

Date	Prepared by	Approved by	Document no's	Revision
26 Jul 2021	WJ Chong	Patrick Yeo	MS-WI-00067	2

MBA INSTALL NEW CONTROLLER & TEST

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4.00 NOTE: EXTERNAL INTERFACE RET KIT AND RET SOFTWARE ARE NOT MATSINGS' PROPRIETARY ITEMS

Revision History:

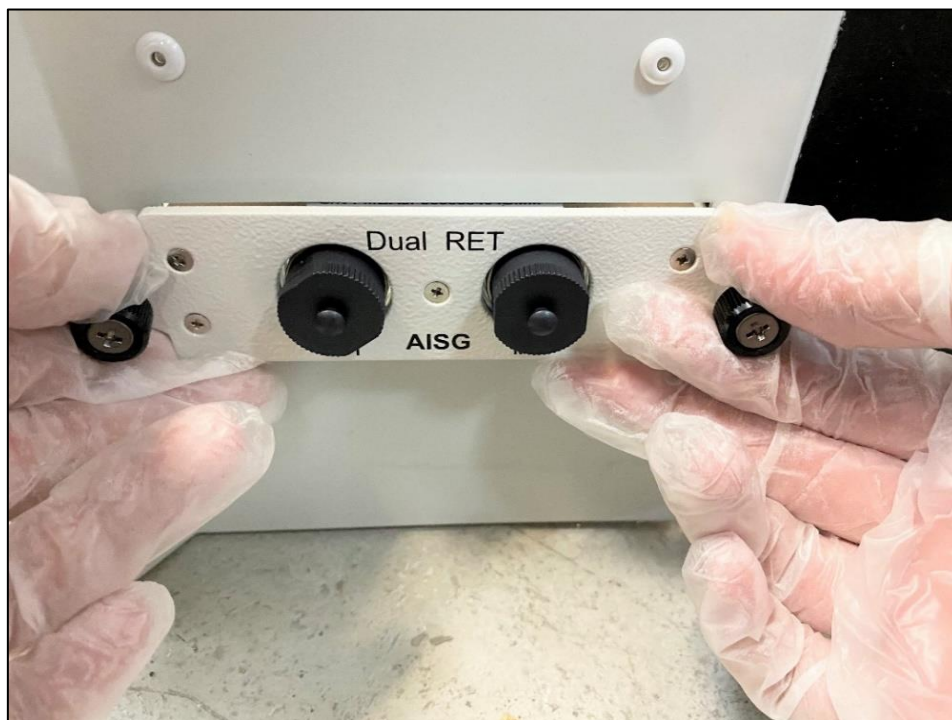
Date	Description	Revised by	Revision nos.
26-Jul-21	Additional information included	WJ	Rev-2

1.00 REPLACE NEW CONTROLLER

1.01 Remove silicone sealant around the controller



1.02 Unscrew and remove the controller from the Antenna



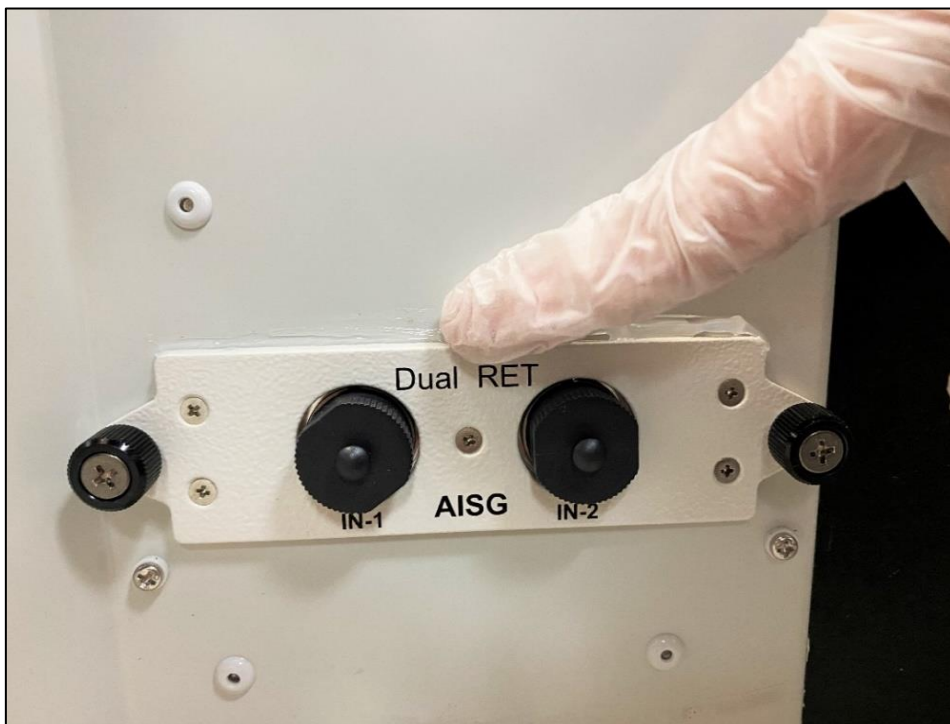
1.03 Replace with a new controller. Ensure the controller SN# tally with Antenna SN#



1.04 Insert the new controller gently to ensure the controller's pin sits right into the D-sub connector socket and then fasten the screw



1.05 Apply silicone sealant along the controller

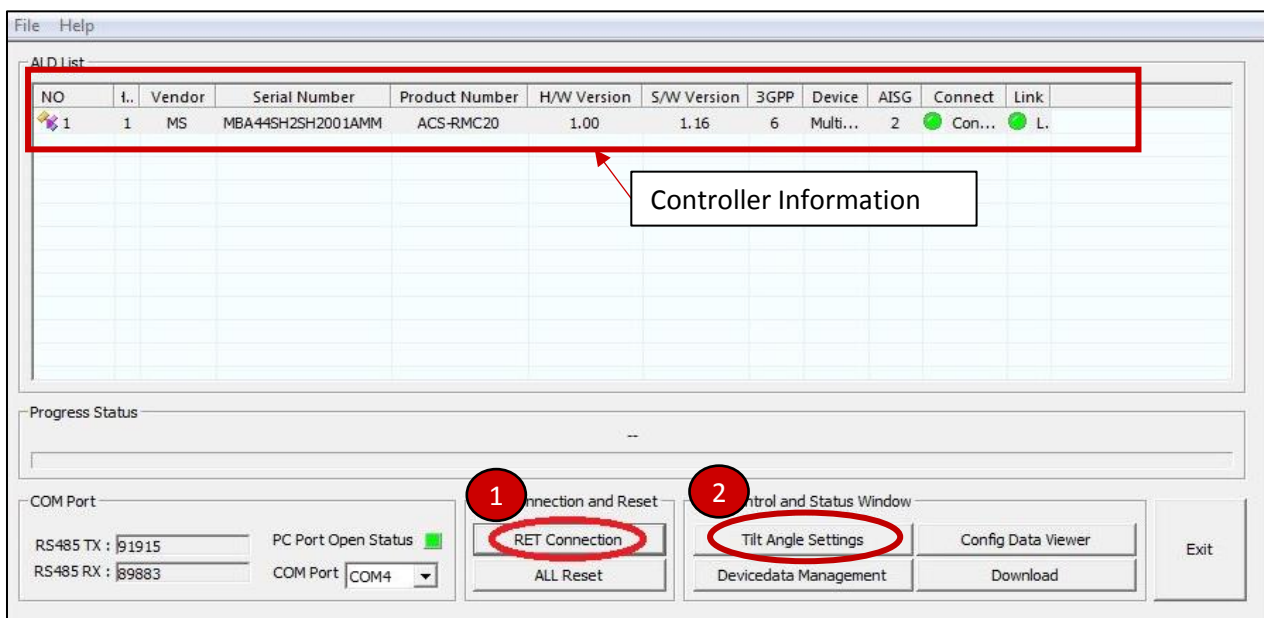


2.00 PERFORM RET TEST

2.01 Connect AISG cable to IN-1 of controller. Customer can use any standard AISG-2.0 compatible external interface to connect to IN-1



2.02 Perform RET Test



RET ID : MSMBA44SH2SH2001AMM

RET Status and Control

Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	Current Tilt	Status
1/4	Beam 1 (P1,2)	MBA-4.4-SH2-SH2	MSMBA44SH2SH2001	0.0	Alarm
2/4	Beam 3 (P5,6)	MBA-4.4-SH2-SH2	MSMBA44SH2SH2001	0.0	Alarm
3/4	Beam 5 (P9,10)	MBA-4.4-SH2-SH2	MSMBA44SH2SH2001	0.0	Alarm
4/4	Beam 7 (P13,14)	MBA-4.4-SH2-SH2	MSMBA44SH2SH2001	0.0	Alarm

Board Information

Final Counter
Target : 0
Current : 0
Over : 0

Progress Counter
Target : 0
Current : 0
Over : 0

Board#1 Voltage
Minimum : 0 mV
Maximum : 0 mV
Current : 0 mV

Board#2 Voltage
Minimum : 0 mV
Maximum : 0 mV
Current : 0 mV

Motor Voltage
Minimum : 0 mV
Maximum : 0 mV
Current : 0 mV

Backlash Count : 0
Direction for Backlash Compensation : CW
Final Tilt Angle : 0.0

Get Board Information

AISG Alarm

Motor Jam ☒ Unknown Procedure ☒
 Actuator Jam ☒ Read Only ☒
 Busy ☒ Unknown Parameter ☒
 Checksum Error ☒ Software Missing ☒
 Not Calibrated ☒ Invalid File Content ☒
 Not Configured ☒ Format Error ☒
 Hardware Error ☒ Unsupported Proc. ☒
 Out of Range ☒ Invalid Proc. Seq. ☒
 Actuator Interference ☒

Alarm

Motor Jam ☒ Unknown Procedure ☒
 Actuator Jam ☒ Read Only ☒
 Busy ☒ Unknown Parameter ☒
 Checksum Error ☒ Software Missing ☒
 Not Calibrated ☒ Format Error ☒
 Not Configured ☒ Unsupported Proc. ☒
 Hardware Error ☒ Invalid Proc. Seq. ☒
 Out of Range ☒ Actuator Interference ☒

Get Alarm Status

Tilt and Calibration

Minimum Tilt : 0.0
Maximum Tilt : 15.0

Set Tilt(Combo) Calibration
Set Tilt(Edit) SelfTest

Parking

Status : OFF Set Parking(ON) Set Parking(OFF)

Motor Start PWM Level

Cur PWM Level : 0: Not used Set Mot Start Level

Motor User Control

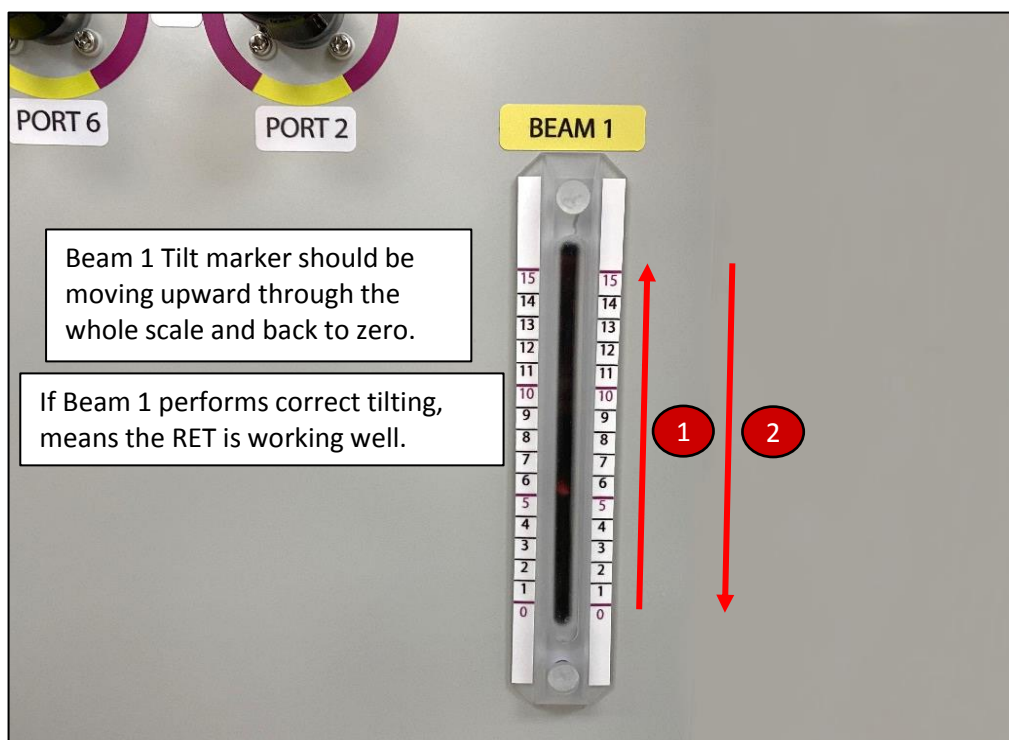
Current Count : 0 0 Set Target Count

All Antenna Control

0 Set Tilt (ALL) Calibration (ALL)

Get Log Close

2.03 Observe tilt angle scale



RET ID : MSMBA44SH2SH2001AMM

RET Status and Control

Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	Current Tilt	Status
1/4	Beam 1 (P1,2)	MBA-4.4-SH2-SH2	MSMBA44SH2SH2001	0.0	Alarm
2/4	Beam 3 (P5,6)	MBA-4.4-SH2-SH2	MSMBA44SH2SH2001	0.0	Alarm
3/4	Beam 5 (P9,10)	MBA-4.4-SH2-SH2	MSMBA44SH2SH2001	0.0	Alarm
4/4	Beam 7 (P13,14)	MBA-4.4-SH2-SH2	MSMBA44SH2SH2001	0.0	Alarm

Repeat the same step on Beam 3,5,7.

Board Information

Final Counter

Target : 0
Current : 0
Over : 0

Progress Counter

Target : 0
Current : 0
Over : 0

Board#1 Voltage

Minimum : 0 mV
Maximum : 0 mV
Current : 0 mV

Board#2 Voltage

Minimum : 0 mV
Maximum : 0 mV
Current : 0 mV

Motor Voltage

Minimum : 0 mV
Maximum : 0 mV
Current : 0 mV

Backlash Count : 0
Direction for Backlash Compensation : CW
Final Tilt Angle : 0.0

Get Board Information

AISG Alarm

Motor Jam ☒ Unknown Procedure ☒
Actuator Jam ☒ Read Only ☒
Busy ☒ Unknown Parameter ☒
Checksum Error ☒ Software Missing ☒
Invalid File Content ☒
Format Error ☒
Not Calibrated ☒ Unsupported Proc. ☒
Not Configured ☒ Invalid Proc. Seq. ☒
Hardware Error ☒ Actuator Interference ☒
Out of Range ☒

Alarm

Motor Jam ☒ Unknown Procedure ☒
Actuator Jam ☒ Read Only ☒
Busy ☒ Unknown Parameter ☒
Checksum Error ☒ Software Missing ☒
Invalid File Content ☒
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Not Calibrated ☒ Unsupported Proc. ☒
Not Configured ☒ Invalid Proc. Seq. ☒
Hardware Error ☒ Actuator Interference ☒
Out of Range ☒

Get Alarm Status

Tilt and Calibration

Minimum Tilt : 0.0
Maximum Tilt : 15.0

Set Tilt(Combo) Calibration
Set Tilt(Edit) SelfTest

Parking

Status : OFF Set Parking(ON) Set Parking(OFF)

Motor Start PWM Level

Cur PWM Level : 0: Not used Set Mot Start Level

Motor User Control

Current Count : 0 Set Target Count

All Antenna Control

Set Tilt (ALL) Calibration (ALL)

Get Log Close

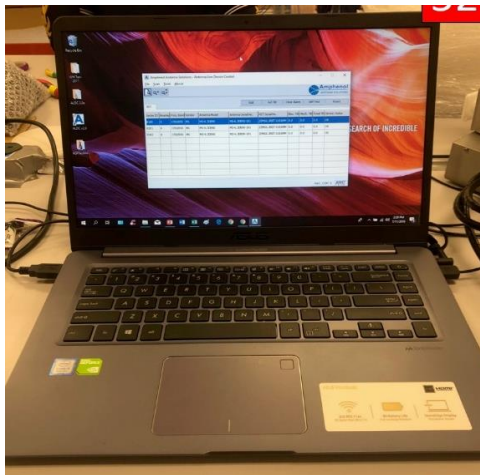
After complete, please plug into IN-2 and repeat the above steps

3.00 RECOMMENDED MATERIALS & TOOLS TO PERFORM THE REPLACEMENT OF THE RET MODULE

3.01 RET Kit



3.02 PC with ASIG-2.0 compatible software



3.03 Sealant Gun (with Transparet Silicone)



3.04 Pen Knife



3.05 Screwdriver



**4.00 NOTE: EXTERNAL INTERFACE RET KIT AND RET SOFTWARE
ARE NOT MATSINGS' PROPRIETARY ITEMS**