

2019

MONZA ISOLATION SYSTEM

MANUAL & DOCUMENTATION



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DELIVERED CONTENTS

See the next page for diagram with dimensions to help identify small hardware.

- 4 Chassis Support Columns (doublewides use 6 columns)
- 4 Bolts (10-32 low head SHCS*) for BOTTOM Shelf Bracket, *bottom* hole (8 if doublewide)
- 8 Bolts (10-32 SHCS*) for Shelf Brackets, *Per shelf**** (4 Bolts only for BOTTOM shelf)
- 8 Washers (10-32 AN 960) to secure BOTTOM Shelf Brackets to the Columns, *Per shelf****
- 8 Bolts (10-32 FHCS**) for Shelf Brackets, *Per shelf****
- 8 Washers (10-32) to secure Shelf Brackets to Carbon Shelf Platforms, *Per shelf****
- 8 Nuts (10-32 Nylock Nut) to secure Shelf Brackets to Carbon Shelf Platforms, *Per shelf****
- 4 BOTTOM Shelf Brackets (8 on doublewides)
- 4 Shelf Brackets, *Per shelf**** (in addition to the BOTTOM Shelf Brackets)
- 1 Shelf, times the quantity ordered (standard is 4 shelves for singlewide, 8 doublewide)
- 1 Carbon Shelf Platform, times the quantity of shelves ordered
- 4 Viscoelastic Shelf Dampers, *Per shelf**** (sizes based on component weight)
- 4 Bamboo Couplers, *Per shelf****
- 4 XL Apex Isolation feet (6 on doublewides)
- 4 Silicon Nitride Balls (6 on doublewides)
- 4 Leveler Interface (010-032) for Apex foot (6 on doublewides)
- 1 Hex Key, 5/32
- 1 Open End Wrench, 9/16
- 1 Ball Driver, 5/32
- 1 ¼" drive breaker bar w/3/8" socket (to tighten nuts for Carbon Platforms)
- 1 Dusting Cloth
- 1 Manual, User guide
- 1 Warranty Certificate
- 1 Warranty Registration Form

* SHCS = Socket Head Cap Screw

** FHCS = Flat Head Cap Screw

*** Quantity indicated is for a singlewide unit, and will increase by 2 columns and the required added hardware for a doublewide unit. So too with the shelves, quantity of shelves and added hardware will increase based on quantity of shelves ordered. Extra nuts/bolts/washers are included.

SMALL HARDWARE DIAGRAM & DIMENSIONS

	<p>10-32 Nylock Nut</p>
<p>Washer may vary from 0.022" to 0.042" in thickness.</p>	<p>10-32 Washer</p>
	<p>10-32 AN 960 Washer</p>
	<p>10-32 SHCS*</p>
	<p>10-32 Low Head SHCS*</p>
	<p>10-32 FHCS**</p>

* SHCS = Socket Head Cap Screw

** FHCS = Flat Head Cap Screw

WARNINGS

Always start all bolts by hand, and never use a power tool to start threading any bolt.

When starting a bolt by hand, be sure it starts and threads easily. If it's not easy, the bolt may be cross-threading. You could damage the threaded insert if you continue, so stop and try again with different alignment or contact your dealer for assistance

TIP: To start a bolt, slowly turn it counter-clockwise (to the left) until you feel the bolt drop into the thread. Then begin threading the bolt turning clockwise (to the right) to secure it in the threaded insert.

Cross threading or other damage done to the threaded inserts will require return of the part to the factory for repair.

Follow this document's procedures for bolt tightening. When you reach the part of assembly where a power tool is acceptable for tightening the bolts, be careful to only use modest torque. Do not over torque bolts. It is possible to strip the threaded insert if excessive torque is applied.

IMPORTANT: Failure to correctly level system will negatively impact performance.

UNPACKING

Before unpacking we suggest you chose and prepare your set up and final usage location. During initial assembly you'll need an area big enough to have the entire structure resting on its side on the floor, with adequate room to work around it.

Check your package contents against the list on the "**Contents**" page, then proceed to set up.

We do send more nuts/bolts/washers than needed.

Open and inspect the shelf carton, but you need not remove the shelves until installation.

Locate the long carton containing the chassis support columns, and remove columns.

Locate and unpack the Carbon Fiber Shelf supports/chassis members, with open centers.

Unpack the carton containing the shelf brackets and locate the BOTTOM brackets which are unique in configuration from the majority of the brackets.

Locate the white boxes containing tools and hardware. You will need the bolts and ball diver hex key initially. The bolt packages are individually labeled.

ASSEMBLY INSTRUCTIONS

Information you need to review/know before starting:

Additional tools needed: a bubble level, hand drill (optional).

Directions given in this manual are for a singlewide unit; but you should have no problem adjusting for a doublewide, triple, or more.

During assembly take care to ensure you do not damage the coating on the support columns.

Please review and carefully note all warnings which are outlined in the “Warnings” section of this manual. Pay special attention to the bolt tightening procedures and warnings.

The bottom of the support column is the end with the internal thread for the footer levelers, which ships with a temporary plastic plug installed.

To determine the top side of a shelf, look for the radius around the perimeter.

CHASSIS BRACKET & PLATFORM ASSEMBLY

1. Place the Chassis Support Columns on the floor in your set up area
2. Locate the 4 (four) BOTTOM Shelf Brackets, these differ slightly from the other Shelf Brackets; the BOTTOM brackets have a sharp 90-degree angle versus a large arduous for the other shelf brackets.
3. Select 4 (four) of the 10-32 low head SHCS bolts, these are the ones with the lower profile, thinner cap which go in the *bottom* hole of the BOTTOM Shelf Brackets.
4. Select 8 (eight) of the 10-32 AN 960 washers, and add one washer to each of the bolts prior selected. You'll have 4 (four) of the AN washers remaining.
5. Starting with the specially configured BOTTOM Shelf Brackets, place the bracket against the bottom two rivet nut inserts in the support column, with the flat bottom of the bracket aligned to the bottom end of the support column (the end with the plastic plug).
6. Using the ball driver, hand thread the bolt with washer into the *bottom* hole of the bracket (the hole at the wider end of the bracket), and feed the bolt into the last rivet nut on the end of the column. Tighten until slightly snug.
7. Repeat this step with the remaining columns.
8. Select 4 (four) of the 10-32 SHCS bolts, these are the ones with the thicker cap which go in the *upper* hole of the BOTTOM Shelf Brackets.
9. Add the remaining “AN” washers to each of the bolts, and carefully thread these bolts (with washers in place) into the top hole of the bracket—the hole at the narrow end—and continue threading into the column's second-to-last rivet nut.

10. Now fully tighten the bolt so the bracket is firmly secure.
11. Repeat this step with the remaining columns.



NOTE: The *BOTTOM Shelf Brackets* shown in this photo are the only connecting points which are fully tightened before standing the unit upright.

12. Next bring the 4 (four) Carbon Shelf Platforms to your set-up area, the piece with the open center, and the remaining Shelf Brackets and small hardware.
13. Set aside one platform for the bottom of the chassis.
14. Place a Carbon Shelf Platform on the floor (or flat work surface) with the side showing the bolt holes facing up.
15. Place a bracket on each platform corner, aligning the bracket holes to the platform holes.
16. Using the 10-32 FHCS, 10-32 washers, and 10-32 Nylock Nut, attach the brackets to the platforms but only finger tighten.
17. The brackets should be flush to the surface of the platform, but should remain slightly loose until final assembly.
18. Repeat this step until three of the four platforms have all four brackets attached at the corners. **See photo next page:**



CHASSIS FRAME ASSEMBLY

1. Retrieve the columns to your work area. For this next step of assembly, you'll be using the 10-32 FHCS bolts, 10-32 washers, and 10-32 Nuts.
2. Using the flathead bolt, loosely attach the remaining platform (the one with no brackets) to one of the columns which has its BOTTOM bracket firmly attached.
3. Place another column parallel to the first, and loosely attach the platform to it.



4. Once you have the platform base with two columns attached, you're ready to attach the remaining platforms to these two columns.
5. With the bracket tips pointing toward the base, attach the remaining platforms at whatever spacing you choose for your system. **See Photo:**



6. Next, place another column on the floor, rotate the unit 90 degrees, and attach this column to each bracket making sure to leave them a little loose for now.
7. Place the last column and repeat your earlier steps.
8. Remove the temporary plastic caps, and install the Levelers in the bottom of each column.

PLACEMENT & LEVELING

Now you have a fully assembled chassis ready for the final steps of properly placing the unit, leveling, and installing shelves. The chassis should be quite wobbly and loose because most of the fasteners are still not fully tightened.

PLACEMENT

1. Stand the chassis upright and move it to its final location. This can be done by lifting the structure by its columns or legs.
2. Care must be taken to avoid bending the Levelers when standing the unit upright.
3. Be sure to lift up on the chassis frame as you stand the unit up in order to avoid excessively loading the levelers at an angle which could cause bending.
4. If you have carpeting, leave at least 5 inches from the wall to avoid having the XL Apex footers overlapping a carpet tack strip or other irregularity.
5. Position the front of the chassis parallel to the wall by measuring from each rear support column to the back wall. Adjust until the measurements from both sides are equal.

INSTALL APEX FOOTERS

1. Installing the Apex footers is also a task best done with help.
2. You'll work on one side of the chassis at a time, but start by setting a Silicon Nitride Ball on the top of each Apex footer.
3. Lift each support column individually tilting the unit, and positioning an Apex with ball under the leveler.
4. You may want to remeasure and adjust position of the chassis again at this time before you begin leveling.

LEVELLING THE CHASSIS

NOTE: *Leveling of the chassis structure is critical, and you must first level the chassis before you can tighten all the fasteners.*

1. With the chassis now in the upright position, start leveling using the top of the bottom-most Carbon Shelf Platform as your reference plane.
2. Place a level across the bottom platform as in an X pattern.
3. Note to which end of the level the bubble is low, and focus attention to the column and leveler closest to this end.
4. Use the supplied 9/16" wrench or dowel pin, raise the adjuster on this column's leveler until the bubble centers.
5. Make slight adjustments and try to extend threads only a minimal amount. Do not exceed 1/2" of exposed thread.
6. Reposition the level to the opposite angle of your X reference, and repeat the procedure.
7. Next, using the supplied hex key and breaker bar socket combo, tighten the bottom platform bracket. Do Not Over Torque!

8. You need only gently turn the key. If the key is flexing much you are applying excessive torque.
9. Now recheck your level, repeating steps 2-6.
 - a. When the unit is level in both planes you can tighten all the remaining connection points using the supplied tools.
 - b. Tighten the fasteners one shelf at a time starting at the second to bottom shelf.
 - c. First, tighten the platform to bracket connection point.
 - d. Second, tighten the bracket to column connection point.
10. Repeat this sequence moving up the unit.
11. Next do a complete nut and bolt re-check to make sure all hardware is uniformly tight and none of the attachment points were missed.
12. Recheck level to confirm the status didn't change during tightening of the fasteners, and adjust Levelers as needed using the same method as above.

NOTE: *If the unit is on carpet, the carpet and pad will compress and affect the level of the unit. The overall chassis level must therefore be rechecked and adjusted several times over the first two weeks post-installation, until stabilized.*

INSTALLING SHELVES & COMPONENTS

INSTALLING DAMPERS & POSITIONING SHELVES

1. Identify the weight of the individual component to be placed on each shelf. Component weight was reviewed during the ordering process, and you were shipped a selection of Viscoelastic Shelf Dampers based on the information provided.
2. Select 4 (four) of the shelf dampers with rate weightings which correlate to the weight of your component.
3. Place one damper in each corner of the Carbon Fiber Platform on the underside, under the shelf corners. The dampers stick easily, and can also easily be removed and repositioned.
4. Gently place the shelf with the dampers onto the Carbon Shelf Support.
5. Match the front edge of the shelf to the straight line created by the transition of the radius to the top flat area of the Carbon Fiber Platform.
6. If you expect a weight imbalance for any of your components, refer to "Optimizing and Tuning Performance" in the section which follows.

PLACEMENT OF COMPONENTS

1. Place rather than push the component upon the shelf; avoid sliding the component onto the shelf.
2. Care should be taken to avoid movement which might cause the feet of your component to scratch the shelf.
3. Place each component upon the shelf as you would prefer for your use and visual aesthetic. We recommend slightly back from the front of the shelf 1 or 2 inches.
4. Position on the shelf may affect damper compression. This will be covered in detail in the “Optimizing and Tuning Performance” section which follows.

OPTIMIZING & TUNING FOR HIGH PERFORMANCE

Correctly setting up and optimizing of this sophisticated design will yield significant sonic benefits. The following information will help you ensure a lifetime of enjoyment from your investment, and allow you to keep your isolation system in top-performance condition.

NOTE: If you have the opportunity to do so, we encourage you to perform a reference listening session before and after an adjustment intended to tune or optimize your system. This will help you make better adjustments in the process, and will also demonstrate the added value of the Monza’s features.

Bamboo Couplers: Your Monza Isolation System ships standard with optional bamboo couplers. These couplers can be placed underneath your components to improve performance. The bamboo material has its own unique internal cell structure which absorbs vibration, thus further enhancing the isolation of your component; plus, the gap created enhances air-flow. Consider the weight bias of the component when placing couplers, and modify at your discretion. We recommend a triangle pattern. It’s easy to do A/B style reference sessions as you adjust placement, plus you can also upgrade to small Apex footers as you learn to use couplers to tune and maximize the performance of your system.

Viscoelastic Dampers: Your Monza Isolation System ships standard with a starter set of Viscoelastic Dampers. These dampers were custom selected for your audio equipment based on the information provided with your original order. The dampers are differentiated by weight rating which is expressed visually by the number of nodes on the damper itself. These dampers are a special feature which greatly enhance your ability to tune performance of your system. Dampers are explained further in the following sections, refer to the “Viscoelastic Damper Weight Rating Chart” on the next page.

VISCOELASTIC DAMPER WEIGHT RATING CHART

<u>DAMPER ID#</u>	<u>QUANTITY</u>	<u>COMPONENT WEIGHT RANGE:</u>
SDII-1 Dampers	Set of 4	up to 10 lbs. / 4.5kg
SDII-2 Dampers	Set of 4	11 - 20 lbs. / 4.6 - 9kg
SDII-3 Dampers	Set of 4	21 - 40 lbs. / 9.5 - 18.1kg
SDII-4 Dampers	Set of 4	41 - 65 lbs. / 18.5 - 29.4kg
SDII-5 Dampers	Set of 4	66 - 100 lbs. / 30 - 45.3kg
SDII-6 Dampers	Set of 4	101 - 200 lbs. / 45.8 - 90.7kg
SDII-7 Dampers	Set of 4	201 - 290 lbs. / 91 - 131.5kg

DAMPER SELECTION

When you place your component upon a shelf, the compression of each damper may not be equal. This occurs due to the unequal distribution of the weight within the component, and therefore unequal pressure upon the dampers and biased placement upon the shelf.

Unfortunately, many components have significant weight bias either side to side or front to rear. You can usually feel this weight imbalance when you lift your components. Therefore, when you place a component to the front of the shelf, which is commonly preferred, it's virtually certain that an individual damper or two will be compressed more or less than another.

Fortunately, unique to our designs, each *individual* damper can be tuned for its *individual* loading. The ability to individually tune your dampers eliminates the constraint of weight bias. You no longer need to offset your component's placement position on a shelf to compensate; rather, the dampers can equalize weight distribution for you. The ability to adjust the dampers individually is essential to optimal performance and is an exclusive Grand Prix Audio design feature.

Adjusting dampers is a relatively easy process which relies on visual cues of damper compression, as well as your own impression of the component's weight distribution.

1. Visually note which damper(s) are being compressed greater.
2. Lift and remove your component.
3. Substitute compressed dampers with one weight rating above the current selection.
4. Do another visual check to verify the dampers are more equally loaded, and adjust further if needed.

5. If you find you're unable to exchange dampers to the extent desired within the confines of the order placed, you can order additional dampers by submitting a support request at: www.grandprixaudio.com

DAMPER LIFE SPAN

All viscoelastic materials have a finite lifespan. This lifespan is determined by many factors such as compression, environment, and hysteresis. Rubbers and less efficient materials have a much longer lifespan but also offer much less performance. We engineer our viscoelastic designs using Sorbothane materials of various durometer. We also engineer our product for optimal usage of this material which means a specific optimal percentage of compression. These engineering parameters and the material properties largely define the lifespan of the damper. Assuming the damper is not over compressed.

Recommended Replacement Interval: We recommend you replace your dampers every 18 months or less. If you don't replace the dampers nothing will break but your system will not sound as good as the dampers age and harden and thus become less efficient. If you want to ensure optimal performance, occasional replacement of the dampers is a must—it's like replacing the shocks on your car.

Extended Replacement Interval: You can extend the lifespan of the dampers by lessening the compression; however, if you exceed the overall weight rating of the dampers too far beyond the overall weight of your component, you'll also give up considerable performance. To extend nearly double your damper lifespan simply use the next higher rating damper than optimally recommended. We greatly discourage this dumbing down of the design, but want to provide this information for your potential benefit nevertheless.

MAINTENANCE

The Monza Isolation System is engineered to provide optimal performance of your sound system, and the various materials used in the Monza were selected for their specific performance qualities and capabilities. This unique blend of materials also means the individual elements of the structure require unique cleaning treatments. For basic dusting, use the cloth provided (or similar), and for cleaning refer to the following instructions:

Column Supports: The black coated support columns can be cleaned with a damp cloth, and if needed a mild detergent can be used. Other colors can be treated same as your car's paint. The brackets and connector hardware simply wipe with a soft cloth.

Column Caps: The polished aluminum closures on the top and bottom of the columns should be cleaned carefully with a soft cloth to remove dust. They can be polished for removal of oxidation and small scratches with aluminum polish. We recommend and use at the factory Mothers™ polish, however Meguiar's™ and others also make good polish. To maintain the unit in "as delivered" condition you will need to lightly polish these parts every few months or even monthly depending upon your climate to remove oxidation build up which will dull the reflectivity of the polished aluminum.

Carbon Fiber Structures: Carbon Fiber structures include the Carbon Shelf Platforms, APEX footers, and possibly Formula Shelves if you ordered this upgrade. All Carbon Fiber structures are maintained the same as paint on a fine automobile. Clean with mild detergent or just a soft damp cloth, and wax with a fine automotive wax such as Meguiar's™. They can also be polished the same as car paint to remove small scratches or for a refresh.

Bamboo Shelves & Dampers: Clean and treat the bamboo structures the same as you would clean and treat any fine wood furniture. Between treatments you can wipe the shelves with a damp cloth, and the dampers can be cleaned under warm running water and then air dried.

TROUBLESHOOTING

We have no troubleshooting notes at this time, but we welcome your feedback to build this portion of the manual.