Jewel Instruments Pattern 675 tube tester, 1932 By Bart Lee, K6VK, CHRS Fellow in History

A Jewell of a Flea Market Find: This appeared as an abandoned and seriously distressed little black box at the March 7 CHRS flea market. But it had a rough charm and some potential. It certainly cleaned-up well: mostly plastic polish but metal polish on the metal and some 1500 sandpaper. The grip cap lead needed some mechanical help by way of shrink-wrap tubing. (The grid cap was made by National in Mass.)



Cleaned up and Polished.

A Jewell 675 (rough) sold for \$12 on the Internet. The 675 is similar to Jewel Instruments Pattern 209 *circa* 1932 but with conjoined tube sockets and a top cap clip. A 209 is listed at \$99 on eBay. The 675 is way more interesting because of its clever multiple tube sockets.



Type 24 tube as the DUT (device under test).

It seems to test all *circa* 1932 tubes in one very small instrument. (See the 1932 ad for a related type as well as the 675).

Tube-	Seller
OF.	
	with proven
profit - maki	ing features
Meston-Jewell design of low that no deal ford to be inadequated by the succession of the provided for the succession of	n Model 627 Tube- liusive features of the n available at a cost or or serviceman can ately equipped, nes as the direct read- fromuce meter, zero- valtage indicator and are combined in the to show you one of tube-Sellers!
Pattern 675 T	ube-Checker
Ask your jobbe new Weston Mode	A compact, light weight tusing the weight tusing the content of the portable and counter use. Test limits are etched on the instrument panel for quick reference. All present tubes are tested without the use of the available for both wer supplies, to show you the closs of the counter of the point tubes of tubes of the point tubes of tubes
WEST	ON
Weston Electrical Inch Jewell Electrical Inch 599 Fralinghuysen A	WELL Idenment Corp., rummant Co., Nowark, N. J.
	mation concerning the ell line of radio serv-
Name	nin an estimated
Address	
City	State

A 1932 advertisement.



The front panel tube list and test data.

TUBE M.A. TEST	TUBE M.A. JEST
.01A * 2.8-4.7 2.1-3.6	38 6.0-8,0 2.3-4.0
10. * 4.2-6.8 2.6-4.2	39 * 3.6-5.0 1.9-3.0
12 A * 6.4-10.6 4.3-7.2	45. 1525. 3.2-4.8
20 * 4.6-7.6 0.4-0.8	46 7.5-10. 3.3-5.0
24 * 1.4-2.0 1.3-2.0	47 7.5-10. 3.3-5.0
26 * 4.8-7.8 2.2-3.7	50 10-16. 3.2-4.8
27 * 3.8-6.0 2.3-4.0	56 4.9-7.0 4.5-6.0
30 * 4.1 - 4.8 2.1 - 3.6	57 * 1.5-2.0 3.3-5.0
31 8.4-11.8 1.1-6.0	58 * 2.2-3.0 2.6-4.0
32 * 1.1 - 1.5 0.9 - 1.5	71A 15-25. 3.2-4.8
33 9.0-12.0 2.6-4.0	80 40.50.
34 * 1.4-2.0 1.3-2.0	81 3645
35 * 1.9-2.5 1.6-2.5	82 19-26.
36 * 1.4-2.0 0.9-1.5	99 * 2.3-3.9 0.6-1.1
37: ★ 3.6-5.0 1.9-3.0	

The front panel tube list and test data, negative image.

The rear panel provides complete instructions. For Internet images see http://www.radiomuseum.org/r/weston_675.html Circuit diagram reference: Rider's Perpetual, Volume 4 = circa 1934 and before; Literature/Schematics: Riders 4-2. Weston seems to have been the dominant company in connection with Jewell Electrical Instrument Company. These are today active brands of test equipment. (de K6VK)