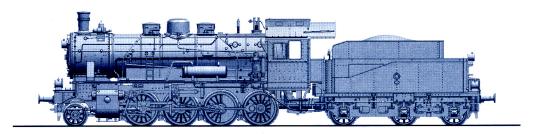


Operating Instructions L13156x

Freight train locomotive with tender, class 56 ²⁻⁸ and Austrian Type 656



Note on original:

The Prussian freight train locomotive type G8¹, subsequent class 55²⁵⁻⁵⁶, hot steam locomotive without pusher axle (D h2), with approximately 5,000 units, was the most frequently built regional railway locomotive in general. The Deutsche Reichsbahn (German State Railways) had 3,122 of these in its inventory. However, due to its lack of a pusher axle, it could only reach a top speed of 55 km/h and the heavy axle load of 17.6 tons made it unsuitable for use on secondary lines. To eliminate these disadvantages, the DRG decided to convert the machine. The locomotive was given a pusher axle in front, and the boiler and chassis were adapted so that the maximum speed was increased to 70 km/h and the locomotive could also be used for passenger trains.

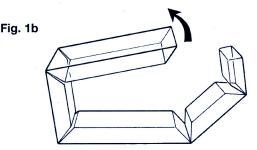
Between 1934 and 1941, 691 of these machines were converted in this way and, to distinguish them from the original design, were reclassified as type 56 ²⁻⁸ (Pruss. G 8 ¹ with pusher axle).

The Deutsche Bundesbahn (German Federal Railways) had 386 of these units in inventory.

Taking Your Model into Operation

Remove your locomotive – encased in the blister pack – carefully from the box. Open the blister pack according to the illustration in **Fig. 1a / 1b**, remove the locomotive, and place it on the track. The DC version is designed for a maximum of 14 volts, and the AC model can be operated in analog mode with up to 16 volts, or digitally. First, allow the locomotive to drive forward and backward for a few minutes at about half the voltage, and then it is ready for operation.

Fig. 1a





Refinement of Your Model

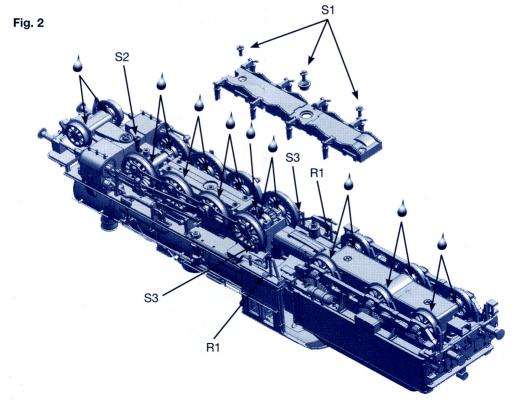
All of the components have already been assembled and installed for you.

Cornering Capability

This model is designed for track systems with even a narrow track radius - minimum radius R 356 mm.

Maintenance and Care of Your Model

To ensure a long useful life, your model should be serviced regularly. For minor service, the model does not need to be opened. Simply place the model on a soft surface as shown in Fig. 2, clean the wheel contacts with a cotton swap dipped in denatured alcohol, and then clean the wheels. Under no circumstances should you turn the drive wheels of the locomotive by hand. After cleaning, apply a drop of machine oil to the bearing points shown in Fig. 2. Use commercially available oils with a fine canula or a pin. Caution: do not use cooking oils or skin creams.





Lubricating the Transmission

To lubricate the transmission, place the locomotive on a soft surface as shown in **Fig. 2** and remove the bottom cover after loosening the three **S1** screws. Apply a commercially available oil with a fine canula or pin. Afterward, move the model slightly forward and backward to distribute the oil to the transmission components that are situated farther inside. Repeat this procedure as needed. We recommend this service after every 30 to 40 hours of operation.

Uncoupling the Locomotive and Tender

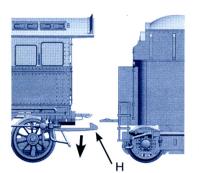


Fig. 3

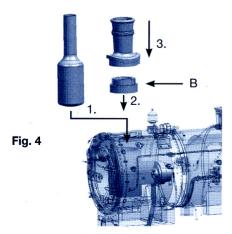
The locomotive and tender are fitted with special couplings that transmit current and can, if required – for example, for purposes of maintenance work on individual vehicles or to install a smoke generator – be uncoupled.

To do this please gently press the retaining collar **H** (**Fig. 3**) downwards with a screwdriver and pull the tender from the locomotive.

Coupling the Locomotive and Tender

Locomotive and tender are placed on the rails a little distanc from each other as in **Fig. 3**. Now carefully push the tender up to the locomotive. The two coupling parts slide in each other and the retaining clip **H** engages. At the same time connect all electrical contacts to each other.

Installing and Operating a Smoke Generator



The smoke generator – e.g. Seuthe No. 21 for analog or No. 24 for digital operation – can be used. Pull up the smokestack and remove the B bushing underneath it with tweezers. Insert the smoke generator (see **Fig. 4**) into the designated hole until it stops.

Follow the steps shown in Fig. 4.

Caution: If you plan to actuate the smoke generator with a digital decoder, please review the operating instructions for the smoke generator and the decoder first to ensure that the decoder is suitable for this operation with respect to current load rating.



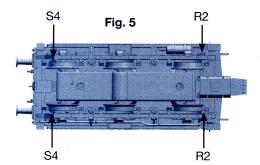
Opening the Locomotive

The locomotive should be opened only for repairs. Loosen the S2 and 2 x S3 screws (see Fig. 2), push in the two R1 catch hooks under the driver's cab, and carefully lift off the locomotive housing.

Activating and Deactivating the Smoke Generator

The smoke generator can be activated and deactivated using the Sw switch located on the tender board (see Fig. 6).

Opening the Tender



Lift up the coal box. The tender box is secured on the underside from below with the two \$4 screws and is held in the front with two R2 catch hooks (see Fig. 5).

Now turn the tender box - as shown in Fig. 6 slightly and lift it up.

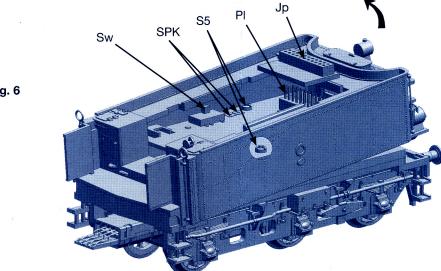


Fig. 6

21-Pole PI Interface

A 21-pole interface is integrated for converting to digital operation. This interface is accessible after **lifting off the coal box**. Before converting, check to make sure all functions are in order in DC operation. Pull up the **Jp** bridging plug vertically (**Fig. 6**) and keep it in a safe place. Next, attach the digital decoder, following the installation instructions from the manufacturer. For questions on the function or the installation, contact the supplier or manufacturer of your decoder. Please note that no liability will be assumed for subsequently installed decoders.

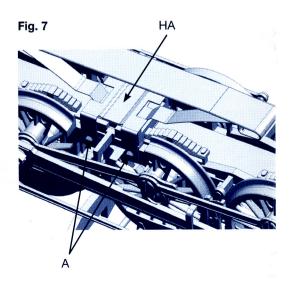
Locomotive Sound

The tender is already fully prepped for locomotive sound operation. To install the loudspeaker, remove the tender box (see section on "Opening the Tender"). Also, loosen the two S5 screws and carefully remove the main board. Take care not to loosen any wires when doing this.

The empty sound capsule for securing the loudspeaker is fastened with 2 screws underneath the board. Snap the loudspeaker – e.g. from ESU with d = 23 mm – into the sound capsule with the **membrane facing down**.

The sound decoder can be attached vertically onto the 21-pole interface instead of the **Jp** bridging plug or other decoder. There are two **SPK** soldering spots on the circuit board for connecting the loudspeaker (**Fig. 6**). Be sure to follow the instructions from the manufacturer of the decoder and loudspeaker manufacturers.

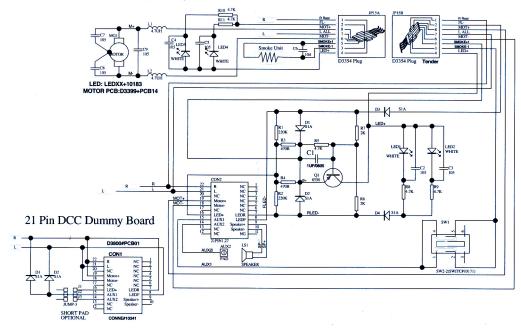
Your Model in AC Version



If you have decided on a LILIPUT model for a three-rail AC system, please note the following: This model has an integrated digital decoder (ESU-Lokpilot) that allows you to operate your vehicle in 16-volt analog AC mode, or digitally. The accompanying operating instructions from ESU contain information on the operation of the decoder. For current pick-up by the center rail, a collector is snapped into the chassis with an **HA** holder as shown in **Fig. 7**. To change out the collector, use a small screwdriver to push arm **A** of the **HA** holder slightly out to the side. This will release the retaining fit of the holder and the collector can be removed.



Schaltplan / Wiring diagram



Warranty Coupon

GB

Should your LILIPUT model be faulty or not work properly or require repair, you can either contact the dealer from whom you purchased the product or contact the customer services department directly of one of the following addresses below.

GREAT BRITAIN
AND ALL OTHER COUNTRIES
(EXCEPT GERMAN SPEAKING COUNTRIES)

BACHMANN EUROPE PLC MOAT WAY, BARWELL GB - LEICESTERSHIRE LE9 8EY Dealer's stamp with day of purchasing

Warranty Conditions:

This LILIPUT model has a warranty of two years from the date of purchase on repairs and parts, as long as it was purchased from an authorised dealer and if this certificate has been stamped with the address of the dealership and the date of purchase has been entered. The warranty permits Bachmann Europe Plc either to rectify any fault or to replace the faulty parts. Further claims are excluded.

Please note that no liability can be assumed for any parts subsequently fitted or for any damage caused thereby.



Garantie-Schein

Sollte Ihr LILIPUT-Modell einen Mangel oder eine Störung aufweisen oder einmal reparaturbedürftig sein, haben Sie die Möglichkeit, sich diesbezüglich entweder an den Händler, bei dem Sie das Produkt gekauft haben oder direkt an die Kundendienstabteilung einer der nachfolgend angegebenen Adressen zu wenden.

DEUTSCHLAND:
BACHMANN EUROPE PLC
NIEDERLASSUNG DEUTSCHLAND
AM UMSPANNWERK 5
D - 90518 ALTDORF BELNÜRNBERG

ÖSTERREICH: DOLISCHO MODELLSPIELWAREN BAHNSTRASSE 4 A - 2340 MÖDLING SCHWEIZ: MODELLBAU UND ELEKTRONIK STETTBACHSTRASSE 193 CH - 8051 ZÜRICH

ALLE ANDEREN LÄNDER:
BACHMANN EUROPE PLC
MOAT WAY, BARWELL
GB - LEICESTERSHIRE LE9 8EY

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Dieses LILIPUT-Modell hat ab Kaufdatum zwei Jahre Garantie auf Reparaturen und Teile, sofern es bei einem autorisierten Händler gekauft wurde und dieses Zertifikat vom Händler abgestempelt und das Kaufdatum eingetragen worden ist. Die Garantie umfasst nach Wahl von Bachmann Europe Plc entweder die Beseitigung eines eventuellen Mangels oder den Ersatz schadhafter Teile. Weitergehende Ansprüche sind ausgeschlossen.

Beachten Sie bitte, dass für nachträglich eingebaute Teile (z.B. Decoder oder Lautsprecher) sowie für dadurch entstandene Schäden keine Haftung übernommen wird.

Kaufdatum mit Händlerstempel

Wichtig! Wir empfehlen die Originalverpackung aufzubewahren, sie ist der beste Schutz für Ihr Modell, wenn dieses nicht gerade auf Ihrer Anlage unterwegs ist. Beim Betrieb der Lok auf Teppichböden kann die feine Mechanik durch Fasern zerstört werden. Änderungen in Konstruktion und Ausführung vorbehalten. Bitte bewahren Sie diese Beschreibung zum späteren Gebrauch auf. Dieses Produkt wurde nach Vorschriften der europäischen Spielzeugrichtlinien (CE) hergestellt. • Important! We recommend that you keep the original box. It is the best place to store your model, when it is not in use. Please be aware, that carpet fibres can destroy the fine mechanism of the locomotive. Subject to changes in design, version and technical data. Please retain these data and instructions for further reference. This

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product has been manufactured according to the European toy Safety Directive (CE). • Importante! Raccomandiamo di tenere la scatola originale. E' il posto migliore in cui tenere il tuo modello quando non è in uso. Fibre di tappeti possono distrug-

gere il fine meccanismo della locomotiva. Preghiamo di conservare questi dati ed istruzioni per altre informazioni. Quest'articolo è stato prodotto in accordo con la Direttiva Europea Sicurezza giochi (CE). Achtung! Bei unsachmäßigem Gebrauch besteht Verletzungsgefahr durch funktionsbedingte scharfe Kanten und Spitzen • Attention! At an incorrect use there exists danger of hurting becauseof cutting edges and tips • Attention! Il y a danger de blessure à un emploi incorrect à cause des aiguilles et arêtes vives! • Voorzichtig! Bij ondoelmatig gebruik bestaat verwondigsgevaar door scherpe zijkanten en uitsteeksels! • Attenzione! Un uso improprio comporta pericolo di ferimenti attraverso punte e spigoli taglienti! • Atencion! Un empleo incorrecto puede causar heridas debido a las puntas y aristas agudas! • Atençao! Por utilização incorrecta existe o perigo de estragos, em virtude de cortes nas abas e nas pontas! • Προξοχη! Η ακαταλληλη χρηση εγκλειει κινδυνουζ μκροτ ραυματιομών, εξ αιπαξ κοπτερων ακμων και προεξοχωθν • Bemaerk! Ved ukorrekt brug kan de funktionsbetingede skarpe kanter og spidser forfolde skade!