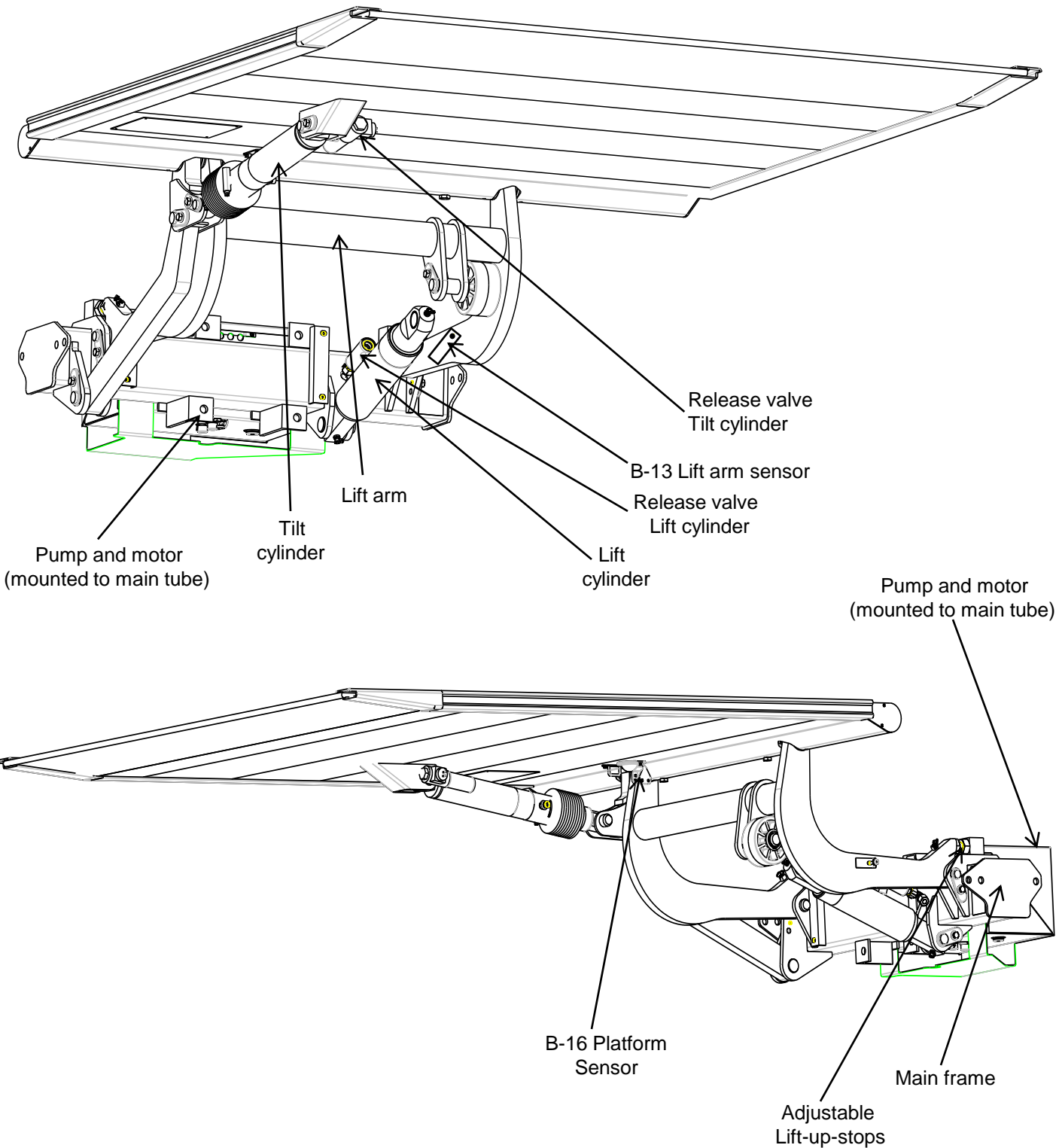


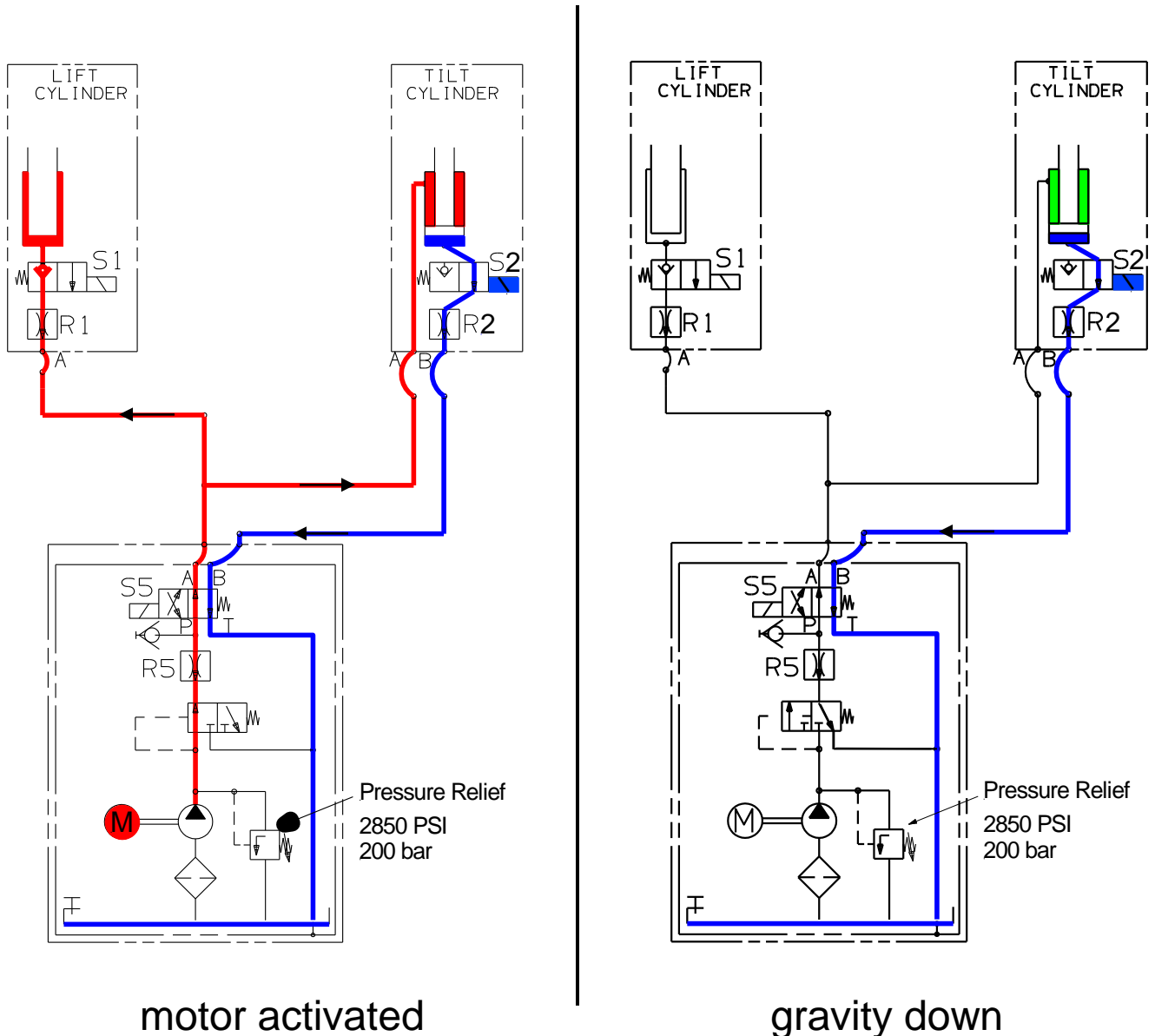
Minifix – Series for Sprinter Van (Mai 2008 – today)



Functional description - hydraulics

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



High pressure

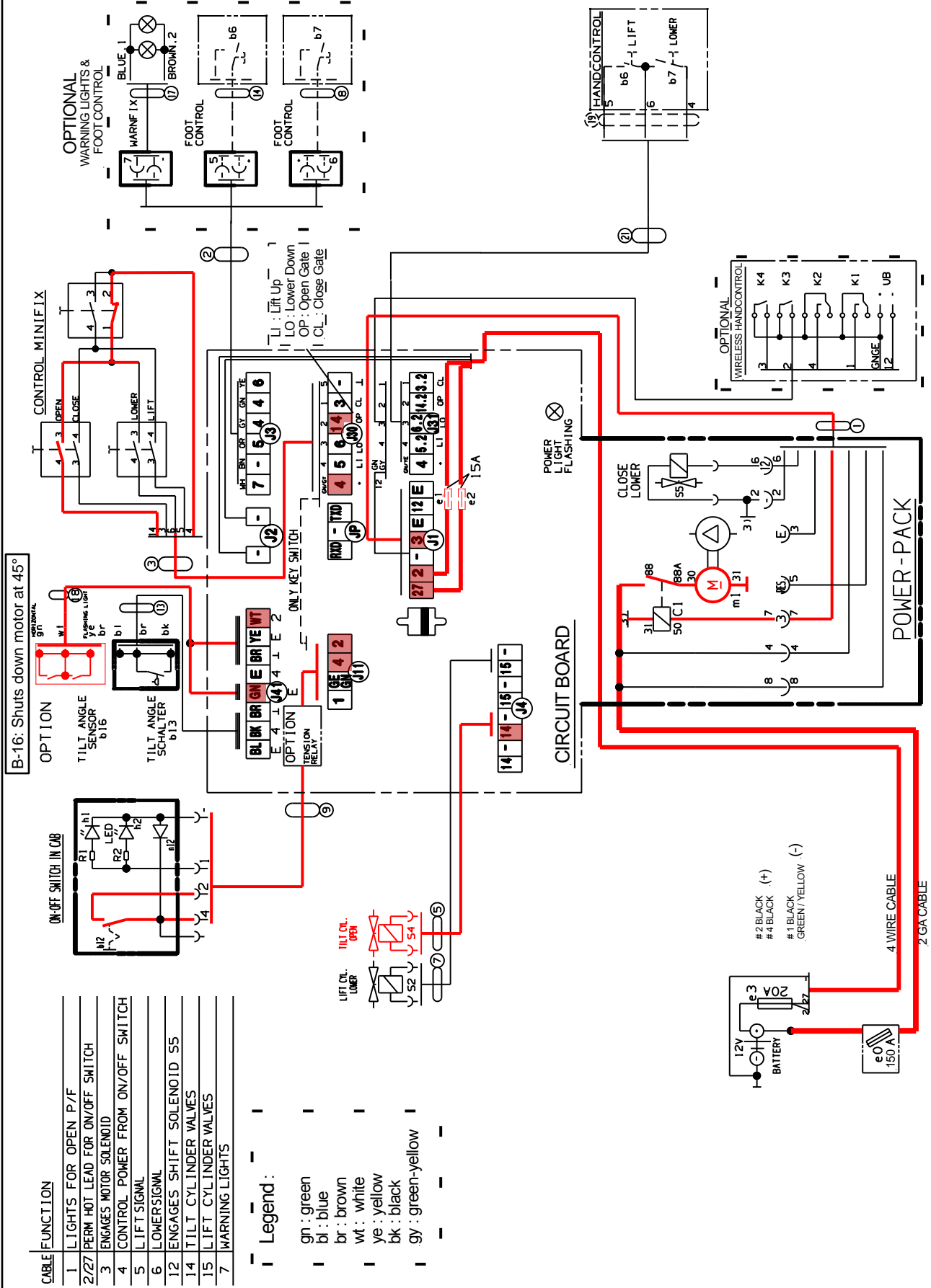
Low pressure

Vacuum

K1Plus – Minifix - Series Tilt close schematic

CABLE FUNCTION	DESCRIPTION
1	LIGHTS 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	LOWERSIGNAL
12	ENGAGES SHIFT SOLENOID S5
14	TILT CYLINDER VALVES
15	LIFT CYLINDER VALVES
7	WARNING LIGHTS

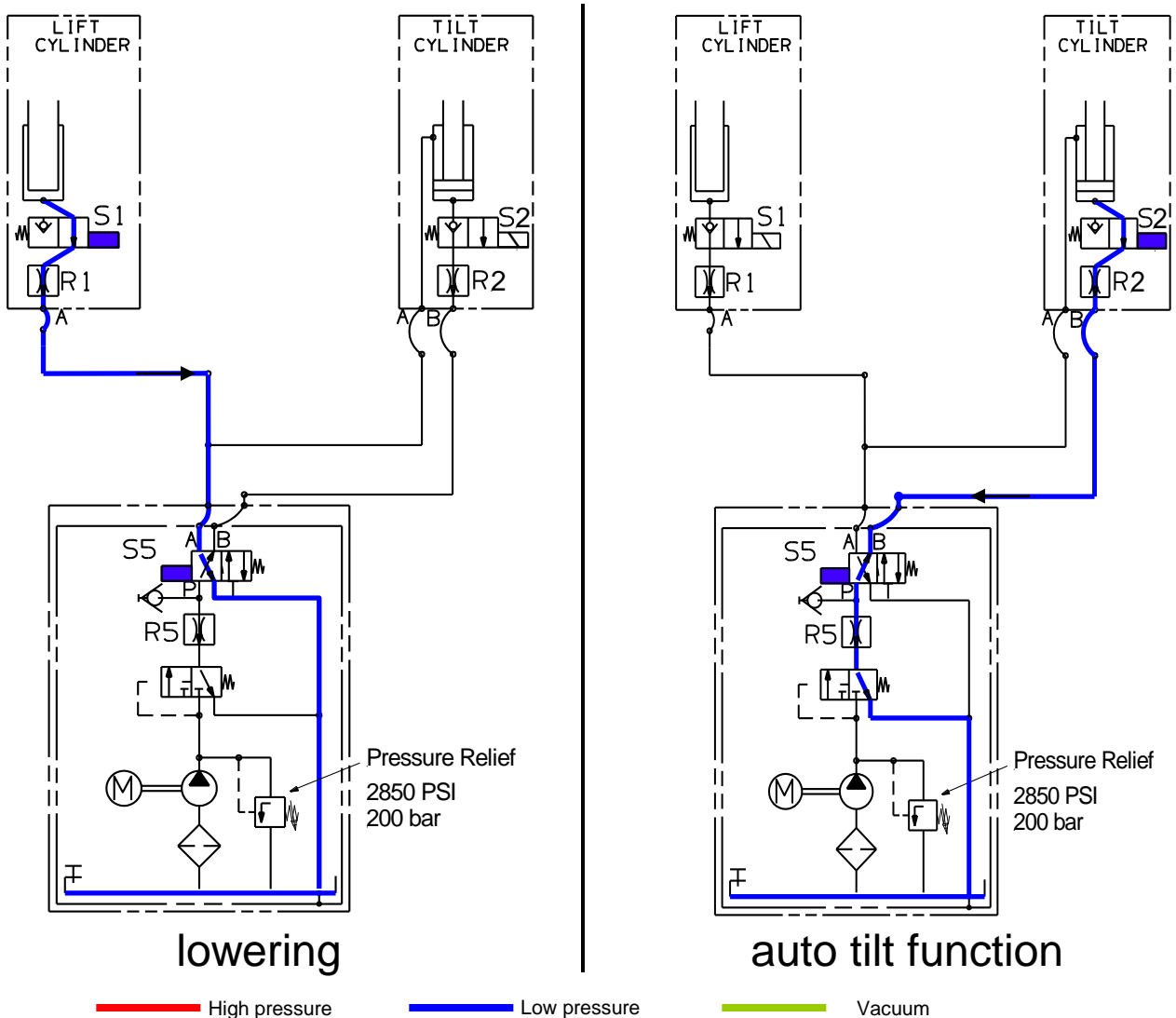
Legend :
 gn : green
 bl : blue
 br : brown
 wt : white
 ye : yellow
 bk : black
 gy : green-yellow



Functional description - hydraulics

Lower down and auto tilt function:

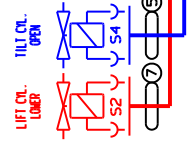
- Shift valve S5 at the aluminum block and solenoid release valve S1 at the lift cylinder will get activated.
- Hydraulic oil runs out of the lift cylinder back into the reservoir, passing the solenoid release valve S1 and the shift valve S5.
- Platform will lower down all the way to the ground only 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	DESCRIPTION
1	LIGHTS FOR OPEN P/F
2/27	PERM HOT LEAD FOR ON/OFF SWITCH
3	ENGAGE'S MOTOR SOLENOID
4	CONTROL POWER FROM ON/OFF SWITCH
5	LIFT SIGNAL
6	LOWERSIGNAL
12	ENGAGES SHIFT SOLENOID SS
14	TILT CYLINDER VALVES
15	LIFT CYLINDER VALVES
7	WARNING LIGHTS

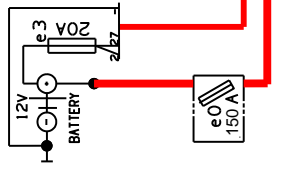
Legend :
 gn : green
 bl : blue
 br : brown
 wt : white
 ye : yellow
 bk : black
 gy : green-yellow



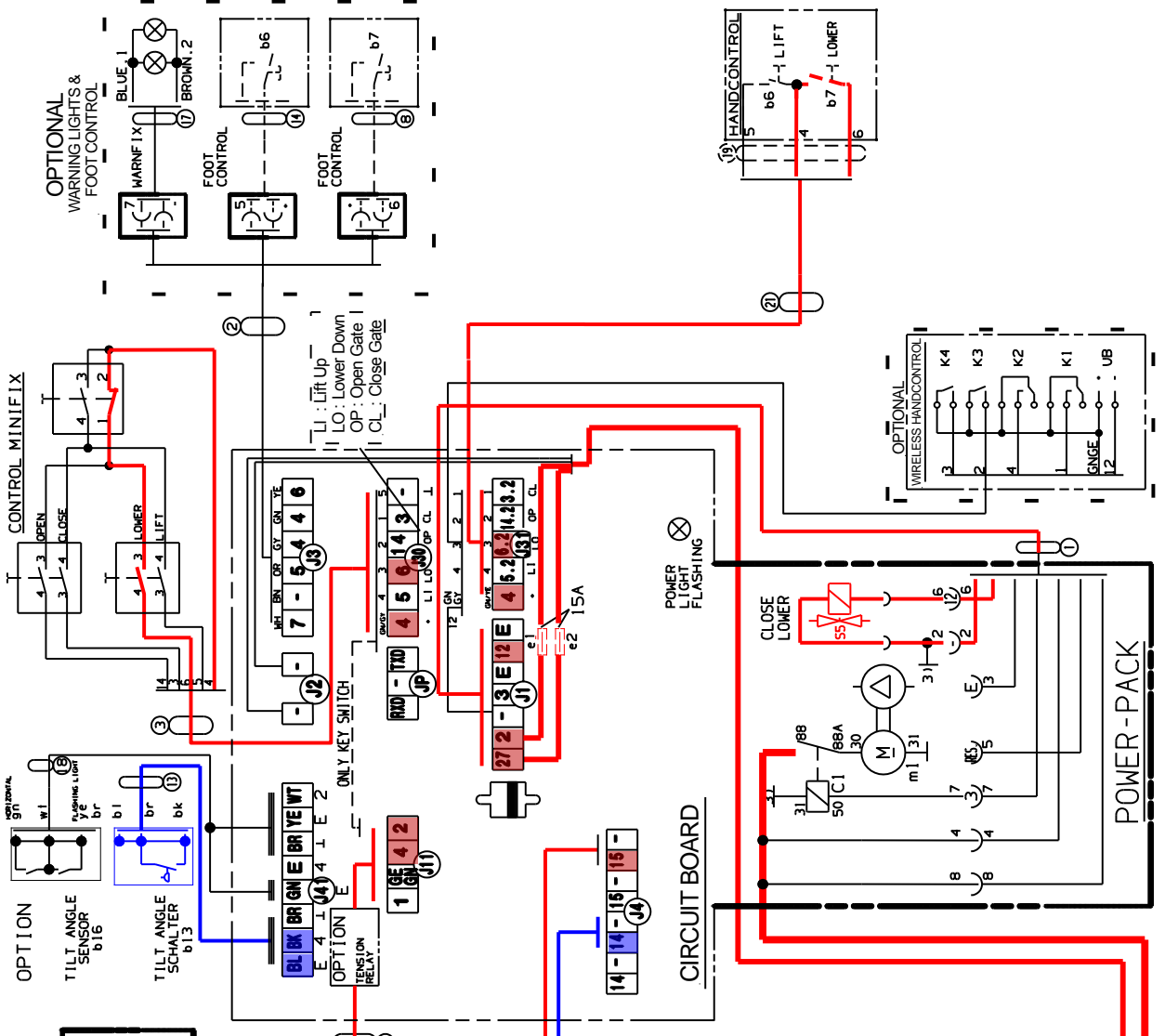
B-13 switch sets a timer, 8" off the ground to tilt down the platform for the auto tilt function

Hot signal lines and connectors for lower function

Additional activates lines and connectors for auto tilt function



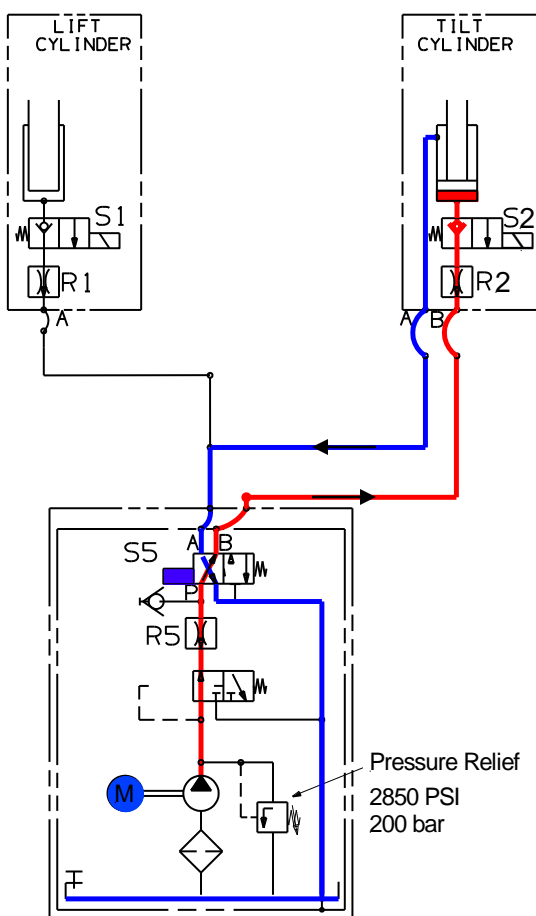
#2 BLACK (+)
 #4 BLACK
 #1 BLACK GREEN/YELLOW (-)



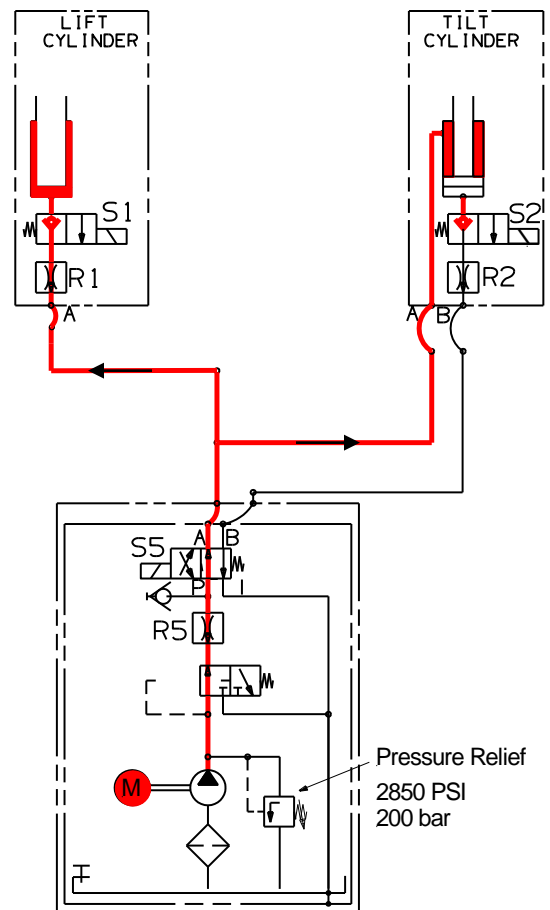
Functional description - hydraulics

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.



level out



Lift up

— High pressure

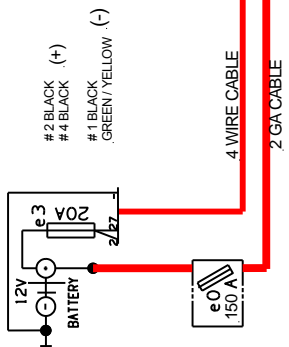
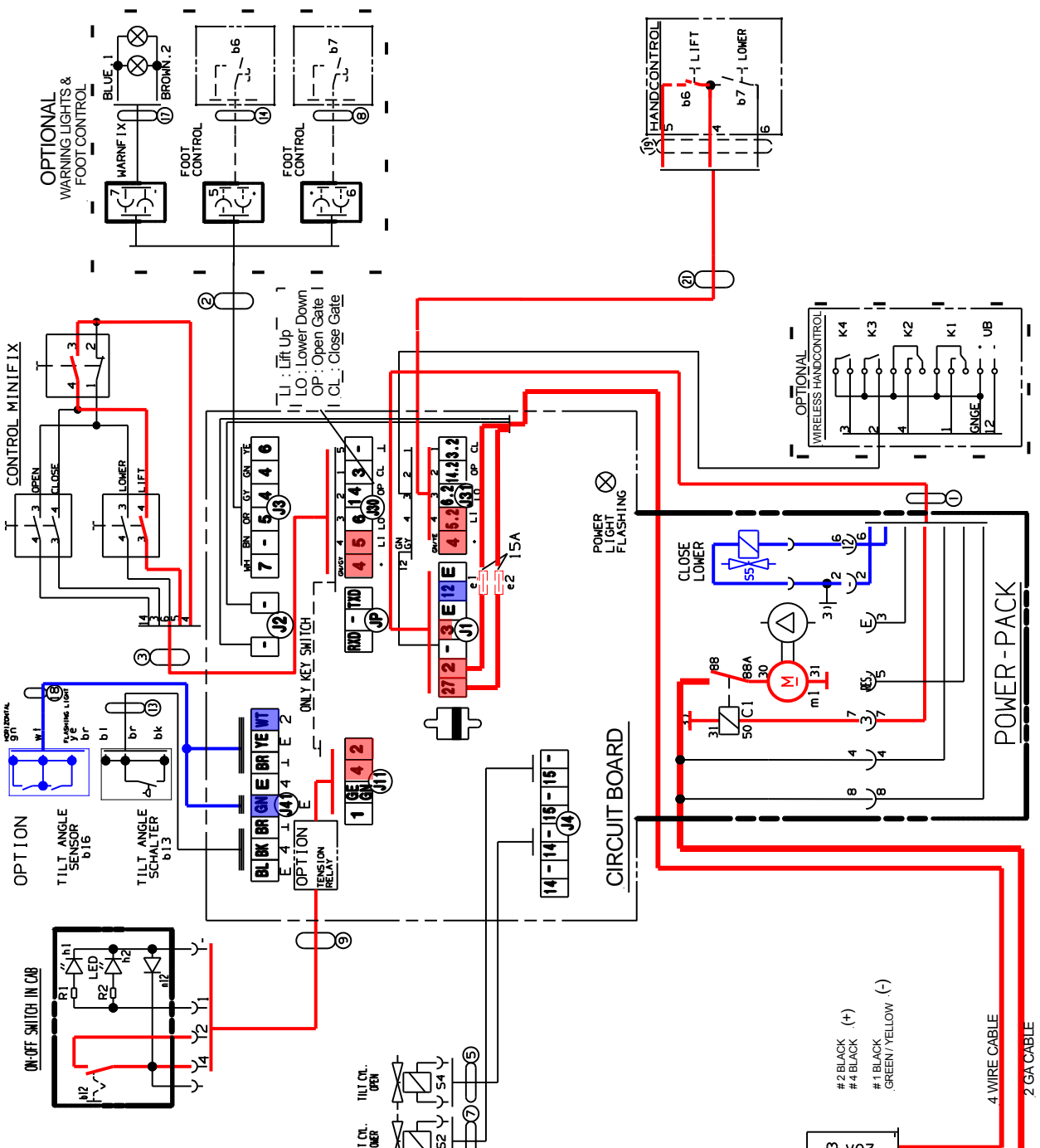
— Low pressure

— Vacuum

K1Plus - Minifix - Series Lift up and level out schematic

CABLE	FUNCTION
1	LIGHTS 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	LOWERSIGNAL
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

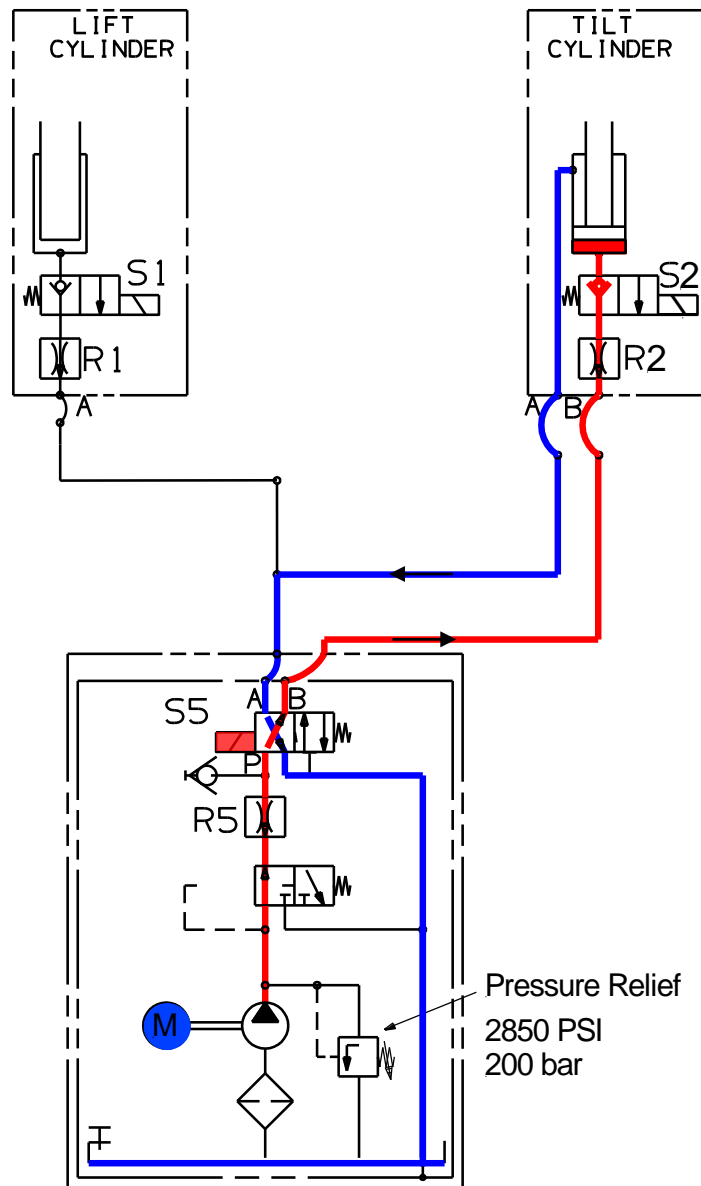


#2 BLACK (+)
 #4 BLACK
 #1 BLACK
 GREEN-YELLOW (-)

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.



High pressure

Low pressure

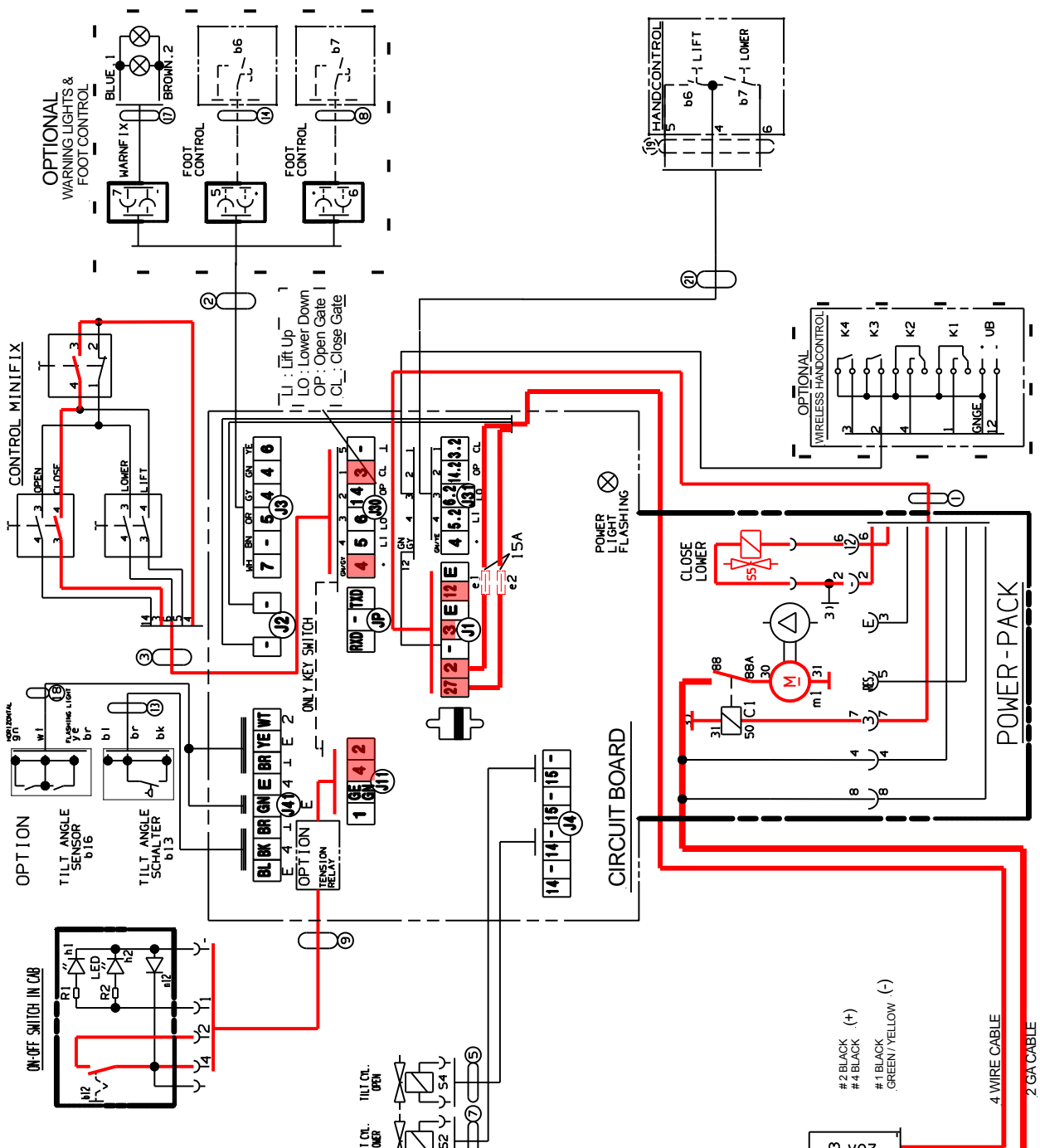
Vacuum

K1Plus - Minifix - Series Tilt close schematic

CABLE	FUNCTION
1	LIGHTS 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	LOWERSIGNAL
12	ENGAGES SHIFT SOLENOID S5
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



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