



28-Gallon Sprinter Auxiliary Fuel Tank User Guide



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Chapter 1.

Introduction to the Factory Fuel System

The Mercedes Sprinter is built from the factory with a 24-Gallon Plastic Diesel Fuel Tank. It is located on the Driver's Side of the vehicle under the chassis and is directly behind the driver's seat.

Unless your Sprinter is equipped with the J51 upgrade, the Factory Gauge calculates fuel level based on miles driven since the vehicle was last fueled. The Factory Fuel Gauge in the dash is connected to a Fuel Level Sender inside the Factory Tank. Unlike other vehicles where the fuel gauge constantly reads the fuel level sender, the Sprinter displays Fuel Level based on a calculated formula of "Fuel Consumption" rather than reading if the tank itself. This means that moving fuel away from the Factory Tank while the engine is turned on will confuse the Fuel Gauge and read higher than it actually is.

Introduction to the Agile 28-Gallon Fuel System

The Agile Off Road 28-Gallon Tank System is comprised of a 28-Gallon Tank mounted in the Factory Spare Tire Location, a fuel pump mounted under the chassis of the vehicle, a fuel gauge with two switches, the fuel lines, filter screens, and a solenoid to prevent the fuel tanks from siphoning while parked.

The system should be controlled from outside the vehicle when you have the door open, and you are facing the Driver's Seat. Two switches comprise the controls of the system. The Left Switch has an "AO Fuel Pump" inscription that controls the On-Off power of the system. The Right Switch is inscribed with Arrows and has three positions, pressing up moves fuel to the 28-gallon tank from the factory, Pressing down moves fuel from the 28-gallon tank to the factory tank. Returning the Switch to the center stops fuel from flowing between the two tanks.

This system is referred to as a Transfer-Style Auxiliary Tank because the Factory Fuel tank is still your primary fuel tank and is what the Gauge in your vehicle Dashboard recognizes. When your Factory tank shows that it is near empty, and other Van Drivers need to find a Gas Station, you have the ability to transfer fuel from your Agile 28-Gallon Fuel tank, to the Factory Tank using the Switches and Seat Base Mounted Gauge.



Chapter 2.

Filling the Factory and 28-Gallon Tanks:

1. Drive to your favorite or nearest Gas Station that offers Diesel Fuel
2. Park the van, and fully turn off the vehicle.
3. Turn the Van to Ignition On, Without Starting the Motor
2007-2018: Turn the key 2 positions clockwise and leave the key in
2019+: With the Key inside the vehicle and without pressing the brake pedal, press the “Press to Start” Button on the dash once, wait for gauge needles to sweep Left-to-Right, then press the “Press to Start” once more.
4. Turn on the Fuel Pump System located on your Driver’s Seat Base using the “AO Fuel Pump” Switch on the left. The Gauge above the switch should illuminate, and the needle should rise to the 28-Gallon Tank’s Current Fuel Level.
5. Open your Van’s Gas door and the Gas Cap, then insert the Fuel Nozzle into the filler neck. Proceed to start fueling the vehicle
6. While the Factory Tank is being fueled, press the Arrow switch UP (Right Arrow Button →) to start moving diesel fuel to the 28-Gallon tank. This will begin to pull fuel from the Factory Fuel tank, to fill the Rear Tank. The 28-Gallon Tank’s fuel pump moves slightly slower than the Fuel Nozzle at the gas station.
*** Do not overfill the Auxiliary Tank. This will cause fuel to spill from the vent valves.**
*** The Auxiliary Fuel Pump is manually controlled. There is no auto-shutoff.**
7. Monitor the Driver’s Seat Base Mounted Gauge to watch the fuel level rise, as well as the Fuel Nozzle to see when it shuts off. The Fuel Nozzle will most likely shut off before the 28-Gallon tank is near Full, because the Factory 24-Gallon tank has finished filling. If you want the 28-Gallon tank filled near capacity, allow the 28-Gallon Tank Pump to continue flowing and filling.
8. Once the 28-Gallon Tank has reached the desired capacity, return the Arrow Switch to the Middle Position. The Arrow switch has 3 Positions, Up-Middle-Down. The Middle Position switches off the 28-Gallon Tank Fuel Pump and you will no longer hear a mechanical “Whirring”
9. Turn off the 28-Gallon Fuel System by turning off the “AO Fuel Pump” Switch on the left. The gauge will go dark, and the needle for the 28-Gallon fuel level will drop to E now that the system is off.
10. Finish fueling the Factory Tank until the Fuel Nozzle automatically shuts off.
11. Return the Fuel Nozzle to the Gas Pump and return to the vehicle.
12. Start the van
2007-2018: Turn and hold the key 1 position clockwise to start the vehicle since the key is still in the ignition.
2019+: With the Key inside the vehicle, press the brake while pressing the “Press to Start” Button.
13. The Van will start, and the fuel gauge on the dash will show the current Diesel Fuel Level



Chapter 2. con't.

Transferring fuel to the Factory Tank from the Agile 28-Gallon Auxiliary Tank

1. Park in a safe area where you can exit the vehicle without imminent danger.
2. Turn the Vehicle Off
3. Turn the Van to Ignition On, Without Starting the Motor
2007-2018: Turn the key 2 positions clockwise and leave the key in
2019+: With the Key inside the vehicle and without pressing the brake pedal, press the “Press to Start” Button on the dash once, wait for gauge needles to sweep Left-to-Right, then press the “Press to Start” once more.
4. Turn on the Fuel Pump System located on your Driver’s Seat Base using the “AO Fuel Pump” Switch on the left. The Gauge above the switch should illuminate, and the needle should rise to the 28-Gallon Tank’s Current Fuel Level.
5. Press the Arrow switch DOWN (Left Arrow Button ←) to start moving diesel fuel to the Factory Tank
6. Stay with the vehicle and monitor the Driver’s Seat Fuel Gauge as it drains.
 - Each fraction notch on the gauge is approximately 7 gallons for reference ($4 \times 7 = 28$ Gallons)
 - If the Factory Fuel Tank is at quarter capacity allow the Seat Base Gauge to drain by a third, and the factory tank should be close to full.
7. Once the desired fuel level is reached, return the Arrow Switch to the Middle Position. The Arrow switch has 3 Positions, Up-Middle-Down. The Middle Position switches off the 28-Gallon Tank Fuel Pump and you will no longer hear a mechanical “Whirring”
8. Turn off the 28-Gallon Fuel System by turning off the “AO Fuel Pump” Switch on the left. The gauge will go dark, and the needle for the 28-Gallon fuel level will drop to E now that the system is off.
9. Start the van
2007-2018: Turn and hold the key 1 position clockwise to start the vehicle since the key is still in the ignition.
2019+: With the Key inside the vehicle, press the brake while pressing the “Press to Start” Button.
10. The Van will start, and the fuel gauge on the dash will show the current Diesel Fuel Level. Verify that the fuel level on the dash has risen to the expected level. If it has not, turn the vehicle off, and then on again.



Chapter 3.

Troubleshooting

My Factory Fuel Gauge does not read the correct fuel level.

The Factory Fuel Gauge will only correctly increase when the vehicle is in the correct state of the refueling. Imagine that the vehicle is parked at a Gas Station.

- The Vehicle Must be turned off
- The Vehicle Must be stopped

The Factory Fuel Gauge resets the fuel level in the following scenarios

- When the ignition is completely turned off, and the car is restarted.
- When fuel is added to the factory tank.
 - By way of the 28-Gallon Auxiliary Tank
 - Or at a Gas Station

The Gauge and Switches do not power on when actuating the “AO Fuel Pump” Switch. The Fuel Pump will not move fuel in either direction.

The fuse for the system needs to be check. The Fuse is in the Factory Chassis Battery Location which is located under the Driver’s Feet. See your factory manual on how to access the Battery. There is an in-line fuse with a label that says, “Fuel Pump”. Inspect and replace the fuse if necessary.

