## Mercedes-Benz

## W209

## Soft Top <br> Operation

Diagnostic Aid

## Hydraulic Parts



| Cylinder Designation | Name of Cylinder |
| :---: | :--- |
| 1 | Hydraulic Pump - A2098000648 |
| 2 | Front Lock Cylinder - A2098001172 |
| 3 | Left Soft Top Compartment Cover Lid Cylinder - A2098001272 |
| 4 | Right Soft Top Compartment Cver Lid Cylinder - A2098001272 |
| 5 | Left Bow Cylinder - A2098000972 |
| 6 | Right Bow Cylinder - A2098000972 |
| 7 | Left Top Actuation Cylinder - A2098000772 |
| 8 | Right Top Actuation Cylinder - A2098000872 |
| 9 | Left Trunk Lid Cylinder (with trunk closer option 881) - A2098001472 |
| 10 | Right Trunk Lid Cylinder (with trunk closer option 881) - A2098001472 |

## Electrical Parts



| Switch Designation | Name of Switch |
| :---: | :--- |
| S84/10 | Soft Top Actuation Switch (dual Position) - A2098203110 |
| S84/22 | Compartment Cover Lid in Catch Position Limit Switch - A2098201910 |
| S84/13 | Compartment Cover Lid Open/Close Limit Switch (dual position) - A2098201810 |
| S84/11 | Soft Top Locked Limit Switch - A2098201151 |
| S84/9 | Trunk Partition Limit Switch - A2098209310 |
| S84/15 | Bow Up/Down Limit Switch (dual position) - A2098202110 |
| S84/19 | Bow Locked Limit Switch - A2098201710 |
| S84/3 | Soft Top Open Limit Switch - A2098202010 |
| S84/18 | Soft Top in Catch Position Limit Switch - A2098202410 |
| S84/20 | Ski Bag Limit Switch - A2098209410 |
| N52 | Soft Top Actuation Control Module (part no. varies) |

## Opening

1. S84/9 and S84/20 verify that the trunk partition and optional ski bag are closed
2. Side windows lower
3. Cylinders 3 and 4 are activated to raise the compartment cover lid until switch S84/19 registers that the bow has released from the lid and switch S84/12 registers that the lid is no longer in the closed position.
4. Cylinder 2 is activated to release the front latch.
5. Switch $\mathrm{S} 84 / 11$ registers that the roof is no longer locked, and S84/18 registers that the roof is still in the catch position.
6. Cylinders 5 and 6 are activated to raise the rear glass (bow).
7. Switch $584 / 15$ registers that the bow is now in the fully upright position
8. Cylinders 3 and 4 are activated to raise the compartment cover lid fully.
9. Switch $584 / 12$ registers that the compartment cover lid is in the fully raised position.
10. Cylinders 5 and 6 are activated to lower the bow (rear glass)
11. Switch $\mathrm{S} 84 / 15$ registers that the bow is lowered
12. Cylinders 7 and 8 are activated to begin lowering the top into the trunk
13. Switch $\mathrm{S} 84 / 18$ registers that the roof is no longer $n$ the catch position
14. The flaps are extended
15. Cylinders 7 and 8 continue to lower the top fully into the trunk
16. Switch $\mathrm{S} 84 / 2$ registers that the top is fully lowered
17. Cylinders 3 and 4 are activated to lower the compartment cover lid
18. Switches $\mathrm{S} 84 / 22$ register that the compartment lid is in the catch position
19. Cylinders 3 and 4 are activated to pull the compartment cover lid fully closed
20. Switch S84/12 registers that the compartment cover lid is fully closed
21. Opening Sequence is completed.

## Closing

1. Cylinders 3 and 4 are activated to fully raise the compartment cover lid
2. Switch $\mathrm{S} 84 / 12$ registers that the compart cover lid is fully raised
3. Cylinders 7 and 8 are activated to raise the soft top from the trunk
4. Switch $\mathrm{S} 84 / 3$ registers that the soft top is no longer lowered
5. At peak height, flaps retract
6. Switch $584 / 18$ registers that the soft top has reached the windshield
7. Cylinders 5 and 6 are activated to raise the bow (rear glass)
8. Switch $\mathrm{S} 84 / 15$ registers that the bow is in the fully raised position
9. Cylinder 2 is activated to lock the roof onto the windshield
10. Switch $884 / 11$ registers that the roof is locked to the windshield
11. Cylinders 3 and 4 are activated to lower the compartment cover lid
12. Switch $\mathrm{S} 84 / 12$ registers that the lid is no longer in the fully raised position
13. The lid continues to lower until switches $\mathrm{S} 84 / 22$ register that the compartment cover lid is in the catch position
14. Cylinders 5 and 6 are activated to lower the bow (rear glass)
15. Switch $\mathrm{S} 84 / 15$ registers that the bow is no longer in the fully raised position as the bow lowers
16. Switch $\mathrm{S} 85 / 14$ registers that the bow is in the lowered position
17. Cylinders 3 and 4 are activated to fully close the compartment cover lid
18. Switch $\mathrm{S} 84 / 19$ registers that the bow is locked to the lid
19. Switch S84/12 registers that the compartment cover lid is fully closed
20. Side windows raise
21. Closing sequence is completed
