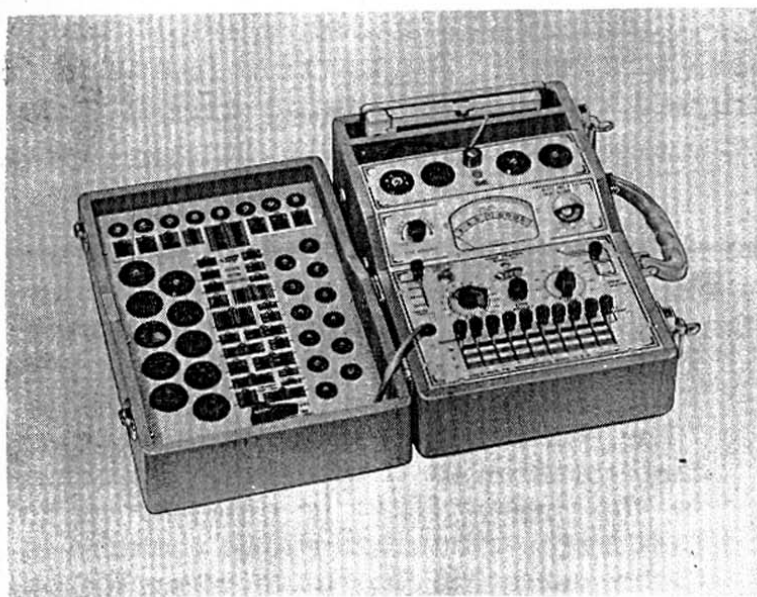




MODEL 107

TUBE TESTER

SETUP DATA  
for  
INDUSTRIAL  
and  
FOREIGN TYPE TUBES





Increased reliability in the operation of your electronic equipment will result, if you depend on the Seco Model 107 for your tube testing needs.

**NOTE:** The following three practical outstanding test provisions are contained ALL IN ONE UNIT.

1. Tubes are tested for grid emission and shorts by a d-c testing process. (This is the industry-accepted and popularly named "GRID CIRCUIT TEST" developed and patented by SECO. This method is considered much superior to conventional a-c short test. This process of d-c testing for all types of existing as well as intermittent shorts covers the entire area where shorts will cause the malfunctioning of military and industrial equipment.
2. Voltage amplifiers such as front end RF and IF types are quickly and accurately tested on the PREWIRED CHASSIS in the cover. Comparative Dynamic Mutual Conductance is read on the meter.
3. Power tubes are tested for current handling capability in a properly designed cathode emission circuit contained on the main chassis.

The following is a quote from the article, "Fine Points of Tube Testing" by William F. Burke, Consulting Editor, PF Reporter, which appeared in the 1958 TEST EQUIPMENT MANUAL.

"The point in question now is whether the emission or transconductance test is the best. This is determined in part by the circuit in which the tube is to be used. In the case of an RF or IF amplifier tube, the stage gain is proportional to the transconductance; thus the Gm test is the most important. In the case of an output or power rectifier tube, it must be capable of supplying large amounts of current; here, the emission test is most important."

**NOTE:** The Seco Model 107 offers both the abovementioned tests in one unit PLUS THE "SECO GRID CIRCUIT TEST".



# OPERATING MANUAL

for

# MODEL 107 TUBE TESTER

## GENERAL DESCRIPTION

Insert 7 pin tubes as listed on panel in these sockets. Sockets labeled 7A, 7C, etc.

Simple to replace etched panel showing tube listing with "LOAD" pot setting to the right of each type. 2X indicates that the type is a twin type and is tested with the BAR KNOB "UP" as well as in the "DOWN" position.

These three sockets are provided for future expansion. Write us on how to wire for your special needs.

Insert octal types in these sockets. Sockets 8A thru 8J

Popular radio and TV amplifier tubes quickly and accurately tested in these pre-wired sockets that have all potentials and signal voltage wired in—only the "FILAMENT SELECTOR" and "LOAD" pot adjustments are required.

Types of similar characteristics are alphabetically arranged in easy-to-read boxes. 90% of TV types can be tested on this chassis.

Power switch and "EYE ADJUST" control turn on tester by turning knob clockwise. Allow 20 seconds to warm-up and adjust so that the eye tube closes down to a narrow slit. (Tester designed for 110-120 Volt 60 cycle AC operation only.)

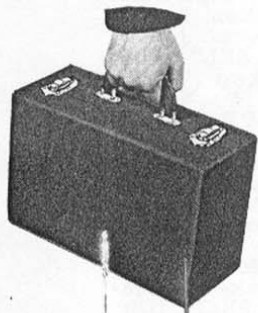
Compartment for storing "FLIP-CHART." Use the set-up information in this chart ONLY when testing tubes in the sockets above the meter. The P. S. column in the "FLIP-CHART" will tell you if the particular type can be checked in the PRE-WIRED socket in the cover of tester. If no socket identification appears in front of the tube type it must be tested in one of the sockets above the meter.

Simple, easy-to-read "GOOD" "BAD" scale for either test. Per cent scale below may be used if desired. An average good tube reads from 90 to 110 in most cases.

This button covers the meter zero set adjustment. Adjust to zero with an eighth inch screwdriver and power switch "OFF."

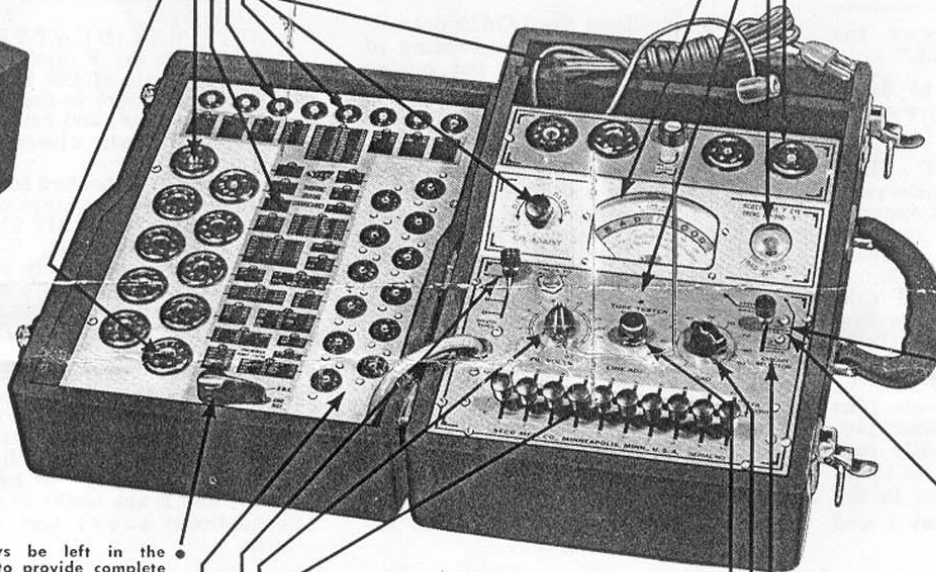
GRID EMISSION AND SHORTS INDICATOR is a type 6AF6G electron ray tube. This indicator is also used to indicate FIL or HEATER continuity.

Insert tube into proper socket to make tests when tube is not listed on the panel in the cover. Observe settings in the "FLIP-CHART" when tubes are inserted in these sockets.



\$139.50

NET DEALER



TUBE INDEX  
FLIP CHART

This switch must always be left in the "CENTER" GCT position to provide complete grid error and shorts information. Bar is moved "UP" to make "DMC" test on single types and also "DOWN" in the case of twin or dual types.

Insert 9 pin tubes as listed on the panel in these sockets. Sockets labeled 9A, 9B, etc.

High quality free point lever type switches. RTMA coded for tube pins #1 thru #9. TC is for tube cap. All of these levers are to be left in the "NORM" position unless otherwise specified. (This is not an "OFF" position.) Generally only three levers are required to be moved for any particular type.

Filament voltage selector switch must be set BEFORE the tube to be tested is inserted into its socket.

This switch labeled "SPEC TYPES" must be left in the "NORM" position at all times when testing tubes on the prewired chassis. Move this selector to A, B, or D as specified on the FLIP-CHART when using the sockets above the meter, otherwise leave it in the "NORM" position.

This switch must be left in the "GRID CIRCUIT TEST" position unless otherwise indicated. Information on grid error and leakage tests covered when switch is in this position.

Push this knob forward to read Cathode Emission on meter scale. DO NOT under any condition move this lever forward if a short was indicated by the eye tube indicator.

Set "CIRCUIT SELECTOR" switch in "ELEM. ANAL." position for making conventional inter-element short and leakage tests.

Load pot setting is made according to the number appearing opposite the tube type appearing on the DMC panel WHEN testing tubes on the chassis mounted in the cover. The load pot setting found in the "FLIP-CHART" is to be used ONLY when tubes are inserted in the sockets above the meter.

After 20 second warm-up time and BEFORE inserting any tube, hold down the red button and turn the "LINE ADJUST" knob until meter pointer reads to center of meter scale.

## SECO TUBE TESTING EQUIPMENT USED IN MANY FIELDS



AUTOMOTIVE



AVIATION



RADIO & TV



BUSINESS  
MACHINES



EDUCATION  
DEVELOPMENT  
& RESEARCH



COMMUNICATION



TRANSPORTATION



MILITARY

# HOW TO MAKE IMPORTANT PLUS TESTS in the Seco Model 107

## 1. To make the "OPEN ELEMENT" test.

- a. Place the heater levers 3 and 4 on F and F<sub>1</sub> (using 6AU6 as an example), and insert tube.
- b. While holding the "Circuit Selector" switch in the cathode emission position move each of the five remaining levers to the "Q" position one at a time and note the amount of meter deflection readings for each position. The control grid will give the greatest deflection, the screen less, the suppressor still less and the plate the least. The lever connected to the cathode will open the circuit and no deflection will be noted.

## 2. To make Power amplifier "GAS" test:

- a. Set up the tester and test the tube as you would normally. Note the meter reading and record.
- b. Return all levers except the heater levers to "NORM."
- c. Consult tube manual to determine plate pin and move corresponding lever to "Q."
- d. Push the "CIRCUIT SEL" switch to Cathode emission position. If meter reading is approximately 90% of above recorded meter reading, the tube is highly gassy and should be rejected. The reading on a good tube should be at the very low end of meter scale.

## 3. To determine the Continuity of Internal connections between pins within the tube itself: Example: The 6AQ5 has an internally connected jumper between pins 1 and 7. (Under the "Q" heading in the "FLIP-CHART" note that 1 and 7 appear under "Q.")

## a. Set up all the pin selector levers as stated in the "FLIP CHART."

## b. The eye tube indicator should OPEN when lever number 1 or 7 is moved back to the "NORM" position.

## 4. To determine which socket and what settings should be used on a newly released tube on which we have not yet given you the information.

### a. On the prewired chassis:

1. Compare the pin arrangements of the new tube and one of the types already listed having the same number of pins and similar base.
2. Set the FIL SEL to proper voltage setting.
3. Set the LOAD pot to "O."
4. Insert the new tube in its proper socket. Operate DMC switch.
5. Readjust the LOAD pot setting for a meter reading of 100. Record the pot setting for future reference.

### b. On the Master Unit:

1. Compare the pin arrangements of the new tube with that of a similar known type. The control grid pin selector lever is always inserted into the "Q" bar position. The individual element location can be determined by making the "OPEN ELEMENT TEST" on each element as described under this heading.
2. Set the "LOAD" pot to approximately 90.
3. Make Cathode Emission test and reduce load settings until meter reading drops 2%. Record load setting for future reference.

## 4. On small diodes, set the Load to 100.

## SPECIAL NOTES ON TAPPED FILAMENT BATTERY TYPE TUBES. (Example is the 3V4)

It is especially important that the above mentioned "FIL CONT" check be made using all three pin selector levers under the F and F<sub>1</sub> column. In this case the #5, #1 and #7 are the filament pins. The cathode emission test as well as the "GRID CIRCUIT TEST" are made with the "FIL SEL" set at 1. This means that the filaments are connected in parallel.

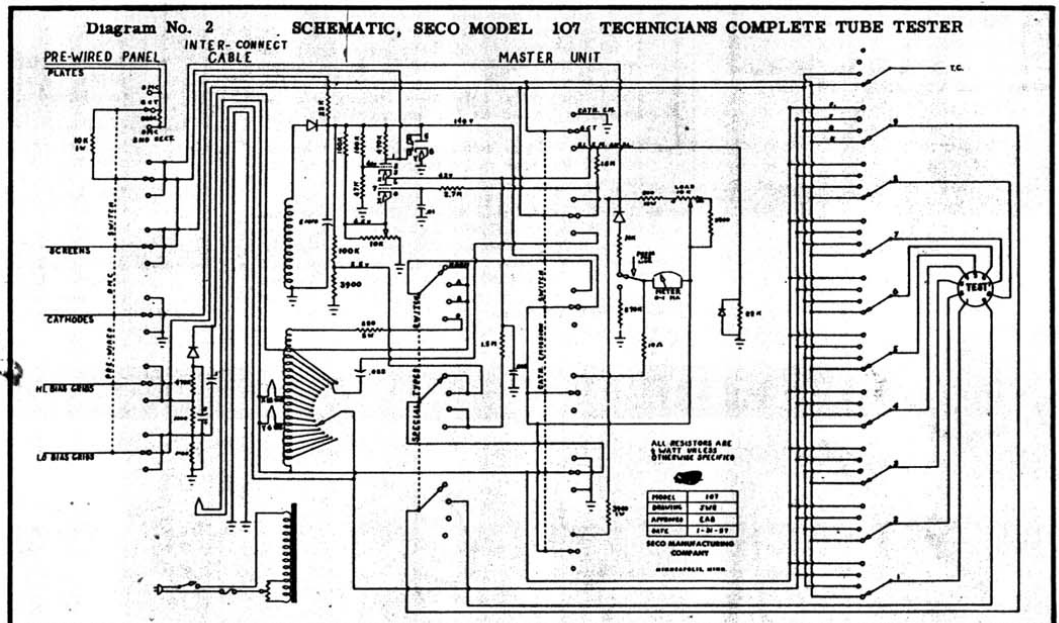
## ADDITIONAL NOTES ON "ELEM. ANALYSIS" TEST POSITION. (Conventional one meg short test)

If it is desired or seems imperative, a conventional inter-element leakage test can be made as follows:

- A. Move the "CIRCUIT SEL" switch to the position marked "ELEM. ANALYSIS."
- B. WITH THE HEATER LEVERS STILL in the F and F<sub>1</sub> position, move each of the remaining pin selector levers to the "Q" position one at a time, and return. The eye should remain closed on a good tube.

When tubes are checked for grid error and other shorts as previously mentioned with the "CIRCUIT SELECTOR" in the "GCT" position, the 107 circuitry will reveal nearly all common practical failures. In some special cases certain types of shorts will not be revealed with the "CIRC SEL" in the GCT position. In all ordinary instances where a tube is removed from a TV set, as an example, and is operating at all, it would be a waste of time to test the tube for any other shorts but those revealed by the tester in the GCT position. In some rare cases, and if any doubt remains, the conventional short test should be made.

## SCHEMATIC OF SECO MODEL 107





## MODEL 107 TUBE TESTER

HOW TO TEST A TUBE ON THE PREWIRED CHASSIS featuring the SECO Developed GRID CIRCUIT TEST—plus MUTUAL CONDUCTANCE TEST on voltage amplifier types. Gm is read on a percentage scale as well as the "GOOD" "BAD" scale. The prewired chassis is in the cover.

1. Set all pin selector lever switches to "NORM."
2. Set "CIRCUIT SELECTOR" switch to "GRID CIRCUIT TEST" position.
3. Set lever switch labelled "SPEC. TYPES" to "NORM."
4. The bar knob on the prewired chassis in the cover must be in the center position marked "GRID CIRCUIT TEST."
5. Insert the power plug into 110-120V 60 cycle AC outlet.
6. Turn on tester with the "EYE ADJ." knob.
7. Allow 20 seconds to warm up.
8. Turn "EYE ADJ." knob clockwise to where eye tube closes to a narrow slit.
9. While pressing the "LINE TEST" button, turn the "LINE ADJ." knob clockwise to where the meter reads to center of scale.
10. The 6AU6 will be used as a sample tube. Set the filament voltage switch labelled "FIL. SEL." to 6.
11. Locate the socket labelled 7E in the top row of seven pin sockets. Reference may be made to the FLIP-CHART under column "P.S." (prewired socket) for determining proper test socket to be used.
12. Set the load pot to 25. This is the number appearing opposite AU6 in the 7E box, and also appears under column "DMC" in the FLIP-CHART. NOTE CAREFULLY: The information in the FLIP-CHART under column "P.S." and "DMC LOAD" applies only to tubes being tested on the prewired chassis.
13. Insert the tube in socket 7E:  
Note: To obtain reliable testing results, it is recommended that the tube be well pre-heated in the set before inserting in the tester. If this is not practical as in series string sets, preheat tubes about twenty seconds at a 20% high Fil V.  
A. As soon as tube is plugged in shorts are indicated automatically.
14. If the tube is clear of grid error and inter-element leakage, the eye tube indicator will remain closed. (If it opens, reject the tube and no further tests need be made.)
15. Move the bar knob up to read the DMC merit of the tube on the meter. An average good tube will read 100. If the tube merit falls into the red "BAD" part of the scale, it should be rejected.
16. In the case of a twin triode, you will note that a 2X appears together with another number like 2X40. This means one section is tested with the bar knob in the up position and the other section is tested with the bar knob in the down position. Grid errors and leakage tests are made on these types in parallel but the mutual conductance tests are made on each section one at a time.
17. In the case of a dual tube having two unlike triodes or a triode and a pentode like the AN8, two load settings are required. In the case of the AN8 the upper Load pot setting is 25 and the lower one is 20. Set the LOAD pot knob to 25 and move the DMC bar knob to the up position to test this section. Return the bar knob to the "GRID CIRCUIT TEST" position and change the load pot setting to 20. Press the bar knob to down position to test this section.

HOW TO TEST A TUBE ON THE "MASTER UNIT" featuring "GRID CIRCUIT TEST" as well as CATHODE EMISSION TEST on all modern types. The Cathode Emission test is the industry accepted method for testing oscillators, pulse amplifiers, power amplifiers and rectifiers wherever cathode current handling capability is of prime importance.

REFERENCE MUST BE MADE TO THE "FLIP-CHART" FOR ALL SETTINGS (WHEN TEST IS BEING MADE ON MASTER UNIT).

Set up the tester as shown in steps 1 thru 9 at the left.

10. Locate the tube type to be tested in the "TUBE INDEX FLIP CHART." Using the 6BQ6 as an example, the following information appears.

P.S.	DMC LOAD	TYPE	FIL. V	F	F <sub>1</sub>	Q	LOAD	SPEC.
		6BQ6	6	2	7	5	10	

Whenever the P.S. (Prewired Socket) column is blank, as in this example, it indicates that the tube CANNOT be tested on the prewired chassis.

11. Set "FIL SEL" to 6.
12. Move pin selector lever number 2 to red bar marked F and move number 7 to F<sub>1</sub>.
13. Set the LOAD pot knob to 10.
14. Move pin selector lever number 5 to black bar marked "Q."
15. In that the space under "SPEC." is left blank, this indicates that the switch labeled "SPEC TYPES" is left in "NORM" position unless indicated otherwise. The indication would be either an "A," "B" or "D."
16. Insert the tube in the proper socket above the meter.
17. \*Allow the tube to warm up at least twenty seconds.
18. With the "CIRCUIT SELECTOR" switch in the "GRID CIRCUIT TEST" position, all important grid errors as well as cathode to heater leakage tests are made simultaneously. Reject the tube if the eye tube indicator deflects into the red area.
19. If the eye tube does not open, proceed to make the cathode emission test by moving the "CIRCUIT SEL" lever forward to the position marked "CATHODE EMISSION." Read the merit of the tube on the "GOOD" "BAD" scale.

\*If it is desired to make a FIL. CONTINUITY test before proceeding further (this is especially recommended when the filament is tapped for pilot lamp as in the 35Z5, 35W4, etc.), observe the following steps:

- A. Move the "CIRCUIT SEL" switch to the position marked "ELEM. ANALYSIS."
- B. With all of the pin selector levers in the "NORM" position, move each of the levers under F and F<sub>1</sub> to the "Q" bar position.
- C. If the continuity is complete, the eye tube indicator will OPEN.

### IMPORTANT . . . . .

SUGGESTIONS FOR GETTING THE BEST USE OUT OF YOUR 107 when servicing series heater type receivers.

1. Move pin selector levers #2, 4 and 8 to the "Q" bar position and your tester is all set up for checking heater continuity of all TV series heater type tubes. USE SOCKETS LOCATED ABOVE METER.
2. To hasten the warm-up of a cold tube which will result in a more satisfactory shorts and grid emission test, the following procedure, which applies to heater type tubes only, is recommended. ADVANCE THE "FIL SEL" TO THE NEXT HIGHER THAN NORMAL SETTING (up to 12V types) DURING THE WARM-UP and "GCT" TEST PERIOD.

Example: A 6CB6 tube can be safely preheated with the "Fil Sel" at position 7. However, the "Fil Sel" should be returned to the NORMAL SETTING when making either the DMC or Emission Test. (The normal setting for the 6CB6 is position 6.)

# OUTSTANDING FEATURES of the Secc Complete Tube Tester Model 107

- I. Designed for convenience and profitable TV Servicing.
  - A. Complete tube tester with portable convenience.
  - B. Three tests in one handy instrument.
    1. Grid-Circuit Test—all tubes
    2. Dynamic Mutual Conductance Test on prewired chassis.
    3. Cathode Emission Test—by free point selector system
  - C. Heavy wood case covered with tough vinyl barquette plastic assures lasting ruggedness.
  - D. Deep etched aluminum panels retain information.
  - E. For more profitable TV Servicing, check tubes on all service calls. Your costly call backs will be reduced to a minimum. Bring your customer into the act—let them know you are using the finest, most reliable test equipment on their set.
- II. Speedy to Operate—Complete tube tests.
  - A. Prewired chassis in cover for DMC check on majority of popular TV Tubes.
    1. "Fil. Sel" and "Load" only settings required.
    2. Grid circuit test and short test automatically set up at all times.
  - B. Dependable and fast free point selector system for Cathode Emission tests as well as comprehensive short test and grid emission test.
    1. Checks all Modern tubes.
    2. Only heater and grid elements to isolate and two or three values (potentials) to adjust.
    3. Pin selector levers numbered according to RETMA basing diagrams.
    4. Settings easily memorized because switches and pots are function labeled and only a minority of tubes are checked for Cathode Emission in TV servicing groups.
  - C. Eye adjustment and Line adjustment are set up only once. (Not individually for each tube.)
    1. Setup is made with no tubes in tester.
    2. All filament currents are compensated for thereafter.
  - D. Handy, new "FLIP-CHART" tube index lists complete tube data for the free point selector system (also indicates if tube is on prewired panel). Operates like a telephone index.
- III. Accuracy and Reason for tube grouping.

## A. DMC test on prewired chassis.

1. Best method for testing High transconductance amplifier types. (Front end types, voltage amplifier types.)
  - a. These types called on for High amplification, low current.
  - b. Includes RF, IF SYNC, VIDEO AND AUDIO VOLTAGE Amp. etc.
2. Each section of twin and dual purpose tubes are checked individually.

## B. Grid Circuit Test on Prewired Chassis

1. Checks reverse grid current as low as .5 micro amps.
2. Checks grid leakage to any other element averaging 75 meg ohms.
3. Short checks each element in tube to every other element in direct proportion to vulnerability.
4. No further short tests necessary. See Figure 1.

## C. Cathode emission on Master Panel.

1. Best method for testing power output and pulse amplifiers, and damper tubes.
  - a. These types called on for low or no amplification and high cathode current.
  - b. Both sections of full wave rectifiers checked individually.

## D. Grid Circuit test on Master Panel (Seco patented and the same as on our GCT-5 tester)

1. Checks reverse grid current.
2. Checks grid leakage to any

- other element.
3. Checks heater leakage to any other element.

## E. Element Analysis

1. Conventional short test for every element with one megohm sensitivity.

## F. Gas test

1. Dependable
2. Actually ionizes gas

## III. Non-Obsolescence

- A. Tube set up data on replaceable panel that may be brought up to date in seconds with a revised panel listing newest tube types as the need arises. Spare sockets on this chassis for future expansion.
- B. Cards on new tube types issued periodically to registered owners.

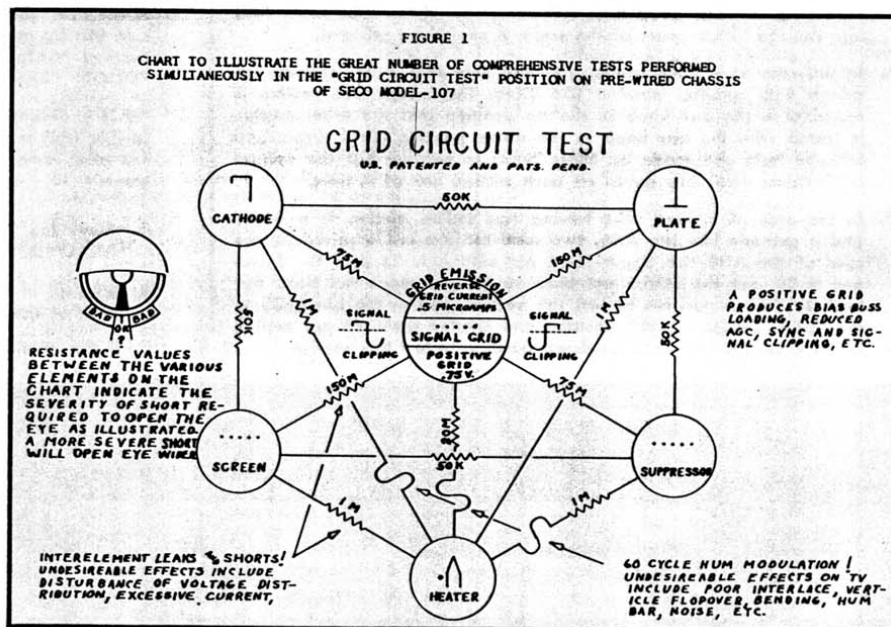
## IV. Demonstrate

### A. Prewired DMC

1. Single purpose tube (6AU6, etc.)
2. Twin triode (12AT7; 12AU7, 6SN7)
3. Dual purpose tubes (6U8, 6X8)
4. Dual tubes are paralleled for GCT—individually tested for each section DMC.

### B. Free point Cathode Emission

1. Rectifier (5U4, etc.)
  - a. 70 mils test current
2. Power output (6CD6)
  - a. 40 mils test current
3. Element Analysis
  - a. One meg sensitivity



KEY TO SYMBOLS

- PS - Prewired socket  
 DMC - Dynamic Mutual Conductance  
 Type - Tube type  
 Fil. Vol. - Filament voltage  
 F, F<sub>1</sub> - Filament pins  
 Q - Input element  
 Kem - Cathode emission  
 Spec - Special type switch

NOTE: Foreign tubes may use varied nomenclature as:

EF180 is same as E180F -- ECC92 is same as E92CC

DMC load settings are subject to edit with known good tube.

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
		0A2	--	--	15	100	D
		0A3	--	--	5	100	Norm
		0A4	--	--	57	100	D
		0B2	--	--	15	80	D
		0B3	--	--	5	70	D
		0C3	--	--	5	80	D
		0D3	--	--	5	100	D
		1C1	1	15.7	4	100	B
		1C2	1	1.7	4	100	B
		1D13	1	1.7	2	100	B
		1F2	1	15.7	6	100	B
		1F3	1	15.7	6	100	B
		1FD9	1	1.7	6	100	B
		1P10	1	17.5	3	85	B
		1P11	1	17.5	6	85	B
		2C33	2	2.7	TC	0	
		2D21	6	3.4	6	5	
		2E26	6	2.7	5	15	
		3B26	3	2.7	TC	20	B
		6D2	6	3.4	2	70	
		"	"	"	7	"	
		6E8	6	2.7	5	85	
		6F12	6	3.4	1	60	
		6H8	6	2.7	TC	60	
		"	"	"	4	100	40%
		"	"	"	5	100	40%
		7D9	6	3.4	1	40	
		8D3	6	3.4	1	60	
9B		30C1	8	4.5	2	45	
		"	"	"	9	45	A
		30L1	7	4.5	2	50	
		"	"	"	6	50	
		108C1	--	--	15	80	D
		150C2	--	--	15	100	D
8G	2x25	B36	12	7.8	1	60	
		"	"	"	4	"	
8G	2x25	B65	6	7.8	1	60	
		"	"	"	4	"	
9D	2x45	B152	12	4.5	2	70	
		"	"	"	7	70	

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
9D	2x45	B309	12	4.5	2	70	
		"	"	"	7	"	
		B319	7	4.5	2	50	
		"	"	"	6	"	
9D	2x25	B32E	12	4.5	2	60	
		"	"	"	7	"	
9D	2x100	B339	12	4.5	2	100	
		"	"	"	7	"	
9D	2x40	B719	6	4.5	2	70	
		"	"	"	7	"	
		BPM04	6	3.4	17	20	
		D63	6	2.7	3	85	
		"	"	"	5	"	
		D77	6	3.4	2	70	
		"	"	"	7	"	
		D152	6	3.4	2	70	
		"	"	"	7	"	
		DA90	1	1.7	2	100	B
		DAC32	1	2.7	TC	100	B
		DAF91	1	1.7	6	100	B
		"	"	"	3	"	"
		DAF92	1	1.7	6	100	B
		"	"	"	4	"	"
		DAF96	1	1.7	6	100	B
		"	"	"	3	"	"
		DC70	1	4.5	1	50	B
		DC80	1	4.35	1	100	B
		DCC90	1	17.4	5	90	B
		"	"	"	3	"	B
		DD6	6	3.4	2	70	
		"	"	"	7	"	
		DDR7	6	3.4	1	40	
		DF33	1	2.7	TC	100	B
		DF62	1	3.5	4	100	B
		DF91	1	15.7	6	100	B
		DF92	1	15.7	6	100	B
		DF96	1	15.7	6	100	B
		DF904	1	15.7	6	100	B
		DH63	6	2.7	TC	100	
		"	"	"	4	"	40%
		"	"	"	5	"	40%

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
7E	65	6187	6	3.4	1	85	
8G	2x95	6188	6	7.8	1	70	
		6188	6	7.8	4	70	
9D	2x25	6189	12	4.5	2		
		6189	12	4.5	7		
		6193	6	3.6	2	60	
		6193	6	3.6	7	60	
		6195	1	17.5	8	70	B
		6197	6	4.5	2	15	
9D	2x45	6201	12	4.5	2	70	
		6201	12	4.5	7	70	
		6202	6	3.4	1	10	
		6202	6	3.4	6	10	
		6203	6	4.5	1	10	
		6203	6	4.5	9	10	A
		6205	6	3.6	1	75	
		6206	6	3.6	1	80	
9D	2x100	6211	12	4.5	2	100	
		6211	12	4.5	7	100	
		6213	--	--	2	100	D
		6215	1	2.7	TC	100	D
		6216	6	4.5	2	10	
		6221	6	3.6	1	85	
		6222	6	3.6	1	90	
		6223	6	3.6	1	75	
		6224	6	3.6	1	25	
		6225	6	3.6	1	80	
9L	15	6227	6	4.5	2	25	
		6245	6	3.4	7	70	
		6247	6	3.6	12	100	
7E	25	6265	5	3.4	1	65	
		6267	6	4.5	9	100	A
		6286	1	2.4	3	100	B
		6287	6	4.5	8	15	
		6305	4	3.4	TC	100	
		6308	--	--	3	100	D
		6320	6	3.6	2	90	
		6320	6	3.6	7	90	
		6321	6	3.6	2	80	
		6321	6	3.6	7	80	
		6325	6	7.8	3	10	
		6325	6	7.8	5	10	
		6327	6	2.7	5	10	
		6350	12	4.5	3	60	
		6350	12	4.5	8	60	
		6352	1	16.48	5	100	D
		6352	1	16.48	7	100	D

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
		6373	1	4.5	2	90	
		6374	6	4.5	TC	15	
		6375	1	4.5	1	50	B
		6384	6	6.8	7	10	
		6385	6	1.9	3	90	
		6385	6	1.9	7	90	
		6386	6	1.9	3	75	
		6386	6	1.9	7	75	
		6395					
		6397	1	17.5	8	85	B
9D	2x90	6414	12	4.5	2	90	
		6414	12	4.5	7	90	
		6417	12	4.5	8	15	
		6418	1	3.5	4	100	B
		6443	6	4.5	TC	15	
		6453	12	4.5	3	35	
		6453	12	4.5	8	35	
7E	25	6455	6	3.4	1	45	
		6456	6	4.6	1	100	
		6457	6	3.6	1	100	
		6458	6	3.6	1	70	
		6519	1	3.5	4	100	B
		6525	6	3.4	6	5	
8D	8	6533	6	6.7	23	100	
		6550	6	2.7	5	10	
		6511	1	3.5	4	100	B
		6512	1	3.5	4	100	B
		6526	--	--	15	100	D
		6527	--	--	15	85	D
		6559	--	--	1	85	D
7E	20	6660	6	3.4	1	30	
7E	25	6661	6	3.4	1	70	
7E	20	6662	6	3.4	1	45	
		6663	6	3.4	2	80	
		6663	6	3.4	7	80	
		6669	6	3.4	17	15	
		6677	6	4.5	2	15	
9B	2x30	6678	6	4.5	2	15	
		6678	6	4.5	9	15	A
9D	2x45	6679	12	4.5	2	70	
		6679	12	4.5	7	70	
9D	2x25	6680	12	4.5	2	60	
		6680	12	4.5	7	60	
9D	2x100	6681	12	4.5	2	100	
		6681	12	4.5	7	100	



PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec			
9L 15			6686	6	4.5	2	20			
			6688	6	4.5	2	75			
			6690	6	3.6	2	90			
			6690	6	3.6	7	90			
			6754	6	4.5	1	20			
			6754	6	4.5	9	20			
			6760	19	4.5	2	10			
			6761	6	4.5	2	10			
			6788	6	3.6	1	85			
			6792	6	2.7	5	100			
			6814	6	3.6	1	70			
			9D 2x20			6829	12	4.5	2	85
						6829	12	4.5	7	85
6842	6	2.6				4	100			
6883	12	2.7				5	20			
6887	6	3.4				2	80			
6887	6	3.4				7	80			
6888	6	2.7				4	85			
8E			6893	12	2.7	5	15			
			6913	12	4.5	2	60			
9D 2x25			6913	12	4.5	7	60			
			6927	6	3.4	5	85			
7A 2x30			6927	6	3.4	6	85			
			6928	6	3.4	17	20			
			6973	6	4.5	36	20			
9D 2x100			7025	12	4.5	2	90			
			"	"	"	7	90			
7E 100			7027	6	2.7	56	10			
			7036	6	3.4	1	100			

A

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
9L 18			7054	12	4.5	2	15
			7055	12	3.4	2	50
			7055	12	3.4	7	50
7E 25			7056	12	3.4	1	80
9D 2x25			7057	12	4.5	2	65
			7057	12	4.5	7	65
9D 2x90			7058	12	4.5	2	90
			7058	12	"	7	90
9B 30			7059	12	4.5	2	50
			7059	12	4.5	9	35
9F 20			7060	12	4.5	2	60
			7060	12	4.5	8	40
7A 2x30			7061	12	4.5	36	10
			7079	6	3.6	2	85
			7083	6	3.4	7	70
			7189	6	4.5	12	15
			7244	6	3.4	5	55
			"	"	"	6	"
			"	"	"	6	"
7G 25			7245	6	3.4	156	45
9D 2x100			7247	6	4.5	2	85
			"	"	"	7	"
7E 35			7355	6	2.7	6	10
			7227	25	4.5	12	15
			7199	6	4.5	7	60
			7199	6	4.5	9	60
			7212	6	2.7	5	10
7C 35			9001	6	3.4	1	100
7C 35			9002	6	3.4	6	90
7E 25			9003	6	3.4	1	80
			9006	6	3.4	15	100
			XXD	12	1.8	4	80
			XXD	12	1.8	5	80
			XXFM	12	1.8	3	100
			XXFM	12	1.8	6	100
			XXFM	12	1.8	5	100
			XXL	6	1.8	6	70

Write factory if you require setup data on any tube not listed.

DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
65	DH77	6	3.4	1	100	
	"	"	"	5	"	40%
	"	"	"	6	"	40%
	DH149	6	1.8	3	100	
	"	"	"	5	"	40%
	"	"	"	6	"	40%
	DK32	1	2.7	5	100	B
	DK91	1	15.7	4	100	B
	DK92	1	7	4	100	B
	DK96	1	7	4	100	B
	DL33	1	2.7	5	85	B
	DL35	1	7	5	100	B
	DL36	1	7	5	100	B
	DL91	1	15.7	3	100	B
	DL92	1	17.5	3	85	B
	DL93	1	17.5	3	50	B
	DL94	1	17.5	3	85	B
	DL95	1	17.5	3	85	B
	DL96	1	17.5	3	100	B
	DL98	1	45.26	3	25	B
	DL651	1	3.5	4	100	B
	DM70	1	4.5	1	100	B
20	DP61	6	3.4	1	70	
	DY30	1	2.78	TC	100	D
	DY80	1	146.258	TC	100	D
	DY86	1	146.258	TC	100	D
	EAA91	6	3.4	2	70	
	"	"	"	7	"	
65	EABC80	6	4.5	8	100	
	"	"	"	2	"	
	"	"	"	1	"	40%
	"	"	"	6	"	40%
	EB34	6	7	3	85	
	"	"	"	5	"	
	EB91	6	3.4	2	70	
	"	"	"	7	"	
55	EBC41	6	3.4	1	100	
	"	"	"	5	"	40%
	"	"	"	6	"	40%
	EBC81	6	4.5	2	100	
	"	"	"	6	"	40%
	"	"	"	8	"	40%
55	EBC90	6	3.4	1	100	
	"	"	"	5	"	40%
	"	"	"	6	"	40%
65	EBC91	6	3.4	1	100	
	"	"	"	5	"	40%
	"	"	"	6	"	40%

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
		EBF80	6	4.5	2	85	
		"	"	"	7	100	40%
		"	"	"	8	"	40%
		EC80	6	4.5	1278	25	
		EC81	6	4.5	1	25	
7C	20	EC90	6	3.4	6	60	
7G	50	EC91	6	3.4	16	70	
7C	30	EC92	6	3.4	6	70	
8G	2x25	ECC33	6	7.8	1	60	
		"	"	"	4	"	
8G	2x100	ECC35	6	7.8	1	100	
		"	"	"	4	"	
8I	2x50	ECC40	6	2.7	4	75	
	"	"	"	"	5	"	
9D	2x45	ECC81	12	4.5	2	70	
		"	"	"	7	"	
9D	2x25	ECC82	12	4.5	2	60	
		"	"	"	7	"	
9D	2x100	ECC83	12	4.5	2	100	
		"	"	"	7	"	
9D	2x30	ECC84	6	4.5	2	70	
		"	"	"	7	"	
9D	2x40	ECC85	6	4.5	2	70	
		"	"	"	7	"	
9A	2x30	ECC90	6	3.4	5	60	
		"	"	"	6	"	
9A	2x30	ECC91	6	3.4	5	60	
		"	"	"	6	"	
9A	2x30	ECC92	6	3.4	5	60	
		"	"	"	6	"	
		ECF80	6	2.7	5	85	
9B	2x30	ECF82	6	4.5	2	50	A
		"	"	"	9	30	A
		ECH35	6	2.7	TC	85	
		"	"	"	5	"	
		ECH81	6	4.5	2	70	A
		"	"	"	9	60	A
		ECL80	6	4.5	2	100	A
		"	"	"	9	25	A
		ECL82	6	4.5	1	85	
		"	"	"	3	35	
		ECH83	6	4.5	2	100	
		"	"	"	9	"	
		ED2	6	3.4	2	70	
		"	"	"	7	"	
		EF70	6	3.6	1	100	
		EF73	6	3.6	1	70	
9L	25	EF80	6	4.5	2	60	
		EF83	6	4.5	2	60	

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec		
9L	25	EF85	6	4.5	2	60			
		EF86	6	4.5	9	100	A		
9L	30	EF89	6	4.5	2	65			
		EF91	6	3.4	1	60			
		EF92	6	3.4	1	75			
7E	20	EF93	6	3.4	1	45			
7E	25	EF94	6	3.4	1	50			
7E	20	EF95	6	3.4	1	70			
7E	25	EF96	6	3.4	1	80			
7E	25	EF180	6	4.5	2	75			
7E	100	EH90	6	3.4	1	85			
7E	100	EK90	6	3.4	1	75			
8D	15	EL33	6	2.7	5	20			
8D	8	EL34	6	2.7	5	10			
8D	10	EL37	6	2.7	5	10			
		EL38	6	2.7	5	15			
9L	25	EL70	1	4.5	2	90			
		EL81	6	4.5	2	25			
		EL83	6	4.5	2	25			
		EL84	6	4.5	12	15			
		EL85	6	4.5	2	25			
		EL86	6	4.5	2	20			
		EL90	6	3.4	17	20			
		EL91	6	3.4	1	40			
		9L	15	EL821	6	4.5	2	15	
				EQ80	6	4.5	7	100	
EY80	6			4.5	9	5	A		
EY81	6			4.5	27	10			
EY84	6			4.5	TC	15			
EY86	6			146.258	TC	100	D		
EZ35	6			2.7	3	15			
"	"			"	5	"			
		EZ80	6	4.5	1	15			
		"	"	"	7	"			
		EZ81	6	4.5	1	15			
		"	"	"	7	"			
		EZ90	6	3.4	1	15			
		"	"	"	6	"			
		GZ30	5	2.8	4	5	D		
		"	"	"	6	"	"		
		GZ32	5	2.8	4	5	D		
		"	"	"	6	"	"		
9H	65	GZ34	5	2.8	4	5	D		
		"	"	"	6	"	"		
		H63	6	2.7	TC	100			
		HABC80	19	4.5	8	100			
		"	"	"	2	"			
		"	"	1	"	40%			
		"	"	6	"	40%			

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec		
7D	55	HBC90	12	3.4	1	100			
		"	"	"	5	"	40%		
		"	"	"	6	"	40%		
7D	65	HBC91	12	3.4	1	100			
		"	"	"	5	"	40%		
		"	"	"	6	"	40%		
		HD14	1	2.7	TC	100	B		
		"	"	"	5	"	"		
		HD30	1	45.26	3	25	B		
7E	20	HF93	12	3.4	1	45			
7E	25	HF94	12	3.4	1	50			
7E	100	HK90	12	3.4	1	70			
		HL90	19	3.4	17	20			
		HL92	50	3.4	5	20			
7E	100	HM04	6	3.4	1	75			
		HY80	35	3.46	5	10			
8D	15	KT32	25	2.7	5	20			
8D	15	KT61	6	2.7	5	20			
8D	10	KT63	6	2.7	5	20			
8D	10	KT66	6	2.7	5	10			
8D	8	KT88	6	2.7	5	10			
		KTW63	6	2.7	TC	60			
8I	23	L63	6	2.7	5	80			
7C	20	L77	6	3.4	6	60			
		LN152	6	4.5	2	100	A		
		"	"	"	9	20	A		
9B		LZ319	8	4.5	2	46	A		
		"	"	"	9	"	A		
		N14	1	2.7	5	100	B		
		N17	1	17.5	3	85	B		
		N18	1	17.5	3	85	B		
		N19	1	17.5	6	85	B		
		N77	6	3.4	2	70			
		"	"	"	7	"			
		N78	6	3.4	1	20			
8D	15	N144	6	3.4	1	40			
		N147	6	2.7	5	20			
		N148	6	1.8	6	15			
		N152	19	4.5	2	5			
		N329	15	4.5	2	10			
		N359	19	4.5	2	5			
		N709	6	4.5	12	15			
		N727	6	3.4	17	20			
		9H	45	PABC80	9	4.5	8	100	
				"	"	"	2	"	
"	"			"	1	"	40%		
		"	"	"	6	"	40%		

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
			5783	--	--	3	100
			5784	6	3.4	7	90
			5785	1	6.7	1	100
			5787	--	--	3	100
			5797	25	4.5	1	50
			5798	25	4.5	2	100
			5798	25	4.5	7	100
			5812	6	34.7	1	15
9D	2x25		5814	12	4.5	2	50
			5814	12	4.5	1	50
			5823	--	--	4	20
			5824	25	2.7	5	15
			5829	6	3.5	1	100
			5829	6	3.5	6	100
			5838	12	2.7	3	5
			5838	12	2.7	5	5
			5839	25	2.7	3	5
			5839	25	2.7	5	5
			5840	6	3.6	1	75
			5842	6	3.9	47	15
7A			5844	6	3.4	5	85
			5844	6	3.4	6	85
			5845	2	34.7	1	100
			5845	2	34.7	5	100
			5847	6	3.9	1	30
			5851	1	17.5	8	90
			5852	6	2.7	3	10
			5852	6	2.7	5	10
			5854	1	3.5	3	100
			5857	6	3.6	4	60
			5871	6	2.7	5	15
			5873	6	1.8	3	75
			5873	6	1.8	6	75
			5875	1	3.5	4	100
			5879	6	4.5	1	100
8D	10		5881	6	2.7	5	10
			5889	1	3.5	TC	100
			5896	6	3.6	1	75
			5896	6	3.6	5	75
			5897	6	3.6	1	40
			5898	6	3.6	1	100
			5899	6	3.6	1	80
			5900	6	3.6	1	80
			5901	6	3.6	1	75
			5902	6	3.6	1	20
			5903	25	3.6	1	70
			5903	25	3.6	5	70
			5904	25	3.6	1	100

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
			5905	25	3.6	1	100
			5906	25	3.6	1	75
			5907	25	3.6	1	100
			5908	25	3.6	1	100
			5910	1	15.7	6	100
7E	100		5915	6	3.4	1	40
			5916	25	3.6	1	80
7A	2x30		5920	6	3.4	5	85
			5920	6	3.4	6	85
			5931	5	2.8	4	5
			5931	5	2.8	6	5
8D	100		5932	6	2.7	5	10
			5931	6	2.7	5	--
9D	2x25		5933	12	4.5	2	85
			5933	12	4.5	7	85
7A	2x30		5934	6	3.4	5	80
			5964	6	3.4	6	80
9D	2x30		5965	12	4.5	2	80
			5965	12	4.5	7	80
			5967	1	27.45	3	100
			5967	1	27.45	6	100
			5968	1	1.8	2	100
			5968	1	1.8	7	100
			5969	1	1.8	2	100
			5969	1	1.8	7	100
			5970	1	1.8	2	100
			5970	1	1.8	7	100
			5971	1	3.5	4	100
			5972	1	3.5	4	100
			5975	6	4.5	3	50
			5977	6	3.6	1	70
			5987	6	3.6	1	80
			5992	6	2.7	5	15
			5993	6	3.7	1	10
			5993	6	3.7	9	10
			5995	6	3.4	1	15
			5998	6	7.8	1	10
			5998	6	7.8	4	10
			6000				
			6004	5	2.8	TC	10
			6004	5	2.8	TC	10
			6005	6	3.4	17	15
8E	25		6006	6	2.7	4	50
			6007	1	3.5	4	100
			6008				
			6012	6	2.7	5	0
			6021	6	3.6	2	100
			6021	6	3.6	7	100
			6026	6	4.5	7	30

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec			
7E 25			6028 19	3.4	1	70				
			6029 1	2.4	3	80	B			
			6030 3	2.7	45	100	B			
8G 2x20			6042 25	7.8	1	90				
			6042 25	7.8	4	90				
7A 2x30			6045 6	3.4	5	80				
			6045 6	3.4	6	80				
			6046 25	2.7	5	15				
			6049 6	3.6	1	70				
			6050 1	2.4	3	100	B			
			6051 1	3.5	4	100				
			6052 6	3.6	1	30				
			6052 6	3.6	5	30				
			6053 25	3.5	1	30				
			6053 25	3.6	5	30				
			6055 25	3.6	1	100				
			6056 25	3.6	1	100				
			9D 2x100			6057 12	4.5	2	100	
6057 12	4.5	7				100				
6058 6	3.4	2				80				
6058 6	3.4	7				80				
6059 6	4.5	2				100				
9D 2x45						6060 12	4.5	2	70	
						6060 12	4.5	7	70	
7E 23						6061 6	4.5	12	20	
						6062 6	4.5	8	15	
						6063 6	3.4	1	15	
			6063 6	3.4	6	15				
			6064 6	3.4	1	50				
			6065 6	3.4	1	70				
			6066 6	3.4	1	100				
			6066 6	3.4	5	100				
			6066 6	3.4	6	100				
			9D 2x25			6067 12	4.5	2	65	
6067 12	4.5	7				65				
9D 2x60						6072 12	4.5	2	100	
						6072 12	4.5	7	100	
8G 2x10						6073 --	--	15	100	D
						6074 --	--	15	100	
8G 2x20						6080 6	7.8	1	10	
						6080 6	7.8	4	10	
8G 2x20						6082 25	7.8	1	10	
						6082 25	7.8	4	10	
			6084 6	4.5	9	100	A			
			6085 12	4.5	2	90				
9D 2x25			6085 12	4.5	7	90				
			6086 19	4.5	2	50				

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec			
7E 20			6087 5	2.8	4	10	D			
			6087 5	2.8	6	10	D			
			6088 1	3.5	4	100	B			
			6092 1	3.5	4	100	B			
			6094 6	3.5	16	15				
			6095 6	3.4	17	15				
			6096 6	3.4	1	70				
			6097 6	3.4	2	80				
			6097 6	3.4	7	80				
			6098							
			7A 2x30			6099 6	3.4	5	85	
						6099 6	3.4	6	85	
			7C 20			6100 6	3.4	6	65	
7A 2x30			6101 6	3.4	5	85				
			6101 6	3.4	6	85				
			6106 5	2.8	4	10	D			
			6106 5	2.8	6	10	D			
			6110 6	3.6	1	100				
			6110 6	3.6	5	100				
			6111 6	3.6	2	85				
8G 2x100			6111 6	3.6	7	85				
			6112 6	3.6	2	100				
			6112 6	3.6	7	100				
			6113 6	7.8	1	100				
			6113 6	7.8	4	100				
			6118 6	2.7	TC	100				
			6118 6	2.7	5	100				
			6118 6	2.7	4	100				
			6121 1	2.4	3	100	B			
			6132 6	4.5	2	10				
9L 15			6134 6	2.7	4	50				
8E 35			6135 6	3.4	6	60				
7C 20			6136 6	3.4	1	70				
7E 25			6137 6	2.7	4	50				
8E 13			6145 6	1.8	6	30				
			6146 6	2.7	5	20				
			6147 1	17.5	8	100	B			
			6152 6	4.5	3	70				
			6157 6	4.5	TC	10				
9D 2x100			6158 12	4.5	2	100				
			6158 12	4.5	7	100				
			6169 6	3.6	18	55				
8G 2x25			6180 6	7.8	1	75				
			6180 6	7.8	4	75				
			6184 6	3.6	2	25				
			6184 6	3.6	7	25				
7E 25			6186 6	3.4	1	85				

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
		PCC84	7	4.5	2	50	
		"	"	"	6	"	
9D	2x40	PCC85	9	4.5	2	70	
		"	"	"	7	"	
9B		PCF80	9	4.5	2	45	A
		"	"	"	9	"	A
9B	2x30	PCF82	9	4.5	2	50	A
		"	"	"	9	30	A
		PL21	6	3.4	6	5	
		PL81	16	4.5	2	5	
		PL82	15	4.5	2	10	
		PL83	1	4.5	2	20	
7E	20	PM04	6	3.4	1	45	
7E	20	PM05	6	3.4	1	70	
		PM07	6	3.4	1	60	
		PY80	19	4.5	9	5	A
		PY81	15	4.5	9	15	A
		PY82	19	4.5	9	5	A
		SP6	6	3.4	1	60	
		U50	5	2.8	4	10	D
		"	"	"	6	"	"
		U52	5	2.8	4	5	D
		"	"	"	6	"	"
		U70	6	2.7	3	15	
		"	"	"	5	"	
		U78	6	3.4	1	15	
		"	"	"	6	"	
		U147	6	2.7	3	15	
		"	"	"	5	"	
		U149	6	1.8	3	15	
		"	"	"	6	"	
		U154	19	4.5	9	5	A
		U319	19	4.5	9	5	A
		UBC41	12	1.8	3	85	
		"	"	"	5	100	
		"	"	"	6	"	
		UCH42	12	1.8	4	85	
		"	"	"	6	70	
		UF41	12	1.8	6	75	
		V2M70	6	3.4	1	15	
		"	"	"	6	"	
		W17	1	15.7	6	100	B
		W63	6	2.7	TC	60	
7E	25	W77	6	3.4	1	70	
		W149	6	1.8	3	15	
		"	"	"	6	"	

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
9L	25	W179	6	4.5	2	60	
		X14	1	2.7	5	100	B
		X17	1	15.7	4	100	B
		X18	1	1.7	4	100	B
		X63M	6	2.7	5	85	
		X79	6	4.5	2	70	
		"	"	"	7	"	
		X81	6	1.8	4	85	
		"	"	"	6	"	
		X148	6	1.8	4	85	
		"	"	"	6	"	
7E	100	X727	6	3.4	1	75	
		Z34	1	2.7	TC	100	B
		Z63	6	2.7	TC	90	
		Z77	6	3.4	1	60	
9L	25	Z152	6	4.5	2	60	
9L	25	Z179	6	4.5	2	60	
		Z300T	--	--	57	100	D
9L	25	Z719	6	4.5	2	60	
		ZD17	1	1.7	6	100	B
		"	"	"	3	"	"
		407	20	19.5	3	85	
		"	"	"	7	"	
		502	6	2.7	3	0	
8E	30	717	6	2.7	4	70	
		884	6	2.7	3	5	
		FM1000					
		1003			5		
		1003			3		
		1005		6.8	3		
		1005		6.8	5		
		1201	6	2.8	15	100	
		1203		1.8	4		
		1204		2.7	5		
		1206		1.8	4		
		1206		1.8	5		
		1222					
		1223	6	2.7	TC	100	
		1231	6	1.8	6	50	
		1232	6	1.8	6	80	
		1236					
		1238					
		1265	--	--	5	100	D
		1266	--	--	5	100	
		1267	--	--	57	100	D
		1273	6	1.8	6	100	

PS.	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
			1274	2.7	3		
			1274	2.7	5		
			1280	1.8	6		
		1284	12	1.8	6	55	
		1291	1	18.4	3	70	B
		1291	1	18.4	6	70	B
		1293	1	1.8	6	100	
		1294	1	1.8	4	100	
		1299	1	18.7	6	80	B
		1612	6	2.7	TC	60	
		1613	6	2.7	5	15	
		1614	6	2.7	5	10	
		1619	2	2.7	5	15	B
		1620	6	2.7	TC	100	
		1621	6	2.7	5	20	
		1622	6	2.7	5	10	
8I	15	1626	12	2.7	5	20	
		1631	12	2.7	5	10	
		1632	12	2.7	5	15	
8G	2x20	1633	25	7.8	1	60	
		1633	25	7.8	4	60	
8H	2x80	1634	12	7.8	3	100	
		1634	12	7.8	4	100	
8I	2x50	1635	6	2.7	4	90	
		1635	6	2.7	5	90	
		1644	12	6.7	1	30	
		1644	12	6.7	3	30	
		1654	1	1.7	TC	100	
		1655					
		2050	6	2.7	3	5	
		2051	6	2.7	3	5	
8G	2x30	3223	6	7.8	1	70	
		"	"	"	4	70	
		5517	--	--	TC	10	
7E		5590	6	3.4	1	100	
7E	20	5591	6	3.4	1	70	
		5610	6	3.4	6	30	
		5618	3	17.5	6	25	
		5635	6	3.6	1	100	
		5635	6	3.6	2	100	
		5636	6	3.6	1	70	
		5639	6	3.6	1	20	
		5641	6	3.6	248	10	
		5643	6	3.6	7	30	
		5644	--	--	1	100	D
		5651	--	--	15	100	D

PS	DMC Load	Type	Fil. Vol.	F, F <sub>1</sub>	Q	Kem Load	Spec
7E	20	5654	6	3.4	1	70	
		5656	6	4.5	2	30	
		5656	6	4.5	3	30	
8E	13	5661	12	2.7	4	45	
		5662	6	3.4	7	0	
		5663	6	3.4	7	0	
		5670	6	1.9	3	70	
		5670	6	1.9	7	70	
		5672	1	3.5	4	100	H
		5676	1	2.4	3	100	H
		5677	1	2.4	3	100	B
		5678	1	3.5	4	100	B
		5679	3	18.4	3	80	B
		5679	3	18.4	6	80	B
		5686	6	4.5	2	15	
		5687	6	45.8	2	30	
		5687	6	45.8	7	30	
		5690	6	1.2	3	15	
		5690	6	6.7	5	15	
8G	2x100	5691	6	7.8	1	100	
		5691	6	7.8	4	100	
8G	2x25	5692	6	7.8	1	85	
		5692	6	7.8	4	85	
8E	20	5693	6	2.7	4	85	
8I	2x50	5694	6	2.7	4	85	
		5694	6	2.7	5	85	
		5696	6	3.4	1	10	
		5702	6	3.4	7	70	
		5703	6	2.3	4	80	
		5704	6	2.3	1	85	
		5718	6	3.6	1	85	
		5719	6	3.6	1	100	
		5722	2	34.7	16	50	
7E	65	5725	6	3.4	1	85	
		5726	6	3.4	2	80	
		5726	6	3.4	7	80	
		5727	6	3.4	6	0	
		5732	6	2.7	TC	85	
		5744	6	2.3	4	100	
7E	20	5749	6	3.4	1	30	
7E	100	5750	6	3.4	1	70	
7E	2x100	5751	12	4.5	2	100	
		5751	12	4.5	7	100	
		5755	12	4.5	3	100	
		5755	12	4.5	6	100	
		5763	6	4.5	8	15	