

Service Bulletin

Date: August 2001

Bulletin No: 12 001 01 (023)

BMW Motorcycles

Subject: K Series: Starter Relay Kit

Operating Manager Sales Department Accessory Departmen Parts Department Measures: Service Department

Details: During the starting procedure of the K 1200 LT and K 1200 RS models, the entire starter current flows through the starter relay. If the rider attempts to start the motorcycle when the battery is almost flat, or continues to operate the starter once signs of low battery voltage are present (decreasing starting RPM), there is the possibility of the contacts within the starter relay to weld shut. The result will be the continued operation of the starter motor until the battery becomes fully discharged. In addition, substantial damage to the main wiring harness is possible.

A new starter relay, incorporated into a starter relay retrofit kit has been Service developed to assist in preventing battery discharge and wiring harness damage under the above described circumstances.

Series Introduction:

The new starter relay will be introduced into series production as follows:

K 1200 RS: with introduction of K 1200 RS facelift model, 01/01.

K 1200 LT: with series production starting with VIN ZD 77402.

Workshop In case of a customer complaint in this area, or in retrofitting, install a Solution: retrofit kit. The kit consists of a starter relay module, wiring harness, relay base and assorted small items, hardware, etc. The instructions included in the kit are in the German language. A translation of the installation instructions are attached to this bulletin.

Parts Part numbers for both the starter relay retrofit kit and the starter relay as **Information:** an individual part, are as follows. Parts are currently available:

Description: Retrofit kit - Starter Relay

Part Number: 61 35 7 663 945

Description: Starter relay, applies only to Retrofit Kit-Starter Relay.

Part Number: 61 35 7 655 540

Warranty Enter a regular warranty claim, using applicable defect and flat rate codes **Processing:** for the model and complaint being addressed.



Instructions:

Installation Installation instructions for the starter relay retrofit kit.

Models: K 1200 RS, K 1200 LT Part Number: 61 35 7 663 945

- 1. If motorcycle is equipped with an alarm system, program alarm to mode B and disarm. This will ensure the alarm system does not activate when the battery is disconnected/reconnected
- 2 Disconnect Ground Connection (-) at the battery.
- 3. Remove the central electrical connection box cover. See appropriate workshop manual group: K 1200 RS = 61.9

K 1200 LT = 61.11

3. See Figure 1. Locate existing starter relay at the bottom left hand corner of electrical box and remove. Unplug/Unbolt electrical connections from existing relay.





Instructions Continued:

- Installation 4. See Figures 2 & 3. Use side cutters to snip both vertical supports in the electrical box. Make sure the horizontal sections remain; they will be used to hold the replacement starter relay module in place.
 - 5. See Figure 3. Use one of the adhesive square foam pads in the kit. Peel the paper backing off and stick in place as shown.

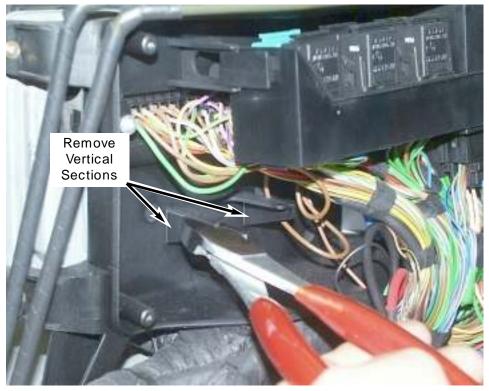


Figure 3





Installation 6. Instructions Continued:

- 6. See Figure 4. Slide a heat shrink tube from the kit onto the 6 mm Red and Black starter motor circuit wires.
 - 7. Using the supplied M5 bolt, toothed washer, flat washer and nylock nut supplied, connect the ring connections of these wires to the same color wires on the supplied relay module harness.
 - 8. Torque bolts to 2 Nm. Slide shrink tubes to center location over bolts and shrink using a heat gun (be careful not to damage any surrounding wires with heat).

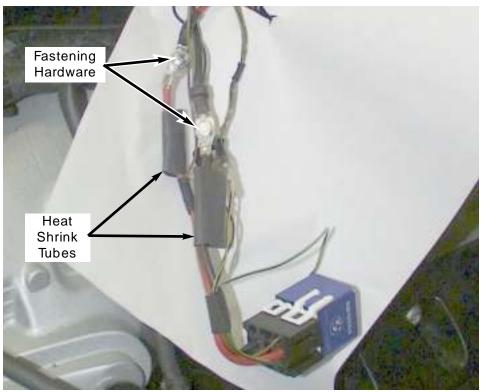


Figure 4

 Use the appropriate chart for the motorcycle you are working on (ie: K 1200 LT = page 5, K 1200 RS = page 6).and connect the remaining wires.

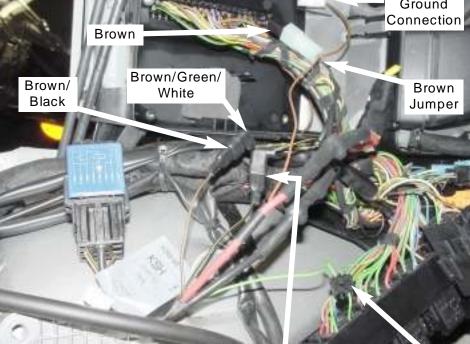
Note: Motorcycles equipped with an alarm require connection to the alarm module harness as directed in the chart.

When completed with the appropriate page, continue on page 7.



Page	5	of	7
------	---	----	---

Installation Instructions Continued:	K 1200 LT	Connect wires from vehicle Harness Side to \rightarrow	Wires from Starter Relay Module Harness (from kit)	Alarm Harness (if equipped)
	With or Without Alarm System	Green wire from ABS Warning Relay (pin 6 or 8) This is a switched ignition power sour- ce for the starter relay module. Use crimp splice from kit.	Green (GN) wire, no connector	
		Brown/Green/White (BR/GN/WS), female connector	Brown/Black (BR/SW), male connector	
		Brown (BR) from ground connection in upper right corner of electrical box (see photo), Female connector	Brown (BR) Jumper wire, Male connector	
		Ground connection in upper right corner of electrical box, Male connector (see photo)	Brown (BR) Jumper wire, Female connector	
	Without Alarm	Black/Yellow (SW/GE), Female connector	Black/Yellow (SW/GE), Male connector	
	With Alarm	Black/Yellow (SW/GE), Female connector		Black (SW), Male
			Black/Yellow (SW/GE), → Male connector	Black (SW), Female
				Ground



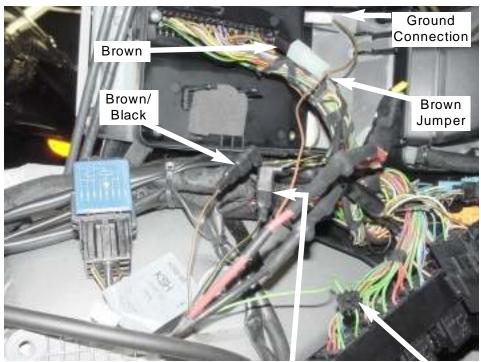


Black/Yellow (without Alarm) Green Wire to ABS Warning Relay green wire (crimp splice from kit)

Black/Yellow (with Alarm)



K 1200 RS	Connect wires from vehicle Harness Side to \rightarrow	Wires from Starter Relay Module Harness (from kit)	Alarm Harness (if equipped)
With or Without Alarm System	Green wire from ABS Warning Relay (pin 6 or 8) This is a switched ignition power sour- ce for the starter relay module. Use crimp splice from kit.	Green (GN) wire, no connector	
	Brown/Black (BR/SW), female connector	Brown/Black (BR/SW), male connector	
	Brown (BR) from ground connection in upper right corner of electrical box (see photo), Female connector	Brown (BR) Jumper wire, Male connector	
	Ground connection in upper right corner of electrical box, Male connector	Brown (BR) Jumper wire, Female connector	
Without Alarm	Black/Yellow (SW/GE), Female connector	Black/Yellow (SW/GE), Male connector	
With Alarm	Black/Yellow (SW/GE), Female connector	•	Black (SW), Male
		Black/Yellow (SW/GE), -	Black (SW), Female





Black/Yellow (<u>without</u> Alarm) Green Wire to ABS Warning Relay green wire (crimp splice from kit)

Black/Yellow (with Alarm)

© 2001, BMW of North America, LLC

Installation Instructions Continued:

Installation 10. See figure 7. Position the new relay module in place as shown.

Stick the second foam pad block in the electrical box cover to hold the relay module in place once the cover is reinstalled. Place the cover on electrical box making sure no wires get pinched when the screws are tightened.



Figure 7

11 See Figure 6. Attach the "Anlassermodul" (Starter module) label to one of the wires on the diagnosis plug.

The purpose of this label is to alert a technician of the installation of this newer component onto a motorcycle not originally equipped (1997-2001 MY).



Figure 7

- 12. Prior to reassembly, check function of new relay and alarm system if equipped.
- 13. Reassemble motorcycle, reconnect battery ground cables and check function.

-- Procedure Complete --



Installation Instructions:

Installation Installation instructions for the starter relay retrofit kit.

Models: K 1200 RS, K 1200 LT Part Number: 61 35 7 663 945

- 1. If motorcycle is equipped with an alarm system, program alarm to mode B and disarm. This will ensure the alarm system does not activate when the battery is disconnected/reconnected
- 2 Disconnect Ground Connection (-) at the battery.
- Remove the central electrical connection box cover. See appropriate workshop manual group: K 1200 RS = 61.9

K 1200 KS = 01.3K 1200 LT = 61.11

3. See Figure 1. Locate existing starter relay at the bottom left hand corner of electrical box and remove. Unplug/Unbolt electrical connections from existing relay.





Installation Instructions Continued:

- 4. See Figures 2 & 3. Use side cutters to snip both vertical supports in the electrical box. Make sure the horizontal sections remain; they will be used to hold the replacement starter relay module in place.
- 5. See Figure 3. Use one of the adhesive square foam pads in the kit. Peel the paper backing off and stick in place as shown.

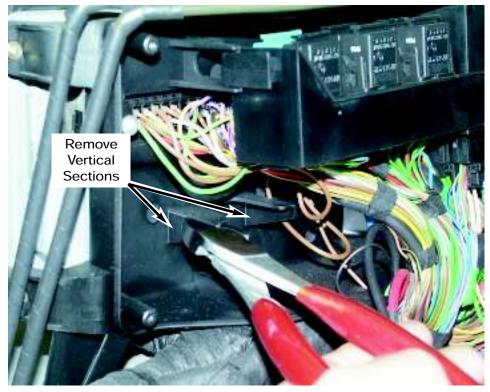
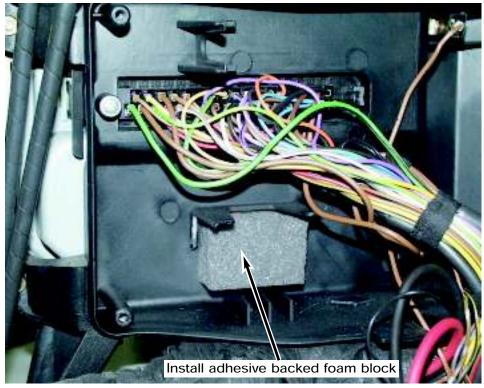


Figure 3





Installation Instructions Continued:

- 6. See Figure 4. Slide a heat shrink tube from the kit onto the 6 mm Red
 and Black starter motor circuit wires.
 - 7. Using the supplied M5 bolt, toothed washer, flat washer and nylock nut supplied, connect the ring connections of these wires to the same color wires on the supplied relay module harness.
 - 8. Torque bolts to 2 Nm. Slide shrink tubes to center location over bolts and shrink using a heat gun (be careful not to damage any surrounding wires with heat).

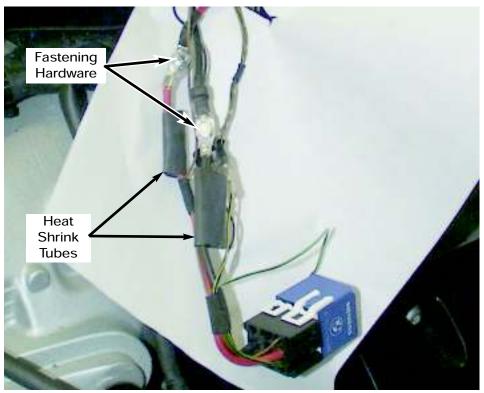


Figure 4

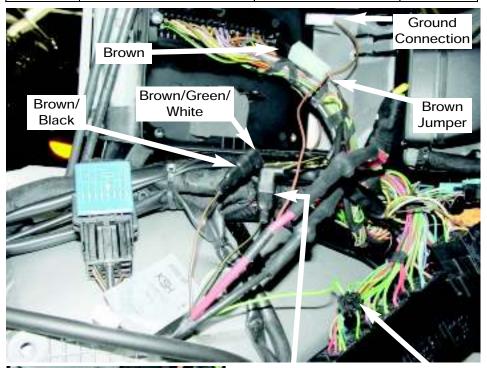
 Use the appropriate chart for the motorcycle you are working on (ie: K 1200 LT = page 5, K 1200 RS = page 6).and connect the remaining wires.

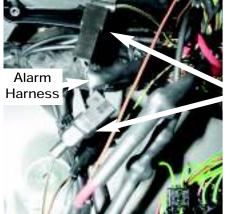
Note: Motorcycles equipped with an alarm require connection to the alarm module harness as directed in the chart.

When completed with the appropriate page, continue on page 7.



Installation Instructions Continued:	K 1200 LT	Connect wires from vehicle Harness Side to \rightarrow	Wires from Starter Relay Module Harness (from kit)	Alarm Harness (if equipped)
	With or Without Alarm System	Green wire from ABS Warning Relay (pin 6 or 8) This is a switched ignition power sour- ce for the starter relay module. Use crimp splice from kit.	Green (GN) wire, no connector	
		Brown/Green/White (BR/GN/WS), female connector	Brown/Black (BR/SW), male connector	
		Brown (BR) from ground connection in upper right corner of electrical box (see photo), Female connector	Brown (BR) Jumper wire, Male connector	
		Ground connection in upper right corner of electrical box, Male connector (see photo)	Brown (BR) Jumper wire, Female connector	
	Without Alarm	Black/Yellow (SW/GE), Female connector	Black/Yellow (SW/GE), Male connector	
	With Alarm	Black/Yellow (SW/GE), Female connector		Black (SW), Male
			Black/Yellow (SW/GE), — Male connector	Black (SW), Female





Black/Yellow (without Alarm)

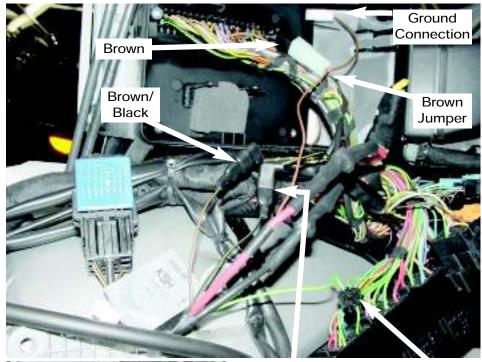
Green Wire to **ABS Warning** Relay green wire (crimp splice from kit)

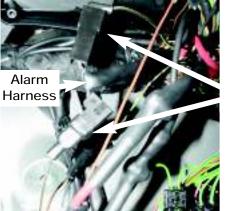
Black/Yellow (with Alarm)



Page	6	of	7
raye	υ	UI.	'

Installation Instructions Continued:	K 1200 RS	Connect wires from vehicle Harness Side to \rightarrow	Wires from Starter Relay Module Harness (from kit)	Alarm Harness (if equipped)
	With or Without Alarm System	Green wire from ABS Warning Relay (pin 6 or 8) This is a switched ignition power sour- ce for the starter relay module. Use crimp splice from kit.	Green (GN) wire, no connector	
		Brown/Black (BR/SW), female connector	Brown/Black (BR/SW), male connector	
		Brown (BR) from ground connection in upper right corner of electrical box (see photo), Female connector	Brown (BR) Jumper wire, Male connector	
		Ground connection in upper right corner of electrical box, Male connector	Brown (BR) Jumper wire, Female connector	
	Without Alarm	Black/Yellow (SW/GE), Female connector	Black/Yellow (SW/GE),	
	With Alarm	Black/Yellow (SW/GE), Female	Male connector	Black (SW),
		connector		Male
			Black/Yellow (SW/GE),>	
			Male connector	Female





Black/Yellow (<u>without</u> Alarm)

Black/Yellow

(with Alarm)

Green Wire to ABS Warning Relay green wire (crimp splice from kit)



Page 7 of 7

Installation Instructions Continued:

Installation 10. See figure 7. Position the new relay module in place as shown.

Stick the second foam pad block in the electrical box cover to hold the relay module in place once the cover is reinstalled. Place the cover on electrical box making sure no wires get pinched when the screws are tightened.

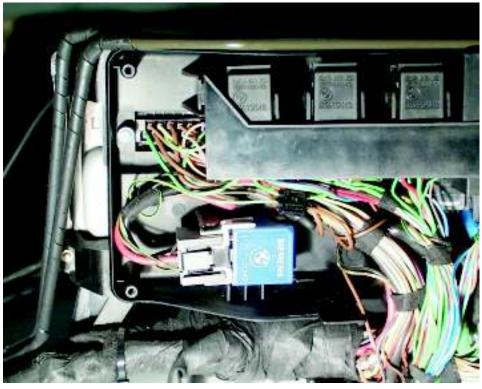


Figure 7

11 See Figure 6. Attach the "Anlassermodul" (Starter module) label to one of the wires on the diagnosis plug.

The purpose of this label is to alert a technician of the installation of this newer component onto a motorcycle not originally equipped (1997-2001 MY).



Figure 7

- 12. Prior to reassembly, check function of new relay and alarm system if equipped.
- 13. Reassemble motorcycle, reconnect battery ground cables and check function.

-- Procedure Complete --

