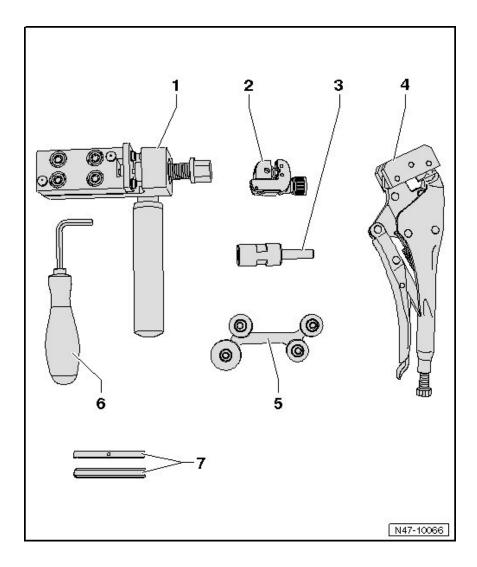
# Brake Hose/Line: Service and Repair

## **Brake Lines, Repairing**

# Special tools, testers and auxiliary items required

- ⇔ Brake line flaring appliance (VAS 6056)
- ⇔ Brake charger/bleeder unit (VAS 5234)
- Flare brake lines using (VAS 6056) without damaging coating. In this way, brake lines can be inexpensively partially replaced in certain cases.
- Work with Brake Line Kit (VAG1356) is not permitted because of the coating and diameter of black brake lines.
- O Brake lines must not be bent more than 90°, otherwise they kink or deform causes unacceptable constriction in the line.
- O Disconnect brake lines preferably at vehicle floor.
- O Position of intermediate pieces should be selected so that they cannot rub against moving parts.
- O not lubricate spindle, clean only with mineral spirits.

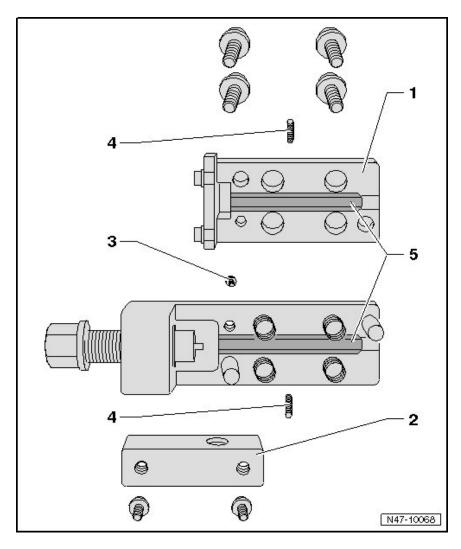
#### **Listing of Individual Tools**



ltem	Tools	Tool number
1	Flaring Tool (including Flaring Jaws VAS 6056/6)	VAS 6056/1
2	Tube cutter	VAS 6056/2
3	Brake line shearing tool *	VAS 6056/3
4	Self-grip pliers with plastic clamping jaws	VAS 6056/4
5	Line bending tool	VAS 6056/5
6	SW6 angle screwdriver	-
7	Flaring jaws	VAS 6056/7

\* The threaded pins, in the side of the shearing tool, are centered and may not be adjusted!

Flaring Tool Assembly Overview



## 1 Upper Part of Flaring Tool

O Remove to change flaring jaws.

#### 2 Hand Grip Mount

## 3 Retaining Screw

O For upper part of flaring tool.

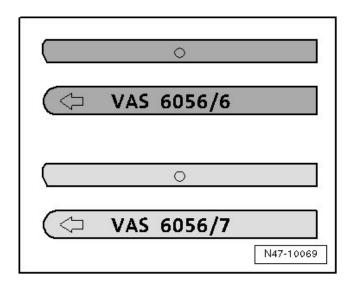
#### 4 Flaring Jaws Threaded Pins

- 2011 Audi Q7 Quattro (4LB) V6-3.0L DSL Turbo (CATA)
  - ⋄ 2 mm hex socket head.

Center and hold the flaring jaws.

- 5 Flaring Jaws

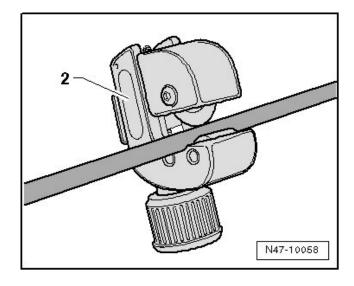
### Flaring Jaws Assembly Instructions



- ∨ VAS 6056/6 (dark) for black brake lines
- ♦ VAS 6056/7 (light) for green brake lines
- The arrow on the rounded side of the flaring jaws must face toward edge of housing and the straight side of the flaring jaws must be installed toward spindle, otherwise flared head will not be formed correctly.

#### Instructions

- Remove affected brake line at brake caliper or wheel brake cylinder and collect escaping brake fluid and dispose of it correctly.
- Disconnect brake line at appropriate location (straight, accessible part) with line cutter 2 -.

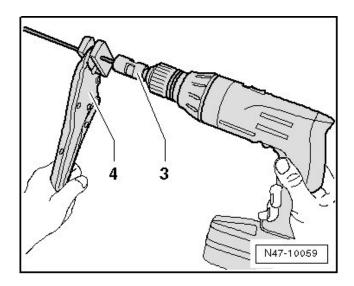


- Remove piece to be exchanged.

Lubricate brake line surface.

2011 Audi Q7 Quattro (4LB) V6-3.0L DSL Turbo (CATA)

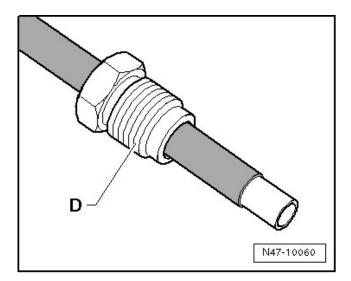
Clamp brake line in self-grip pliers - 4 - so that 50 mm of the plastic clamping jaws show.



- Clamp shearing tool 3 in a drill and place it on brake line.
- Shear coating from brake line at a slow drill RPM and with light pressure against the line.

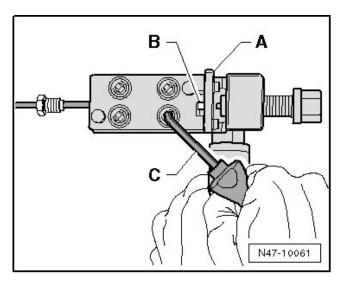
The length of the sheared-off portion is determined by the stop in the shearing tool.

- Remove shearing tool from brake line and remove shearing remains.
- Remove self-grip pliers and tube fitting **D** from brake line.

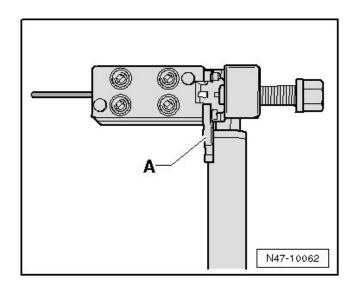


Slide brake line - **B** - against stop - **A** - in flaring tool.

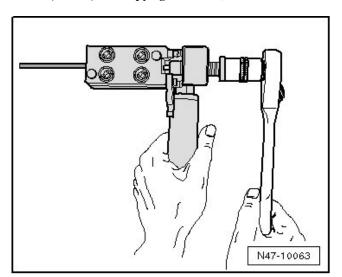
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- Brake line must contact stop when hex socket heat screws are tightened, otherwise flared head will not be formed correctly.
- Clamp brake line in flaring tool until it cannot be moved any more. Fold stop A up and tighten hex socket head screws diagonally with angle screw driver - C -.



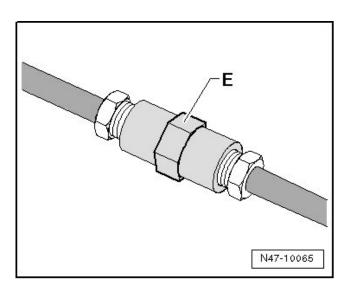
Turn spindle to stop in flaring tool.



- Turn spindle back.
- Loosen hex socket head screws diagonally.
- Remove brake line from flaring tool, clean and check brake line and flared head.

Briefly rinse part of brake line remaining in vehicle.

- Connect (VAS 5234), place bleeder container hose on flanged head of brake line and run (VAS 5234) briefly until some brake fluid runs through.
- Clean the brake line with compressed air.
- Join brake lines with connecting piece E -.



- Assemble brake line.
- Then brake system must be bled. Refer to => [ Brake System, Bleeding ] See: Brake Bleeding/Service and Repair.