

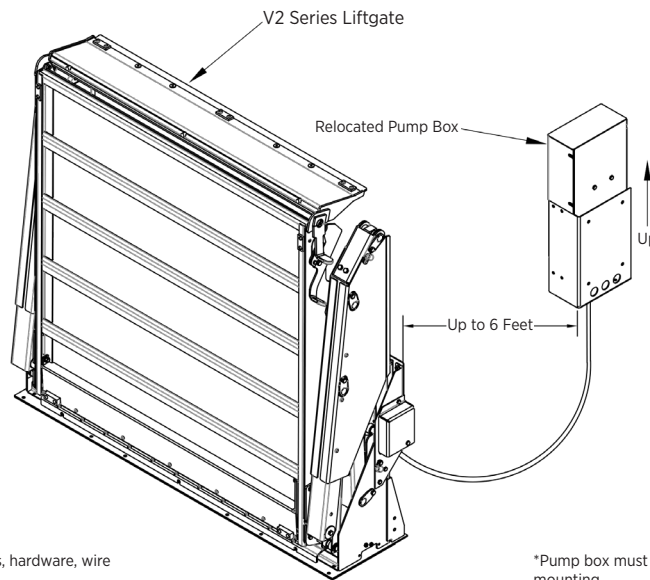
V2 PUMP BOX RELOCATION KIT



Provides the option to relocate the pump box up to 6 feet

V2 Pump Box Relocation Kit: Part No. 15903

This kit will allow upfitters to relocate the V2 pump box up to 6 feet from the original location; providing flexibility if the original location prohibits or interferes with additional equipment installation.

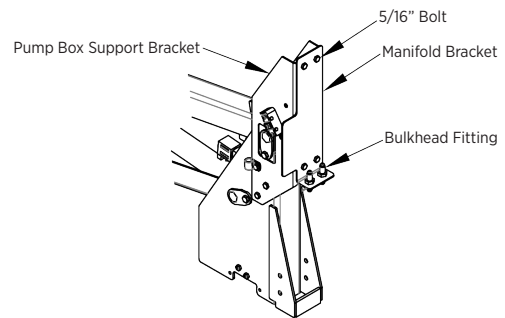
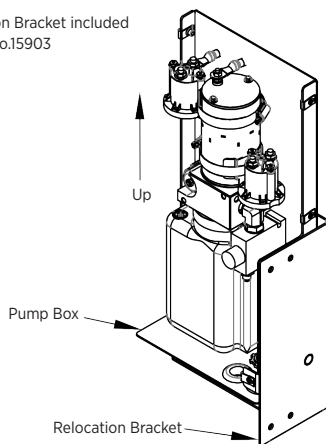


*Kit includes: Brackets, wiring, hoses, hardware, wire and hose loom.

*Pump box must remain in vehicle position after mounting

*The above kit is compatible on all V2 model liftgates. For latest installation insutructions go to www.tommygate.com

*Relocation Bracket included in Part No.15903



*Manifold Bracket, 5/16" Bolts & Bulkhead Fitting included in Part No.15903

In view of the responsibility of altered-stage vehicle manufacturers to comply with all applicable vehicle certification, Tommy Gate offers its "V2 Pump Box Relocation kits" as a possible solution. However, it is the sole responsibility of the upfitter/final stage manufacturer to determine if the Tommy Gate V2 Pump Box Relocation interferes with any other applicable vehicle certification - and it is not the responsibility of Tommy Gate/Woodbine Manufacturing Company. Any information made available by Tommy Gate regarding its V2 Pump Box Relocation Kit is not intended to be, and shall not be, relied upon as a final determination of compliance with any other vehicle certification. Each distributor must, on its own, make each such required determination for each vehicle it offers to a customer. Tommy Lifts are industrial products for material handling only and are not to be used as personnel or wheelchair lifts. For safe handling and operating instructions, visit: www.tommygate.com. This price sheet is a supplement, effective April 2019, All terms and conditions of sale apply. Please see the Tommy Gate Liftgate Price List for complete information.

These instructions will aid you in relocating the pump box on a Tommy Gate V2 series liftgate.

Note: The pump box must remain in a vertical position after remounting (Figure 1).

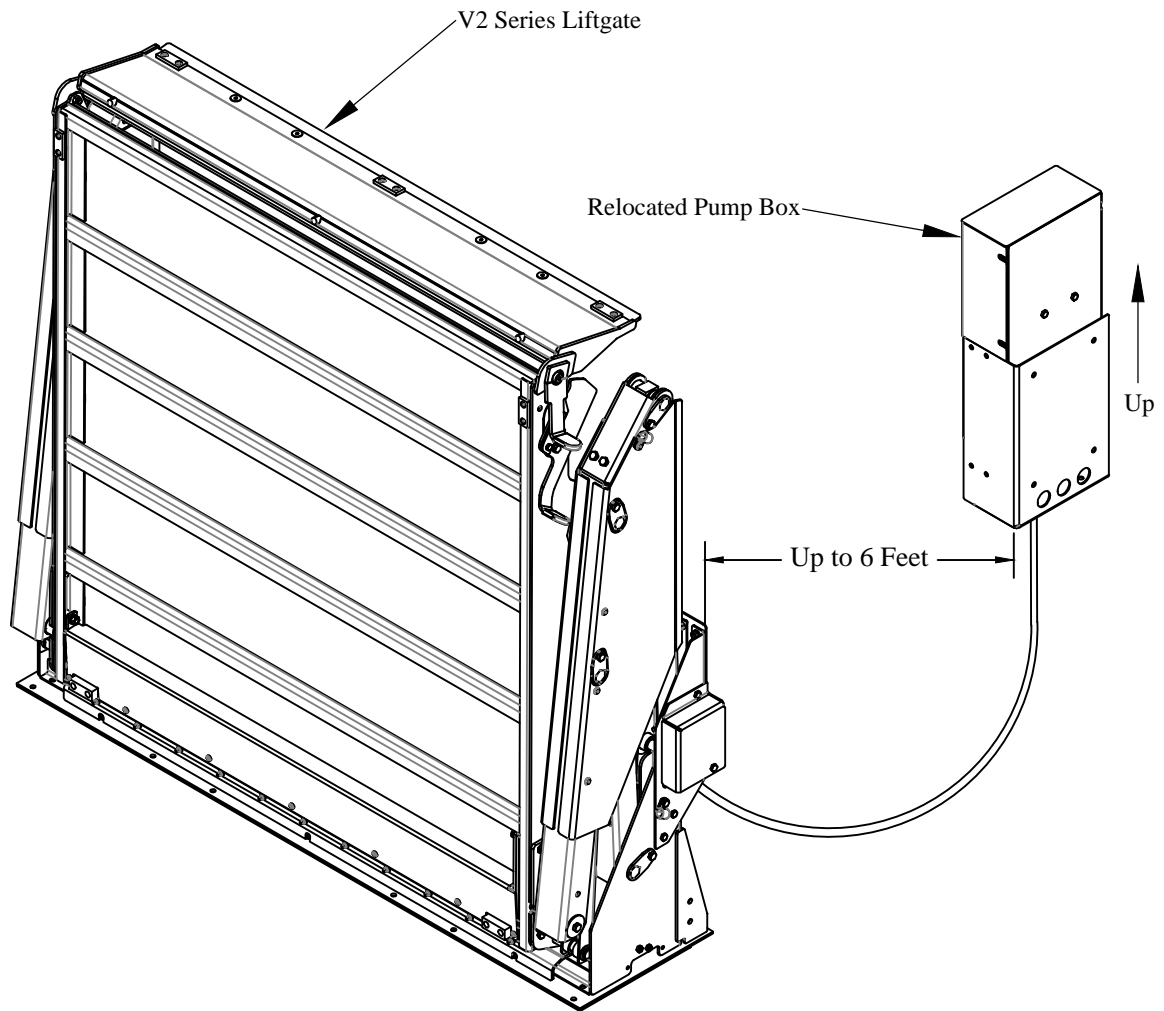


Figure 1: V2 Pump Box Relocation

V2 Pump Box Relocation Instructions

Preparing for the Relocation

1. Verify repair kit (Figure 2 and Table 1).

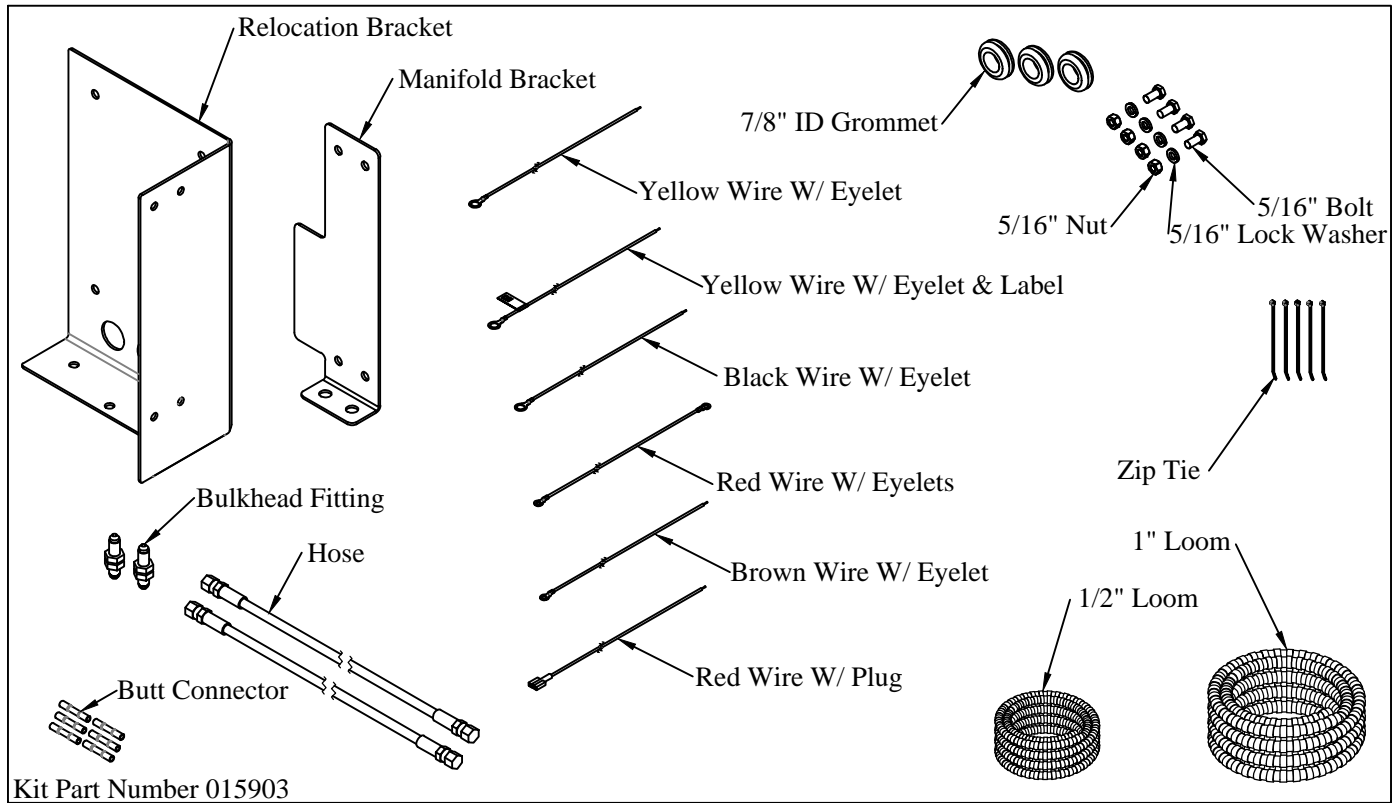


Figure 2: V2 Pump Box Relocation Part Identification

Table 1: Part List

QTY.	PART NO.	DESCRIPTION
1	015891	V2 PUMP BOX RELOCATION BRACKET COMP
1	015892	V2 MANIFOLD BRACKET
2	010576	04MJIC-04MJIC BULKHEAD FITTING
2	013042	1/4"x91.75" HYD HOSE
6	009089	16-14 HEAT SHRINK BUTT CONNECTOR
1	015894	16GA. YELLOW 96" WIRE W/ (1) 5/16 EYELET
1	015899	16GA. YEL 96" WIRE W/ 5/16 EYE & DN LBL
1	015895	16GA. BLACK 96" WIRE W/ (1) 5/16 EYELET
1	015896	16GA. RED 116" WIRE W/ #10 EYELETS
1	015897	16GA. BROWN 96" WIRE W/ (1) #10 EYELET
1	015898	16GA. RD 116" WIRE W/ (1) FULL INS QD PLUG
4	000543	5/16-18x5/8" HHCS GR5
4	000584	5/16" SPRING LOCK WASHER
4	000554	5/16-18 GR5 NUT (ZINC)
8FT	015904	1" ID SPLIT CORRUGATED LOOM
8FT	015905	1/2" ID SPLIT CORRUGATED LOOM
5	009077	3/16"x7-1/2" CABLE TIE
3	004199	7/8" ID GROMMET

V2 Pump Box Relocation Instructions

Preparing the Gate

1. **Open** the van's rear doors.
2. **Lower** the liftgate to the ground.
3. **Disconnect** the 4 GA. power cable from the positive side of the battery (Customer Connection Point on the driver seat pedestal on Ford Transit) or manually **Trip** the circuit breaker (Figure 3).

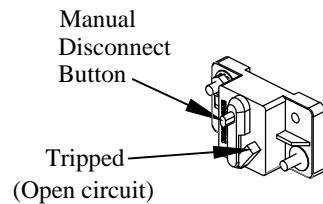


Figure 3: Manually trip circuit breaker.

Relocating the Pump Box

1. **Remove** the pump box cover by removing five (5) thumb screws (Figure 4).

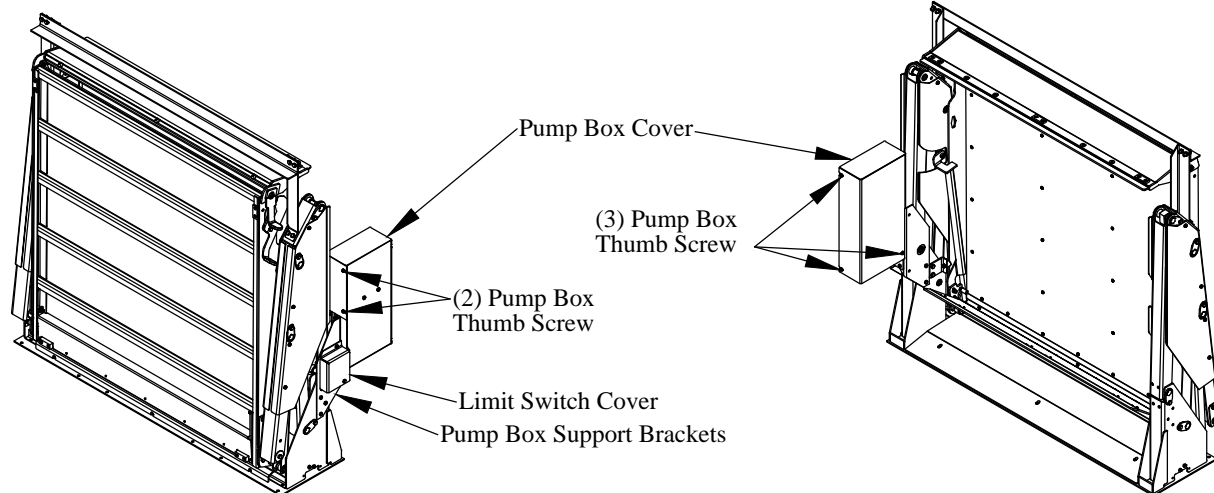


Figure 4: Pump Box.

2. **Remove** and **Save** limit switch cover (Figure 4).
3. **Disconnect** all wires from limit switch (Figure 8).
4. **Remove** brown wire from lower solenoid contactor (Figure 8).
5. **Remove** yellow wire from lower solenoid contactor (Figure 8).
6. **Remove** red wire from small post on raise solenoid (Figure 8).
7. **Disconnect** red wire from inline fuse wire (Figure 8).
8. **Remove** and **Save** ground bolt from power unit (Figure 8).
9. **Loosen** control cord strain relief in bottom of pump box.
10. **Remove** control wires and yellow wires from pump box.
11. **Mark** the hoses and flow divider for driver and passenger side. The driver side hose is closer to the driver side of the van.

Note: Have rags available for next step to clean up any oil spills.

V2 Pump Box Relocation Instructions

Relocating the Pump Box (Continued)

12. Disconnect hoses from flow divider and **Remove** from pump box.

13. Position and **Mount** the pump box relocation bracket to van wall or floor as desired (hardware not included).
The pump box must remain in a vertical position after remounting (Figure 5).

Note: If the power cable is not long enough for pump box to reach desired location, reroute or replace with new power cable from Tommy Gate. **Do Not** splice power cable.

14. Support the pump box to keep it from falling in next step.

15. Remove and **Save** four (4) 5/16" bolts with lock washers and nuts attaching pump box to support brackets (Figure 4).

16. Install pump box in pump box relocation bracket using bolts removed in previous step (Figure 5).

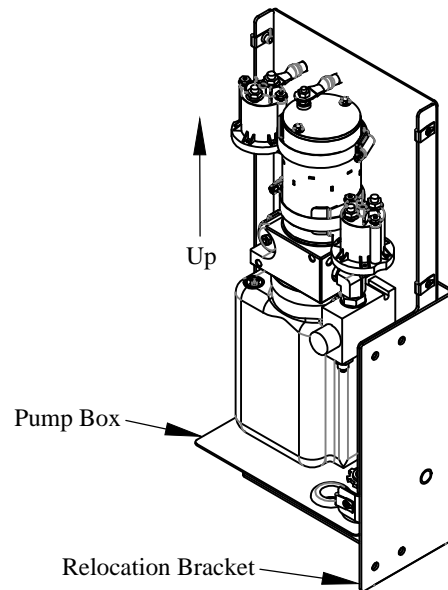


Figure 5: Pump Box Mounted in Vertical Position on Relocation Bracket.

17. Install manifold bracket on the pump box support brackets with provided 5/16" bolts, lock washers and nuts (Figure 6).

18. Install bulkhead fittings in manifold bracket (Figure 6).

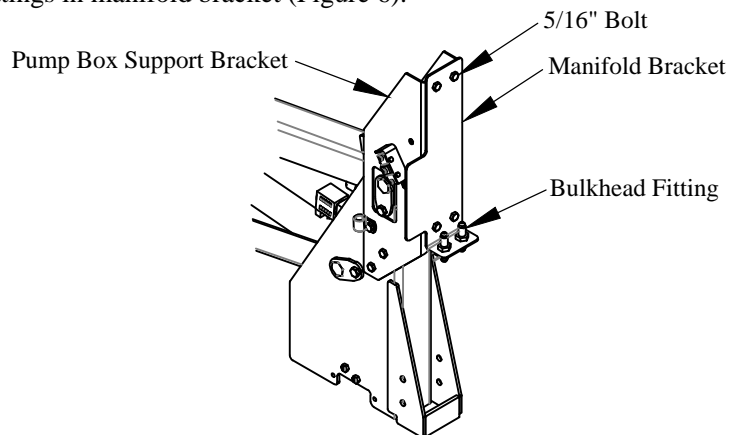


Figure 6: Manifold Bracket.

19. Install liftgate hoses on top of bulkhead fittings.
Keep driver side hose closer to driver side of van.

20. Install included hoses on bottom of bulkhead fittings.

V2 Pump Box Relocation Instructions

Relocating the Pump Box (Continued)

21. **Route** the free end of the included hoses through the grommets in the bottom of the pump box.
Protect hoses from metal edges with grommets (included) or edge seal (not included).
22. **Install** hoses on flow divider.
Match up hose sides as previously marked.
23. **Install** blue and green control wires to terminal 1 (common) on limit switch (Figure 8).
24. **Install** orange control wire and provided red wire with eyelets to terminal 2 (normally closed) on limit switch (Figure 8).
25. **Replace** limit switch cover (Figure 4).
Do Not over tighten bolts and crush the cover.
26. **Install** provided brown wire on lower solenoid contactor where factory brown wire was previously removed (Figure 8).
27. **Install** provided yellow wire with "DN" label to lower solenoid contactor where factory wire was previously removed (Figure 8).
28. **Install** provided red wire with plug onto inline fuse wire (Figure 8).
29. **Install** remaining black and yellow wires on power unit ground bolt with 4 AWG and lower solenoid ground wires (Figure 8).
30. **Route** red wire from limit switch through strain relief in pump box and **Install** on raise solenoid where factory wire was previously removed (Figure 8).
31. **Route** control wires and yellow wires through strain relief out of pump box.
32. **Route** wires along hoses.
Protect wires from metal edges with grommet (included) or edge seal (not included).
33. **Match** loose wires up to previously removed wires.
Note: Polarity of yellow wires are reversible.
34. **Trim** and **Strip** wire ends as needed.
35. **Connect** wires with provided heat shrink butt connectors.
36. **Verify** wiring matches diagram (Figure 8).
37. **Install** 1/2" convoluted loom over wiring.
38. **Tighten** strain reliefs.
39. **Install** 1" convoluted loom over hoses.
40. **Secure** excess hose and wire length with provided zip ties.

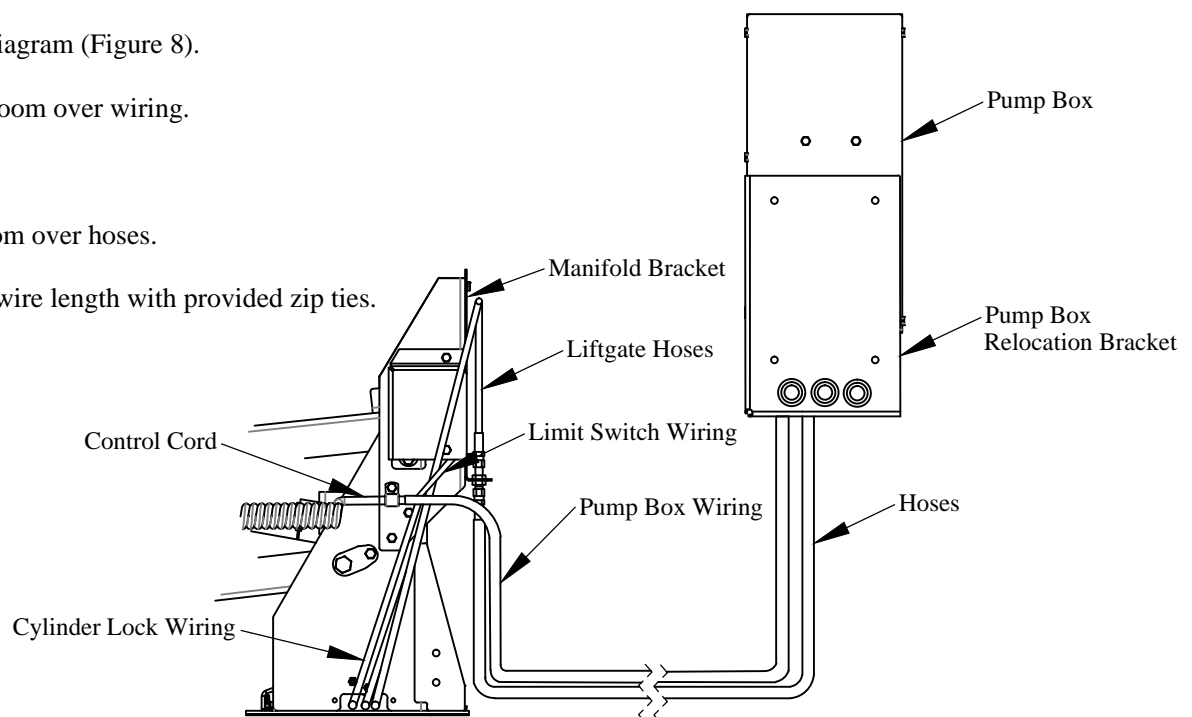


Figure 7: Completed Install.



ELECTRICAL WIRING DIAGRAM

Pendant Control

!!! PLEASE READ AND FOLLOW ALL DIRECTIONS BEFORE PROCEEDING !!!



NOTE !!! IF GATES ARE NOT WIRED IN ACCORDANCE WITH THIS DIAGRAM YOUR WARRANTY WILL BE VOID.



WELDING NOTE !!! DISCONNECT ALL BATTERY CABLES. ALWAYS DISCONNECT THE GROUND CABLE FIRST. ATTACH THE WELDING GROUND TO THE TRUCK RATHER THAN THE LIFTGATE.

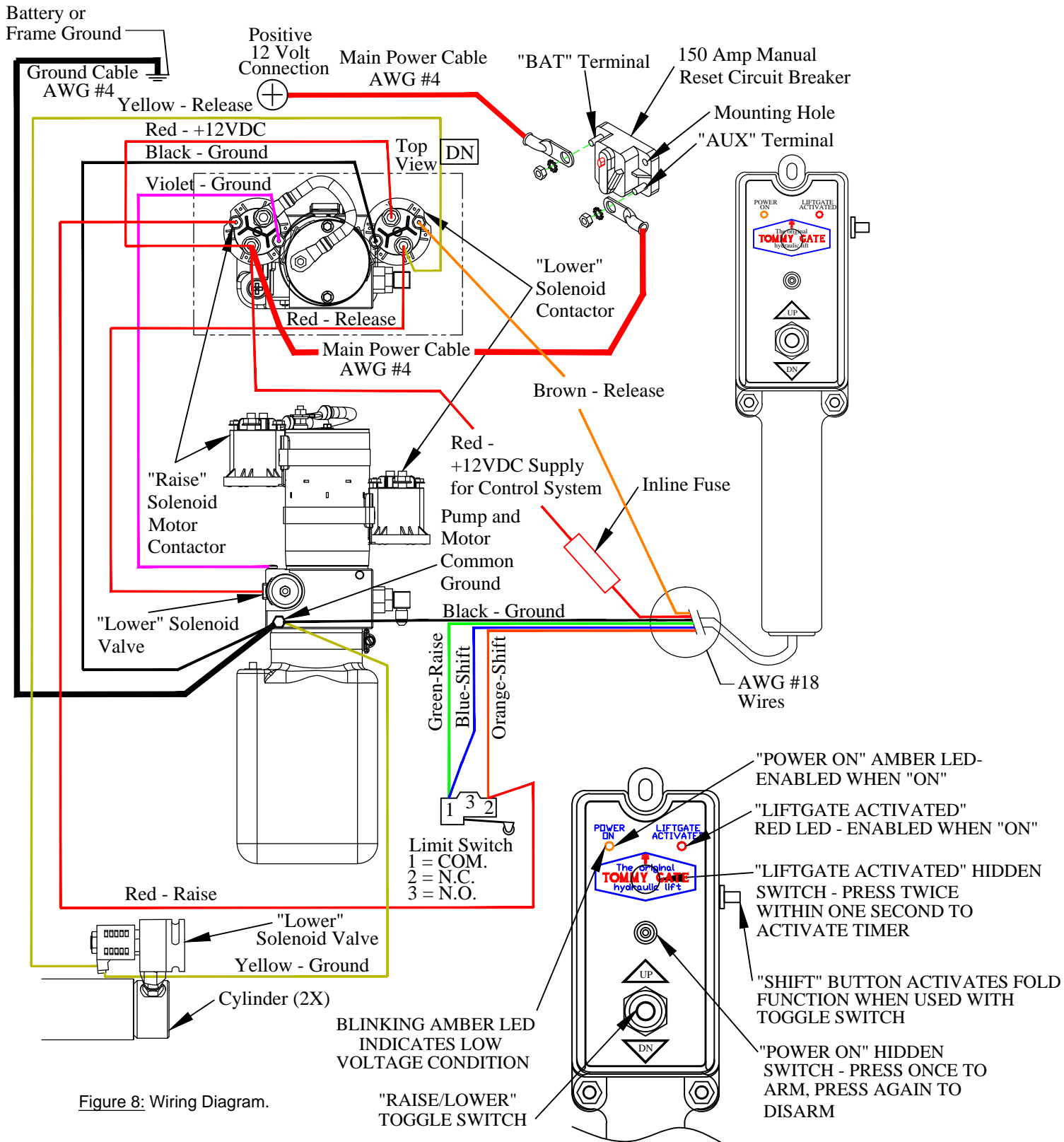
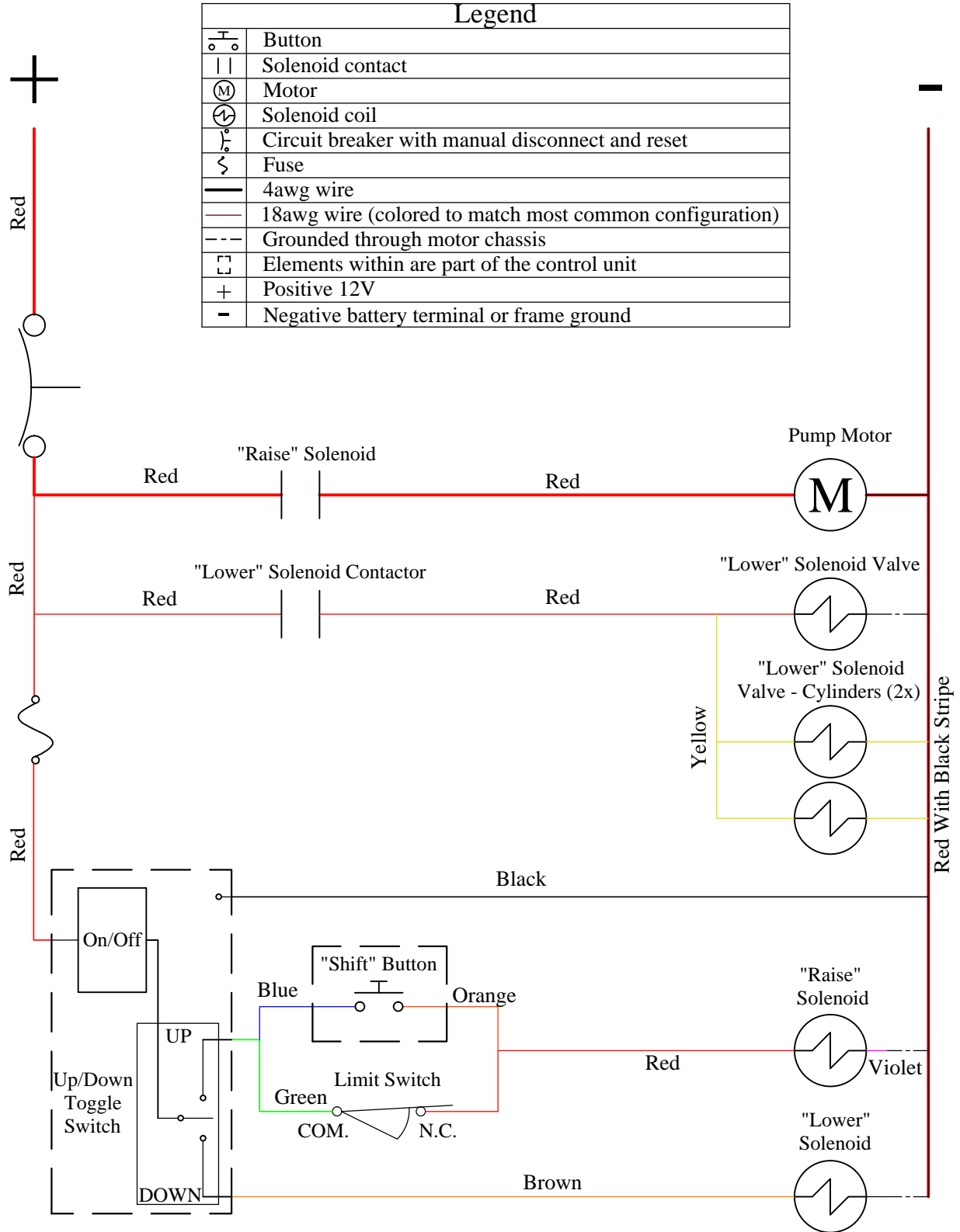


Figure 8: Wiring Diagram.



V2 POWER UNIT CONTROL CIRCUIT



V2 Pump Box Relocation Instructions

Finishing the Install

Note: The recommended hydraulic oil for this liftgate is ISO grade 32, Dexron, or equivalent.

1. **Check** if the reservoir is at least 1/2 to 3/4 full with the platform on the ground, if it is, Skip to Step 5.
2. **Remove** the vent plug from the pump reservoir (Figure 9).

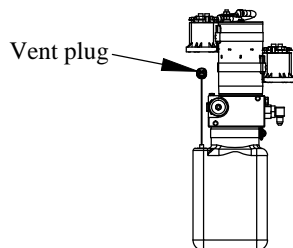


Figure 9: Vent plug.

3. **Add** enough recommended hydraulic oil to fill the reservoir 1/2 to 3/4 full.
(The platform should be on the ground at this point or the reservoir will be overfilled.)
4. **Install** the vent plug in the pump reservoir (Figure 9).
5. **Install** the pump box cover and screws.
6. **Connect** the 4ga power cable to the positive side of the battery (Customer Connection Point on the driver seat pedestal on Ford Transit) or manually **Engage** the circuit breaker (Figure 10).

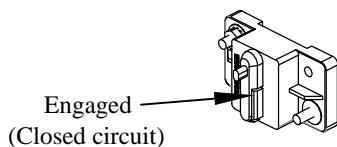


Figure 10: Engage circuit breaker.

7. **Test** operation of liftgate.
8. **Raise and Store** the platform.