AKTV8

Intelligence In Motion

MiLift

Lift Axle Control System

Trailer

Installation and operating instructions

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Parts Included in Kit

MiLift Installation Kits

Part Number	Description	003514 QTY	
003169	Electronic Control Module	1	
002361	Bracket	1	
003513	Harness, Trailer	1	
002587	Harness, ABS Jumper	1	
003522	Warning Label	2	
002397	Fitting, Tee, Reducer, 3/8” to ¼” PTC	1	
003536	Installation QR Code Card	1	
003601	Fitting, Union, ¼” to 3/8” PTC	1	

Note: See section 7.2 for accessory items

1 General

1.1 Intended Use

This MiLift lift axle system is specifically designed for the heavy-duty trailer industry to control up to two lift axle control valves or axle groups. The system consists of a smart Electronic Control Module (ECM), DOT rated Union T-fitting and OEM compatible wiring harness that connects to the vehicle's existing lift axle control wiring. Locally obtain any additional parts required to properly install the MiLift lift axle system.

The ECM can be programmed to automatically raise and lower up to two sets of lift axles under selected conditions, such as weight limits and/or when the vehicle is in reverse or navigating tight turns. This is done through an APP on an Android device during set up.

1.2 Information About These Instructions

These instructions will enable you to safely install, set up, and operate the MiLift lift axle system. These instructions are an integral part of the product and must be accessible to personnel. Personnel must carefully read through and understand these instructions before starting work of any kind on the lift axle system. Following all the safety and handling instructions contained in this manual is a fundamental requirement for safe working.

1.3 Liability and Warranty

Modification to the MiLift lift axle system may only be carried out by the manufacturer's personnel. If the system requires repairs or servicing beyond the scope of the activities described in these instructions, this work may only be carried out by the manufacturer of the system or by persons who have been expressly authorized and trained by the manufacturer. Furthermore, the air system shall be free of chemical additives such as lubricants, deicers, or antifreeze products Failure to observe the above will void the warranty. The manufacturer accepts no liability for damages incurred.

1.4 Warranty Statement

Items sold by AKTV8 are warranted to be free from defects in materials and workmanship for a period of 2 years from the date of manufacture, provided said items are used according to AKTV8's recommended usages. AKTV8's liability is limited to the repair of, refund of purchase price paid for, or replacement in kind of, at AKTV8's sole option, any items proved defective, provided the allegedly defective items are returned to AKTV8 prepaid. The warranties expressed above are in lieu of and exclusive of all other warranties. There are no other warranties, expressed or implied, except as stated herein. There are no implied warranties of merchantability or fitness for a particular purpose, which are specifically disclaimed. AKTV8's liability for breach of warranty as herein stated is the exclusive remedy, and in no event shall AKTV8 be liable or responsible for incidental or consequential damages, even if the possibility of such incidental or consequential damages has been made known to AKTV8. AKTV8 reserves the right to discontinue manufacture of any product or change product materials, design, or specification without notice. Our policy is one of continuous research and development. We therefore reserve the right to amend without notice the specifications given in this document. Customers are responsible for ensuring that the product is used only for the purpose of which it is intended. In case of doubt, AKTV8 will be pleased to advise.

2 Safety

Knowledge of the procedure to be performed and safe work habits are essential to preventing death, personal injury, or property damage. Use the following statements as a common-sense guide to proper work and tool-use habits.

2.1 Dangers of Compressed Air

DANGER:

Compressed air can cause injuries if not handled correctly. Ensure systems are depressurized before work begins. Work should be carried out by a pneumatics specialist.

2.2 Service Training

- Read and understand the instructions contained in all manuals delivered with the vehicle and MiLift lift axle system.
- Familiarize yourself with the location and proper use of all controls and safety devices.
- Only trained personnel shall install, troubleshoot, or repair the MiLift lift axle system.

2.3 Repair Person Qualifications

Work on the vehicle's electrical system, equipment on the chassis, and the pneumatic/brake systems may be performed only by skilled individuals who have been specially trained for such work.

2.4 Personal Protective Equipment (PPE)

Wear the following PPE while installing or maintaining the MiLift lift axle system:

- Close-fitting work clothes that do not hinder movement
- Safety glasses with side shields
- Hearing protection
- Safety-toed footwear

In addition, before servicing or maintaining the machine:

- Tie back long hair
- Remove all jewelry (including rings)

2.5 Personal Safety Measures

- Follow the specific safety instructions in this manual.
- Block or support the vehicle and parts that may move or fall prior to performing installation or repairs.
- Engine block and muffler system become very hot during operation and require cooldown time after the vehicle is shut off. Avoid contact with hot parts.
- Never use machine parts or attachments/superstructures as a climbing aid.

2.6 Safety Symbols Found in This Manual

DANGER

This symbol and the word 'danger' indicate an immediately dangerous situation that may result in death or serious injury if not avoided.

WARNING!

This symbol and the word ‘warning’ indicate a potentially dangerous situation that may result in death or serious injury if not avoided.

CAUTION!

This combination of symbol and signal word indicates a possibly hazardous situation that may result in damage to property or environmental damage if it is not avoided.

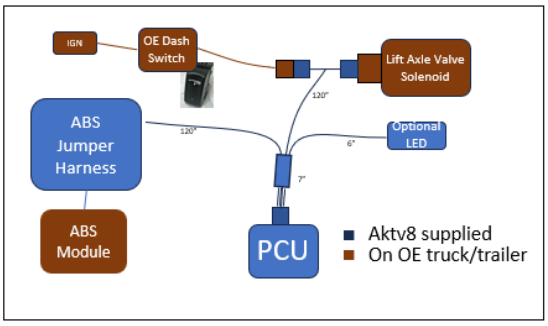
NOTE: *Indicates tips and other useful information*

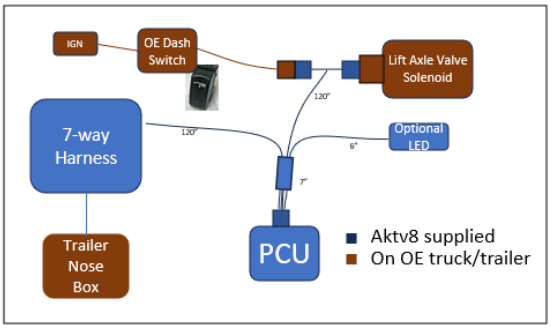
3 Installation

Warning:

To prevent personal injury or death, do not defeat safety devices. Contact the vehicle manufacturer before making any modifications to the vehicle pneumatic brake system.

3.1 MiLift Electrical Installation Overview Trailer





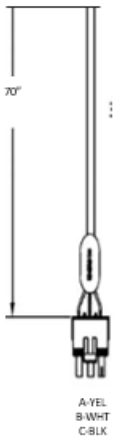
C1				
DESCRIPTION:		PLUG, APEX SHELL F		
CONNECTOR HOUSING:		35063643 APEX 2.8 6-WAY (alt 54200608)		
TERMINAL P/N:		10762803		
CAVITY	CIRCUIT	SIZE	COLOR	DESCRIPTION
1	AK001	16 AWG	BLACK-BLK	BATTY POWER (+)
2	AK002	16 AWG	BLUE-BU	PCM SWITCH INPUT
3	AK004	16 AWG	YELLOW	LED POWER
4				CAVITY PLUG, APEX 2.8
5				CAVITY PLUG, APEX 2.8
6	AK011	16 AWG	WHITE-WH	MOD GROUND (-)

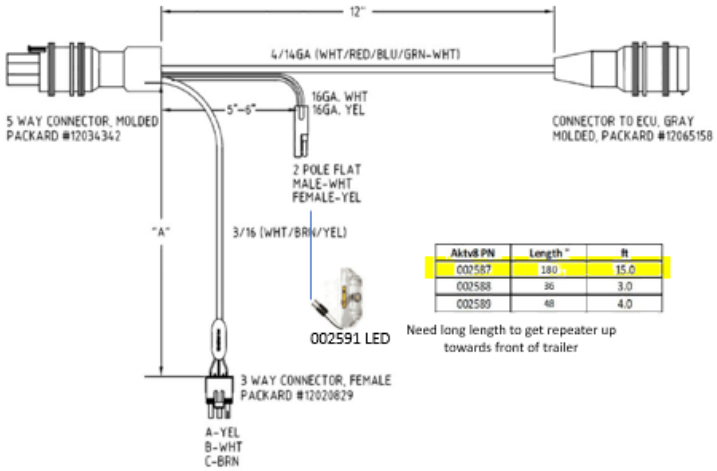
Figure 1

iLift Trailer or MiLift Harness

003578 Harness 7-Way or 002587 Harness ABS Jumper 15'

Alternate Harness for Nose Box Connection

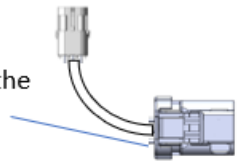




Aktv8 PN	Length "	ft
002587	180	15.0
002588	36	3.0
002589	48	4.0

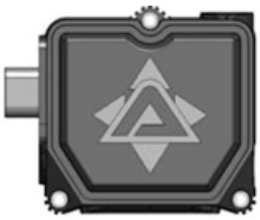
Need long length to get repeater up towards front of trailer

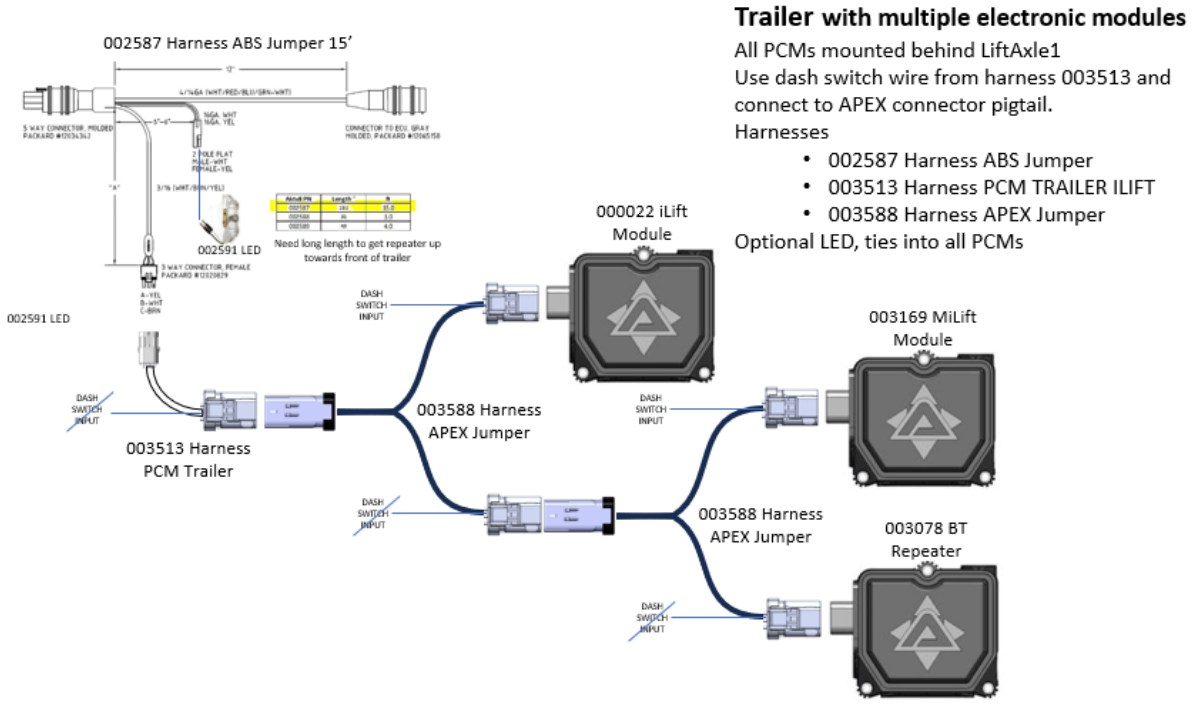
For trailer without dash switch, run the wire to the trailer junction box and connect to Auxiliary/ABS (blue wire) power circuit.



003513 Harness PCM Trailer

000022 iLift Module





Trailer with multiple electronic modules

All PCMs mounted behind LiftAxle1
Use dash switch wire from harness 003513 and connect to APEX connector pigtail.
Harnesses

- 002587 Harness ABS Jumper
- 003513 Harness PCM TRAILER ILIFT
- 003588 Harness APEX Jumper

Optional LED, ties into all PCMs

Note: Optional BT Repeater 003078 is used with TPMS installation

Note: For trailer without dash switch, run the wire to the trailer junction box and connect to Auxiliary/ABS (blue wire) power circuit.

3.2 MiLift Pneumatic Installation Diagram

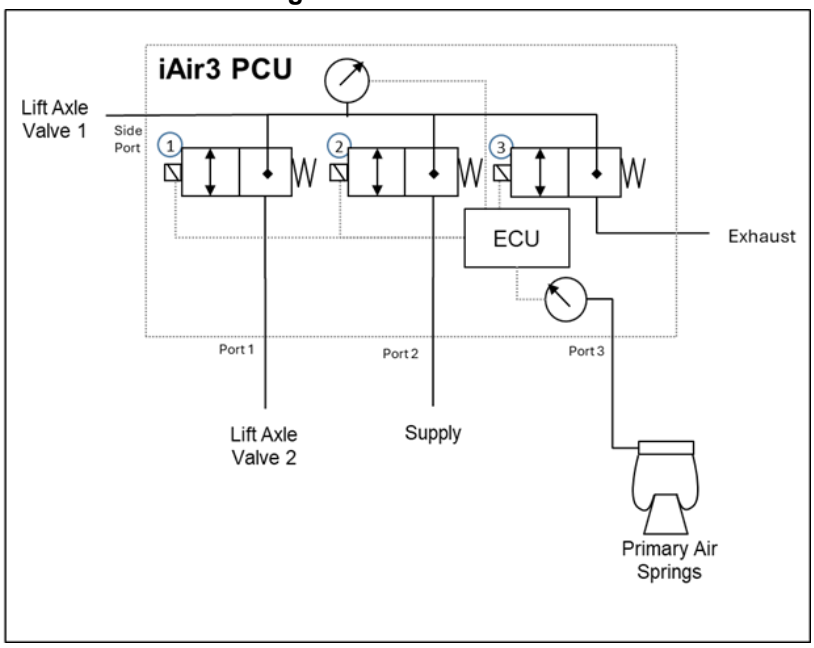


Figure 2

3.3 MiLift Installation

NOTE: All figures represent a typical single axle MiLift installation. The routing, mounting, and installation may vary depending on the vehicle make, model, and configuration. Port 1 on PCU will remain plugged for single lift axle application.

Warning:

To prevent personal injury or death, make sure the parking brake is set, the transmission is in neutral or park, and the wheels are blocked.

1. Park vehicle on flat level surface.
2. Ensure the lift axle(s) is (are) in the lifted position.
3. Support lift axle(s) with suitable blocks or stands.
4. Lower lift axle(s) onto blocks or stands.
5. Drain air from vehicle's main suspension.
6. Drain air tanks until pressure is removed from air system.
7. Disconnect electrical cord from tractor.

CAUTION:

To prevent injury or damage to equipment, do not route wiring harness near heat sources, moving objects, or sharp edges.

CAUTION:

To prevent injury or damage to equipment, do not modify wiring harness without consent from AKTV8.

8. Route wiring harness to trailer ABS control module or alternatively to trailer nose box. Secure with wire ties as needed. Do not re-connect trailer electrical cord at this time. Secure with wire ties as needed.

NOTE: Ensure enough slack is left in wiring harness so that wiring harness connector will reach MiLift Pneumatic Control Unit (PCU) electrical connector.

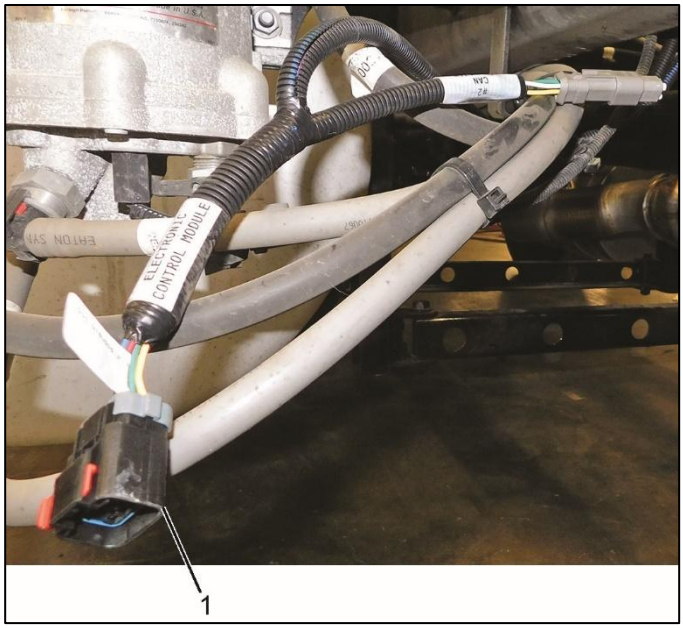


Figure 3

9. Route wiring harness (Figure 3, Item 1) along existing chassis harness or air tubing to desired MiLift PCU location. Use UV-resistant zip ties at 12-inch intervals.

CAUTION!

To prevent injury or damage to equipment, the MiLift PCU must be mounted on a flat surface with the logo out. If mounting vertically, air tubes should face down. If mounting horizontally, ensure it is positioned in a way that water will not collect around wiring harness or air tubes.

Figure 4

10. Use the MiLift PCU (Figure 4) on bracket as a drilling template, mark mounting bolt location for MiLift PCU on flat vibration insulated surface.
11. Drill 8.5 mm holes for MiLift PCU bracket

NOTE: Mounting bolts are not provided with kit. Suitable mounting nuts and bolts must be locally obtained. Always use anti-vibration washers.

12. Mount MiLift PCU (Figure 4) and secure with M8 hex head nuts and bolts, grade 8.8 or better. Torque nuts to 28 Nm ± 2 Nm.
13. Connect wiring harness (Figure 3, Item 1) to MiLift PCU (Figure 4).
14. Route MiLift wire harness (single lead) to lift axle control valve on the vehicle (Figure 5).

Note: For trailer without dash switch, run the wire to the trailer junction box and connect to Auxiliary/ABS (blue wire) power circuit.

15. Connect MiLift wiring harness single lead, to OEM solenoid control (power down) of lift axle valve.

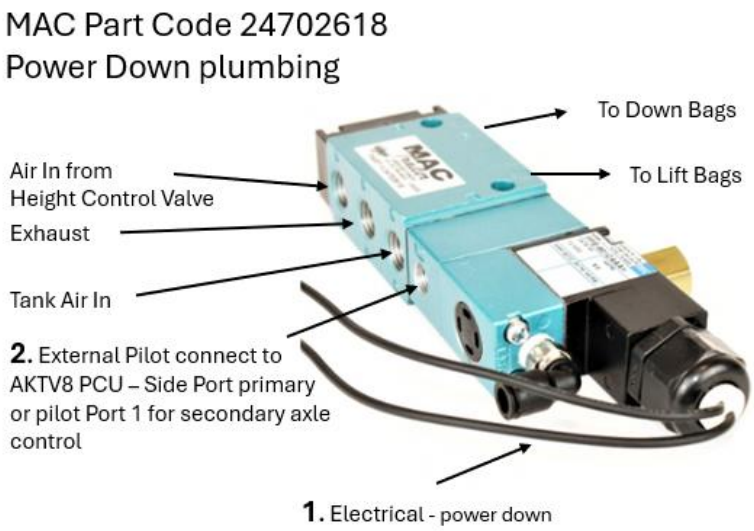


Figure 5

NOTE: The lift axle valve (MAC valve shown, or other valves) is equipped with a control solenoid (NC, power down), unplug the solenoid from the vehicle wiring harness. Connect the tractor/trailer power cord and turn vehicle ignition on and switch OEM lift axle switch to “ON, down”) position and determine the positive (+) wire on electrical plug.

In two control axle applications, select valve for the first axle to deploy to interface with the electrical harness.

16. Cut the positive wire on wire harness. Leave enough space on either side to splice in MiLift wiring harness wire.
17. Crimp butt connectors and heat shrink to assure water tight connection.
18. Re-connect the vehicle wiring harness to the lift axle solenoid solenoid.

19. If your lift axle Control valve is not equipped with a solenoid valve this electrical connections needs to be made in the trailer nose box (Pin 7, ABS power)
20. Disconnect air tube from the lower MAC valve pilot port. (Figure 5, Item 2), tank air.

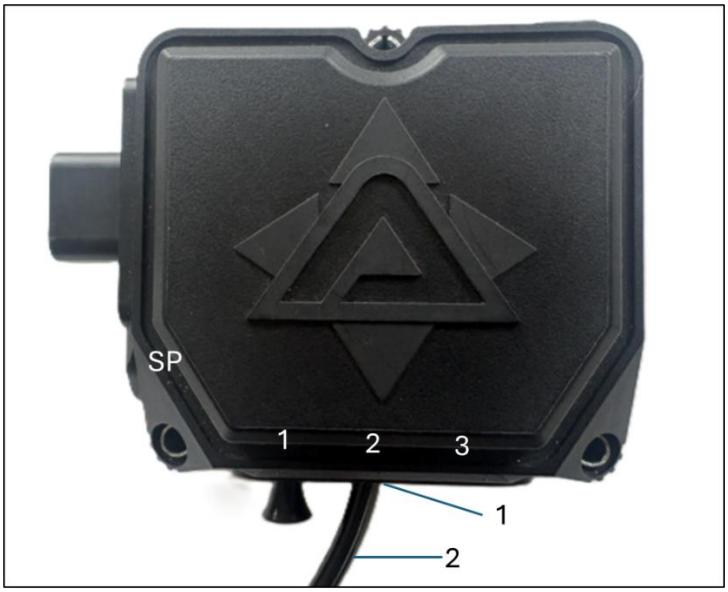


Figure 6

Note: See Figure 2, general pneumatic system diagram.

21. Extend supply pressure air tube or re-route to MiLift PCU supply port 2 (Figure 6, Item 2).

22. Route new air tube outlet from MiLift PCU side port (SP) by electrical connector (Figure 7, Item 1) to MAC valve lower pilot port (Figure 5, Item 2.

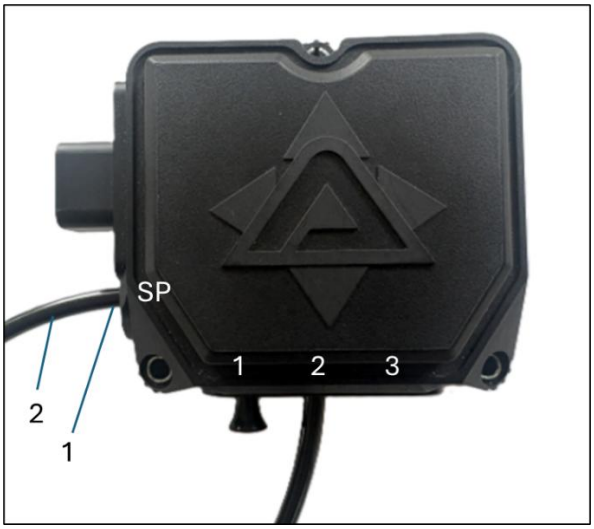


Figure 7

23. Connect air tube (Figure 7, Item 2) to MiLift PCU port SP (Figure 7, Item 1, and secure with wire ties as needed.

Note: To control a second lift axle, the plug in Port 1 needs to be removed and replaced with the pilot air tube to the second lift axle control valve.

24. Using T fitting (Figure 8, Item 3) connect to vehicle air ride suspension supply line (Figure 8, Item 1). (See vehicle pneumatic schematic for air ride supply location.)

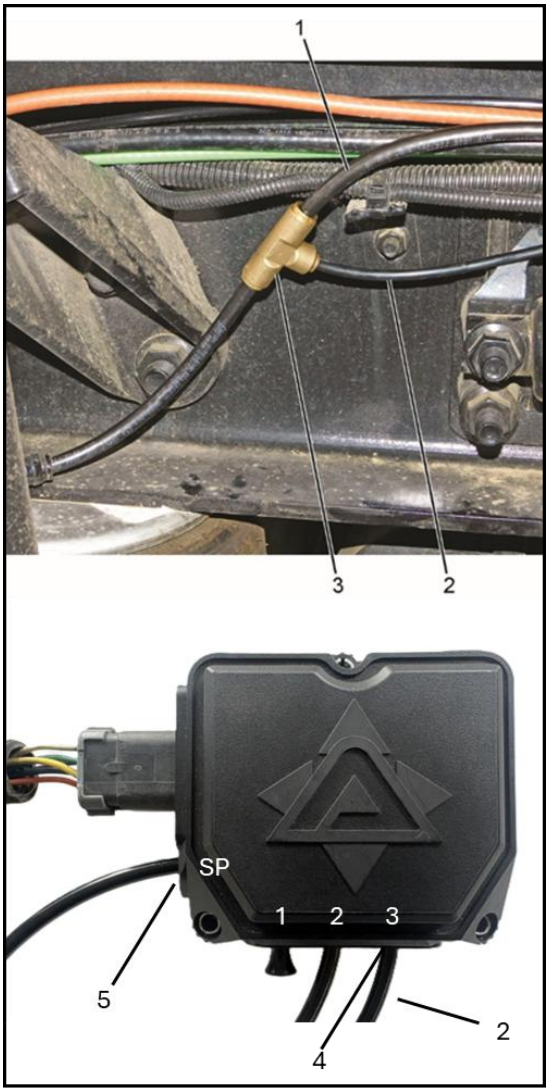


Figure 8

25. Connect air tube (Figure 8, Item 2) to T fitting (Figure 8, Item 3) and route to MiLift PCU.
26. Connect air tube (Figure 8, Item 2) to MiLift PCU port 3 (Figure 8, Item 4), and secure with wire ties as needed.

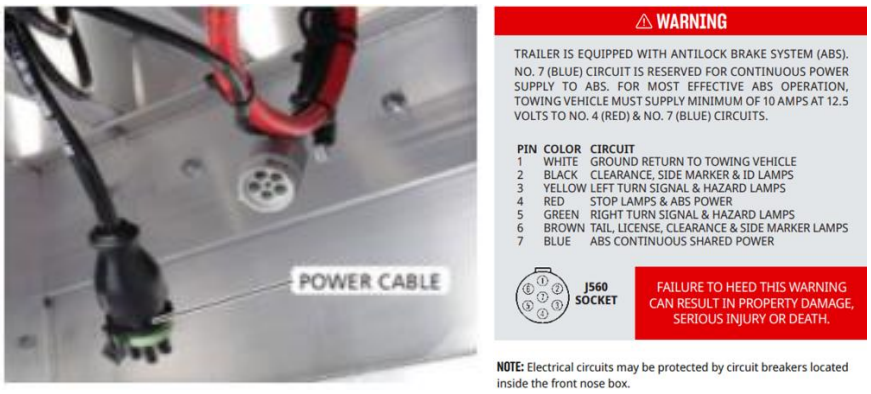


Figure 9

27. Locate the trailer's ABS module and power cable. (Figure 9), if so equipped or use 7-way harness
28. Install ABS jumper harness to vehicle harness.
29. Connect trailer harness to ABS jumper harness and route to MiLift ECM
30. Alternatively route the 7-way harness to the trailer nose box (Figure 9, J560 pin out) and connect to Pin 7 (Power) and Pin 1 (Ground)
31. Connect trailer harness to 7-way harness and route to iLift PCU
32. Start vehicle and allow air pressure to build.
33. Turn off engine but keep key in ignition position
34. Deploy the lift axle with the lift axle switch, if so equipped.

Note: Actuate the lift axle switch (Figure 10) to the "On" position. Lift axle will not deploy but is in automatic standby mode. Only actuate switch "Off" when vehicle is in operation for axle override up if situation requires.

A forced override down can be achieved by double cycling of the switch in rapid succession.

35. Using the MiLift app, program MiLift according to vehicle specs and intended use. (See Programming .)

Example of trailer control installation

Figure 10

Note: Leave the switch in the "On" position. The lift axle will be in "Auto mode" when the vehicle is used. Only toggle switch "Off" when vehicle is in operation for axle override up, if situation requires. If the trailer is not equipped with an electrical switch and the dash wire was connected to Pin 7 in the nose box, the system will be in "Auto Mode" when the electrical connection to the tractor is made and the ignition is on.

36. Check air tubes and fittings for leaks. Repair as needed.

37. Thoroughly clean the surface to ensure adhesion and install warning labels visibly on each side of the chassis or vehicle body near the lift axle. (Figure 11)

Figure 11

4 Programming MiLift

4.1 Overview

The following procedure is a basic guide to program the MiLift lift axle system. After the MiLift is programed, the vehicle will need to be driven with a load and while the primary suspension pressures are monitored. The settings may need to be revised in real time to ensure the system operates as desired.

The MiLift app defaults to “Basic” setup, where many system parameters are automatically assigned. If the “Basic” setup is inadequate, the system parameters can be adjusted by using the “Advanced Control” option.

The MiLift lift axle system can be programed to operate two control pressures to connect the primary suspension pressure to the deployed lift axle(s).

- Deploy to Target Pressure at minimum 100 PSI pilot pressure signal to the lift axle control valve pilot port SP for 1 axle or Port 1 for a second axle.

Note: The control a second lift axle, the plug in Port 1 needs to be removed and replace with the pilot air tube to the second lift axle control valve.

The MiLift lift axle system is also equipped with an overload warning setting. This feature can be enabled and disabled using the MiLift app.

4.2 Connecting to MiLift Lift Axle System

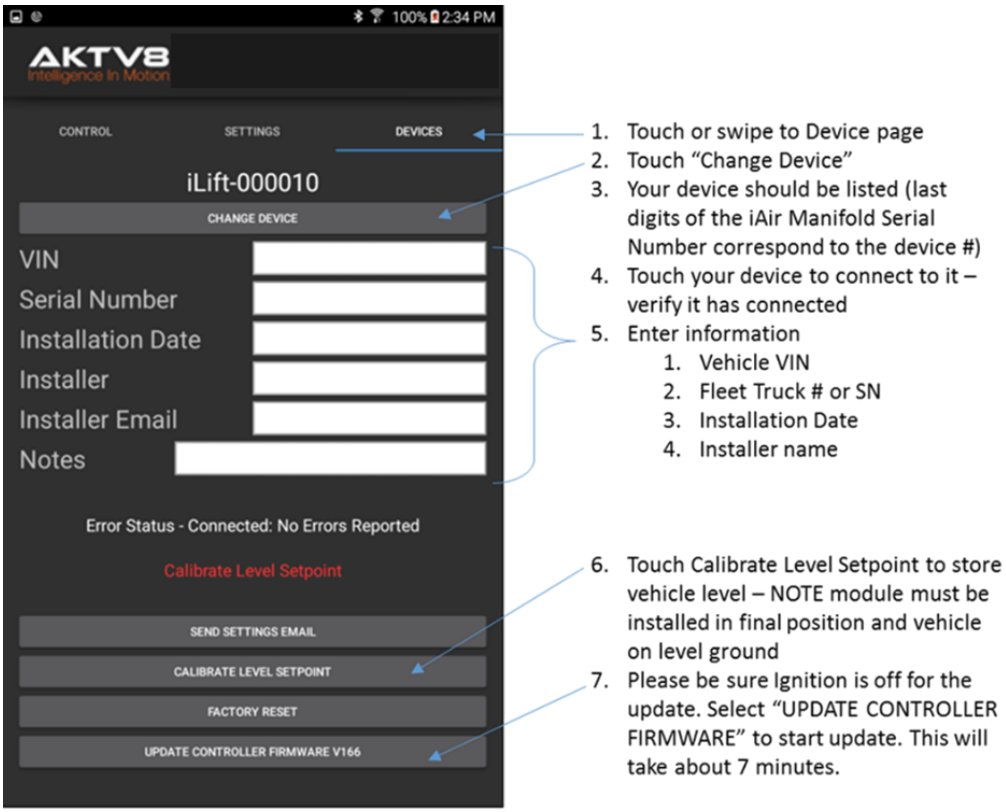


Figure 1

1. Download MiLift app by going to Google Play Store – iLift Control

https://play.google.com/store/apps/details?id=com.aktv8.ilift&hl=en_US

2. Open MiLift app in compatible smart phone or tablet.
3. Touch or swipe to **DEVICES** tab (Figure 12, Item 1).
4. Touch **CHANGE DEVICE** (Figure 12, Item 2).

NOTE: The last six digits of the MiLift Electronic Control Unit (ECU) serial number should match the MiLift device number.

5. Ensure correct device is listed.
6. Touch the device to connect to the MiLift app.
7. Verify the MiLift app has connected.

NOTE: To confirm the module is connected to the App, swipe to **CONTROL** (Figure 13, Item 1) and confirm screen looks like (Figure 14). Once confirmed go back to **DEVICES** (Figure 13, Item 1).

If you can't establish a Bluetooth connection out of the iLift App, go to tablet "Settings" and select "Bluetooth" and look in *Available Devices* and pair with PCM to tablet

8. Update the module to the latest software revision. Figure 12, Item 7), please be sure the OEM switch is in the Off (Up) position.
9. Enter the following information in the appropriate fields (Figure 12, Item 3):
   - Vehicle Identification Number (VIN)
   - Assigned fleet truck number or serial number
   - Installation date
   - Installer's name
10. Calibrate level setpoint (Figure 12, Item 6) to store vehicle level.

Note: The module (PCU) must be installed in final position, and the vehicle must be on level ground.

4.3 Basic Setup

For basic set up only the legal Primary Maximum Suspension Pressure (PMP) is needed. Figure 13, Item 6

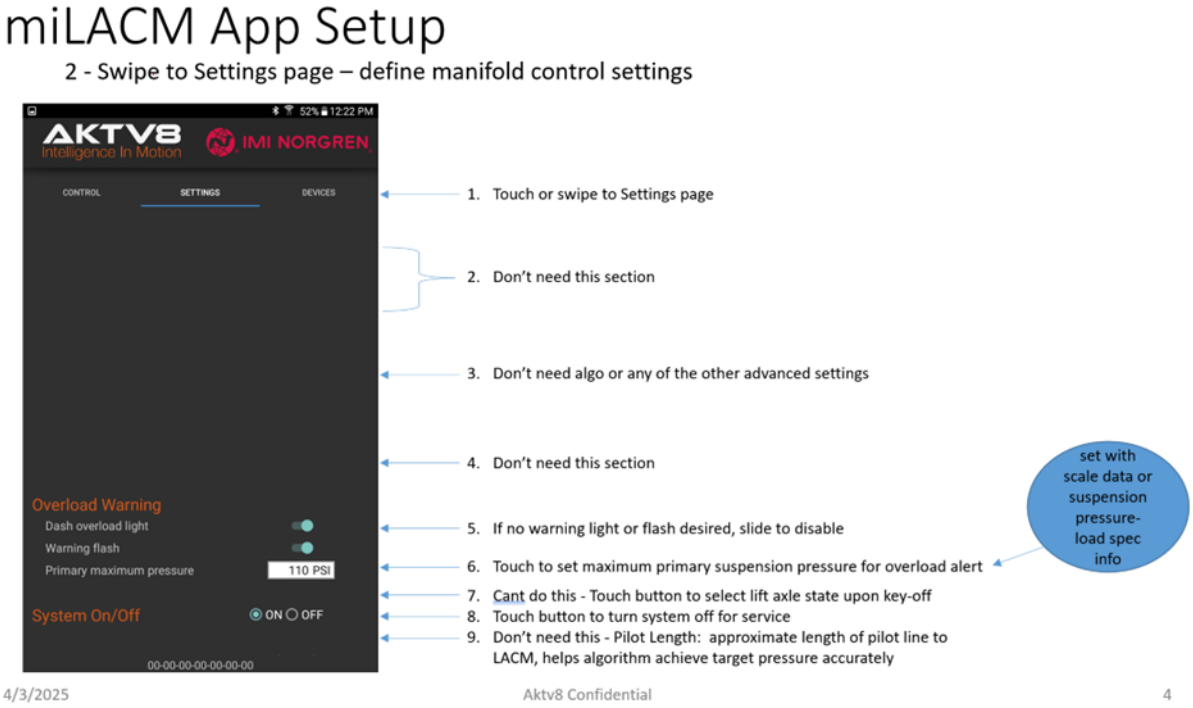


Figure 2

1. Touch or swipe to **SETTINGS** tab (Figure 13, Item 1).

NOTE: The PCU will deploy the first deployable lift axle at target deploy (PMP -5%) pressure through the side port (SP) Figure 8, Item 5). The second deployable lift axle will be deployed by the PCU after the deploy target pressure is reached (PMP -5%) again through pilot port 1 (Figure 8, Item 4). To determine accurate suspension weight, calibration with a certified scale is recommended. Lift pressure setting is set to PMP -60%.

Example: PMP at 80 PSI, first axle deploys at 76 psi, second axle again deploys at 76 psi

Lift pressure at 32 psi.

2. Touch to toggle on/off **Dash overload light** functions (Figure 13, Item 5) as desired.
3. Touch **Primary maximum pressure** window (Figure 13, Item 6), and set maximum legal load pressure. Refer to axle manufacturer PSI/ load scale for estimated values on initial setting. Reference table below for example:

Required Pressure (psi)	Load Per Axle (lbs)	Load Per Axle (kg)
99	30,000	13,608
92	28,000	12,701
85	26,000	11,793
78	24,000	10,886
71	22,000	9,979
64	20,000	9,072
58	18,000	8,165
51	16,000	7,257
44	14,000	6,350
37	12,000	5,443
30	10,000	4,536

4. **Key-Off State** (Figure 13, Item 7) is not available. When vehicle is turned off the lift axle will go to the up position.
5. Select desired **System On/Off** (Figure 13, Item 8).

6. Verify the following functions are working properly:
   - **Override "Up"** - Set OEM lift axle switch to "Up" position, to override axle up.
   - Key-off state- not available- lift axle will be in the up position when the vehicle is turned off.
   - **Override "Down**" – Double click OEM lift axle switch – Down – Up – Down, to override axle down.

Note: Forced Override Down – cycle the Up/Down ON/OFF electrical switch twice in rapid succession.

- **Auto deploy**- OEM dash switch in the "Down" or "ON" position.

Note: To bring the system back to Auto deploy mode, if system is in the forced override down mode. You must first set the OEM lift axle switch back to "Up" to override axle up. Bring system back to Auto deploy mode by setting OEM lift axle switch in the "Down" position.

4.4 Advanced Setup (only necessary if you are not satisfied with operation in basic setup)

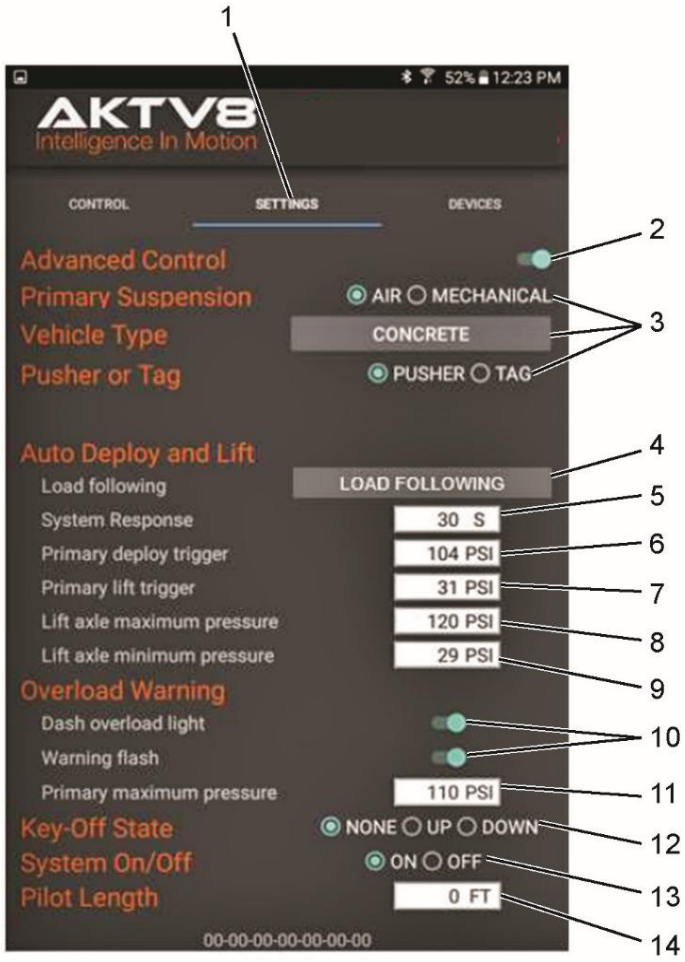


Figure 14

1. Touch or swipe to **SETTINGS** tab (Figure 14, Item 1).
2. Touch to toggle on **Advanced Control** (Figure 14, Item 2).
3. Touch to select the features (Figure 14, Item 3) that apply to the vehicle.
4. Touch to select controls (Figure 14, Item 4) **DEPLOY TO Pressure Following**

NOTE: The system response depends on the height control valve speed.

5. Touch System Response window (Figure 14, Item 5) and set system response (typically 20 to 60 seconds).
6. Touch Primary deploy trigger window (Figure 14, Item 6) and set pressure for the primary deploy trigger. Recommended is 6 to10% below maximum legal primary suspension pressure.
7. Touch Primary lift trigger window (Figure 14, Item 7) and set pressure for the primary lift trigger. Recommended is 60 to 65% below maximum legal primary suspension pressure.

NOTE: It is best to set lift axle maximum pressure after gathering vehicle weight data from a scale. To determine accurate suspension weight, calibration with a certified scale is recommended.

8. Touch Lift axle maximum pressure window (Figure 14, Item 8) and set maximum pressure when fully loaded.
9. Touch minimum pressure window (Figure 14, Item 9), don't change, does not apply.
10. Touch to toggle on/off warning light functions (Figure 14, Item 10) as desired.

NOTE: It is best to set Primary maximum pressure after gathering vehicle weight data from a scale. To determine accurate suspension weight, calibration with a certified scale is recommended.

11. Touch Primary maximum pressure window (Figure 14, Item 11) and set maximum pressure.
12. Touch to select desired Key-Off State (Figure 14, Item 12), this function is not used.
13. Touch to select desired System On/Off (Figure 14, Item 13).
14. Touch Pilot Length window (Figure 14, Item 14) and set estimated pilot line length.

4.5 Control and Monitor

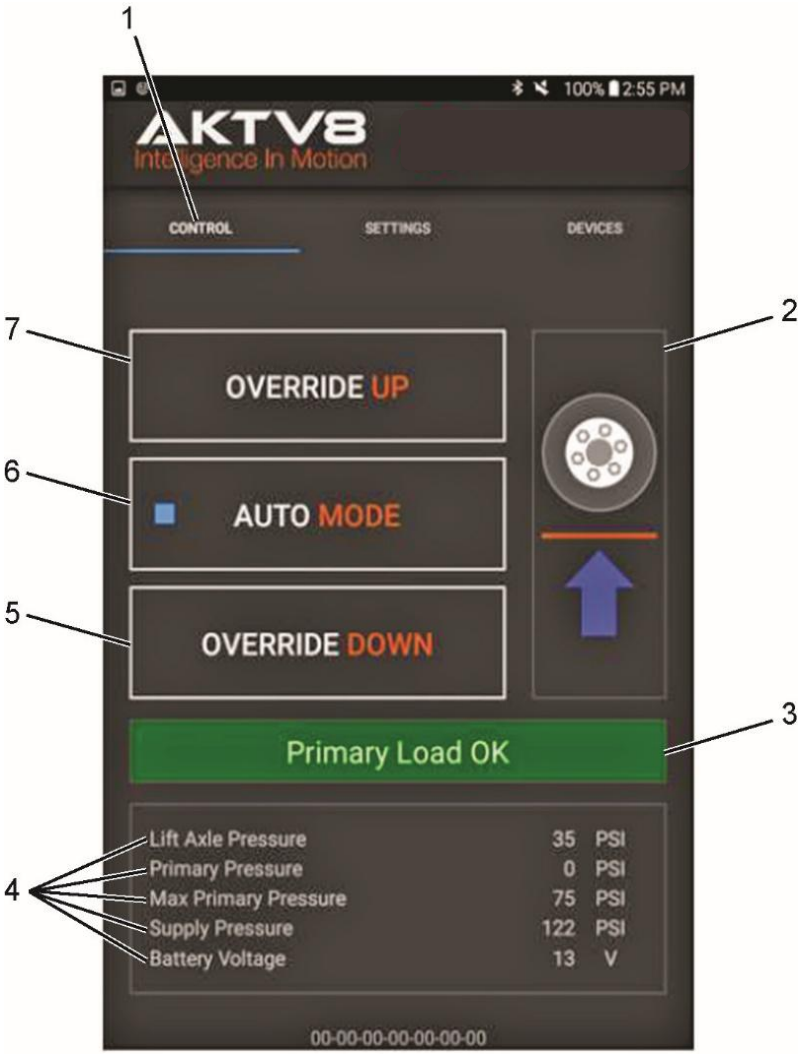


Figure 15

1. Start engine and allow air pressure to build.

Figure 16

2. Keep OEM lift axle dash switch dash switch (Figure 16, reference example) in the “Down” position, if so equipped.
3. Touch or swipe to CONTROL tab (Figure 15, Item 1).

NOTE: The status of the lift axle is displayed using the image on the right side of the CONTROL screen (Figure 15, Item 2).

4. Touch to OVERIDE UP (Figure 15, Item 7) to raise axle.
5. Touch AUTO MODE (Figure 15, Item 6) to enable automatic control functions.
6. Touch OVERRIDE DOWN (Figure 15, Item 5) to deploy axle.
7. Touch AUTO MODE, and test override down function (see step 8).
8. Switch OEM dash switch to the “Up” position. Double engage the OEM switch (“Down” - “Up” – “Down”. This forces the system into a forced override down of the axle when the vehicle is below the auto deploy threshold.
9. If reverse lift is installed, place transmission in reverse. Ensure the reverse lift function is operating properly.
10. Place transmission in neutral. Ensure the lift axle deploys.
11. Turn OEM dash switch to the “Up” position to take system out of forced down. Place OEM dash switch back to “Down” position (Figure 15, Item 6) to enable automatic control functions.
12. Turn off vehicle.
13. Check air tubes and fittings for leaks. Repair as needed.
14. Thoroughly clean the surface to ensure adhesion and install warning labels visibly on each side of the chassis or vehicle body near the lift axle.
15. The zone display (Figure 15, Item 3) displays the status of the vehicle’s axle status as follows:
    - Primary Load OK (green)
    - Load Warning (yellow)
    - Overload (red)
16. The following data (Figure 15, Item 4) can be monitored from the CONTROL screen.

- Lift Axle Pressure displays air pressure provided to the lift axle (checked every 60 seconds)
- Primary Pressure displays the primary suspension pressure
- Max Primary Pressure displays the pressure when the overload warning will illuminate
- Supply Pressure displays air pressure in the air system
- Battery voltage displays vehicle battery voltage

4.6 Log Setting Data

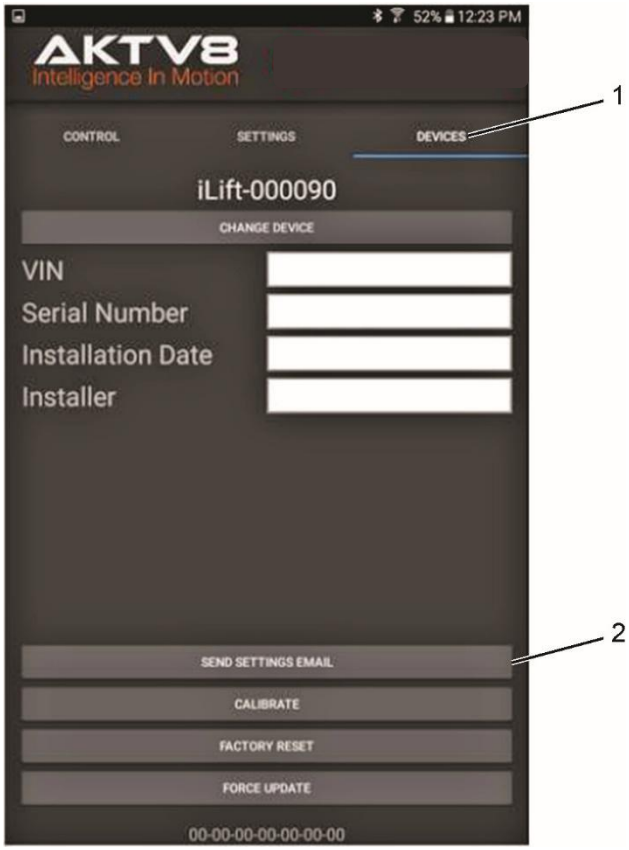


Figure 17

The following procedure is to record settings for future reference.

1. Touch or swipe to DEVICES tab (Figure 17, Item 1).
2. Touch SEND SETTINGS EMAIL (Figure 17, Item 2).

5 Operation

The MiLift lift axle system is a fully automated lift axle system.

Auto deploy: The first lift axle will deploy when the deploy trigger is reached. If a second lift axle is controlled by the module, the second lift axle will deploy when the deploy trigger is reached again.

Auto lift: The second lift axle with retract first when the lift trigger is reached. The module will drop the signal pressure to the first axle briefly as well but re-deploy right away again. The first axle will lift when the lift trigger is reached.

The MiLift lift axle system is equipped with an overload warning setting. This setting alerts the operator of a primary suspension overload. The feature provides primary suspension load feedback that can be monitored through a warning light LED on the trailer or in the dash switch and through the app. The harness and LED for trailer installation is optional. Wiring to the dash switch is not provided in the kit.

The MiLift lift axle system also allows the operator to override the automatic lift and deploy feature through dash switch, if so equipped (See Control and Monitor.) If the dash switch control signal wire is hard wired to Pin 7 in the trailer nose box, the system is germanely in “Auto Control” mode.

6 Troubleshooting

6.1 MiLift Lift Axle System Does Not Function

1. Verify app “System On/Off” is set to ON.
2. Check wiring:
   - Verify 12V supply.
   - Verify Switch wiring is correct, connection to Pin 7 in trailer nose box.
   - OEM wire to LACM solenoid has 12V when vehicle key switch is in the ON position and Lift Axle switch is in the “Down” position. The vehicle ignition is on and the trailer is electrically connected to the trailer
3. Ensure air system has more than 70 psi.
4. Ensure air tubes are properly plumbed with no kinks, breaks, or damage.

6.2 Air Leaks

1. Ensure galley plug is properly installed and is not leaking.
2. Ensure air tubes are properly plumbed with no kinks, breaks, or damage.

6.3 Lift Axle Deploys Then Lifts Immediately

1. Ensure pilot line is properly plumbed with no kinks, breaks, or damage.
2. Ensure there are no air leaks at the lift axle ECM or lift axle valve.

6.4 Override Down Does Not Function

1. Ensure air system has more than 70 psi.
2. Verify wiring is correct.

6.5 Auto deploy Does Not Function

1. Ensure the primary pressure is above the deploy trigger threshold (6 percent less than primary maximum pressure defined in the app). Wait the amount of time set as system response time in the app. Ensure auto deploy is functioning.
2. Ensure air system has more than 70 psi.
3. Verify primary suspension pressure is plumbed to port 3.
4. Plumb handpump into port 3 and manually inflate to check auto deploy.

6.6 Override Deploy Pressure Under Target

1. Increase pilot line length in the app.

6.7 Override Deploy Pressure Over Target

1. Decrease pilot line length in the app.

6.8 Axle Lifts Then Deploys Unnecessarily

1. Ensure lift trigger pressure is not too close to deploy trigger pressure. Reduce lift trigger pressure as needed.
2. Increase system response time, to reduce system sensitivity to the main suspension height control valve fluctuations.

6.9 No Overload Warning Light

1. Ensure the app’s overload warning settings are toggled ON.
2. Verify the primary suspension pressure is greater than the primary max pressure.
3. Check for faulty override switch. Replace as necessary.

6.10 App Error Codes

Error Code	Error Code Name	Description
1	Battery Low	Battery voltage below limit
2	Battery HIGH	Battery voltage above limit
3	Temperature Low	Temperature below limit
4	Temperature High	Temperature above limit
5	VCC5 Low	Internal VCC5 supply below voltage limit
6	VCC5 High	Internal VCC5 supply above voltage limit
7	VCC33 Low	Internal VCC33 supply below voltage limit
8	VCC33 High	Internal VCC33 supply above voltage limit
9	VCC33AO Low	Internal VCC33AO supply below voltage limit
10	VCC33AO High	Internal VCC33AO supply above voltage limit
11	Pressure Sensor A Calibration	Pressure sensor is not calibrated, or calibration is not valid or is corrupt
12	Pressure Sensor A Status	Pressure sensor is reporting a fault
13	Pressure Sensor B Calibration	Pressure sensor is not calibrated, or calibration is not valid or is corrupt
14	Pressure Sensor B Status	Pressure sensor is reporting a fault
15	LED Driver Stuck On	Light-Emitting Diode (LED) driver is flowing current even after it has been commanded to be off
16	LED Open	LED current is not flowing current after it has been commanded to be on
17	LED Short	LED current exceeds a current limit
18	VALVE1 Driver Stuck On	Valve driver drain voltage indicates it is still on even though it has been commanded to be off
19	VALVE1 Driver Stuck Off	Valve driver drain voltage indicates it is off after it has been commanded to be on
20	VALVE2 Driver Stuck On	Valve driver drain voltage indicates it is still on even though it has been commanded to be off
21	VALVE2 Driver Stuck Off	Valve driver drain voltage indicates it is off after it has been commanded to be on
22	VALVE3 Driver Stuck On	Valve driver drain voltage indicates it is still on even though it has been commanded to be off
23	VALVE3 Driver Stuck Off	Valve driver drain voltage indicates it is off after it has been commanded to be on
24	Valve Fail	Electrical current is detected but the valve cannot exhaust the pressure
25	Fast Leak	Supply cannot increase the pressure above 0
26	Slow Leak	Maintenance mode is having to periodically add air to keep the pressure setpoint

7 Parts

7.1 MiLift Trailer Installation Kit

	Trailer	**003514**
Part Number	Description	QTY
003169	Electronic Control Module	1
002361	Bracket	1
003513	Harness, Trailer	1
002587	Harness, ABS Jumper	1
003522	Warning Label	2
002397	Fitting, Tee, Reducer, 3/8” to ¼” PTC	1
003536	Installation QR Code Card	1
003601	Fitting, Union, ¼” to 3/8” PTC	1

7.2 Accessory Items

Part Number	Description	QTY
003578	Harness- 7-way	X
003009	Harness PCM Trailer, Inductor	X
003588	Harness Apex Jumper	X
003513	Harness, Trailer	X
002587	Harness, ABS Jumper	X
002592	Harness, LED (21’)	X
002591	LED	X
000151	Plug 1/4" PTC DOT	X

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CERTIFIED PRODUCT DOCUMENT

NO MODIFICATIONS ARE PERMITTED WITHOUT THE APPROVAL OF FM & THE CERTIFICATION ENGINEER