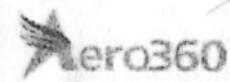


00015



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Pre - Assembly

Process No.: 00/20

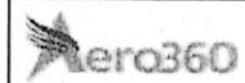
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Top CF plate	
2	Bottom CF plate	
3	Sidewall	
4	PDB encloser	
5	Level sensor	
6	Flowsensor	
7	Obstacle sensor	
8	Pump	
9	BEC3	
10	AI mount	
11	Motor Arm	
12	Hall sensor	
13	BEC 1	
14	BEC 2	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Drill 3mm hole in all existing holes to enlarge them, making it easier to insert the screws	17/4/25	17/4/25	Harish & Surya
2	Put M3X6mm brass inserts to the side wall and PDB encloser	"	"	Harish
3	Cut the motor cables to length of 680mm and solder the XT60 male connector	16/4/25	16/4/25	Harish.
4	Do the Crimping work of Level sensor, Flow sensor and Obstacle sensor refer the "Bhumi TC Assembly prerequisites and SOP"	17/4/25	17/4/25	Harish
5	Do the soldering work of Pump,BEC.	17/4/25	17/4/25	Barani
6	Change the orientation of foldable mechanism part to achieve vertical folding and put the screws to AI mount.	"	"	Harish
7	Stick the 3m tape along edge of the AI mounts	"	"	"
8	Refer the Lug connector wiring image, do the soldering as per the "TC Assembly prerequisites and SOP"	"	"	Barani.

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (if any)
1	Ensure that the brass inserts on the sidewall and the PDB enclosure are correctly positioned	yes	N.O.
2	Verify that the soldering of motors, pump, and BEC is properly done, and ensure the polarity is correct.	yes	
3	Verify the Screws alignment and threads of AI mount	yes	
4	Verify that the lug connector soldering is properly done.	yes	

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya . m.	22/4/25		✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Landing Gear & Drone Hub Assembly

Process No.: 01/20

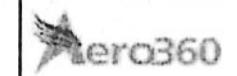
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Vertical LG	
2	Horizontal LG with T mount	
3	LG Seater	
4	AI Mount	
5	Bottom CF Plate	
6	Top CF plate	
7	Side wall	
8	Motor Arm	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Place the sidewall to the bottom plate align with screw 6 screws.	17/4/25	17/4/25	Harish
2	Attach the LG seater to the Bottom plate with appropriate screws and locknuts	"	"	"
3	connect the Vertical LG to the T mount to make pre assembled LG	"	"	"
4	Place the preassembled LG on the LG seater and screw them together with appropriate screws.	"	"	"
5	Insert the motor arms into the AI mounts and screw them tightly.	"	"	"
6	Place the AI mounts over their respective screw holes on the bottom CF plate, and screw them together.	"	"	"
7	Place the top CF plate onto the AI mounts, and screw it to the top surface of these mounts as per the assembly manual.	"	"	"
8	Use a spirit level to check if the arms are parallel to ground level/datum.	19/4/25	19/4/25	Harish

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check the entire LG assembly and see if all screws are fastened tightly	Yes	
2	Check if motor arms are aligned with horizontal datum	Yes	
3	Ensure the motor arms and AI mounts are tightly fastened and secured	Yes	
4	Make sure that the top and bottom CF plates are tightly secured to all the AI mounts	Yes	

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Suraj.m	22/04/25	M. Raja	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: PDB Assembly

Process No.: 02/20

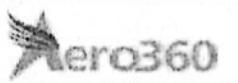
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	PDB	
2	Power Cable	
3	Safety Mount	
4	XT 60 connector	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Place the PDB on the HUB	17/4/25	17/4/25	Hari
2	Use four M3 16mm screws to secure the PDB to the HUB	"	"	"
3	Tighten the Hub with Locknuts	"	"	"
4	Mount the PDB to the airframe	"	"	"
5	Screw the Power cable with respect to the Polarity	"	"	"
6	Close it with the safety mount as shown below	"	"	"
7	Connect the motors to XT60 connectors of the PDB respectively	"	"	"

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks
1	Verify the connections	Yes	-

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
S. Surya m.	22/04/25	M. Sg.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Motor Assembly

Process No.: 03/20

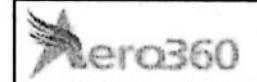
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Motor 1	
2	Motor 2	
3	Motor 3	
4	Motor 4	
5	Motor 5	
6	Motor 6	
7	XT60 Connectors	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Thread motor wires through designated holes in the arms.	17/4/25	17/4/25	Harish
2	Align each motor with its corresponding motor arm.	"	"	"
3	Use M3 12mm screws to fasten each motor to its arm.	"	"	"
4	Riveting the motors to the motor arm	19/4/25	19/4/25	Harish

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (if any)
1	Check for entanglement of motor wires	Yes	
2	Check if motors are level and secured tightly	Yes	
3	Check if all the motors are riveted tightly	Yes	

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya.m.	22/04/25	C. S. J.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Radio Assembly

Process No.: 04/20

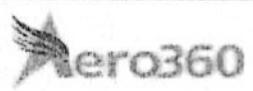
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Air unit	
2	BEC3	
3	XT60 Connector	
4	Antenna	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Place the Radio on top of the plate with 3M tape	18/4/25	18/4/25	Hari M
2	Place the BEC 3 next to the radio	"	"	"
3	Connect the BEC to the PDB	"	"	"
4	Thread the black antenna cable through the triangle cutout on the top plate.	"	"	"
5	From the bottom plate, slide the brass end of the antenna into the designated hole	"	"	"
6	Tighten the brass end using the brass washer and bolt from the outside.	"	"	"
7	Attach the antenna to the brass end from the outside	"	"	"

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Verify all the connections	Yes	—

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya M.	22/04/25	M. Surya M.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Hall Sensor Assembly

Process No.: 05/20

Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

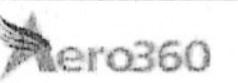
S. No	Component Name	Component Seial#
1	Hall Sensor	
2	BEC 1	
3	XT 60 Connector	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Route sensor leads through the top plate, followed by through the bottom CF plate.	18/4/25	18/4/25	Harish & Siva
2	Connect the brass sensor leads to the red wire of the power cable.	"	"	"
3	Attach the 3M sticker on the hall sensor and place it on the designated spot as shown in the assembly manual.	"	"	"
4	Use zip ties to secure the sensor on both sides.	"	"	"
5	Stick BEC 1 to the designated spot on the CF plate according to the assembly manual.	"	"	"
6	Connect XT 60 from BEC 1 to the PDB.	"	"	"

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check if hall sensor connections are correct	Yea	
2	Check if BEC is firmly adhered to CF plate	Yea	
3	Check if all connections are tight and proper	Yea	

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Siva	22/04/25	N. Siva	✓

Serial No.	BEC or Power-Cube output voltage				Calibration Data	
	Vout 1	Vout 2	Vout 3	Vout 4	V divider	A/V
MT-49205	---	---	---	---	18.93424	77.48691



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: BEC Assembly

Process No.: 06/20

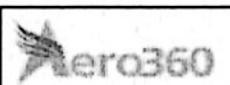
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Air unit	
2	BEC2	
3	XT60 Connector	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Place BEC2 on the top CF plate.	18/4/25	18/4/25	Harish & Siva
2	Connect XT 60 connector to the PDB at the designated slot.	"	"	"

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (if any)
1	Check if BEC is secured tightly	Yes	
2	Check if the connection is done precisely	Yes	✓

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya.m	22/04/25	M. Siva	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: GPS Assembly

Process No.: 07/20

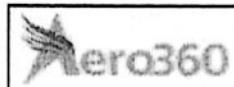
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	GPS stand	
2	Here3 GPS	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Place the GPS stand on Arm 2 slightly away from the top CF plate.	17/4/25	17/4/25	Harish
2	Screw the bottom part and the top part of the GPS stand using appropriate screws.	"	"	"
3	Stick the Here3 GPS using 3M adhesive tape in the right orientation. (Refer assembly manual)	18/4/25	18/4/25	Siva .

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check if GPS is front facing	Yes	
2	Check if GPS is level with the ground	Yes	-
3	Check if the GPS mount is straight and secured tightly	Yes	

Quality Approval			
Quality Head	Signature	Accepted/Rejected	
Surya.m	22/04/25	M.K.P	Accepted ✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Camera Assembly

Process No.: 08/20

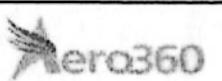
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Camera	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Mount camera on the side wall (refer the assembly manual for images)	18/1/25	18/1/25	Harish.

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check for camera alignment	YES	-

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya.m.	22/04/25	A. S.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Payload and Pneumatics Assembly

Process No.: 09/20

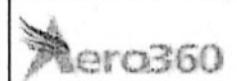
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-0001S

S. No	Component Name	Component Serial #
1	Tank	
2	Tank Cap	
3	Water Pipes	
4	Nozzle	
5	Hose Pipe Cutter	
6	Pneumatic Joint	
7	YS401 flow sensor	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Install tank to the landing gear with respective screws, and ensure that the tank cap faces the aft of the drone.	17/4/25	17/4/25	Harish
2	Install the pump at the aft of the tank with respective screws provided.	11	11	11
3	Route all water pipes with the Pneumatic Connectors, referring the assembly manual for the routing diagrams.	11	11	11
4	Make sure to use a hose pipe cutter for cutting silicone water pipes.	11	11	11
5	Install nozzles to the motor mounts with fitment caps and screws provided. It will be for motors M1, M2, M4, and M6.	11	11	11
6	Ensure that the nozzles are placed at the aft side of the drone.	11	11	11
7	Connect the hose pipe to the pneumatic joint at each of the nozzles.	11	11	11
8	Attach Water flow sensor at Pump outlet refer assembly manual	11	11	11

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check if the tank has been fit and secured tightly and level.	Yes	
2	Check for all pipe routings.	Yes	
3	Ensure all the connections and joints are tightly secured.	Yes	

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya.m.	22/04/25	M.S.J.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Obstacle Sensor Assembly

Process No.: 10/20

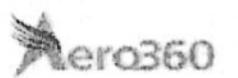
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	CF Sensor plate	
2	Obstacle Sensor	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Mount the Obstacle Sensor to the CF sensor plate using M3 screws and locknuts tightly.	18/4/25	18/4/25	Harish & Siva
2	Mount the plate with the sensor to the tank using M4 screws as shown in manual.	11	11	11

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check if obstacle sensor is tightly secured	YES	
2	Check if the sensor and plates are tightly mounted and level with datum	YES	

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Guruja.m.	02/04/25	C. J.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Level Sensor Placement

Process No.: 11/20

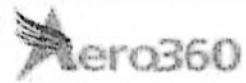
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-000

S. No	Component Name	Component Serial #
1	Level Sensor	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Place the level sensor as shown in the assembly manual using 3M adhesive tape.	18/4/25	18/4/25	Hari S.

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check if the level sensor is placed properly and does not move or shake too much	Yes	-

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya. m.	22/04/25	Hari S.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Flight Controller Installation

Process No.: 12/20

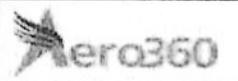
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Flight Controller	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Place the FC above the top CF plate, and screw the four corners with M3 screws and washers.	18/4/25	18/4/25	Siva
2	Connect all the respective wires to and from the FC by referring to the image given in the assembly manual	"	"	"

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check if the FC is at the CG (or very close to it), and is level	Yes.	-
2	Confirm if the FC setup is vibration free	Yes.	
3	Check for all the wire connections to and from the FC	Yes.	

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya. m.	22/04/25	C.R.P.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Canopy Installation

Process No.: 13/20

Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Canopy	

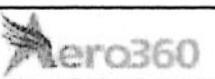
Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Align the canopy in proper direction	18/4/25	18/4/25	Harish
2	Fix it to the Airframe using M3*12mm screws and M3 washers	11	11	"

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks (If any)
1	Check and move the drone for sticking void stickers	Yes	-

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya m.	22/04/25	M. KJ	✓

Surface of canopy
not Smoother

If may cause
problem while
Shake the
void shell



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Firmware Upgrade

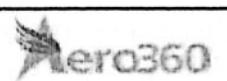
Process No.: 14/20

Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	PDRL Firmware	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Login to the application using credentials.	18/4/25	18/4/25	Surya
2	Select the .apj file after browsing through desktop, and then click on start.	11	11	11
3	Follow the instructions as shown on the window, and click on flash.	11	11	11
4	The selected .apj file will get flashed and the previous FC data will get erased.	11	11	11

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya.m.	22/04/25		✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

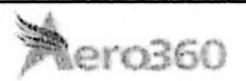
Process: Bootloader Update

Process No.: 15/20

Identification Serial Number	
Drone Serial No.	AE-BH-01-25-000 15

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Go to bootloader update section, and you should be able to see a default UID in OEM UID section.	18/4/25	18/4/25	Surya
2	Connect the FC to the firmware to view the version and drone ID in the bootloader update logs window.	"	"	"
3	Click on update button to update Bootloader, and then once it is done, disconnect FC.	"	"	"

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya.m.	22/04/25	M.S.P.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: RC Calibration

Process No.: 16/20

Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

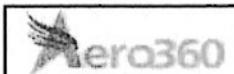
S. No	Component Name	Component Serial #
1	Radio Controller Unit	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Click on "Calibrate" button through AeroGCS Config, and follow the instructions on the screen.	18/4/25	18/4/25	Surya
2	Click on "OK" when prompted to ensure all sticks and throttle is down.	"	"	"

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks
1	Check if all the sticks and throttle control is down to zero.	yes .	✓

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya m.	23/04/25	M.Sg.	✓

0b9bfaa5-30ce-445b-89f5-6bc35b559311



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: IMU Calibration

Process No.: 17/20

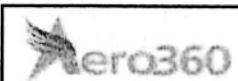
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Flight Controller	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Select "Accelerometer" section and tap the 'Calibrate' button, and follow the instructions on screen.	18/4/25	18/4/25	Surya
2	Orient the device to fine-tune its accelerometer.	11	11	11
3	Click on 'Next' and follow the on screen instructions for accurate accelerometer calibration.	11	11	11
4	Repeat these steps to ensure the best fine-tuned accelerometer	11	11	11
5	Perform Reboot after fine-tuning, and reestablish connection with drone.	11	11	11

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks
1	Check if all the sticks and throttle control is down to zero.	Yes	-

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya m.	22/04/25	M. Surya	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Compass Calibration

Process No.: 18/20

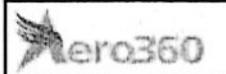
Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

S. No	Component Name	Component Serial #
1	Flight Controller	

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator Name
1	Choose the compass that needs calibration in the 'COMPASS' tab.	18/4/25	18/4/25	Surya , Siva Marik
2	Press calibrate button, and then follow instructions on screen.	11	11	11
3	Rotate the drone randomly around all axes until progress bar fills to the right and the calibration is done.	11	11	11
4	Adjust Compass settings according to the new values needed by the drone.	11	11	11
5	Reboot your device before moving on to next calibration steps.	11	11	11

Quality Checklist			
S.No.	Quality Check	Yes/No	Remarks
1	Check if all the sticks and throttle control is down to zero.	yes,	
2	Drone should be unarmed for compass calibration	yes .	

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya.m.	22/04/25	M. S.	✓



DRONIX TECHNOLOGIES PRIVATE LIMITED

BHUMI A10E

Process: Parameter Configuration

Process No.: 19/20

Identification Serial Number	
Drone Serial No.	AE-BH-01-25-00015

Steps of Procedure				
S. No	Process Step	Start Date	End Date	Operator
1	Reset all RPA configuration parameters to their default settings.	18/4/25	18/4/25	Surya
2	Go to advanced settings, browse for .parm file, and upload it.	11	11	11

Quality Approval			
Quality Checked By	Checked Date	Signature	Accepted/Rejected
Surya.m.	22/04/25	M. Surya	✓