



smart fortwo (450)

Art. No. 3981 000 070

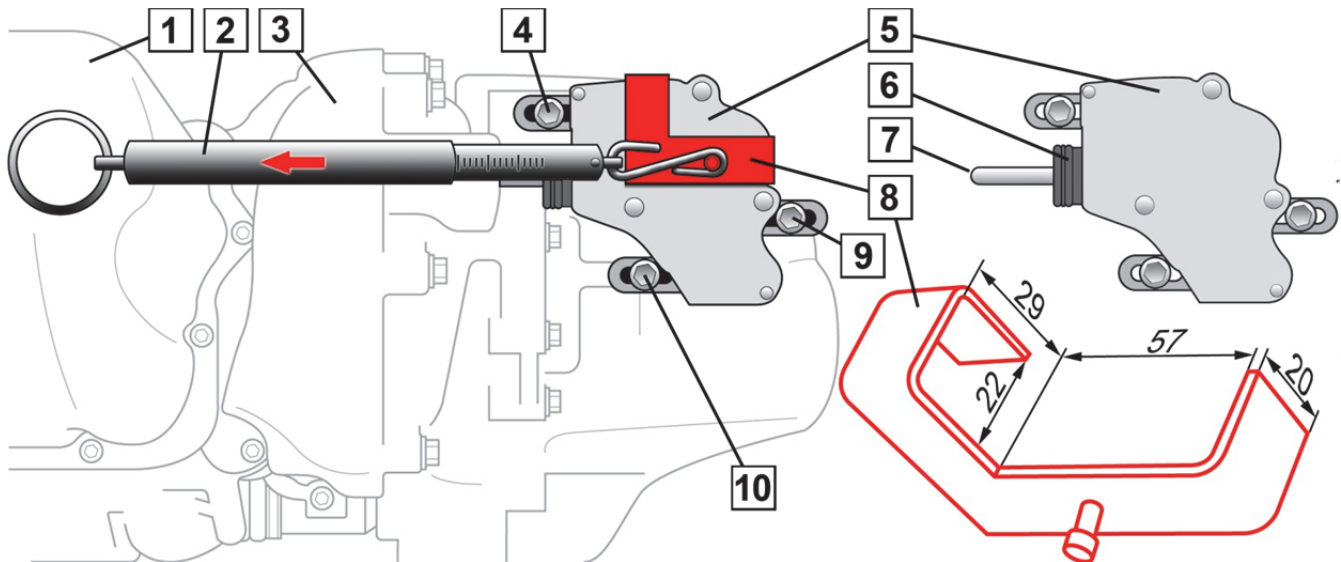


Fig. 1: Clutch actuator with spring scale for adjusting the pre-tensioning force

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|------------|--------------------------|---|-----------------|
| 1 | Engine oil pan | 5 | Clutch actuator |
| 2 | Spring scale with Nonius | 6 | Rubber bellow |
| 3 | Clutch bell housing | 7 | Tappet |
| 4 / 9 / 10 | Screw | 8 | Special tool |

WARNING!



The clutch actuator builds up high degrees of force. Risk of crushing and breaking hands.

Do not reach into the clutch actuator adjustment range.

Only operate the clutch actuator when installed with counter-pressure on the clutch.

NOTE

Do not touch clutch actuator on the tappet or the rubber bellow.



Do not open clutch actuator.

Never touch the electric connector. The servomotor sensor system can be destroyed by static discharge.



Removing the clutch actuator for smart fortwo (450)

1. Switch off the ignition.
2. Wait for the stopping time of the transmission control system (approx. 1 minute).
3. Make sure the clutch is completely closed.
4. Disconnect the electric connection on the clutch actuator servomotor.
5. Loosen clutch actuator (5) screws (4, 9, 10).

Installing the clutch actuator for smart fortwo (450)

NOTE



Adjust clutch actuator (5) with the engine cold (Coolant temperature max. 40 °C). Only hook the spring scale on the special tool (8).

Setting the Clutch Actuator

1. Position the clutch actuator (5) in such a way that the tappet (7) is resting securely on the tappet mount of the clutch release lever.
2. Attach the clutch actuator to the transmission with the screws (4, 9, 10) so it is moveable.
3. Connect the electric connection on the clutch actuator servomotor.
4. Place special tool (8) on the clutch actuator (5).
5. Hook spring scale (2) to the special tool (8) and tighten in the direction of the arrow (Fig. 1). Pre-tensioning force: **50 N**.
6. Tighten screws in the order **9 → 10 → 4** with **10 ± 1 Nm**.
7. Remove spring scale and special tool.

Adjust transmission control system and move the clutch until it engages

1. Connect diagnostic unit to the OBD (on board diagnostics) diagnostic plug.
2. Execute Pulse clutch.
3. Check error memory.
4. Clear error memory.
5. Reset saved clutch data.
6. Hook spring scale (2) to the special tool (8) and tighten in the direction of the arrow (Fig.1).
7. Pre-tensioning force: maintain **50 N** and loosen screws (4, 9, 10).

NOTE



Repeat mechanical adjustment procedure if the pre-tensioning force reduces while loosening the screws (4, 9, 10) to **0 N**.

8. Reduce pre-tensioning force to **11 N**.
9. Tighten screws in the order **9 → 10 → 4** with **10 ± 1 Nm**.
10. Set slipping point with the diagnostic unit.



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