

M A T E R I A L L I S T

 TONE TRANSMIT UNIT

 MODEL TTU-2

SECTION I	ELECTRICAL COMPONENTS AND MECHANICAL PARTS
SECTION II	HARDWARE (NUTS, SCREWS, WASHERS, ETC.)
SECTION III	LOOSE ITEMS SUPPLIED W/UNIT
SECTION IV	SUPPORTING DRAWINGS
SECTION V	SPECIFICATIONS
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SECTION V SPECIFICATIONS

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SECTION VI RAW MATERIAL

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SECTION III LOOSE ITEMS SUPPLIED W/UNIT

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BILL OF MATERIAL		MODEL	TTU-2	PROJ. NO.	LIST NO.	ML-10070
		ISSUE			SHEET	1 OF 7 SHEETS
PART NO.	QUAN. PER ONE EQUIP.	DESCRIPTION			REMARKS	
ELECTRICAL COMPONENTS AND MECHANICAL PARTS						
RA75ASA252AK25	1	RESISTOR: 2.5K 25W, variable wire wound			R 101	
RC20GF682K	1	RESISTOR: 6.8K 1/2W, carbon composition ± 10%			R 102	
RC42GF331K	1	RESISTOR: 330Ω 2W, carbon composition ± 10%			R 103	
RC20GF154K	1	RESISTOR: 150K 1/2W, carbon composition ± 10%			R 104	
RC20GF563K	1	RESISTOR: 56K 1/2W, carbon composition ± 10%			R 105	
RC20GF104K	1	RESISTOR: 100K 1/2W, carbon composition ± 10%			R 106	
RC20GF103K	1	RESISTOR: 10K 1/2W, carbon composition ± 10%			R 107	
RC30GF184K	1	RESISTOR: 180K 1W, carbon composition ± 10%			R 108	
RC20GF105K	1	RESISTOR: 1 MegΩ 1/2W, carbon composition ± 10%			R 109	
RC20GF222K	1	RESISTOR: 2.2K 1/2W, carbon composition ± 10%			R 110	
RC20GF560K	1	RESISTOR: 56Ω 1/2W, carbon composition ± 10%			R 111	
RC20GF474K	1	RESISTOR: 470K 1/2W, carbon composition ± 10%			R 112	
RC20GF474K	1	RESISTOR: 470K 1/2W, carbon composition ± 10%			R 113	
RC20GF104K	1	RESISTOR: 100K 1/2W, carbon composition ± 10%			R 114	
RC30GF823K	1	RESISTOR: 82K 1W, carbon composition ± 10%			R 115	
RC20GF393K	1	RESISTOR: 3.9K 1/2W, carbon composition ± 10%			R 116	
RC20GF102K	1	RESISTOR: 1K 1/2W, carbon composition ± 10%			R 117	
RC20GF102K	1	RESISTOR: 1K 1/2W, carbon composition ± 10%			R 118	
RV-4ATX102A	1	RESISTOR: 10K 2W, variable carbon			R 119	

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PART NO.	QUAN. PER ONE EQUIP.	DESCRIPTION			REMARKS	
ELECTRICAL COMPONENTS AND MECHANICAL PARTS						
RC20GF104K	1	RESISTOR: 100K $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 120	
RR-104-582	1	RESISTOR: 5.8K $\frac{1}{2}W$, metallized film $\pm 10\%$			R 121	
RR-104-673	1	RESISTOR: 67K $\frac{1}{2}W$, metallized film $\pm 10\%$			R 122	
RC20GF104K	1	RESISTOR: 100K $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 123	
RC20GF101K	1	RESISTOR: 100 Ω $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 124	
RC20GF104K	1	RESISTOR: 100K $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 125	
RC20GF101K	1	RESISTOR: 100 Ω $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 126	
RC20GF102K	1	RESISTOR: 1K $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 127	
RC30GF222K	1	RESISTOR: 2.2K 1W, carbon composition $\pm 10\%$			R 128	
RC20GF474K	1	RESISTOR: 470K $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 129	
RC20GF101K	1	RESISTOR: 100 Ω $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 130	
RC20GF101K	1	RESISTOR: 100 Ω $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 131	
RC20GF474K	1	RESISTOR: 470K $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 132	
RC20GF223K	1	RESISTOR: 22K $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 133	
RC20GF101K	1	RESISTOR: 100 Ω $\frac{1}{2}W$, carbon composition $\pm 10\%$			R 134	
RV-4-ATXA501A	1	RESISTOR: 500 Ω 2W, variable carbon CLU-5011			R 135	
RR-102-1	1	RESISTOR: fixed wire wound cartridge heater, 20W, 115 Volt			R 136	
RR-102-1	1	RESISTOR: fixed wire wound cartridge heater, 20W, 115 Volt			R 137	

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PART NO.	QUAN. PER ONE EQUIP.	DESCRIPTION	REMARKS
ELECTRICAL COMPONENTS AND MECHANICAL PARTS			
RC20GF101K	1	RESISTOR: 100 $\frac{1}{2}$ W, carbon composition	R 138
C304ABD100E (RM)	4	CAPACITOR: 100 μ f 500V, ceramic tubular \pm 2% NPO	C 101
C304ABB220E (RM)	1	CAPACITOR: 200 μ f 500V, ceramic tubular \pm 2% NPO	C 102 (2x100 μ f, 500V)
C304ABB22E (RM)	1	CAPACITOR: 22 μ f 500V, ceramic tubular \pm 5% NPO	C 103
CC-100-16A	1	CAPACITOR: 0.01 μ f 500V, ceramic disc. \pm 10%	C 104
CN-102-8	1	CAPACITOR: 0.1 μ f 300V, paper tubular \pm 10% Good-All 615G 10403	C 105
C304ABL10E (RM)	1	CAPACITOR: 10 μ f 500V, ceramic tubular \pm 5%	C 106
CC-100-16A	1	CAPACITOR: 0.01 μ f 500V, ceramic disc. \pm 10%	C 107
CV 11C 300	1	CAPACITOR: 4-30 μ f 500V, variable ceramic	C 108
CC-100-16A	1	CAPACITOR: 0.01 μ f 500V, ceramic disc. \pm 10%	C 109
CM20C270J	1	CAPACITOR: 27 μ f 500V, fixed mica \pm 5%	C 110
CM20E681G	1	CAPACITOR: 680 μ f 500V, fixed mica \pm 2%	C 111
CM20E681G	1	CAPACITOR: 680 μ f 500V, fixed mica \pm 2%	C 112
CC-102-1	1	CAPACITOR: 68 μ f 500V, fixed ceramic \pm 5%	C 113
CC-102-1	1	CAPACITOR: 68 μ f 500V, fixed ceramic \pm 5%	C 114
CC26UJ111G	1	CAPACITOR: 110 μ f 500V, fixed ceramic \pm 2% N750	C 115
CC-102-4	1	CAPACITOR: 1000 μ f 500V, fixed ceramic \pm 1%	C 116 (2x500 μ f, 500V)
CM-20A102K	1	CAPACITOR: 1000 μ f 500V, fixed mica \pm 10%	C 117

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PART NO.	QUAN. PER ONE EQUIP.	DESCRIPTION ELECTRICAL COMPONENTS AND MECHANICAL PARTS	REMARKS
CM-20E270G	1	CAPACITOR: 27 μ f 500V, fixed mica \pm 2% char E	C 118
CC26UJ111G	1	CAPACITOR: 110 μ f 500V, fixed ceramic \pm 2% N 750	C 119
C304ABB27E	2	CAPACITOR: 27 μ f 500V, ceramic tubular \pm 2% NPO	C 120
C304ABB27E	1	CAPACITOR: 27 μ f 500V, tubular ceramic \pm 2% NPO	C 121
CC-100-16A	1	CAPACITOR: 0.01 μ f 500V, ceramic disc. \pm 10%	C 122
C304ABD100E (RM)	1	CAPACITOR: 100 μ f 500V, tubular ceramic \pm 2% NPO	C 123
C304ABD100E (RM)	1	CAPACITOR: 100 μ f 500V, tubular ceramic \pm 2% NPO	C 124
CC-103-1	1	CAPACITOR: 15 μ f 500V, fixed ceramic \pm 0.5 μ f N750	C 125
CB-103-2	1	CAPACITOR: 4.6 - 51 μ f, variable air dielectric dual unit	C 126
C304ABD100E (RM)	1	CAPACITOR: 100 μ f 500V, tubular ceramic \pm 2%	C 127
CC-100-16A	1	CAPACITOR: 0.01 μ f 500V, ceramic disc. \pm 10%	C 128
CC-100-16A	1	CAPACITOR: 0.01 μ f 500V, ceramic disc. \pm 10%	C 129
CP69B4EF503L	1	CAPACITOR: 0.05 μ f 600V, tubular paper \pm 15%	C 130
6J6	1	TUBE: electron 6J6	V 101
6BE6	1	TUBE: electron 6BE6	V 102
6BE6	1	TUBE: electron 6BE6	V 103
12AU7A	1	TUBE: electron 12AU7A	V 104
12AU7A	1	TUBE: electron 12AU7A	V 105

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PART NO.	QUAN. PER ONE EQUIP.	DESCRIPTION ELECTRICAL COMPONENTS AND MECHANICAL PARTS	REMARKS
12AU7A	1	TUBE: electron 12AU7A	V 106
TF-138	1	TRANSFORMER: audio UTC H-7	T 101
FX-10004	1	FILTER: low pass 3000c/s cut off CAC# 90115B	FX 101
CR-10001-197.450	1	CRYSTAL: 197.450 k/cs in HC6U case	CR 101
JJ-121-1	1	PLUG: Jones P-306AB	P 101
A-600	1	OVEN ASSEMBLY: XFK complete	
<u>TONE TRANSMIT FILTER UNIT TTF-2</u>			
Same as ML-A-1283 except add:			
FX-10005	1	FILTER: band pass f/s	ITEM NO. 74
FX-10006	1	FILTER: 1500 c/s	ITEM NO. 75

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PART NO.	QUAN. PER ONE EQUIP.	DESCRIPTION	REMARKS
HC-10001	1	CRYSTAL HOLDER:	Millen 33302
LO-10001	1	SHAFT LOCK: 1/4 inch 3/8 - 32 thread	Millen 10061
TE-102-2	7	STAND OFF INSULATORS:	
TS-102-P01	3	TUBE SOCKET: 7 pin	
TS-102-U03	3	TUBE SHIELD: 7 pin	
NT-101-4	3	NUT STRAP: 7 pin	
TS-103-P01	3	TUBE SOCKET: 9 pin	
TS-103-U02	3	TUBE SHIELD: 9 pin	
NT-101-5	3	NUT STRAP: 9 pin	
P-306-AB	2	PLUG: 6, male, Jones	
SCBS0632BC8	4	SCREW: 6-32 x 1/2" binder head	
SCFS0632BC8	16	SCREW: 6-32 x 1/2" flat head	
SCBS0632BC6	2	SCREW: 6-32 x 3/8" binder head	
SCBS044OBC8	10	SCREW: 4-40 x 1/2" binder head	
SCBS044OBC3	21	SCREW: 4-40 x 3/16" binder head	
SCBS044OBC9	2	SCREW: 4-40 x 9/16" binder head	
LWEO4MRC	33	LOCKWASHER: 4-40 internal tooth	
LWEO6MRC	16	LOCKWASHER: 6-32 internal tooth	

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PART NO.	QUAN. PER ONE EQUIP.	DESCRIPTION	REMARKS
NTH044OBC8	8	HARDWARE: NUTS: 4-40	
NTH0632BC8	16	NUTS: 6-32	
TE-117-21	4	SPACER: 4-40 x 3/16"	
NT-108-1	4	SPEED NUT: 6-32	
FS-102-1	8	SPRING: type S	Fastener: Dzus assembly
FS-109-4	8	RING STUD: retaining	Fastener: Dzus assembly
FS-110-1	8	STUD: slotted head	Fastener: Dzus assembly

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TIS II MATERIAL LIST:

Each system comprises:

- | | |
|--------------|--|
| 1 each TST-2 | Material as per ML-A-1281. |
| 1 each TTU-1 | Material as per ML-A-1282
except NF-103-1500. |
| 1 each TTF-2 | Material as per ML-A-1283. |
| 1 each TTU-2 | Material as per ML-10070. |

NOTE: NF-103-1500 is the same as NF-103-1445 but retuned.

