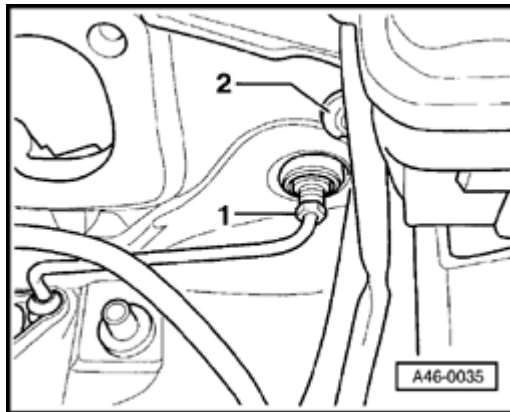


## Brake pedal, removing and installing

Removing and installing vacuum servo unit with brake master cylinder ⇒ [page 47-34](#)

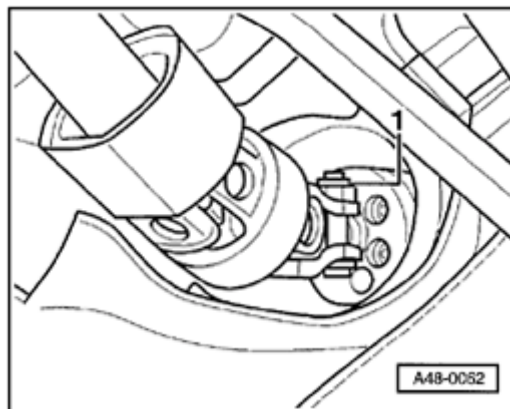
**A**

- Unbolt hydraulic line -1- for clutch master cylinder.

### **CAUTION!**

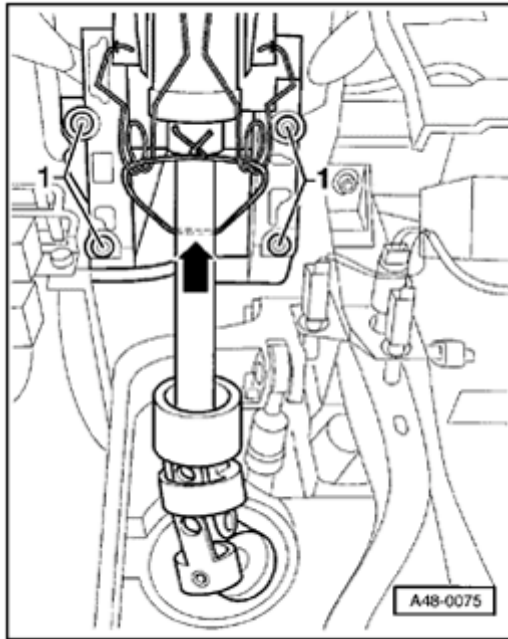
**Before disconnecting the hydraulic line, protect the plenum chamber from brake fluid flowing out.**

- Disconnect supply hose from elbow of master cylinder.

**A**

- Remove nut -1- at universal joint.
- Loosen eccentric by turning bolt (Torx<sup>®</sup> T50) clockwise, and remove bolt.

46-47

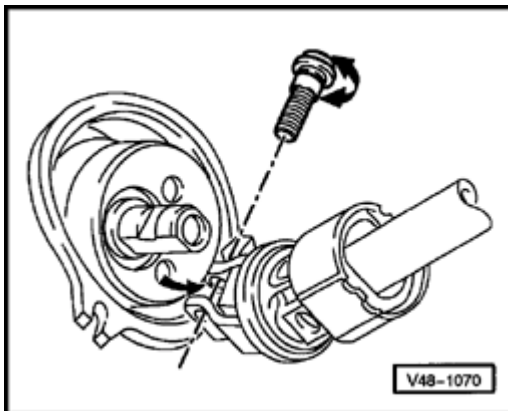


A

- Secure steering column with safety wire before removing steering column from steering gear pinion.

**CAUTION!**

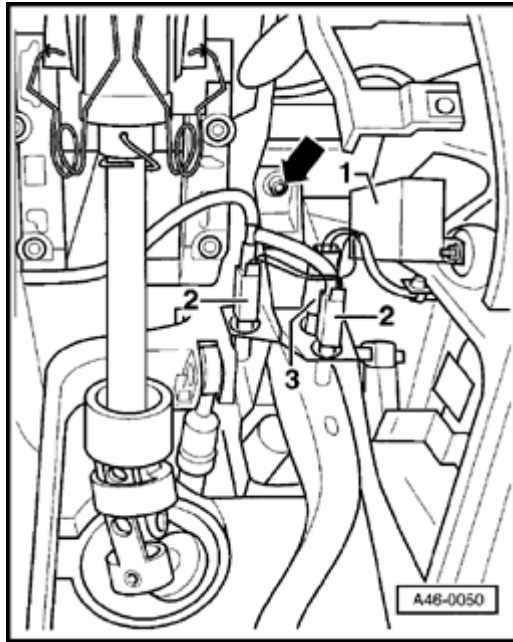
- ♦ *The splines between the top and bottom part of the steering column must not be separated during the removal and installation procedure.*
- ♦ *Turn the steering wheel into center position and do not alter position during repairs, otherwise the airbag spiral spring may be damaged.*



A

- Move universal joint down out of the way.

46-48

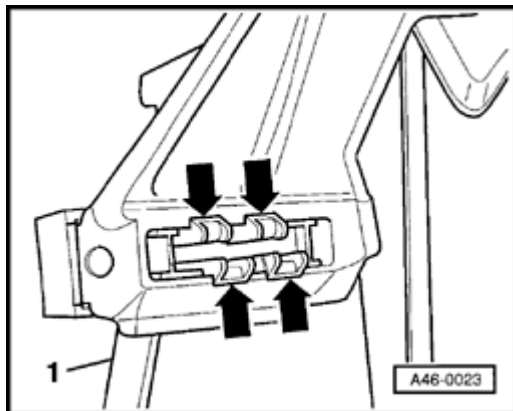


A

- Remove brake light switch -3- and CCS vent valves -2-.
- Remove hex socket-head bolt (arrow) for attaching pedal assembly to instrument panel member.
- Pull pedal assembly down and remove.

**Note:**

*Do not damage control module -1- for immobilizer (where applicable) when removing pedal assembly.*



A

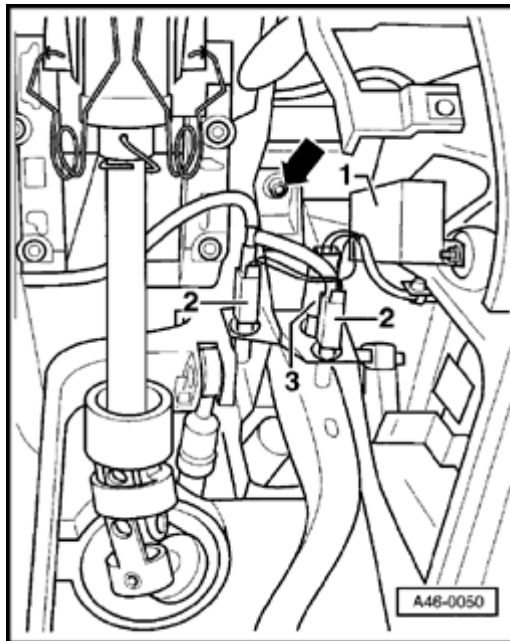
- To remove accelerator pedal, press catch in direction shown (arrows) while pressing out accelerator pedal.

## Installing

### CAUTION!

**Do not remove safety wire or other removal/installation aids from steering column until after the universal joint has been re-installed on the steering gear pinion.**

- Install pedal assembly onto joint pin.



A

- Install hex socket-head bolt (arrow) for attaching pedal assembly to instrument panel member and tighten by hand.

### Note:

*Do not tighten hex socket-head bolt (arrow) for attaching pedal assembly to instrument panel member until after installing the brake servo unit.*

- Attach accelerator pedal (AP) cable.

- Install brake servo unit ⇒ [page 47-37](#) .

After installing:

- Bleed brakes ⇒ [page 47-23](#) .

- Bleed clutch ⇒ Repair Manual, Manual Transmission 012 Front Wheel Drive or Manual Transmission 01A All Wheel Drive, Repair Group 30.

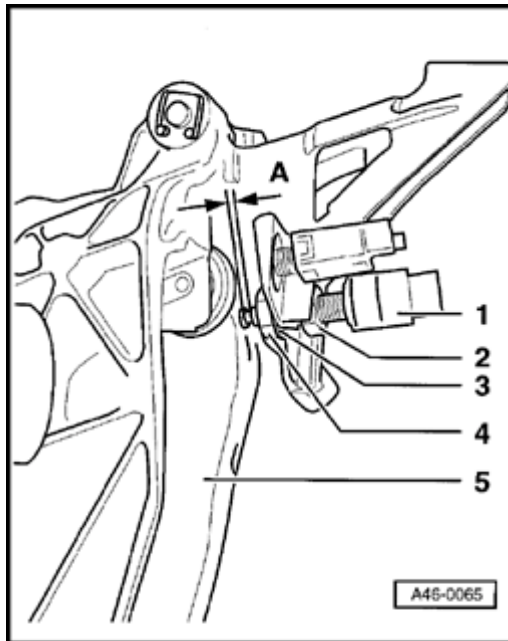
- Adjust brake light switch ( ⇒ [page 46-50](#) ) and CCS vent valves ( ⇒

[page 46-54](#) ).

## Brake light switch -F-, adjusting

- The pedal assembly must be bolted tight to the brake servo and to the instrument panel member before carrying out the adjustment.

The following adjustments should be carried out in case of complaint:

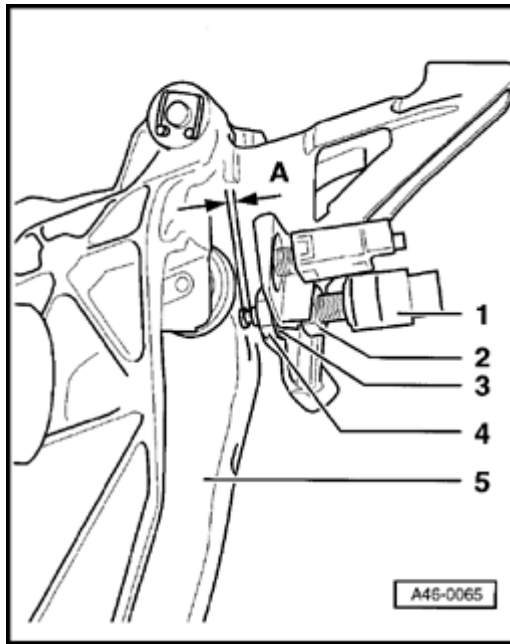


### ⚠ Pedal bracket for brake light switch with retaining clip

- 1 - Brake light switch
- 2 - Hex nut, M12 x 1.5  
Part No. N 011 162 9
- 3 - Spring washer, M12  
Part No. N 012 232 3
- 4 - Hex nut, M12 x 1.5  
Part No. N 011 162 9
- 5 - Brake pedal

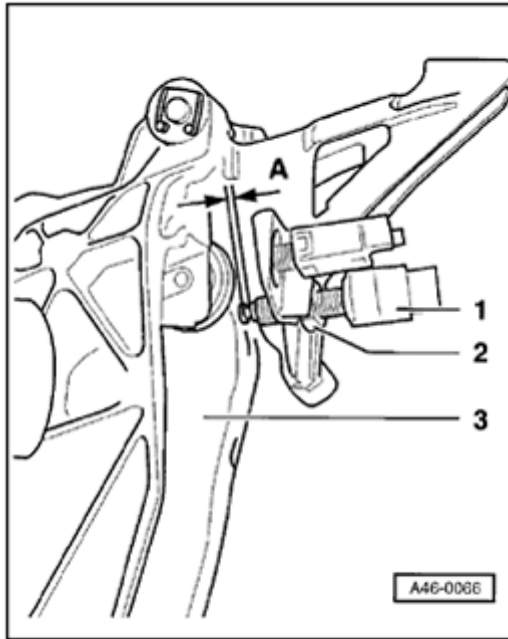
### **CAUTION!**

**Part numbers are listed here for reference only. Always check with your Parts department for the latest information.**



A

- Pull brake light switch out of pedal bracket.
- Remove clip ⇒ [page 46-45](#) , item - 20 -.
- Turn nut -2- on brake light switch.
- Install brake light switch in pedal bracket, insert spring washer -3- and nut -4-.
- Adjust clearance -A-, then tighten nut -4-.
  - ◆ Dimension -A- = 0.1 to 0.5 mm (0.004 to 0.020 in.)
  - ◆ Tightening torque: 4 Nm (35 in lb)



#### **A Pedal bracket with internal thread for brake light switch**

1 - Brake light switch

2 - Hex nut, M12 x 1.5

Part No. N 011 020 8

3 - Brake pedal

#### **Note:**

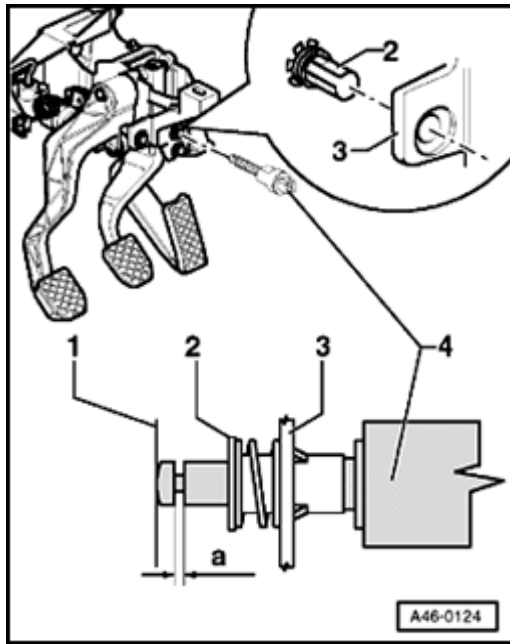
*Between the nut and the pedal bracket there is a spring clip (not shown), Part No. N 012 042 4.*

#### **CAUTION!**

***Part numbers are listed here for reference only. Always check with your Parts department for the latest information.***

- Install brake light switch in pedal bracket.
- Adjust clearance -A-, then tighten nut -2-.
  - ◆ Dimension -A- = 0.1 to 0.5 mm (0.004 to 0.020 in.)
  - ◆ Tightening torque: 4.5 Nm (39 in lb)





#### **A With spring clip for the brake light switch**

1 - Stop surface of brake pedal

2 - Spring clip

Press into pedal cluster from behind

3 - Pedal cluster

4 - Brake light switch -F-

a - Clearance: max. 0.7 mm (0.028 in.)

#### **Note:**

*The switch must be installed only once in order to assure that it is adequately tight.*

#### **Adjusting switch**

- Insert switch -4- into installed clip -2- and press in to stop.

#### **Note:**

- ◆ *As a result of this step, the brake pedal must not be under preload.*
- ◆ *If necessary, turn switch back somewhat, noting clearance -a-.*

### **Cruise Control System (CCS) vent valve, adjusting**

- Insert vent valve into clip and push through to stop.
- Push back valve by pulling back brake pedal or clutch pedal to stop.

**Note:**

*Only install the valve one time, otherwise an adequately tight fit cannot be assured.*

#### **Version with spring clip for the vent valve**

- Same procedure as for the brake light switch ⇒ [page 46-53](#) .