

Hi-Tech Transport Electronics, Inc.

Air-WeighTM

**5600 SERIES ON-BOARD
ELECTRONIC SCALE
OPERATIONS HANDBOOK**

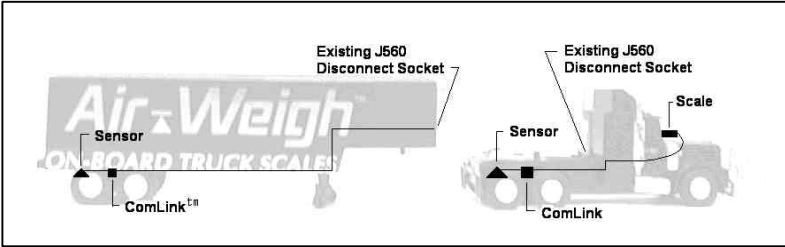
July 1999

Air-Weigh

THE ACCURATE ON-BOARD ELECTRONIC SCALE
For Air-Ride Trucks & Trailers™

Patents #5,478,974; #623,635; #4,832,141

5600 SERIES ON-BOARD ELECTRONIC SCALE



Specifications

Scale Power Input: 8 – 24 VDC, self-regulated

Scale Dimensions:

W = 6-3/4"

L = 1-1/16"

H = 2-5/8"

Sensor Input (from ComLink): 8 VDC

Sensor Output: 1 – 6 VDC to ComLink processor

Sensor Capacity: 0 – 125 psi

Sensor Operating Temperature: -30° to +80° C.

ComLink Power Input: 8 – 24 VDC, self-regulated

ComLink Output: Digital (no measurable DC voltage)

ComLink Dimensions:

W = 7-3/4"

L = 4-1/4"

H = 3-1/4"

Limited Warranty

Your Hi-Tech Transport Electronics™ product is warranted against defects in material or workmanship for one year from the date of the original purchase. Any Hi-Tech Transport Electronics product, which, because of a manufacturing mistake or malfunction, proves to be defective within the one year warranty period, will be repaired or replaced at Hi-Tech Transport Electronics' option, and at no charge to you, provided it is returned to Hi-Tech Transport Electronics with proof of purchase.

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July 1999

Scale System Overview

The Air-Weigh 5600 scale converts truck and trailer air-spring air pressure to an accurate weight.

The scale determines how much weight per pound of air pressure your suspension is supporting. This is accomplished by comparing empty and loaded vehicle weights with the air pressures required to support those

weights. Once calibrated, the scale will display the actual on-the-ground weight of each axle group to within 200 – 300 lbs. (90 – 136 kgs.) of an accurate platform scale. To some extent, accuracy depends on weighing the vehicle on a flat and level surface and the physical characteristics of the air suspension system itself.

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1. Installation Preparation

1a. Component Description

Electronic Digital Scale

The electronic digital scale displays weights and permits a variety of user modifications, including sensitivity, vehicle identification number, unit of weight, and brightness, among others. You can make these modifications or calibrate the scale using the six input keys.

Electronic Pressure Sensors

The pressure sensors measure the air pressure in your tractor and trailer air springs and convert the measurements to electronic signals.

ComLink Remote Sensor Processor

The ComLink provides two functions: storing calibration data specific to its axle group, and

communicating with the scale by multiplexing digital signals over the vehicle's existing 7-wire electrical harness.

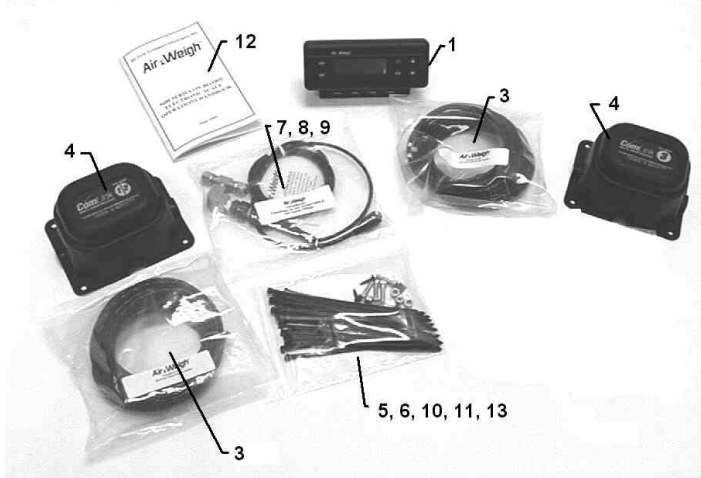
Each ComLink has an identifying number: 1, 2, 3, 4, 5, 6, or 1/2. The 1/2 ComLink enables calibration of a leaf spring suspension steering axle, and measurement of its weight, by measuring the amount of weight transferred to the steer axle from the tractor drive suspension.

ComLink Cable

ComLink cable, in a variety of configurations, supports communications between components, or with the vehicle's existing 7-wire electrical harness. Each cable bears a label and has specific connectors for specific functions.

1b. Parts List

Check the parts you need in the columns corresponding to the kit you will be installing.



Part description and part number	Tractor only kit: 5600	Trailer add-on kit: 5235
#1 – Scale Display Module, AW5600: 050-5620	1	
#2 – Mounting Screws: 131-4020	2	
#3 – 30' Disconnect Cable: 010-8012	2	1
#4 – ComLink Remote Sensor Processor, identified by channel number: 050-5650	1 (#1/2) or (#1)	1 (#3), (#4), (#5), (#6) or (#2)
#5 – ComLink Mounting Bolts ¼-20 x 1: 131-4065	4	4
#6 – ComLink Mounting Nuts: 132-4070	4	4
#7,8,9 – Sensor/Fitting/Cable Assembly: 010-9082 Note: The individual sensor, fitting and assembly parts have been pre-assembled into a single component.	1	1
#10 – Nylon Wire Ties: 145-4552	25	25
#11 – Solder-N-Seal Eyes: 139-4055	4	4
#12 – Operations Handbook: 901-0560	1	1
#13 – ComLink Mounting Flat Washers: 133-5002	8	8

1c. Pre-Installation Considerations

Connecting To The Electrical System

The 5600 scale series communicates between tractor and trailers using a multiplexing technology to piggyback its signals over the vehicle's existing 7-wire electrical harness without any interference. No additional J560 disconnect is required between tractor and trailer. The scale and its ComLink Remote Sensor Processors are wired

directly to Common Ground and Power of the 7-wire harness at any convenient access point.

The current 5600 scale system includes an internal modification that can simplify installation by reducing the electrical connections from four to two. Twist the Red and White ComLink wires together to form the Power connection and twist the Black and Green ComLink wires together to form the Ground connection.

Then connect the Black/Green ComLink wires to Common Ground in the existing 7-wire electrical harness. Connect the Red/White ComLink wires to Power.

Preferred Installation Method

7-Wire Harness	ComLink Cable
Blue (12VDC Power)	Red and White (Power)
White (Ground)	Black and Green (Ground)

The preferred option for Power is the Blue wire auxiliary circuit, because all new North America tractors

are now wired full-time ignition-hot to service trailer ABS systems.

NOTE: After March 1, 1998, all new trailers require the Blue circuit as full-time power for trailer ABS systems. Air-Weigh converted to a basic 2-wire installation procedure with Power connected to the Blue circuit and Ground to the Common White circuit. Air-Weigh also included several additional multiplexing switching circuits for use in turning equipment on and off so that additional connectors do not have to be installed. By wiring your Air-Weigh scale to the Blue and White circuits, you may avoid subsequent changes.

Alternate Installation Method

7-Wire Harness	ComLink Cable
Black or Brown (Markers)	Red and White (Power)
White (Ground)	Black and Green (Ground)

If the trailer is currently using the blue circuit to switch/power lights or valves, and you want to continue that procedure, you might want to connect the Red/White ComLink wires to the Marker light circuit, usually Black and/or Brown on the 7-wire electrical harness (must be the same circuit on both tractor and trailer). To power the scale system, turn on that marker light circuit.

Separate Left And Right Side Height Control Valves

For dual height control valves (air suspension with both right and left height control valves on the same axle group), combine left and right air pressure signals into a single axle group weight using the #000-5265 Dual Sensor Processor Kit.

Develop A Fleet-Wide Channel Assignment Plan

It is imperative that you do not install identically numbered ComLinks on the same tractor/trailer combination. We recommend that you develop a fleet-wide channel numbering plan. (Call Air-Weigh Customer Support at (888) 459-3247 for assistance in your plan). Generally, numbering should start with channel #1 on the steer axle, then assign channels towards the rear of the vehicle (#2 on the drive axles, #3 for jeeps (when a jeep is not in place, the scale will skip channel #3, displaying #1,2 and 4, etc.).

Maintaining consistency throughout a fleet of tractors and trailers allows trailers to be freely swapped.

2. Installation

2a. General Recommendations

The pressure sensor may be installed in the airline near any airbag in the suspension system, so choose the one easiest to work with.

Not all disconnect cables are the same length. Determine where each cable will be installed prior to

proceeding with the installation. If you do not have enough cable to complete the installation, contact your Air-Weigh distributor or contact Air-Weigh Customer Support to order the cable you need.

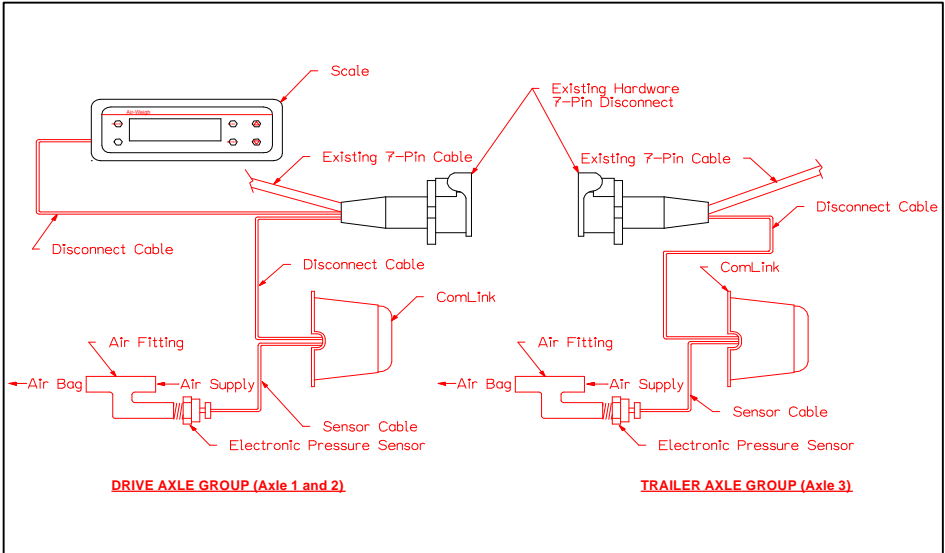
You may cut any ComLink cable to length, ensuring the desired length includes the 4-pin Conxall™ socket.

Do not wire-tie cables until you have installed the entire kit.

Each tractor and trailer has unique characteristics that should be considered when you install your Air-Weigh scale system. Most importantly is access to the vehicle's existing 7-wire electrical harness. Check the backs of the disconnect sockets for access. If your trailer has a 7-pin junction box close to the trailer axle group, you may want to

route the trailer ComLink to it instead of the trailer 7-pin disconnect socket. This will reduce installation time.

Some tractors have under-dash accessibility. Many wiring harnesses are now "plug and play"; so drop plugs can be inserted at the backs of light sockets. The trailer rear sill generally has easy access to the Blue circuit.



2b. Installing A Scale In The Cab

Step 1: Select a location for the scale with adequate clearance for the cables.

Step 2: Use the mounting bracket as a template to mark the location of two 1/8" holes for the self-tapping mounting screws. Do not mount the scale in the bracket until after cables are attached to scale.

Step 3: Attach the Disconnect Cable to the scale and route to a convenient access to the vehicle's existing 7-wire electrical harness. Because you will also be connecting a ComLink to the tractor's 7-wire electrical harness, you might not want to connect to the harness until you've decided where both cables are to be routed. You may cut the cables to length, but leave enough length to tie-wrap the cable after you complete the installation Pre-Test. See "1c. Pre-installation Considerations", above, for the recommended connection method.

If you are connecting at the back of the 7-pin disconnect socket, unbolt the disconnect socket for easier access.

Step 4: Mount the scale to the bracket.

2c. Installing A Pressure Sensor

Note: If you have two height control valves on a single axle group, you must use an Air-Weigh Dual Sensor Processor Kit (000-5265) to accurately measure the axle

group weight. The kit includes an extra pressure sensor, sensor cable and Dual Sensor Processor to combine air pressure signals from each leveling valve into a single, averaged pressure signal. This signal is then communicated to the ComLink. Follow the instructions in the Dual Sensor Processor Kit for installation before proceeding with the following installation.

Note: Plan ahead. Once the sensor is completely installed, you will need to secure it to existing airlines and cables with tape.

Caution: Do not plan to tie it to the chassis or any other metal object on the vehicle. This may result in sensor damage and potential grounding.

Step 1: Clean a six-inch section of undamaged airline near an airbag. If it is painted, remove the paint.

Step 2: Cut the airline in the middle of the cleaned area.

Step 3: Insert brass ferrule over airline. Push the cut end of each of the airline pieces completely into the sensor pressure fitting openings, and tighten nuts over tee fitting.

2d. Installing A ComLink

Note: Use care when selecting a location for the ComLink. Select a location that minimizes the amount of moisture and debris that come in contact with the ComLink.

The ComLink provides two functions. It stores calibration data that is specific to each axle group, and communicates with the scale in the cab by multiplexing digital signals over the vehicle's existing 7-wire electrical harness. It is connected to both a pressure sensor and the vehicle's 7-wire electrical harness. Each ComLink is programmed to communicate its weight information on a separate axle group channel, so each ComLink is identified as either a #1,2,3,4,5,6 or 1/2. The #1/2 ComLink enables a tractor with a leaf spring suspension steering axle to be calibrated, and weight be predicted, by measuring the amount of weight transferred to the steer axle (channel #1) from the tractor drive suspension (channel #2). If your tractor has an air-ride steer axle, then order and install the ComLink #1 on the steer axle suspension and the ComLink #2 on the drive axle suspension, instead of the #1/2 ComLink on the drive axles.

If ComLinks are being installed on a fleet that drops and hooks a variety of long combination vehicles, some planning should be considered so that no two trailer elements with the same ComLink channel number would normally be coupled together. As an example, all jeeps would be channel 3, all trailers channel 4, and all boosters channel 5. If the jeep is dropped, channel 3 would not display a weight, but the trailer would continue to display its weight on channel 4.

Step 1: Locate a flat, vertical surface large enough to mount the ComLink within six feet of the Air-Weigh pressure sensor. It is very important that the ComLink be mounted so that moisture properly drains out the bottom drain hole.

Step 2: Drill 1/2" mounting holes, using the ComLink as a template.

Step 3: Insert the 6' Sensor Cable 5-pin plug into the 5-pin socket on the back of the ComLink.



Step 4: Insert a Disconnect Cable 4-pin plug into one of the 4-pin sockets on the back of the ComLink.

Step 5: Tie-wrap the Sensor Cable and the Disconnect Cable to the ComLink housing.



NOTE: You must calibrate your Air-Weigh scale before it will display accurate weight readings. See "5. Calibration," below, for details.

Step 6: Route the 50-ft. Disconnect Cable loose end to a convenient access to the vehicle's existing 7-wire electrical harness. You may cut the cable to length, but leave enough slack to tie-wrap the cable securely. See page 6 for recommended connection method.

Note: Do not bolt the ComLink to the frame until after the Installation Pre-Test, described in the next section.

2e. Installation Pre-Test

Switch the tractor ignition to the ON position and pressurize the vehicle's air suspension. Verify that there are no air leaks. Wait until Starting self-tests disappears from the display and push the **POWER** switch on the scale. The scale will light up and begin its start-up sequence. Within a minute, all connected ComLinks should have signed on and the scale will display weights for each corresponding Axle Group. Each ComLink will flash a green light whenever the scale communicates with it, every four to ten seconds, depending on what other devices are connected.

Each ComLink will show a factory pre-programmed weight until you calibrate it.

If the scale is displaying the **MAIN MENU** instead of the Weights Display, push the **ENTER** switch to move to the Weights Display.

If an Axle Group with a connected ComLink does not appear on the Weights Display after a minute, or shows a zero weight, check the indicator light on the face of the ComLink itself for a flashing red light. The Morse code-like flashes are error codes (see "13. Troubleshooting," below, for details; the code for No Communication is . _ . _). Otherwise, verify that the ComLink flashes green.

2f. Finishing Touches On The Installation

Step 1: Use the tie-wraps to form a drip-loop in the Sensor Cable at each sensor. This will help prevent water from running down the cable into the sensor socket.

Step 2: Once the system is installed and passes the Installation Pre-Test, bolt on the ComLink and tie-wrap all ComLink cables to the existing tractor and trailer cables, wires and hoses. Seal the wiring connections in an appropriate manner to prevent corrosion.

Leave a small amount of slack in the ComLink cable at all connections.

The installation is now complete.

3. Scale Start-Up

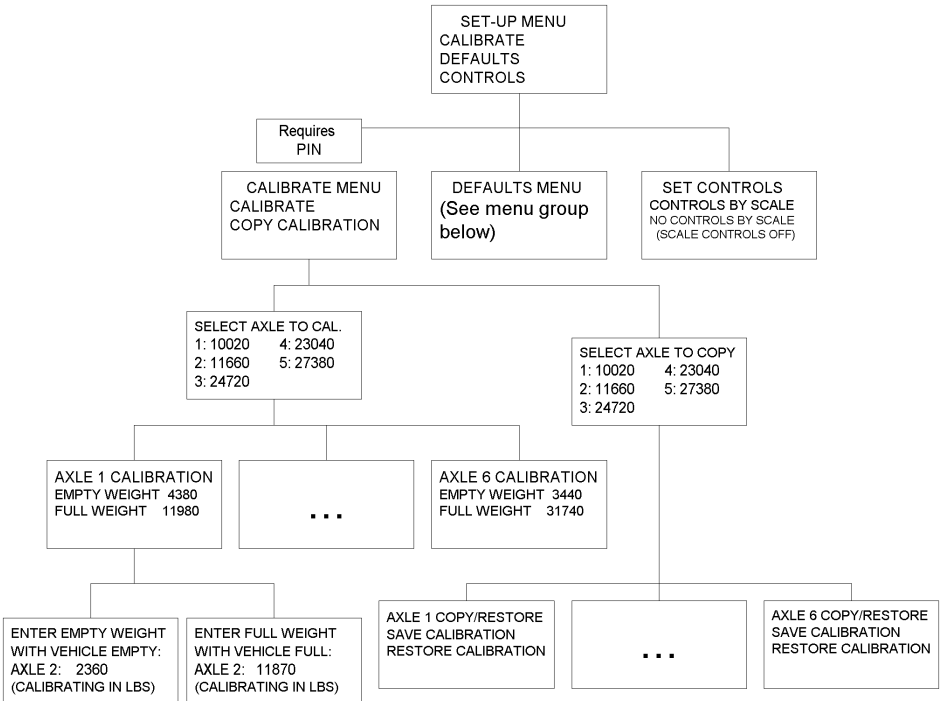
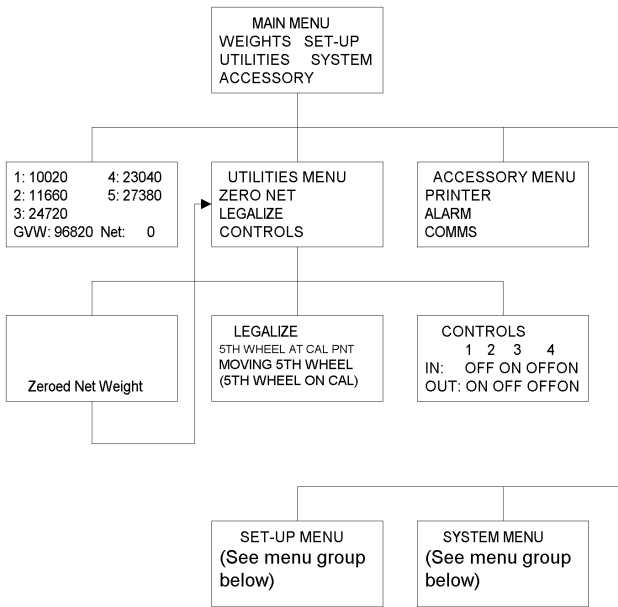
Operation	Result
Apply power to the scale	Self-tests and hibernates
Push POWER switch	Scale signs on and then goes to Weights Display or MAIN MENU
Push POWER switch again	Scale hibernates

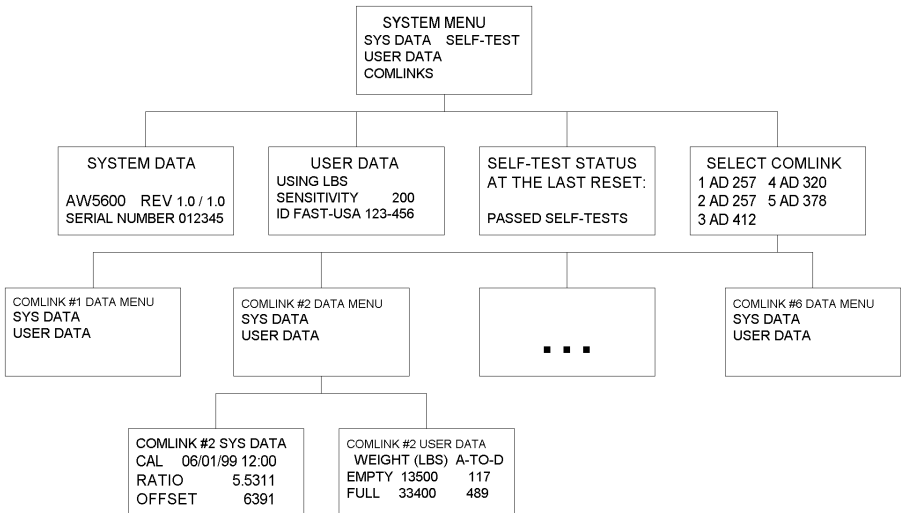
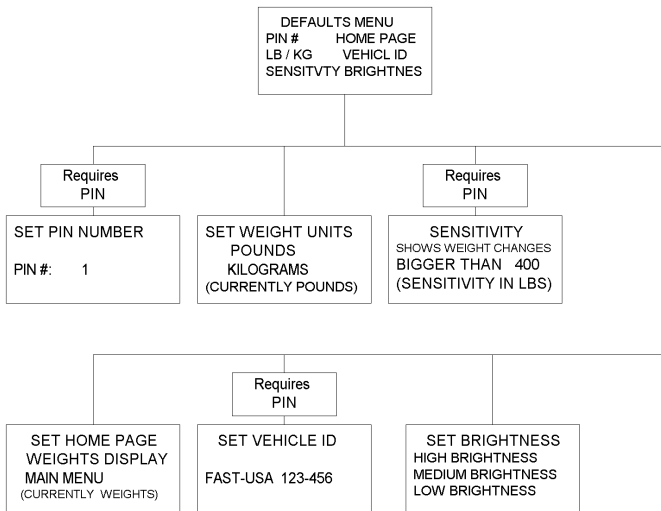
<p>You can have the MAIN MENU appear instead of the Weights Display, after the sign-on. See “9c. Change The Home Page Display,” below, for details.</p> <p>The Weights Display shows all the Axle Groups up to the last one which has responded. If the scale detects fewer than four Axle Groups, the display shows the weights centered, for instance</p> <p style="text-align: center;"> 1: 10020 2: 11660 </p> <p>If there are four or more Axle Groups, the display will shift the first three to the left, for example</p>	<table border="0"> <tr> <td>1: 10020</td> <td>4: 23040</td> </tr> <tr> <td>2: 11660</td> <td>5: 27380</td> </tr> <tr> <td>3: 24720</td> <td></td> </tr> </table> <p>Until the first ComLink Remote Sensor Processor signs on, the scale flashes</p> <p style="text-align: center;">Activating ComLinks</p> <p>on the bottom line. Afterwards, the bottom line of the Weights Display will show the Gross Vehicle Weight and the Net, as in the following</p> <p style="text-align: center;">GVW: 96820 Net: 96820</p>	1: 10020	4: 23040	2: 11660	5: 27380	3: 24720	
1: 10020	4: 23040						
2: 11660	5: 27380						
3: 24720							

4. Scale Menus And Front Panel Switches

Operation	Result
Push MENU switch	Display shows: <div style="text-align: center;"> MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY </div> with WEIGHTS flashing
Push ↓ or ↑ on a menu display	Changes which item is flashing
Push ENTER on a menu display	Enters the flashing item
Push ESC on a menu display	Moves back up to the menu from which you entered

The complete menu structure appears on the next two pages:





5. Calibration

5a. Preliminary Considerations

Before calibrating the scale, please note that your Air-Weigh scale is only as accurate as the commercial scale weights you use to calibrate.

Weigh on level ground, with the brakes released and the engine running. Momentarily exhaust air from the suspension, then charge it back into the system. Move the vehicle slightly to make sure that the suspension and height control valve have fully inflated to the factory-specified ride height. It may take a few minutes for the suspension to compensate fully, depending on the size of the ports and type of height control valve you have. Calibrate the scale

on the weighing platform or on another nearby flat surface. Reapply the brakes after calibration.

If you must leave the cab while the brakes are released, block the wheels.

When calibrating the drive axles (ComLink channel #2), do not include the weight of the steer axles.

You must complete the entire calibration procedure for both **EMPTY** and **FULL** weights before the scale will display weights accurately. The **FULL** weight does not need to be precisely up to the maximum legal weight, but the heavier the weight, the more accurate your scale will be.

5b. Weighing A Leaf Spring Steer Axle

Even though the steer axle may have a leaf spring suspension, the scale can still predict its weight by determining how much weight is transferred from the drive axles to the steer axle. Note that if the fifth wheel is behind neutral, weight is transferred away from the steer axle, and a platform scale will show an empty weight for the steer axle which is greater than its loaded weight. In this case, you will still calibrate with the weights as measured, that is, entering an Empty Weight greater than the Full Weight.

Set the tractor fifth wheel or turntable to a position that is forward of neutral, so an increase of weight on the drive axles results in an increase of weight on the steer axle. Many truckload operators set it where both the drive axles and the steer axle are at the maximum GVW limit. The fuel level will Affect Steer Axle Weight Accuracy, but not the

drive axle accuracy. Air-Weigh recommends that you calibrate with the fuel tank half full.

Calibrate Axle Group #1 for the steer axle weights and #2 for the drive axles weights. The standard tractor ComLink (#1/2) provides data from both these Axle Groups to the scale.

For the steer axle weight to remain accurate as you change its load, the tractor fifth wheel must be in the same position when you later use the scale's Weight Display, as it was when you calibrated the steer axle,

However, if you do not change the load, you can adjust the fifth wheel and still have the scale show an accurate steer axle weight, provided you inform the scale that you are moving the fifth wheel off its calibration position (see "8. Moving The Fifth Wheel.")

5c. Calibrate An Axle Group

Operation	Result
Push MENU switch	Display shows: <p style="text-align: center;">MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY</p> with WEIGHTS flashing
Push the ↑ switch twice	SET-UP begins flashing
Push ENTER	Display shows: <p style="text-align: center;">SET-UP MENU CALIBRATE DEFAULTS CONTROLS</p> with CALIBRATE flashing
Push ENTER	Display shows: <p style="text-align: center;">CALIBRATE MENU CALIBRATE COPY</p> with CALIBRATE flashing
Push ENTER	Display shows: <p style="text-align: center;">SELECT AXLE TO CAL.</p> listing all available ComLinks and their weight readings, and 1: flashing
Push ↓ or ↑ to select a different Axle Group if desired	Changes which Axle Group number flashes
Push ENTER	Display shows: <p style="text-align: center;">AXLE CALIBRATION EMPTY WEIGHT FULL WEIGHT</p> for the selected Axle Group, with EMPTY WEIGHT flashing
Push ENTER for Empty Weight calibration; or	Display shows: <p style="text-align: center;">ENTER EMPTY WEIGHT WITH VEHICLE EMPTY: AXLE 3: 4000 (CALIBRATING IN LBS) (or KGS)</p> with current Empty Weight ("4000") flashing

Push ↓, then push ENTER for Full Weight calibration	Display shows: ENTER FULL WEIGHT WITH VEHICLE FULL: AXLE 3: 35000 (CALIBRATING IN LBS) (or KGS) with current Empty Weight ("35000") flashing
Push ↓ or ↑ to change the flashing number	Number changes by 20
Hold down ↓ or ↑, changing the number	Number increases or decreases, more rapidly after holding for one second, then rapidly by 100's after two seconds
Let up on the ↓ or ↑ switch	Number stops changing and begins flashing again. You can change it more by going back to "Push ↓ or ↑ to change the flashing number"
Push ESC to erase change in progress	Number returns to original value, flashing
Push ENTER to use the flashing number	Scale accepts new calibration weight
Push ESC, ESC	Moves back to the SELECT AXLE TO CAL. display, with newly calibrated Axle Group's weight set to zero
Wait a minute or two	Newly calibrated Axle Group shows weight from new calibration

Both empty and full calibration must be accurate for an accurate axle group weight.

5d. Copying Calibration To A New ComLink

Operation	Result
Push MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↑ switch twice	SET-UP begins flashing
Push ENTER	Display shows: SET-UP MENU CALIBRATE DEFAULTS CONTROLS with CALIBRATE flashing
Push ENTER	Display shows: CALIBRATE MENU CALIBRATE COPY with CALIBRATE flashing
Push the ↓ switch	COPY flashes
Push ENTER	Display shows: SELECT AXLE TO COPY listing all available ComLinks and their weight readings, and 1: flashing
Push ↓ or ↑ to select a different Axle Group if desired	Changes which Axle Group number flashes
Push ENTER	Display shows: AXLE COPY/RESTORE SAVE CALIBRATION or NO CALIB TO SAVE RESTOR CALIBRATION or NO CAL TO RESTORE for the selected Axle Group, with SAVE CALIBRATION flashing

Push ENTER to save current calibration for the Axle Group; or	Scale saves the current calibration
Push ↓, then push ENTER to restore the previously saved calibration for the Axle Group	Scale restores the previously saved calibration
After restoring the previously saved calibration, push ESC	Moves back to the SELECT AXLE TO COPY display, with newly restored Axle Group's weight set to zero
Wait a minute or two	Axle Group shows weight from restored calibration

You can COPY from one ComLink to another, as long as they have the same Axle Group number. This will be useful if you are replacing a ComLink. Copying calibration will also save time if you are replacing a trailer on which a calibrated ComLink is mounted, with an identical one whose ComLink has not been calibrated. A saved calibration for later copying will last through any power failure, removal of the scale from its circuit, etc.

Note: the COPY is a rough calibration. For more accurate weights, you should fine tune the Axle Group calibration, by recalibrating with a heavy load.

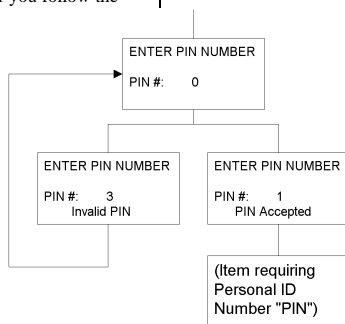
5e. Entering A Personal Identification Number (PIN)

If your PIN is non-zero, the display will put up the **ENTER PIN NUMBER** display whenever you follow the

menus to calibrate, to set the PIN, to change the Weight Display sensitivity, or to change the Vehicle Identification. Once you enter the correct PIN, the display will return to the display to which it had blocked access.

If you forget your PIN, you may obtain the factory PIN for your scale by calling Air-Weigh with the scale's serial number (see "14. Support," below). You can find this serial number on the **SYS DATA** display (see "11a. Finding System Data," below).

If you need to know calibration data, you can inspect it without your PIN on the **COMLINK** displays (see "11c. ComLink Calibration Date, Ratio And Offset," and "11d. ComLink Empty And Full Weight And A-To-D," below).



Operation	Result
Attempting to calibrate, to set the Personal Identification Number (PIN), to change the Weight Display Sensitivity, or to change the Vehicle ID, when the PIN is not already 0 (zero)	Display shows: ENTER PIN NUMBER PIN #: 0 with 0 flashing
Push ↓ or ↑ to change the flashing number	Number changes by 1
Hold down ↓ or ↑, changing the number	Number increases or decreases, more rapidly after holding for one second, then rapidly by 100's after two seconds
Let up on the ↓ or ↑ switch	Number stops changing and begins flashing again. You can change it more by going back to "Push ↓ or ↑ to change the flashing number"
Push ESC to erase change in progress	Number returns to original value, flashing
Push ENTER to use the flashing number	Scale accepts PIN
PIN entry is correct	Display moves to the item, such as calibration, to which it had blocked access

6. Displaying Axle Weights

Operation	Result
Push MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push ENTER	Display shows: 1: 11540 4: 32560 2: 31200 3: 31600 GVW:106900 NET 50060

Once calibrated, the scale will display the actual on-the-ground weight of each axle group to within 200 to 300 lbs. (125 kgs.) of an accurate platform scale. It also shows their sum, that is, the Gross Vehicle Weight (**GVW**), as well as the net payload (**NET**).

The weight will be displayed in 20 lb. or kg. increments. To some extent, accuracy depends on weighing the vehicle on a flat and level surface and the physical characteristics of the air suspension system itself. The vehicle's suspension system must be operating properly,

and its leveling or height control valve must be set at the factory-specified ride height.

Weigh on level ground, with the brakes released and the engine running. Momentarily exhaust air from the suspension, then charge it back into the system. Move the vehicle slightly to make sure that the suspension and height control valve have fully inflated to the factory-specified ride height. It may take a few minutes for the suspension to compensate fully, depending on the size of the ports and type of height control valve you have. Reapply the brakes after weighing.

If you must leave the cab while the brakes are released, block the wheels.

The scale receives data periodically from each ComLink Remote Sensor Processor, which converts the pressure reading at its Axle Group's air spring to a number. The scale always polls all six possible ComLinks regardless of how many are actually connected. The poll rate is approximately every 0.8 seconds. On average, the scale will get an update of a given Axle Group every 4.8 seconds.

The scale will not show a change in weight for an Axle Group unless the change exceeds the Weights Display Sensitivity (see "8d. Change The Weights Display Sensitivity," below).

The ComLink data can show some fluctuation during loading, unloading, and motion. "Fluctuation" here means, it goes up, then goes down; or vice versa. If the scale determines that the readings from any Axle Group have been fluctuating more than 1,000 pounds over the last three readings, it will remove the bottom line of the Weights Display (**GVW** and **Net**) and replace it instead with a flashing "**Weights changing**." It will restore the display of **GVW** and **Net** if either the change in weight on the fluctuating Axle Group has decreased to less than 1,000 pounds, or changes in the most recent two readings have been in the same direction, i.e. both increasing or both decreasing.

7. Zero The Net Payload

The scale provides two ways to zero the Net Payload, from the Weights Display and from the Main Menu:

Operation (first method)	Result
(from the Weights Display)	Display shows: 1: 11540 2: 31200 3: 31600 GVW: 74340 NET 50060
Push the ENTER switch	Net begins flashing
Push the ENTER switch a second time; or	Display shows: 1: 11540 2: 31200 3: 31600 GVW: 74340 NET 0 Net stops flashing. The amount of a later change in the Gross Vehicle Weight (GVW) will appear there.
Push the ESC switch to cancel the process	Leaves the net payload unchanged, and not flashing

Operation (second method)	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↓ switch	UTILITIES begins flashing
Push the ENTER switch	Display shows: UTILITIES MENU ZERO NET LEGALIZE CONTROLS with ZERO NET flashing
Push the ENTER switch	Display shows: Zeroed Net Weight for a moment, then restores the UTILITIES MENU with ZERO NET flashing
Push MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ENTER switch again	Scale puts up Weights Display , with zero Net . The amount of a later change in the Gross Vehicle Weight will appear there.

The scale will keep track of your Net Payload through any power failure, removal of the scale from its circuit, etc.

8. Moving The Fifth Wheel

Operation	Result
Push the MENU switch, <u>with the fifth wheel at its calibration point</u>	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↓ switch	UTILITIES begins flashing
Push the ENTER switch	Display shows: UTILITIES MENU ZERO NET LEGALIZE CONTROLS with ZERO NET flashing
Push the ↓ switch	LEGALIZE starts flashing
Push the ENTER switch	Display shows: LEGALIZE 5TH WHEEL AT CAL PNT MOVING 5TH WHEEL (5TH WHEEL ON CAL) or (5TH WHEEL OFF CAL) * with 5TH WHEEL AT CAL PNT flashing

Push ENTER when you return the fifth wheel to its calibration point; or	Scale accepts fifth wheel at calibration point, and measures steer axle weight. Display briefly shows LEGALIZE Selected on calib point. You can change your payload
Push ↓, then push ENTER to move the fifth wheel off its calibration point	Scale accepts fifth wheel off calibration point, and calculates steer axle weight. Display briefly shows LEGALIZE Selected off calib point. Do NOT change your payload! *

When the fifth wheel is at its calibration point, the scale measures the weight of Axle Group #1, the steer axle. When it is off its calibration point, the scale calculates the steer axle weight, by measuring how much load you are shifting to it from Axle Group #2, the drive axle. The scale adds this to the last measured steer axle weight.

The scale will show a flashing “*” next to Axle Group #1 whenever you select the steer axle to be off its calibration point.

The scale will keep track of your fifth wheel setting through any power failure, removal of the scale from its circuit, etc.

To ensure accuracy, you must have the steer axle at its calibration point, and the scale must show (5TH WHEEL ON CAL) , whenever you change the payload over the drive axle.

To ensure accuracy, the scale must show (5TH WHEEL OFF CAL) before you move the fifth wheel from its calibration point.

9. Change The Default Settings

You can change various ways that your scale operates, including:

- whether it comes up in the Weights Display or **MAIN MENU** after you turn it on. This is the “home page.”
- whether it uses pounds or kilograms for the unit of weight in display and calibration.
- the brightness of the scale display.
- the current Personal Identification Number (PIN). You must enter your PIN, unless it’s zero, in order to access this setting.
- the increment (sensitivity) which the scale requires to change the displayed weight for an axle group. You must enter your PIN, unless it’s zero, in order to access this setting.
- the Vehicle Identification which the 5600 prints as part of a weight receipt and transmits in transponder

communications. You must enter your PIN, unless it’s zero, in order to access this setting.

If you need to know the sensitivity or the Vehicle Identification, you can inspect them without your PIN on the **USER DATA** display (see “11b. Finding User Data,” below).

Factory values are: Weights Display home page; pound weight units; maximum display brightness; PIN of zero; sensitivity of 200; Vehicle ID is _____ (i.e., all underscores). All changes to the default settings will remain in effect through any power failure, removal of the scale from its circuit, etc.

All changes begin with the following sequence:

Operation	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↑ switch twice	SET-UP begins flashing
Push the ENTER switch	Display shows: SET-UP MENU CALIBRATE DEFAULTS CONTROLS with CALIBRATE flashing
Push the ↓ switch	DEFAULTS starts flashing

Push the ENTER switch	Display shows: DEFAULTS MENU PIN # HOME PAGE LB/KG VEHICL ID SENSITVTY BRIGHTNES with PIN # flashing
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9a. Change Your Personal Identification Number (Pin)

Operation	Result
Initial default settings operations; see “9. Change The Default Settings,” above	Display shows: DEFAULTS MENU PIN # HOME PAGE LB/KG VEHICL ID SENSITVTY BRIGHTNES with PIN # flashing
Push the ENTER switch	The scale may require you to enter your current PIN before allowing this operation. See “5e. Entering A Personal Identification Number (PIN),” above. Otherwise, display shows: SET PIN NUMBER PIN # [current PIN] with your current PIN flashing
Push ↓ or ↑ to change the flashing number	Number changes by 1
Hold down ↓ or ↑, changing the number	Number increases or decreases, more rapidly after holding for one second, then rapidly by 100’s after two seconds
Let up on the ↓ or ↑ switch	Number stops changing and begins flashing again. You can change it more by going back to “Push ↓ or ↑ to change the flashing number”
Push ESC to erase change in progress	Number returns to original value, flashing
Push ENTER to use the flashing number	Scale accepts new PIN

9b. Change The Units Of Weight: Pounds Or Kilograms

Operation	Result
Initial default settings operations; see “9. Change The Default Settings,” above	Display shows: DEFAULTS MENU PIN # HOME PAGE LB/KG VEHICL ID SENSITVTY BRIGHTNES with PIN # flashing
Push the ↓ switch	LB/KG starts flashing
Push the ENTER switch	Display shows: SET WEIGHT UNITS POUNDS KILOGRAMS (CURRENTLY POUNDS) or (CURRENTLY KILOS) with POUNDS flashing
Push ENTER to select POUNDS ; or	Scale accepts POUNDS
Push ↓, then push ENTER to select KILOGRAMS	Scale accepts KILOGRAMS

All subsequent weight readings, calibration, and sensitivity settings will be in the selected weight units.

Take care not to enter a full weight or empty weight in pounds during calibration when the system is in kilograms, or vice versa.

9c. Change The Home Page Display

Operation	Result
Initial default settings operations; see "9. Change The Default Settings," above	Display shows: DEFAULTS MENU PIN # HOME PAGE LB/KG VEHICL ID SENSITVTY BRIGHTNES with PIN # flashing
Push the ↓ switch three times	HOME PAGE starts flashing
Push the ENTER switch	Display shows: SET HOME PAGE WEIGHTS DISPLAY MAIN MENU (CURRENTLY WEIGHTS) or (CURRRNTLY MAIN MENU) with WEIGHTS DISPLAY flashing
Push ENTER to select WEIGHTS DISPLAY ; or	Scale accepts WEIGHTS DISPLAY
Push ↓, then push ENTER to select MAIN MENU	Scale accepts MAIN MENU

9d. Change Weights Display Sensitivity

Operation	Result
Initial default settings operations; see "9. Change The Default Settings," above	Display shows: DEFAULTS MENU PIN # HOME PAGE LB/KG VEHICL ID SENSITVTY BRIGHTNES with PIN # flashing
Push the ↓ switch twice	SENSITVTY starts flashing
Push the ENTER switch	The scale may require you to enter your current PIN before allowing this operation. See "5e. Entering A Personal Identification Number (PIN)," above. Otherwise, display shows: SENSITIVITY SHOWS WEIGHT CHANGES BIGGER THAN 200 (SENSITIVITY IN LBS) or (SENSITIVITY IN KGS) with your current sensitivity ("200") flashing
Push ↓ or ↑ to change the flashing number	Number changes by 20
Hold down ↓ or ↑, changing the number	Number increases or decreases, more rapidly after holding for one second, then rapidly by 100's after two seconds
Let up on the ↓ or ↑ switch	Number stops changing and begins flashing again. You can change it more by going back to "Push ↓ or ↑ to change the flashing number"
Push ESC to erase change in progress	Number returns to original value, flashing
Push ENTER to use the flashing number	Scale accepts new sensitivity

If you want the greatest possible sensitivity, with displayed weights changing at the smallest change to air-spring pressure, set the number on the **SENSITIVITY** display to 20. For a much more stable-appearing display of axle group weights, set the number to whatever you choose up to 1,000.

For example, if you set sensitivity to 600, and Axle Group 3's actual weight changes from 22100 to 22560, the

display will continue to show 22100. However, if it changes to 22700 or above, or 21500 or below, then the new weight will appear on the display, as well as showing up in the **GVW** and **Net**.

If you need to know the sensitivity, you can inspect it without your PIN on the **USER DATA** display (see "11b. Finding User Data," below).

9e. Change The Vehicle Identification

Operation	Result
Initial default settings operations; see “9. Change The Default Settings,” above	Display shows: DEFAULTS MENU PIN # HOME PAGE LB/KG VEHICL ID SENSITVTY BRIGHTNES with PIN # flashing
Push the ↑ switch twice	VEHICLE ID starts flashing
Push the ENTER switch	The scale may require you to enter your current PIN before allowing this operation. See “5e. Entering A Personal Identification Number (PIN),” above. Otherwise, display shows: SET VEHICLE ID GOOD TRUCKS US-1 with your current ID (“ GOOD TRUCKS US-1 ”), and the first (left-most) character in your current ID (“ G ”) flashing
Push ↓ or ↑ to change the flashing character	Character changes to the next number, then to letters, dash, space and underscore, through this sequence: 0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ- _
Hold down ↓ or ↑ , changing the character	Character increases or decreases, more rapidly after holding for one second
Let up on the ↓ or ↑ switch	Character stops changing and begins flashing again. You can change it more by going back to “Push ↓ or ↑ to change the flashing character”
Push ESC to erase change in progress	Character returns to original value, flashing
Push ENTER to use the flashing character, whether you’ve changed it or not	Scale accepts the character and starts flashing the next one to the right
Push ESC repeatedly to erase more changes	Scale returns each character to original value, and starts flashing the next one to the left; eventually returning to the previous display (DEFAULTS MENU)
Push ENTER to use the last (right-most) flashing character	Scale accepts new Vehicle ID

If you need to know the Vehicle ID, you can inspect it without your PIN on the **USER DATA** display (see “11b. Finding User Data,” below).

9f. Change The Display Brightness

Operation	Result
Initial default settings operations; see “9. Change The Default Settings,” above	Display shows: DEFAULTS MENU PIN # HOME PAGE LB/KG VEHICL ID SENSITVTY BRIGHTNES with PIN # flashing
Push the ↑ switch	BRIGHTNES starts flashing
Push the ENTER switch	Display shows: SET BRIGHTNESS HIGH BRIGHTNESS MEDIUM BRIGHTNESS LOW BRIGHTNESS with HIGH BRIGHTNESS flashing
Push ENTER ; or	Display goes to maximum brightness, with HIGH BRIGHTNESS flashing

Push ↓, then push ENTER ; or	Display goes to medium brightness, with MEDIUM BRIGHTNESS flashing
Push ↓ twice, then push ENTER	Display goes to minimum brightness, with LOW BRIGHTNESS flashing

10. Other Devices

10a. WireLink Tractor Module Simulator

Operation	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↑ switch twice	SET-UP begins flashing
Push the ENTER switch	Display shows: SET-UP MENU CALIBRATE DEFAULTS CONTROLS with CALIBRATE flashing
Push the ↑ switch	CONTROLS starts flashing
Push the ENTER switch	Display shows: SET CONTROLS CONTROLS BY SCALE NO CONTROLS BY SCALE (SCALE CONTROLS OFF) or (SCALE CONTROLS ON) with CONTROLS BY SCALE flashing
Push the ENTER switch; or	Allows controls by scale, if there is no WireLink Tractor Module active
Push ↓, then push ENTER	Terminates controls by scale if all INs are OFF (see next procedure table).

Operation	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↓ switch	UTILITIES begins flashing
Push the ENTER switch	Display shows: UTILITIES MENU ZERO NET LEGALIZE CONTROLS with ZERO NET flashing
Push the ↑ switch	CONTROLS starts flashing

Push the ENTER switch	Display shows: CONTROLS 1 2 3 4 IN: OFF OFF ON OFF OUT: ON OFF OFF OFF with Input #1 ("OFF") flashing, only if you have set CONTROLS BY SCALE (see previous procedure table)
Push the ENTER switch; or	Reverses state of flashing Input #1
Push ↓, then push ENTER ; or	Reverses state of flashing Input #2
Push ↓ twice, then push ENTER ; or	Reverses state of flashing Input #3
Push ↑, then push ENTER	Reverses state of flashing Input #4

The scale can act as a WireLink Tractor Module simulator. If the vehicle has a Tractor Module, the **CONTROLS** display shows its input states ("IN"), and its output states transmitted from the Trailer Modules' inputs ("OUT"). If the vehicle has only Trailer Modules, you can control them from the **CONTROLS** display, provided that

you have set up **CONTROLS BY SCALE** (see the first procedure table in this section).

The **CONTROLS BY SCALE** setting, and the input states, will last through any power failure, removal of the scale from its circuit, etc.

10b. Accessories

Operation	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↓ switch three times	ACCESSORY begins flashing
Push the ENTER switch	Display shows: ACCESSORY MENU PRINTER COMMS ALARM with PRINTER flashing

The initial release of the Air-Weigh 5600 Series On-Board Electronics Scale does not include support for

accessories. Air-Weigh will provide support for accessories at a later date.

11. System Information

11a. Finding System Data

Operation	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↑ switch	SYSTEM begins flashing
Push the ENTER switch	Display shows: SYSTEM MENU SYS DATA SELF-TEST USER DATA COMLINKS with SYS DATA flashing

Push the ENTER switch	Display shows: SYSTEM DATA AW5600 V 1.01/1.02 SERIAL NUMBER 123654 with the scale's model number ("AW5600"), version numbers ("V 1.01/1.02"), and serial number ("123654").
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11b. Finding User Data

Operation	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↑ switch	SYSTEM begins flashing
Push the ENTER switch	Display shows: SYSTEM MENU SYS DATA SELF-TEST USER DATA COMLINKS with SYS DATA flashing
Push ↓, then push ENTER	Display shows: USER DATA USING LBS SENSITIVITY 240 ID FAST-USA 123-456 with the current weight units ("LBS"), Weights Display sensitivity ("240"), and Vehicle ID ("FAST-USA 123-456").

11c. ComLink Calibration Date, Ratio And Offset

Operation	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↑ switch	SYSTEM begins flashing
Push the ENTER switch	Display shows: SYSTEM MENU SYS DATA SELF-TEST USER DATA COMLINKS with SYS DATA flashing
Push the ↓ switch twice	COMLINKS begins flashing
Push the ENTER switch	Display shows: SELECT COMLINK 1 AD 0135 4 AD 0305 2 AD 0135 3 AD 0247 (each active ComLink represented, and showing its current A-to-D reading) with 1 flashing
Push ↓ or ↑ to select a different ComLink if desired	Changes which ComLink number flashes

Push the ENTER switch	Display shows: COMLINK #2 DATA MENU SYS DATA USER DATA with SYS DATA flashing
Push the ENTER switch	Display shows: COMLINK #2 SYS DATA CAL 03/24/99 12:00 RATIO 13.509 OFFSET 996

The scale uses two intermediate values to figure the weight. These are the ratio and offset. The scale derives both of these values from the numbers which you enter at calibration. You might be able to troubleshoot a problem with an axle group's weight by checking the ratio and offset.

The display also shows the calibration date stored in the selected ComLink. This is the actual date and time at calibration, if you had a printer connected to the scale when you calibrated the ComLink. If there is no printer when you calibrate, the scale will store the factory release date of its internal control program, 6/1/99 for the initial version. If the ComLink has never been calibrated, the display shows the date 1/1/70.

11d. ComLink Empty And Full Weight And A-To-D

Operation	Result
Push the MENU switch	Display shows: MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY with WEIGHTS flashing
Push the ↑ switch	SYSTEM begins flashing
Push the ENTER switch	Display shows: SYSTEM MENU SYS DATA SELF-TEST USER DATA COMLINKS with SYS DATA flashing
Push the ↓ switch twice	COMLINKS begins flashing
Push the ENTER switch	Display shows: SELECT COMLINK 1 AD 0135 4 AD 0305 2 AD 0135 3 AD 0247 (each active ComLink represented, and showing its current A-to-D reading) with 1 flashing
Push ↓ or ↑ to select a different ComLink if desired	Changes which ComLink number flashes
Push the ENTER switch	Display shows: COMLINK #2 DATA MENU SYS DATA USER DATA with SYS DATA flashing
Push ↓, then push ENTER	Display shows: COMLINK #2 USER DATA WEIGHT (LBS) A-TO-D or WEIGHT (KGS) EMPTY 9700 112 FULL 68340 517

This display shows the Empty and Full weights which the user entered during calibration. It also shows the

ComLink A-To-D readings that were in effect when the user entered Empty and Full weights.

Operation	Result
Push the MENU switch	Display shows: <div style="text-align: center;"> MAIN MENU WEIGHTS SET-UP UTILITIES SYSTEM ACCESSORY </div> with WEIGHTS flashing
Push the ↑ switch	SYSTEM begins flashing
Push the ENTER switch	Display shows: <div style="text-align: center;"> SYSTEM MENU SYS DATA SELF-TEST USER DATA COMLINKS </div> with SYS DATA flashing
Push the ↑ switch	SELF-TEST begins flashing
Push the ENTER switch	Display shows: <div style="text-align: center;"> SELF-TEST STATUS AT THE LAST RESET: PASSED SELF TESTS (if passed, or) 1L2H3L (if didn't pass) </div>

The scale tests three system voltages: the powerline voltage, the 5 volt supply and the 10 volt supply. If any of these three goes out of range while the scale is turned on, it will remember that such an event took place, and display it here ("1L2H3L" in the preceding table). The ranges are

8VDC and up for the powerline, and +/- 10% for the other two supplies.

The following shows how **SELF-TEST STATUS** displays abnormal self-test results. Note that the system will present only one type of error per voltage.

Fault	Display
5VDC low	1L
5VDC high	1H
10VDC low	2L
10VDC high	2H
Powerline low	3L

12. Maintenance

12a. Scale

The Air-Weigh electronic scale should be maintenance-free under normal operation. Keep the scale in a protected environment and treat as any electronic component. Gently use a clean, soft cloth, slightly damp with water, to wipe away dust from the display.

12b. Disconnects

Periodically spray the 7-pin sockets and plugs with electrical cleaner. A good electrical connection is vital for

proper operation. Make every effort to keep moisture out of the disconnect socket while the system is in operation.

12c. ComLink Remote Sensor Processor

The Air-Weigh ComLink should be maintenance-free under normal operating conditions. Ensure that the ComLink is mounted properly and keep the drain holes free of obstruction.

12d. Sensors

Periodically inspect the sensor connections. Do not grease the sensor plug-in socket.

13. Troubleshooting

Problem: the display is always self-testing, or it lists errors when you apply power to it. Pushing the **POWER** switch has no effect.

Cause The scale has an internal error.	Solution Replace the scale.
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Problem: the scale will not display an axle group's weight, or always shows it as 0.

Cause If two ComLinks with the same axle group channel number are installed on a tractor and trailer, then neither one will be able to communicate with the scale.	Solution Verify you do not have duplicate ComLink channel numbers in the scale system.
Cause If the missing weight display is from the trailer, the 7-wire disconnect cord may not be connected.	Solution Verify the disconnect sockets are connected and wired correctly.

Problem: the ComLink is not functioning.

Cause The ComLink is not receiving power. There is no flashing red or green light on the ComLink.	Solution Verify the disconnect sockets are connected and wired correctly.
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Problem: the ComLink is flashing red, but not communicating.

The ComLink will indicate error conditions by blinking an error code on its red LED light. The message is

similar to Morse code. The LED will flash a "dash" with a 1.5 second red light. It will flash a "dot" with a brief 0.2 second red light. All error messages consist of a set of four flashes.

Code	Cause	Solution
..._	The voltage input is too low (6 VDC or less).	Check the power source and connections to the ComLink.
..._	The ComLink internal voltage is either too low or too high.	Remove and replace the ComLink.
..._ _	The voltage to the pressure sensor is too low.	Disconnect the sensor cable from the sensor. If the ComLink error code stops, then the sensor has an internal short. Remove and replace the sensor.
..._ _	The ComLink is functioning properly, but is not communicating with the scale.	Check all wiring connections for shorts or mis-wired connections.
..._	The ComLink has an internal A / D converter error.	Remove and replace the ComLink.

Problem: a weight shows as 0, or does not change when it should.

Cause An open wire, a bad ground, or mismatched color coding connection.	Solution Check all wire connections and color coding at the 7-wire sockets or junction boxes. There is a remote chance that the pressure sensor is malfunctioning.
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Problem: inaccurate weight readings or readings that vary.

<p>Cause Calibration error.</p>	<p>Solution Recalibrate the inaccurate axle group.</p>
<p>Cause Generally, varying weight readings result from bad mechanical connections in and around the leveling valve, or a leveling valve set at an incorrect ride height.</p>	<p>Solution Check the bushing, mounting bolts, and radius rod of the leveling valve for looseness or wear. An old valve may be worn out or a new one may be improperly adjusted. Improper ride height will distort the air bags, resulting in erroneous pressure readings.</p>
<p>Cause Weighing on uneven or unlevel ground. Not releasing the parking brake when weighing.</p>	<p>Solution Weigh on a flat level surface. A leveling bubble in the cab will help you find a suitable surface. Allow the air suspension to come up to its full factory-specified ride (the weight readings will settle down when the air pressure stabilizes. Release the brakes while weighing to eliminate suspension binding.</p> <p><i>If you must leave the cab while the brakes are released, block the wheels.</i></p>
<p>Cause An adjustment was made to the leveling valve, or the air bags were replaced after calibration.</p>	<p>Solution Recalibrate the affected axle group.</p>
<p>Cause A flashing * appears next to Axle Group #1, which does not show accurate weight.</p>	<p>Solution Move the fifth wheel to its calibration point. Tell the scale that the fifth wheel is at its calibration point (see "8. Moving The Fifth Wheel").</p>

Problem: display light turns off or won't turn on.

<p>Cause The scale automatically turns off the display light when its input power supply voltage is low.</p>	<p>Solution Check the scale's input power supply voltage. Check the truck for low battery, alternator, etc.</p>
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14. Support

If you cannot correct a problem, or you suspect you have a malfunctioning part, please contact Air-Weigh

Product Support at (888) 459-3247, Monday through Friday, 8 AM – 5 PM Pacific Time. From outside the U.S. and Canada, please call (541) 343-7884.

THE ACCURATE ON-BOARD ELECTRONIC SCALE

Air-Weigh™

For Air-Ride Trucks & Trailers

Patents #5,478,974; #623,635; #4,832,141

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