T.O. 33A1-8-105-4 (Formerly 16-45-401)

ILLUSTRATED PARTS BREAKDOWN

VARIABLE MASTER OSCILLATOR TYPE 115 MODEL 1

(NORTHERN RADIO CO., INC.)

BEVISION

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Revised 8 March 1957

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TABLE OF CONTENTS

Section		Page
. 1	INTRODUCTION	1
11	ILLUSTRATIONS AND COMPONENT PARTS LISTS	4
	Variable Master Oscillator Type 115 Model 1	
	Illustrations	4
	Components Parts Lists	18
Ш	MANUFACTURER'S PART NUMBER CROSS-INDEX TO REFERENCE SYMBOL NUMBER	32
IV	SPECIAL SERVICE TOOLS LIST	37

VARIABLE MASTER OSCILLATOR TYPE 115 MODEL 1 (cont)	Reference Symbol No.	Stock No.	Description	Sourc Code
SHELD: tube STEELD: Libbe STEELD: Same as E8			VARIABLE MASTER OSCILLATOR TYPE 115 MODEL 1 (cont)	
### STRIPLD: Same as E8 ### SHIELD: Same as E13 ### SHIELD: Same as E5 ### SHIELD: Same as E6 ### SHIELD: Same as E7 ### SHIELD: Ff tune, part No. BK4A42-1 ### SHIELD: Ff tune, part No. BK4A42-2 ### KNOB: Same as E8 ### KNOB: Same as E8 ### KNOB: Same as E8 ### SHIELD: Ff tune, part No. BK4A42-2 ### KNOB: Same as E28 ### SAME SAME SAME SAME SAME SAME SAME SAME	E7		SHIELD: Same as E6	
### ELCO Corp. part No. 149 ### SHELD: Same as E8 ### TERRINAL: stud (10 each used) ### PRME part No. 5000 ### PRME part No. 1704 ### INSULATOR: Same as E13 ### INSULATOR: disk, part No. PTIAL-3 ### OVEN: insulator, part No. 187A1 ### INSULATOR: standoff (4 ench used) ### INSULATOR: Same as E21 (4 each used) ### INSULATOR: Same as E21 (4 each used) ### INSULATOR: Same as E21 (4 each used) ### INSULATOR: Same as E2 (4 each used) ### INSULATOR: Same as E2 (5 each used) ### INSULATOR: Same as E2 (6 each used) ### INSULATOR: DISTANCE AS (7 each used) ### INSULATOR: DISTANCE A	E8			1
### SHIELD: Same as E8 ### SHIELD: Same as E8 ### SHIELD: Same as E8 ### TERMINAL: stud (10 each used) ### TERMINAL: Same as E13 ### TERMINAL: Same as E13 ### TERMINAL: stud (10 each used) ### TERMINAL: stud (1				
### SHIELD: Same as E8 ### TERMINAL: stud (10 each used) ### INSULATOR: Same as E13 ### INSULATOR: Same as E14 for breakdown, no number assy ### INSULATOR: Same as E21 (4 each used) ### INSULATOR: Same as E28 ### INSULATOR: part No. 1166 ### INSULATOR: part No. 1165 ### INSULATOR: part No. 11932 ### INSULATOR: part No. 11932 ### INSULATOR: part No. 11932 ### INSULATOR: bushing ### INSULATOR: Same as E38 ### INSULATOR: bushing ### INSULATOR: same as E38 ### INSULATOR: bushing #### INSULATOR: same as E38 #### INSULATOR: same as E38 #### INSULATOR: bushing #### INSULATOR: same as E38 ##### INSULATOR: same as E38 ##### INSULATOR: same as E38 ###### INSULATOR: same as E38 ####################################	E9		SHIELD: Same as E8	
TERMINAL: stud (10 each used)	E10		SHIELD: Same as E8	
INSULATOR: standoff	E11		SHIELD: Same as E8	
INSULATOR: standoff	E 12			
INSULATOR: Same as E13	E13		-	
INSULATOR: Same as E13 INSULATOR: Same as E13 INSULATOR: Same as E13 INSULATOR: Same as E13 INSULATOR: Same as E3 INSULATOR: disk, part No. PTIA1-3 OVEN: inner, see fig. 4 thru 6 for breakdown, no number asay STRIP: insulator, part No. INTA1 INSULATOR: standoff (4 each used) ANL part No. 1700 ANL part No. 1700 INSULATOR: Same as E21 (4 each used) INSULATOR: Same as E28 SHIELD: rf tuner, part No. BK4A42-1 SHIELD: rf tuner, part No. BK4A42-2 E26 KNOB: Same as E28 INSULATOR: part No. 119A2 KNOB: Same as E28 INSULATOR: part No. 105 ICA part No. 1165 OVEN ASSY: see fig. 3 for breakdown, no number asay INSULATOR: bushing ANL part No. 1172 INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 TERMINAL: stud CGT part No. X1795-B E41 SHIELD: main inductor, part No. SH4B2			i e	
INSULATOR: Same as E13	E14		INSULATOR: Same as E13	
### SHIELD: Same as E5 INSULATOR: disk, part No. PTIA1-3 OVEN: inner, see fig. 4 thru 6 for breakdown, no number assy E20 STRIP: insulator, part No. IN7A1 INSULATOR: standoff (4 each used) ANL part No. 1700 ANL part No. 1700 E22 INSULATOR: Same as E21 (4 each used) INSULATOR: Same as E21 (4 each used) INSULATOR: Same as E21 (4 each used) E24 INSULATOR: Same as E21 (4 each used) SHIELD: Same as E2 E26 SHIELD: rf tuner, part No. BK4A42-1 E27 E28 KNOB: Same as E28 KNOB: Same as E28 KNOB: Same as E28 E30 KNOB: Same as E28 KNOB: Same as E28 E31 KNOB: Same as E28 KNOB: Same as E28 KNOB: Same as E28 KNOB: Same as E38 KNOB: Same as E38 KNOB: Same as E6 E34 INSULATOR: part No. 1195 E35 COVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 E40 TERMINAL: stud COT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E15		INSULATOR: Same as E13	
INSULATOR: disk, part No. PTIAI-3	E16		INSULATOR: Same as E13	
OVEN: inner, see fig. 4 thru 6 for breakdown, no number assy STRIP: insulator, part No. 1N7A1 INSULATOR: standoff (4 each used) ANL part No. 1700 INSULATOR: Same as E21 (4 each used) E24 INSULATOR: Same as E21 (4 each used) SHIELD: Same as E2 (4 each used) SHIELD: r-f tuner, part No. BK4A42-1 SHIELD: r-f tuner, part No. BK4A42-2 KNOB: ICA part No. 1166 KNOB: Same as E28 ICA part No. 1165 OVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E17		SHIELD: Same as E5	
### STRIP: insulator, part No. 1N7A1 INSULATOR: standoff (4 each used)	E18		INSULATOR: disk, part No. PTIA1-3	
INSULATOR: standoff (4 each used)	i		OVEN: inner, see fig. 4 thru 6 for breakdown, no number assy	
INSULATOR: Same as E21 (4 each used) SHIELD: Same as E21 (4 each used) SHIELD: Pf tuner, part No. BK4A42-1 SHIELD: Pf tuner, part No. BK4A42-1 E27 E28 KNOB: Same as E28 INSULATOR: part No. 1N9A2 KNOB: ICA part No. 1165 OVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 E39 INSULATOR: Same as E38 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E 20		STRIP: insulator, part No. 1N7A1	
INSULATOR: Same as E21 (4 each used) INSULATOR: Same as E21 (4 each used) E24	E21			
E24 E25 E26 SHIELD: Same as E21 (4 each used) E27 E28 SHIELD: r-f tuner, part No. BK4A42-1 E28 E30 E30 KNOB: ICA part No. 1166 E29 E30 KNOB: Same as E28 KNOB: Same as E28 E31 KNOB: Same as E28 KNOB: Same as E28 E32 E33 KNOB: Same as E28 KNOB: Same as E28 E34 E35 KNOB: Same as E28 KNOB: Same as E28 E36 CA part No. 1165 COVEN ASSY: see fig. 3 for breakdown, no number assy E37 FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy E38 INSULATOR: bushing ANL part No. 1172 E39 INSULATOR: Same as E38 E40 CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E22		INSULATOR: Same as E21 (4 each used)	
### SHIELD: Same as E8 ### SHIELD: Same as E8 ### SHIELD: rf tuner, part No. BK4A42-1 ### SHIELD: rf tuner, part No. BK4A42-2 ### SHIELD: rf tuner, part No. BK4A42-2 ### KNOB: ### ICA part No. 1166 ### ICA part No. 1166 ### KNOB: Same as E28 ### INSULATOR: part No. 1N9A2 ### KNOB: ### ICA part No. 1165 ### ICA part No. 1166 ### ICA	E23		INSULATOR: Same as E21 (4 each used)	
### SHIELD: r-f tuner, part No. BK4A42-1 #### SHIELD: r-f tuner, part No. BK4A42-2 #### SHIELD: r-f tuner, part No. BK4A42-2 #### KNOB: #### ICA part No. 1166 ##### KNOB: Same as E28 #### KNOB: Same as E28 #### KNOB: Same as E28 ##### KNOB: Same as E28 ##### KNOB: Same as E28 ###################################	E24		INSULATOR: Same as E21 (4 each used)	Ì
### SHIELD: r-f tuner, part No. BK4A42-2 E28	E25		SHIELD: Same as E8	
E28 E30 E30 E31 E31 E32 E32 E33 E33 E34 E35 E35 E36 COVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy E38 INSULATOR: bushing ANL part No. 1172 E39 E39 E30 E41 E41 E41 E41 E51 E72 E73 E74 E75 E76 E76 E77 E78 E78 E78 E78 E78	E26		SHIELD: r-f tuner, part No. BK4A42-1	
ICA part No. 1166	E27		SHIELD: r-f tuner, part No. BK4A42-2	
E29 KNOB: Same as E28 INSULATOR: part No. 1N9A2 KNOB: ICA part No. 1165 OVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 E40 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E 28			
E30 KNOB: Same as E28 KNOB: ICA part No. 1165 E36 OVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy E38 INSULATOR: bushing ANL part No. 1172 E39 E40 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E29			
E32 E33 KNOB: Same as E28 KNOB: Same as E28 INSULATOR: part No. 1N9A2 KNOB: ICA part No. 1165 CVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 E39 INSULATOR: Same as E38 E40 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E30		KNOB: Same as E28	
E32 E33 KNOB: Same as E28 KNOB: Same as E28 INSULATOR: part No. 1N9A2 E35 KNOB: ICA part No. 1165 OVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 E39 INSULATOR: Same as E38 E40 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E31		KNOB: Same as E28	
INSULATOR: part No. 1N9A2 KNOB: ICA part No. 1165 OVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E32			
E35 KNOB: ICA part No. 1165 OVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E33		KNOB: Same as E28	
E36 E37 CVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 E40 TERMINAL: stud CGT part No. X1795-B E41 SHIELD: main inductor, part No. SH4B2	E34		INSULATOR: part No. 1N9A2	
E36 OVEN ASSY: see fig. 3 for breakdown, no number assy FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 E40 TERMINAL: stud CGT part No. X1795-B SHIELD: main inductor, part No. SH4B2	E35			
E37 FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy INSULATOR: bushing ANL part No. 1172 INSULATOR: Same as E38 E40 TERMINAL: stud CGT part No. X1795-B E41 SHIELD: main inductor, part No. SH4B2	77.6			
E38 INSULATOR: bushing ANL part No. 1172 E39 INSULATOR: Same as E38 E40 TERMINAL: stud CGT part No. X1795-B E41 SHIELD: main inductor, part No. SH4B2				
E39 INSULATOR: Same as E38 E40 TERMINAL: stud CGT part No. X1795-B E41 SHIELD: main inductor, part No. SH4B2			FRONT PANEL AND CHASSIS ASSY: see fig. 11 thru 14 for breakdown, no number assy	
E40 TERMINAL: stud CGT part No. X1795-B E41 SHIELD: main inductor, part No. SH4B2	E38			
CGT part No. X1795-B E41 SHIELD: main inductor, part No. SH4B2	E39		INSULATOR: Same as E38	1
E41 SHIELD: main inductor, part No. SH4B2	E40			
	E41			
Outer, see itg. / for breakdown, no number assy				
E43 POWER SUPPLY ASSY: see fig. 9 and 10 for breakdown, no number assy	•			

Reference Symbo! No.	Stock No.	Description	Source Code
		VARIABLE MASTER OSCILLATOR TYPE 115 MODEL 1 (cont)	
Fi		FUSE: cartridge, 4 amps, 250 v LTF part No. 312004	
F2		FUSE: cartridge, .2 amps, 125 v LTF part No. 313 .200	
н		SCREW: machine, slot dr, bind hd, brs, nickel pl, No. 4-40, 1/8 in. lg (6 each used)	
		MFP Coml	
Н2		SCREW: machine, slot dr, bind hd, brs, nickel pl, No. 4-40, 3/16 in. lg (4 each used) MFP Coml	
нз		SCREW: machine, slot dr, flat hd, brs, nickel pl, No. 4-40, 5/8 in. lg (3 each used) MFP Comi	
H4		SCREW: machine, slot dr, bind hd, brs, nickel pl, No. 4-40, 3/8 in. lg (13 each used) MFP Coml	
Н5		SCREW: machine, slot dr, flat hd, brs, nickel pl, No. 4-40, 3/4 in. lg (4 each used) MFP Comi	
Н6		SCREW: machine, slot dr, flat hd, brs, nickel pl, No. 4-40, 3/8 in. lg (4 each used) MFP Comi	
Н7		SCREW: machine, slot dr, bind hd, brs, nickel pi, No. 4-40, 1/4 in. 1g (36 each used) MFP Comi	
Н8		SCREW: machine, slot dr, rd hd, brs, nickel pl, No. 4-40, 1/2 in. 1g (5 each used) MFP Comi	
Н9		SCREW: machine, slot dr, oval hd, brs, nickel pl, No. 4-40, 5/16 in. lg (14 each used)	
Н10		WASHER: lock, internal tooth, phosphor bronze, nickel pl, No. 4, 17/64 in. OD (69 each used)	
ни		SH Comi NUT: hexagon, brs, nickel pl, No. 4-40, 0.092 in. thick, 0.245 in. across flats (57 each used)	
		MFP Comi	
H12		WASHER: flat, brs, nickel pl, 0.125 in. ID, 0.312 in. OD, 0.032 in. thick (4 each used) MFP Comi	
H13		WASHER: flat, fibre (6 each used) ICA part No. 5601	
H14		SCREW: machine, slot dr, bind hd, brs, nickel pl, No. 6-32, 3/4 in. 1g (2 each used) MFP Comi	
H15		SCREW: machine, slot dr, rd hd, brs, nickel pl, No. 6-32, 1/4 in. 1g (6 each used) MFP Coml	
Н16		SCREW: machine, slot dr, bind hd, Sems with external tooth lockwasher, steel, Cd pl, No. 6-32, 3/8 in. ig (49 each used)	
H17		SH Comi SCREW: machine, slot dr, bind hd, bra, nickel pl, No. 6-32, 1/4 in. 1g (59 each used)	
H18		MFP Comi SCREW: set, hex socket dr, cup point, steel, Cd pl, No. 6-32, 1/8 in. 1g	
		(9 each used) PK Coml	
H19		SCREW: set, hex socket dr, cup point, steel, Cd pl, No. 6-32, 3/8 in. 1g (2 each used) PK Comi	,
H20		SCREW: machine, slot dr, bind hd, brs, nickel pl, No. 6-32, 1/2 in. lg (2 each used) MFP Coml	