



**DTB**

Date: March 9, 2007  
 Order No.: T-B-31.19/07d  
 Supersedes: T-B-31.19/07c dated May 23, 2006  
 Group: 31

**Revision History**

Revision	Date	Purpose
d	3/9/07	Applicable Models, Rear SAM Part No. and Adapter Harness Location Updated
c	5/23/06	Applicable Models Updated
b	2/2/06	Procedure, Wire Description and Part Number Updated / Adapter Harness Information Included
a	12/12/05	Wire Description and Part Number Updated
-	6/2/05	Initial issue

**SUBJECT: Model 164.122/175/177/186/822/871**  
**Installing Electric Trailer Brake Controller**

If you receive customer inquiries regarding the need for an electric trailer brake controller in the above model vehicles, the following guide is provided.

**i Note:** There are various makes and models of brake controllers on the market and none have been tested or approved for use by Mercedes-Benz. If you choose to nonetheless install an unapproved aftermarket brake controller, we strongly suggest that all work of this type be performed in strict accordance to the installation instructions and set up procedures as supplied by the brake controller manufacturer. Installation of electric trailer brake controllers or any damage to the vehicle caused by their use is not covered by the Mercedes-Benz warranty.

In connection with the installation of such devices, please note the following.

1. Check the installed rear SAM. If a rear SAM with part number A164 540 78 45 or A164 540 88 45 is currently installed, a new rear SAM must be installed and version coded. The current part number is listed in the parts information section below. The cost of this update is not covered by warranty.

**i Note:** Some vehicles without a factory trailer hitch are equipped with a rear SAM that requires replacement with a different rear SAM if trailer brakes are to be retrofitted.

2. Locate plug X58/28. This contains the four wires needed for the electric trailer brake controller.

This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Records.

Refer to the below for wire description.

- a. Up to December 2006 production, X58/28 (Figure 1, green plug) near the rear fuse box F4 (Figure 1). Plug may be tie wrapped to harness below Rear SAM.
- b. As of December 2006 production, X58/28 (Figure 2, green plug) near the diagnostic connector X11/4 (Figure 2). Plug may be tie wrapped to harness above connector X11/4.



Figure 1

T-B-31/1907

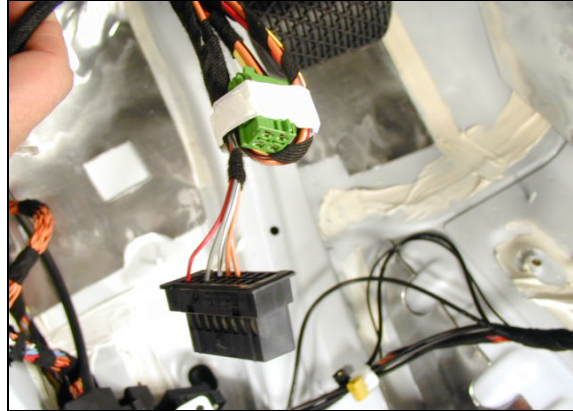


Figure 2

T-B-31.19/07d

### Wire Description – X58/28

Color	Size	Description
Red or Red /Blue	2.5 mm <sup>2</sup>	Fuse F4f71, 30 Amp fuse. This is the power supply for an electric trailer brake controller.
Brown	2.5 mm <sup>2</sup>	W7 ground. This is the ground wire for an electric trailer brake controller
Grey or Black/Red	0.75mm <sup>2</sup>	Brake light circuit. This is the brake signal for an electric trailer brake controller (input to the electronic brake controller).
Yellow/Red or Yellow/White	2.5 mm <sup>2</sup>	X58/11 pin 7. This is the variable voltage signal to actuate the trailer brakes (from the output of the electronic brake controller).

**i Note:** Most electric trailer brake controllers specify that the power supply must be wired using a self resetting circuit breaker. Follow the instructions supplied with the electric trailer brake controller.

**i Note:** The above variation in wire colors depends on production date of factory harness and or installed accessory harness.

**⚠ Warning!** The electric trailer brake controller must be adjusted according to the instructions supplied with the electric trailer brake controller, which requires the trailer be connected to the tow vehicle.

### **Adapter Harness for X58/28**

In order to assist in the installation of an electronic brake controller, an adapter harness which plugs into the vehicle's X58/28 connector may be built. This adapter harness can then be run to the installed location of the electronic brake controller. The parts required for this adapter harness are specified in the parts information section below and consist of a green female connector housing, a 0.75 mm<sup>2</sup> pin, three 2.5 mm<sup>2</sup> pins and four lengths of wire (Figure 3).

**i** **Note:** All four wires need to run from the X58/28 connector to the installed location of the electronic brake controller, which can vary depending on customer preference.



Figure 3

T-B-31.19/07b

#### **Parts Information**

<b>Qty.</b>	<b>Part Name</b>	<b>Part Number</b>
1	Rear SAM	A164 540 11 01
1	Connector Housing	A039 545 35 28
1	Pin 0.75 mm <sup>2</sup>	A046 545 40 28
3	Pin 2.5 mm <sup>2</sup>	A035 545 74 28
As required	Wire 2.5 mm <sup>2</sup>	Locally Sourced
As required	Wire 0.75 mm <sup>2</sup>	Locally Sourced