



# 65019

## Mogul Type Gearbox

### THE PRODUCT

**Attention!** This product is intended for advanced users only.

This gearbox is intended for kitbashing and scratchbuilding projects. It features:

- protected gearbox with seven-pole Bühler motor
- six powered wheels
- one traction tire
- six power pickups
- wheel sensor for sound

### THE PROGRAM

With this model, we recommend the following items:

- 65001 American Steam Sound Unit

For information on the complete LGB program, see the LGB catalog.

### OPERATION

#### Electrical connections

This gearbox is a "D" gearbox. On top of the gearbox are four pins.

The gearbox will work only if the white (ws) and yellow (ge), as well as the brown (br) and green (gr) pins are connected. This routes the current from the tracks to the motor.

#### Power Supply

**Attention!** For safety and reliability, operate this model with LGB power supplies (transformers, power packs and controls) only. The use of non-LGB power supplies will void your warranty.

The motor of this gearbox is designed to operate on 0-24V DC. Use this model with LGB power supplies **with an output of at least 1 amp**. For more information on LGB power supplies for indoor, outdoor and multi-train operation, see the LGB catalog.

**Attention!** After extended operation, this model may leave carbon dust or other debris around the track. This dust and debris can stain carpet and other materials. Consider this when setting up your layout. Ernst Paul Lehmann Patentwerk and LGB of America are not liable for any damages.

### SERVICE

#### Do-It-Yourself Service Levels

Level **1** - Beginner

Level **2** - Intermediate

Level **3** - Advanced

**Attention!** Improper service will void your warranty. For quality service, contact your authorized retailer or an LGB factory service station (see **Authorized Service**).

**Hint:** Additional expert instructions for many LGB products are available at [www.lgb.com](http://www.lgb.com).

#### Replacing the motor **3**

- Remove the six screws from the top of the gearbox. Note that the screws are different lengths.

- Replace the motor. Reassemble.

**Attention!** If the motor is removed, generously lubricate the gears with LGB Gear Lubricant (51020).

**Attention!** Make sure that the drive rods do not bind. Binding can cause serious damage to the model.

#### Replacing the brushes, pick-up shoes or wheelsets **3**

Remove the four screws on the bottom of the gearbox. Note that the screws are different lengths. Remove the bottom of the gearbox. Note the position of the power strips. If necessary, replace the wheelsets, pick-up shoes or brushes. Reassemble.

**Attention!** If the wheelsets are removed, generously lubricate the gears with LGB Gear Lubricant

(51020).

**Attention!** Make sure that the drive rods do not bind. Binding can cause serious damage to the model.

#### Maintenance parts

50019	Maintenance Oil
51020	Gear Lubricant
62204	Standard Motor with Long Shaft
62007	Mogul Idler Gear Set
63120	Brushes, Assembled, 14mm and 16mm, 8 pieces
63218	Standard Pick-Up Shoes, 2 pieces
64191	Mogul-Series Wheel Set
69184	Traction Tires, 46.5mm, 10 pieces

#### AUTHORIZED SERVICE

Improper service will void your warranty. For quality service, contact your authorized retailer or one of the following LGB factory service stations:

##### **Ernst Paul Lehmann Patentwerk**

Reparatur-Abteilung  
Saganer Strasse 1-5  
D-90475 Nürnberg  
GERMANY

Telephone: (0911) 83707 0

Fax: (0911) 83707 70

##### **LGB of America**

Repair Department  
6444 Nancy Ridge Drive  
San Diego, CA 92121  
USA

Telephone: (858) 535-9387

Fax: (858) 535-1091

You are responsible for any shipping costs, insurance and customs fees.

**Hint:** Information on LGB products and LGB representatives around the world is available online at [www.lgb.com](http://www.lgb.com)

**CAUTION!** This model is not for children under 8 years of age. This model has small parts, sharp parts and moving parts. The locomotive drive rods can pinch and bind. Save the supplied packaging and instructions.

Products, specifications and availability dates are subject to change without notice. Some products are not available in all markets and at all retailers. Some products shown are pre-production prototypes. LGB, LGB of America, LEHMANN and the LGB TOYTRAIN logotype are registered trademarks of Ernst Paul Lehmann Patentwerk, Germany. Other trademarks are the property of their owners. © 2002 Ernst Paul Lehmann Patentwerk.