottom of the flue tube (YA) need approx. 1/8" gap between burner and igniter (GA) Styles may vary



Refasten Lp Burner back onto the burner brackets, (YA) Make sure to use the short screws back where they were, do not use the self-drilling screws where the short screws were. Otherwise, you will puncture the tube beneath.



If you have the style that has a thermocouple, make sure the thermocouple is secured and is in place like it should be. When flame is lit it should be sticking into the flame at least 1/8'' (RA) attach the loose ground wire anywhere to the box where its out of the way (BA)



Plug the wire harness back in again (RA) and the heating element wires (YA) put board cover back on





Reattach the red/black light wire again as before

Reattach the board mounting screws



Reattach white and brown ice maker wires (RA). If ice maker has being removed the following steps can be skipped. If not follow these steps again to put back together, but also use your own pics as style can vary



Reattach ice maker ground screw (RA).





Reattach the 120V wires for ice maker cord (RA). Reattach water line

Insert the icemaker water spigot again into the back of the unit making sure its inline with the icemaker, add foam to seal around the spigot & wire





Most times Your fridge has 2 or more vent fans on the center of the unit blowing air up, these can be reattached same as they were on the old unit, make sure they are pointed up and the fan switch needs to be located on the plate marked "fan switch" shown later. Or if you bought our recommended vent fan kit it gets mounted to the back of the unit marked "Fan Backer" this has a thin sheet metal backer to hold the fan into place.



#### **Reinstall the 2 burner covers**



Make sure fan is pointing up and use the screws supplied with the fan kit

Fan switch gets attached to the plate marked "fan switch"



The 12V DC supply wire for the fan needs to be attached to your coach 12V DC wire later.



Warning: Please make sure and follow thru this step, otherwise the unit could over heat causing damage to the unit.

Before installing the fridge back into the cavity, check to make sure wall insulation is secured and this is a good time to sweep or vacuum any loose debris. If this fridge is installed into a slide out then make sure and remove the top side vent (YA) baffling (RA) so our unit can perform properly, all it does is slow air flow. If the fridge is vented into a roof vent then nothing has to be changed.



You will then be required to add a slideout fan to your top side vent to force the hot air out that's being pushed up from the fans below the vent, (this is required on all slide out models to be covered in our warranty)



The eyelet can be screwed at any ground, connect female + to the fan switch wire, so it comes on when the lower fans come on



<u>https://jc-refrigeration.com/product/slide-out-fan-kit-u/</u> this does not have to be our fan, but a fan has to be added to the top vent.



If It's installed into a roof vent style, then it's a good idea to remove the top cap once done to remove any debris or just to make sure its wide open. Also check the top cap rain guards (BA), these can swell out with time and heat and cause serious air flow restriction, you can cut off ½" of these rain guards to give more air flow if they are restricted. If your cap is a aftermarket "Camco" cap then the rain guards have to be cut completely off as these caps are not made for your fridge vent.



Now you're ready to slide the refrigerator back into the cavity. Once it's started it helps to have someone outside to watch as you slowly push the fridge back into place, making sure the gas line is out of the way.



Remove the top control panel and fasten the top mounting screws back into place (RA).



Refasten the door handles.



Fasten the screws that hold the top control panel into place (RA).

Fasten the bottom mounting screws (RA).





Re-install the rear mounting screws (RA). Refasten your defrost hose

Reinstall your gas line, make sure its tight and after the gas has been turned on use soap and check for leaks on all gas joints. (RA) hook your 12V DC back up to the power block as before, make sure to put the positive back to where it was before. This is where you connect the interior fin fan and rear vent fan to. (YA)



Go to the inside of your RV and turn your refrigerator control "ON" now push the mode button and set it onto "Gas" mode. After a few seconds your burner should light up and run, adjust your temp setting to 5 till fridge is cold. A thing to remember is fridge food zone is 38F to 41F, the freezer 0F to 10F.



Now check your gas line joints again to make sure you do not have leaks. Now plug your 120V plugs back in again and make sure you have 120V at the plug



Now turn your fridge eyebrow to "AUTO" it should then switch to AC. If your fridge has these switches then make sure they are both turned off. LO AMB one is if you are in a below 0F amb temp, what it will do is make the light turn on at all times so the unit runs longer, and the other is only used if you are in a high humidity area. (BA)



If you have a amp clamp the total amps between the 2 heaters should be 3.6A to 3.8A. After its been running for ½ to 1 hr you need to make sure you here the rear vent fans turn on. Which can be heard either thru the front fridge door or thru the rear side vent.

We highly recommend using a digital wireless thermometer to monitor your inside fridge temps, many phone calls or temp misleading's can be avoided by making sure the thermometers you are using are accurate, you do not have to use our brand but we do recommend using something like this type.

https://jc-refrigeration.com/product/refrigerator-freezer-digital-wireless-thermometer-free-shipping/



Clip fridge sensor underneath second shelf down or first shelve beneath the fin, place it center front to back and center side to side (RA), if its clipped underneath it will be out of food containers way.



Same with freezer, clip underneath bottom shelves center side to side but have this one more towards the back of the freezer.



#### You are all done and ready to hit the road and do some serious camping $oldsymbol{\Im}$

Let us know if you see any areas we missed or that should be made clearer, since we do installs practically every day, we get blind at times to things that should be mentioned or be made clear.

<u>dahvac@outlook.com</u> Thanks for hanging in there to the end, give yourself a fair pat on the back and enjoy your cold fridge for many years on your travels.



## FAQs

#### What is covered under warranty?

Our warranty covers the cooling unit and shipping for 3 years free and labor for 90 days. An additional 3 yrs. can be bought off our website, which can be found on the warranty form attached to the unit. It does not cover any original Dometic parts such as the control board, the front display, thermistor, etc.

# What if the cooling unit needs to be worked on and I'm not close to your location (Shipshewana, IN)?

Contact us first and we will try to help you get the issue resolved. Most problems can be fixed by us through email or phone but if more work, or hands on work is needed, we have a list of dealers/service centers in almost every state that have purchased cooling units from us before and could possibly help you out.

#### Is there any regular maintenance to perform on these cooling units?

The only thing that needs to be done on these cooling units is to take compressed air and blow any dust or debris out of the burner assembly. This can be done maybe once or twice per year.

What makes our unit better than the original: We use much thicker tubing for one and our boilers are all hand welded which will prevent stress cracks (leakers) and we attach another coil which makes it double cooling capacity.

What is the best method to reach us for questions or concerns: email will be the fastest responds, a phone call without pictures of what you have will most times only delay the proper answer to your question. Emailing us a picture with the question will get you the fastest answer <u>info@jc-refrigeration.com</u>

How long have you been manufacturing these: we started servicing in 1991 and manufacturing in 1994

Is it true that these should be perfectly level: Yes, these can be off by 3 deg max in order to work, if they get off level more than 3 deg they will shut down and the boiler will create damage very quickly by over heat. This is a gravity flow system, so while travelling it's not a problem and it will slosh enough to keep going, it's while parked that it