

ACHLEITNER 4WD-SYSTEM for Mercedes-Benz Sprinter (NCV3)



**...for many, the journey ends at the first obstacle,
for the successful, it is only the starting position.**

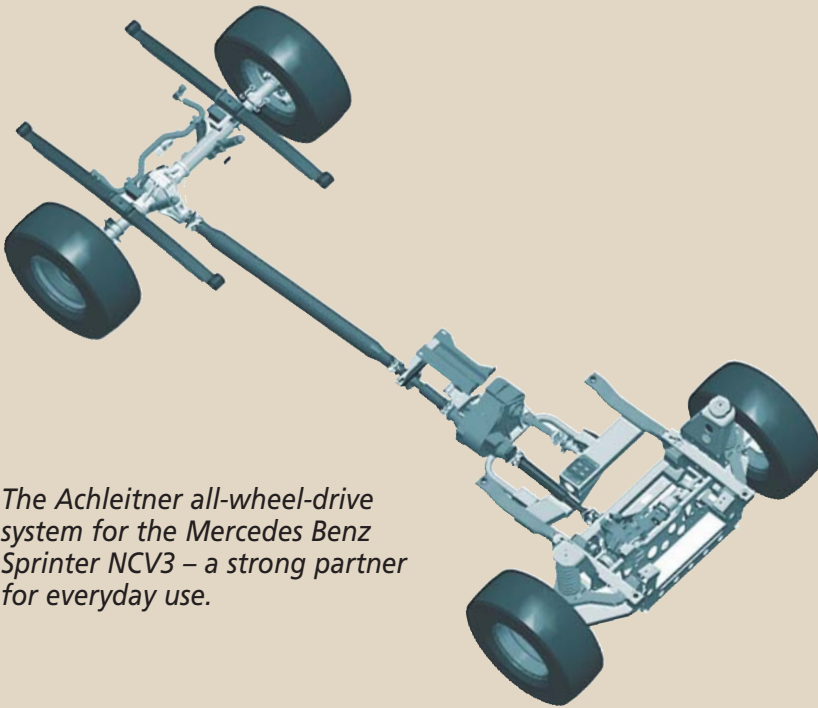
THE BEST OF TWO WORLDS

The Sprinter NCV3 with the Achleitner all-wheel-drive system combines the advantages of two worlds.

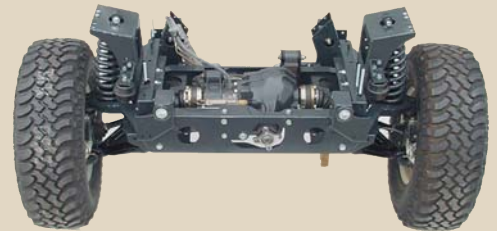


As a basic vehicle the Mercedes Benz Sprinter offers outstanding features. The dynamic proportions and harmonious lines of this attractively designed transporter make an immediate impression. The ergonomic layout of controls, a comfortable and supportive driving position, the large driver seat adjustment range, good driver seat ergonomics and practical storage options set new comfort and quality standards. Whether operating the electronically controlled climate system, the radio with CD drive, DVD navigation, the hands-free phone system or the convenient

joystick control, everything in the Sprinter is in the right place. The 200 possible combinations of different wheelbases, bodies, engines and payloads together with more than 450 special options cover nearly all conceivable use and load requirements.



The Achleitner all-wheel-drive system for the Mercedes Benz Sprinter NCV3 – a strong partner for everyday use.



The specially developed front axle in coil spring design with optional 100% differential lock

The Achleitner permanent all-wheel-drive system with reduction gearbox makes the Sprinter an all-terrain transporter and ideal partner for many different tasks.

Up to three 100% center differential or differential locks, optional single tire fitment on both axles and a specially developed front axle in coil spring design form the rugged basis of the system. Off-road capability is significantly enhanced through increased ground clearance, better fording depth, and improved snow chain suitability on both axles by providing chassis elevation as a standard feature, individually adapting the chassis, raising the clearances, as well as adjusting the wheel spacing and wheel arch extension according to the model. The strengthened rear rigid axle allows loads up to a total weight of 6,000 kg: the Sprinter with Achleitner all-wheel-drive system can thus carry payloads of up to 3,650 kg.

After delivery of the basic vehicle the components of the standard 4x2 Sprinter drive train are removed and replaced by one of the two stages of the Achleitner all-wheel-drive system: either the near-standard "PERFEKT 4x4" variant or the extremely off-road capable "MANTRA 4x4" version. The result is an exceptional off-road vehicle, with permitted total weights of 3,500 kg, 4,600 kg, 5,000 kg and 6,000 kg, which is strong, rugged and reliable over a wide range of demanding conditions.

THE SPRINTER – THE BASIC VEHICLE

Body types:

- single / double cab chassis
- panel van / panel van partly glazed
- crewbus
- pickup / dumper

Wheelbases:

- 3.250 mm
- 3.665 mm
- 4.325 mm



Single cab chassis,
wheelbase 3.250 mm



Double cab chassis,
wheelbase 4.325 mm



Single cab pickup,
wheelbase 3.665 mm



Panel van with normal roof,
wheelbase 3.250 mm



Panel van with high roof,
wheelbase 3.665 mm



Panel van partly glazed with super high roof,
wheelbase 4.325 mm with long tail-section



Crewbus with high roof
wheelbase 4.325 mm with normal tail-section



Caravan „James Cook“,
wheelbase 3.665 mm

Engines:

Type	OM 646 DE 22 LA	OM 646 DE 22 LA	OM 646 DE 22 LA	OM 642 DE 30 LA
Output [kW/hp]	65 / 88	80 / 109	110 / 150	135 / 184
at engine speed [rpm]	3800	3800	3800	3800
Max. torque [Nm]	220	280	330	400
at engine speed [rpm], EURO4	1.400 - 2.600	1.600 - 2.500	1.200 - 2.400	1.600 - 2.600
Cylinders	4	4	4	6
Arrangement	In-line	In-line	In-line	72°-V-angel
Valves per cylinder	4	4	4	4
Bore [mm]	88,0	88,0	88,0	83,0
Stroke [mm]	88,3	88,3	88,3	92,0
Displacement [ccm]	2.148	2.148	2.148	2.987
Compression ratio	18,0 : 1	18,0 : 1	18,0 : 1	18,0 : 1

Mercedes-Benz Diesel-Engines with Common-Rail-Direct-Injection (CDI) particularly convince with regard to their enormous assertiveness. Due to the very high injection pressures, this system ensures excellent mixture formation, while the electronic management allows good adaptation of injection timing and quantity to current operating and driving conditions.

THE SPRINTER – VEHICLE EQUIPMENT

Standard equipment (extract):

- Power-steering
- Front/rear disk brakes
- Brake Assist (BAS)
- Summer tyres
- 16" steel rims
- EURO 4 engine variant
- Exhaust gas monitor for nitrogen oxides (NOx)
- Diesel particulate filter
- 6-speed manual transmission
- Tank 75 Liter
- Full-length partition*
- Heated rear-view mirror, electrically adjustable
- Light range regulator
- clear headlamp lights, Halogen H7
- Parking light
- Windshield laminated glass
- Heat-insulating glass all around
- driver- and co-driver-seat adjustable
- Armrest for driver's and co-drivers's seat
- Airbag, front driver's seat
- three- point seat belt for all seats
- Seatbelt tensioner driver and codrivers
- height- adjustable head restraints for driver's/co-driver's seat
- Glove box lockable
- Shelf above windscreen
- Shelf
- Smoker's package
- Battery 12V 100 Ah
- Electric equipment 12 V/ starter 12 V
- Alternator 14 V / 180 A
- "ASSYST" service computer
- Engine speed indicator electronical
- (combined) instrument cluster
- Bulb failure indicator
- Cleaning fluid level warning light
- Speedometer, km/h
- Central locking with radio remote control op
- Immobilizer
- Electr. window lifts twice
- Tool kit
- First-aid kit
- Warning triangle
- "Brasao" fabric, black

Optional equipment (extract):

- Height and rake adjustable steering wheel
- Electric tilting/sliding glass sunroof in
- Entire partition with 1 sliding window*
- Additional battery for retrofit power consumption
- Radio sound 5
- Navigation system COMMAND with TMC interface
- Navigation system Radio sound 50 APS
- CD changer
- Headlamp washing system
- Windshield heatable
- Anti-theft alarm system
- Heat insulation
- Auxiliary hot-air heater
- Auxiliary hot-water heater
- Additional warm water heating with timer
- Air conditioner, automatic heater control
- Heat-insulation glass w.band filter on windscreen
- Heating for driver's seat
- Heating for co-driver's seat
- High-output A/C system in passenger compartment
- Seat belt warning for driver's seat
- Light and rain sensor
- Main tank, 100 litres
- Fuel filter with water separator
- Automatic dim-dip light
- Fog lamps Halogen
- Alternator 14 V / 220 A
- Cruise control
- Power take off
- Trailer coupling ball headed / rigid coupling head
- Airbag, co-driver
- Windowbag for driver and co-driver
- Thorax bag for driver + co-driver
- Suspension seats, comfort version
- Swivel base for driver's / co-driver's seat
- Sliding door left*
- Seats for passenger compartment
- Interior panelling*
- Lashing rails in load compartment
- Leatherette black
- Sliding windows for load compartment
- Step for rear wall door
- Fire extinguisher
- Chock

*) only for panel van



EQUIPMENT / FEATURES OF THE 4WD-SYSTEM

	3,5 t PERFEKT 4x4	3,5 t MANTRA 4x4	4,6 t / 5,0 t PERFEKT 4x4	4,6 t / 5,0 t MANTRA 4x4	6,0 t MANTRA 4x4
Drivetrain					
Permanent all-wheel drive (variable power distribution)	●	●	●	●	●
Gear reduction (i = 2,5)	●	●	●	●	●
100% differential lock in transfer case	●	●	●	●	●
100% differential lock in rear axle	●	●	●	●	●
100% differential lock in front axle	○	●	○	●	●
Axle ratio i = 4,375	●	●	●	●	●
Axle ratio i = 4,857 / i = 5,286	○	○	○	○	○
Chassis					
Individual adjusted chassis	●	●	●	●	●
Front axle in coil spring design with independent suspension in double wishbone geometry	●	●	●	●	●
Rigid rear axle with parabolic leaf springs	●	●	●	●	●
Air cushion aggregate for rear axle	-	-	○	○	○
Single tires at rear axle	●	●	-	●	●
Raise of chassis (100 mm)	●	●	●	●	●
Gauge extension (40 mm)	●	●	●	●	●
Increased ground clearance	-	●	-	●	●
Snow chain capability on both axles	●	●	●	●	●
Braking(control)system					
Hydraulic 2-circuits driving brake	●	●	●	●	●
Disc brakes at front and rear axle	●	●	●	●	●
Duo-self energizing parking brake working on rear axle	●	●	●	●	●
Braking system with antilock-braking-system (ABS)	●	●	●	●	●
Brake assist (BAS)	●	●	●	●	●
Electronic-Stability-Program (ESP)	-	-	-	-	-
Antiskid system (ASR)	-	-	-	-	-
Functions for tilting obviation	-	-	-	-	-
Body					
Wheel flares (GRP) (approx. 145 mm)	-	●	-	●	●
Wheel flares (plastic) (approx. 40 mm)	●	-	●	-	-
Wheelhouse enlargement	-	●	-	●	●
MANTRA-hood (GRP) painted in vehicle color	-	●	-	●	●
ACHLEITNER-mud-flaps	-	●	-	●	●
Underride protection for front axle	○	●	○	●	●
Underride protection (u-bolt-type) for transfer case	○	●	○	●	●
Tires / wheels					
245/75 R 16 on steel rims 6,5J x 16 (5 Stk.)	●	-	-	-	-
265/75 R 16 on steel rims 8,0J x 16 (5 Stk.)	-	●	-	-	-
215/85 R 16 on steel rims 5,5J x 16 (7 Stk.)	-	-	●	-	-
285/75 R 16 on steel rims 8,5J x 16 (5 Stk.)	-	○	-	● (4,6 t)	-
265/70 R 17,5 on steel rims 7,5J x 17,5	-	-	-	● (5,0 t)	●
Steel rims painted in silver-grey	●	●	●	●	●
All-Terrain-tires	●	●	●	●	-
M&S-tires	○	○	○	○	●
Proper spare wheel supplie by in bulk	●	●	●	●	●
Withholding of original MB tires	●	●	●	●	●
Vehicle documentation & accessories					
Parts catalog for 4WD-system	●	●	●	●	●
Instruction manual for 4WD-system	●	●	●	●	●
Service booklet for 4WD-system	●	●	●	●	●
Registration document	●	●	●	●	●
Extended toolkit for 4WD-system	●	●	●	●	●
Miscellaneous					
Weight of 4WD-system	240 kg	320 kg	240 kg	420 kg	420 kg
Increased fording depth (lifted deairings)	○	●	○	●	●
Speedometer adjustment	●	●	●	●	●

● Standard equipment

○ Optional equipment

- Not available

Indications of weights are subject to +/- 20 kg weighing tolerance, indications of dimensions are subject to +/- 10% tolerance!



The illustrated vehicles are partly fitted with optional equipment available at an extra charge. Subject to changes in design, equipment and delivery, errors excepted.

