

LINK[®] Auxiliary Suspensions

INSTALLATION INSTRUCTIONS PARTS LIST

AIR CONTROL KITS
(13501025 AND 13501026)



Link Mfg. Ltd.
223 15th St. N.E.
Sioux Center, IA USA
51250-2120
www.linkmfg.com

QUESTIONS?
CALL CUSTOMER
SERVICE
1-800-222-6283

NOTES:

- 1) This kit contains the items needed to install the control system for your Link Auxiliary Suspension on a typical truck. Your specific situation may require additional components or may not use all the provided components. Please contact Link Customer Service if you have questions.
- 2) Considerations should be made to route all wiring and airline in protected locations away from any moving parts.
- 3) Cable ties or other fastening devices may be required to secure airline, wire and/or fittings to truck/suspension.
- 4) For fittings without pre-applied thread sealant, apply Permatex #807 or comparable anaerobic pipe thread sealant to fill three exterior pipe threads on brass fittings and tighten 1-½ revolutions beyond hand tight.

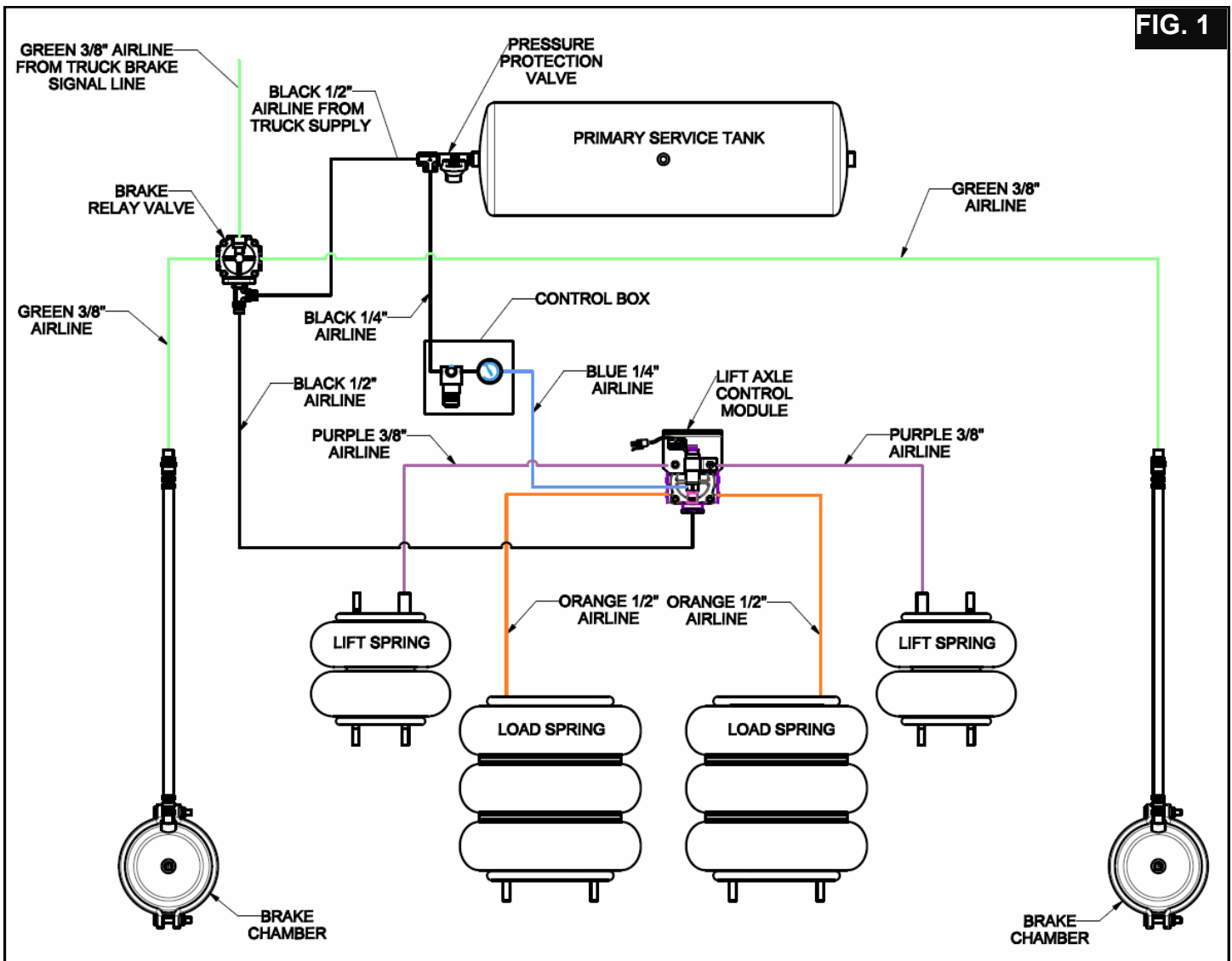
NOTICE This kit is for a self-steer suspension in which the driver wants the lift axle to be up when ignition is off.

PLUMBING INSTRUCTIONS—Refer to FIG. 1 and Parts List for Details

- A. Connect the pressure protection valve directly to the air supply tank on the truck using either the 3/8 NPT or 1/2 NPT reducer and the 1/4 NPT nipple fitting (Items 5, 6 & 7). Install the street tee (Item 19) into the output port of the pressure protection valve. Finally, install the connectors (Items 9 & 18) into the street tee for supplying air to the brake valve (1/2" line) and the control box (1/4" line).

NOTICE Make sure direction of flow for the system matches flow indicator on the pressure protection valve.

- B. Mount the control panel/box (Item 27 or 28) to the truck exterior in the desired location for driver convenience, making sure air controls are easily accessible. (Some states may allow in cab mounting of the air control box.)
- C. Mount the brake relay valve (Item 1) to the truck near the auxiliary suspension. Assemble the fittings for the brake signal (Item 14), brake air supply (Item 20), and brake valve output (2x Item 16).
- D. Mount the lift axle control module (Item 2) to the truck in a protected location, making sure that the exhaust is oriented down. Assemble the fittings for the signal pressure (Item 17), the lift springs (2x Item 16), and load springs (2x Item 15) to the lift axle control module.



PLUMBING INSTRUCTIONS CONTINUED...

- E. Connect to the signal line of the truck's air brake system using the provided tee fitting (Item 10) and run 3/8" green airline to the brake signal port on the brake valve.
- F. Use 1/2" black airline to connect the brake valve to air supply tank.
- G. Assemble the bulkhead union fittings and 45 degree street elbows (Items 12 & 13) to the suspension hanger brackets. See **FIG. 2** for details.
- H. Use 3/8" green airline to connect the brake valve outputs to the bulkhead union fittings from the previous step. See **FIG. 2** for recommended routing and clipping.
- I. Connect the brake chambers using the 90 street elbows and brake hoses (2x Items 21 & 8).
- J. Connect the lift springs to the lift axle control module using 3/8" purple airline and elbow fittings (2x Item 14). See **FIG. 3** for recommended routing.
- K. Connect the load springs to the lift axle control module using 1/2" orange airline and elbow fittings (2x Item 11). See **FIG. 4** for recommended routing.
- L. Route the supply airlines to the brake valve and the lift axle control module (1/2" black). Also route the airlines to the control box (1/4" black) and from the control box to the signal port on the lift axle control module (1/4" blue). See **FIG. 1** for details.
- M. Secure any loose components to the truck.

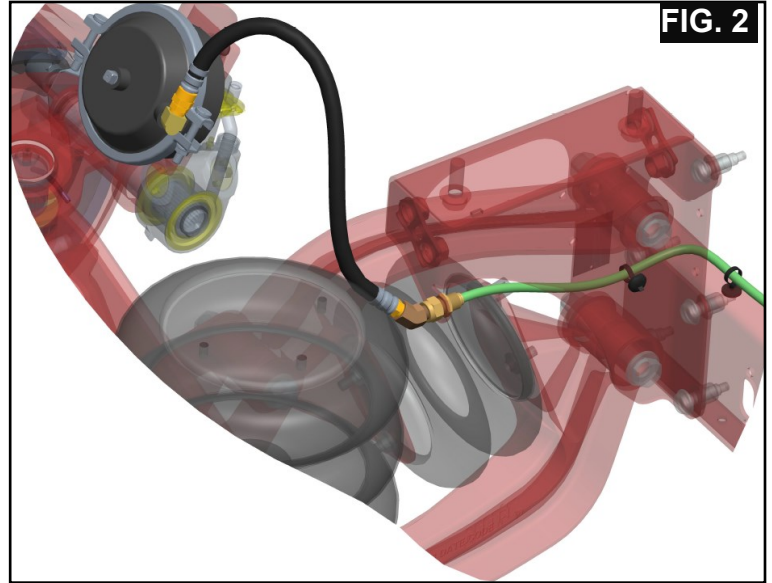


FIG. 2

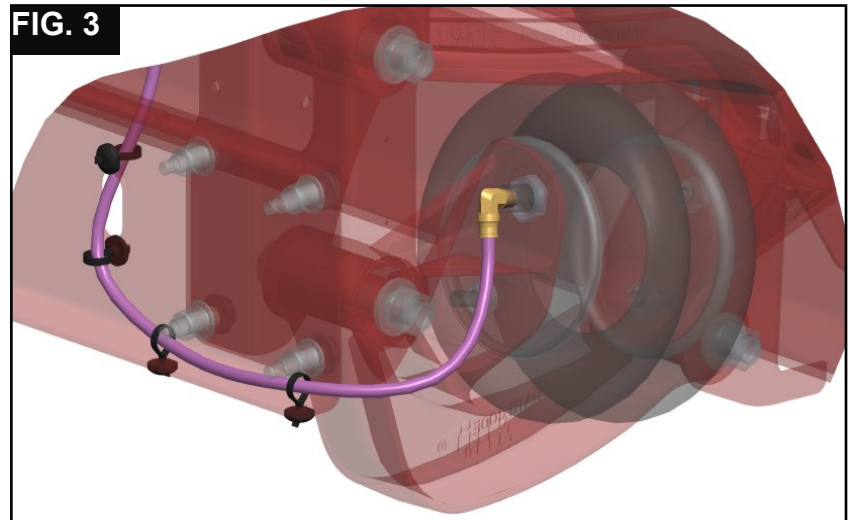


FIG. 3

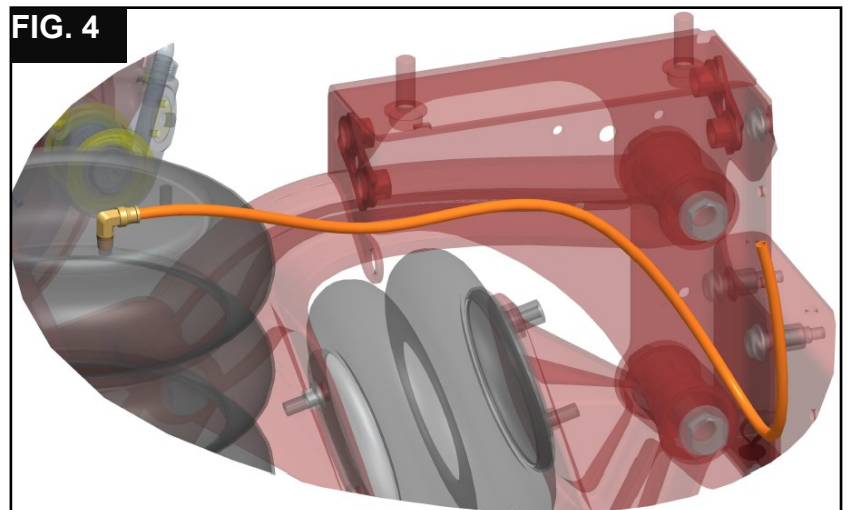


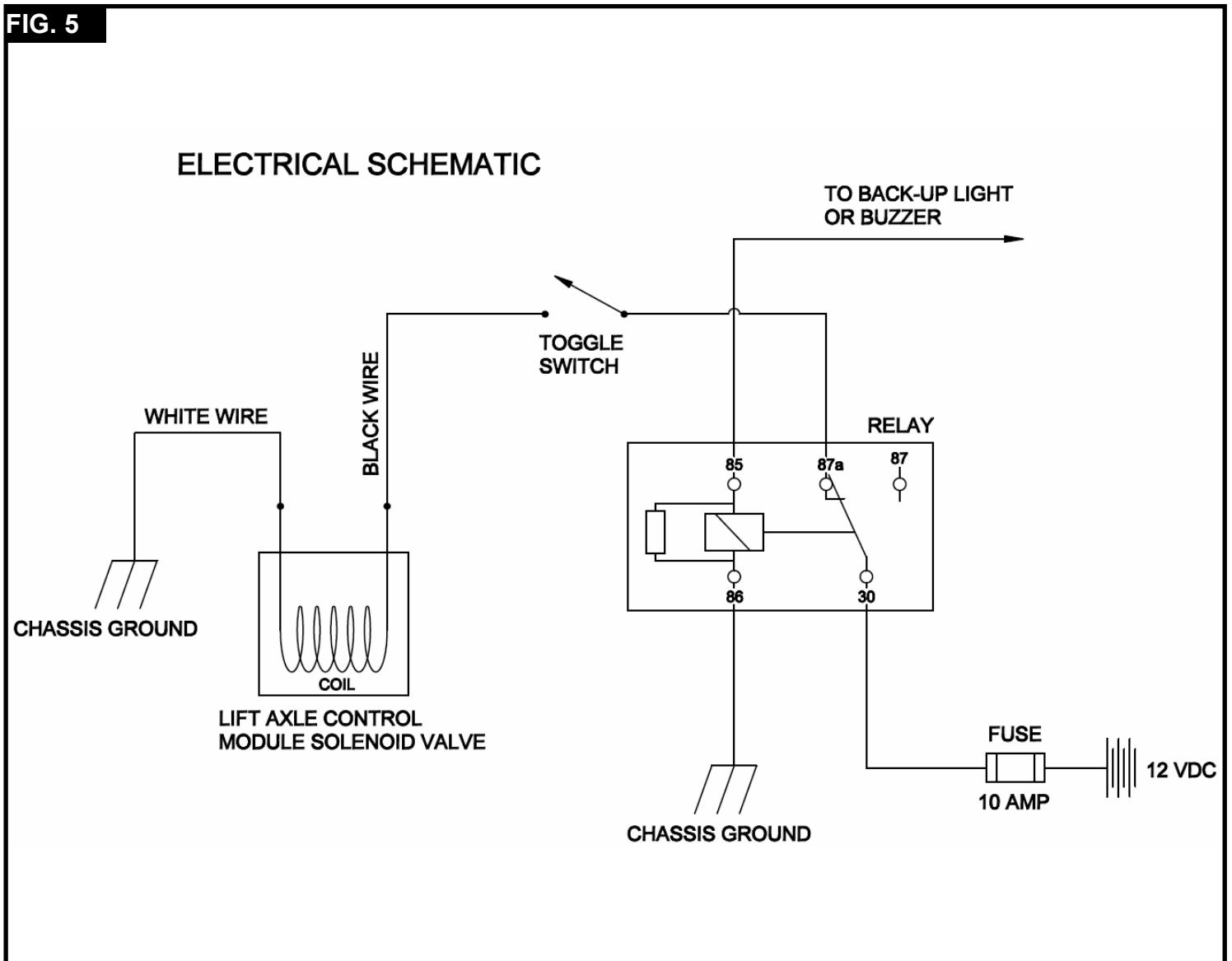
FIG. 4

ELECTRICAL INSTRUCTIONS

⚠ CAUTION Always disconnect the battery while working with the vehicle's electrical system.

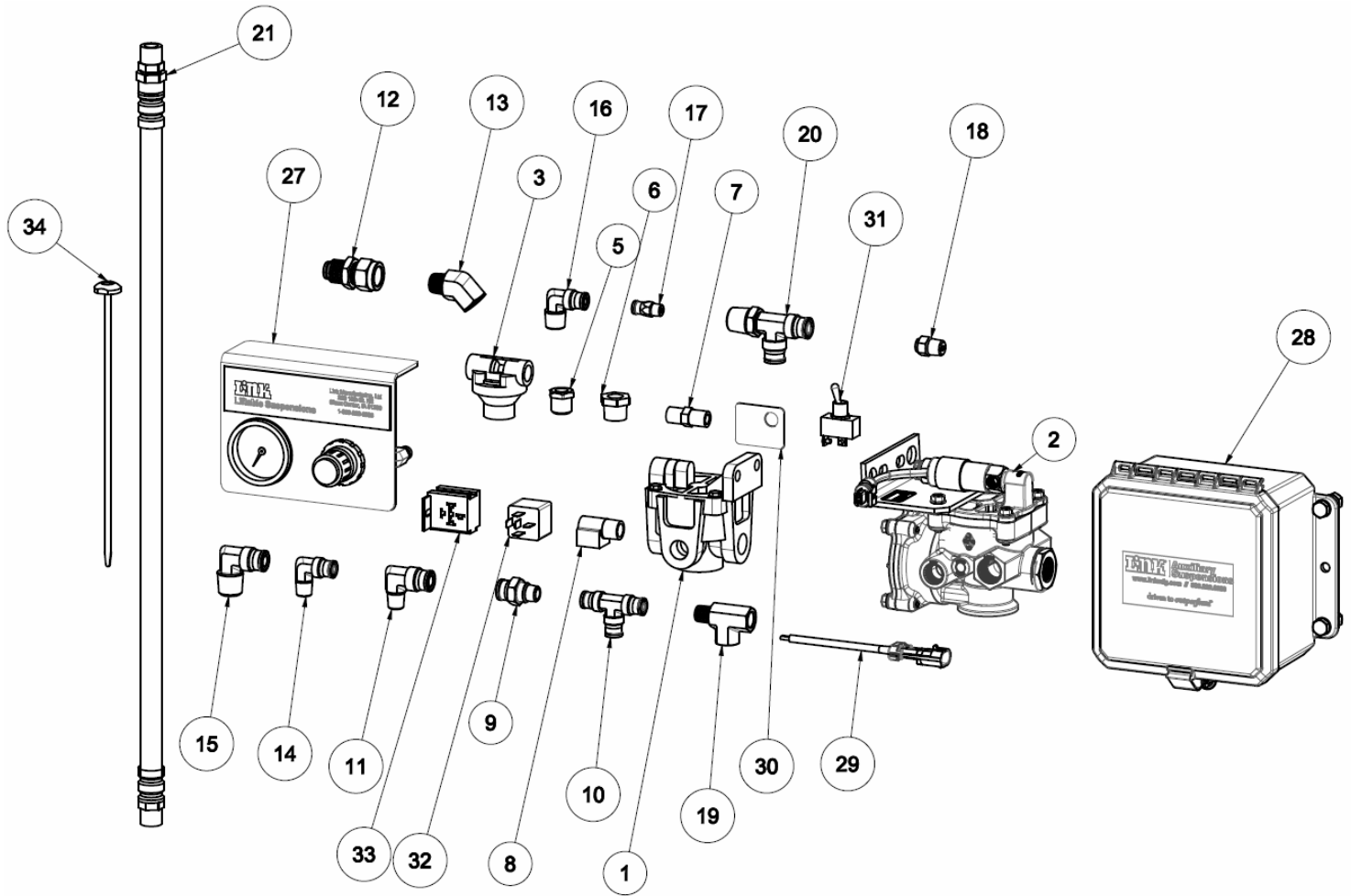
- A. Mount the relay base to the truck in a protected location. **NOTE:** If there is an open slot in the truck's relay panel and you wish to wire your relay through this panel you will not need the supplied relay base.
- B. Make all wiring connections to the relay as shown in **FIG. 5**, crimping push-on connectors (not provided) to wires and mounting them in the supplied relay base. **NOTE:** Make sure the 12 VDC source is switched (turns off with the key).
- C. Make connections to the toggle switch from terminal 87a on the relay, and the black wire from the solenoid valve wire harness.
- D. Attach the white wire from the solenoid valve wire harness to a reliable grounding point on the truck. Attachment to the truck frame is **NOT** sufficient for a trouble-free ground.
- E. Mount the toggle switch and toggle switch plate to the interior of the truck in a desired location. **NOTE:** Make sure that lift axle position correlates with "Raise / Lower" position on toggle switch plate (tab on toggle switch plate may need to be removed).
- F. When all electrical connections have been made, reconnect the battery, pressurize the system and tighten any fittings that are leaking.

FIG. 5



Control and Installation Kit Parts List

Standard Control (13501025) or Sealed Control (13501026)



ITEM	DESCRIPTION	13501025 QTY	13501026 QTY	ITEM	DESCRIPTION	13501025 QTY	13501026 QTY
1	RELAY VALVE, RG-2, MIDLAND	1	1	18	CONNECTOR-MALE, 1/4 NPT 1/4 TB	1	1
2	LIFT AXLE CONTROL MODULE	1	1	19	TEE-STREET, 1/4 NPT	1	1
3	VALVE-PRESSURE PROTECTION	1	1	20	TEE-RUN-MALE-SWIVEL, 1/2 NPT 1/2 TB	1	1
4	AIRLINE-NYLON, .250 O.D., BULK	30 ft	30 ft	21	ASSEMBLY-AIR BRAKE HOSE (26 IN.)	2	2
5	BUSHING-REDUCER 3/8 M-NPT TO 1/4 F-NPT	1	1	22	AIRLINE-NYLON, BLUE, 0.25 O.D., BULK	30 ft	30 ft
6	BUSHING-REDUCER, 1/2 M-NPT - 1/4 F-NPT	1	1	23	AIRLINE-NYLON, PURPLE, .375 O.D., BULK	12 ft	12 ft
7	HEX NIPPLE, 1/4 M-NPT	1	1	24	AIRLINE-NYLON, GREEN, .375 O.D., BULK	20 ft	20 ft
8	ELBOW, 90 STREET (3/8-NPT)	2	2	25	AIRLINE-NYLON, .500 O.D., BULK	20 ft	20 ft
9	CONNECTOR-MALE, 1/4 NPT 1/2 TB	1	1	26	AIRLINE-NYLON, ORANGE, .500 O.D., BULK	12 ft	12 ft
10	TEE-UNION, 3/8 TB	1	1	27	AIR CONTROL ASSEMBLY	1	-
11	ELBOW-MALE, 1/4 NPT 1/2 TB	2	2	28	CONTROL BOX, SEALED	-	1
12	UNION-BULKHEAD-FEMALE, 3/8 NPT 3/8 TB	2	2	29	HARNESS-WIRE	1	1
13	ELBOW-STREET-45, 3/8 NPT	2	2	30	PLATE-SWITCH, LIFT	1	1
14	MALE-ELBOW, 1/4 NPT 3/8 TB	3	3	31	SWITCH-TOGGLE	1	1
15	ELBOW-MALE, 1/2 NPT 1/2 TB	3	3	32	RELAY	1	1
16	ELBOW-MALE, 3/8 NPT 3/8 TB	4	4	33	RELAY BASE	1	1
17	CONNECTOR-MALE, 1/8 NPT 1/4 TB	1	1	34	CABLE TIE-BUTTON HEAD, 9.63" LONG	10	10