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T.M.C. (CANADA) SPECIFICATION NO S-10003

MODIFICATION OF TMC TUNING DRAWERS
MODELS FFRD-5, FFRD-6, AND FFRD-7

PURPOSE OF MODIFICATION: To provide a substantially linear shift when operating in the RCR System as required by RCAF Specification RAD 11-9.

FFRD-5

Parts Required: 1 in number - 25 mmf Condenser CC21SL250K
1 " " - 30 mmf Condenser CC21SL300K
1 " " - 3.3K Resistor RC20GF332J

Procedure: Refer to Drawing CK-124

1. Connect the 25 mmf condenser from the plate side of C523 to ground. This condenser becomes C539.

2. Remove L501 250 microhenry choke and replace with R528 3.3K Resistor.

3. Remove C525 which is connected between the plate end of the new R528 and the bottom end of the cathode resistance R525 of V504. Replace with new C525 (30 mmf condenser), connecting it between the plate end of R528 and the GN connection on L502. After this modification is made, check that the BN connection of L502 is still connected direct to the bottom end of R525 and that C528 is connected to the GN connection of L502.

Results:

Summary of Test on 96 drawers	± 4.5 volts		
	2mc	3mc	4mc
Maximum of negative swing	5.9	9.0	16.6
Minimum of negative swing	4.1	6.2	8.8
Maximum of positive swing	5.3	10.2	15.6
Minimum of positive swing	4.0	6.9	8.2
Average of negative swing	4.93	8.43	10.6
Average of positive swing	4.49	7.4	11.6

FFRD-6

Parts Required: 2 in number 2.2K Resistors RC20GF222J

Procedure: Refer to Drawing CK-133

1. Remove R620 (1.2k) and replace with 2.2K r sistor.

2. Remove L601,300 microhenry choke, and replace with 2.2K resistor. This becomes R628

3. Disconnect the cathode end of C625 and connect to GN on L602. After this modification is made, check that BN on L602 connects to th bottom end of R625 and that

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MODIFICATION OF TMC TUNING DRAWERS
MODELS FFRD-5, FFRD-6, AND FFRD-7 (continued)

C628 is connected to GN on L602

Results:

Summary of Test on 96 drawers

	4mc	6mc	8mc
Maximum of negative swing	13.2	20.7	30.8
Minimum of negative swing	8.1	13.8	16.6
Maximum of positive swing	12.6	22.2	30.4
Minimum of positive swing	8.3	13.8	16.0
Average of negative swing	10.7	17.4	25.1
Average of positive swing	10.6	18.8	23.9

FFRD-7

Parts Required: 1 in number 3.3K Resistor RC20GF332J
1 in number 6.8K Resistor RC20GF682J
1 in number 47 mmf condenser CC21SL470K

Procedure: Refer to Drawing CK-134

1. Remove R270 (1.2K). Replace with the 3.3K resistor.
2. Remove R722 (3.3K) and replace with 6.8K resistor.
3. Remove C725 (100 mmf) and replace with 47 mmf condenser but connecting the cathode end to GN on L702. After this modification, check that BN on L702 connects directly to the bottom end of R725 and that C728 connects to GN on L702.

Results:

Summary of Test on 96 drawers

	8mc	12mc	16mc
Maximum of negative swing	14.8	26.4	40.0
Minimum of negative swing	12.0	18.9	27.6
Maximum of positive swing	15.2	27.6	39.2
Minimum of positive swing	12.0	18.3	24.8
Average of negative swing	13.1	23.4	35.1
Average of positive swing	13.8	23.2	31.3