HEATING/FURNACES

Date: Mon, 29 Sep 1997 21:12:26 -0500 From: john.massey#tcs.wap.org (John Massey)

Subject: GMC: Surburban furnace

Thanks, John

BTW When I tried to start the furnace by setting the thermostat, I heard no click, no blower, nothing. While I was on the net looking for information, my wife looked at our 1977 Cobra van conversion and saw that it had a Suburban furnace also and it works. I pulled the cover off the Cobra's thermostat and saw that a reed relay clicked in when the thermostat setting was changed.

I went over to the GMC, pulled the thermostat cover, moved the setting lever and the reed relay didn't move. I touched the relay arm, it moved, clicked the relay closed and the blower came on with the heat a few minutes later. Whew...it all works now.

3) How do you turn on the heater?

Are you referring to the furnace? If so, there were several production models. The Suburban furnace on ours has an inline valve at the unit, with the LP tank turned on, open the online valve, press the pilot bypass while you work the built-in spark unit, until you light the pilot light, continue to hold the bypass button in for a short while, then release. If the pilot light stays lit, then you can go to the wall thermostat and set the desired temp. The Suburban model has a blower fan that runs all the time the burner valves are open and the unit is hot, so its normal for the blower to run longer than you think it should. (not like a home furnace that lights, then the blower comes on)

Date: Wed, 17 Jun 1998 23:24:55 -0400 (EDT) From: "Thomas G. Warner" <warner#borg.com> Subject: 1976 GMC palmbeach Sol-aire furnace

I am using view 280020 furnace-30,000 BTU, SOl-aire, in the parts book for reference and the key numbers of the parts are in ().

In the process of repairing my 1976 palmbeach I found that the outside intake (27,27,7) and exhaust vents (28,7) for the sol-aire furnace appear to be installed incorrectly. I do not have another one to check so thought I would see if someone else has worked on one.

There is about 1" of space between the intake and exhaust ducts and the outside of the fiberglass shell of the coach. On the outside is screwed the cap vents directly to the fiberglass. Is this correct? It would seem that carbon monoxide could escape into the inside of the coach when installed like this.

Any help would be appreciated. I don't want to use it until I am sure that it is correct. At the end of the summer I am going to install a new furnace but want to use this one for this year.

Date: Sat, 26 Dec 1998 23:35:10 EST

From: CHill113@aol.com Subject: GMC: Furnace

I have a furnace problem, and hence a problem with my wife. She doesn't like to wake up cold. Two nights in a row the furnace seemed to be working fine until middle of the night and we wake up cold and the furnace fan is running

blowing cold air. (not just the usual run on to cool down the combustion chamber). I turn the thermostat off. Wait a minute and turn it on and it heats OK for a couple hours then repeats the cold air act. Any suggestions where to start to look for the defective switch or valve?

Justin, 77 Palm Beach (DuroTherm furnace)

Date: Sun, 27 Dec 1998 00:11:06 -0500

From: "Bartz, Paul" <s9d3452@mail.drms.dla.mil>

Subject: RE: GMC: Furnace

Justin:

I had a similiar problem recently and found that the ignitor electrode had a soot build-up and once I cleaned it off, voila. Once you take the front cover off the furnace, there were just a couple of screws to remove and then the plate holder for the electrode is free to be pulled backward to get at the electrode.

Paul Bartz

Date: Sun, 27 Dec 1998 12:37:11 -0600

Subject: Re: GMC: Furnace

On our Surburban furnace, I had to replace the IC control board. The local RV shop should be able to test it for you (if the Duo Therm furnace uses the same kind of starter).

Good Luck bdub '76 Palm Beach In The Heart o Texas www.web-access.net/~bmassey/

Date: Tue, 29 Dec 1998 10:16:13 EST

From: DEvans753@aol.com Subject: Re: GMC: Furnace

I had a similar problem a few years ago which turned out to be moisture in the propane tank. My understanding goes like this: at temperatures above freezing, some amount of water vapor mixed with the propane would freeze as it went through the pressure regulator (this expansion process always drops the temperature of the gas). The build-up would take up to an hour depending upon how frequently the furnace cycled, ultimately choking the propane flow. If it were still above freezing outside, after an hour or so, the ice would melt and propane flowed again -- self-fixing but very frustrating!

I convinced myself that this was the problem by wrapping a ziplock bag of hot water around the pressure regulator and insulating it to get 4-5 hours of continuous operation. After getting the propane tank fairly low, I removed the tank, took it to an open field and vented the remainder. Sure enough, the tank contained about 2 cups of watery stuff. After cleaning/drying/painting/installing/refilling, the furnace ran perfectly the past few years!

Dave Evans
'73 Canyon Lands
Rochester, MI

Date: Tue, 29 Dec 1998 10:47:35 EST

From: Gcbr@aol.com

Subject: Re: GMC: Furnace

Dave

When I redid my propane tank I too found about 2 cups of water or what ever in my tank. My local propane dealer told me some of it was the stuff the put in there to give propane its smell. It accumulates over time. We poured the nasty stuff out them flushed it with methyl alcohol. Hope it is good for another 23 years.

Take Care Arch 76 GB IL

Date: Tue, 29 Dec 1998 11:06:13 EST

From: LNelson208@aol.com Subject: Re: GMC: Furnace

Justin....just in case your furnace problem occured when you were not "plugged in", I will offer this information, in case it may help you. The same symptons popped up on my SOB two years ago. After much teeth gnashing and middle of the night diagnostics, I discovered a fact that everyone else on the planet already knew from birth. On the extremely rare chance that you also are not aware of this, here goes:

Your furnace will not operate correctly on a low voltage from the house bank. Can't tell you what the cutoff is, but I'm guessing that anything less than 12 volts won't cut the mustard. I have since read much about this in letters to the tech editor, etc. The thing starts but quits. Anyway, it probably doesn't apply to your case. My problem did, however, help me to realize that you can't have two (smart) charging sources hooked up to the same battery, as one will cancel out the other, and you still have a dead battery. Good luck.

Sent: Tuesday, December 29, 1998 9:52 PM

Subject: GMC: Keeping warm

I would like the thoughts of many of you on the net of the following:

Keeping the furnace on while traveling.

Comments please.

Ed Lubo 75 Landau New Jersey

Date: Tue, 29 Dec 1998 22:40:27 EST

From: CHill113@aol.com

Subject: Re: GMC: Keeping warm

Yes, I always have with no problems. I do kick it off when I gas up, then turn it back on. Same for gas refrigerator. I know some feel to leave the propane on could be a disaster in an accident, but so could an 18 wheeler driver going to sleep and crossing the median. I just don't believe you can guard against all possibilities.

Justin 77PB

Date: Tue, 29 Dec 1998 23:19:49 -0500 From: Zachary Zehnacker <zakz@erols.com>

Subject: Re: GMC: Keeping warm

You might want to look into one of those automatic valves that shuts off the propane at the tank when there is a leak. On a class C SOB, we had the tread separate on a tire. The flapping tread ripped down the propane lines from the bottom of the motorhome. Luckily we had the propane tank off so it was not a problem. We still often traveled with the tank open after this, but it was always in the back of our minds. Now the automatic valves have become pretty common and might be a good way to cut down some of the risks of leaving the tank open. We have never used one of these automatic valves, so this is all just a possible suggestion of something to look into.

Zak

Date: Tue, 29 Dec 1998 23:43:11 -0500 (EST) From: "Thomas G. Warner" <warner@borg.com>

Subject: Re: GMC: Keeping warm

Arch, I plan to do the same. Run a small heater near the refrig and tap off the lines running to the hot water heater. Will look for a 12VDC relay such as used on the gas tank transfer switch to turn it on and off.

At 11:27 PM 12/29/98 EST, Arch wrote: >Ed

>I dont think most of us would mind if you ran the furnace while on the >road. Here are some thoughts I have. Now these are not GMC thoughts >but LeSharo thoughts. My LeSharo has a rear heater built into it. >My LeSharo uses the hot water heater lines for the rear heater. >I want to do the same on the GMC. Why burn propane when I can >use engine heat? I have also found it useful to run the rear heater >when the system began to over heat. I have not worked out all of >the details yet but Patrick will get the pics when I do. Got to get the >beast on the road first! That is what I think.

>Take Care >Arch 76 GB IL

Date: Tue, 29 Dec 1998 23:50:39 EST

From: Gcbr@aol.com

Subject: Re: GMC: Keeping warm

Thomas

Try the relays used for headlights. It is a 30 amp relay and available everywhere. I want to move my heater back further. Dont know where yet just want it to be as far back as I can get it. That's what I want to do. Take Care

Arch

Date: Wed, 30 Dec 1998 00:34:23 -0500

From: "Loren \((Skip\)) Newhouse" <lnewh@erols.com>

Subject: Re: GMC: Keeping warm

Arch,

Many years ago I had a '54 Buick Super that had an underseat hot water heater. I did a fine job of heating the back seat. Maybe that's what you're looking for.

Skip Newhouse
'75 Avion
Western MD

Date: Wed, 30 Dec 1998 01:13:12 EST

From: Adohen@aol.com

Subject: Re: GMC: Keeping warm

In a message dated 12/29/98 11:51:58 PM Eastern Standard Time, Gcbr@aol.com writes:

- > Dont know where yet
- > just want it to be as far back as I can get it. Thats what I want to do.

Hi Arch!

Just want to mention I used fin tubing from house hot water system to provide heat in my old 58 jeep. It worked well. I used ball valves to control water flow and therefore heat.

Scott Adohen@aol.com

Date: Wed, 30 Dec 1998 11:44:28 EST

From: LNelson208@aol.com

Subject: Re: GMC: Keeping warm

Bold italics mine. Don't leave these things out there for me to grab onto. I can't resist. So here goes. Hey Skip, what I want to know is, did the heater also work out for you in the Buick. Sorry. Seriously, I have checked out the hot water heaters in J.C. Whitneys. I am going to go this direction, since my coach is being used in the winter, in winter type country. I like Arch's idea of getting it far back. Possibly at floor level centered on the rear window, between the seats, but not interfering with access to the water pump area. I wonder if the products of combustion of the engine (i.e. process heat) could support yet another heater in the central (refrigerator) location. Guess we could always put a piece of cardboard in front of the radiator. Best wishes to all for the new year. Larry nelson, PB 75, 6 degrees F. in Springfield, MO

Date: Thu, 7 Jan 1999 21:01:31 -0600 From: "Roger Black" <rblack@tecinfo.com>

Subject: Re: GMC: In-Floor Heating

Arch,

While you have the floors to redo, have you thought about adding the infloor water heating tubing system? You can use the engine coolant when running without lighting the heater (supposedly dangerous) and run the water heater at night. Eliminates the existing heater, blower, ducts, etc. Run a small water pump off the water heater attached to a thermostat to pump water throughout your whole coach at night or when the engine isn't running. Use the same thermostat to control a valve from the engine coolant. Figured you would be the one to try a different approach. Those floor tiles wouldn't be cold on your feet during the winter.

Date: Thu, 7 Jan 1999 21:09:08 -0600

From: "Roger Black" <rblack@tecinfo.com>

Subject: Re: GMC: In-Floor Heating

Ocops! Didn't think that one out completely. Forget using engine coolant, just the water heater and the water would be recycled back into the water heater. No additional weight and less weight with elimination of heater and ducts. Water heater could run off of electricity when moving, then gas or electricity when parked.

Roger

Date: Thu, 7 Jan 1999 22:20:39 EST

From: Gcbr@aol.com

Subject: Re: GMC: In-Floor Heating

Roger

Take Care Arch

Date: Thu, 7 Jan 1999 22:30:06 EST From: Gcbr@aol.com

Subject: Re: GMC: In-Floor Heating

Roger

There is one thing I am going to check out. When I was at Lowes the other day----and in a big hurry-----I saw something that looked cool. They had some sort of electric heat system to put under ceramic tile that sure looked good on a quick overview. Got to go back and look at what it was all about. That's what interested me.

Take Care

Date: Thu, 7 Jan 1999 22:47:40 EST

From: CHill113@aol.com

Subject: Re: GMC: In-Floor Heating

In a message dated 1/7/99 9:09:54 PM Central Standard Time,
rblack@tecinfo.com

writes:

<< Water heater could run off of electricity when moving, then gas or electricity when parked. >>

Quite a few of the coaches have electric heaters with radiator coolant lines running through them for hot water on the road.

Date: Sat, 9 Jan 1999 23:33:25 EST

From: RickStapls@aol.com

Subject: Re: GMC: Bathroom Heat

In a message dated 1/9/99 11:48:53 AM EST, wmyers442@yahoo.com writes:

> I do not find a furnace outlet in the side bath on my '74 Glacier with >Suburban furnace. The Maintenance Manual refers to 2 possible locations for >the outlet in the bathroom and shows a duct going over with aux fan. Do some >models not have this feature?

Bill,

Mine has a little nozzle that looks like the fresh air vent on an airliner, mounted above the toilet (towards the hall side of the toilet centerline). Inside the wall, there's a 6 x 6 x 1 inch box, connected to an aluminum tube (\sim 1 1/4" diameter IIRC) which runs vertically to the ceiling, thence across to the blower on the driver's side, mounted behind the top cabinet in the wardrobe module. A flexible duct (\sim 2" diam.) connects the blower inlet to the furnace plenum. The blower runs whenever the furnace does.

After all that, this is one clever idea from GM that just doesn't work. First, there is so much restriction (bends, small lines, etc.) that very little air is emitted in the bath. The blower produces its' fair share of sound and fury, but it signifies very little. Worse yet, the aluminum supply tube, running across the ceiling with little/no insulation to protect it from the cold roof, cools the air so much that it emerges lukewarm-to-cool in the bath. I gutted the nozzle to reduce restriction, and insulated that part of the pipe which I could reach. Still no good.

Unless you can fabricate larger and/or better insulated ductwork, it is not

engine-heat-assisted water heater system under the sink. Bottom line: If you

haven't got it, don't sweat it, you ain't missing a thing. My .02, YMMV.

Rick Staples
'75 Eleganza
Louisville, CO
("Chasing History " with the Broncos! ;-))

Date: Sun, 10 Jan 1999 09:33:44 -0500
From: "Mark Grady" <mgrady@bnin.net>
Subject: GMC: Bathroom Heat (not worth it)

When we first got our Kingsley, the furnace kept blowing fuses. I couldn't figure out why. I thought for sure it was a wiring fault, so isolated the furnace and fed it 12v on a separate lead. It ran fine, so I started hooking the original wires backup. Only one would cause the fuse to blow.

It wasn't til I found GMC MHI and got a maintenance manual that I even knew about the supplemental fan. It was seized up. I spent more time getting that fan working than I'd like to admit.

As Rick writes, don't do it. You'd get as much heat from a candle. His advice that you get more heat from the water heater is right on. (Unless you've got one of the new stainless ones and insulated it like Arch). Friends don't let friends fix their furnace fans.

Now you've got .04 worth of advice. Mark Grady mgrady@bnin.net '77 K N Webster, IN

was -6°, now a balmy +6° and snowing

{snipped Rick's excellent post -- read it}

Date: Sun, 10 Jan 1999 09:59:15 EST

From: HLBF@aol.com

Subject: Re: GMC: Bathroom Heat (not worth it)

In a message dated 1/10/99 9:33:58 AM EST, mgrady@bnin.net writes:

> the furnace kept blowing fuses.

When mine did that I found the problem to be dirt-daubers building their little adobes in my blower cage. We didn't have protective screens on the outside back then. Gone to play.

Lanier

Date: Sun, 10 Jan 1999 20:24:55 EST

From: Priceml@aol.com

Subject: Re: GMC: Bathroom Heat

Bill:

My 74 Canyon Lands has a heater outlet in the bathroom, it is under the cabinet directed at the hot water heater. No aux. fan.

Mike P Central Ca. 74 Canyon Lands

Date: Sun, 10 Jan 1999 18:40:33 -0800 (PST) From: William Myers <wmyers442@yahoo.com>
Subject: RE: GMC: Bathroom Heat --- Summary

Thanks for all those responding to my inquiry. Rick and Mark, thanks for a very graphic explanation of: if I do not have the duct going to the bathroom from the furnace, nothing will be missed. I have looked in all the recommended places and am convinced that the option is not equipped on my rig.

PS Rick, after 13 yrs in Colorado, I follow the Broncos more than the Cowboys. Should be a great game next weekend. ("Chasing History " with the Broncos!)

Thanks again to all, Bill '74 Glacier, N Tx

Date: Tue, 12 Jan 1999 09:29:27 -0500

From: "The Hamiltons" <hamilton@king.igs.net>

Subject: GMC: Bathroom Heat

After all the discussion on bathroom heat, it also needed my bit. On our coach the aux blower pushes hot air thru a 2 to 3" fabric-covered, wire reinforced duct. Can't remember the size because I haven't seen it for a couple of years. The duct is routed along the left side to the rear, along the back wall, and up the right side to the bathroom to a 2 to 3" opening at floor level to the right of the toilet. Air was barely warm by the time it reached the bathroom but the volume seemed adequate.

I insulated the entire duct with a bubble wrap and duct tape. It was a difficult job getting behind the module on the left side. The air is now fairly warm when it reaches the bathroom - it will take the coldness off the white fibreglass given 5 to 10 minutes.

A switch was put on the aux blower so it is only running when needed.

Kathy & Al Hamilton 76 Eleganza II Kingston, Ont Date: Tue, 12 Jan 1999 09:42:28 -0600

From: "Neely Butler" <Neely.Butler@gte.net>

Subject: Re: GMC: Bathroom Heat

Kathy & Al,

Read with interest your description of the bathroom heat, it is the only one I have seen that appears to be like ours. The previous owner removed the kitchen stove and replaced it with large microwave oven. The blower is behind the oven. Have not seriously tried to remove oven but may be big chore. May have to remove counter top first. I have kitchen stove, with oven, and will replace it at that time. It has been very cold here in Mid. Tenn. and will really need heater if we use motorhome. Thanks for your comments.

Neely B. Tenn. '78 Elenganza II

Date: Tue, 12 Jan 1999 11:08:10 EST

From: Adohen@aol.com

Subject: Re: GMC: Bathroom Heat

Hi Neely!

My Palm Beach 75 has a similar configuration as yours I believe. My bathroom ductwork travels along the left rear, rear and beside water tank to the bathroom. My website GMC PHOTOS 12/16/98 has some pictures which show some of the routing .

Scott Adohen@aol.com

Date: Tue, 12 Jan 1999 15:28:44 EST

From: EMERYSTORA@aol.com

Subject: Re: GMC: Bathroom Heat

I have had my GMC for 17 years and can agree with you all that it doesn't do a fantistic job of warming the bathroom. I had considered insulating the duct but, since the first few years that I owned it were in Michigan, I found that the heat radiating from the duct going through the water pump compartment was enough to keep my pump and water lines in that area from freezing. I insulated the compartment to keep more of the heat in. I had a Travco prior to the GMC and had often found that my water pump and lines would freeze on cold nights. This did not occur with the GMC. If you are doing cold weather camping you might want to leave the system as is.

Emery Stora 77 Kingsley Santa Fe, NM

Date: Wed, 13 Jan 1999 10:44:53 EST

From: CHill113@aol.com

Subject: Re: GMC: Bathroom Heat

I quote from the GMC maintainence manual, page 24G-7: If bathroom warm air outlet is located beside the shower head the auxiliary

furnace blower is located in the closet module (see figure 32) if warm air duct is located on wall below baythroom sink the suxiliary furnace blower is installed behind the range/oven (figure 33) Hope this helps.

Justin 77PB

Date: Tue, 26 Jan 1999 17:34:02 -0800

From: "Claude Brousson" <cbrousson@sprint.ca>

Subject: GMC: Cat Heaters

Ηi

I see my friend Al Chernoff is asking about Cat Heaters, so maybe this will help -- The literature I have is not right up to date but is as follows: Model 6P12A is 6000BTU's input

- - Draws less than .5 amps and weighs 15 lbs.
- - Heats up to 175 square feet (Depending on insulation)
- -uses a thermostat
- -exterior venting is 1.5 ins. in size
- -Power venting removes 100% of combustion by products and replaces combustion oxygen automatically. Automatic safety shut down in case of malfunction $\frac{1}{2}$
- -heats by radiation

Smaller model is 3P12A and is similar except is 3000BTU input and heats up to 100 square feet of space. Also they surface mount or are 2.25 in recessed. I saw one mounted on the left wall as you enter the coach and it was hinged so it could be swung out at least 90 degrees.

Hope this helps. They may have new model numbers now. Don't know. Claude B.

Date: Sun, 24 Jan 1999 21:53:04 -0600

Subject: Re: GMC: Question???

At 07:36 PM 1/24/99 -0800, Chuck Will wrote:

>The past couple of chilly evenings I noticed the heater motor coming on >but no heat. I went to the Thermostat and turned it up and re adjusted >the on/off switch and it came on and so did the heat. Apparently there >must be something gone amiss with the unit. Does anybody have any >ideas? It works ok after you get up and go to the back and reset >everything. Chuck Lompoc, CA

Mine did that right before the thermostat burned out. Then, when I still couldn't get the Suburban furnace to come on, I discovered that the ic board was toast.

I don't know if the thermostat burning out had anything to do with it, but that ic board was a hunderd bucks. The thermostat was only \$25. It might be worth changing it out early just in case.

Good Luck bdub '76 Palm Beach In The Heart o Texas

www.web-access.net/~bmassey/

Date: Sun, 24 Jan 1999 23:10:55 EST

From: Adohen@aol.com

Subject: Re: GMC: Question???

In a message dated 1/24/99 10:38:45 PM Eastern Standard Time, willa@impulse.net writes:

> It works OK after you get up and go to the back and reset

> everything. Chuck Lompoc, CA

Hi Chuck!

My 25' travel trailer was doing the same thing. I found that my electrical connections on the furnace were corroded. A little sandpaper and better contacts solved the problem for me.

Scott Adohen@aol.com

Date: Tue, 26 Jan 1999 21:25:26 EST

From: Gcbr@aol.com Subject: GMC: Furnace

GMCers

Some of you ask me to keep you up with my quest for a new furnace. I had received info that the Suburban SF was the way to go. I went to my local RV place. I ask about the SF 30-----he told me he would not sell me one. You must understand I have done business here for over 20 years and bought my GMC out of his junk yard. He told me that they have had a lot of problems with the SFs. He recommended I go with the 30 NT. An older design but much more reliable. The problem with the SFs is that they tend to drop out on the high limit thermostat. After a few times doing that the high limit thermostat fails. Have any of you had such a problem? He told me the NT is the old favorite. Any of you using it. It looks like that if I took out the W aluminum bracket that it would fit in the original compartment. I have already glassed over the original holes for the intake and exhaust. Would like to hear all of you have to say. After I get it in I will be back to ask what all of the wires going to that plug do. That's where I am at. Take Care Arch

Date: Sun, 24 Jan 1999 19:21:41 EST

From: Gcbr@aol.com

Subject: GMC: Furnace and floor

GMCers

I have some questions for you. Today I took out my furnace. I really freaked out at what I found. Now on my LeSharo the two tubes that are the air intake and the exhaust are metal and extend through the fiberglass. Is the GMC supposed to be the same way? Are the flat metal plates on the tubes supposed to be on the outside of the unit? The flat metal plates on the end of the tubes were on the inside of my coach. They were not even up against the sidewall. The aluminum bracket is still bolted to the floor but the sheet

metal brackets on the furnace had rusted out. On the out side of the coach the vent louvers were only held on by sheet metal screws in to the fiberglass. There was a good 1/8th inch gap between exhaust tube and the fiberglass. The fiberglass is somewhat melted around the hole. Glassed in the old holes and will be looking for a new furnace!

Speaking of a new furnace----what have some of you done? Jim tells me the Surbaban SF 30 fits well. I think I saw that the 35,000 BTU one is the same size. Would I be better off with it? My local RV shop is having a sale on Atwood furnaces-----any body gone that route? Does any one know if there is still any furnace out there that uses an air return duct?

Now for the floor portion of this message. I want to put down 1/4 inch luan plywood before I put down the tile in my coach. No, I am not going to carpet the darn thing. I will carpet the cockpit and the step but not the rest. I see several bolts coming through the floor. Are these bolts I will need to get to at some time? What do they hold to what? Yeah I still need to drop my fuel tanks-----any of them do that?

OK I am going back to work. Any help will sure be welcome.

Take Care

Arch 76 GB IL River only came up about 6 inches today----looking good. Did not put in drivers seat.

Date: Sun, 24 Jan 1999 19:37:16 -0500 From: "Mark Grady" <mgrady@bnin.net> Subject: GMC: Furnace and floor (reply)

Arch wrote:

- > The fiberglass is somewhat melted around the hole. Glassed in the old > holes and will be looking for a new furnace!
- I hope so, your old furnace installation sounded like it had the deep sleep option.

Go to Wal-Mart, get yourself a CO detector. First Alert makes one that has a slide in battery/sensor unit, so you can replace the sensor when it looses sensitivity (or pull it out if it goes off just before you head out the door.)

It seems that Wes (Cinnabar) ran a story about a catalytic unit. At the time, that seemed to make sense, and while oxygen depletion is still an issue, much quieter and less hassle than the hot air buzz box furnace solution. I'll go to the stacks and see if I can find it while someone else posts the answer.

- > Are these bolts
- > I will need to get to at some time? What do they hold to what? Yeah I
- > still need to drop my fuel tanks----any of them do that?

Nope. The fuel tanks are held up by straps that you get to from deep underneath the belly of the beast.

Mark
'77 K
N Webster
mgrady@bnin.net

Date: Sun, 24 Jan 1999 18:41:43 -0700 From: Darren Paget <paget@telusplanet.net>

Subject: Re: GMC: Furnace and floor

Arch. These bolts that come up through the floor. Do the come up or go down through? The two small bolts that come up in the centre between the propane and genset compartments hold your 3" waste line to the underside of the coach. There are two bolts which are in a line at the leading edges of the same two compartments along the seam in the floor. These two go down from the inside. They hold the two brackets that hold up your waste tank. The other two bolts at the other end of the brackets are in a line about equal to the leading edge of the bathroom module and closet module. There are also various pairs, about six inches apart, that go through the floor from the inside out. These bolts hold the coach body to the frame. These are not your main hold downs but are supplemental. There are also a bunch of torx headed bolts which hold the floor plywood to the aluminum sub frame.

As far as the furnace is concerned I can't help you there. I went a little radical on my replacement. I placed my new hot water heater in the old furnace location and put my new Hydroflame furnace under my Cook top. This is just forward of the utility compartment at the same height. This configuration does not let me have a conventional oven but that is taken care of by having a convection microwave.

I didn't want to go with the 110 volt water heater because we do camp without power a lot and I don't like running the genset all the time. This also gives me whatever time I choose to buy a new genset because the old one was toast any ways. I am a fan of propane fired appliances. The less dependent I am on the 110 power the freer I am to stop where I want. Darren

Date: Sun, 24 Jan 1999 21:14:42 EST

From: Adohen@aol.com

Subject: Re: GMC: Furnace and floor

Arch!

Did you wear hip huggers to get to your coach or a boat?

Mark talked about the gas tanks and I believe they are also attached just to the steel crossmembers. No bolts there. There are 8 bolts that come through the floor to hold the coach to the frame in the area between the step and door. They are carriage bolts that fit into an off centered washer. 7 are easy to get at and one is inside the kitchen cupboard left side and is buried partially under the furnace support. I replaced all 8 of mine because the nuts were rusted underneath the coach. I bought galvanized bolts and nuts. I figured they didn't need to be grade eight because they were fastenened through plywood anyhow. What I did was mig weld the washers and top of carriage bolts together so they might be able to be removed later on, hopefully not by me but someone 25 yrs from now. I don't know how the holding tanks are fastened but will check. Another suggestion about the luan. When I would install kitchen floors. I made a template out of 15 lb tar paper and scribed it with a two inch straight edge. Removed the whole template and

placed it over the luan which was spread out on the floor. Taped the tar paper to the luan and rescribed with 2" straight edge and pencil. Then I would use a sabre saw with a no kerf blade to cut it where necessary. I used the 7/8 inch paneling nails rather than staples in the walk areas to fasten. Staples seem to pop up after use.

Scott Adohen @aol.com

Date: Sun, 24 Jan 1999 21:44:33 EST

From: Adohen@aol.com

Subject: Re: GMC: Furnace and floor

Arch!

Just looked under my GMC sob. Notice it is not a big SOB, which means some other brand. It is just a sob for now.

The holding tank is fastened by 4 bolts, the front 2 are fastened to an oak furring board and don't go through the floor. The two back bolts go up through an alu. floor brace and I can't tell if they go through to top of floor. In either case I don't think these will be in the area of the tile. They seem to be under cabinets or something. You might want to look at my website and look at the pictures.

Underneath your GMC Scott Adohen@aol.com

Date: Sun, 24 Jan 1999 21:32:51 EST

From: Gcbr@aol.com

Subject: Re: GMC: Furnace and floor

Darren

Thank you so much for your info. You made me realize what my problem is right now. I have a new motorhome and a new lifestyle before me. I think I will drop some of the mods I was thinking of. Most of my travel has been business-----it wont be now! OK some of you old hands at being free please tell me what I am going to be doing. If I can have the old lady ready I marked down that balloon thing in NM. I have always wanted to see that. Please tell me how I will use my GMC now that I dont have to.

Take Care Arch

Date: Sun, 24 Jan 1999 22:36:27 -0800

From: Phil Stewart <plstewrt@bellsouth.net>

Subject: Re: GMC: Furnace and floor

Arch,

I too installed vinyl flooring in the living part of my Transmode when I ripped up the old mildewed second layer of carpeting. The vinyl is great for spills the whole area can be swept out in less than minute. We use a few washable throw rugs to add more color and comfort.

Before putting down the vinyl I glued and stapled in a 1/4" plywood underlayment. Because the underlayment went over those carriage bolt heads to the body / frame straps underneath, I remove each one and replaced them with new stainless steel bolts and nuts. I also epoxyed to the 3/4 inch subfloor each head and its eccentric turn-preventing washer of the bolts so that if in the future the body and frame need to be separated I won't have to pull up the flooring to grab a the bolt head to keep it from turning. I suggest you consider this before you cover up any carriage bolts heds.

I also found similar installation problems to yours with the Sol-Aire Furnace orignally installed on my coach. I replaced it with 6000 BTU and 3000 BTU Cat LP catalyltic heaters. One in the front and the other in the rear of the coach. Together these units have kept me and the wife warm in some pretty cold weather (10 degrees F.) And we like the "campfire" effect of the radiant heat while watching the TV on cold nights. They have small powered vents that force the combustion by-products outside. Their disadvantage is that they do take more time to warm an ice cold interior than the forced air furnaces usually installed in the GMCs.

Phil Stewart '76 Transmode, TN

Date: Sun, 24 Jan 1999 22:35:53 EST

From: Adohen@aol.com

Subject: Re: GMC: Furnace and floor

Hi Arch!

They only attach the body through the plywood with a large washer on the top. If you don't feel like replacing all the bolts, I would suggest just replacing the ones just inside the doorway, that way you won't have to ruin your floor in that area. All the other bolts are under sofas or dinette so if you have to replace them down the road at least those areas wouldn't be as noticeable.

If you are looking for something to do, stop up when you retire and we will push some dirt around and drag race our GMC's.

Scott Adohen@aol.com

Date: Sun, 24 Jan 1999 22:45:00 -0700

From: "mr.c" <mr.c@twrol.com>

Subject: Re: GMC: Furnace and floor

I have a sol-aire furnace in mine, and I am also interested in understanding what will replace my furnace in the future. I just took mine out and cleaned it all up, and hope it will work a long time. I also know that no parts exist so when it goes, it goes.

Al Chernoff 77 Eleganza II

Date: Sun, 24 Jan 1999 22:59:40 -0700

From: "mr.c" <mr.c@twrol.com>
Subject: Re: GMC: Question???

I don't know if you have the Sol Aire, but when mine got cold it wouldn't work. Then when it got warmer it worked. When I took out the furnace and lubed the motor, I also removed the assembly where the flame goes in, and I cleaned and checked the ceramic ignitor. It was all cruded up, and I think it works better now. Had to replace the bolts when I took them out as they were really rusted and one broke off. But I think it is now better.

Al Chernoff

77 Eleganza II

Date: Mon, 25 Jan 1999 00:29:05, -0500

From: JDDP32B@prodigy.com (MR EUGENE R FISHER)

Subject: GMC: furnace

Hi Arch

Yup, are now an expert. Al and I just finished removing our furnaces and oiling the motors so now we know.

The two U-channels under your heater were once spot-welded to the bottom of the furnace. This held the heater in position to the floor. The two pipes on the side of the heater, (in and out) slid into the flat plates with the flanged holes that you said were not even close to the side of the coach. These flanged plates were to be held in place with the self threading bolts from the outside that hold on the out side plates. Mine had thermal bondo like stuff between the inside plates and the side of the coach to make a seal. So the inlet and outlet plates make a sandwich with the fiberglass of the side of the coach in the middle. On both of our rigs the pipes from the heater were rusted into the flanged plates which made them almost impossible to remove. Al (who did his second) put bolts and nuts on the sandwich and knocked the rusted pipes loose with a large socket from the outside. There was also some insulation that looked like loose fiberglass to keep the heat from the side of the coach.

Since yours is all in pieces it would have been easy for you to put it back. Be sure you keep the furnace. Parts are no longer available for them.

Chuck

AS for the heat not coming on, if the blower motor does not come up to speed the gas will not come on. Sooooo, if the battery voltage is low or if the motor runs slow the gas will not come on. This might be part of the problem.

good luck gene - --

Arch,

If they are, as I suspect, carriage bolts (flush, rounded, heads), I think they are gas tank mounts and floor to aluminum member mounts. You may have to access them if you go to unbolt them and they strip out of the wood subfloor.

HTH.

Rick Staples

'75 Eleganza Louisville, CO

Date: Mon, 25 Jan 1999 15:52:04 EST

From: EMERYSTORA@aol.com

Subject: Re: GMC: Furnace and floor (reply)

If anyone goes with a catalytic heater be sure to get one that has an external air intake and exhaust. This will eliminate oxygen depletion or buildup of fumes. These have been around for several years now. The older style instructions indicate that you must keep a window cracked open.

Emery Stora 77 Kingsley Santa Fe, NM

Date: Mon, 25 Jan 1999 21:23:26 EST

From: Gcbr@aol.com

Subject: Re: GMC: furnace

Gene

If I was going to reinstall my furnace I would not do it the way it was done. I would take the pipes with the flanges on them to the outside of the coach. This way I would have a sliding metal connection to the outside. This is the way it is done on my LeSharo. Seems to make more sense that way. I honestly have no desire to live with a 23 year old furnace in such close quarters. So if some of you need some parts holler. I would guess that mine has not been used that much since the plastic sticker is still on it with the #s intact. I would guess that if it had been used much----someone would be dead. Heck maybe that is why it was in a junk yard.

Take Care Arch

Date: Mon, 25 Jan 1999 21:43:26 -0800 From: Phil Stewart <plstewrt@bellsouth.net>

Subject: Re: GMC: Furnace and floor

Al,

The heaters I bought are the Platinum CAT brand units made by Thermal Systems, Inc. of Tumwater, WA. (360) 532-0539. These are the same ones Wes C. wrote about in the March 1995 and June 1995 issues of GMC Motorhome News. Their cost direct from the factory in September 1996 was \$325 for either model, i.e., 3000 BTU (3P12A) or 6000 BTU (6P12A).models.

I would guess that my installation would not be typical for any other GMC since my Transmode has pretty much been re-modeled with custom cabinets and floorplan. However, the instructions that came with the heaters were very clear and easy to follow for a safe installation. You can mount them about anywhere on a verticle surface that allows for clearances from combustible materials of 18" in front, 1" from the floor, 6" from the sides and 2" from the ceiling. They can be angled up or down 15 degrees from vertcle if necessary.

Since they have 12 volt fans (.5 amp draw) to exhaust the combustion by-products (mainly water vapor, carbon dioxide and hopefully not much carbon monoxide) to the outside, they should be mounted so that the exhaust pipe (1 1/2" plastic plumbing pipe) does not need run more than 10' and the elbows are kept to two or less. A neat white ABS plastic vent cap is supplied for the outside trim. The vents can be run to the roof or thru the sides of the body. In my case I ran the exhausts out the side and below the rub rail. They stand out only an inch and are not objectional in appearance.

The heaters are controlled by separate wall mounted thermostats that allows for zone heating in my coach. I can run both or either one depending how cold it is outside. So wiring of appropriate size must be provided for the twelve volt supply to each heater with smaller wiring to their respective thermostats.

These units use 1/4 lb or 1/8 lb. of propane per hour and teeing into the copper LP gas line which supplies the cooktop, water heater, and refrig was a simple job for me. The heaters' additional load on the LP tank regulator and supply line has not been a problem for me.

Even though these heaters have powered exhaust vents, I installed a carbon monoxide detector which has never gone off because of the heaters.

All in all, I'm satisfied with the CAT heaters, finding them well made, easy to install and operate. As I said before, I like the radiant heat given off by the heaters. Your experience and satisfaction could be substantially different from mine.

Good luck,
Phil Stewart
'76 Transmode, TN

Date: Mon, 25 Jan 1999 21:50:45 -0800 From: Phil Stewart <plstewrt@bellsouth.net> Subject: Re: GMC: Furnace and floor (reply2)

Mark and Al,

I failed to mention in my eariler post on this subject that I always leave one of the roof vents slightly opened when running the CAT LP heaters. There are probably enough air leaks elsewhere in the coach to make up for oxygen depletion but the roof vent makes certain everyone and evey heater gets enough 02 over night.

Phil Stewart
'76 Transmode, TN

Date: Thu, 04 Feb 1999 21:01:49 -0700

From: "mr.c" <mr.c@twrol.com>
Subject: Re: GMC: no heat

Gene Fisher and I took out our solaire furnaces and cleaned and lubed the motor. I also took out the head end and cleaned out the ceramic ignitor. I found when I put it back together it didn't work. So much for my cleaning.

I looked at the plugs and found that one of the pins had completely corroded. I replaced the plug with another set and it works find. Hope this helps. I have a great deal of experience in taking them out so if you need some additional information, let me know.

Al Chernoff 77 Eleganza II

Jim Hall wrote:

> Lately my heater has been giving me problems. It is a soloaire original > furnace - 1977 PB. I took a short trip to charleston one evening and found >that it would run but not ignite. I reset it a few times and checked the gas > and connection - all ok, gas to valve. It had been working fine 2 nights > earlier. After hooking up to shore power - I tried it again - it worked > fine. Could a bad ground connection cause this. Had to us the generator > and a electric space heater. Even with the generator running it would > not run.

Date: Fri, 5 Feb 1999 14:20:23 EST

From: CHill113@aol.com Subject: Re: GMC: no heat

Jim

I have just returned this morning from the RV dealer where they attempted to fix the same problem. The service technician told me that if voltage drops below 10.5 the furnance will not ignite, but the fan will keep running. You might consider this since you say it worked alright when plugged in. Justin

77 PB (Duotherm)

Date: Sat, 6 Feb 1999 14:21:59 EST

From: Gcbr@aol.com Subject: GMC: Furnace

GMCers

I have a problem. Have any of you put a suburban NT 30 in your GMC. I would like to put one in where the old sol-aie sat under the kitchen sink. I know the SF will work. My local dealer says the NT is a better furnace. Somebody talk to me. That's what I need.

Take Care Arch 76 GB IL

Subject: Re: GMC: Furnace

We've got a Surburban NT30 furnace in our coach Arch. It's under the kitchen sink. I took it out a while back and replaced the IC card (\$100 bucks). Fits like a glove and works great now.

What else ya need to know? I can scan and email you the installation

instructions if you want. It's got all the dimensions and diagrams.

bdub

'76 Palm Beach

Date: Sat, 6 Feb 1999 17:36:27 -0500 (EST) From: "Thomas G. Warner" <warner@borg.com>

Subject: Re: GMC: Furnace

It will fit where the old sol-aire was? do you have to modify the exterior vents at all?

Tom & Marg Warner Vernon Center NY 1976 palmbeach

Date: Sat, 06 Feb 1999 18:03:30 -0600

From: Billy Massey <bmassey@web-access.net>

Subject: Re: GMC: Furnace

My new vents are about 5" forward and about 5" higher than the old ones that have been plugged. See picture at http://www.web-access.net/~bmassey/sweetpea.html

Arch, I put the installation diagram up there too. Sorry it's so big but had to do it that way to make it readable.

'76 Palm Beach In The Heart o Texas www.web-access.net/~bmassey/ icq # 202333

Date: Sat, 6 Feb 1999 20:32:32 EST

From: Gcbr@aol.com

Subject: Re: GMC: Furnace

Billy

I love you!!!!! My local dealer has never put one in a GMC so he could not tell me if it would fit. He was very firm that he would not sell me an SF. Understand I bought the GMC from his junk yard and have done business there for 24 years.

OK what I need to know -- did you take out the elongated U shape bracket? Or if you did not put it in----does the furnace sit on the floor? Is there a flat aluminum bar between the two upright frame members? If so is it notched in any way? Do I need to retain side access to the furnace or can all work be done from the front cabinet door? Anything you could send to help answer these questions would sure be appreciated. I owe you one Billy.

Take Care

Arch still raining The stupid radio antenna leaks!!!

Date: Sat, 6 Feb 1999 20:39:30 EST

From: Gcbr@aol.com

Subject: Re: GMC: Furnace

Thomas

The exhaust and intake vents will have to be modified. I had fiberglass and resin left over from repairing back end cap. I put one layer over each hole then a big patch over both of them on the inside. The Bondoed the outside. I will cut new holes for the new furnace.

Take Care Arch 76 GB IL

Date: Sat, 06 Feb 1999 22:09:30 -0600

Subject: Re: GMC: Furnace

I didn't see any elongated U shape bracket. The furnace sits on a couple of 1/2" plywood strips, about 3" x ~ 12 ".

There's about an inch clearance from the front cabinet wall. The propane line comes in through an elbow on this side.

If your talking about a bar between two coach frame members, I didn't see one. It just sits up against the outer wall and is attached by screws that go through the outside vent plate.

I haven't got any side access to mine. I had to take the unit out from under the cabinet to install the new IC card. Since it's in a metal case, side access wouldn't have helped anyway.

Hope this helps

Date: Wed, 10 Feb 1999 14:07:20 -0800

From: "Bill Macdonald" <eieioh@email.msn.com>

Subject: GMC: Sol Aire Furnace

The blower-motor fan on the Sol Aire gas furnace in my '77 Kingsley runs for about a 50 seconds, stops for 5 seconds, runs again for 50 secs. then stops again, and so on. It keeps repeating this cycle with no ignition spark showing through the sight glass and, consequently, no burner lighting. I visually inspected the spark electrode and it shows no cracks and it checked okay for continuity to its "spark-plug-type" terminal. A device called a "flame switch" has 12 VDC leads to it but I don't know its function or how to check this device. There is 12 VDC at the gas solenoid valve, plenty of propane in the tank, pressure is good and all valves are open. For some reason, their is no ignition. Any ideas?

Bill Mac

Date: Wed, 10 Feb 1999 20:12:12 EST

From: Gcbr@aol.com

Subject: Re: GMC: Sol Aire Furnace

Bill

You say that there is 12 VDC at the gas valve. Was this checked with a good voltmeter or a light? The furnace needs to have at least 10.5 volts with the fan running. If it drops below that it will not light.

When do you have 12 VDC at the valve? Just when it is trying to light or all of the time?

Take Care Arch

In a message dated 2/10/99 4:31:11 PM Central Standard Time, eieioh@email.msn.com writes:

> VDC leads to it but I don't know its function or how to check this device.
> There is 12 VDC at the gas solenoid valve, plenty of propane in the tank, >
>pressure is good and all valves are open. For some reason, their is no
>ignition. Any ideas?
>

> Bill Mac

Date: Fri, 12 Feb 1999 11:29:36 EST

From: ELUBO@aol.com Subject: GMC: Furnace noise

Our furnace squeels like a stuck pig when it first starts up and then when it's ready to shut down. I think that it's the bushing in the fan. Is there any quick remedies out there, without taking the complete unit our.

Thanks, Ed Lubo at Desert Hot Springs, CA

Date: Fri, 12 Feb 1999 21:49:25

From: Gil Gilbertson < gilname@ix.netcom.com>

Subject: Re: GMC: Furnace noise

Ed: Don't think your question identified your GMC or make of furnace. Disregard this if you don't have a SOLAIRE like I have. The Solaire tends to squeal and howl after a number of years, audible from 200 feet or more. This noise usually quits after the first half-minute of firing. This is often caused by an improper air adjustment, cured by turning a tiny screw a tiny bit (only one-fourth turn from one extreme to the other). Might try this if you have the Solaire. My coach came with a nice 26 page operating/maintenance/parts/wiring booklet, that's how I found out about this.

Gil in Iowa.

Date: Fri, 12 Feb 1999 22:59:43 -0700 From: "mr.c" <mr.c@twrol.com> Subject: Re: GMC: Furnace noise

Must confess that you have to take out the motor to lube it. I have a Sol Aire and I took the motor out and had a chance to oil it. That should stop the noise.

Al

Date: Sat, 13 Feb 1999 22:33:45 EST

From: ELUBO@aol.com

Subject: Re: GMC: Furnace noise update

Arch.

I don't have the slightest idea what the model number is.

Where you open the door to see if the unit is lit, above it surburban name is pressed in the front of the unit. On the left there is an opening where you could see the circuit board and to right of the openings is where the duct work is connected to go to the rear of the coach.

Ed Lubo