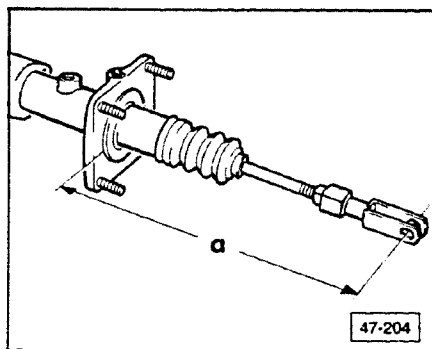


## Brake – Hydraulic Components, Regulator, Booster



► Fig. 1 Clevis, adjusting

- $a = 230.0 \pm 0.5 \text{ mm}$

### Note

Brake servo, Part No. 443 612 099 C, is now supplied with or without clevis. When replacing brake servo, transfer clevis from old brake servo to new servo and adjust to above measurement

When measuring, clevis and push rod must always be aligned with brake servo.

### Brake pressure regulator, checking

#### Note

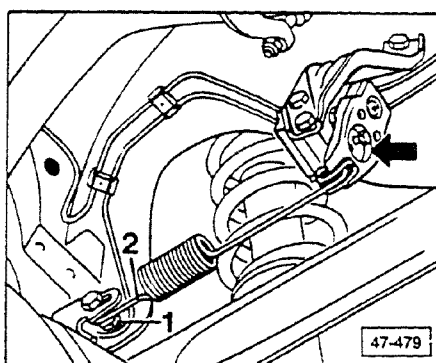
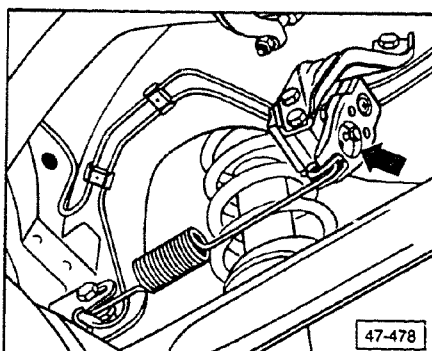
Brake pressure regulator is mounted on body (left rear) and operated by spring attached to rear axle.

- depress brake pedal once firmly (car must be on ground)
- release pedal suddenly and check that lever (arrow) on pressure regulator moves

#### Note

Brake system must be filled with fluid and free of air (properly bled).

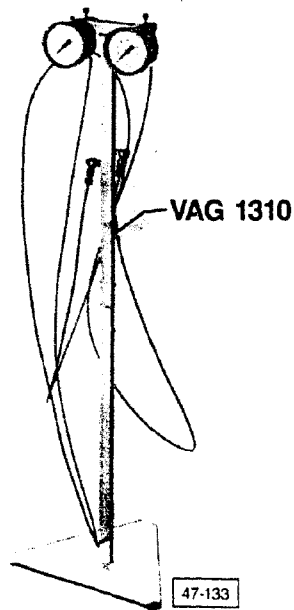
- lift vehicle off ground so that load is taken off rear axle
- press lever of brake pressure regulator toward rear
- loosen nut 1
- attach spring 2 without play and without tension to plastic roller
- tighten nut to 25 Nm (18 ft lb)



### Brake system, checking for leaks

- connect gauge US 1016 to left front brake caliper and right rear wheel brake caliper
- depress brake pedal until front axle pressure gauge reads 100 bar (1450 psi), hold for 5 seconds
  - rear pressure reading must not vary more than 10 bar (145 psi) within 5 seconds
  - if results cannot be obtained replace brake pressure regulator
- remove pressure gauges
- bleed brakes

## Brake – Hydraulic Components, Regulator, Booster



### Brake pressure regulator, adjusting

#### Work sequence

- car must be empty
- car must be on wheels (Bosch ramp)
- fuel tank full
- remove bleeder screw and connect adaptor to left front wheel brake caliper and right rear wheel brake cylinder
- connect gauge
- bleed both hoses and gauges with bleeder valve on gauges
- have person (approximately 165 lbs) sit on driver's seat
- bounce car several times at rear
- depress brake pedal firmly several times
- depress brake pedal until gauge on front axle reads 50 bar (725 psi)
  - gauge for rear axle cylinder must read 32.5-42.5 bar (471-616 psi)
- increase brake pedal pressure until gauge on front axle reads 100 bar (1450 psi)
  - gauge for rear axle cylinder must read 54.0-71.5 bar (783-1037 psi)
- if pressure at rear axle is too high, release spring tension by loosening and moving bolt
- if pressure is too low, tighten spring tension

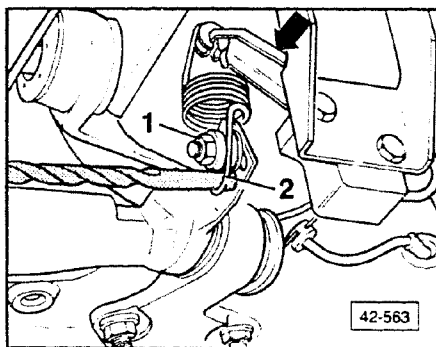
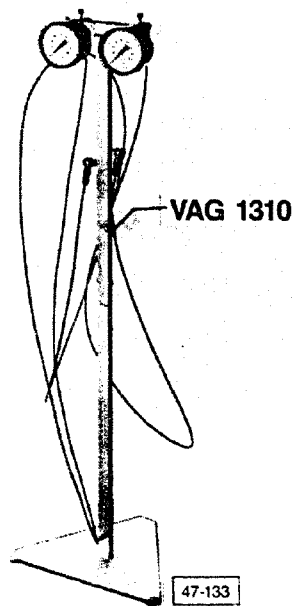
#### CAUTION

Do not adjust pressure regulator with brake pedal depressed.

Use following test sequence:

- take pressure readings
- release brake pedal
- adjust spring
- depress pedal again
- take pressure readings
- if pressure cannot be adjusted replace regulator
- disconnect pressure gauges and bleed brakes

## Brake – Hydraulic Components, Regulator, Booster



### Brake pressure regulator, adjusting

- car must be empty
  - car must be on wheels (Bosch ramp)
  - fuel tank full
  - remove bleeder screw and connect adaptor to left front wheel brake caliper and right rear wheel brake cylinder
  - connect gauge (use adapter **VAG 1310/4**)
  - bleed both hoses and gauges with bleeder valve on gauges
  - have person (approximately 165 lbs) sit on driver's seat
  - bounce car several times at rear
  - push brake pedal firmly several times
  - lift vehicle off ground so load is taken off rear axle
  - push brake pressure regulator lever down until stop
  - loosen nut (1)
  - insert 10 mm diameter drill bit between spring (2) and plastic roller
  - tighten nut **25 Nm (18 ft lb)**
  - repeat pressure test (vehicle on ground)
  - push brake pedal until gauge on front axle reads 50 bar (725 psi)
    - gauge for rear axle cylinder must read **35.0-45.0 bar (507.5-652.5 psi)**
  - increase brake pedal pressure until gauge on front axle reads 100 bar (1450 psi)
    - gauge for rear axle cylinder must read **57.0-73.0 bar (826.5-1058.5 psi)**
- If pressure at rear axle **too low**
- increase brake regulator spring tension
- If pressure at rear axle **too high**
- reduce brake regulator spring tension
- If brake pressure readings cannot be obtained
- replace brake pressure regulator