



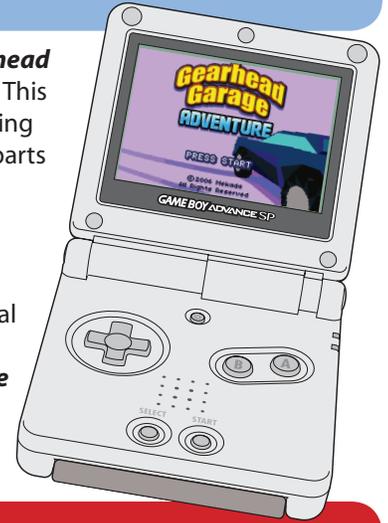
# Gearhead Garage ADVENTURE



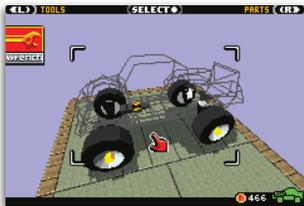
Based on the popular PC title *Snap-On Gearhead Garage* (published in 1999 by Activision), **Gearhead Garage Adventure** brings the “bolt ‘em up” genre to the Nintendo GameBoy Advance platform. This entirely new sequel expands the original’s novel 3D erector set concept, adding an outdoor driving mode, an interactive storyline, and adventure-style item collection puzzles utilizing the vehicle parts inventory.



Kids and experienced gamers alike enjoy manipulating car models in the integrated 3D workshop, and the constructive problem-solving gameplay makes this product an easy sell for parents as well as educators.\* The original PC title sold 110,000 copies in retail stores, and with a broadened target demographic and so many fun enhancements, **Gearhead Garage Adventure** offers something genuinely new and exciting for the portable gaming market.



## Product Profile



<b>Working Title</b>	<i>Gearhead Garage Adventure</i>
<b>Platform</b>	Nintendo GameBoy Advance, GameBoy Micro, GameBoy SP, and compatible systems
<b>Genre</b>	Simulation / Adventure
<b>Target Audience</b>	8 years old to adult
<b>Status</b>	This project was self-funded by Ratloop and is essentially complete except for platform compliance and marketing requirements. A playable demo cartridge is available upon request.
<b>3D Engine</b>	<i>Reifacta</i> engine designed specifically for portable systems: features a z-buffer software rasterizer capable of rendering true 3D vehicle meshes at 30 FPS on the GameBoy Advance hardware
<b>Toolchain</b>	Custom development system based on GNU Compiler Collection (GCC)
<b>ROM Size</b>	64 Mb
<b>Ownership</b>	The “Gearhead Garage Adventure” concept, implementation, and “Reifacta” toolset are intellectual properties of Ratloop, Inc. doing business as Mekada. The names and logos for Gearhead Garage®, Ratloop®, and Mekada® are registered trademarks of Ratloop, Inc. The “Krawall GBA” audio library is used under license from Synk / Kienzl und Prohaszka OEG.

\* *Snap-on Gearhead Garage* for PC was licensed for usage in schools and received a 2002 All Star Award from Children’s Software Review in the “Logic” category.

# Now With More Orz Bower



Join mechanical whiz Orz Bower on his unique journey through Motopia's six map regions: Mountain Valley, Desert Island, Outland Caverns, Motopia City, Sailor's Reef, and Moon Base. Along the way, Orz meets over 70 memorable personalities who trade parts, tools, and other game items helping him in his search to uncover the secret of Adrian Verc's K85 engine.



Adventure gaming isn't just about memorable encounters, rites of passage, and a hero's self-discovery. Sometimes it's about assembling the fastest motor vehicle on the planet... one bolt at a time.

Explore a world map containing garages, trading posts, driving courses, and repair jobs.



## Bolt It Up

At the heart of the *Gearhead Garage* series is the 3D workshop, where players repair and customize 7 distinctive vehicle models with over 50 interchangeable parts to collect. The major engine, body, and drive train components of a 3D car can be individually manipulated in the workshop: Use the wrench to unbolt and replace parts. Use the key to start the engine. Use the paint can to customize the body. Anyone can be a virtual mechanic!



Extra items are kept in the Parts Bin, where they can be inspected, repaired, or attached to a vehicle.



The 3D workshop tools allow the vehicle's engine, body, and drive train parts to be disassembled and customized.

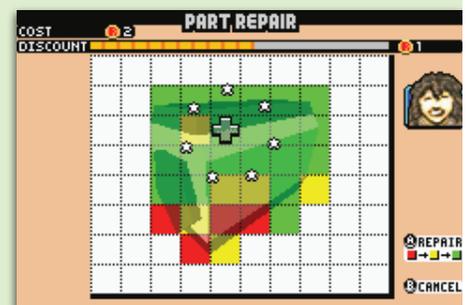
Besides fixing up his own vehicles, Orz also performs various repair jobs for the other characters in the story. The initial encounters serve to explain the game controls, introducing the workshop tools incrementally as the player masters the user interface. As the story progresses, characters offer hints and custom parts in exchange for the work performed on their cars.



Acquiring the "paint can" tool makes it possible to personalize your vehicles.



Repair jobs have been enhanced to require multiple tasks.



Race against the clock! The "part repair" action now incorporates an entertaining mini-game.

## Hit the Road

Each world region features a selection of themed driving courses where players can see their custom vehicles in action. Obstacles such as gates, elevators, and item dispensers are unlocked via triggers that require a car with a certain speed, body style, or repair condition.



Custom parts affect the vehicle's compatibility with different driving courses.



The "Car Stats" report allows the player to pinpoint the necessary upgrades.

These trigger requirements are typically satisfied by attaching custom vehicle parts designed for specific environmental conditions unique to the course. In the above example, the appropriate driving grip is "loose", but the player's wheels are optimized for roads with "hard" grip. By switching to "loose" grip wheels, the car will be able to attain the higher speed necessary to activate a speed trigger elsewhere in the level, thus opening a gate that leads to a different exit on the world map.

## Let's Trade

Trading posts allow Orz to swap car parts with other game characters. Unlike garages, the player can directly see the item that will be received when the trade becomes possible, which is the starting point for increasingly interesting and challenging puzzles.



For instance, if Orz needs the "cable rider" equipment from a character who wants her car painted, then he must first obtain the paint can tool, which can be traded for some other item, and so forth. Cars are everything in Motopia!



## Under the Hood

Ratloop is dedicated to delivering great entertainment products that emphasize excellence in all dimensions of the user experience. Besides its innovative gameplay, *Gearhead Garage Adventure* leverages the *Reifacta* optimized rasterizer to achieve impressive video effects on extremely limited hardware. No other GameBoy Advance product makes it possible for players to construct and manipulate a complex 3D model with interchangeable components -- let alone take it out for a test drive.

### REIFACTA

*Reifacta* is Ratloop's proprietary multimedia engine specifically optimized for the hardware constraints of a portable device. It combines a highly flexible software component framework with three separate hand-coded video pipelines for z-buffer triangle meshes, voxel height maps, and wireframe edge rendering. More information about this solution is available upon request.

## About the Developer

Ratloop, Inc. is an independent games studio that has been delivering innovative electronic entertainment for nearly 10 years. In 2000, Ratloop introduced its "Mekada" brand that targets the rapidly growing broader audience of casual gamers. Other Mekada titles include *In the Line of Duty: Firefighter* and *FDNY Firefighter*.

Check out [www.ratloop.com](http://www.ratloop.com) to learn more about Ratloop's games.

