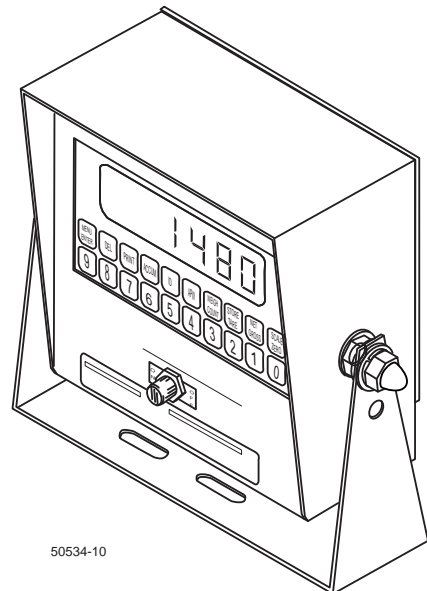




**Operator**

# Fork Truck Scale

## 5900 Series



50534-10



**Amendment Record**

**5900 Series Fork Truck Scale**

**Document 50536**

Manufactured by Fairbanks Scales Inc.

821 Locust

Kansas City, Missouri 64106

Created	05/1999	
Revision 1	05/1999	Released Manual
Revision 2	07/2011	Updated manual format
Revision 3	01/2013	Updated Description



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# Section 1: General Information

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## 1.1. Introduction

The 5900 series indicator is a feature packed instrument used with the Fork Truck Scale (FTS) NTEP and Non-NTEP fork lift scales.

## 1.2. Description

The 5900 Series Fork Truck Scales were designed specifically for fork trucks. Fork trucks are available in many different sizes and capacities (classes). Fairbanks offers 5900 Series Fork Truck Scales products for all classes of fork trucks, commercial and noncommercial versions. The 5900 Series Fork Truck Scales products were designed for easy installation and operation. The system consists of a flexure-based weigh carriage and a cab-mounted digital indicator. The weigh carriage simply attaches onto the existing fork carriage and uses the existing forks. The cab-mounted digital indicator is mounted within easy reach and view of the operator.

The indicator has a large, easy to read with a back-light LCD display, full numeric keypad, tare, weight accumulator, and push-button zero. Multiple setpoint capabilities and a time and date feature come standard. Options include an RS232 output. The IND-R5900 indicator is NTEP approved when used with an NTEP approved carriage assembly 96674. (NTEP=Legal-for-trade)

## 1.3. 5900 Instrument Specifications – Legal for Trade

Feature	Description
Display	1" LCD Backlit Display 2 line alpha-numeric, 16 characters (each line)
Keypad	Full numeric keypad, 0 - 9 plus 10 function keys: Zero           Gross/Net           Tare Count (piece counting)           APW ID (ID entry)           Print ACC (accumulation)           Delete Enter
Units	Pounds/kilograms



### 1.3. 5900 Instrument Specifications, continued

Feature	Description
Power	10 - 50 VDC
Temperature	14° F to 104° F (-10° C to +40° C)
Enclosure	Welded, painted 12-gauge steel
Rating	NEMA 2
Time and Date	Optional
RS232 Interface	Optional

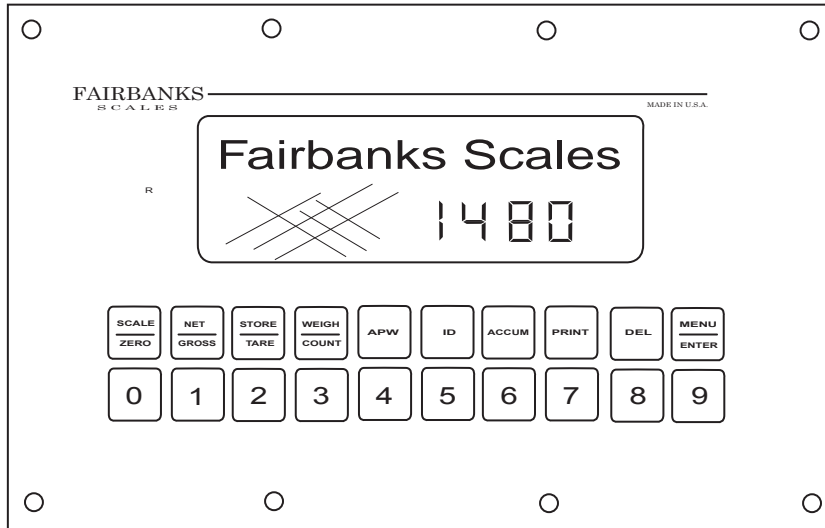
### 1.4. Weigh Carriage Specifications

Feature	Description
Material	Carbon Steel
Paint	Primer - dark gray synthetic enamel Top coat - Safety Orange enamel
Safety Factor	5:1
Load Cell	S-Type, 10,000 lb. capacity, 4340 tool steel construction (NTEP) S-Type, 10k-15k-20k capacities, 4340 tool steel construction (non-NTEP)
Flexures	Field replaceable hardened spring steel
Carriage Height	16" (NTEP) 16", 20" & 25" (non-NTEP)
Carriage Width	36" (NTEP) 36", 42" & 48" (non-NTEP)























# Section 2: Operation

## 2.1. Keyboard Layout



## 2.2. Key Definitions

	Set scale to "0" with NO load on scale		} 0-9 function as numeric keys in all modes
	Toggles between "Gross" and "Net" when a "Tare" is set		
	Stores a "Tare" weight from load on scale or keyed tare		
	Toggles between "Weigh" and "Count" modes		
	Allows entry of Average Piece Weight		
	Allows entry of an ID number		
	Allows Accumulation of weights and count, press with each weighment to add		
	Sends data to optional Printer		
	Revise selection in Program or Back-up 1 space		
	Accepts data in Program mode Recalls Tare, Kg/Lb toggle		

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## 2.3. Cycles of Operations

### 1. Gross weighing:

- Raise empty forks off ground and level
- Press **SCALE/ZERO** key
- Press **STORE/TARE** key (clears previous tare value)
- Lower forks and lift load
- Gross weight displayed

### 2. Net weighing- *Push-button Tare*

- Raise empty forks off ground and level
- Press **SCALE/ZERO** key
- Press **STORE/TARE** key (clears previous tare value)
- Lower forks and lift load
- Press **STORE/TARE** key
- Add additional weight to lift
- Net weight displayed

### 3. Net Weighing - *Keyboard Tare*

- Raise empty forks off ground and level
- Press **SCALE/ZERO** key
- Press **STORE/TARE** key (clears previous tare value)
- Lower forks and lift load
- Key in tare value
- Press **STORE/TARE** key
- Net weight displayed

### 4. Piece Counting

- Raise empty forks off ground and level
- Press **SCALE/ZERO**
- Press **STORE/TARE** key (clears previous tare value)
- Lower forks and lift load
- Press **APW** key
- Key in APW value or accept displayed value
- Press **APW** key
- Press **WEIGHT/COUNT** key
- Read count on top line and weight on bottom line



## 2.3. Cycles of Operations, continued

### 5. Gross Weight Accumulation

- Raise empty forks off ground and level
- Press **SCALE/ZERO**
- Press **STORE/TARE** key (clears previous tare value)
- Lower forks and lift load
- Read weight
- Press **ACCUM** key (weight value added)
- Repeat for additional loads
  - To view: Press and hold **ACCUM** key
  - To Clear: Press **0** key  
Press **ACCUM** key

### 6. Net Weight Accumulation

- Raise empty forks off ground and level
- Press **SCALE/ZERO**
- Press **STORE/TARE** key (clears previous tare value)
- Key in tare value
- Press **STORE/TARE** key
- Lower forks and lift load
- Read weight
- Press **ACCUM** key (weight value added)
- Repeat for additional loads
  - To view: Press and hold **ACCUM** key
  - To Clear: Press **0** key  
Press **ACCUM** key

### 7. Counting Accumulation

- Raise empty forks off ground and level
- Press **SCALE/ZERO**
- Press **STORE/TARE** key (clears previous tare value)
- Press **APW** key
- Key in APW value or accept displayed value
- Press **APW** key
- Press **WEIGHT/COUNT** key
- Key in tare value
- Press **STORE/TARE** key
- Lower forks and lift load
- Read weight
- Press **ACCUM** key (count value added)
- Repeat for additional loads
  - To view: View displays weight total only  
Total data can be sent to printer
  - To Clear: Press **0** key. Press **ACCUM** key



## **2.3. Cycles of Operations, continued**

### **8. Printing**

- Press **PRINT** key at any time to send data to printer.
- Program setup determines what will be printed.  
Consult your local Fairbanks Representative for specific programming of the data output.

Note: Unit must have optional RS232 option installed.

## **2.4. Setting Time & Date**

- Press numerical keys "9085"
- Press "MENU/ENTER"
- The display will prompt:
- Enter last two digits of year
- Press "ENTER" to accept year
- Repeat process for month, day, hour, minutes
- Press "ENTER" to return to normal mode

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## Section 3: Service and Maintenance

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### 3.1. Errors

There are sources of errors that may affect the fork lift scale: power problems with lift, electronic errors, and/or mechanical faults. A possible problem may be located with a good visible inspection of the lift truck. Check for cut or damaged wires, loose or missing bolts or damage to flexures. Call your nearest Fairbanks service representative for help.

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**Note:**

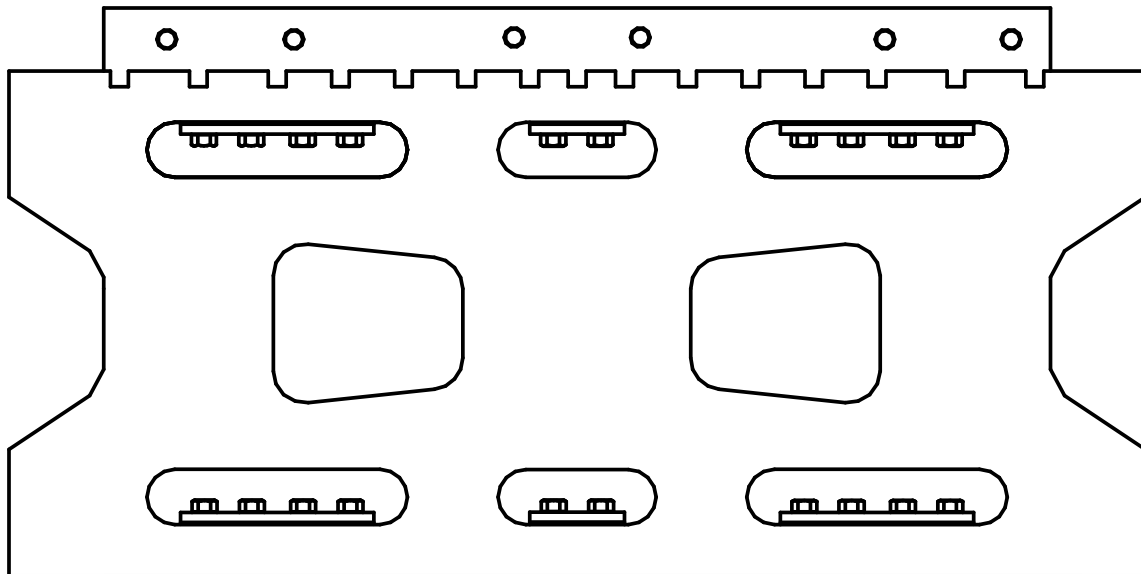
*Incorrect wiring or shorted wiring may damage the indicator.*

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Error Description	Solution
No Display	Try [ON/OFF] switch again, check fuse, check that forklift has power to lights or horn. If fuse is good, call your nearest Fairbanks service representative
Partial digits	Hold the [DEL] key then press the [R] key to reset, call your nearest Fairbanks service representative
Indicator will not ZERO	Hold the [DEL] key and press the [R] key to reset, make certain forks are clear on the sides, clear of the floor and level. Call your nearest Fairbanks service representative
Weights are different with same load	Check for debris between the scale plates restricting movement. Make certain load is clear of floor and on sides, call your nearest Fairbanks service representative
Weights are "light"	Make certain load is clear of floor and on sides, call your nearest Fairbanks service representative
Weights are "heavy"	Make certain load is clear of floor and on sides, call your nearest Fairbanks service representative

## 3.2. Fork Truck Scale Data

Please enter the appropriate base and indicator serial numbers. Please refer to the numbers below for information regarding orders or service.



<b>Indicator Model #</b>	<b>Indicator Serial #</b>
<b>Base Model #</b>	<b>Base Serial #</b>
<b>Capacity x Grad.</b>	

	Part Number	Quantity
Top Flexure	3144LT-050	5
Bottom Flexure	3145LT-050	5





Manufactured by Fairbanks Scale, Inc.  
821 Locust Street  
Kansas City, MO 64106

[www.fairbanks.com](http://www.fairbanks.com)

# Fork Truck Scale

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**5900 Series**

**Document 50536**