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).

Veston-Jewell design available at a cost to low that no dealer or serviceman can flord to be inadequately equipped. Such proven features as the direct readic three-toins table performance meter. zero-est test circuit, line voltage indicator and superanting control are combined in the ew Model 677. Ask your jobber to show you one of hese new Weston Tube-Sellers! Attern 675 Tube-Checker A compact, light ube-checker that is popular for both portable and counter use. Test limits are eithed on the instrument panel for quick reference. All present tubes are tested with the counter use. Test limits are eithed on the counter use of the counter use of the counter use. Test limits are eithed on the counter use of the counter use of the counter use. Test limits are eithed on the counter use of	Tul	be-Seller
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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)