

MAINTENANCE MANUAL

ORION™

MECHANICAL DRAWINGS AND PARTS LIST

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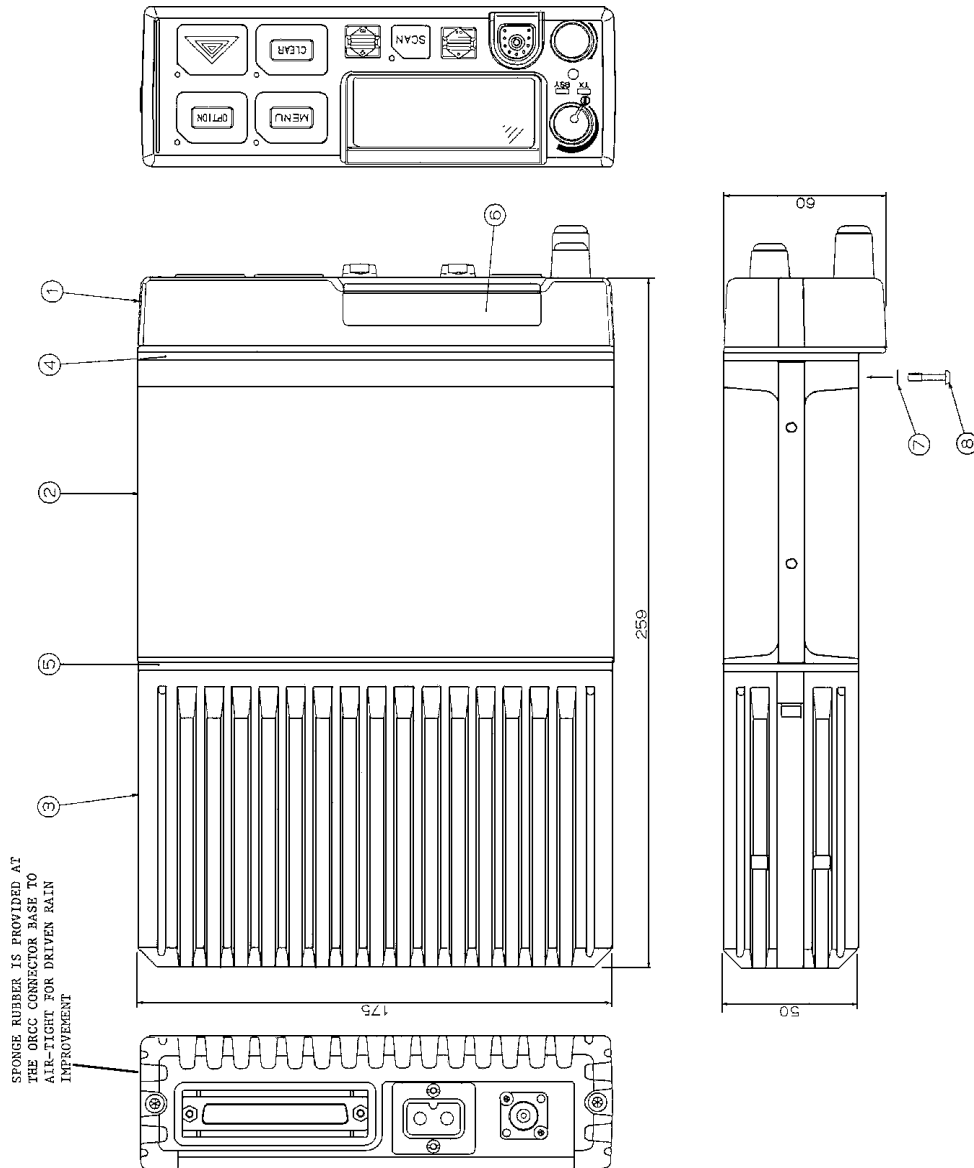
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INTRODUCTION

This maintenance manual provides Assembly Diagrams including exploded views and parts lists for all mechanical assemblies and parts associated with the **ORION** mobile radio (Low Band, VHF, UHF, 800 MHz & 900 MHz). Also included in this manual are Torque Settings and the Sequence to make these settings for the Control Units, Transmitter/Receiver Modules (TXRX) and Power Amplifier Units.

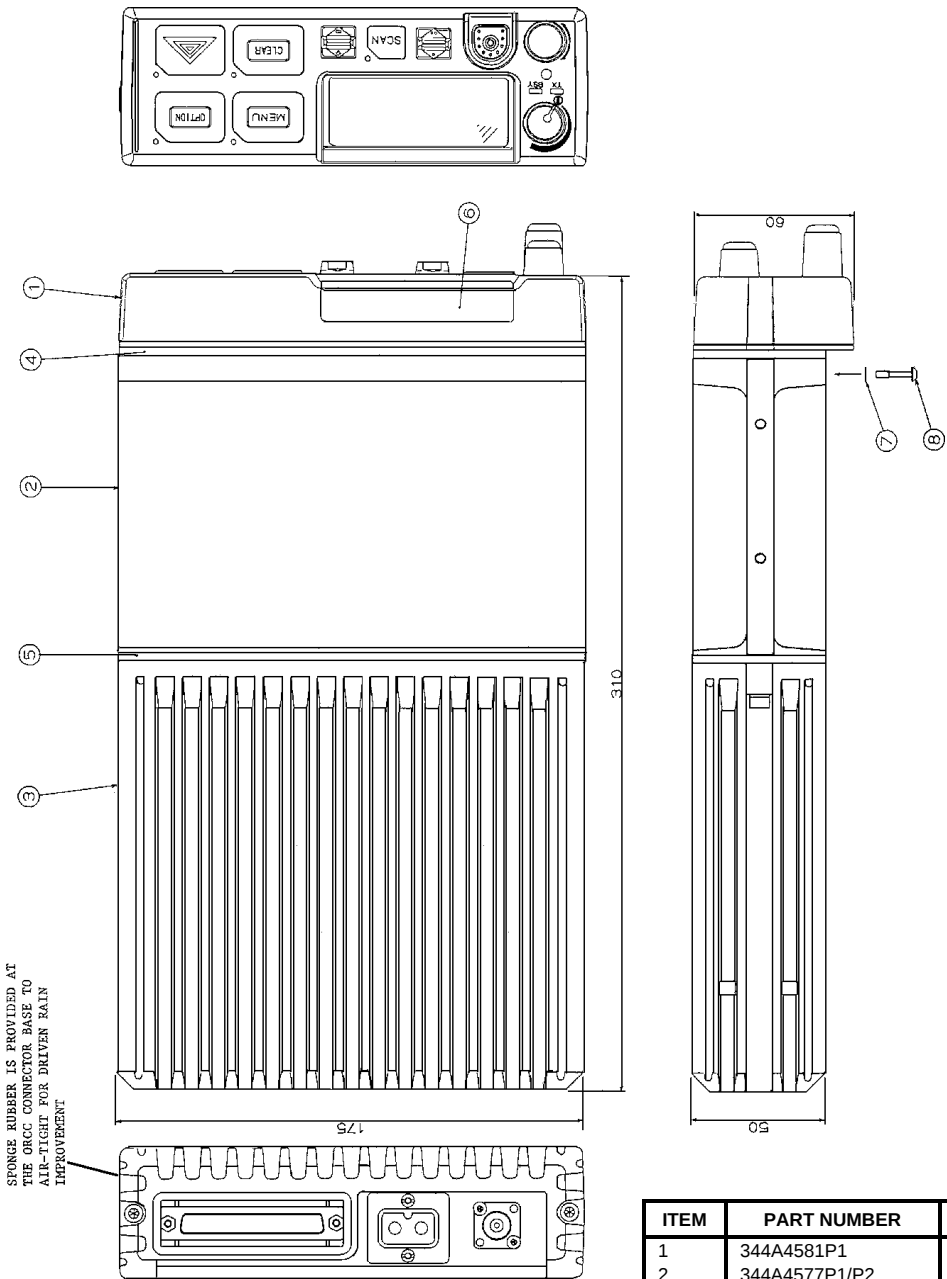


VHF (136-174 MHz)
UHF (403-512 MHz)
800 MHz
900 MHz

Only

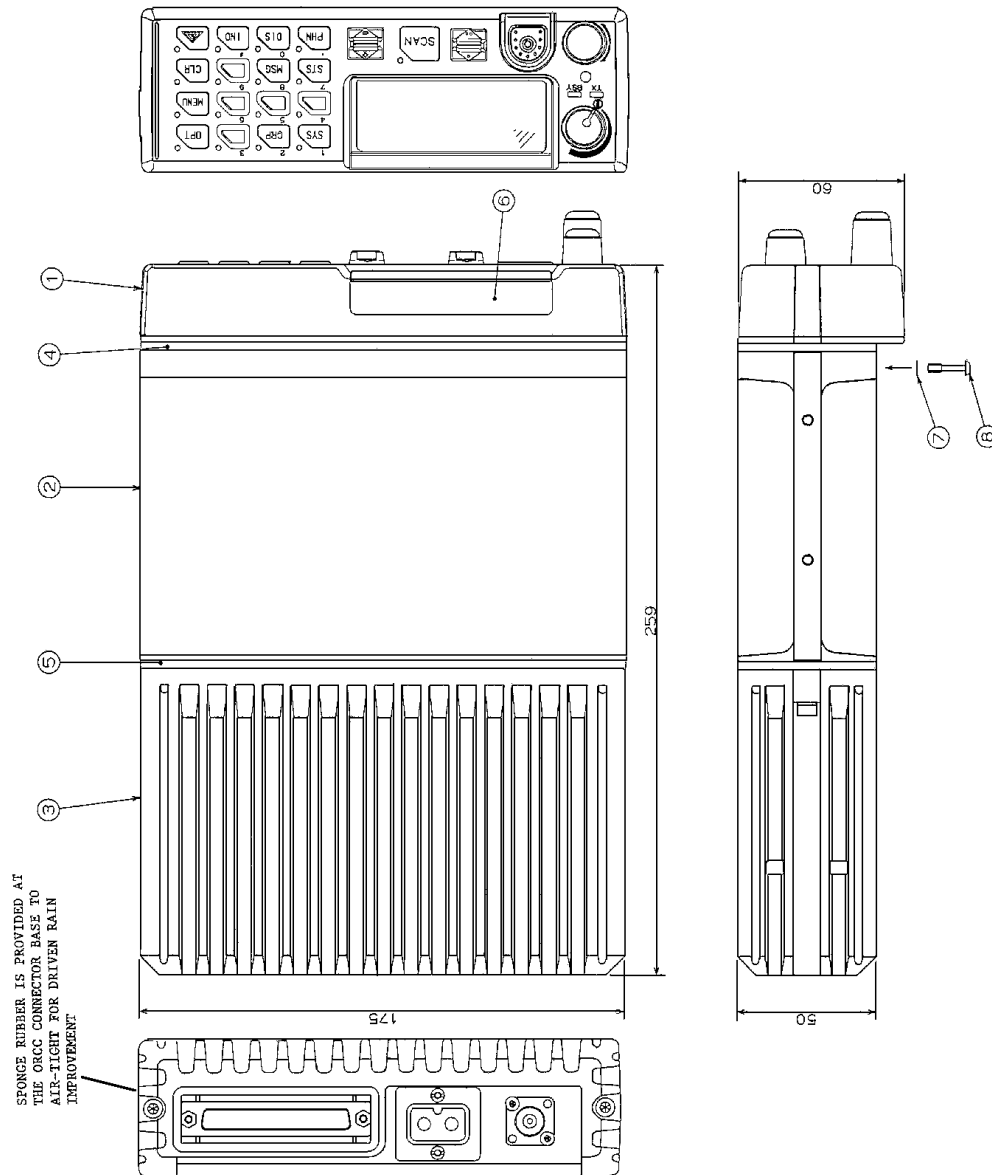
ITEM	PART NUMBER	DESCRIPTION
1	344A4581P1	CONTROL UNIT
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
	344A4579P1	TXRX (800-256K) (SYNTH/RX/EX)
	344A4580P1	TXRX (900-256K) (SYNTH/RX/EX)
	344A4578P101-P104	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4579P101	TXRX (800-512K) (SYNTH/RX/EX)
	344A4580P101	TXRX (900-512K) (SYNTH/RX/EX)
	344A4577P101-P102	TXRX (VHF-DB) (SYNTH/RX/EX)
3	344A4572P3/P4	POWER MODULE (VHF) (POWER UNIT)
	344A4573P3/P4/P5	POWER MODULE (UHF) (POWER UNIT)
	344A4574P1	POWER MODULE (800) (POWER UNIT)
	344A4575P1	POWER MODULE (900) (POWER UNIT)
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW

LOCAL TYPE MOBILE RADIO (SCAN LOW POWER)



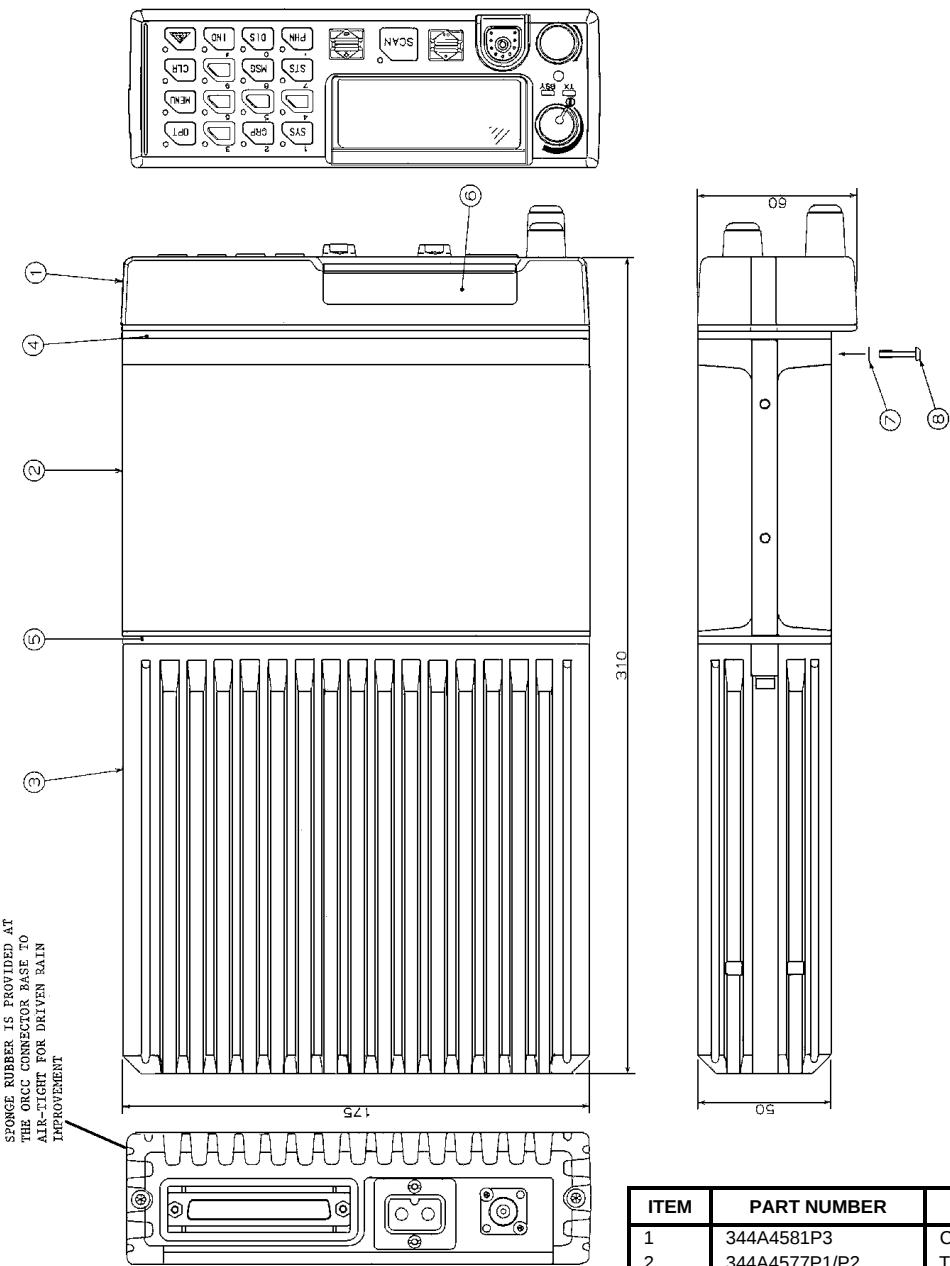
ITEM	PART NUMBER	DESCRIPTION
1	344A4581P1	CONTROL UNIT
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
	344A4577P101-P102	TXRX (VHF-DB) (SYNTH/RX/EX)
	344A4578P101-P104	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4579P101	TXRX (800-512K) (SYNTH/RX/EX)
	344A4580P101	TXRX (900-512K) (SYNTH/RX/EX)
	344A4579P1	TXRX (800-256K) (SYNTH/RX/EX)
	344A4580P1	TXRX (900-256K) (SYNTH/RX/EX)
3	344A4572P5/P6	POWER MODULE (VHF) (POWER UNIT)
	344A4573P6/P7/P8	POWER MODULE (UHF) (POWER UNIT)
	344A4574P2	POWER MODULE (800) (POWER UNIT)
	344A4575P2	POWER MODULE (900) (POWER UNIT)
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW

LOCAL TYPE MOBILE RADIO (SCAN HIGH POWER)



ITEM	PART NUMBER	DESCRIPTION
1	344A4581P3	CONTROL UNIT
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
	344A4579P1	TXRX (800-256K) (SYNTH/RX/EX)
	344A4580P1	TXRX (900-256K) (SYNTH/RX/EX)
	344A4578P101-P104	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4579P101	TXRX (800-512K) (SYNTH/RX/EX)
	344A4580P101	TXRX (900-512K) (SYNTH/RX/EX)
	344A4577P101-P102	TXRX (VHF-DB) (SYNTH/RX/EX)
	344A4572P3/P4	POWER MODULE (VHF) (POWER UNIT)
	344A4573P3/P4/P5	POWER MODULE (UHF) (POWER UNIT)
3	344A4574P1	POWER MODULE (800) (POWER UNIT)
	344A4575P1	POWER MODULE (900) (POWER UNIT)
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW

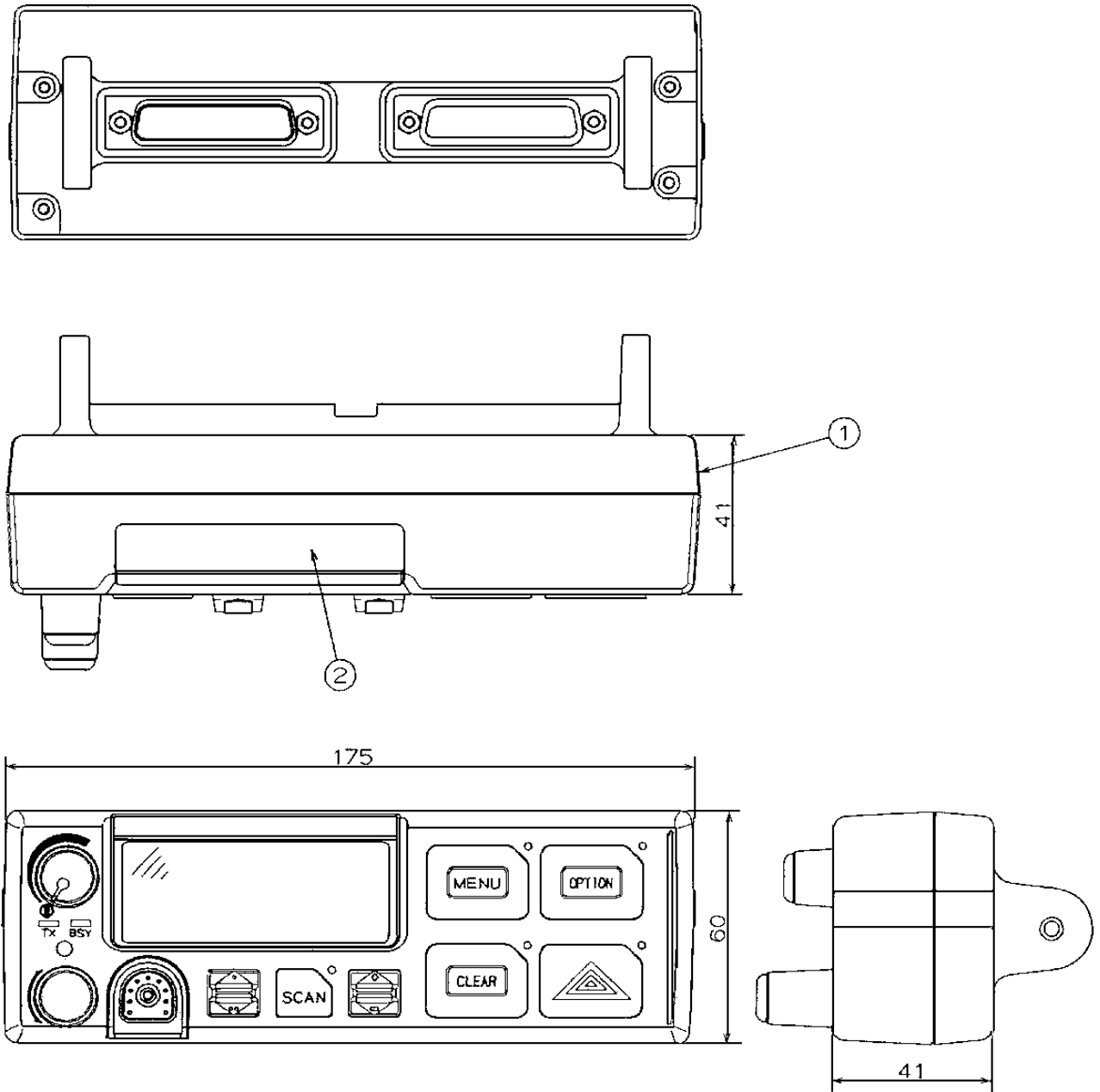
LOCAL TYPE MOBILE RADIO (SYSTEM LOW POWER)



VHF (136-174 MHz)
UHF (403-512 MHz)
800 MHz
900 MHz

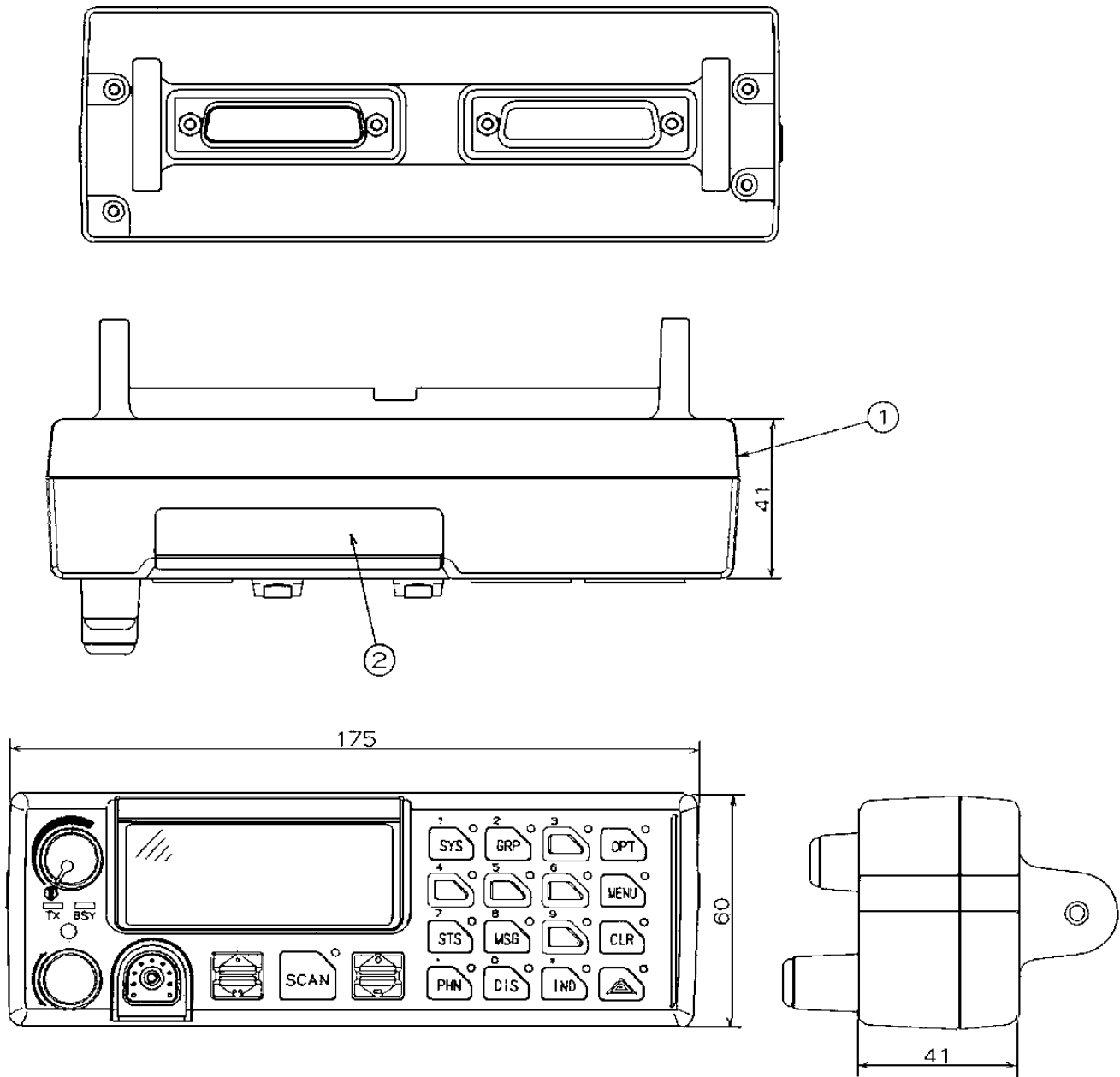
ITEM	PART NUMBER	DESCRIPTION
1	344A4581P3	CONTROL UNIT
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
	344A4577P101-P102	TXRX (VHF-DB) (SYNTH/RX/EX)
	344A4578P101-P104	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4579P101	TXRX (800-512K) (SYNTH/RX/EX)
	344A4580P101	TXRX (900-512K) (SYNTH/RX/EX)
	344A4579P1	TXRX (800-256K) (SYNTH/RX/EX)
	344A4580P1	TXRX (900-256K) (SYNTH/RX/EX)
3	344A4572P5/P6	POWER MODULE (VHF) (POWER UNIT)
	344A4573P6/P7/P8	POWER MODULE (UHF) (POWER UNIT)
	344A4574P2	POWER MODULE (800) (POWER UNIT)
	344A4575P2	POWER MODULE (900) (POWER UNIT)
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW

LOCAL TYPE MOBILE RADIO (SYSTEM HIGH POWER)



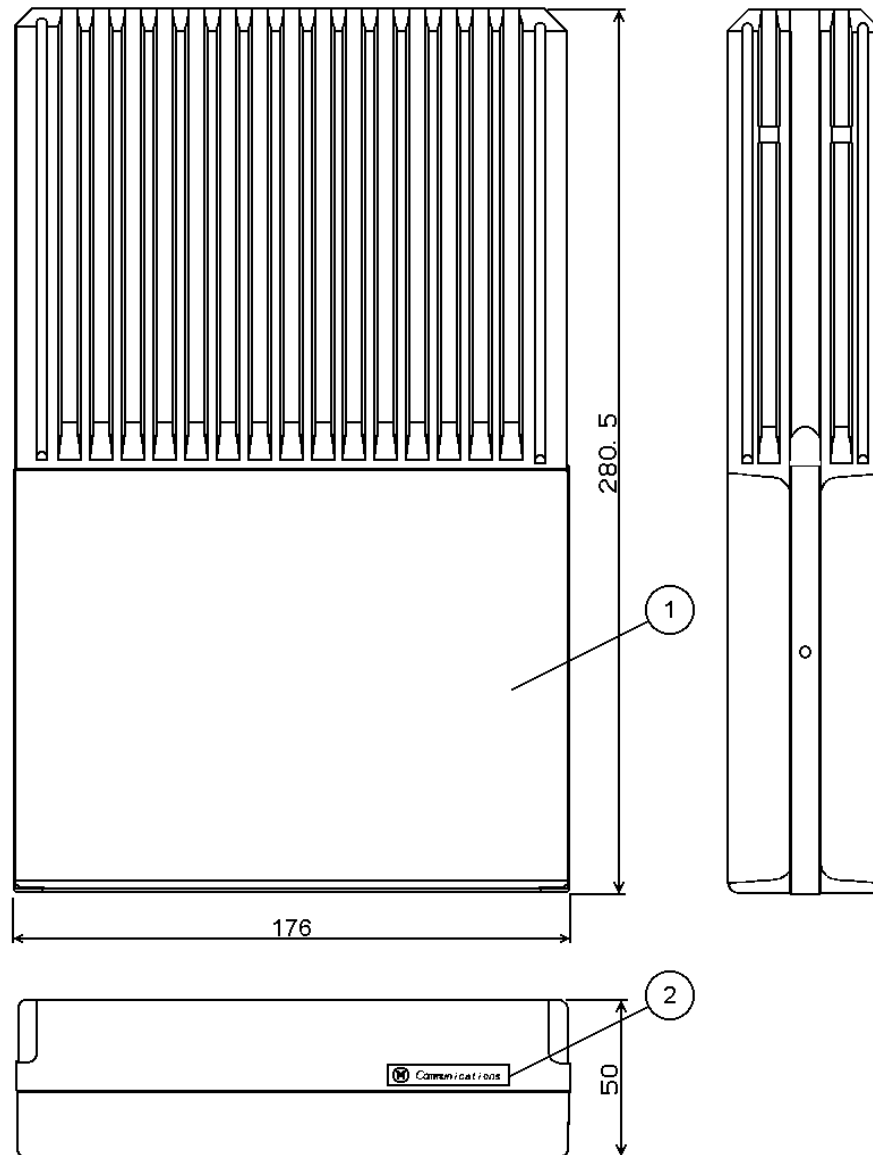
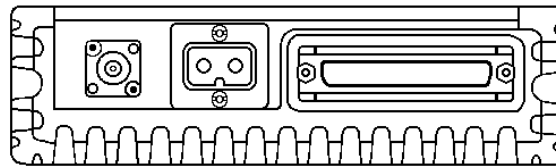
ITEM	PART NUMBER	DESCRIPTION
1	344A4581P2	CONTROL UNIT
2	19B802621P1	NAME PLATE

REMOTE TYPE CONTROL UNIT (SCAN)



ITEM	PART NUMBER	DESCRIPTION
1	344A4581P4	CONTROL UNIT
2	19B802621P1	NAME PLATE

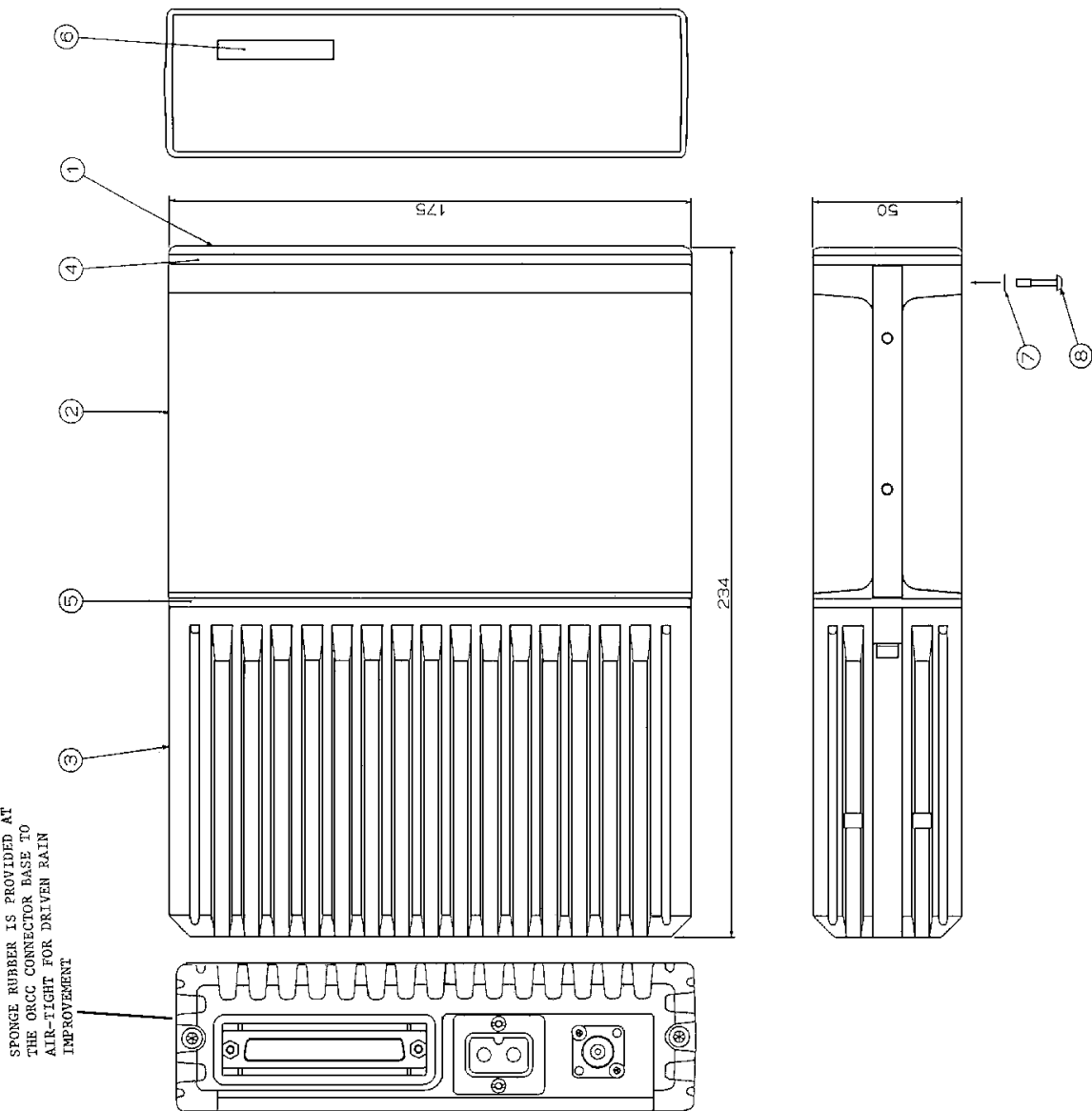
REMOTE TYPE CONTROL UNIT (SYSTEM)



Low Band Only

ITEM	PART NUMBER	DESCRIPTION
1	344A4571P1-P4	RADIO UNIT
2	344A4757P1	NAME PLATE

REMOTE TYPE MOBILE RADIO (LOW BAND)

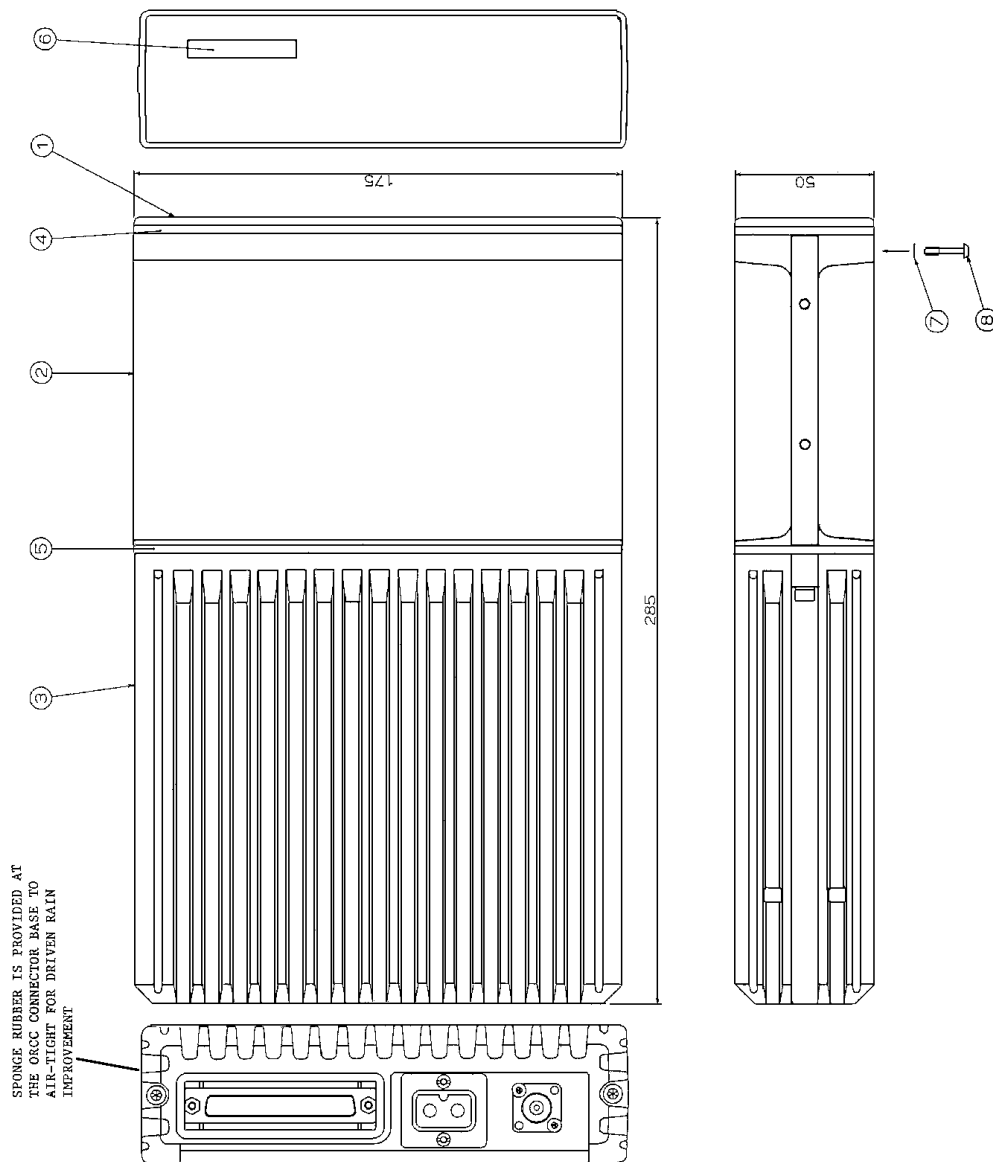


VHF (136-174 MHz)
UHF (403-512 MHz)

Only

ITEM	PART NUMBER	DESCRIPTION
1	19B802671P1	FRONT COVER
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4577P101-P102	TXRX (VHF-DB) (SYNTH/RX/EX)
	344A4578P101-P104	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
3	344A4572P3/P4	POWER MODULE (VHF) (POWER UNIT)
	344A4573P3/P4/P5	POWER MODULE (UHF) (POWER UNIT)
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW

REMOTE TYPE MOBILE RADIO (LOW POWER)

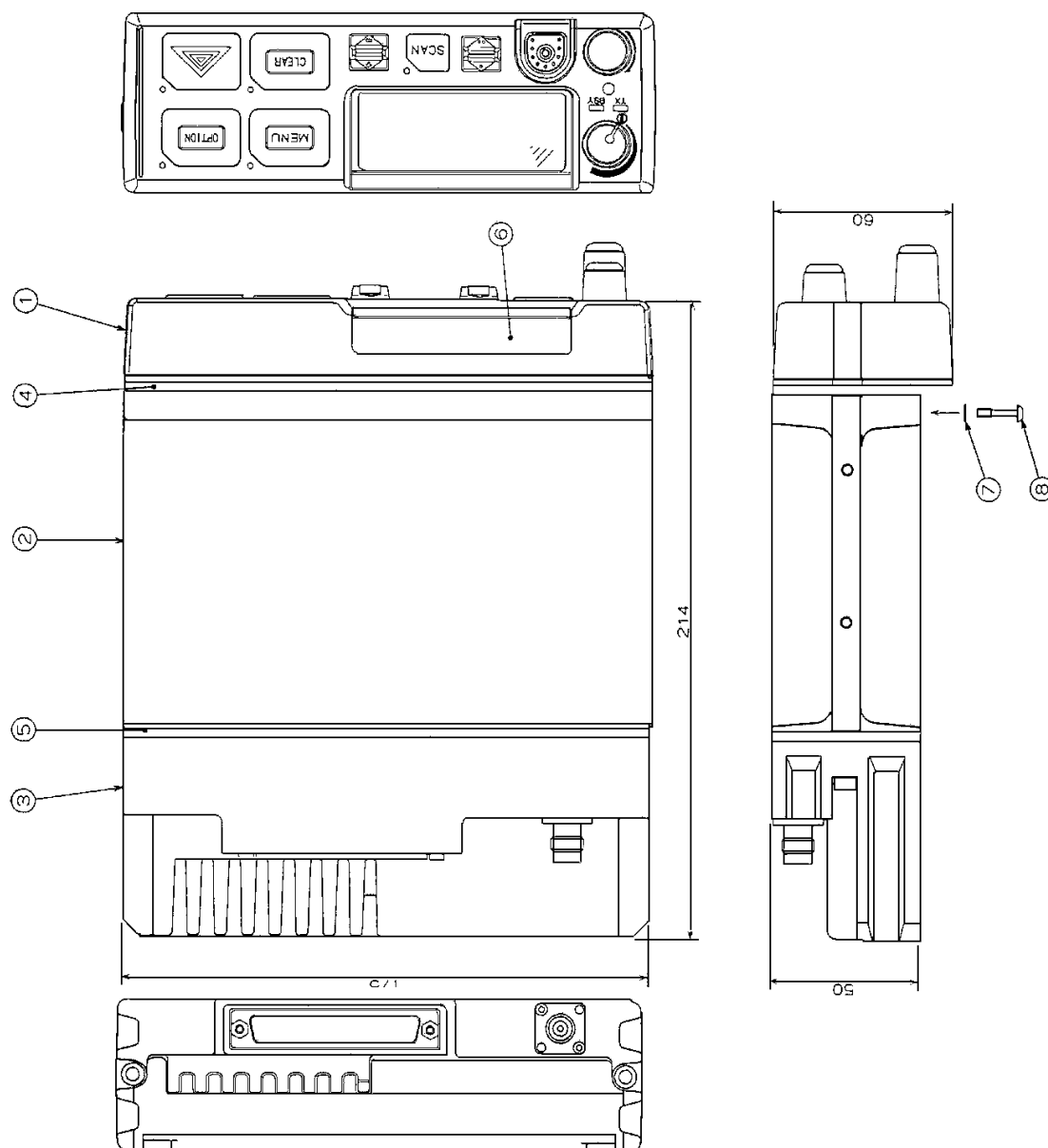


VHF (136-174 MHz)
UHF (403-512 MHz)

Only

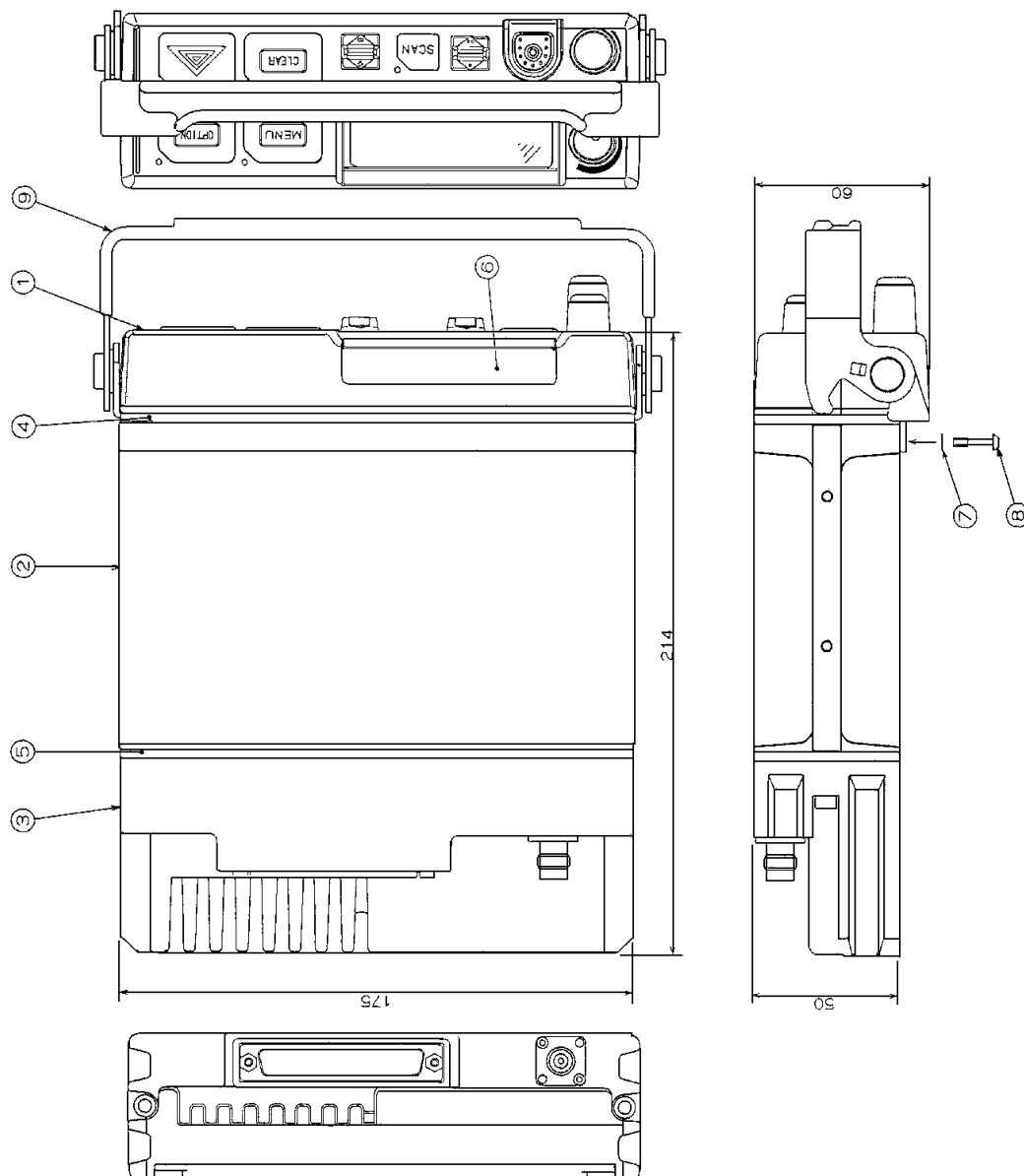
ITEM	PART NUMBER	DESCRIPTION
1	19B802671P1	FRONT COVER
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4577P101-P102	TXRX (VHF-DB) (SYNTH/RX/EX)
	344A4578P101-P104	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
3	344A4572P5/P6	POWER MODULE (VHF) (POWER UNIT)
	344A4573P6/P7/P8	POWER MODULE (UHF) (POWER UNIT)
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW

REMOTE TYPE MOBILE RADIO (HIGH POWER)



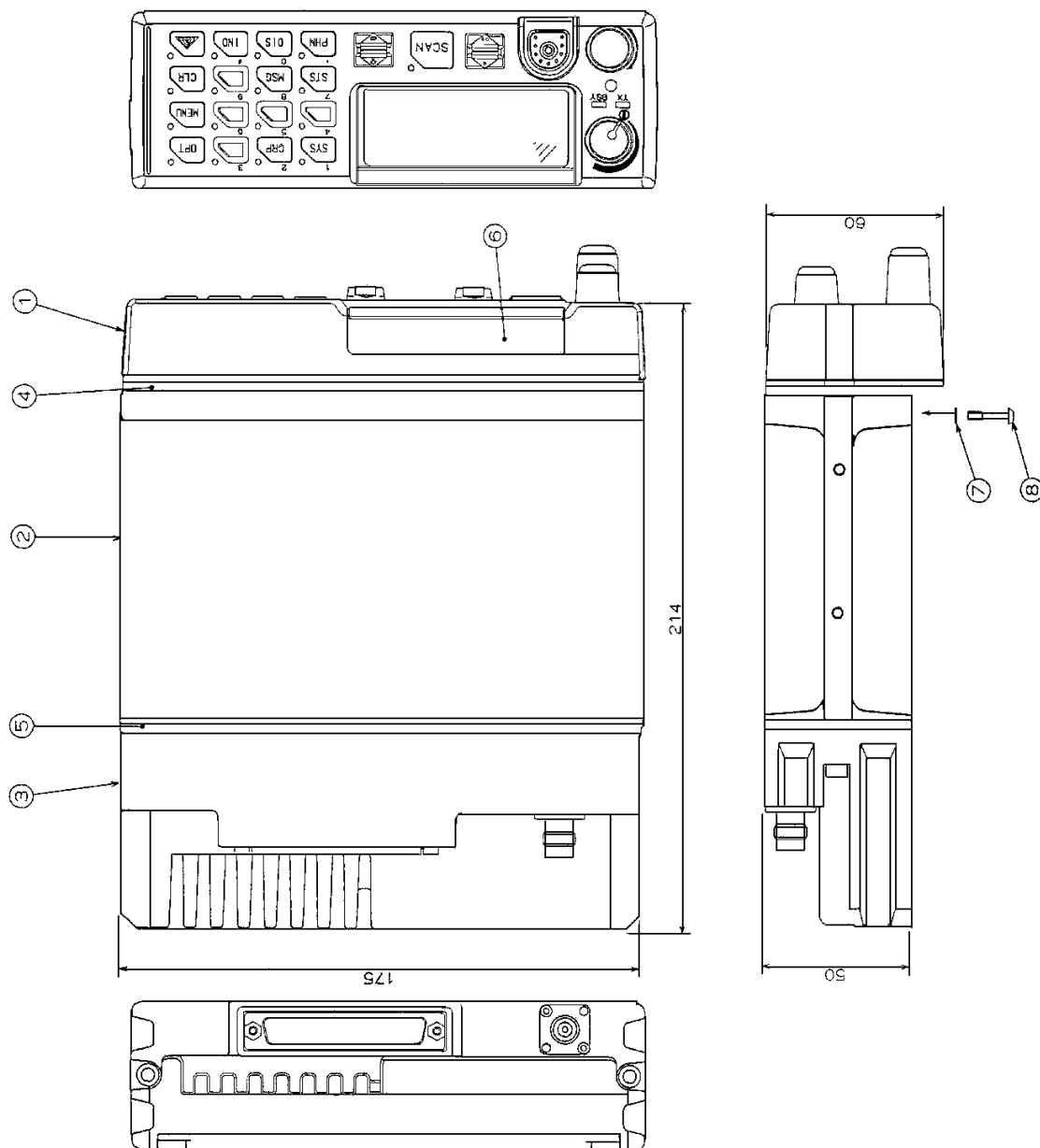
ITEM	PART NUMBER	DESCRIPTION
1	344A4581P1	CONTROL UNIT
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
	344A4577P102	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4578P101/P102/P104	TXRX (UHF-DB) (SYNTH/RX/EX)
3	344A4572P1/P2	POWER MODULE (VHF) (POWER UNIT) 25 WATTS
	344A4573P1/P2/ P9	POWER MODULE (UHF) (POWER UNIT) 20 WATTS
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW

EUROPEAN FRONT MOUNT TYPE MOBILE RADIO (SCAN)



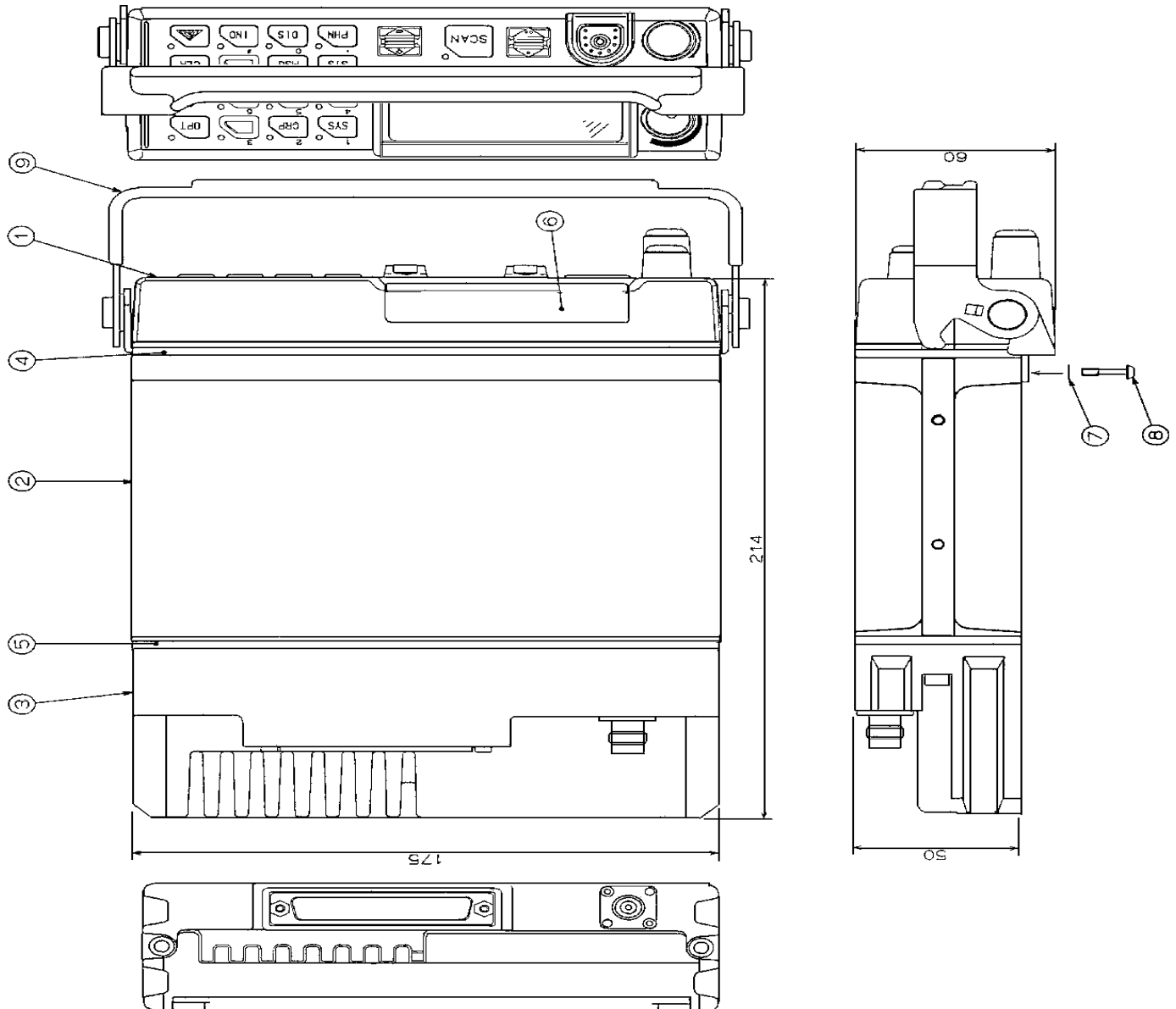
ITEM	PART NUMBER	DESCRIPTION
1	344A4581P1	CONTROL UNIT
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
	344A4577P102	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4578P101/P102/P104	TXRX (UHF-DB) (SYNTH/RX/EX)
3	344A4572P1/P2	POWER MODULE (VHF) (POWER UNIT) 25 WATTS
	344A4573P1/P2/ P9	POWER MODULE (UHF) (POWER UNIT) 20 WATTS
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW
9		HANDLE KIT

EUROPEAN CASSETTE MOUNT TYPE MOBILE RADIO (SCAN)



ITEM	PART NUMBER	DESCRIPTION
1	344A4581P3	CONTROL UNIT
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
	344A4577P102	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4578P101/P102/P104	TXRX (UHF-DB) (SYNTH/RX/EX)
3	344A4572P1/P2	POWER MODULE (VHF) (POWER UNIT) 25 WATTS
	344A4573P1/P2/ P9	POWER MODULE (UHF) (POWER UNIT) 20 WATTS
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW

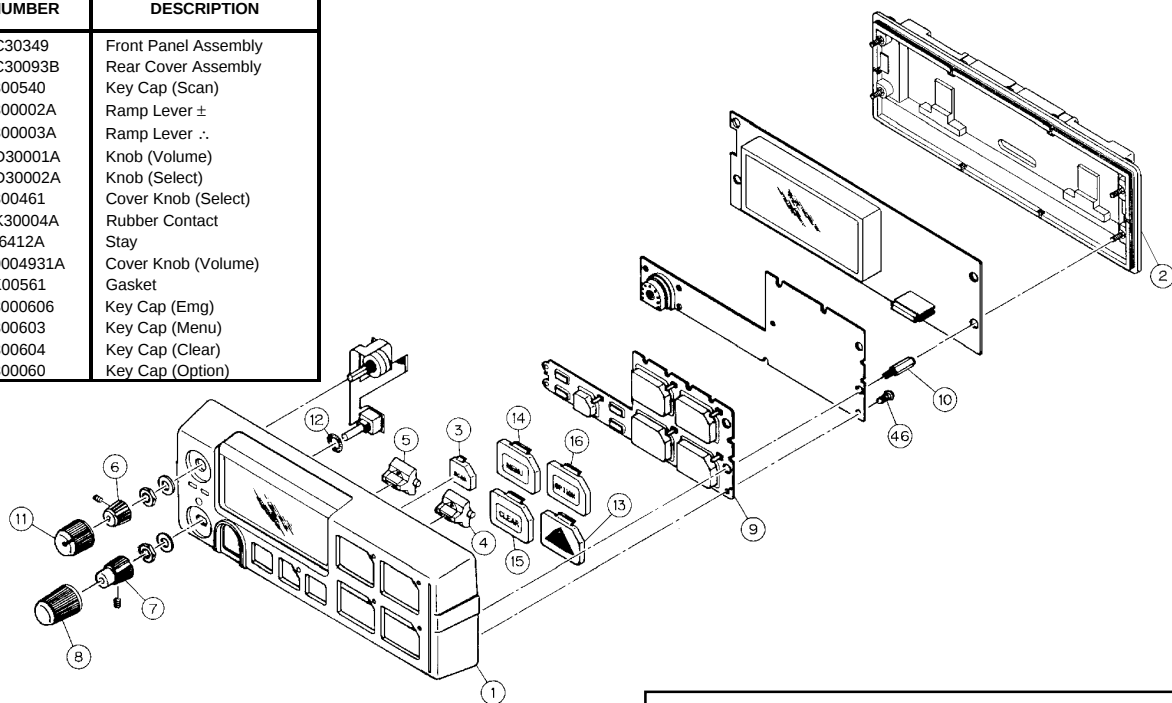
EUROPEAN FRONT MOUNT TYPE MOBILE RADIO (SYSTEM)



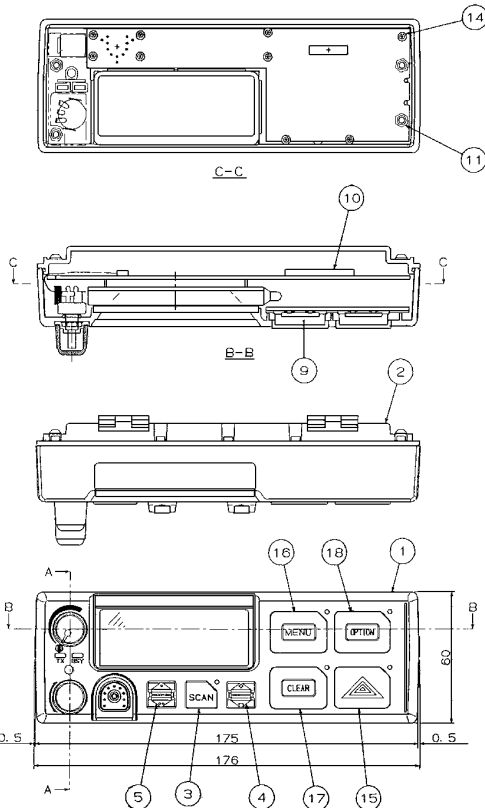
ITEM	PART NUMBER	DESCRIPTION
1	344A4581P3	CONTROL UNIT
2	344A4577P1/P2	TXRX (VHF) (SYNTH/RX/EX)
	344A4578P1-P4	TXRX (UHF) (SYNTH/RX/EX)
	344A4577P102	TXRX (UHF-DB) (SYNTH/RX/EX)
	344A4578P101/P102/P104	TXRX (UHF-DB) (SYNTH/RX/EX)
3	344A4572P1/P2	POWER MODULE (VHF) (POWER UNIT) 25 WATTS
	344A4573P1/P2/ P9	POWER MODULE (UHF) (POWER UNIT) 20 WATTS
4	19B802611P2	GASKET
5	19B802611P1	GASKET
6	19B802621P1	NAME PLATE
7	344A756P1	WASHER
8	344A4700P2	SCREW
9		HANDLE KIT

EUROPEAN CASSETTE MOUNT TYPE MOBILE RADIO (SYSTEM)

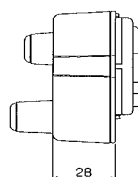
ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30349	Front Panel Assembly
2	B19/MPBC30093B	Rear Cover Assembly
3	B19/MTV300540	Key Cap (Scan)
4	B19/MTV300002A	Ramp Lever ±
5	B19/MTV300003A	Ramp Lever ∴
6	B19/MPHD30001A	Knob (Volume)
7	B19/MPHD30002A	Knob (Select)
8	B19/MTV300461	Cover Knob (Select)
9	B19/MPPK30004A	Rubber Contact
10	B19/ML046412A	Stay
11	B19/MTV0004931A	Cover Knob (Volume)
12	B19/BRPK00561	Gasket
13	B19/MTV3000606	Key Cap (Emg)
14	B19/MTV300603	Key Cap (Menu)
15	B19/MTV300604	Key Cap (Clear)
16	B19/MTV300060	Key Cap (Option)



B19/MPTG30015 No. 10 Torq Screw for Rear Cover
B19/BRTG00339 Thrust Washer for Torq Screw



ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30349	Front Panel Assembly
2	B19/MPBC30093B	Rear Cover Assembly
3	B19/MTV300540	Key Cap (Scan)
4	B19/MTV300002A	Ramp Lever ±
5	B19/MTV300003A	Ramp Lever ∴
6	B19/MPHD30001A	Knob (Volume)
7	B19/MPHD30002A	Knob (Select)
8	B19/MTV300461	Cover Knob (Select)
9	B19/MPPK30004A	Rubber Contact
10	B19/MTB309080A	Case Shield
11	B19/MTL046412A	Stay
12	B19/MTV0004931A	Cover Knob (Volume)
13	B19/BRPK00561	Gasket
14	B19/BRTG05174	PT Screw
15	B19/MTV3000606	Key Cap (Emg)
16	B19/MTV300603	Key Cap (Menu)
17	B19/MTV300604	Key Cap (Clear)
18	B19/MTV300060	Key Cap (Option)

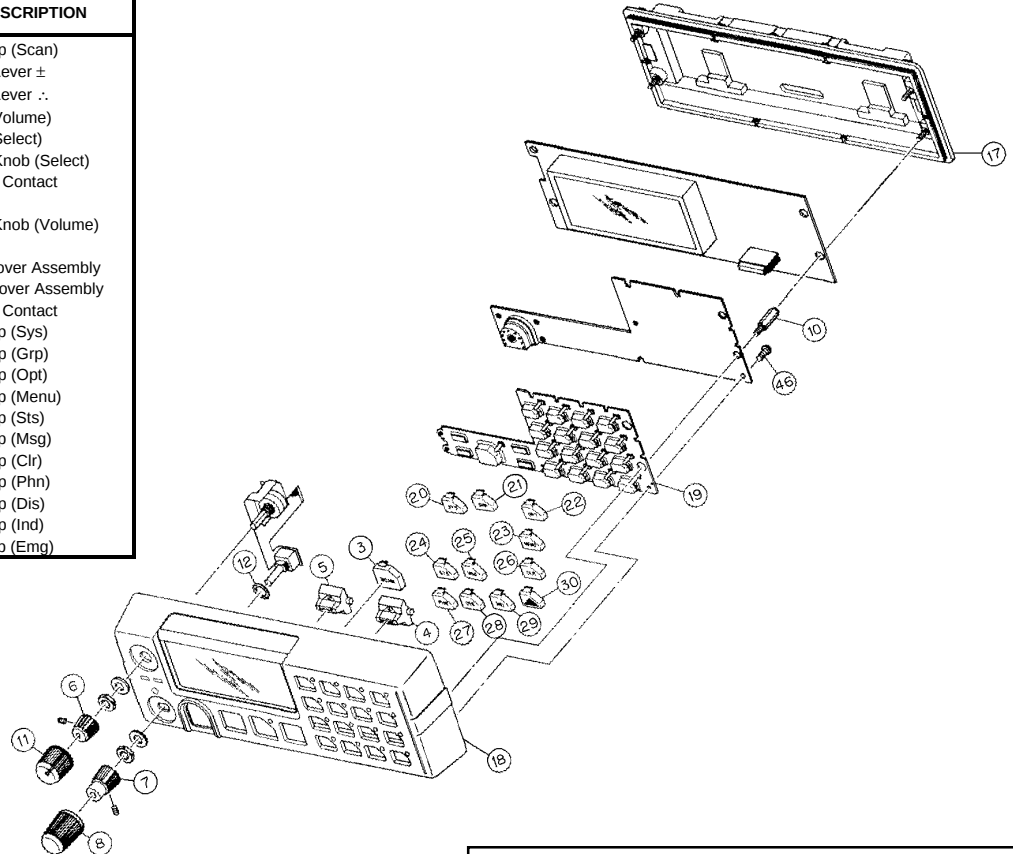


LOCAL TYPE CONTROL UNIT (SCAN)

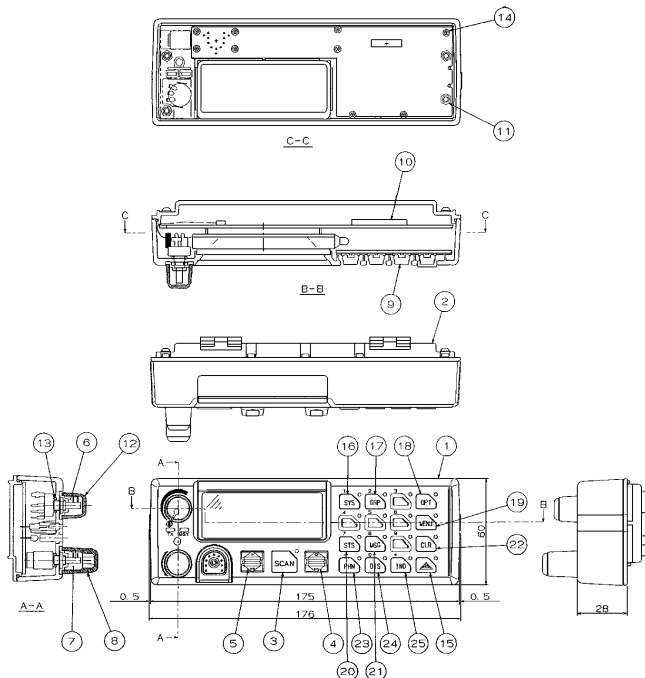
EXPLODED VIEW & PARTS LIST

344A4581P1 (B19/CMD-556BL)

ITEM	PART NUMBER	DESCRIPTION
3	B19/MTV300540	Key Cap (Scan)
4	B19/MTV300002A	Ramp Lever ±
5	B19/MTV300003A	Ramp Lever ∴
6	B19/MPHD30001A	Knob (Volume)
7	B19/MPHD30002A	Knob (Select)
8	B19 MTV300461	Cover Knob (Select)
9	B19/MPPK01867A	Rubber Contact
10	B19/MTL046412A	Stay
11	B19/MTV004931A	Cover Knob (Volume)
12	B19/BRPK00561	Gasket
17	B19/MPBC30093B	Rear Cover Assembly
18	B19/MPBC30348	Front Cover Assembly
19	B19/MPPK01867A	Rubber Contact
20	B19/MTV300542	Key Cap (Sys)
21	B19/MTV300543	Key Cap (Grp)
22	B19/MTV300544	Key Cap (Opt)
23	B19/MTV300545	Key Cap (Menu)
24	B19/MTV300546	Key Cap (Sts)
25	B19/MTV300547	Key Cap (Msg)
26	B19/MTV300548	Key Cap (Clr)
27	B19/MTV300549	Key Cap (Phn)
28	B19/MTV300550	Key Cap (Dis)
29	B19/MTV300551	Key Cap (Ind)
30	B19/MTV300552	Key Cap (Emg)



B19/MPTG30015 No. 10 Torq Screw for Rear Cover
B19/BRTG00339 Thrust Washer for Torq Screw



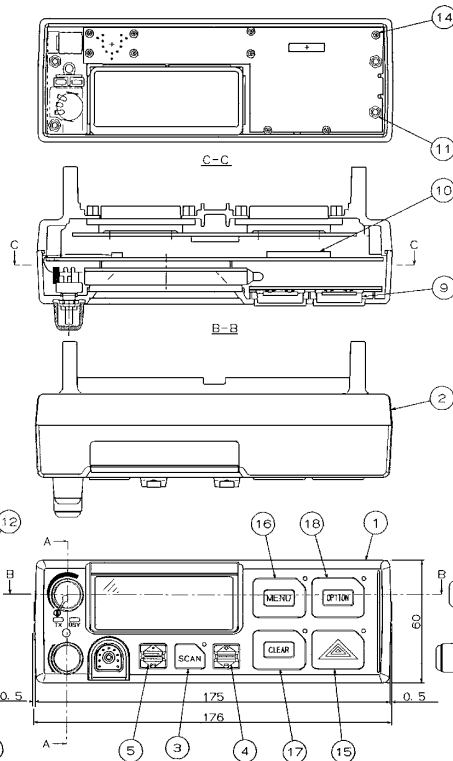
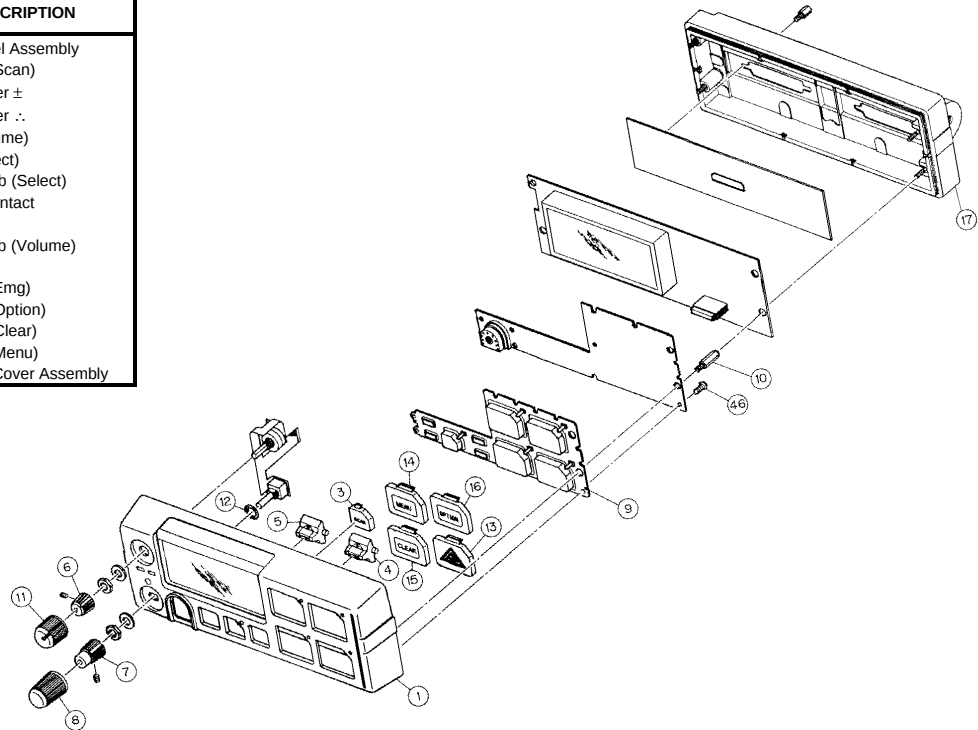
ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30348	Front Cover Assembly
2	B19/MPBC30093B	Rear Cover Assembly
3	B19/MTV300540	Key Cap (Scan)
4	B19/MTV300002A	Ramp Lever ±
5	B19/MTV300003A	Ramp Lever ∴
6	B19/MPHD30001A	Knob (Volume)
7	B19/MPHD30002A	Knob (Select)
8	B19 MTV300461	Cover Knob (Select)
9	B19/MPPK01867A	Rubber Contact
10	B19/MTB309080A	Case Shield
11	B19/MTL046412A	Stay
12	B19/MTV004931A	Cover Knob (Volume)
13	B19/BRPK00561	Gasket
14	B19/BRTG05174	PT Screw
15	B19/MTV300552	Key Cap (Emg)
16	B19/MTV300542	Key Cap (Sys)
17	B19/MTV300543	Key Cap (Grp)
18	B19/MTV300544	Key Cap (Opt)
19	B19/MTV300545	Key Cap (Menu)
20	B19/MTV300546	Key Cap (Sts)
21	B19/MTV300547	Key Cap (Msg)
22	B19/MTV300548	Key Cap (Clr)
23	B19/MTV300549	Key Cap (Phn)
24	B19/MTV300550	Key Cap (Dis)
25	B19/MTV300551	Key Cap (Ind)

LOCAL TYPE CONTROL UNIT (SYSTEM)

EXPLODED VIEW & PARTS LIST

344A4581P3 (B19/CMD-556ML)

ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30349	Front Panel Assembly
3	B19/MTV300540	Key Cap (Scan)
4	B19/MTV300002A	Ramp Lever ±
5	B19/MTV300003A	Ramp Lever ∴
6	B19/MPHD30001A	Knob (Volume)
7	B19/MPHD30002A	Knob (Select)
8	B19/MTV300461	Cover Knob (Select)
9	B19/MPPK30004A	Rubber Contact
10	B19/ML046412A	Stay
11	B19/MTV0004931A	Cover Knob (Volume)
12	B19/BRPK00561	Gasket
13	B19/MTV300606	Key Cap (Emg)
14	B19/MTV300603	Key Cap (Option)
15	B19/MTV300604	Key Cap (Clear)
16	B19/MTV300060	Key Cap (Menu)
17	B19/MDNQZ5110A	RIA Rear Cover Assembly



Stays (See item 10 above)

B19/MTL04612A For control Unit Front Mount
B19/BRBP05191 For RIA Remote Rear Cover

B19/MPTG30015 No. 10 Torq Screw for Rear Cover
B19/BRTG00339 Thrust Washer for Torq Screw

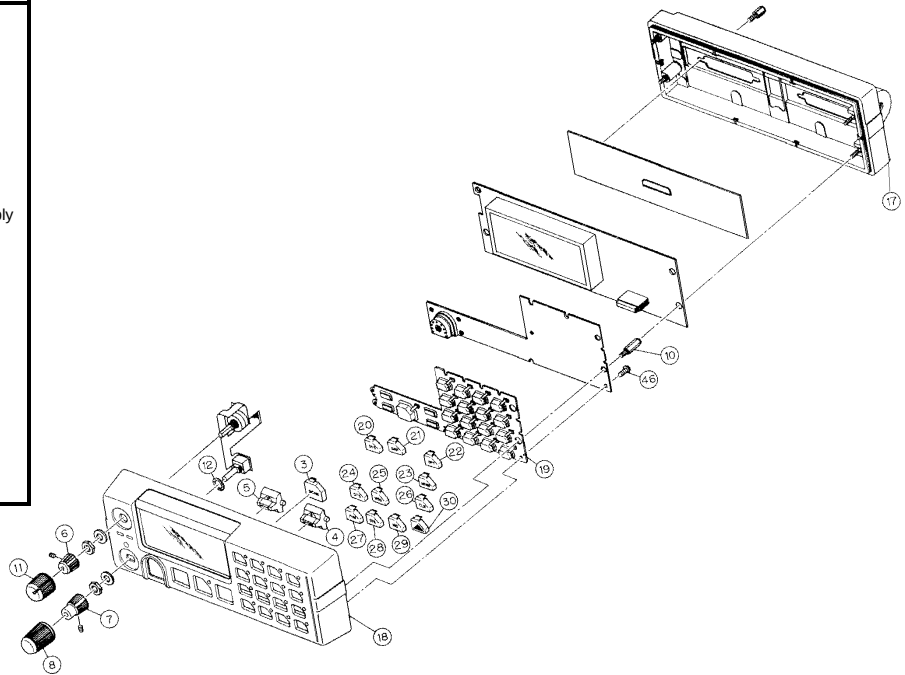
ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30349	Front Panel Assembly
2	B19/MDNQZ5110A	RIA Rear Cover Assembly
3	B19/MTV300540	Key Cap (Scan)
4	B19/MTV300002A	Ramp Lever ±
5	B19/MTV300003A	Ramp Lever ∴
6	B19/MPHD30001A	Knob (Volume)
7	B19/MPHD30002A	Knob (Select)
8	B19/MTV300461	Cover Knob (Select)
9	B19/MPPK30004A	Rubber Contact
10	B19/MTB309080A	Case Shield
11	B19/MTL046412A	Stay
12	B19/MTV0004931A	Cover Knob (Volume)
13	B19/BRPK00561	Gasket
14	B19/BRTG05174	PT Screw
15	B19/MTV300606	Key Cap (Emg)
16	B19/MTV300603	Key Cap (Menu)
17	B19/MTV300604	Key Cap (Clear)
18	B19/MTV300607	Key Cap (Option)

REMOTE TYPE CONTROL UNIT (SCAN)

EXPLODED VIEW & PARTS LIST

344A4581P2 (B19/CMD-556BR)

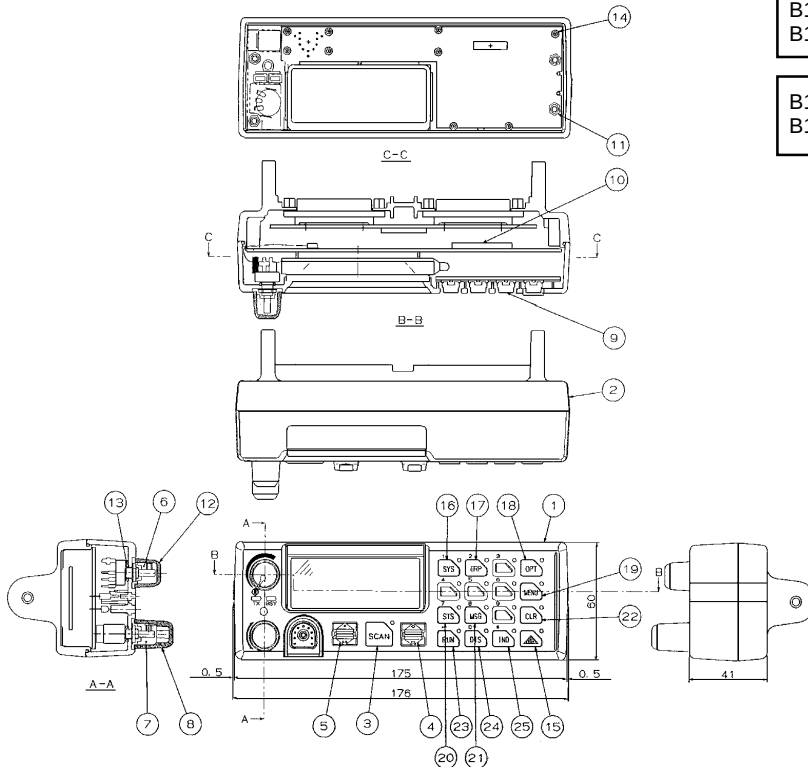
ITEM	PART NUMBER	DESCRIPTION
3	B19/MTV300540	Key Cap (Scan)
4	B19/MTV300002A	Ramp Lever ±
5	B19/MTV300003A	Ramp Lever ∴
6	B19/MPHD30001A	Knob (Volume)
7	B19/MPHD30002A	Knob (Select)
8	B19 MTV300461	Cover Knob (Select)
10	B19/MTL046412A	Stay
11	B19/MTV004931A	Cover Knob (Volume)
12	B19/BRPK00561	Gasket
17	B19/MDNQZ5110A	RIA Rear Cover Assembly
18	B19/MPBC30348	Front Cover Assembly
19	B19/MPPK01867A	Rubber Contact
20	B19/MTV300542	Key Cap (Sys)
21	B19/MTV300543	Key Cap (Grp)
22	B19/MTV300544	Key Cap (Opt)
23	B19/MTV300545	Key Cap (Menu)
24	B19/MTV300546	Key Cap (Sts)
25	B19/MTV300547	Key Cap (Msg)
26	B19/MTV300548	Key Cap (Clr)
27	B19/MTV300549	Key Cap (Phn)
28	B19/MTV300550	Key Cap (Dis)
29	B19/MTV300551	Key Cap (Ind)
30	B19/MTV300552	Key Cap (Emg)



Stays (See item 10 above)

B19/MTL04612A For control Unit Front Mount
B19/BRBP05191 For RIA Remote Rear Cover

B19/MPTG30015 No. 10 Torq Screw for Rear Cover
B19/BRTG00339 Thrust Washer for Torq Screw



ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30348	Front Cover Assembly
2	B19/MDNQZ5110A	RIA Rear Cover Assembly
3	B19/MTV300540	Key Cap (Scan)
4	B19/MTV300002A	Ramp Lever ±
5	B19/MTV300003A	Ramp Lever ∴
6	B19/MPHD30001A	Knob (Volume)
7	B19/MPHD30002A	Knob (Select)
8	B19 MTV300461	Cover Knob (Select)
9	B19/MPPK01867A	Rubber Contact
10	B19/MTB309080A	Case Shield
11	B19/MTL046412A	Stay
12	B19/MTV004931A	Cover Knob (Volume)
13	B19/BRPK00561	Gasket
14	B19/BRTG05174	PT Screw
15	B19/MTV300552	Key Cap (Emg)
16	B19/MTV300542	Key Cap (Sys)
17	B19/MTV300543	Key Cap (Grp)
18	B19/MTV300544	Key Cap (Opt)
19	B19/MTV300545	Key Cap (Menu)
20	B19/MTV300546	Key Cap (Sts)
21	B19/MTV300547	Key Cap (Msg)
22	B19/MTV300548	Key Cap (Clr)
23	B19/MTV300549	Key Cap (Phn)
24	B19/MTV300550	Key Cap (Dis)
25	B19/MTV300551	Key Cap (Ind)

REMOTE TYPE CONTROL UNIT (SYSTEM)

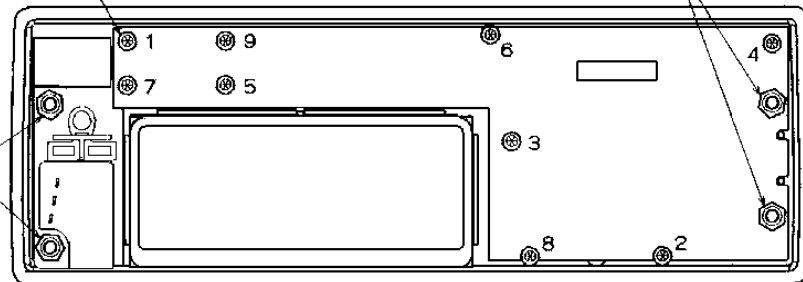
EXPLODED VIEW & PARTS LIST

344A4581P4 (B19/CMD-556MR)

PT. SCREW (SEQUENCE: 1~9)
2.8Kg·cm

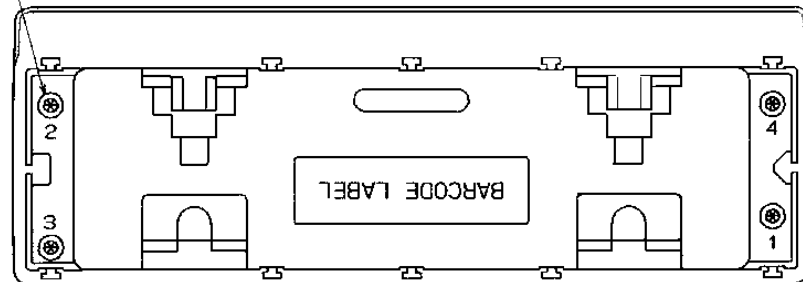
STAY
6Kg·cm

STAY
6Kg·cm

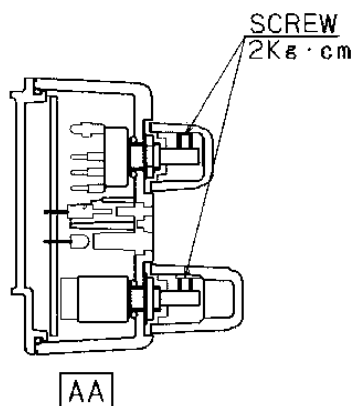


BACK VIEW (REMOVE REARCOVER AND PANEL CONTROL)

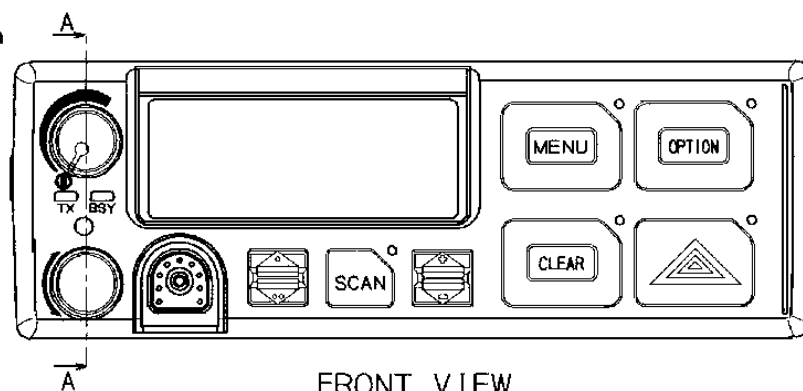
TORX SCREW (SEQUENCE: 1~4)
8Kg·cm



BACK VIEW



SCREW
2Kg·cm



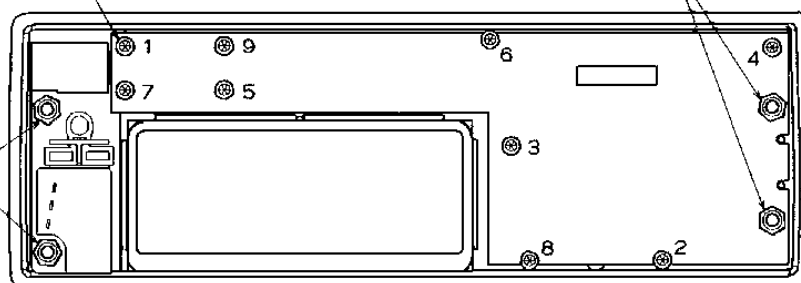
FRONT VIEW

SCAN CONTROL UNIT (LOCAL)

PT. SCREW (SEQUENCE: 1~9)
2.8K ϵ ·cm

STAY
6K ϵ ·cm

STAY
6K ϵ ·cm

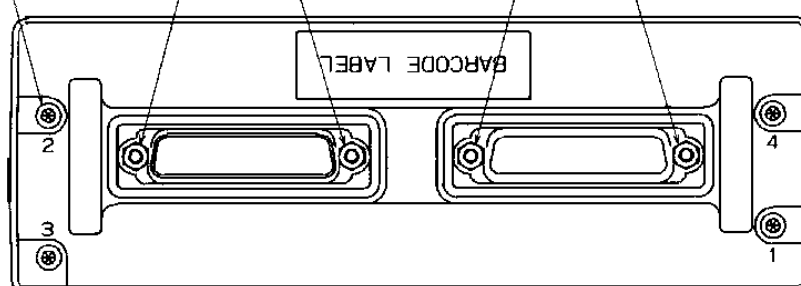


BACK VIEW (REMOVE REARCOVER AND PANEL CONTROL)

TORX SCREW (SEQUENCE: 1~4)
8K ϵ ·cm

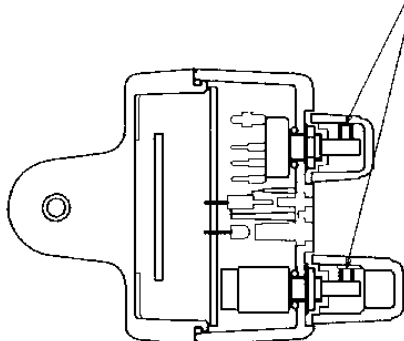
STAY
6K ϵ ·cm

STAY
6K ϵ ·cm

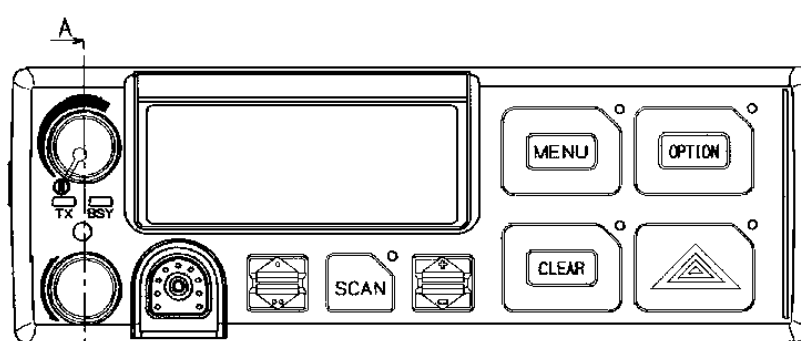


BACK VIEW

SCREW
2K ϵ ·cm



AA



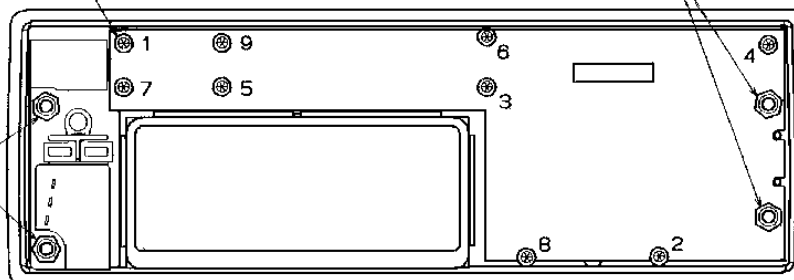
FRONT VIEW

SCAN CONTROL UNIT (REMOTE)

PT. SCREW (SEQUENCE: 1~9)
2.8Kg·cm

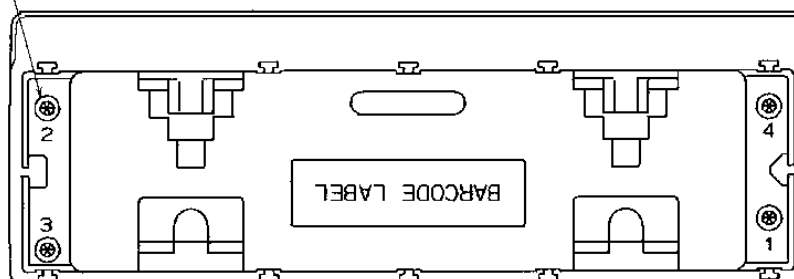
STAY
6Kg·cm

STAY
6Kg·cm

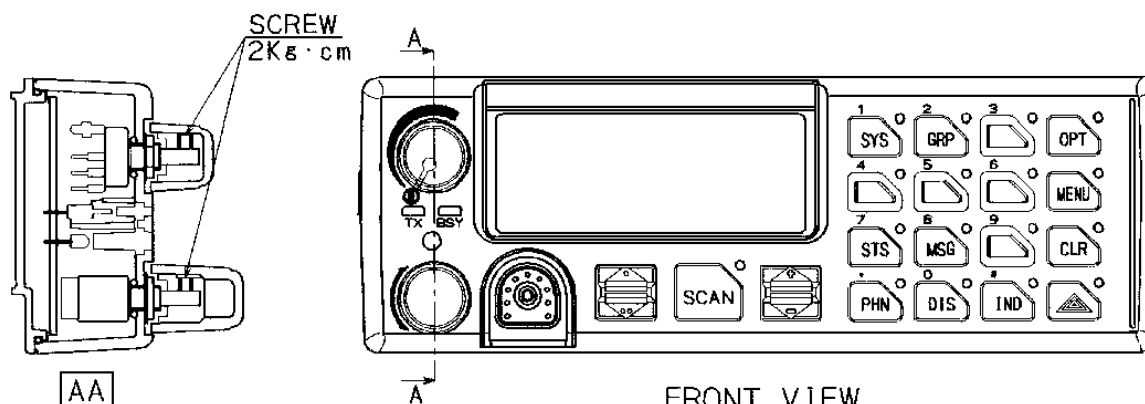


BACK VIEW (REMOVE REARCOVER AND PANEL CONTROL)

TORX SCREW (SEQUENCE: 1~4)
8Kg·cm



BACK VIEW



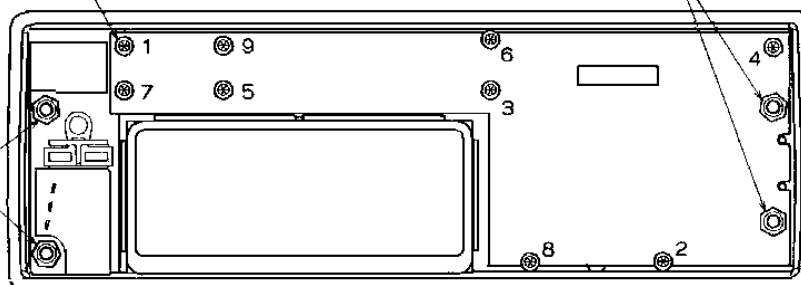
FRONT VIEW

SYSTEM CONTROL UNIT (LOCAL)

PT. SCREW (SEQUENCE: 1~9)
2.8Kg·cm

STAY
6Kg·cm

STAY
6Kg·cm

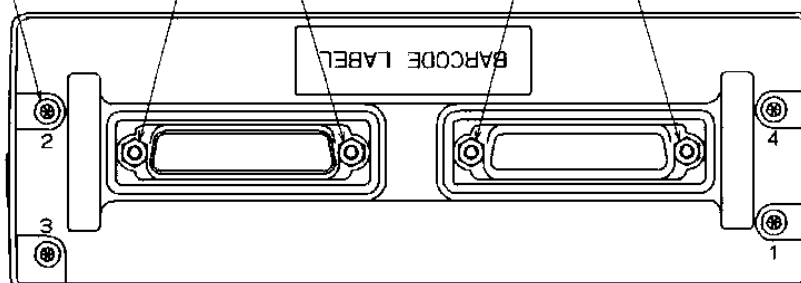


BACK VIEW (REMOVE REARCOVER AND PANEL CONTROL)

TORX SCREW (SEQUENCE: 1~4)
8Kg·cm

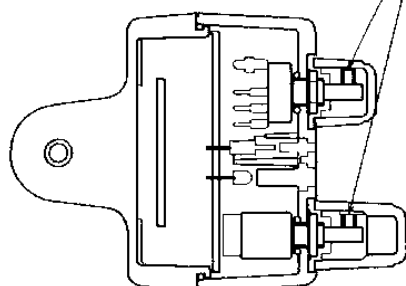
STAY
6Kg·cm

STAY
6Kg·cm

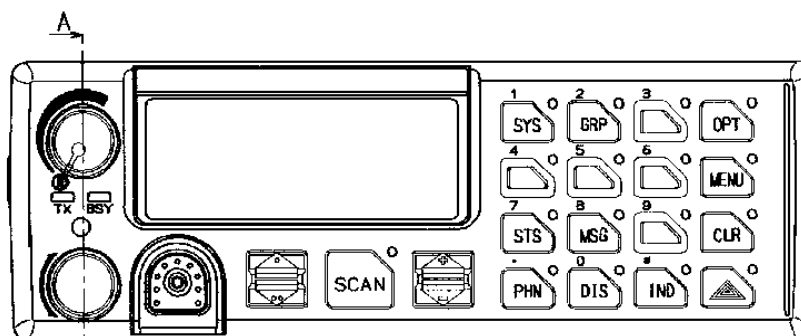


BACK VIEW

SCREW
2Kg·cm

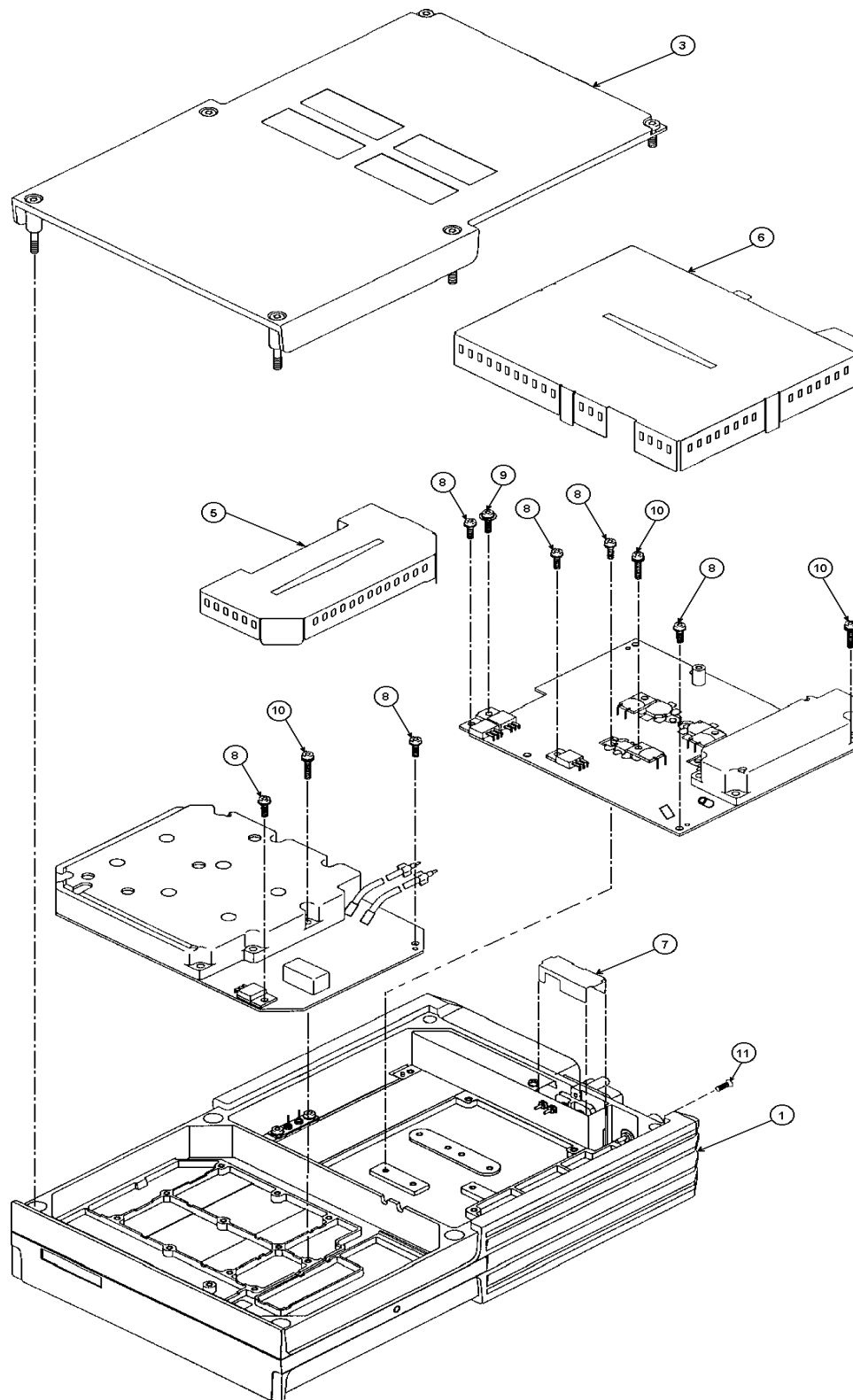


AA

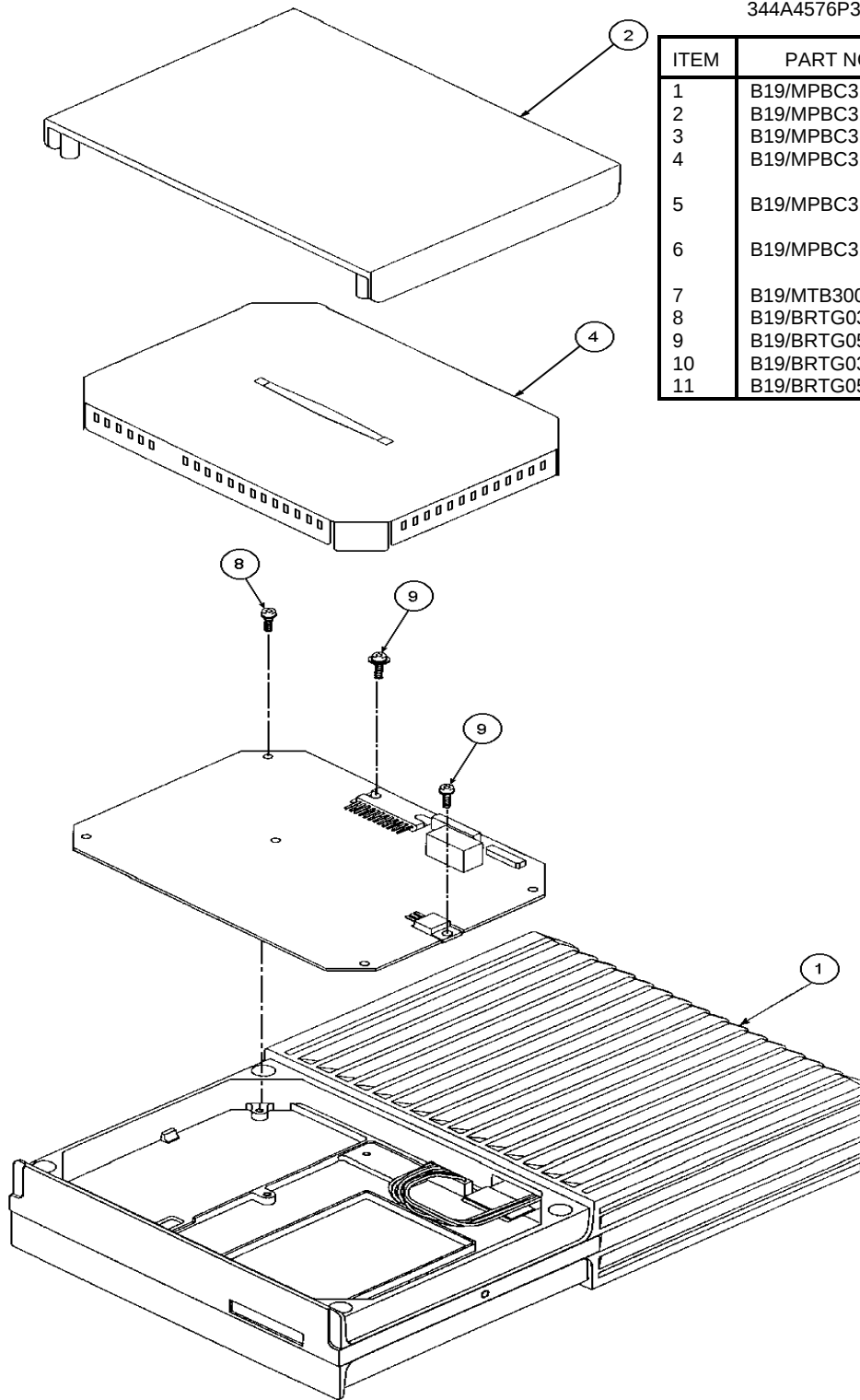


FRONT VIEW

SYSTEM CONTROL UNIT (REMOTE)



LOW BAND (EXPLODED VIEW AND PARTS LIST (1/2))



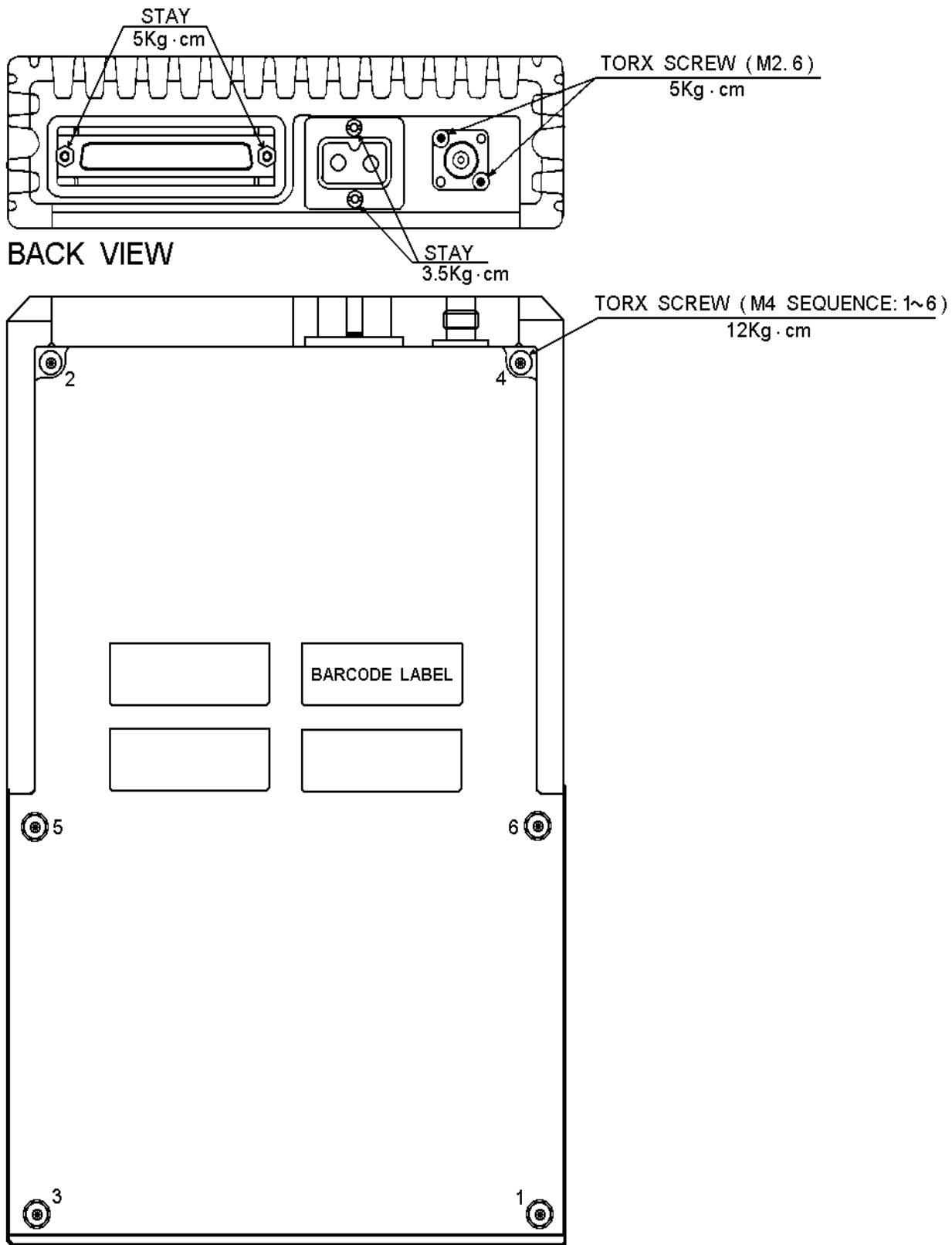
RADIO UNIT

344A4576P1
344A4576P3

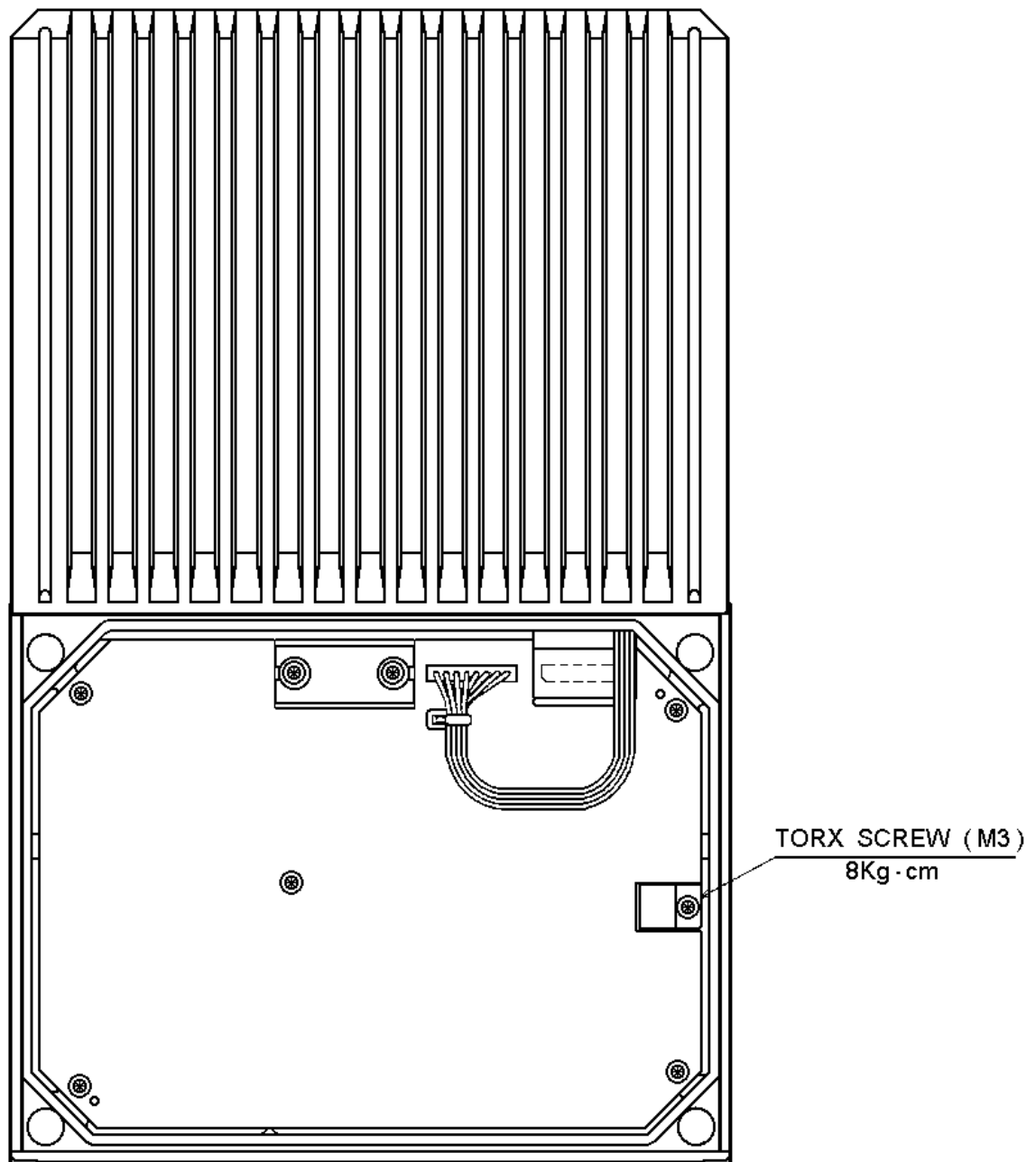
344A4576P2
344A4576P4

ITEM	PART NO.	DESCRIPTION
1	B19/MPBC31484	FRAME ASSEMBLY
2	B19/MPBC31474	TOP COVER ASSEMBLY
3	B19/MPBC31475	BOTTOM COVER ASSEMBLY
4	B19/MPBC31437	COVER SHIELD ASSEMBLY (LOGIC)
5	B19/MPBC31548	COVER SHIELD ASSEMBLY (RF)
6	B19/MPBC31549	COVER SHIELD ASSEMBLY (PA)
7	B19/MTB300290B	COVER SHIELD
8	B19/BRTG03830	SCREW (M3X8)
9	B19/BRTG05022	SCREW (M3X10)
10	B19/BRTG03943	SCREW (M3X13)
11	B19/BRTG05023	SCREW (M2.6X6)

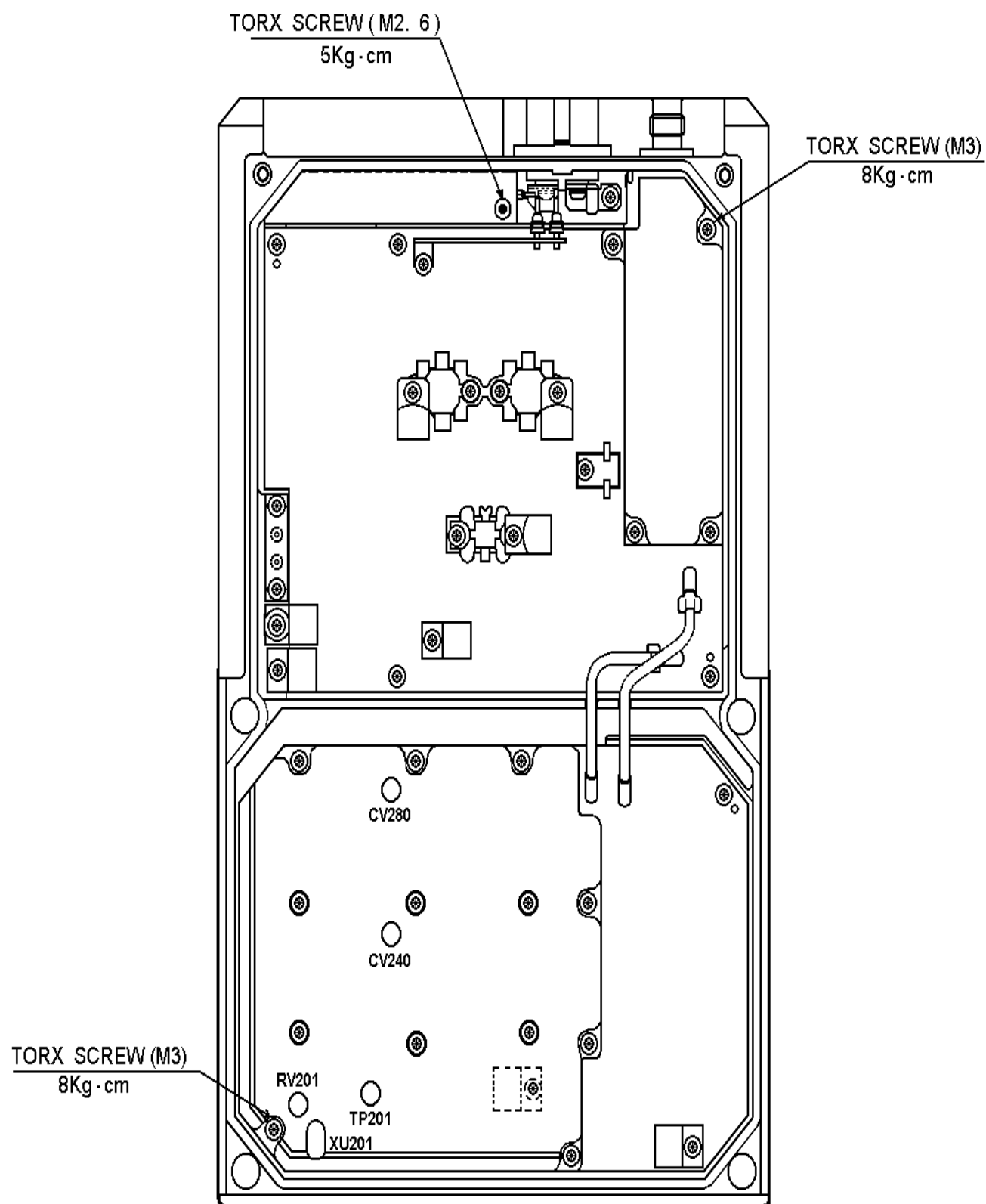
LOW BAND (EXPLODED VIEW AND PARTS LIST (2/2))



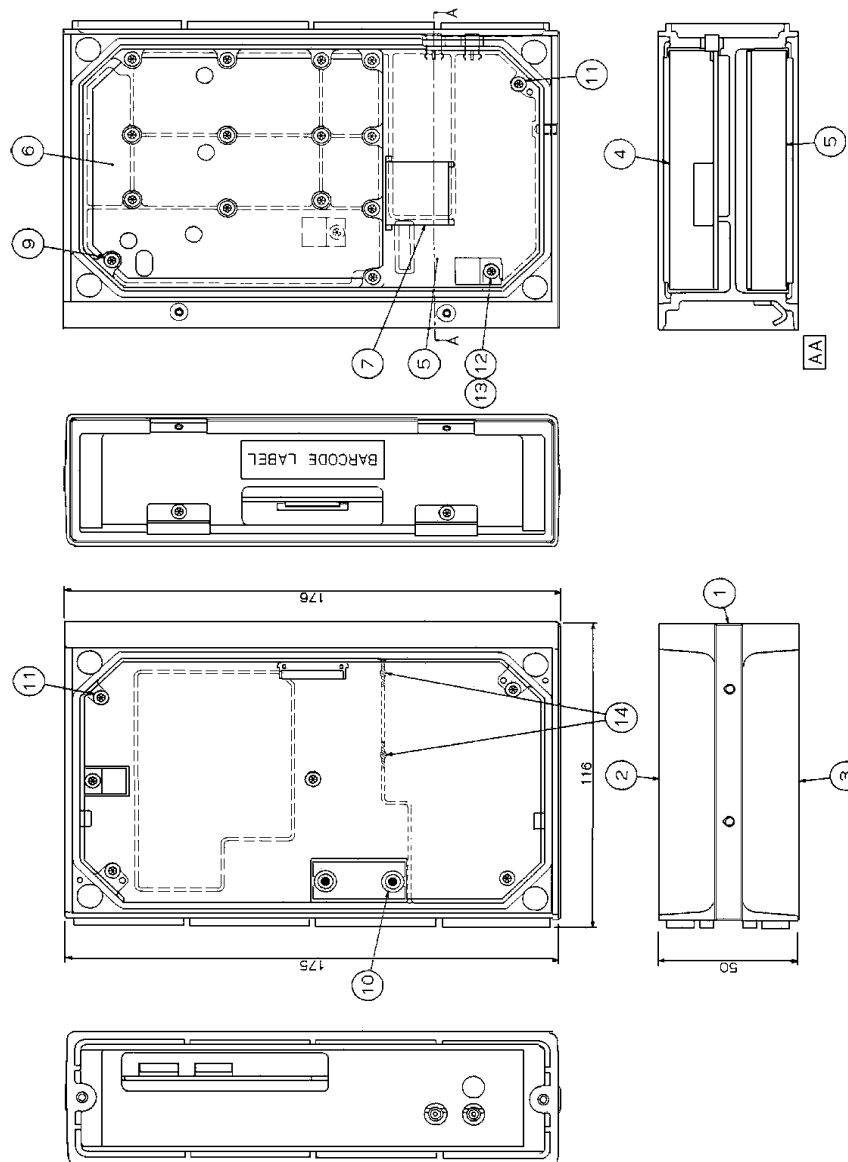
LOW BAND (1/3)



TOP VIEW
(REMOVE TOP COVER AND SHIELD COVER)

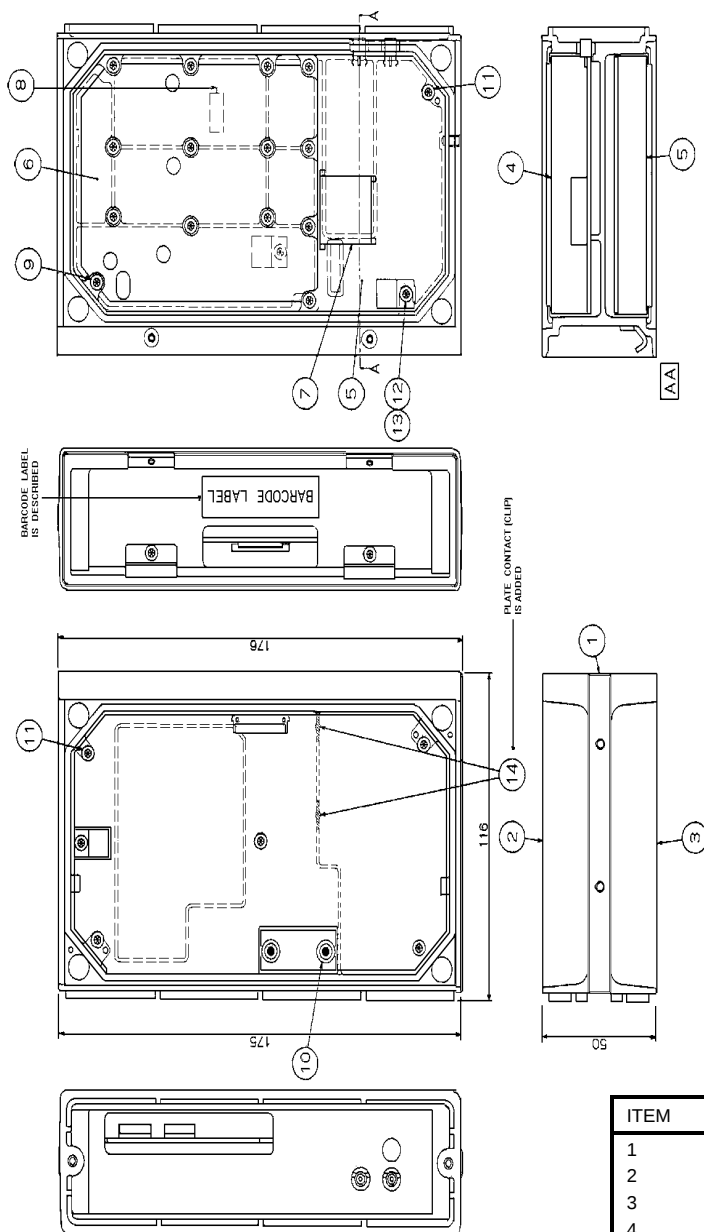


LOW BAND (3/3)



ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30111C	FRAME ASSEMBLY
2	B19/MPBC30112	TOP COVER ASSEMBLY
3	B19/MPBC30113	BOTTOM COVER ASSEMBLY
4	B19/MPBC30691A	COVER SHIELD ASSEMBLY
5	B19/MPBC30692	COVER SHIELD ASSEMBLY
6	B19/MTC003924	CASE SHIELD
7	B19/MTB308813	CASE SHIELD
	B19/MTB205125B	CONTACT
9	B19/BRTG03943	SCREW (M3X13)
10	B19/BRTG05022	SCREW (M3X10)
11	B19/BRTG03830	SCREW (M3X8)
12	B19/BRTG03889	SCREW (M3X10)
13	B19/BSLW030008	WASHER
14	B19/MPSR02419	CONTACT

SYNTHESIZER/RECEIVER/EXCITER (VHF)
344A4577P1/P2 (B19/JHM-271RSA/B)
344A4577P101/P102 (B19/JHM-271RDA/B)



ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30111C	FRAME ASSEMBLY
2	B19/MPBC30112	TOP COVER ASSEMBLY
3	B19/MPBC30113	BOTTOM COVER ASSEMBLY
4	B19/MPBC30691A	COVER SHIELD ASSEMBLY
5	B19/MPBC30692	COVER SHIELD ASSEMBLY
6	B19/MTC003924	CASE SHIELD
7	B19/MTB308813	CASE SHIELD
8	B19/MTB205125B	CONTACT
9	B19/BRTG03943	SCREW (M3X13)
10	B19/BRTG05022	SCREW (M3X10)
11	B19/BRTG03830	SCREW (M3X8)
12	B19/BRTG03889	SCREW (M3X10)
13	B19/BSLW030008	WASHER
14	B19/MPSR02419	CONTACT

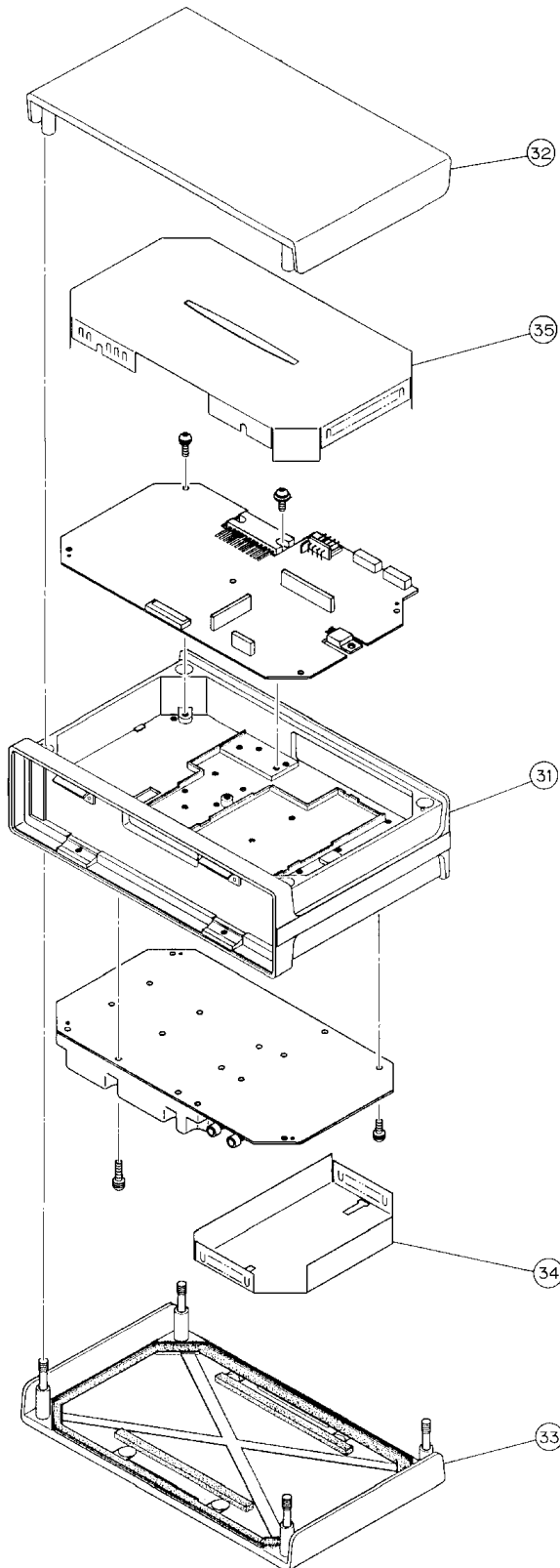
SYNTHESIZER/RECEIVER/EXCITER (UHF, 800 MHz & 900 MHz)

344A4578P1/P2/P3 (B19/JHM-471RSA/B/C)

344A4578P101/P102/P103 (JHM-471RDA/B/C) UHF-DB

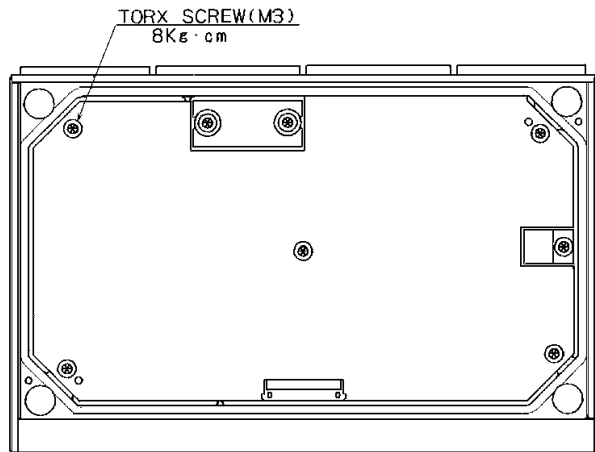
344A4579P1 (B19/JHM-871RN) 800 MHz

344A4580P1 (B19/JHM-971RL) 900 MHz

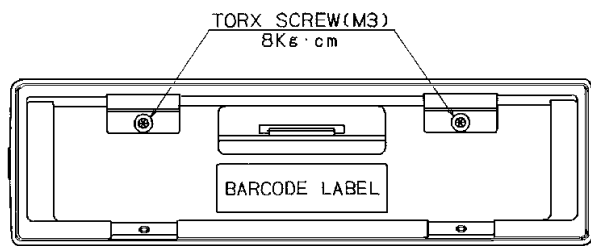


ITEM	PART NUMBER	DESCRIPTION
31	B19/MPBC30111C	Frame
32	B19/MPBC30112	Top Cover
33	B19/MPBC30113	Bottom Cover
34	B19/MPBC30691A	Bottom Cover Shield
35	B19/MPBC30692	Top Cover Shield

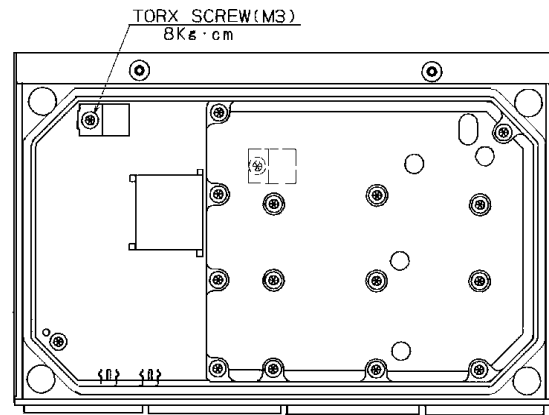
SYNTHESIZER/RECEIVER/EXCITER (EXPLODED VIEW)



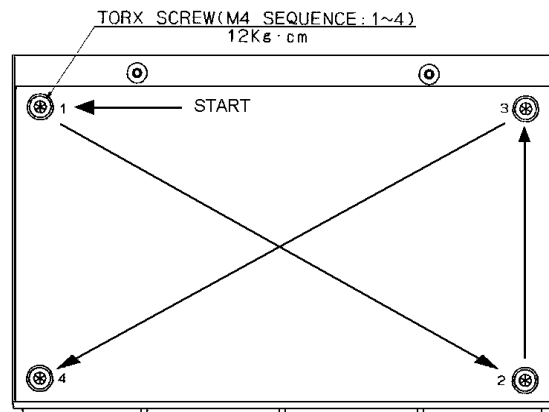
TOP VIEW(REMOVE TOP COVER AND SHIELD COVER)



FRONT VIEW

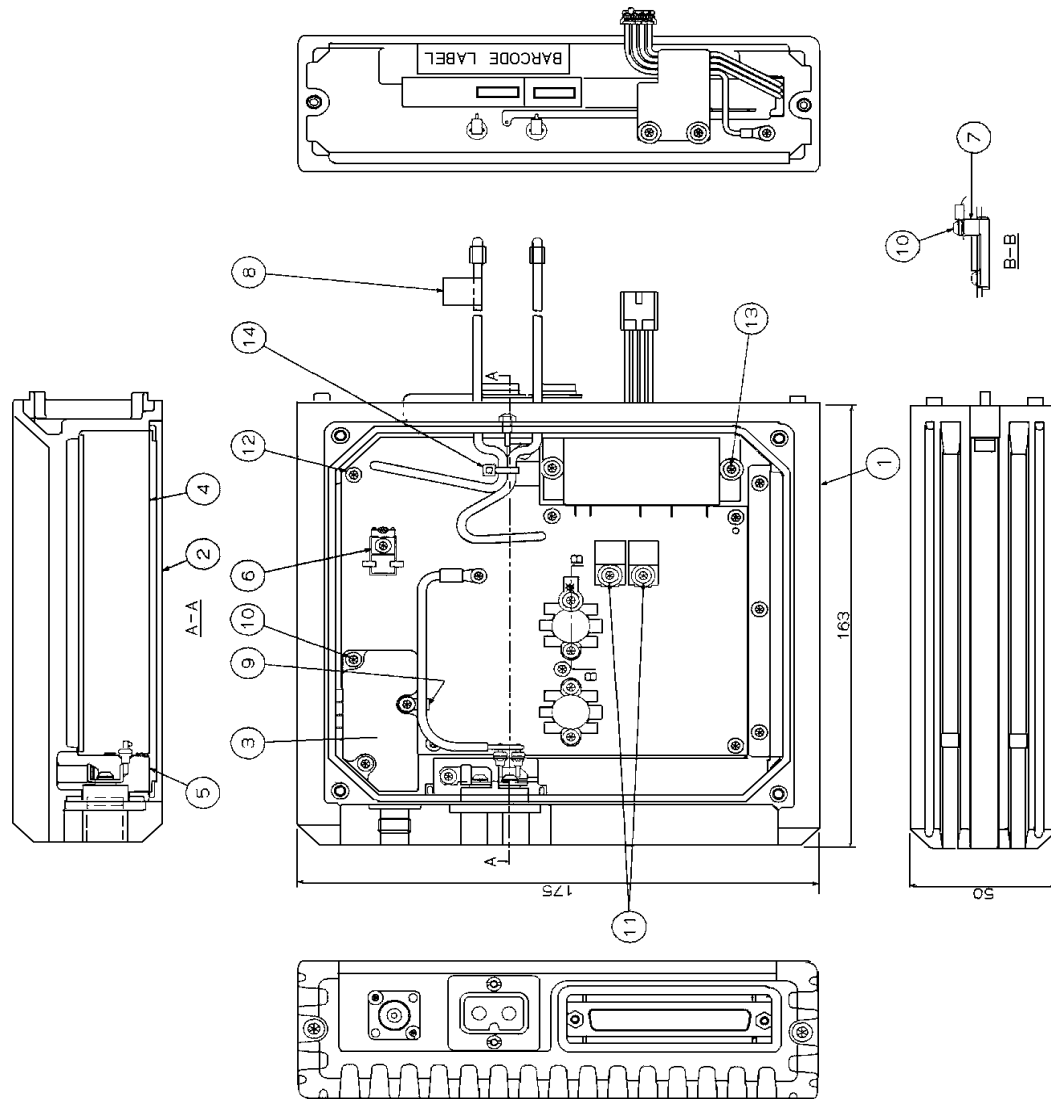


BOTTOM VIEW(REMOVE BOTTOM COVER AND SHIELD COVER)



BOTTOM VIEW

SYNTHESIZER/RECEIVER/EXCITER



VHF HIGH POWER

ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30095C	FRAME (ASSY)
2	B19/MPBC300968	COVER (ASSY)
3	B19/BPBC30693	CASE SHIELD (ASSY)
4	B19/MPBC30695A	CASE SHIELD (ASSY)
5	B19/MTB300290B	CASE SHIELD
6	B19/MTB307254	PLATE
7	B19/MTL035255	SPACER
8	B19/MPNN31124	MARKER
9	B19/MPBP30119	CLAMP
10	B19/BRTG03943	SCREW (M3X13)
11	B19/BRTG05022	SCREW (M3X10)
12	B19/BRTG03830	SCREW (M3X8)
13	B19/BRTG03942	SCREW (M3X8)
14	B19/BRBP00131	CABLE CLAMP
	B19/BRTG03889	SCREW (M3-10)
	B19/BSLW03000B	WASHER (LW3)
	B19/MTB310143	SPACER

VHF LOW POWER (USA)

ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30108C	FRAME (ASSY)
2	B19/MPBC30109B	COVER (ASSY)
3	B19/MPBC30693	CASE SHIELD (ASSY)
4	B19/MPBC30696	MPBC SHIELD (ASSY)
5	B19/MTB300290B	COVER SHIELD
	B19/MTB306383	SPACER
7	B19/MTL035255	SPACER
8	B19/MPNN31124	MARKER
9	B19/BPBP30119	CLAMP
10	B19/BRTG03943	SCREW (M3-13)
11	B19/BRTG05022	SCREW (M3-10)
12	B19/BRTG03830	SCREW (M3-8)
13	B19/BRTG03942	SCREW (M3-8)

VHF LOW POWER (EUROPEAN)

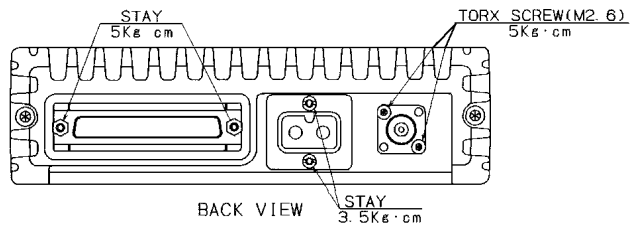
ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30953	FRAME
2	B19/MPBC30752	COVER (ASSY)
3	B19/MPBC30820	COVER SHIELD (ASSY)
4	B19/MTC300047	COVER SHIELD
7	B19/MTL035255	SPACER
8	B19/MPNN31124	MARKER
10	B19/BRTG03943	SCREW (M3-13)
	B19/BSLW03000S	WASHER (LW3)
	B19/BRTG00198	WASHER
11	B19/BRTG05022	SCREW (M3-10)
12	B19/BRTG03830	SCREW (M3-8)
13	B19/BRTG03942	SCREW (M3-8)
14	B19/BRBP00131	CLAMP CABLE

POWER AMPLIFIER UNIT (VHF)

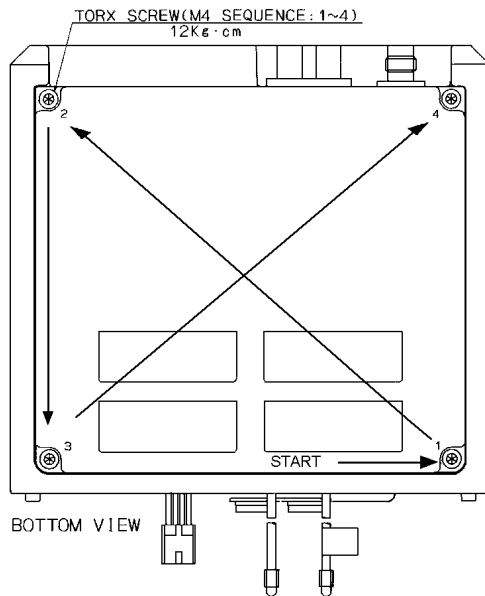
344A4572P5/P6 (B19/JHM-271PAH/BH) HIGH POWER

344A4572P1/P2 (B19/JHM-271PAE/PBE) LOW POWER EUROPEAN

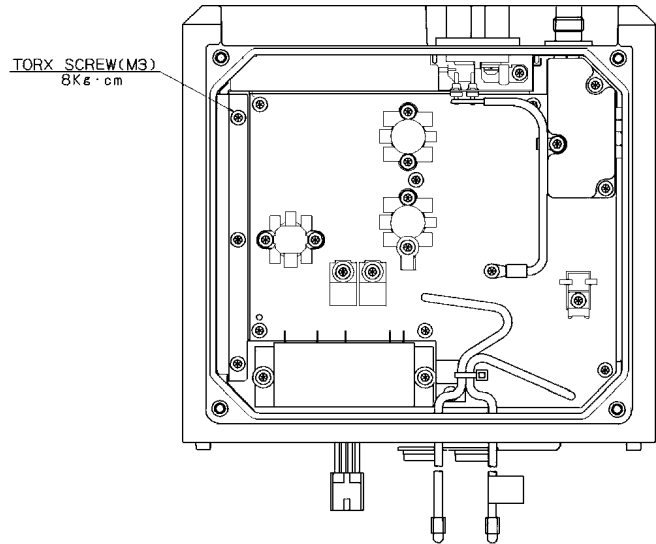
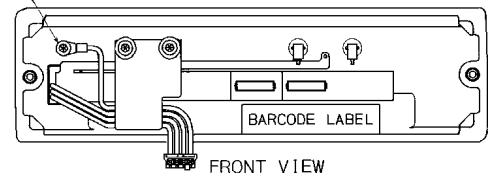
344A4572P3/P4 (B19/JHM-271PAL/PBL) LOW POWER USA



BACK VIEW

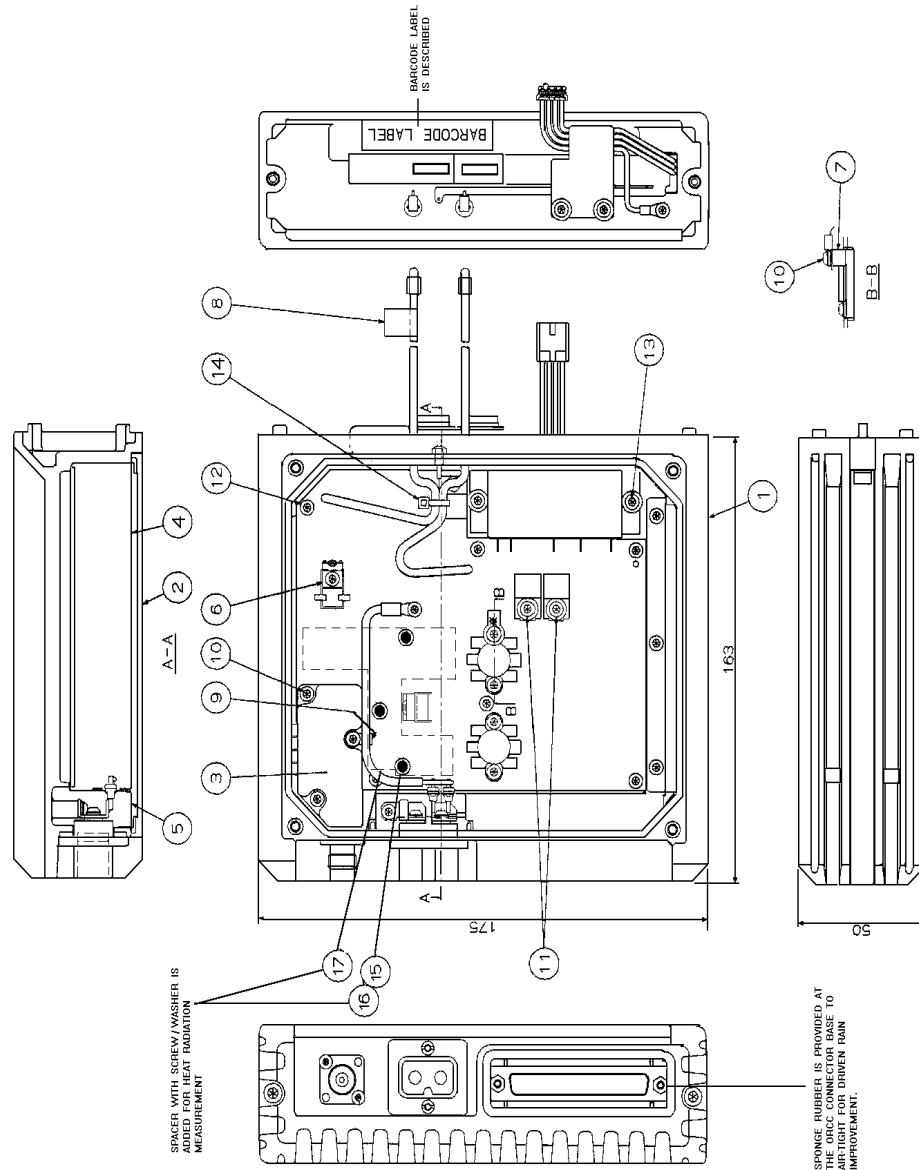


BOTTOM VIEW

BOTTOM VIEW
(REMOVE COVER AND SHIELD COVER)TORX SCREW(M3)
8Kg·cm

FRONT VIEW

POWER AMPLIFIER UNIT (VHF)



UHF

ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30095C	FRAME (ASSY)
2	B19/MPBC30096B	COVER (ASSY)
3	B19/MPBC30693	CASE SHIELD (ASSY)
4	B19/MPB30695A	CASE SHIELD (ASSY)
5	B19/MTB300290B	CASE SHIELD
6	B19/MTB307254	PLATE
7	B19/MTL035255	SPACER
8	B19/MPNN31124	MARKER
9	B19/MPBP30119	CLAMP
10	B19/BRTG03943	SCREW (M3X13)
11	B19/BRTG05022	SCREW (M3X10)
12	B19/BRTG03830	SCREW (M3X8)
13	B19/BRTG03942	SCREW (M3X8)
14	B19/BRBP00131	CABLE CLAMP
15	B19/BRTG03889	SCREW (M3X10)
16	B19/BSLW030008	WASHER
17	B19/MTB310143	SPACER

800 & 900 MHz

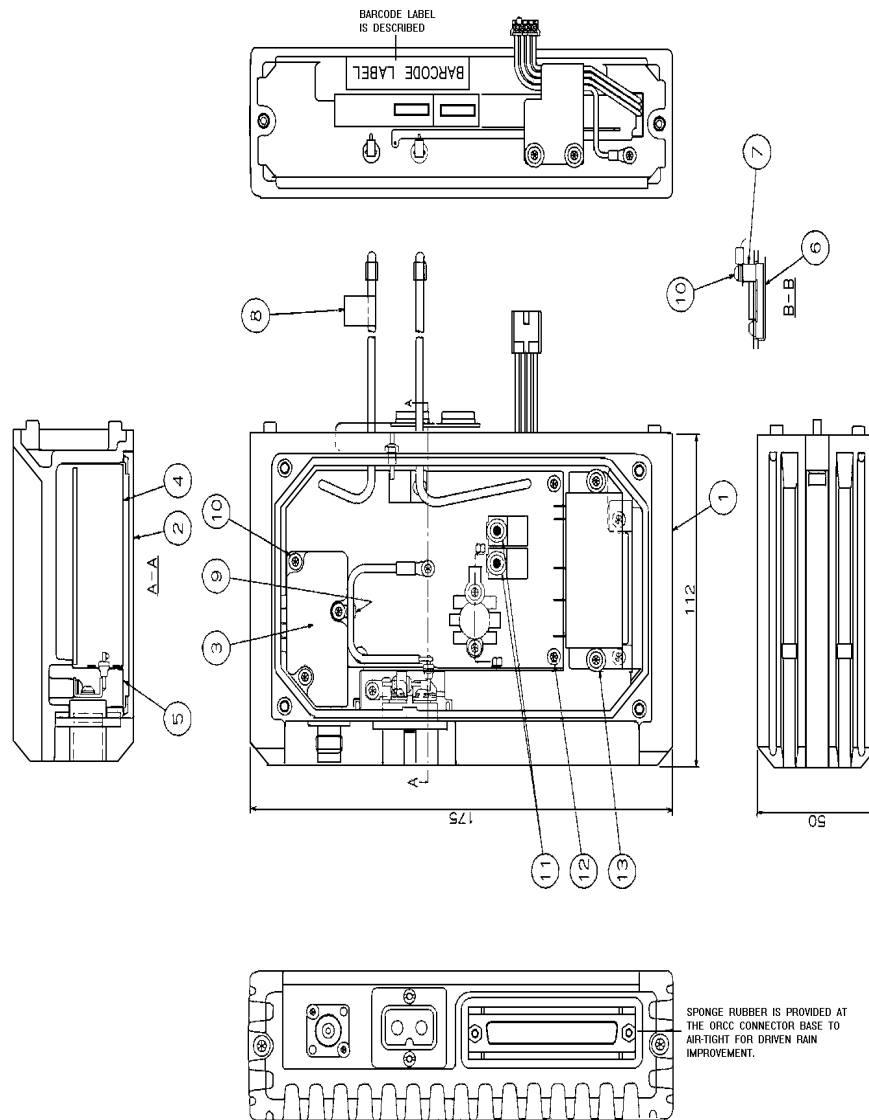
ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30108	FRAME (ASSY)
2	B19/MPBC30109	COVER (ASSY)
3	B19/MPBC30693	CASE SHIELD (ASSY)
4	B19/MPBC30696	COVER SHIELD (ASSY)
5	B19/MTB300290B	COVER SHIELD
6	B19/MTB309612	PLATE
7	B19/MTL035255	SPACER
8	B19/MPNN31124	MARKER
9	B19/BPBP30119	CLAMP
10	B19/BRTG03943	SCREW (M3-13)
11	B19/BRTG05022	SCREW (M3-10)
12	B19/BRTG03830	SCREW (M3-8)
13	B19/BRTG03942	SCREW (M3-8)

POWER AMPLIFIER UNIT(HIGH POWER)

344A4573P6/P7/P8 (B19/JHM-471 PAH/BH/CH) UHF

344A4574P2 (B19/JHM-871PH) 800 MHz

344A4575P2 (B19/JHM-971PH) 900 MHz



UHF (USA MODEL)

ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30108C	FRAME (ASSY)
2	B19/MPBC30109B	COVER (ASSY)
3	B19/MPBC30693	CASE SHIELD (ASSY)
4	B19/MPBC30696	COVER SHIELD (ASSY)
5	B19/MTB300290B	COVER SHIELD
6	B19/MTB306383	SPACER
7	B19/MTL035255	SPACER
8	B19/MPNN31124	MARKER
9	B19/MPBP30119	CLAMP
10	B19/BRTG03943	SCREW (3X13)
11	B19/BRTG05022	SCREW (3X10)
12	B19/BRTG03830	SCREW (3X8)
13	B19/BRTG03942	SCREW (3X8)

UHF (EUROPEAN MODEL)

ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30953	FRAME
2	B19/MPBC30752	COVER (ASSY)
3	B19/MPBC30820	COVER SHIELD (ASSY)
5	B19/MTC300047	COVER SHIELD
7	B19/MTL035255	SPACER
8	B19/MPNN31124	MARKER
9	B19/BRBP00131	CLAMP CABLE
10	B19/BRTG03943	SCREW (M3-13)
	B19/BSLW03000S	WASHER (LW3)
	B19/BRTG00198	WASHER
11	B19/BRTG05022	SCREW (M3-10)
12	B19/BRTG03830	SCREW (M3-8)
13	B19/BRTG03942	SCREW (M3-8)

800 & 900 MHz

ITEM	PART NUMBER	DESCRIPTION
1	B19/MPBC30108	FRAME (ASSY)
2	B19/MPBC30109	COVER (ASSY)
3	B19/MPBC30693	CASE SHIELD (ASSY)
4	B19/MPBC30696	COVER SHIELD (ASSY)
5	B19/MTB300290B	COVER SHIELD
6	B19/MTL035255	SPACER
7	B19/MPNN31124	MARKER
8	B19/BPBP30119	CLAMP
9	B19/BRTG03943	SCREW (M3-13)
10	B19/BRTG05022	SCREW (M3-10)
11	B19/BRTG03830	SCREW (M3-8)
12	B19/BRTG03942	SCREW (M3-8)
13	B19/MTB309612	PLATE

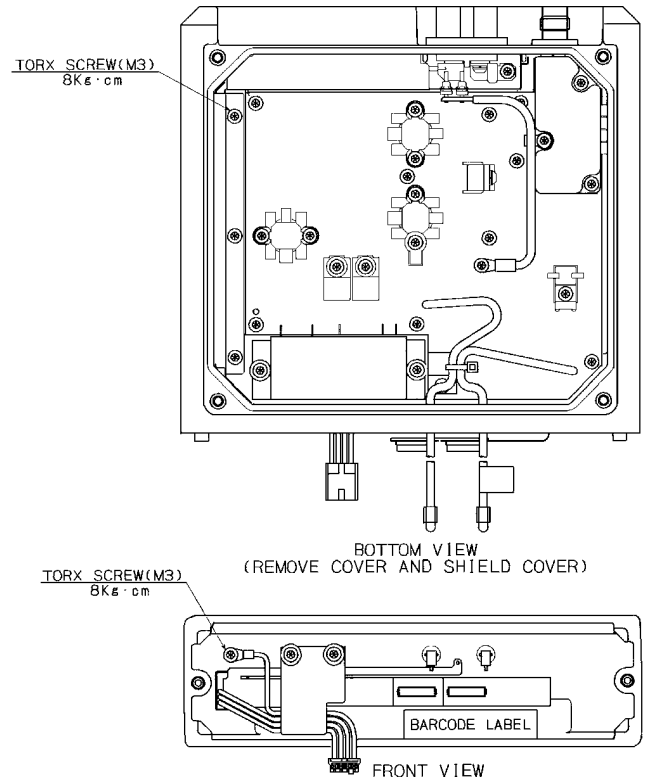
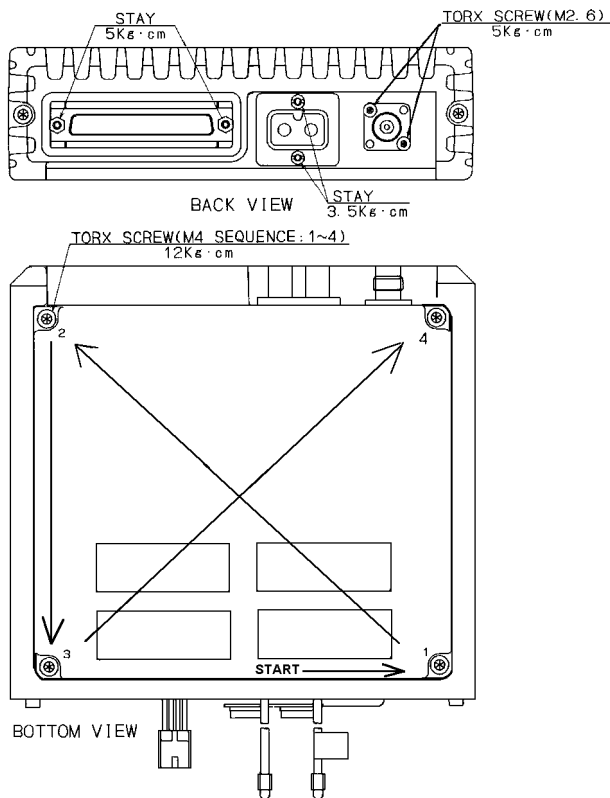
POWER AMPLIFIER UNIT (LOW POWER)

344A4573P3/P4/P5 (B19/JHM-471PAL/BL/CL) UHF

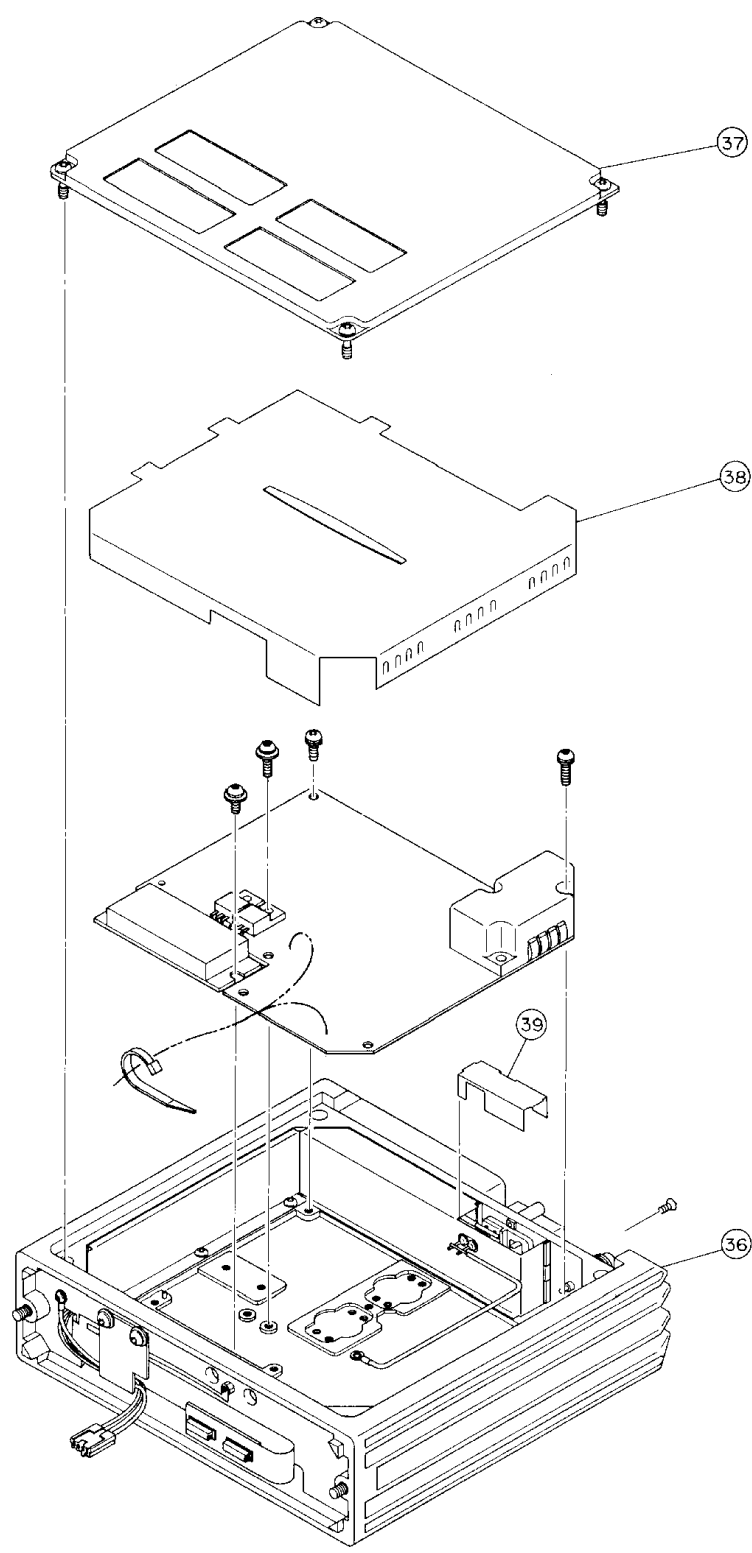
344A4573P1/P2 (B19/JHM-471/PAE/BE) UHF EUROPEAN

344A4574P1 (B19/JHM-871PL) 800 MHz

344A4575P1 (B19/JHM-971PL) 900 MHz



**POWER AMPLIFIER UNIT
(UHF, 800 MHz & 900 MHz)**



ITEM	PART NUMBER	DESCRIPTION
36	B19/MPBC30095C	Frame
37	B19/MPBC30096B	Top Cover
38	B19/MPBC30695A	Case Shield
39	B19/MPBC30693	Case Shield

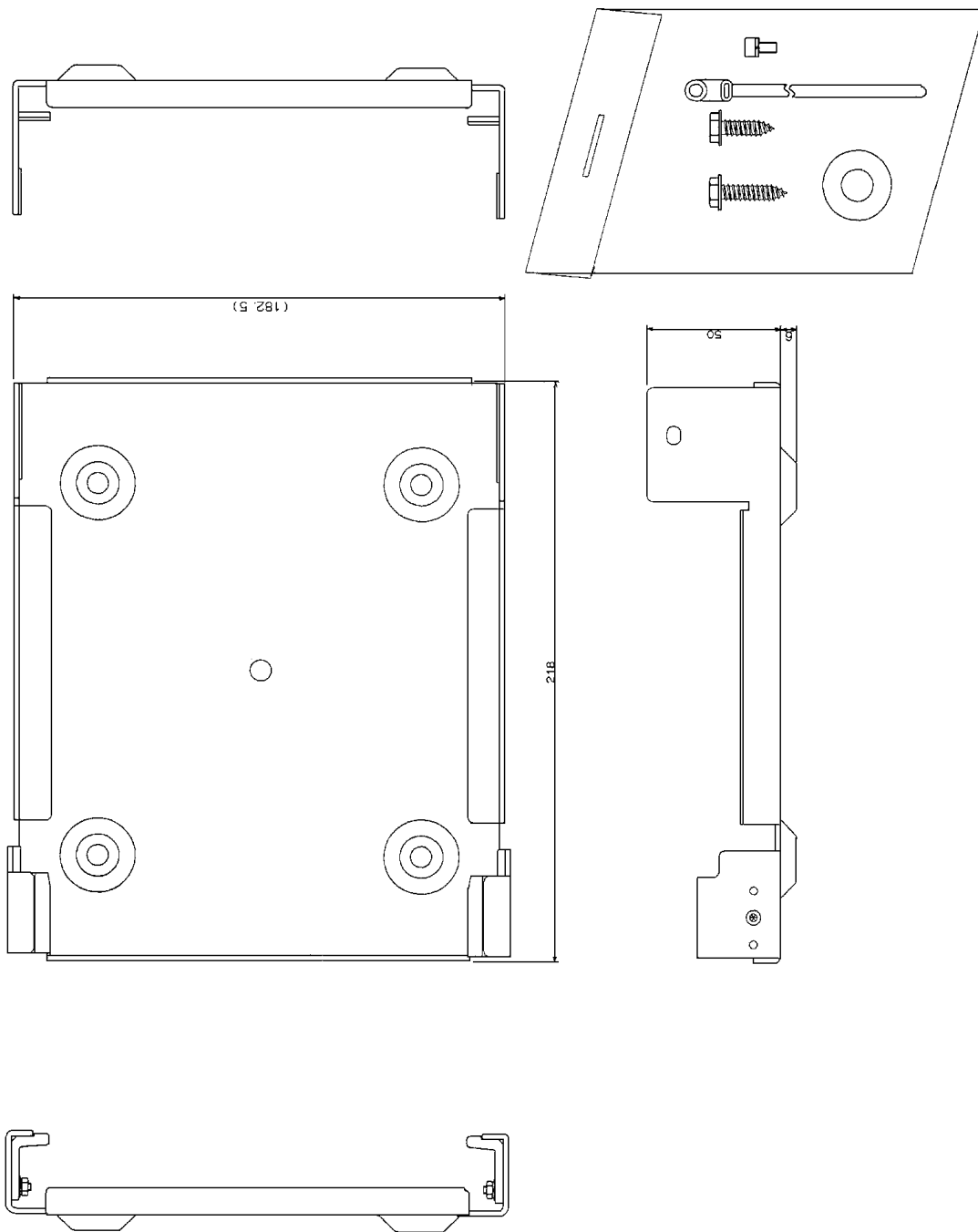
POWER AMPLIFIER UNIT (EXPLODED VIEW)

**OPTION
NQZ-4881
MECHANICAL PARTS**

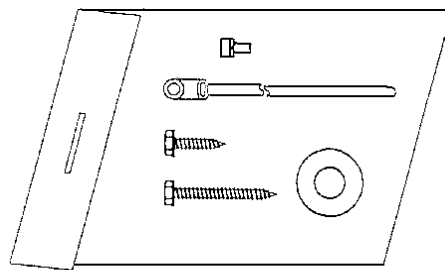
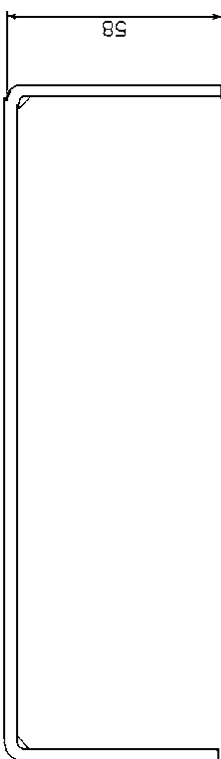
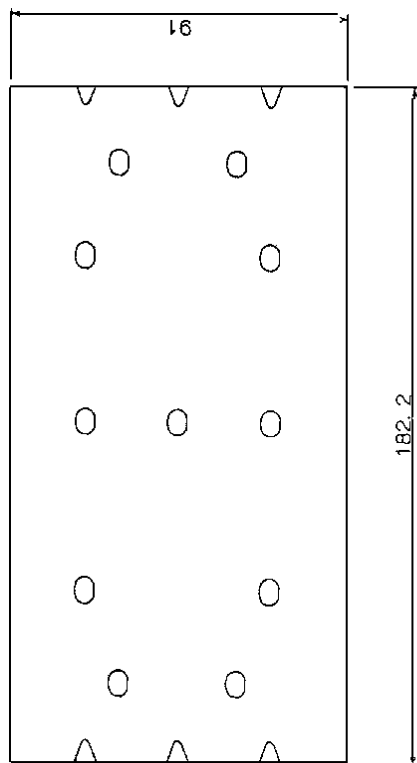
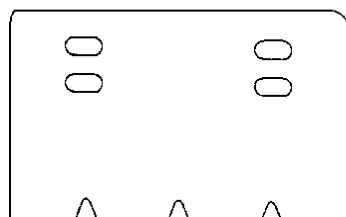
ITEM	PART NUMBER	DESCRIPTION
1	B19/NQZ-4881OPT	CASSETTE MOUNT
2	B19/MPBX30085	RIA MOUNTING BRACKET
3	B19/MPBX21706	TRAY MOUNTING BRACKET
4	B19/MPBX31233	FRONT MOUNTING BRACKET
5	B19/MPPK01853B	GASKET (TRX-PA)
6	B19/MPPK30050	GASKET (CU-TRX)
7	B19/MPBC30728	FRONT COVER (TRX)
8	B19/MPNM30271	LABEL C/U (EGE)
9	B19/MPNM30280A	LABEL C/U (ERIC)
10	B19/MPNL30408	LABEL FRONT COVER (EGE)
11	B19/MPNL30409	LABEL FRONT COVER (ERIC)
12	B19/MPTG30015	SCREW (M3-14)
13	B19/BRTG00339	WASHER (M3)
14	B19/MPHD30066	STANDARD SYSTEM KEYCAP KIT
15	B19/MPHD30067	OPTIONAL SYSTEM KEYCAP KIT
16	B19/MPHD30068	OPTIONAL SCAN KEYCAP KIT
17	B19/MPDM30036	KEYLOCK FOR TRANSCEIVER
18	B19/MPTC30026	SCAN KEYCAP EXTRACTOR
19	B19/MPTC30027	SYSTEM KEYCAP EXTRACTOR
20	B19/MPTG30006	SCREW (M4-20)
21	B19/BRTG00198	WASHER (M4)

SYMBOL	PART NUMBER	DESCRIPTION
F601	B19/5ZFAP00008	5A Fuse (Used on IF Logic Board).
K601	B19/5KLAC00112	Relay 9V JY9H-K (Used on IF Logic Board).
CD201	B19/5TZAD00560	Orange Opto Diode TL0205 (Used on Control Panel).
CD202	B19/5TZAD00296	Red Opto Diode TLR205 (Used on Control Panel).
VFD201	B19/7WSLD00004	Vacuum Florescent Display (Used on Control Panel).
S1	B19/5SZJC00021	Rotary Switch (Used on Control Unit).
S2	B19/5RVAC00106	Volume Control (Used on Control Unit).
PC1	B19/6PCLC00307	Flex PC Board Volume/Selector switch (Used on Control Unit).
PC2	B19/6PCLD00321	Flex PC Board Ribbon Flex Cable (Used on Control Unit).
J1001	B19/5JADB00005	TNC RF Connector (Used on PA Assembly).
J1002	B19/5JWAV00159	DC Power Jack (Used on PA Assembly).
J1004	B19/5JWAH01075	Speaker Connector (Used on PA Assembly).
J1003	B19/5JBAH00333	Connector DB-37 Pin Female ((Used on USA PA Interface Board
J1003	B19/5JBAH00334	Coonnector DB-37 Pin Male (Used on European PA Interface Board).
CD1001	B19/5TXAM00019	Diode 6A 100 PIV MR751 (Used in PA Assembly)
J102	B19/5JWHZ00048	Microphone Connector 9 Pins (Used on Switch Board).

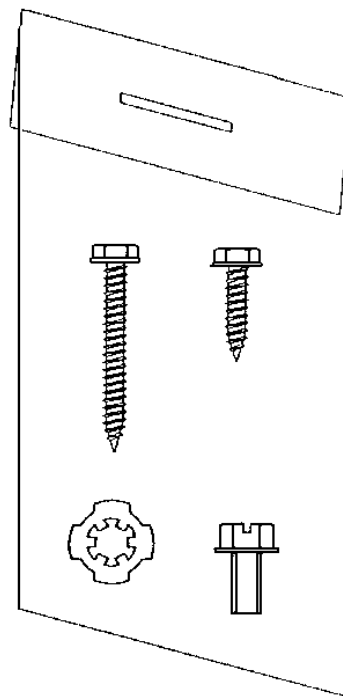
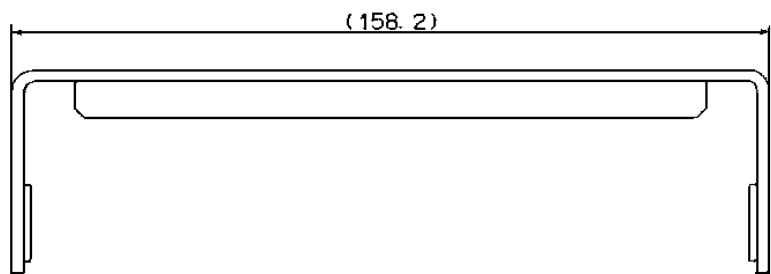
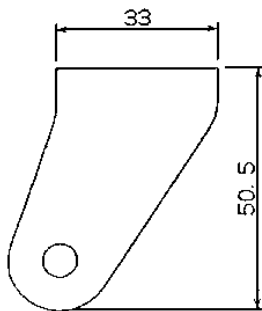
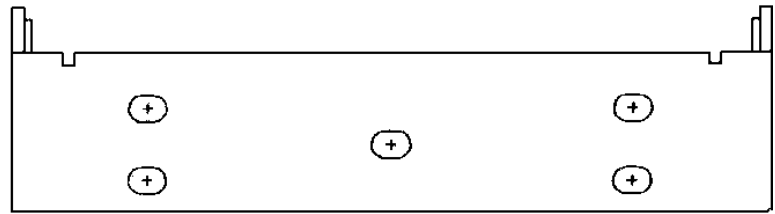
MECHANICAL PARTS



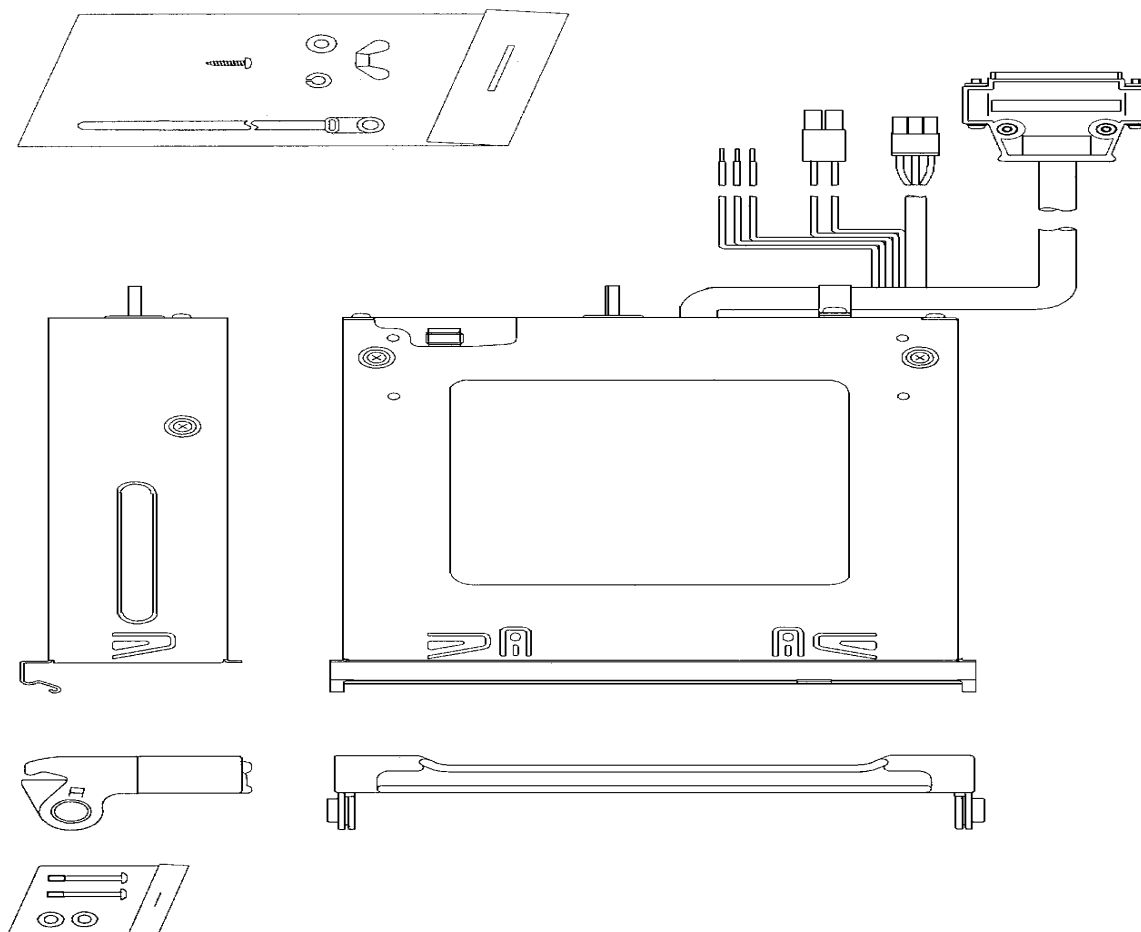
TRAY MOUNTING BRACKET WITH HARDWARE KIT
19B802673P1 (B19/MPBX21706)



FRONT MOUNTING BRACKET WITH HARDWARE KIT
19B802672P1 (B19/MPBX31233)



RIA MOUNTING BRACKET WITH HARDWARE KIT
19B802472P1 (B19/MPBX30085)



CASSETTE MOUNT WITH HARDWARE KIT
19C852366P1 (B19/NQZ-4881OPT)

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