Minifix – Series for Sprinter Van (Mai 2008 – today)
Tilt open:

- Motor starts running till the platform reaches an 45° angle. Thereafter the motor shuts down and the platform opens up by gravity.

- Oil pressure is set on exit “A” (S5 valve) to force the tilt cylinders to pull back in.

- The existing oil in the tilt cylinder runs back through the energized solenoid release valve S2 into the oil tank.

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**Functional description - hydraulics**

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**Pressure Relief**

- 2850 PSI
- 200 bar

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**motor activated**

- **High pressure**
- **Low pressure**
- **Vacuum**

**gravity down**
Legend:

gn : green
bl : blue
br : brown
wt : white
ye : yellow
bk : black
gy : green-yellow

CABLE FUNCTION
1 LIGTHS FOR OPEN P/F
2/27 PERM HOT LEAD FOR ON/OFF SWITCH
3 ENGAGES MOTOR SOLENOID
4 CONTROL POWER FROM ON/OFF SWITCH
5 LIFT SIGNAL
6 LOWER SIGNAL
12 ENGAGES SHIFT SOLENOID SS
14 TILT CYLINDER VALVES
15 LIFT CYLINDER VALVES
7 WARNING LIGHTS

ON-OFF SWITCH IN CAB

OPTION TILT ANGLE SENSOR

CONTROL MINIFIX

OPTION LIFT SENSOR

4 WIRE CABLE
2 GA CABLE
# 2 BLACK
# 4 BLACK
# 1 BLACK
GREEN / YELLOW
(+)
(-)

150 WIRELESS HANDCONTROL
OPTIONAL
WARNING LIGHTS &
FOOT CONTROL

CIRCUIT BOARD

POWER PACK

OPTIONAL WIRELESS HANDCONTROL

B-16: Shuts down motor at 45°

Legend:

Li : Lift Up
Lo : Lower Down
Op : Open Gate
Cl : Close Gate
Functional description - hydraulics

Lower down and auto tilt function:

- Shift valve S5 at the aluminum block and solenoid release valve S1 at the lift cylinder will get activated.
- Hydraulic oil runs out of the lift cylinder back into the reservoir, passing the solenoid release valve S1 and the shift valve S5.
- Platform will lower down all the way to the ground only by gravity.

**When platform hits ground the auto tilt function will get activated (B-13)**

- Solenoid release valves S2 at the tilt cylinder will be activated additionally
- The existing oil in the tilt cylinder runs back through the energized solenoid release valve S2 and the energized shift valve S5
- Speed will be reduced additionally by passing restrictor R5 during auto tilt
K1Plus – Minifix - Series Lower down and auto tilt function schematic

CABLE FUNCTION
1. LIGHTS FOR OPEN P/F
2. PERM HOT LEAD FOR ON/OFF SWITCH
3. ENGAGES MOTOR SOLENOID
4. CONTROL POWER FROM ON/OFF SWITCH
5. LIFT SIGNAL
6. LOWER SIGNAL
12. ENGAGES SHIFT SOLENOID SS
14. TILT CYLINDER VALVES
15. LIFT CYLINDER VALVES
7. WARNING LIGHTS

Legend:
- gn: green
- bl: blue
- br: brown
- wt: white
- ye: yellow
- bk: black
- gy: green-yellow

B-13 switch sets a timer, 8" off the ground to tilt down the platform for the auto tilt function.

Hot signal lines and connectors for lower function.
Additional activates lines and connectors for auto tilt function.

Power Pack

12V Battery

Wireless Handcontrol

Functional description - hydraulics

Level out and lift up:

- Motor starts running and shift valve S5 will get energized for level up straight.
- Oil pressure is set on exit “B” (S5 valve) to force the tilt cylinder to push out.
- The existing oil in the tilt cylinder runs back directly through the energized S5 into the oil tank.
- When platform is leveled, the S5 valve shifts back, forced by the spring into default position.
- The Platform remains in leveled position.
- By shifting the valve, now the motor pushes the oil through the exit “A” into the lift and tilt cylinder. Because of the single locking valve S2 the tilt cylinder will not tilt.
- Meanwhile, the motor pushed the oil into the lift cylinder straight through the solenoid release valve S1. The platform raises up.
K1Plus - Minifix - Series Lift up and level out schematic

CABLE FUNCTION
1. LIGHTS FOR OPEN P/F
2. PERM HOT LEAD FOR ON/OFF SWITCH
3. ENGAGES MOTOR SOLENOID
4. CONTROL POWER FROM ON/OFF SWITCH
5. LIFT SIGNAL
6. LOWER SIGNAL
7. WARNING LIGHTS & FOOT CONTROL
8. TILT CYLINDER VALVES
9. LIFT CYLINDER VALVES
10. WARNING LIGHTS

Legend:
- gn : green
- bl : blue
- br : brown
- wt : white
- ye : yellow
- bk : black
- gy : green-yellow

LI : Lift Up
LO : Lower Down
OP : Open Gate
CL : Close Gate

OPTIONAL WIRELESS HANDCONTROL
OPTIONAL WARNING LIGHTS & FOOT CONTROL
OPTIONAL FOOT CONTROL
HAND CONTROL
Functional description - hydraulics

Tilt close:

- Motor starts running and the shift valve S5 on the aluminum block gets energized.
- Oil pressure is set on exit “B” (S5 valve) to force the tilt cylinder to move out.
- The existing oil in the tilt cylinder runs back into the reservoir.
- The platform will tilt close at the end of the body.