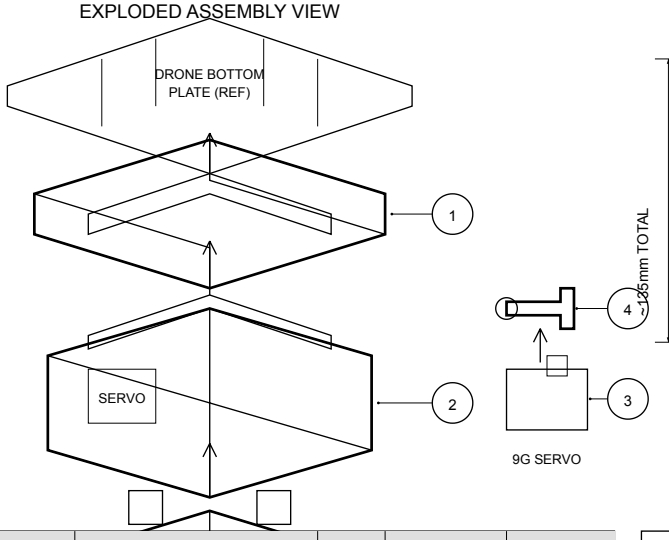
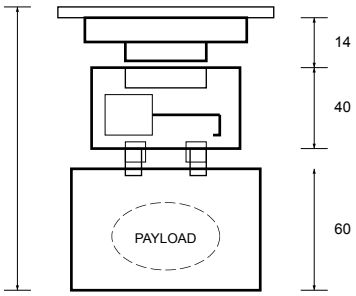
EXPLODED ASSEMBLY VIEW



ASSEMBLED SIDE VIEW



PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	MATERIAL	SOURCE
1	MF-PH-001	FRAME ADAPTER PLATE	1	PETG	3D PRINT
2	MF-PH-002	PAYLOAD CRADLE	1	PETG	3D PRINT
3	SG90	9G DIGITAL SERVO	1	-	PURCHASED
4	MF-PH-004	RELEASE ARM	1	PETG	3D PRINT
5	MF-PH-003	PAYLOAD BASKET	1	PETG	3D PRINT
6	M3x12	SOCKET HEAD CAP SCREW	6	STEEL	PURCHASED
7	M3 NYLOC	NYLON LOCK NUT	6	STEEL	PURCHASED
8	M2x8	SERVO MOUNTING SCREW	2	STEEL	PURCHASED

SPECIFICATIONS

MAX PAYLOAD: 2.0 kg
SYSTEM WEIGHT: ~80g
RELEASE TIME: <0.5s
SERVO TORQUE: 1.8 kg-cm

ASSEMBLY NOTES:

1. ATTACH FRAME ADAPTER (1) TO DRONE BOTTOM PLATE USING M3x12 SCREWS (6) AND NYLOC NUTS (7)
2. INSTALL SERVO (3) INTO CRADLE (2) POCKET, SECURE WITH M2x8 SCREWS (8)
3. ATTACH RELEASE ARM (4) TO SERVO SPLINE, VERIFY HORIZONTAL AT 0° (PWM 1000µs)
4. SLIDE CRADLE ASSEMBLY ONTO FRAME ADAPTER DOVETAIL RAIL UNTIL DETENT CLICKS
5. CONNECT SERVO WIRE TO FC: BROWN=GND, RED=5V, ORANGE=SIGNAL
6. CONFIGURE SERVO IN BETAFLIGHT: 1000µs (LOCKED) TO 2000µs (RELEASED)
7. TEST RELEASE MECHANISM 10X BEFORE FLIGHT
8. HOOK BASKET (5) INTO CRADLE SLOTS FOR PAYLOAD ATTACHMENT

MODEL-F		
PAYLOAD HOLDER - ASSEMBLY		
PART NO: MF-PH-ASSY		
DRAWN:CLAUDE	DATE: 12/2025	REV: A