PRECISION APPARATUS
DIV. OF DYNASCAN CORP.
1801 W. BELLE PLAINE
CHICAGO, ILL. 60613

OPERATING INSTRUCTIONS FOR PRECISION APPARATUS ADAPTER A-15

The Precision Apparatus Model A-15 is a Multi-socket Adapter designed to enable you to check the *Compactron, Nuvistor* (both 5 pin and 7 pin types), *Novar, Ten-pin Miniature* Tubes and Ten-pin Decal Tubes with any Tube Tester.

IMPORTANT: For each of the following tests insert the A-15 plug into the 9 pin miniature socket on your tube tester. The plate cap of your tube tester should be connected to the plate cape stud on the A-15 case.

I. COMPACTRON TESTING

For the testing of Compactrons, Precision has developed its unique "Keying System" which eliminates the need for multiple sockets or complicated switching systems. Test Procedures are as follows:—

A. To test *COMPACTRONS with a Precision or Paco Tube Tester:*
You will note that the panel of the A-15 includes a series of numbers (from "0" to "12") around the *Compactron* Socket. All that is required to test any

KEY . . . Wide Spacing

FIG. 1

Compactron is:

1. Insert the plug of the A-15 into the Nine-pin Miniature Tube Socket on the Tester.
2. Attach the grid cap to the stud on the A-15 case.
3. Set levers and switches as indicated.
4. Insert the tube into the Compactron Socket with the *blank space or key,* (see Fig. 1) at the number indicated in the Test Data, and:
5. Test!

B. To test *COMPACTRONS with a Tube Tester other than Precision or Paco:* Use your Tube Tester Manufacturer's Data and the attached chart (page 4) which indicates which pins of the Compactron Tube terminate at the Adapter male-plug when the Compactron Tube is inserted in the Socket in each of the 13 possible ways. *For Example:*

1. Assume that, for a given section of a tube, you have determined that pins 5, 9, and 11 are "Anode" or "Meter Circuit" elements; pin 2 is the cathode; and pins 1 and 12 are the heaters (filaments).

2. First determine which positions of the tube in the socket will allow all of the above pins to be picked up. In our example, this occurs when the blank space is at "7".

3. With the blank space (key) at this position, we see from the chart on page 4 that Compactron pin "1" corresponds to pin "8" of the male plug. Compactron pin "2" to pin "9" of the male plug, Compactron pin "5" corresponds to pin "C", (Grid cap lead, usually number "0" or "10" on most Testers). "9" corresponds to "3", "11" corresponds to "5" and "12" corresponds to "6". Therefore, make the changes required to convert your Tester Manufacturer's Data to agree with the pin terminations as indicated above, and note that "Blank space (key) goes to 7".

4. Test information is now completed for this particular EXAMPLE.

II. NOVARS, 10 PIN MINIATURE, DECAL, AND NUVISTOR TESTING

A. To test *Novars, 10 Pin Miniatures, Decals* and *Nuvistors ON PRECISION OR PACO TESTERS:*

All that is required for these types, is to set levers and switches as indicated in the data; plug the A-15 into your Tube Tester, and attach the grid cap; plug the tube to be tested into the appropriate socket of the A-15; and Test.

B. To test *Novars, 10 Pin Miniatures* and *Nuvistors ON TESTERS OTHER THAN PRECISION OR PACO:*

For *Nuvistors,* first note the wiring of the Nuvistor Sockets in the wiring diagram (on page 5); make any changes necessary in your Tube Tester Manufacturer's Data, plug the A-15 into your Tester (and attach the grid cap), insert the Nuvistor into the proper socket and Test.

For Novars, Decals and *10-pin Miniature* Types, just plug in and Test.

NOTE: In the event that Tester Data is not available, data may be set up by first referring to the Tube Manufacturer's Data and then setting up your Tester in accordance with the attached pin location information. It is then possible to obtain *temporary* Test Data by setting controls as indicated by your Tester Manufacturer's Data for a *similar* tube (i.e.: same characteristics, but different basing).

SERVICE INFORMATION

When returning a Precision Apparatus instrument for repair or service, always pack carefully in a rugged, oversized container, using a generous supply of padding such as excelsior, shredded paper, or crumpled newspaper. Attach a tag to the instrument giving your name, address and trouble experienced. Never return an instrument unless it is accompanied by a full explanation of difficulties encountered. The more explicit the details, the more rapidly your instrument can be handled and processed.

Please address to:

PRECISION APPARATUS
Div. of Dynascan Corp.
1801 W. Belle Plaine
Chicago, Ill. 60613

ATT: SERVICE DIVISION

A FRAGILE label should appear on at least four sides of the carton.

Return shipment to you will be made via PARCEL POST COLLECT, including repair-service charges unless otherwise requested by previous correspondence.

Please take note that a Carrier cannot be held for damages in transit if in HIS OPINION, packing is insufficient.

COMPACTRON ROTATION CHART

WITH BLANK SPACE (KEY) AT	— COMPACTRON PINS —											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
0	1	2	3	4	5	6	7	8	9	—	—	C
1	2	3	4	5	6	7	8	9	—	—	C	—
2	3	4	5	6	7	8	9	—	—	C	—	1
3	4	5	6	7	8	9	—	—	C	—	1	2
4	5	6	7	8	9	—	—	C	—	1	2	3
5	6	7	8	9	—	—	C	—	1	2	3	4
6	7	8	9	—	—	C	—	1	2	3	4	5
7	8	9	—	—	C	—	1	2	3	4	5	6
8	9	—	—	C	—	1	2	3	4	5	6	7
9	—	—	C	—	1	2	3	4	5	6	7	8
10	—	C	—	1	2	3	4	5	6	7	8	9
11	C	—	1	2	3	4	5	6	7	8	9	—
12	—	1	2	3	4	5	6	7	8	9	—	—

Corresponding Pin of Adapter Plug

NOTE:
C = Cap Stud
— = No Connection

INTER-WIRING CHART

		SOCKETS				
ADAPTER PLUG	CABLE	10 PIN MIN. OR DECAL	NOVAR	NUVISTOR		COMPACTRON
				5 PIN	7 PIN	
1	brown	1	1	2	1	1
2	red	2	2	4	3	2
3	orange	3	3	8	5	3
4	yellow	4	4	10	10	4
5	green	5	5	12	12	5
6	blue	6	6		6	6
7	violet	7	7		7	7
8	white	8	8			8
9	black	9	9			9
Grid Cap*	black	10				12

*Located on A-15 Case.

TUBE CHART INFORMATION

Available For All Precision Apparatus and Paco Tube Testers

Current tube testing information for your Precision Apparatus or Paco Tube Tester is available from Precision Apparatus, A Division of Dynascan Corporation, Chicago, Ill. This information is in book form, and as a supplement to your existing roll chart, will give you the setup information required to test new tube types.

A subscription to tube testing information will furnish you with several issues of testing information at intervals during the year. The price of a subscription is $4.50/year.

Due to the cost of handling, we are unable to provide a service of this type on other than a cash in advance basis. To obtain the Precision Apparatus tube chart service send the model and serial number of your Tube Tester, your name, address and zip code and a check or money order for $4.50 to:

Precision Apparatus Division
Dynascan Corporation
Att: Service Dept.
1801 W. Belle Plaine
Chicago, Illinois 60613

IMPORTANT: Because of recent postal regulations, be certain to include your ZIP CODE.