



Model 049D1100 Jack Test Cell

Operation and Maintenance Manual with Illustrated Parts List

2222 South Third Street Columbus, Ohio 43207-2402 Phone (614) 443-7492 FAX (614) 445-3981 sales@columbusjack.com

8/3/2009

Columbus JACK / Regent

MODEL 049D1100 JACK TEST CELL PAGE -1-

1.0 Introduction

This manual is issued as a basic service and maintenance manual covering the Model 049D1100, Jack Test Cell manufactured by Columbus **JACK** / Regent Corporation, 2222 So. Third St., Columbus, OH 43207, U.S.A., phone number (614) 443-7492, FAX number (614) 445-3981.

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

2.0 Specifications

Capacity

10,000 psi

3.0 Features

Columbus **JACK** / Regent's Jack Test Cell is designed to test a variety of axle and tripod jacks, regardless of jack manufacturer. By connecting the Test Cell to the output of the jacks' pump, the jack relief valve setting can be safely verified and adjusted as required.

4.0 Safety Information

Make sure all personnel involved with this test cell read and understand these instructions before using.

WARNING: The test cell is designed to a maximum pressure of 10,000 psi. Do not use test cell for pressures exceeding the design limits. Failure to comply can result in injury or death to personnel and/or severe damage to the equipment.

5.0 Pre-Operation Procedure

- 5.1 Perform visual inspection and check for loose, damaged or missing components.
- Verify pressure gauge is in working order and calibrated as required. Note: Columbus **JACK** / Regent recommends calibration every three months minimum.

6.0 Testing Procedure

Caution: Never connect test cell directly to a hydraulic tube. Always use short hose assembly between the test cell and a hydraulic tube.

- 6.1 Connect test cell to the pump to be tested, based upon the following:
 - 6.1.1 Test cell can be connected directly to any pump with an integral hose and matching connector.
 - 6.1.2 Test cell with long hose assembly can be connected to any pump with a matching connector.

Columbus JACK / Regent

MODEL 049D1100 JACK TEST CELL PAGE -2-

6.0 Testing Procedure (Continued)

- 6.1.3 Test cell with short hose assembly can be connected to any pump that uses a standard 3/8 flared-tube type pump output fitting.
- 6.2 Close release valve on pump and operate pump until relief valve opens. Note: Pressure will maintain constant when relief valve opens.
- Verify maintained pressure is in the range specified in jack maintenance manual. Note: Aircraft jack relief valves are set between rated load pressure and 110% rated load pressure.

Caution: Always open pump release valve before adjusting relief valve.

- 6.4 Open release valve.
- 6.5 Adjust relief valve as outlined in jack maintenance manual.
- 6.6 Close pump relief valve and operate pump to verify relief valve setting. Repeat as necessary.

7.0 Oil Types

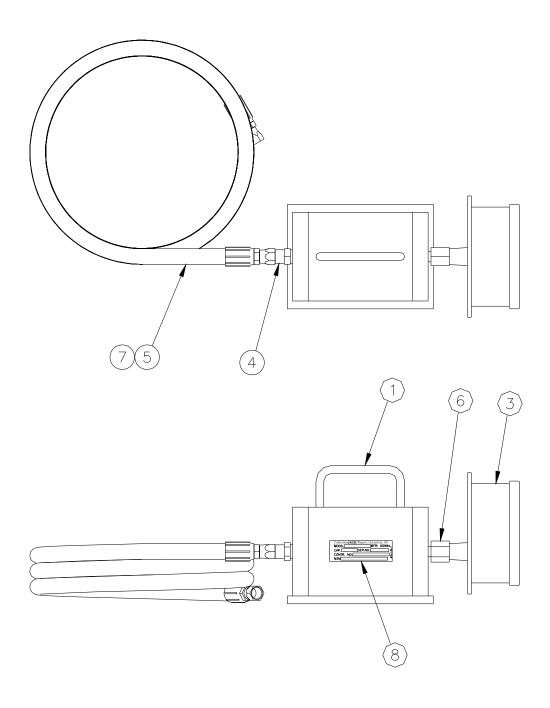
The following hydraulic oils are recommended for use:

Exxon/Mobil Aero HF (MIL-5606) Exxon/Mobil DTE-11, -15 Phillips 66 X/C 5606 Royco 783 (Anderol) (MIL-PRF-6083) Shell Tellus 10, 15 Shell Aerofluid 31 (MIL-PRF-83282) Shell Aerofluid 41 (MIL-PRF-5606) Texaco Regal Oil R & O (32, 46, 68, 100, 150, 220, 320, 460)

Model 049D1100 Jack Test Cell Page 1 of 2 Figure 1

PART NUMBER	DESCRIPTION	UNITS PER ASS'Y
049D1100	Jack Test Cell	Ref
049D1107	Test Cell Weldment	1
Not Used		
450A3312	Gauge	1
43A13905		
049-1120		
485-20806		
049-1121		
915-176-1	Nameplate	
	049D1100 049D1107 Not Used 450A3312 43A13905 049-1120 485-20806 049-1121	049D1100 Jack Test Cell 049D1107 Test Cell Weldment Not Used 450A3312 43A13905 Gauge 049-1120 Hose Assembly, Female 485-20806 Expander, 1/2 x 3/8 FG-S 049-1121 Hose Assembly, Short

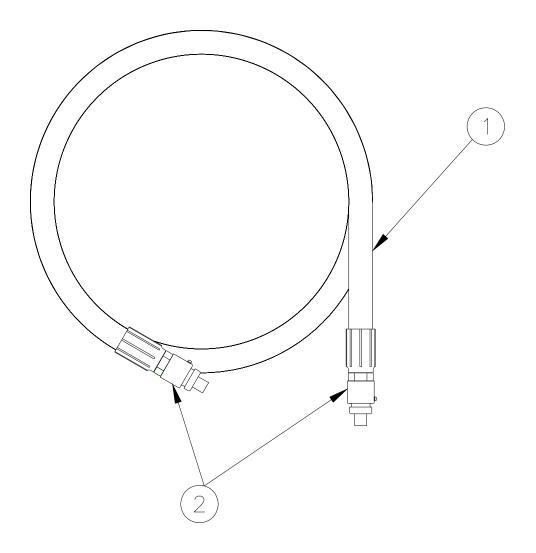
Model 049D1100 Jack Test Cell Page 2 of 2 Figure 1



Model 049D1100 Jack Test Cell Page 1 of 2 Figure 2

FIG. & ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASS'Y
2-	049-1120	Hose Assembly, Long	Ref
-1 -2	49B6568 43A13906	Hose Assembly Connector Assembly, Male	

Model 049D1100 Jack Test Cell Page 2 of 2 Figure 2



Model 049D1100 Jack Test Cell Page 1 of 2 Figure 3

FIG. & ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASS'Y
3-	049-1121	Hose Assembly, Short	Ref.
-1 -2	450A6732 43A13906	Hose Assembly, 7010101060606-24 Connector Assembly, Male	

Model 049D1100 Jack Test Cell Page 2 of 2 Figure 3

