
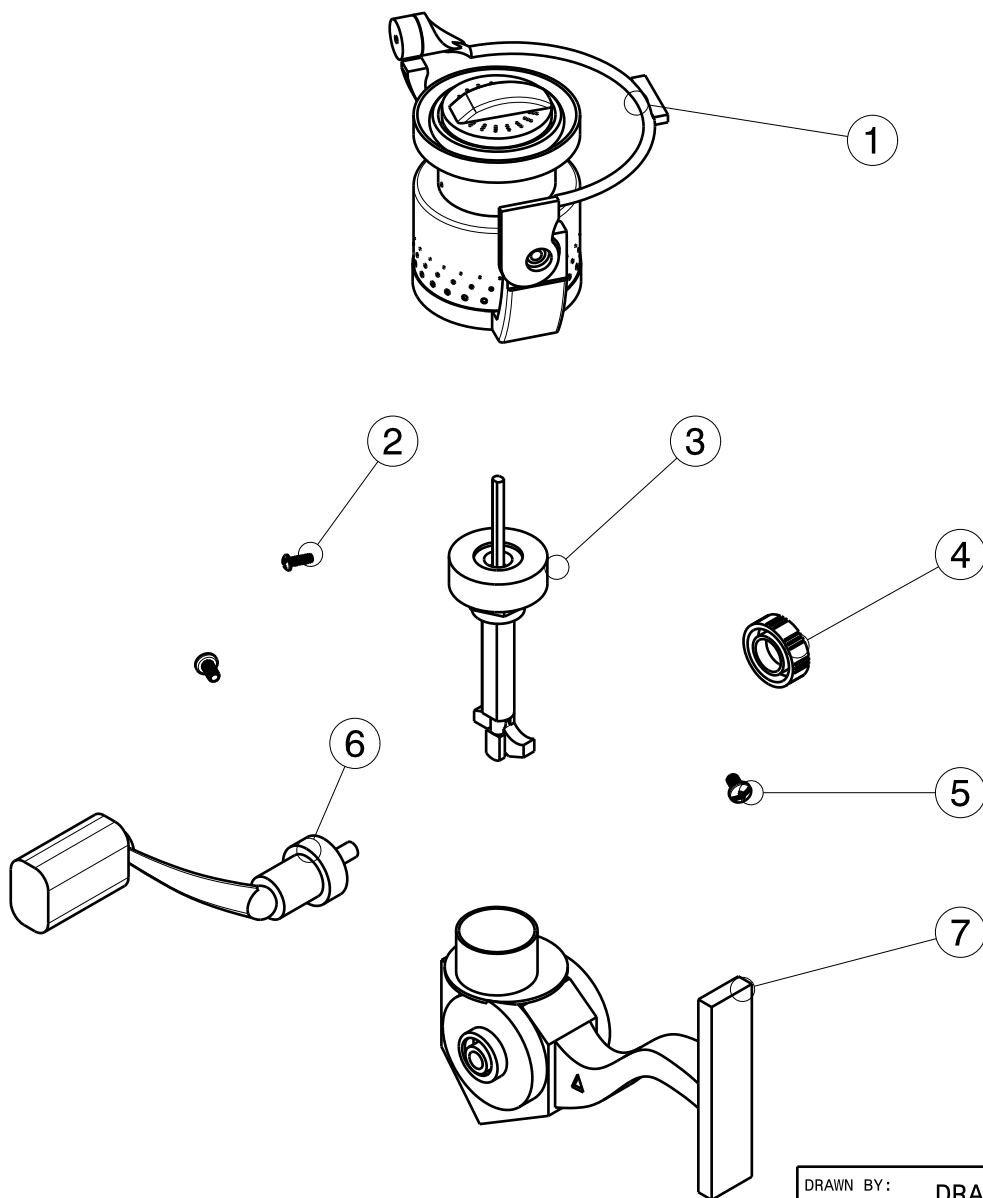


DRAWN BY:	 EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF ENGINEERING		
REVIEWED BY:	PROF. ACEVEDO	DRAWING TITLE:	
MODELED BY:	DRAKE HUGHES		
UNITS:		SCALE:	SHEET:
		1=1	01/12
		04/22/2025	



07	REEL BASE SUBASSEMBLY	1	VARIES
06	HANDLE	1	ALUMINUM
05	HUGHES_90604A722 _Pan Head Combination Phillips Slotted Screws	2	STEEL
04	DUSTCAP	1	PLASTIC
03	LINEAR MOTION PARTS SUBASSEMBLY	1	VARIES
02	HUGHES_90604A303 _PAN_HEAD_COMBIN ATION_PHILLIPS_S LOTTED_SCREW	1	STEEL
01	SPOOL ADJASCENT PARTS SUBASSEMBLY	1	VARIES
PART #	DESCRIPTION	QTY	MAT'L

DRAWN BY: DRAKE HUGHES
 REVIEWED BY: PROF. ACEVEDO
 MODELED BY: DRAKE HUGHES

UNITS:



EMBRY-RIDDLE AERONAUTICAL UNIVERSITY
 COLLEGE OF ENGINEERING

DRAWING TITLE: HUGHES FISHING REEL MAIN
 ASSEMBLY EXPLODED

SCALE:

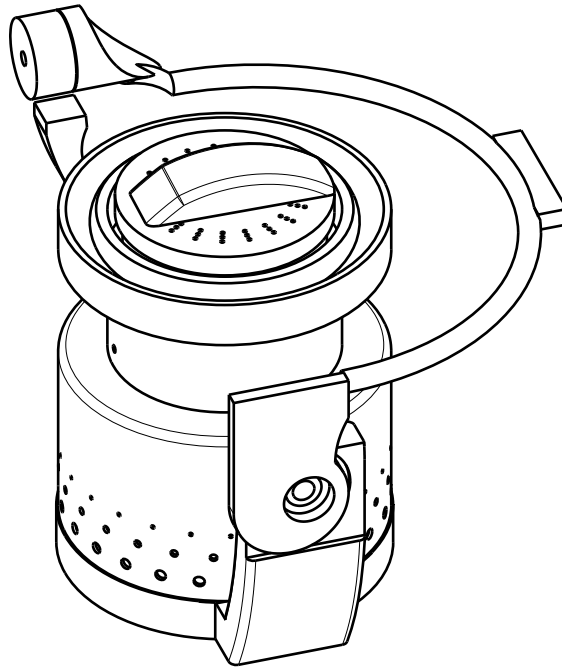
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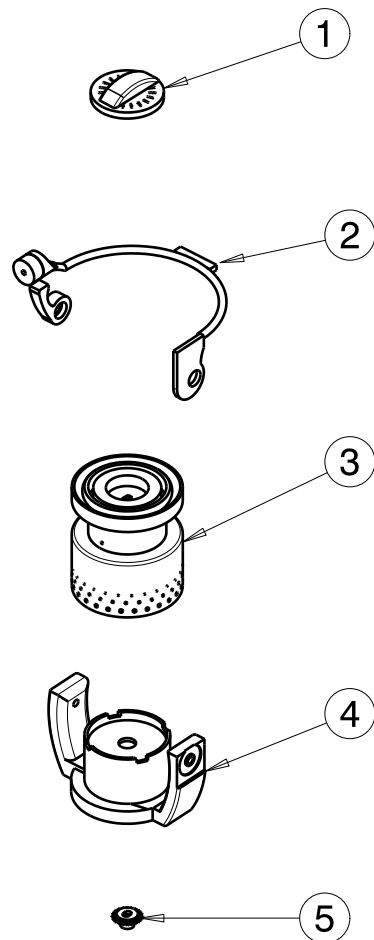
04/22/2025

SHEET:


02/12

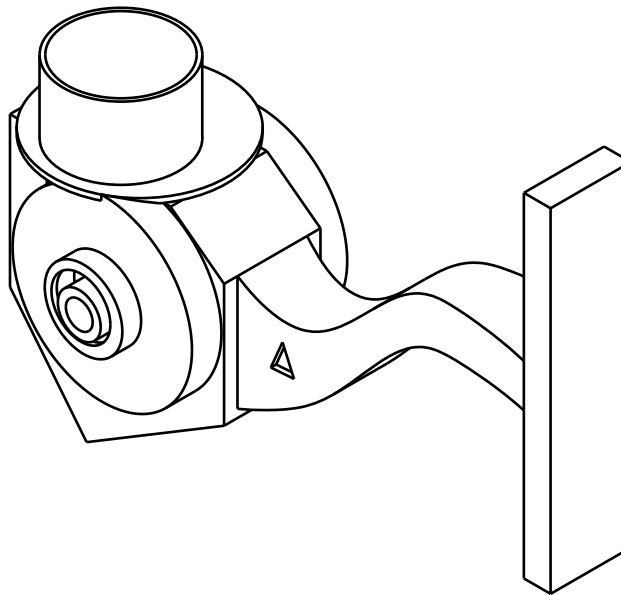



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REVIEWED BY:	PROF. ACEVEDO		COLLEGE OF ENGINEERING	
MODELED BY:	DRAKE HUGHES	DRAWING TITLE: HUGHES SPOOL ADJASCENT PARTS SUBASSEMBLY ISOMETRIC		
UNITS:		SCALE: 1=1	DATE: 04/26/2025	SHEET: 03/12

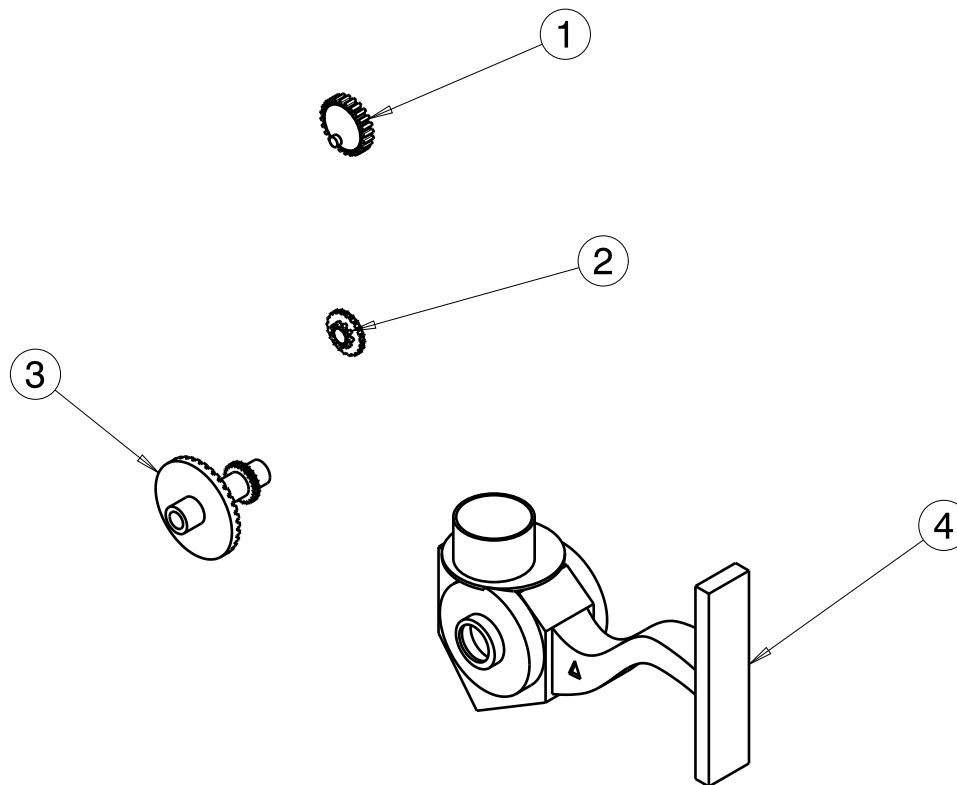


05	CLICK GEAR	1	ALUMINUM
04	ROTOR	1	ALUMINUM
03	SPOOL HOLDER	1	ALUMINUM
02	BAIL	1	ALUMINUM
01	CAP	1	PLASTIC
PART #	DESCRIPTION	QTY	MAT'L


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REVIEWED BY:	PROF. ACEVEDO		
MODELED BY:	DRAKE HUGHES	DRAWING TITLE: HUGHES SPOOL ADJASCENT PARTS SUBASSEMBLY EXPLODED	
UNITS:			
SCALE:	1=3	DATE:	04/26/2025
		SHEET:	04/12

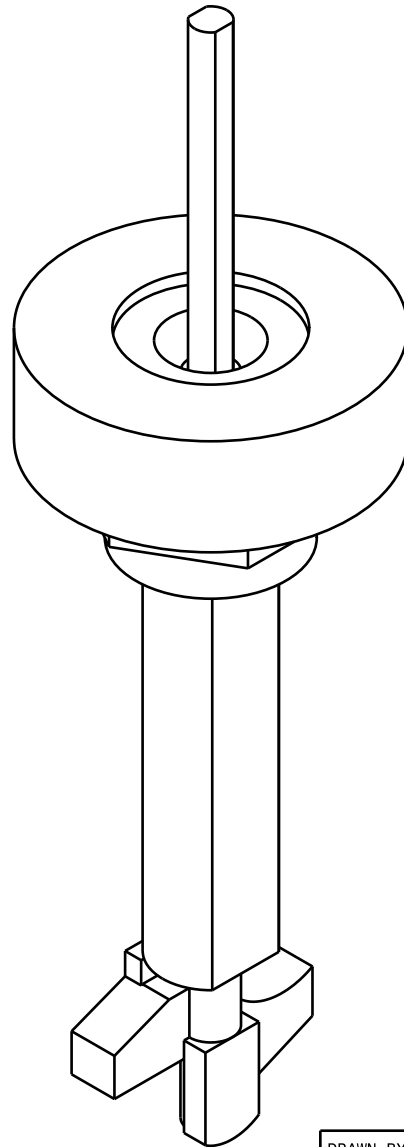



DRAWN BY: DRAKE HUGHES	 EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF ENGINEERING		
REVIEWED BY: PROF. ACEVEDO			
MODELED BY: DRAKE HUGHES	DRAWING TITLE: HUGHES REEL BASE SUBASSEMBLY ISOMETRIC		
UNITS:	SCALE: 1=1	DATE: 04/26/2025	SHEET: 05/12

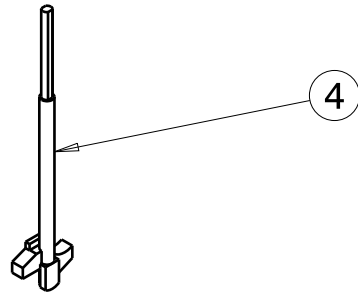
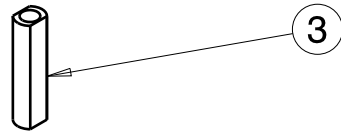
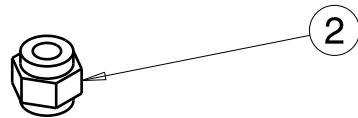
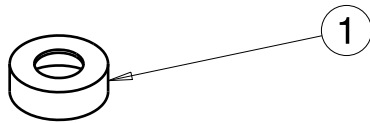


04	BASE	1	ALUMINUM
03	LARGE GEAR	1	STEEL
02	SMALL GEAR 2	1	ALUMINUM
01	SMALL GEAR 1	1	ALUMINUM
PART #	DESCRIPTION	QTY	MAT'L

DRAWN BY: DRAKE HUGHES	 EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF ENGINEERING		
REVIEWED BY: PROF. ACEVEDO			
MODELED BY: DRAKE HUGHES	DRAWING TITLE: HUGHES REEL BASE SUBASSEMBLY EXPLODED		
UNITS:	SCALE: 1=2	DATE: 04/26/2025	SHEET: 6/12



DRAWN BY:	DRAKE HUGHES	 EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF ENGINEERING
REVIEWED BY:	PROF. ACEVEDO	
MODELED BY:	DRAKE HUGHES	
		DRAWING TITLE: HUGHES LINEAR MOTION PARTS SUBASSEMBLY ISOMETRIC
UNITS: MM	SCALE: 2=1	DATE: 04/10/2025 SHEET: 07/12



4	MAIN SHAFT	1	ALUMINUM
3	GOLDEN ROD	1	BRUSHED METAL
2	RING AROUND GOLDEN ROD	1	BRASS
1	GEAR COMPARTMENT CAP	1	PLASTIC
PART #	DESCRIPTION	QTY	MAT'L

DRAWN BY: DRAKE HUGHES
REVIEWED BY: PROF. ACEVEDO
MODELED BY: DRAKE HUGHES

UNITS: MM



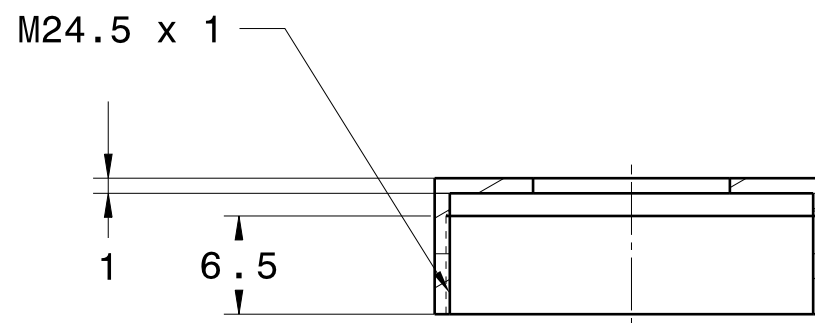
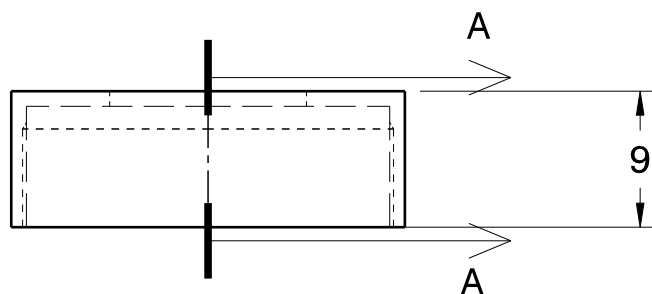
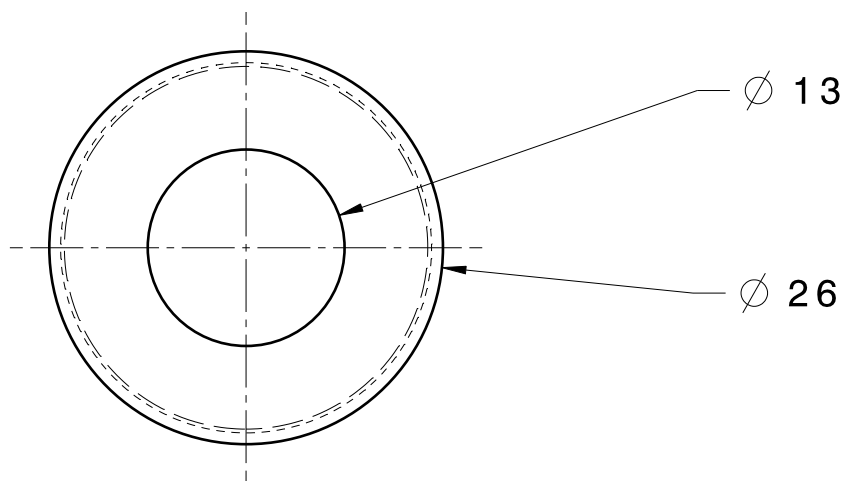
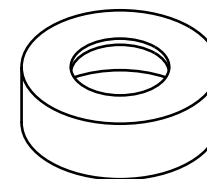
EMBRY-RIDDLE AERONAUTICAL UNIVERSITY
COLLEGE OF ENGINEERING

DRAWING TITLE:
**HUGHES LINEAR MOTION PARTS
SUBASSEMBLY EXPLODED**


SCALE: 1=2

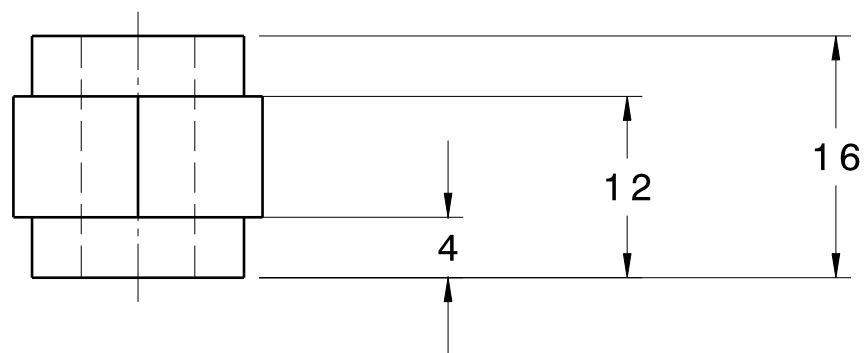
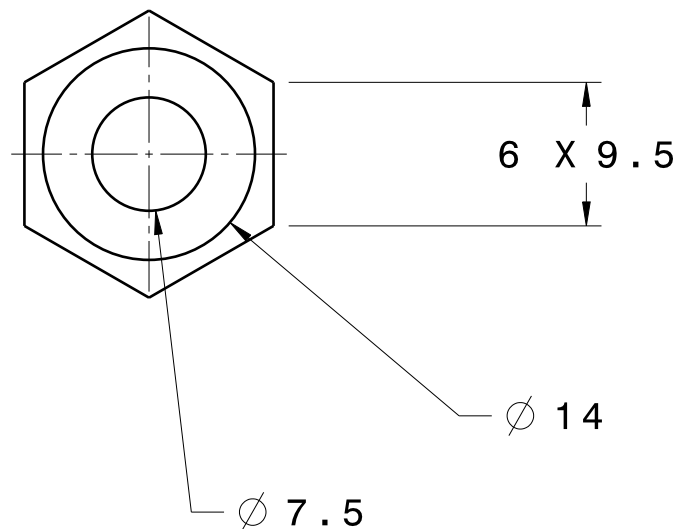
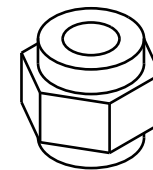
DATE: 04/10/2025


SHEET: 08/12

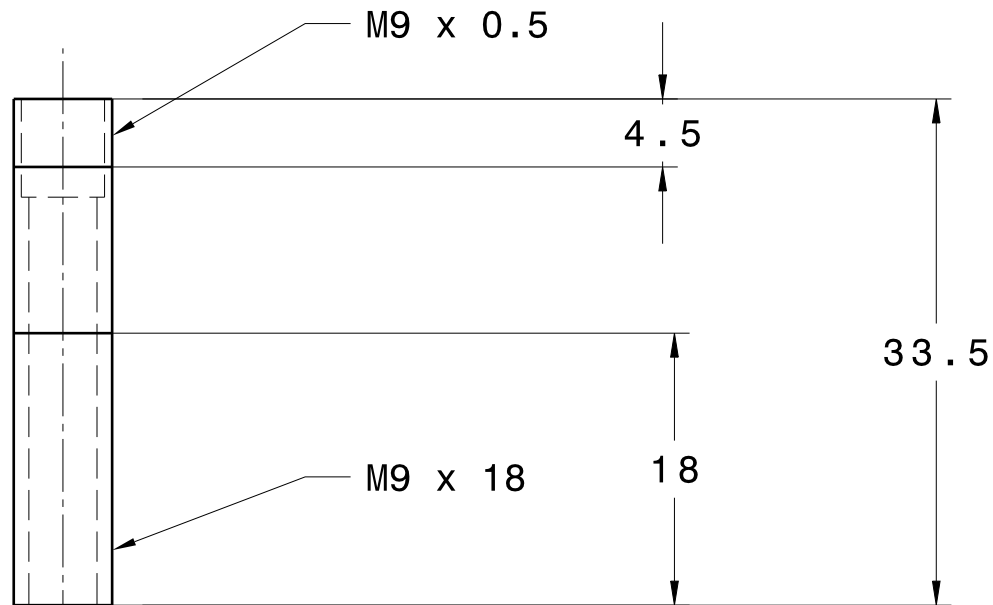
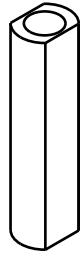
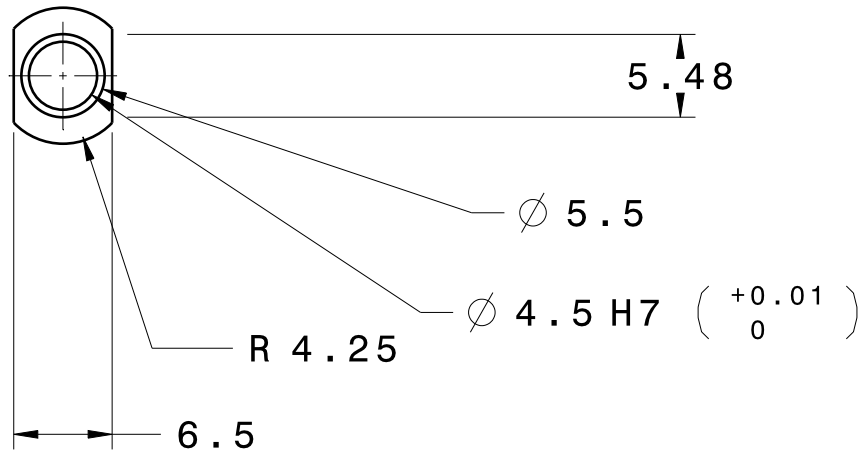


SECTION VIEW A-A


DIMENSION TOLERANCE	DRAWN BY: DRAKE HUGHES	 EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF ENGINEERING		
DECIMAL:	REVIEWED BY: PROF. ACEVEDO			
± .1	MODELED BY: DRAKE HUGHES	DRAWING TITLE: HUGHES GEAR COMPARTMENT CAP		
ANGULAR:				
± 1°	UNITS: MM	SCALE: 2:1	DATE: 04/10/2025	SHEET: 09/12

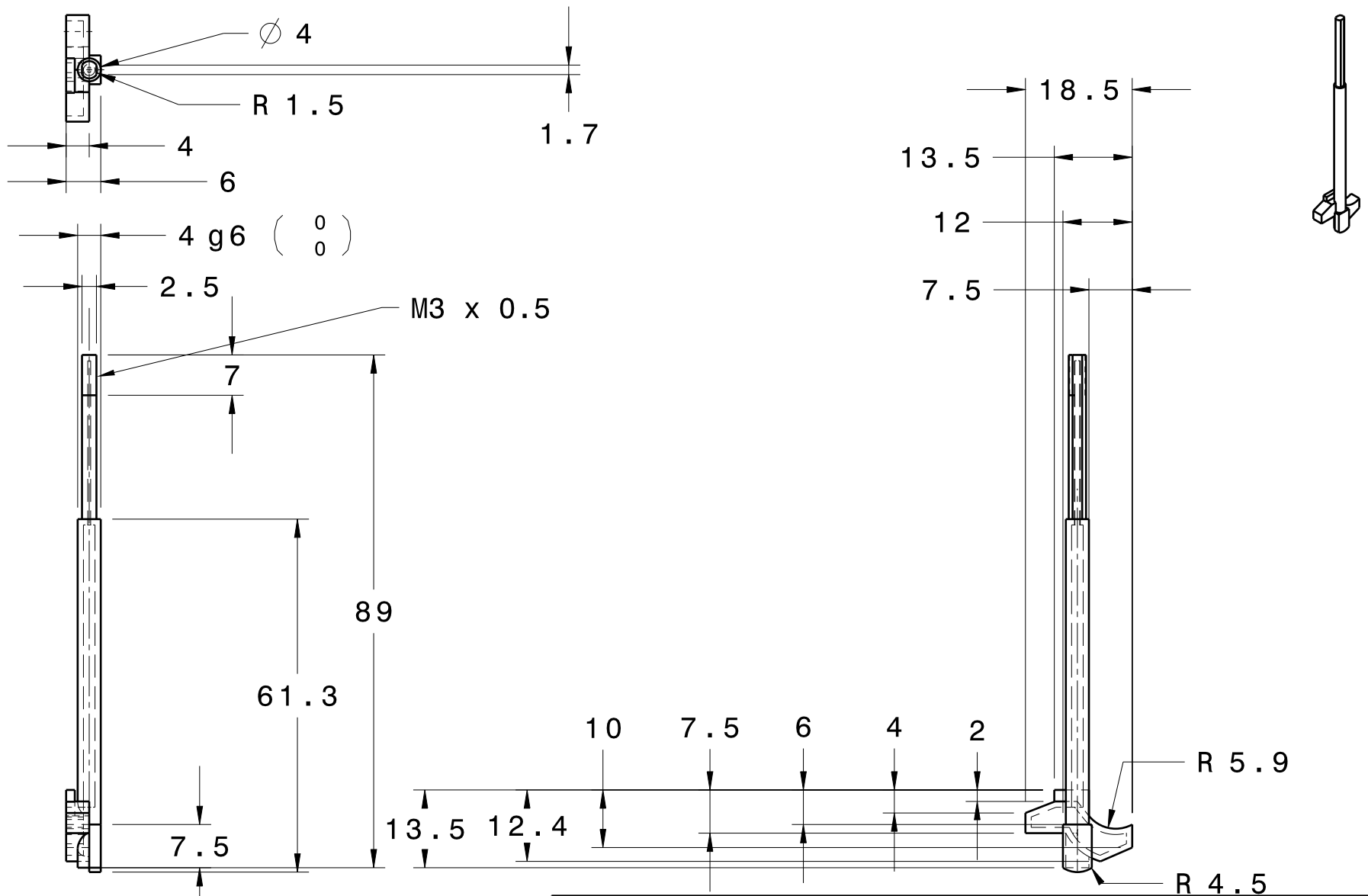


DRAWN BY: DRAKE HUGHES			EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF ENGINEERING		
REVIEWED BY: PROF. ACEVEDO					
MODELED BY: DRAKE HUGHES					
		DRAWING TITLE: HUGHES RING AROUND GOLDEN ROD			
UNITS: MM		SCALE: 2:1	DATE: 04/10/2025	SHEET: 10/12	




GOLDEN ROD AND MAIN SHAFT
REQUIRE CLEARANCE - SLIDING -
(H7/g6)
BECAUSE THESE PARTS NEED TO MOVE
WITH RESPECT TO EACH OTHER

DRAWN BY: DRAKE HUGHES			EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF ENGINEERING			
REVIEWED BY: PROF. ACEVEDO						
MODELED BY: DRAKE HUGHES						
		DRAWING TITLE: HUGHES GOLDEN ROD				
UNITS: MM		SCALE: 1:1	DATE: 04/10/2025		SHEET: 11/12	



GOLDEN ROD AND MAIN SHAFT
REQUIRE CLEARANCE - SLIDING -
(H7/g6)
BECAUSE THESE PARTS NEED TO MOVE
WITH RESPECT TO EACH OTHER

DRAWN BY:	DRAKE HUGHES		EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF ENGINEERING				
REVIEWED BY:	PROF. ACEVEDO						
MODELED BY:	DRAKE HUGHES						
		DRAWING TITLE: HUGHES MAIN SHAFT					
UNITS:	MM	SCALE:	1 : 1	DATE:	04/10/2025	SHEET:	12/12