# Repair Manual

## K 1200 LT

**BMW AG  Motorcycle Division**
**After Sales**

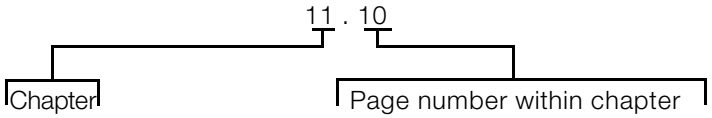
# Introduction

This repair manual will help you to perform all the main maintenance and repair work correctly and efficiently. If it is consulted regularly by workshop personnel it will form a useful addition to the theoretical and practical knowledge acquired at the BMW Training Centre. It is a contribution towards achieving even higher Service quality.

A new issue of this repair manual will be published if amendments or additions (supplements) are needed.

All information in both text and illustrations refers to motorcycles in standard condition or with genuine BMW accessories installed, and not to motorcycles which have been modified in any way to depart from the manufacturer's specification.

- The repair manual is structured in the logical sequence of the work to be performed: Removal, Disassembly, Repair, Assembly, Installation.
- The entire contents are divided into individual chapters, corresponding to the Construction Groups.




An arrow symbol followed by the chapter and page numbers is a reference to another chapter, e.g. ➠.....See Group 46

- Work to be performed during an Inspection is described in Group "00". The various inspection routines are numbered I, II, III and IV. This numbering is repeated in the work descriptions which follow, so that work can take place without interruption.
- Use of the BMW special tools needed for certain tasks is described in the work instructions.

If the need arises, repair instructions are also issued in the form of Service Information. This information is of course incorporated into the next issue of the repair manual. We also recommend, as an additional source of information, the Electronic Parts Catalogue (ETC), which contains clear and easy-to-follow illustrations.

If the work described here is restricted to a particular equipment specification, for instance if a specific optional extra (OE) is fitted, this is stated in square brackets at the start of the item concerned, e.g. **[With heated handlebar grips]**.

Please refer to the following pages as well for a description of other symbols used and how to work with it.

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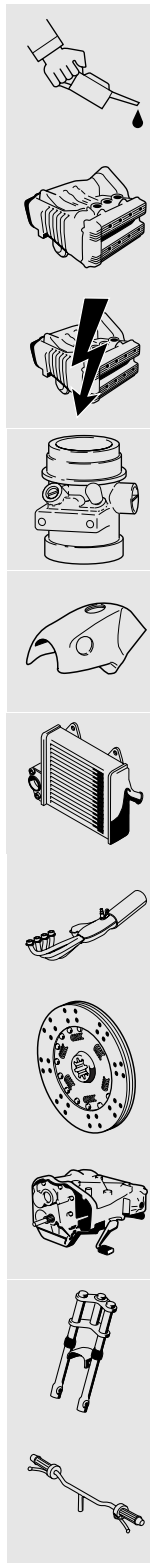
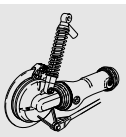
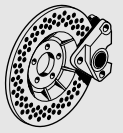
**Group / Chapter**





**Group / Chapter**

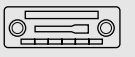










# BMW AG Motorcycle Division
# Maintenance schedule
# K 1200 LT

| Customer | Licence plate No. | BMW Inspection at 1,000 km (600 miles) | BMW Service every 10,000 km (6,000 miles) | BMW Inspection every 20,000 km (12,000 miles) | BMW Annual Service |
|---|---|---|---|---|---|
| Order No. | Mechanic's signature | | | | |
| Read out the fault memory with the **BMW MoDiTeC** unit | | ☐ | ☐ | ☐ | ☐ |
| Check throttle cable play, adjust if necessary | | ☐ | | ☐ | |
| Change engine oil while at operating temperature<br>**If the motorcycle is ridden only for short distances or at outside temperatures below 0 °C (32 °F), this work must be done every 3 months or at least every 3,000 km (1,800 miles) *)** | | ☐ | ☐ | ☐ | ☐ |
| Change oil in gearbox while at operating temperature<br>**at least every 2 years *)** | | | | ☐ | ☐ every 2 years |
| Change oil in rear wheel drive while at operating temperature<br>**at least every 2 years *)** | | ☐ | | ☐ | ☐ every 2 years |
| Examine brake pads and discs for wear, replace if necessary ***)** | | | ☐ | ☐ | |
| Check the front/rear brake fluid level | | ☐ | ☐ | ☐ | |
| Check operation of brake system and freedom from leaks; repair/replace items if necessary ***)** | | | | ☐ | |
| **Replace the brake fluid at least once a year** | | | | | ☐ |
| Check clutch operating fluid level | | ☐ | ☐ | ☐ | |
| Change clutch fluid<br>**every 40,000 km (24,000 miles) or at least every 2 years *)** | | | | ☐ 40,000 | ☐ every 2 years |
| Replace fuel filter ***)**<br>**generally every 40,000 km (24,000 miles), if the fuel is of poor quality, every 20,000 km (12,000 miles)** | | | | ☐ 40,000 | |
| Check and top up, where necessary, coolant level and concentration | | ☐ | | ☐ | |
| **Replace the coolant at least every 2 years*)** | | | | | ☐ every 2 years |
| Check battery acid level, if necessary add distilled water<br>Clean/grease battery terminals if necessary | | | | ☐ | ☐ |
| Replace intake air cleaner element<br>**If severe dirt and dust are encountered, replace the intake air cleaner every 10,000 km (6,000 miles) or even more frequently *)** | | | | ☐ | |
| Check function of side stand contact switch | | ☐ | ☐ | ☐ | |
| Grease side stand bearing, check that the centre stand moves freely, and grease it if necessary ***)** | | | ☐ | ☐ | ☐ |
| Check the steering damper | | | ☐ | ☐ | |
| Check tightness of rear wheel studs | | ☐ | | | |
| Check rear wheel bearing play by rocking wheel | | | | ☐ | |
| Check swinging arm bearings (free of play), adjust if necessary ***)** | | ☐ | | ☐ | |
| Clean the inductive sensor on the rear wheel<br>**every 40,000 km (24,000 miles) or at least every 2 years *)** | | | | ☐ 40,000 | ☐ every 2 years |
| Check valve clearances, adjust if necessary | | | | ☐ | |
| Replace the lining of the chain tensioning rail and chain guide rail every 60,000 km (36,000 miles)***)** | | | | ☐ 60,000 | |
| Replace spark plugs | | | | ☐ | |
| Final inspection with road safety and functional check:<br>– Condition of tires and wheels, tyre pressure<br>– Clutch, gearshift mechanism, hand and foot brake, ABS, steering system<br>– Lighting and signalling equipment, telltale lights, instruments, horn<br>– Reversing aid, radio with remote contro, optional equipment fitted<br>– Trial run if necessary | | ☐ | ☐ | ☐ | ☐ |

***)** **Charged as an additional item**

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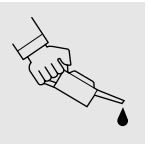

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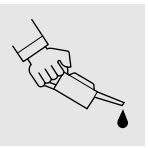


## Brake pads/brake discs

**Checking brake pads and discs for wear and replacing if necessary (Inspections II and III)**

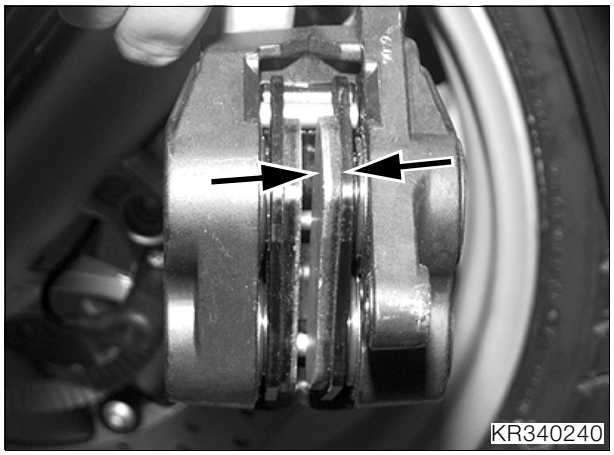
### Checking brake pads for wear

**Warning:**
Never permit brake pads to wear past minimum permissible thickness.
Always replace pads as a complete set.

**Front brake pads**

**Caution:**
Do not scrape the wheel – mask it off if necessary.

– Remove the brake calliper.

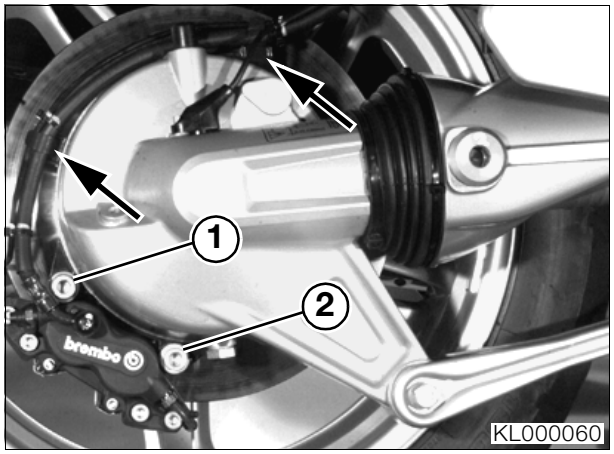



- Measure brake pad thickness (arrows).

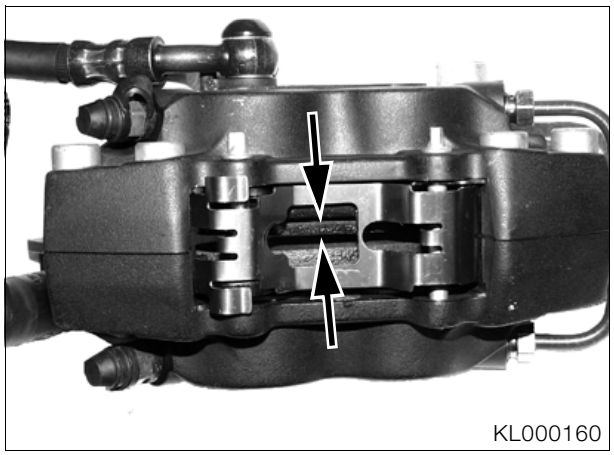
**Minimum pad thickness** ..... 1.0 mm (0.04 in)

**Tightening torques:**
Brake calliper to fork tube ..... 40 Nm

**Rear brake pads**




- Release the brake line from the clips (arrows) on the rear-wheel drive.
- Release fasteners (1, 2), remove brake calliper.

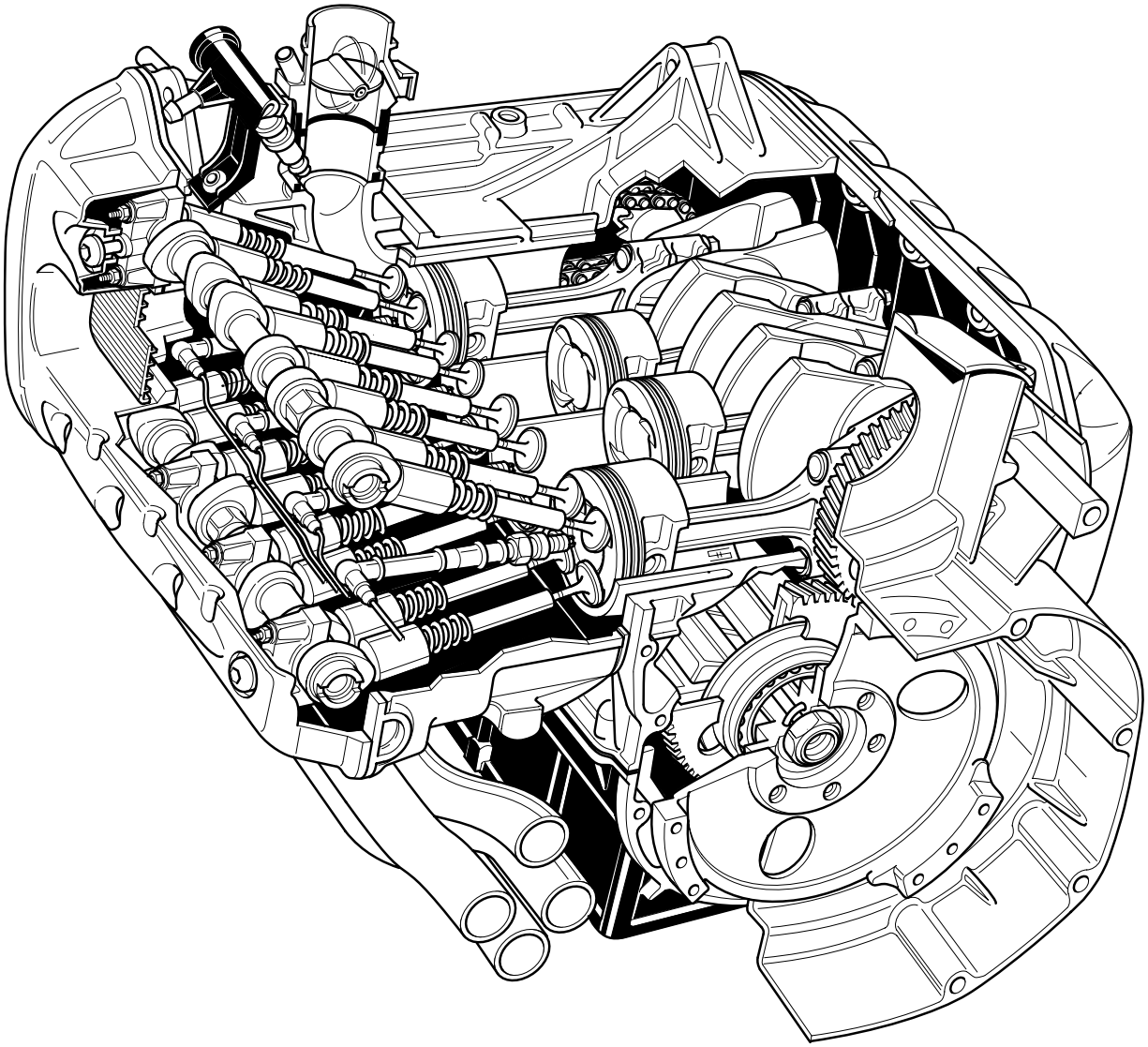



- Measure brake pad thickness (arrows).

**Minimum pad thickness** ..... 1.0 mm (0.04 in)

**Tightening torques:**
Brake calliper to rear wheel drive ..... 40 Nm

# Cutaway drawing of engine, K 1200 LT



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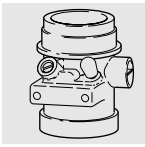

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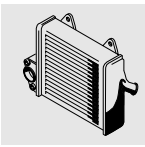
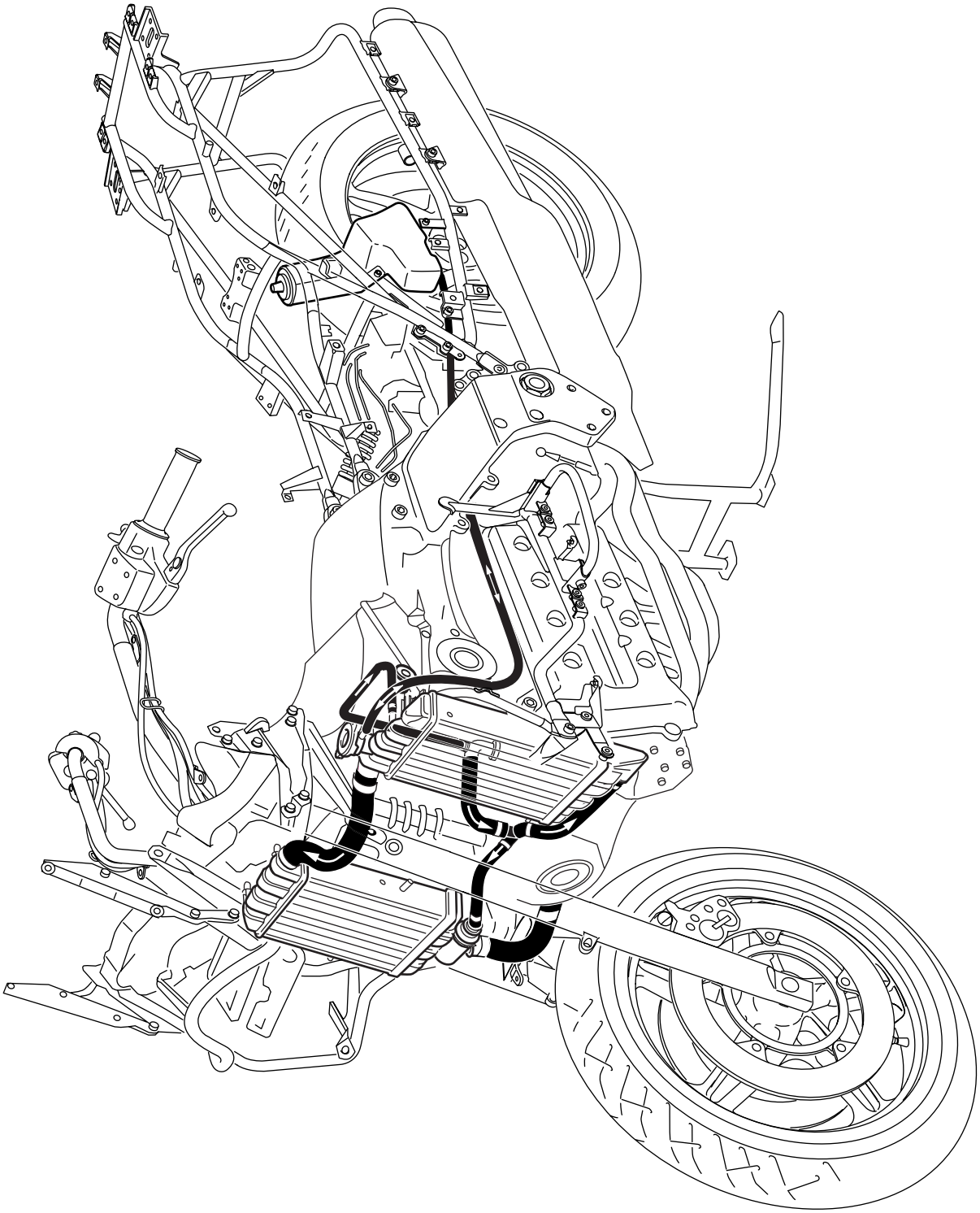
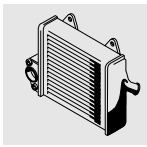


## Coolant circuit





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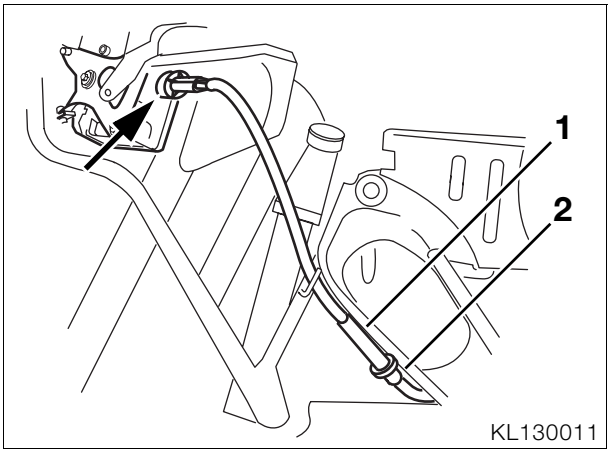
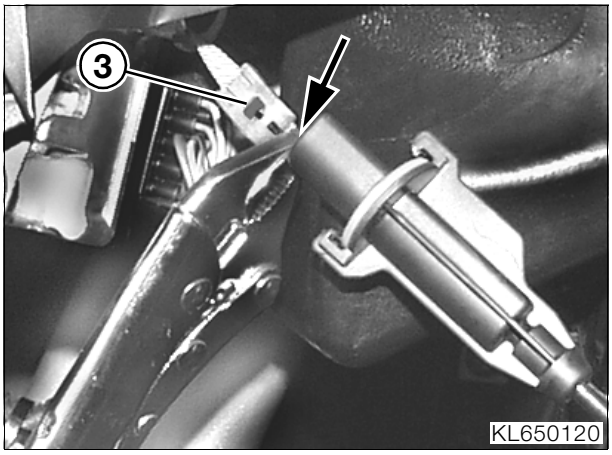
## Removing and installing control unit of cruise-control system

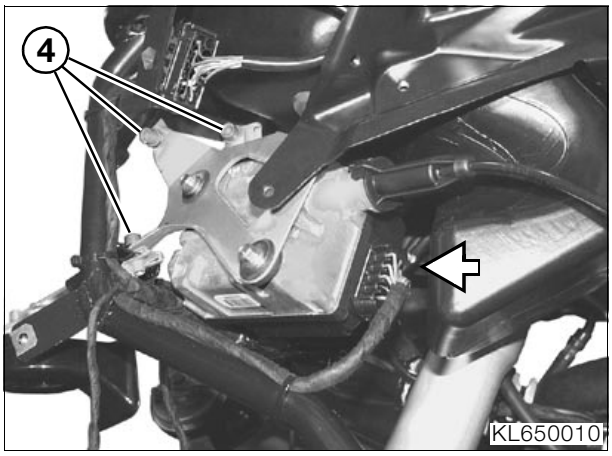
– Remove left side section of fairing.
➠ .....See Group 46
– Remove upper section of fairing.



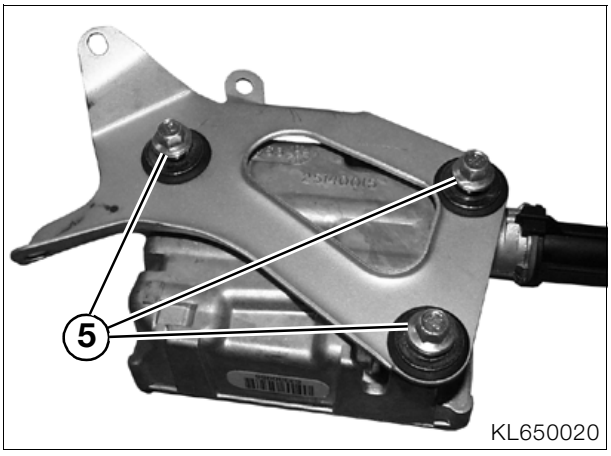

- Carefully pull Bowden cable at sleeve (1) and remove insert (2).
- Disconnect bayonet-type plug (arrow) of control unit.




- Pull Bowden cable away from control unit until approx. 1 cm (0.4 in) of cable is visible and secure Bowden cable in this position with clamp (arrow).
- Disengage nipple (3), move Bowden cable with clamp clear.




- Disconnect plug (arrow).
- Remove screws (4) securing retaining plate to fairing bracket.
- Remove retaining plate with control unit for cruise control system.




- Remove screws (5) and remove control unit.
- Installation is the reverse of the removal procedure.

**Tightening torques:**
Retaining plate to fairing bracket..... 8 Nm