

## Ptatohed's back seat 'Fold-Up' Mod:



Who? Anyone with a 4<sup>th</sup> generation ('95 – '99) Nissan Maxima (and possibly a 3<sup>rd</sup> gen., '89-'94).

What? The ability to fold your back seat up to connect the trunk with the cabin.

When? When you need to place large/long items in your car.

Where? In the back seat/trunk.

Why? Because Nissan didn't install a conventional folding rear seat like the closest competition (Accord, Camry, Taurus, etc.).

How? I thought you'd never ask. See below...

### Ptatohed's back seat 'Fold-Up' Mod instructions:

This mod really isn't that difficult. And the beauty of it is there is no permanent damage. You can always put your seat/car back to stock at any time, if you so desire, with no indication that you ever modified it in any way. The quick 'down and dirty' is this:

Take your back seats out, remove the metal plate behind the rear seat back, take off the decorative, plastic liner that was on the metal plate and place it on the back of your upper seat and place the seats back in with the lower bolts of the upper seat left off. Done. :o)

Here is the more detailed, step-by-step of what I just said:

**1.)** The first thing you'll want to do is remove the two rear seat cushions. After this, you won't ever again need to remove the 'horizontal' (bottom) cushion and you'll only need to 'partially' remove the 'vertical' (top) seat cushion (when you want to fold it up). Look at the full page scan of Factory Service Manual page BT-26 (found at the end of this write-up) to remove the rear seat cushions while following along with this step.

Horizontal/lower rear seat cushion:



Vertical/upper rear seat cushion:



To remove the rear seats, start with the horizontal cushion. Simply pull the retainer ring forward while pulling up on the seat. There are two retainer rings, one on the left and one on the right. See picture 28.3a from page 11-18 of the Haynes manual below (a full scan of page 11-18 of the Haynes manual can be seen at the end of this write-up). Once the two retainer rings are unclipped, pull the front of the lower cushion forward and up, and then remove it from the car.

Picture 28.3a from the Haynes manual (full page 11-18 shown at end of write-up):



The only reason you'll need to remove the horizontal cushion is to obtain access to the vertical cushion's two lower bolts. Now remove the bolts for the vertical cushion. There are four total. You can look at pictures 28.3b and 28.3c in the Haynes, page 8-11, scan at the end of this write-up but keep in mind they are showing a 3<sup>rd</sup> generation Maxima (the 3<sup>rd</sup> gen. has 6 bolts total compared to the 4<sup>th</sup> gen.'s 4 bolts). As mentioned before, the FSM, page BT-26, shows the location of the 4 bolts very clearly. There are two outer bolts going through the vertical seat's lower "U-hooks" and two bolts in the center armrest. The "U-hooks" are located on the bottom left and right sides of the vertical seat. See a picture of the "U-hook" below.

"U-Hook" on the bottom corner of the vertical seat cushion:



To gain access to the two bolts in the armrest, unhook and pull forward the vinyl gray cloth hanging between the armrest and the pass-through opening. To unhook it, pull straight up on the plastic part attached to the vinyl cloth. It is hooked onto the lower opening of the armrest pass-through. See picture below.

Gray vinyl 'drape' in rear armrest:



Once all four lower bolts are removed, the vertical seat cushion can be removed from the car. Guide the two shoulder seat belts around the outside of the cushion (see “Additional Comments and Misc. Notes:” at the end of this write-up for mention of the ’99 Maxima which has 3 shoulder belts). Next, while pulling the bottom of the seat forward, push/pull the seat straight up. There are “D-Hooks” on the seat cushion which lower down into “J-Hooks” attached to the car (see pictures below). The grip is fairly strong but keep trying, you’ll get it. There are three of these hook systems, one on the left, one on the right and one in the middle. You’ll become an expert at this unhooking process because you’ll be doing it each time you fold the seat up. :o) (see “Directions for Use:” at the end of this write-up). Once you have unhooked all three, pull the seat forward and out of the car.

“D-Hook” on the back of the vertical seat cushion:



“J-Hook” attached to the car behind vertical seat cushion:



2.) The next step is to remove the metal 'plate' attached to the back wall. You can see the metal plate in picture 29.3, page 11-18, of the Haynes manual (full page 11-18 shown at the end of this write-up) but here is a better picture.

Metal 'plate' attached to the back wall behind the vertical seat cushion:



Refer to FSM page BT-15 found at the end of this write-up for removal of the plate. There are eight 10mm bolts spaced equally around the metal plate and two 10mm nuts at the top of the plate.

Picture of the plate removed from the car:



Congratulations, you just shaved ~6 lb off your car. :o) Save the plate off to the side, you'll need it in the next step. What I did when I was all finished was place my bolts/hardware in a bag and tape it to the metal seat back plate to keep everything together (as seen in the picture above).

3.) In this step, you will attach the trim panel which was located on the back of the metal plate onto the back of the vertical seat cushion. This step is recommended but not necessary. This is the hardest step - and even this step isn't that hard. So that you are not viewing the foam of your back seat from the trunk, you will want to take the gray, decorative, plastic liner that is attached to your metal plate off and place it on the back of your vertical seat cushion. First remove the gray rubber trim that goes around the inside perimeter of the pass-through opening, still attached to the metal plate (see FSM page BT-19 at the end of this write-up). It will pull right off fairly easily. Then remove the plastic liner by removing the two plastic snaps. Remove the snaps carefully with a flathead screwdriver. Now you will need to attach this liner to the back of your seat cushion. There really is no other way than to glue it on. You're welcome to use whichever adhesive you wish but I used a product called *Window & Door Super Caulk* by Liquid Nails found at any Home Depot or Wal-Mart for ~\$2-\$3. Don't let the 'Window & Door' title fool you, this stuff is strong.

Liquid Nails Acrylic Latex Caulk, LC-130:



<http://www.liquidnails.com/caulks/lc-130.html>

(Note you'll need a caulking gun. ~\$2-\$3 at Wal-Mart or Home Depot)

I like this glue because it has a good combo of holding strong when you need it to but it is also reasonably easy to separate and clean up the residue if you ever needed to take the glued items apart. The trick to gluing the liner to the seat is to line up the plastic liner to the cushion using the armrest pass-through as your guide. Do a few dry runs/test fits until you feel comfortable. You will need to temporarily re-install your vertical seat while test fitting. (It should be very easy with the lower seat cushion out but you can see step #4 for tips on installing the vertical cushion). When you are ready, put down a lot of glue at the contact points and leave weights on it over night. Note that the back of the seat surface is far from flat. It has a lot of 'hills' and 'valleys'. Obviously only the 'hills' will make contact with the liner. Make sure you put a lot of

glue on these 'hills'. After gluing, I'd wait at least 24 hours before going any further just to be safe. See the picture below of the plastic liner glued to the back of the seat.

Gray, plastic, decorative liner glued to the back of the vertical seat cushion:



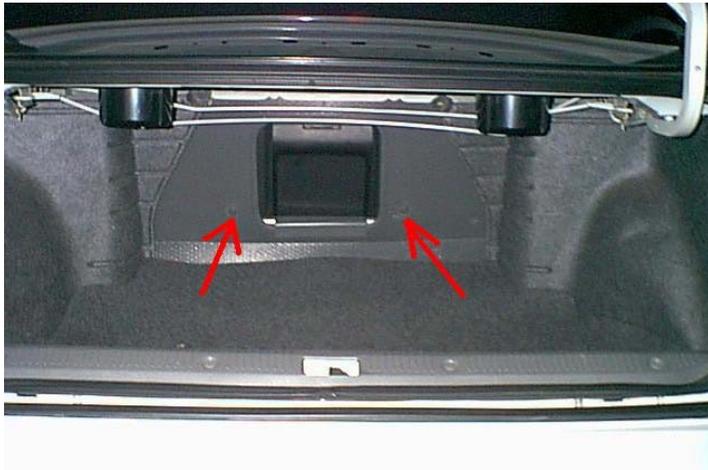
You have just a little more work to do to the vertical cushion. You're going to want to also install the gray trim that goes around the armrest pass-through opening. The one thing I want to point out is now that your metal plate is no longer there, the rubber trim will fit too loosely over the plastic liner alone. Use a spacer - Popsicle sticks worked great for me. See picture below. It shows my trim in place with the head of a Popsicle stick sticking out.

Example of a Popsicle stick used as a spacer in the pass-through trim:



Cut the Popsicle sticks to the size you need and run them along the perimeter of the trim. Put them on the 'seat side' of the trim instead of the 'trunk side'. They will not be visible when you are all done. There is no need to use any glue, they pressure-fit in just fine but if you would feel more comfortable, feel free to use a drop of glue on each Popsicle stick. Once the trim is in place you can connect the gray cloth drape to the armrest opening by feeding it through the opening and snapping it into place along the bottom of the opening. Lastly, take the two plastic push-bolts that went in the holes to the left and right of the pass-through and glue them in for looks. See picture below.

The two plastic push-bolts (that originally attached the liner to the plate) glued to the liner:



4.) You are now ready to place the seat cushions back in. Start with the lower seat cushion. Make sure you don't accidentally trap your seatbelts below the cushion. Guide them through the slits in the seat as you put the seat back in. Align the seat with the two retaining clips and push down until they click into place. Now install the upper seat cushion. Make sure you hook all three upper hooks in place. Put the seat in with the bottom angled out ~30°. Line up the three hooks and push down on the top of the seat. You might need to push down hard. Guide the outer seatbelts around the vertical cushion, guide the lower U-hooks around the horizontal cushion and swing the vertical cushion down into closed position. You're done!

### **Directions for Use:**

When you don't need the extra storage room, keep the rear seat back completely down and in place. You'll never know it was even modified. When you do need the extra storage space and you want to fold the seat up, it's very easy to do. Simply pull the bottom of the vertical seat forward from inside the car. See pictures at the end of this write-up. Working one side at a time, make sure to guide the lower U-hooks from the vertical seat cushion around the sides of the horizontal cushion as you're swinging the bottom up. Once the two U-hooks are around the lower cushion, push/pull the upper seat cushion upward, toward the rear windshield to unhook

the three upper hooks. You only need to push the seat up a few inches to free it from the hooks. Once unhooked, you can now freely swing the bottom of the upper cushion out, allowing for your pass-through storage. The top, headrest part of the upper seat will rest nicely on the rear speaker deck.

I typically just let the top of my vertical seat cushion rest on the rear speaker deck and the bottom of my vertical seat cushion rest on the item I am transporting. I leave the seat belts wrapped around the vertical seat cushion to hold it in place. See “Additional Comments and Misc. Notes:” below for mentioned alternate ideas.

### **Additional Comments and Misc. Notes:**

- As mentioned before, what I do is simply lift the seat up, slip my object under the seat and let the seat rest on the object. If someone wants to take this a step further, perhaps little shocks can be added to keep the seat open on its own. Or perhaps a simple approach could also be to use a short strap/cord to connect the bottom of the vertical seat to the grab handles above the rear doors. See picture below:



- On a similar note, as mentioned earlier, I simply rest the top of the vertical seat on the rear speaker deck when I fold my seat up. If someone wants to get creative, perhaps some sort of hinge system could be designed. At the very least, it might not be a bad idea to run a loop of wire around the vertical seat's upper D-hooks and the behind the J-hooks on the car (this would also help with safety – see next two bullet items). See picture below:



- I usually leave my seatbelts wrapped around the vertical seat cushion when I fold it up. This keeps the seat nicely in place. However, if you need to fold up the seat more than ~45°, you will need to move the seatbelts around the seat.
- If you do move the seatbelts around the vertical seat cushion, please exercise caution while driving. I don't want your seat flying forward and hitting you/your passenger(s) in an emergency stop. The same goes for items being transported – please exercise caution.
- Note there is an electrical wire bundle which runs across the trunk floor near the rear seat. I just taped it down real well. It shouldn't affect anything, just be aware of it and use caution when transporting items that might crush it.
- I also didn't mention making a wider opening because it would require permanent damage. But if you find yourself needing a wider opening than that produced by simply removing the rear metal wall, and you don't mind permanent damage, it seems doable. Cut away more of the trunk liner at the opening and you'll gain at least another foot. You will also need to cut away a little sheet metal. See pictures at the end of this write-up.
- Please note that the items you are placing through the opening will be resting on your rear seat (lower cushion). If you are placing anything dirty or sharp, be sure to place down a blanket, towel, cardboard, etc. for protection. In a pinch, simply use your existing trunk mat. See the pictures at the end of this write-up. I placed a flannel shirt under my bike tire. You could also plan ahead and leave your lower seat cushion at home (or even your upper seat cushion for that matter).
- Please note certain year Maximas might have a black plastic trunk liner instead of the gray liner that I have in my '96 and talk about in this write-up (In fact, I have purchased a '99 Maxima since I started writing this and it does have a black liner, unlike my '96).
- Speaking of '99s: As mentioned earlier in this write-up, all 1999 Maximas have a third, center, shoulder rear seatbelt. This would obviously affect doing this seat fold-up mod. I personally have not performed the seat fold-up modification to my '99 yet but if you have a '99, keep in mind the third seat belt will affect two areas of this mod.: It might make folding up the seat more difficult with the third belt in the way and it might make transporting objects more difficult. I think the mod can still be done and is still worth doing, however. When I get around to doing this mod to my '99 I will update this write-up.
- Continuing on the subject of '99s, my friend Jim (.org screen name The Wizard) had a black box mounted to the driver side of his metal plate, between the plate and the vertical cushion. We aren't sure what it is for but the only difference between his '99 and my '99 is that his is a 5-speed. So, if you have a '99 5-speed, you may need to relocate this box.
- You will notice a considerable increase in road noise when the seat is up. You can even hear the gas 'sloshing' around. This is normal and will not be noticeable when the seats are back in their closed position.
- Another benefit to this modification is that, in addition to shaving ~6 lb by removing the metal plate, it is now much easier to remove your two rear seat cushions on track nights. That is a 30lb savings! (Lower cushion = 10lb, upper cushion = 20lb)
- I am not absolutely sure and I am not making any promises but my educated guess is that this would work for a 3<sup>rd</sup> generation ('89-'94) Maxima. If anyone is successful, please let me know.

**Pictures:**

Rear seat cushion fully closed:



Rear seat fully open (90°):



Rear seat fully closed. Bike does not fit:



Rear seat folded up. Bike fits:



Picture of bike and folded-up seat from inside cabin:



View of bike and folded-up seat from the side:

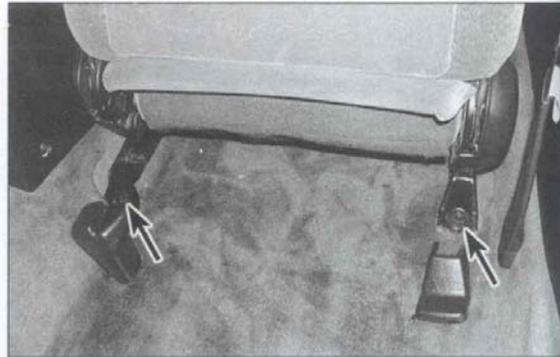


If, for some reason, you desire an even larger opening than that provided by simply removing the rear metal seat back plate alone, cut your trunk liner and sheet metal in the locations shown in the pictures below:





28.1a Remove the two front bolts (arrows) for the front seat . . .



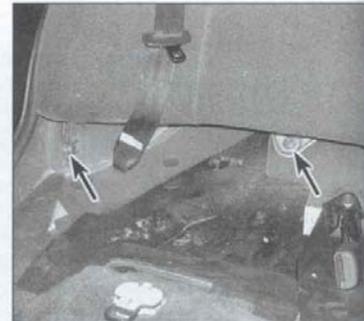
28.1b . . . and the plastic covers and bolts (arrows) at the rear of the front seat



28.3a Pull out on the clip retainer ring while pulling sharply upward to detach the back seat lower cushion



28.3b Fold down the center armrest in the back seat and remove these bolts (arrows) . . .



28.3c . . . then remove the four lower mounting bolts (arrows indicate the two right-side bolts)

**28 Seats - removal and installation**

**Front**

Refer to illustrations 28.1a and 28.1b

- 1 Remove the retaining bolts, detach any clips, unplug any electrical connectors and lift the seat from the vehicle (see illustrations).
- 2 Installation is the reverse of removal.

**Rear**

Refer to illustrations 28.3a, 28.3b and 28.3c

- 3 Remove the seat cushion by pulling out on the retainer, then pulling up sharply on the cushion (see illustration). After removing the cushion, remove the bolts and lift the seat back out (see illustrations).
- 4 Installation is the reverse of removal.

**29 Rear package shelf - removal and installation**

Refer to illustrations 29.2 and 29.3

- 1 Refer to Section 28 and remove the back seat.
- 2 Using a trim tool or a taped screwdriver to pry the rear roof pillar trim panels out (see illustration). The rear shoulder belts are routed through the panels. If you are just

removing the package shelf to replace the rear speakers, just slide the panels along the belts, out of the way.

- 3 The shelf can be pried up carefully from the body with a trim tool (see illustration).
- 4 Installation is the reverse of the removal.

**30 Sunroof - adjustment**

- 1 Access to the sunroof motor is by prying out the cover for the overhead light and sun-

roof switches.

- 2 Close the sunroof to its flush-with roof position.
- 3 Unbolt the sunroof motor from the roof and disconnect the drive cables.
- 4 With the motor's electrical connector still in place, run the motor until it reaches the end of its travel, then stop.
- 5 Reattach the two cables and bolt the motor back in.
- 6 Installation is the reverse of removal.



29.2 Pry out the rear roof pillar trim panels, and slide them along the seat belts and out of the way



29.3 Pry up the package shelf with a trim tool - slide the tool along between the shelf and the body until you locate the plastic pins, then pry up

## INTERIOR TRIM

### Side and Floor Trim

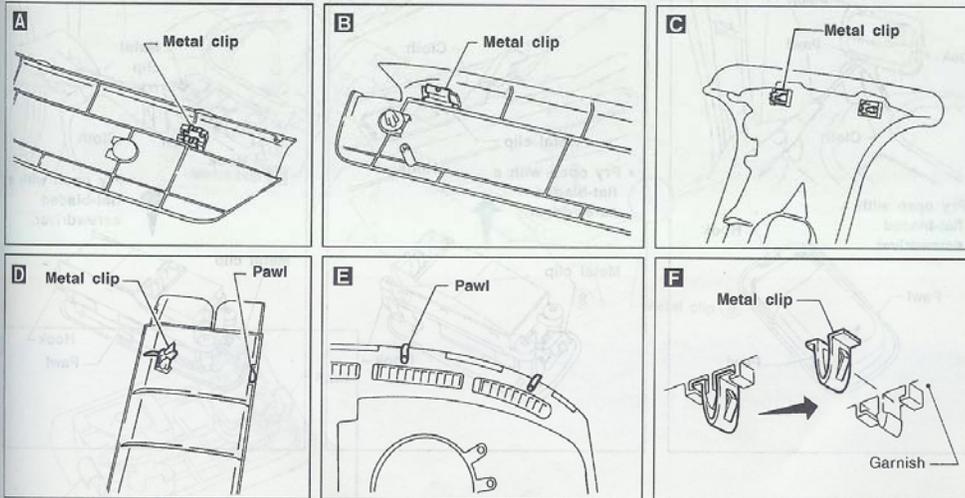
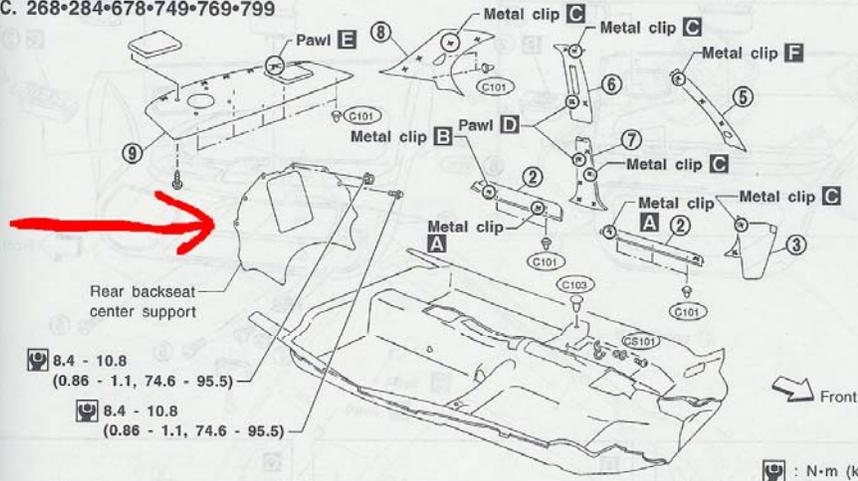
**CAUTION:**

Wrap the tip of flat-bladed screwdriver with a cloth when removing metal clips from garnishes.

**REMOVAL — Body side trim**

- ① Remove front and rear seats. Refer to "SEAT" for details, BT-24, 26.
- ② Remove front and rear kicking plates.
- ③ Remove dash side lower finishers.
- ④ Remove front and rear body side welts. Refer to "Door weatherstrip" in EXTERIOR for details, BT-20.
- ⑤ Remove front pillar garnishes.
- ⑥ Remove center pillar upper garnishes.
- ⑦ Remove center pillar lower garnishes.
- ⑧ Remove rear pillar garnishes.
- ⑨ Remove rear parcel shelf finisher.

SEC. 268•284•678•749•769•799



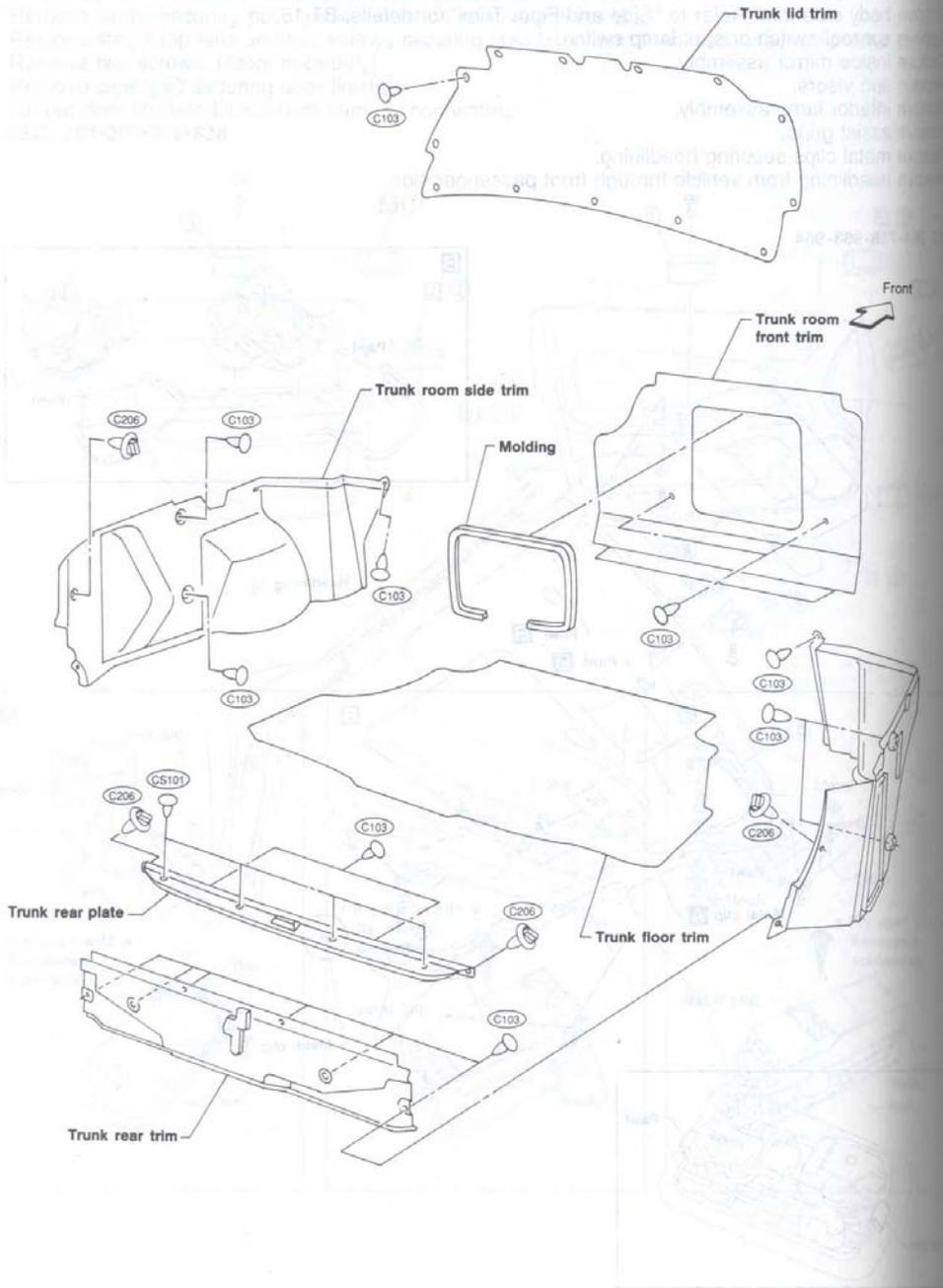
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## INTERIOR TRIM

### Trunk Room Trim

SEC. 849

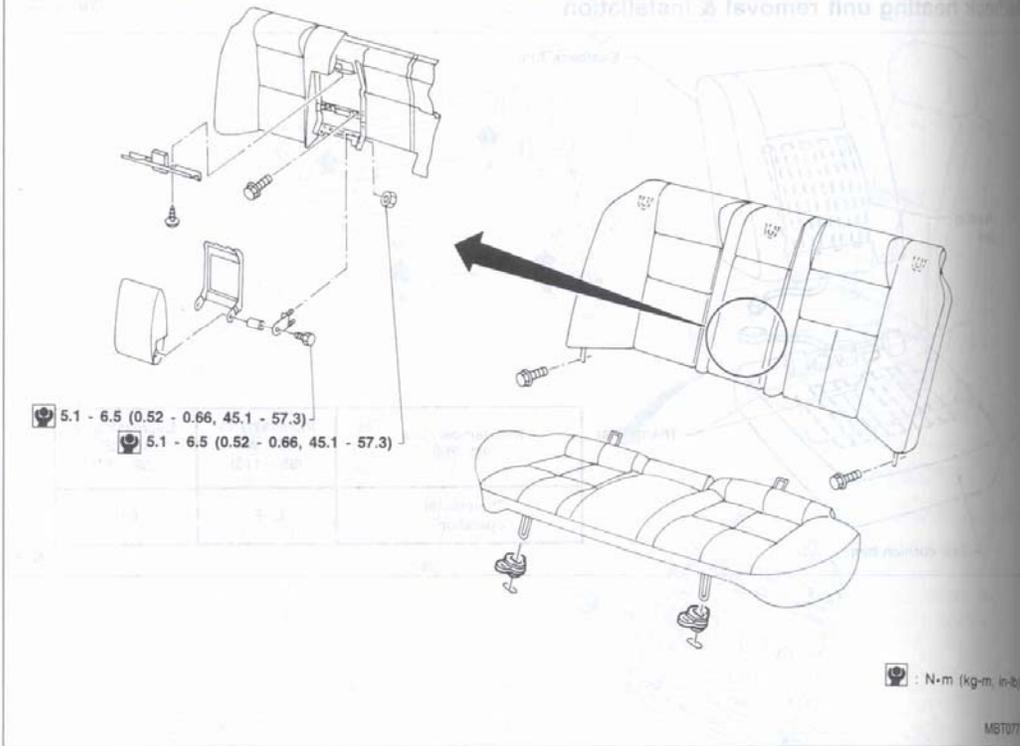


BT-18

# SEAT

## Rear Seat

SEC. 880



Good luck, enjoy, and please feel free to contact me if you have any questions or comments.

- Josh

e-mail: [ptatohed@netzero.net](mailto:ptatohed@netzero.net)  
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(Original Maxima.org thread:)

<http://forums.maxima.org/showthread.php?s=&threadid=158305&perpage=15&pagenumber=1>