

Columbus**JACK**/Regent



**Model 9555-010**  
**100 Ton**  
**Portable Jack Tester**

Operation and Maintenance Manual  
with Illustrated Parts List

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2/15/2013

**MODEL 9555-010**  
**100 TON PORTABLE JACK TESTER**  
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**1.0 Introduction**

This manual is issued as a basic operation and maintenance manual covering the Model 9555-010, 100 Ton Portable Jack Tester manufactured by Columbus**JACK**/Regent, 2222 S. Third St., Columbus, Ohio 43207, USA, phone number (614) 443-7492, FAX (614) 445-3981.

To derive maximum service, it is recommended that personnel have an understanding of the equipment before attempting to operate the tester. It is mandatory that the operating procedures herein be followed.

**2.0 Specifications**

Capacity	100 Tons
Adjustable Test Height	12.35, 20.35 Inches
Overall Dimensions	22 x 19.25 x 38.5 Inches
Power Requirements	110/220 VAC, 1Ø, 50/60 Hz
Estimated Weight	850 Lbs

**3.0 Description**

The Model 9555-010 Jack Tester has two vertical side plates connected together by a top support plate on the top and a base plate on the bottom. The top support plate can be placed in either of two vertical positions, providing the two vertical openings. There is a load cell mounted to the top support plate in the center of the unit. A digital display indicates the force applied to the load cell in tons. This tester is rated up to 100 tons.

**4.0 Assembly and Set-up**

- 4.1 The unit is shipped with the digital display and cable separate.
- 4.2 Make sure that the display cable is attached from the load cell to the back of the digital display unit.
- 4.3 There are two test height combinations possible. The test height can be changed by removing the top four hex bolts and sleeves and then placing the top support plate in either of the two positions provided. Replace the four sleeves to connect the side and top support plates. Replace the four hex bolts and hand tighten until washer (Item 6) contacts side plate. Note: Top support plate weighs approximately 150 pounds.
- 4.4 Install threaded bar into top support plate, then screw load cell onto threaded bar. Insure load cell surface is tight against top support plate.

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**5.0 Operation**

- 5.1 The jack tester is designed to provide accurate load testing of axle jacks built by any hydraulic jack manufacturer. Please read and adhere to all safety information provided with the jack.
- 5.2 Determine test height: For single stage jacks, the ram needs to be partially extended before contacting the load cell. For multi stage jacks, all but the last stage need to be fully extended and the last stage needs to be partially extended before contacting the load cell.
- 5.3 Once the proper height is determined place the top support plate in the desired position as instructed in step 4.3 above.
- 5.4 Position the jack so that the lift point is directly beneath the load cell.
- 5.5 Place ball between cup adapter on jack and cup on load cell.
- 5.6 Test jack in accordance with specific jack manual.

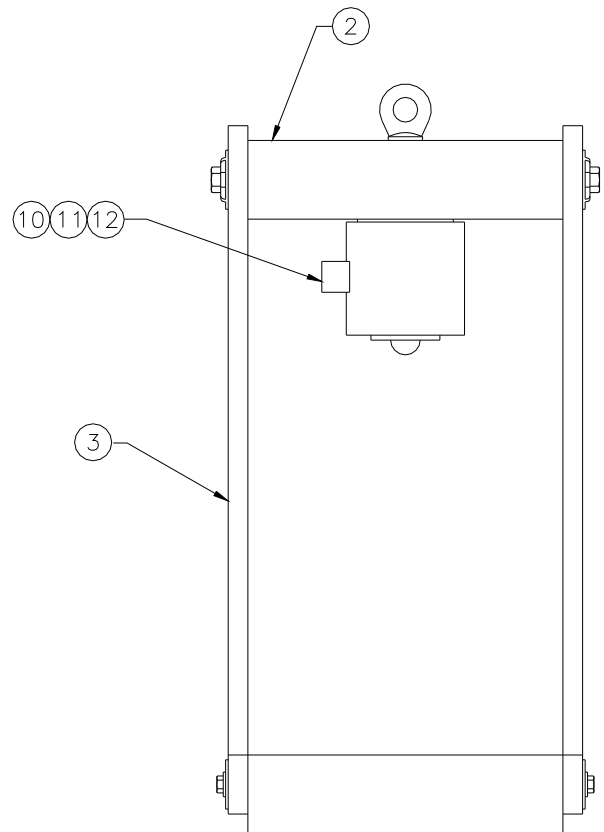
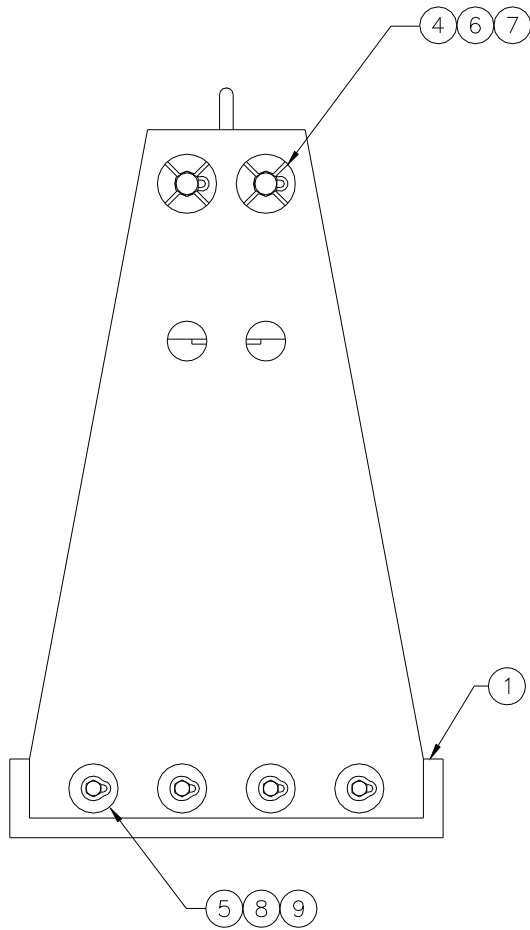
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Figure 1

FIG. & ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASS'Y
<b>1-</b>	<b>9555-010</b>	<b>100 Ton Portable Jack Tester .....</b>	<b>Ref.</b>
-1	9555-2	Base Plate.....	1
-2	9555-3	Top Support Plate.....	1
-3	9555-4	Side Plate.....	2
-4	9555-6	Top Sleeve.....	4
-5	9555-7	Bottom Sleeve.....	8
-6	450A5534-075	Bridge Washer .....	4
-7	372-26240	Hex Head Cap Screw .....	4
-8	450A5535-050	Bridge Washer .....	8
-9	371-20220	Hex Head Cap Screw .....	8
-10	9555-8	Bar.....	1
-11	450A6372	Steel Ball.....	1
-12	450A6970	Load Cell System.....	1

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Figure 1



# Appendix



M2000-1-200 Jack Test Kit

[WWW.AIRCRAFTSCALES.COM](http://WWW.AIRCRAFTSCALES.COM)

# Return for calibration to:

Jackson Aircraft Store Room  
1401 Mercer Ave  
Unit 2046  
West Palm Beach, Florida 33401

Contact: Larry Jackson 561-281-6179  
[Larryjackson@jawsscales.com](mailto:Larryjackson@jawsscales.com)  
[WWW.jawsscales.com](http://WWW.jawsscales.com)

It is most important to properly package your scale for return, it is a delicate instrument and can be damaged.

## RETURN IN ORIGINAL SHIPPING CONTAINER(S)

Scales not properly packaged will be subject to a handling charge for boxing, foam and packaging materials.

Warranty is void if persons other than Jackson Aircraft Weighing Service calibrate or service the unit.



# Jackson Aircraft Weighing Systems

Scale instructions for set up and use of the model M2000 digital system:

**CAUTION:** Never test a jack with the cell not secured into the jack or test stand properly, injury or death may result if a cell is ejected during the test.

1. Connect electrical lead to the load cell, it is very important insure good connections
2. Screw in the cell to jack adapter and follow the jack test stand mounting and instructions from the test stand manufacture.
3. Plug in the unit power supply and turn ON the unit. The unit will display the software version
4. The unit is now ON and displays all available channels press the >0< function to “0” the indicator; the scale should now display “0” with no weight on the cells.
5. The scale is now ready for use; place the load cell on top of the jack or into the testing stand. Cell is equipped with  $\frac{3}{4}$  16 thread base and a standard one inch stud. The cell top is concave and can be loaded using the included spherical adapter or a standard load ball.
6. Select channel 1 Red cell, press “1” followed by the “print select key” read the weight of channel 1
7. After recording the weight of the channels, lower the aircraft and check for “scale drift” on each channel. If the scale does not return to “0”
8. Positive number should be deducted from the total weight of each channel
9. Negative number should be added to the total weight of each channel.
10. Repeat the above procedure at least once to confirm weight readings.
11. Turn the unit OFF and return all item to the case

Do not attempt to make any adjustments to the scale, only use the functions as noted above. If you have any questions please contact Jackson Aircraft Weighing Service.

[www.aircraftscales.com](http://www.aircraftscales.com) Fax: 561-594-5621 Bus: 561-281-6179

## **Scale troubleshooting for use of the model M2000 digital system:**

### **Unit does not display or power up:**

Check connections at the plug, this is a 12 volt system. If unit does not power up on the power supply in the kit, switch to the 12 volt accessory cable and attempt to power up from a 12 volt battery source. (12 volt accessory cable and connection is an option, not all kits have this feature)

### **Unit powers up, display reads large weight numbers:**

The unit must be zeroed <0>. Press the <0> function and check for a 0 reading. The zero reading may be unstable at first and drift, wait for the cell to completely power up and stabilize and check zero. Do not move the cell from the top of the jack; let the cell stabilize prior to jacking the aircraft.

### **Unit powers up, but still drifts and will not hold a zero reading:**

This can be caused by several factors:

Check connections, reconnect and zero (cell connections are critical to obtaining a stable reading, check for poor, dirty, damaged plugs, pins or moisture on the connectors, clean with contact cleaner if necessary)

Cells came from cold to hot or hot to cold storage; let the cells stabilize to the temperature of the area being used. Check wire cables for damage.

### **Unit indicator became unstable while the weight was on the cell:**

Check the connector on the unstable cell, unplug and re plug the connector, check if the reading became stable. Release the load and check zero, if the indicator has more than 3x the division re-zero and re-weigh. If not add negative numbers to the total or subtract positive numbers from the total and record as "scale drift"

### **Jacking:**

When jacking the test stand and jack manufactures instructions must be followed or damage may result due to improper jacking. Follow the jack manufacture requirement for the type and capacity of jack to be used. One-inch mounting must be used to mount the load cell to the top of the jack and or secure it to the test stand. Jacks with out this mounting should not be used unless the proper loading and or mounting provisions are used

### **Jack placement:**

Jack placement is critical to proper load cell performance. Jacks should never be placed in position of severely unlevelled conditions. Jacks placed in test stands should always be installed following the jack test stand manufactures instructions.

**Load cell mounting:**

Load cells are mounted on the top of the jack using a one-inch hole located in the top of the jack or mounted into the test stand following the test stand manufactures instructions. One inch studs are supplied with the load cells, locate the threaded hole on the bottom of the load cell and screw in the stud adapter. Make sure the adapter is screwed all the way into the load cell, there should be no air gap between the stud and cell, and studs must fit flat and in full contact with the bottom of the cell.

Load cells can be mounted on the top of the jack ram or fitted into the test stand, check the top of the jack for the mounting interface.

**Considerations:**

Only use trained personnel in jacking and testing full load in a jack test stand. Jacks or the test stand can be damaged or incorrect readings can be obtained by improper use of jacks and load cells.

Always insure that the cell is fitted properly in the test stand and or on the jack to be tested. Cells can be ejected causing injury or death if mounted improperly. This kit should only be used by personnel trained in testing, mounting and loading a jack. Failure to properly use this cell kit can cause damage or injury.

Jacks, test stands and equipment will stretch; always consider the load being placed on the cell and the amount of stress and stretch of the equipment before making a decision on the acceptance of the load.

Jacks may lose the load due to hydraulic failure and or leakage; always check the jack and cell during test for hydraulic leakage indicated by a declining load on the cell.