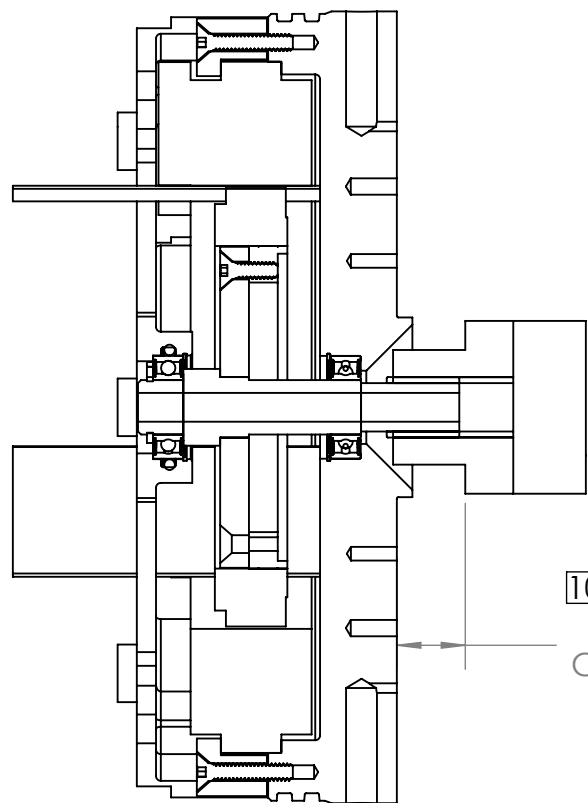
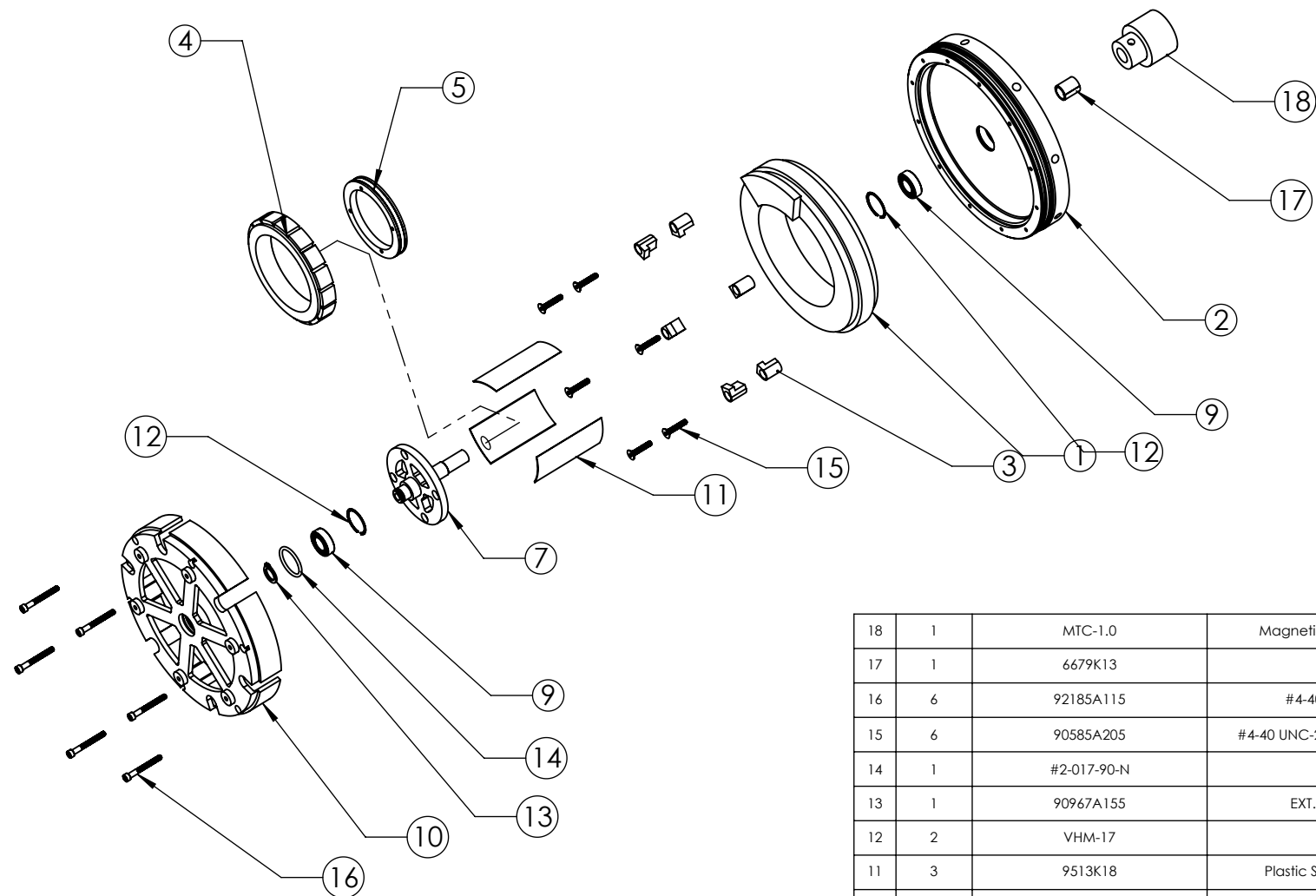
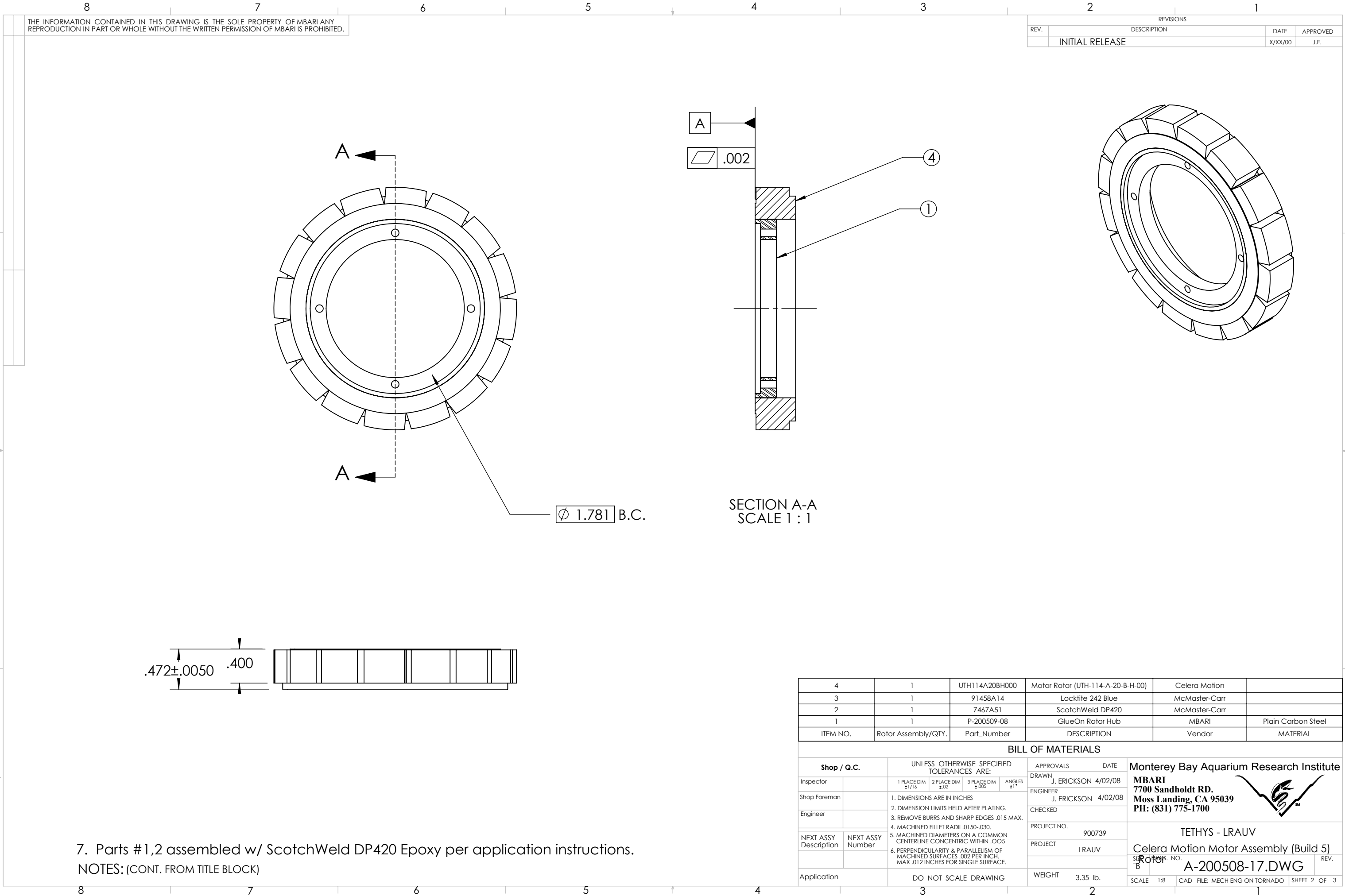




10. .445
MAG
COUPLING
DIM.

18	1	MTC-1.0	Magnetic Coupling Inner Plug		Magnetic Technologies LTD.	
17	1	6679K13	Split Bearing		McMaster-Carr	
16	6	92185A115	#4-40 x 1.0 SocHdCap		McMaster-Carr	316 SS
15	6	90585A205	#4-40 UNC-2A x 5/8 Flt Hd Soc Screw		McMaster-Carr	AISI 316
14	1	#2-017-90-N	O-RING			BUNA - N
13	1	90967A155	EXT. RETAINING RING		McMaster-Carr	420 S.S.
12	2	VHM-17	Spring Ring		Smalley	
11	3	9513K18	Plastic Shim Stock- 1x2x0.020		McMaster-Carr	Polyester
10	1	P-200512_08	Motor Stator Retainer	A	MBARI	6061-T6 Alloy
9	2	MMC# 7804K118	Deep Groove Ball Bearing		McMaster-Carr	
8	1	91458A14	Locktite 242 Blue		McMaster-Carr	
7	1	P-200510-08	Motor Rotor Shaft	A	MBARI	Plain Carbon Steel
6	1	7467A51	ScotchWeld DP420		McMaster-Carr	
5	1	P-200509-08	GlueOn Rotor Hub	-	MBARI	Plain Carbon Steel
4	1	UTH114A20BH000	Motor Rotor (UTH-114-A-20-B-H-00)		Celera Motion	
3	6	P-200511-08	Stator Retainer Clip	-	MBARI	6061-T6 Alloy
2	1	P-200462-08	Thruster Motor Rear End Cap	B	MBARI	6061-T6 Alloy
1	1	UTH114A20BH000	Motor Stator (UTH-114-A-20-B-H-00)		Celera Motion	
ITEM NO.	QTY.	Part_Number	DESCRIPTION	Revision	Vendor	MATERIAL

Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE		Monterey Bay Aquarium Research Institute			
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	J. ERICKSON 4/02/08			MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700			
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADI .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER	J. ERICKSON 4/02/08						
Engineer						CHECKED	J.S. 3/6/17						
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO.	900739						
		PROJECT	LRAUV			TETHYS - LRAUV Celera Motion Motor Assembly (Build 5)							
Application		DO NOT SCALE DRAWING				WEIGHT		3.35 lb.		SIZE B DWG. NO. A-200508-17.DWG REV.			
										SCALE 1:8 CAD FILE: MECH ENG ON TORNADO SHEET 1 OF 3			



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THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MBARI ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF MBARI IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE	X/XX/00	J.E.

SEE MS WORD-- LRAUV MOTOR ASSEMBLY DOC FOR DETAILS
REF. TO A NEW AL BUSHING IS THE SAME AS ITEM 18, MISUMI BUSHING, SEE NOTE BELOW ABOUT FITMENT

DP 420--BONDING ROTOR- USE A FLAT SURFACE, WAX PAPER, AND ACETONE FOR CLEANING PARTS
ABRAID ROTOR HUB(2) TO SLIDING FIT

HUB--REMOVE EXCESS DP 420 FROM MATING SURFACES OF HUB(5) TO ROTOR SHAFT(7)

ROTOR--CHECK FITMENT OF ROTOR SHAFT TO BEARINGS (9), SLIDING FIT

RETAINER--CHECK FITMENT OF RETAINER(10) TO REAR CAP(2), HALL EFFECTS LOCKING COMPOUND MAY INTERFERE
FILE DOWN OR POCKET RETAINER.

WIRES--ROUTE THRU OUTERMOST SLOTS OF RETAINER(10)

A 2ND SET SCREW IS ADVISED TO BE ADDED, 90 DEG. , TO ITEM 19, MAG. INNER PLUG

BUSHING(18)--SOME ADDITIONAL SHIMS MAY BE NECESSARY TO OBTAIN A PROPER CLOSE FIT BETWEEN 7, 18 AND 19.
E.G- 0.0015 AND 0.003 PLASTIC SHIM STOCK WAS USED ON SEVERAL ASS'YS

NOTES: (CONT. FROM TITLE BLOCK)

BILL OF MATERIALS									
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute	
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	J. ERICKSON	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 	
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.				ENGINEER	J. ERICKSON		
Engineer						CHECKED			
NEXT ASSY Description	NEXT ASSY Number					PROJECT NO.	900739	TETHYS - LRAUV	
						PROJECT	LRAUV	APPLIMOTION MOTOR ASSEMBLY - NOTES	
Application		DO NOT SCALE DRAWING				WEIGHT	lb.	SIZE B	DWG. NO. .DWG
							SCALE 1:8	CAD FILE: MECH ENG ON TORNADO	SHEET 3 OF 3