

GENTEX[®]

TBH-R1

HELMET SYSTEMS

OPERATOR'S MANUAL



For Gentex TBH-R1 Ballistic Helmet Systems

This product is covered by one or more patents.
For more information visit www.gentexcorp.com/patents

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INTRODUCTION

ABOUT YOUR TBH-R1 HELMET SYSTEM

The TBH-R1 is a new helmet system designed to stop rifle rounds and most handgun and frag threats. This helmet system introduces the latest innovations in materials, alongside new and improved system components. TBH-R1 is available in three cuts in mission configured and shroud only options.

HELMET VERSIONS:

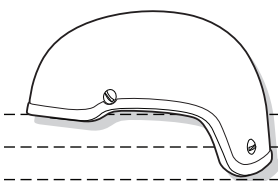


Mission Configured

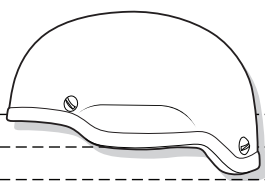


Shroud Only

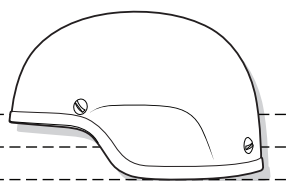
AVAILABLE HELMET CUTS:



High Cut

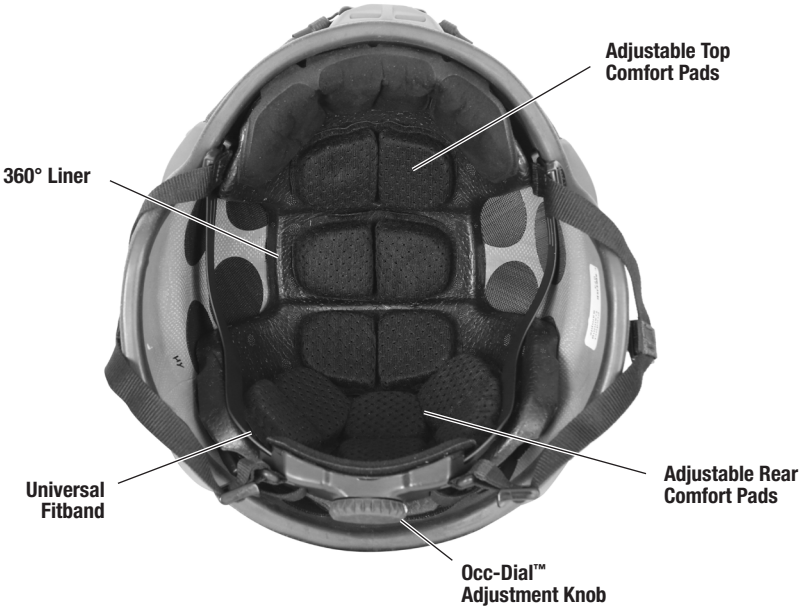
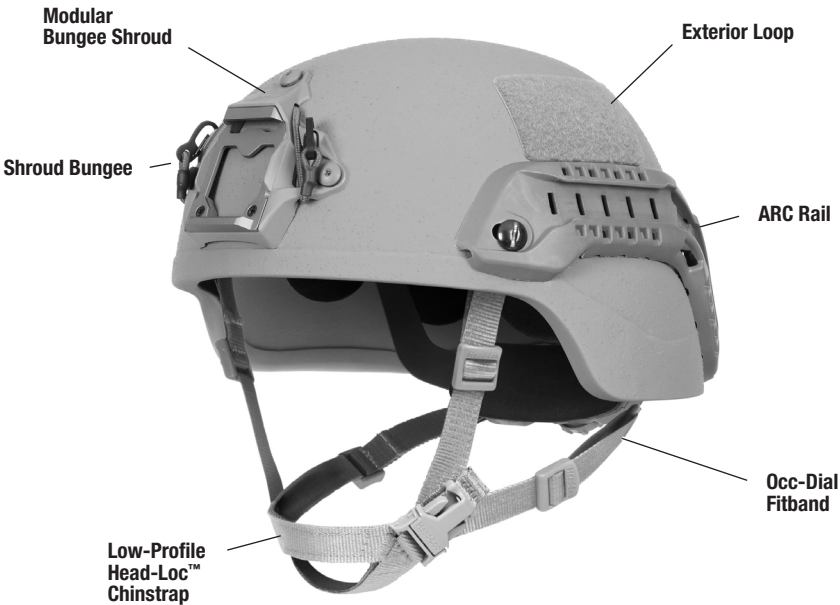


Medium Cut



Low Cut

HELMET SYSTEM COMPONENTS



SIZING GUIDE

TBH helmets have been designed from the ground up to fit the largest group of users in helmet sizes that most closely match their heads. However, there is still a small percentage of users that will not fit our standard sizing configurations. Please use the sizing guide below to determine your helmet size and your chinstrap size.

HELMET SIZING GUIDE

INCHES:

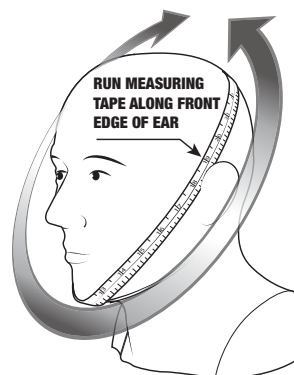
Helmet Size	Head Length (in.)	Head Width (in.)	Head Circ. (in.)
Small (S)	Up to 7 ¼	Up to 6 ½	Up to 21 ¼
Medium (M)	7 ¼ to 7 ¾	6 ½	21 ¼ to 22 ½
Large (L)	7 ¾ to 8 ¼	6 ½	22 ½ to 23 ½
X-Large (XL)	8 ¼ and greater	6 ½ and greater	23 ½ and greater

MILIMETERS:

Helmet Size	Head Length (mm)	Head Width (mm)	Head Circ. (mm)
Small (S)	Up to 184	Up to 165	Up to 539
Medium (M)	184 to 196	165	539 to 571
Large (L)	196 to 209	165	571 to 596
X-Large (XL)	209 and greater	165 and greater	596 and greater

CHINSTRAP SIZING GUIDE

For best sizing, wear the helmet with all forms of equipment that will be used during an operation. Include length of hair, balaclava, cold-weather gear, protective mask, and communication equipment. If unable to obtain size with actual helmets, select largest size helmet based on any of the three measurements obtained using a caliper and/or tape measure.

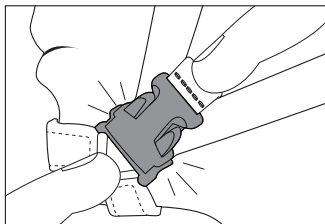


TBH Helmet Size	Chinstrap Size (in)
S	MEDIUM (24.5 - 27.5)
M	MEDIUM (24.5 - 27.5)
L	LARGE (26 - 29)
XL	X-LARGE (27.5 - 30.5)

RETENTION SYSTEM OPERATION

1 FASTEN THE CHINSTRAP

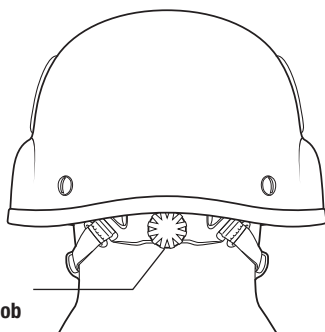
Put the helmet on and fasten the chinstrap buckle.



2 ADJUST THE OCC-DIAL

Use your thumb to rotate the Occ-Dial Adjustment Knob to tighten the fitband until it is comfortably snug.

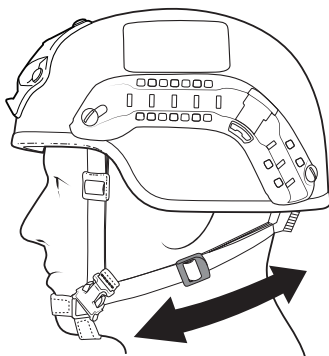
Occ-Dial
Adjustment Knob



3 ADJUST REAR HEAD-LOC SLIDERS

With both hands, pull the two Rear Head-Loc Sliders on the lower webbing straps toward your chin until snug.

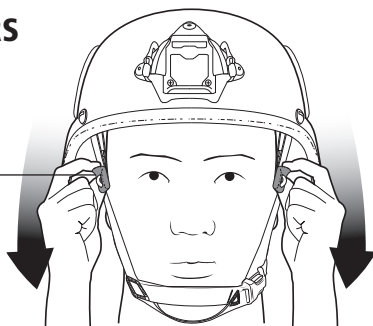
NOTE: THE TECHNIQUE WORKS BEST IF YOU ONLY HOLD THE PLASTIC SLIDERS AND DON'T TOUCH THE WEBBING.



4 ADJUST FRONT HEAD-LOC SLIDERS

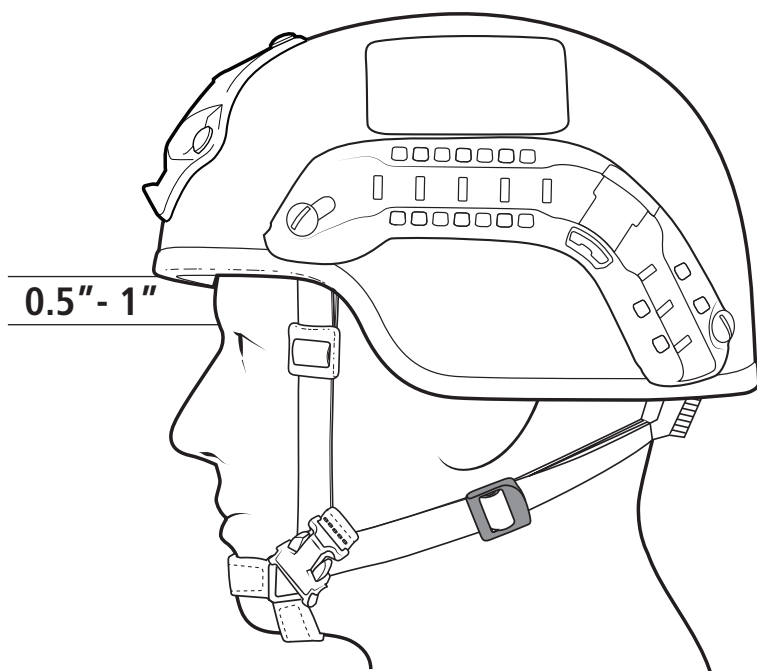
With both hands, pull the two Front Head-Loc Sliders on the webbing straps that come from the front temples of the helmet toward your chin until snug.

Front Head-Loc Slider



CHECKING FIT

A properly fitted helmet should sit securely on the head, with minimal to no movement when rocking the head side-to-side and back-and-forth. Check that the height of the helmet is not too high or too low. With a properly fitted helmet, the distance between the top of the user's eyebrow and the front rim of the helmet should be no less than 0.5" and no more than 1".



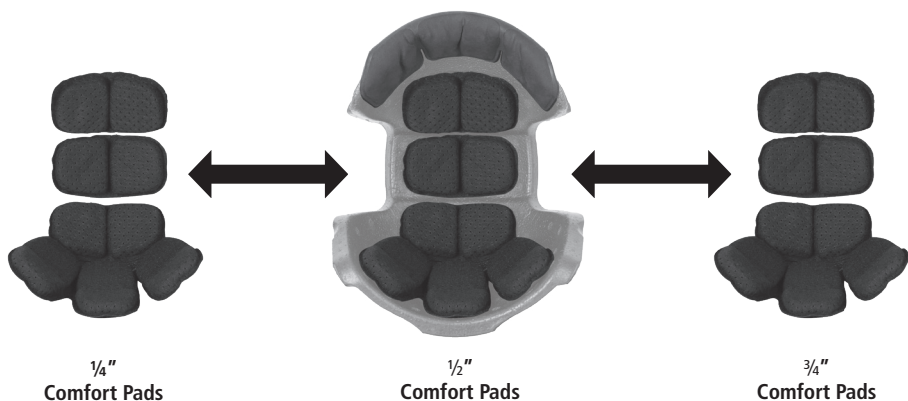
⚠ WARNING

An improperly fitted helmet can result in less than optimal helmet performance and possible injury or death.

360° LINER SYSTEM

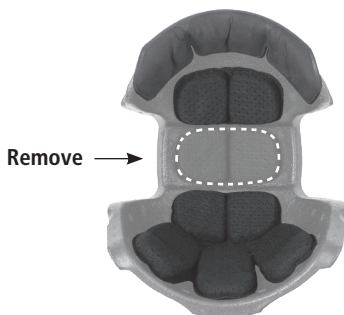
ALTERNATE PAD CONFIGURATION

Adjust the comfort and fit of your 360° Liner by swapping the ½" Comfort Pads with the ¼" or ¾" Comfort Pads. A combination of pad thicknesses can be used to achieve best comfort and fit.



HEADSET PAD CONFIGURATION

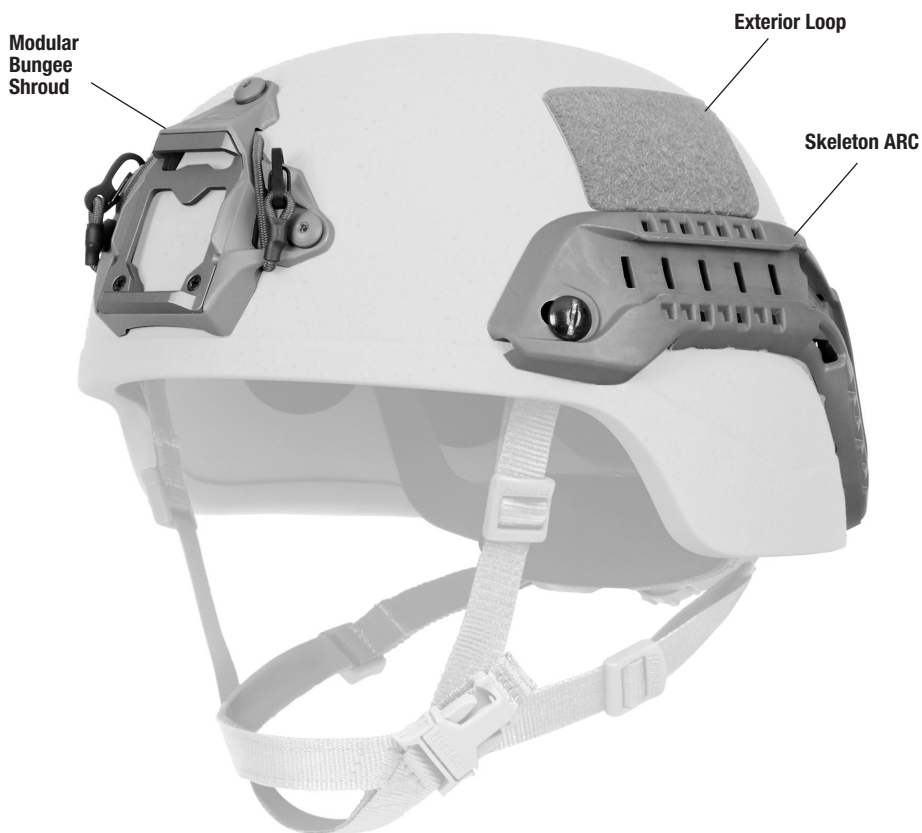
For use of the 360° Liner in conjunction with a banded headset, simply remove the Comfort Pad located at the crown as shown below.



ACCESSORY INTEGRATION

ATTACHING ACCESSORIES TO THE HELMET

There are three ways of attaching accessories to the TBH-R1 Helmet: The Modular Bungee Shroud, Skeleton Accessory Rail Connectors (ARCs), and Exterior Loop. These three components provide convenient and secure ways to quickly attach and detach various accessories to different positions



MODULAR BUNGEE SHROUD

ABOUT THE MODULAR BUNGEE SHROUD

The Modular Bungee Shroud (MBS) mounts to Gentex TBH-R1 helmets using the standard 3-hole pattern. The MBS has an integrated Night Vision Goggle (NVG) bungee that does not interfere with any other accessories, providing a low profile option for stabilizing NVGs. The MBS also has a removable metal insert that can be swapped out to provide different mounting solutions without completely removing the shroud from the helmet.

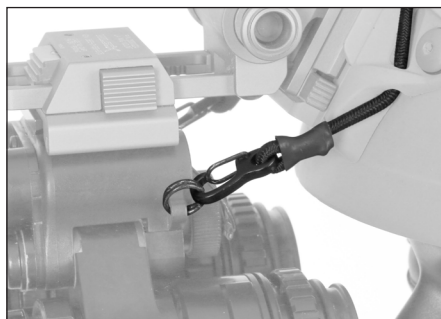


ATTACHING STABILIZING BUNGEEES TO NVGS

Some NVGs may require the use of the included Split Rings to attach the carabiner bungee clips.



Split Rings (Included)



NVGs Attached with Split Rings

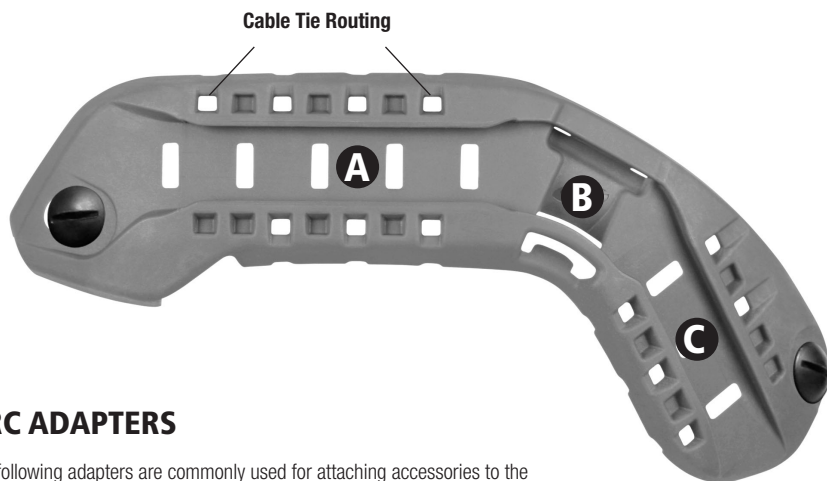


NVGs Attached without Split Rings

ACCESSORY RAIL CONNECTORS (ARCs)

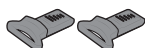
SKELETON ARC ACCESSORY ATTACHMENT

Skeleton ARCs are mounted to the sides of the helmet to allow for quick yet secure donning or doffing of various headborne accessories.



ARC ADAPTERS

The following adapters are commonly used for attaching accessories to the Gentex TBH-R1 Helmet: Picatinny & Wing-Loc Adapters (A), O2 Single Strap Kit (B), and 36mm Goggle Swivel Clip Kit (C).



O2 Strap Kit
(Not Included)



36mm Goggle Swivel Clips
(Not Included)

A TOP RAIL

Top Rail can accommodate Picatinny Adapters, which connect devices compatible with 1911 Picatinny Rail, and Wing-Loc Adapters, which provide a base to mount a variety of headborne accessories.

B RAIL CORNER

Rail corner allows for instant and secure snap-in attachment of Para-Flite and Carleton O2 masks with O2 Single Strap Kit.

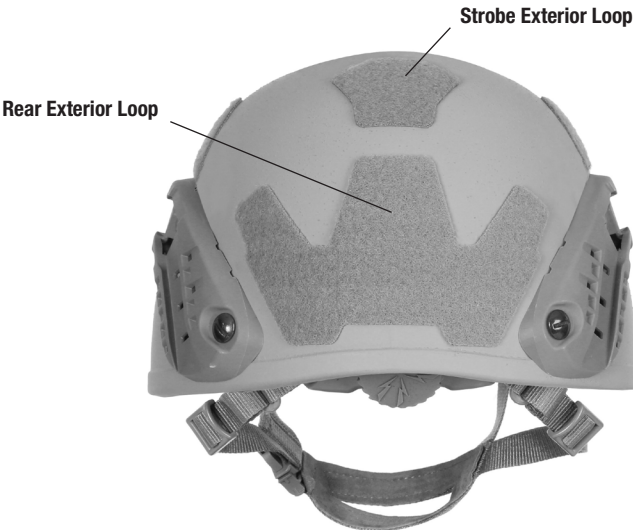
C BACK RAIL

Goggle Swivel Clips, attached to your choice of goggles, can quickly clip into the back rail while allowing freedom of rotation.

EXTERIOR LOOP

EXTERIOR LOOP ACCESSORY ATTACHMENT

Apply hook fastener to the bottom of a device and place device on top of the loop on the outside of the TBH-R1 Helmet shell.



MAINTENANCE SCHEDULE

STANDARD RECOMMENDED MAINTENANCE

Perform the following recommended maintenance procedures before and after each use. If any defects are found, the damaged components should be replaced before use.

- ❶ Clean the helmet with a mild detergent and water.*
- ❷ Check that the chinstrap screws are tight using a flathead screwdriver.
- ❸ Clean the Exterior Loop for dust and dirt by using air pressure.
- ❹ Visually check the Modular Bungee Shroud and Skeleton ARCs for signs of breakage.
- ❺ Visually check the Fitband for signs of breakage.
- ❻ Check that the Occ-Dial Adjustment Knob works properly.
- ❼ Check that the chinstrap does not have any damage and that the buckle latches and releases properly.

*The whole helmet can be rinsed in fresh water.

REPLACEMENT PARTS

Our team of dedicated customer service and support professionals is highly trained on all aspects of our products and is available to assist you with all your needs, including checking the status of your order, billing, warranties and returns, orders, replacement parts, and technical support.

Gentex Ground Customer Service

+1 888.894.1755

groundcs@gentexcorp.com

OPERATOR NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

OPERATOR NOTES

[illegible]

OPERATOR NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

▲ WARNING

This helmet provides LIMITED protection for the head and does not offer any protection against neck, spinal, or certain types of brain injuries including those caused by rotational forces. Some hazards can exceed this helmet's specified ability to provide protection and could cause serious injuries or death. This helmet is made to absorb the energy of a blow by partial destruction or damage to the shell, liner and the harness, and even though such damage may not be readily apparent, any helmet subjected to severe impact should be replaced. This helmet is designed to help protect from bumps, scratches, and concussion. This helmet is not intended for use in white water classes 5 and 6 as given by the International Canoe Federation. For adequate protection this helmet must be fit and adjusted properly to the user.

Inspect the helmet before each use. Make sure the shell components are not damaged, cracked, deformed, loose or showing signs of excessive wear. Do not remove or alter the front, top, side or back impact pads or modify any or the original component parts of the helmet, other than as recommended by the helmet manufacturer. Replacing the ½" thick impact pads with the supplied Ops-Core ¾" impact pads will not adversely affect impact performance. However, by removing the pads completely or repositioning them, impact attenuation performance could be adversely affected. Helmets should not be adapted for the purpose of fitting attachments in any way not recommended by the helmet manufacturer. Do not apply paint, solvents, adhesives, or self-adhesive labels except in accordance with instructions from the manufacturer as they could degrade helmet integrity and resulting performance. Clean shell with soap and lukewarm water. Internal comfort pads may be hand washed and air dried.

WARRANTY

Unless an individual product is covered by a separately issued warranty, Gentex warrants that all ballistic helmet shells will be free from defects in material or workmanship under normal use and service for a period of five (5) years from the date of delivery. Unless an individual product is covered by a separately issued warranty, Gentex warrants that all helmet components, accessories, peripherals, and parts will be free from defects in material or workmanship under normal use and service for a period one (1) year from the date of delivery. All repair covered by this warranty shall be performed at Gentex's factory, or other such warranty repair facilities of Gentex as designated by Gentex unless Gentex specifically directs that repair services be performed at another location. Any defect corrected and found to be within this scope of the warranty will be repaired by Gentex and all charges for labor and material will be borne by Gentex. If it is determined that either no fault exists in Gentex, or the damage to be repaired was caused by negligence of the user, its agents, employees or customers, you agree to pay all charges associated with each such repair. No statement, recommendation or assistance made or offered by Gentex through its representatives to the user, its agents, employees, or customers in connection with the purpose or intended use of any Gentex's product shall be or constitute a waiver by Gentex of any of the provisions of this warranty or change Gentex's liability under this warranty.

EXCEPT WHERE PROHIBITED BY LAW, THE WARRANTY DESCRIBED ABOVE CONSTITUTES THE SOLE WARRANTY MADE BY GENTEX EITHER EXPRESSED OR IMPLIED. THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED THAT EXTEND BEYOND THE FACE HEREOF, HEREIN, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL GENTEX BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES EVEN IF ADVISED OF SUCH DAMAGES, AND THE USER, ITS AGENTS, EMPLOYEES, OR CUSTOMERS REMEDIES SHALL BE LIMITED TO SOLELY TO THE REPAIR OR REPLACEMENT OF NONCONFORMING UNITS OR PARTS, WHICH AMOUNT SHALL NOT EXCEED THE TOTAL PURCHASE PRICE OF THE PRODUCT UNDER WARRANTY.

Any tampering, misuse or negligence in handling or use of the product renders the warranty void. Further, the warranty is void if, at any time, the user, its agents, employees or customers attempts to make any internal changes to any of the components of a product; if at any time the power supplied to any part of the product exceeds the rated tolerance; if any external device attached by the user, its agents, employees or customers creates conditions exceeding the tolerance of the product; or if any time the serial number plate is removed or defaced. OPERATION OF THE PRODUCTS THAT RENDERS THIS WARRANTY VOID WILL BE DEFINED TO INCLUDE ALL OF THE POSSIBILITIES DESCRIBED IN THIS SECTION, TOGETHER WITH ANY PRACTICE THAT RESULTS IN CONDITIONS EXCEEDING THE DESIGN TOLERANCE OF THE PRODUCTS.

