



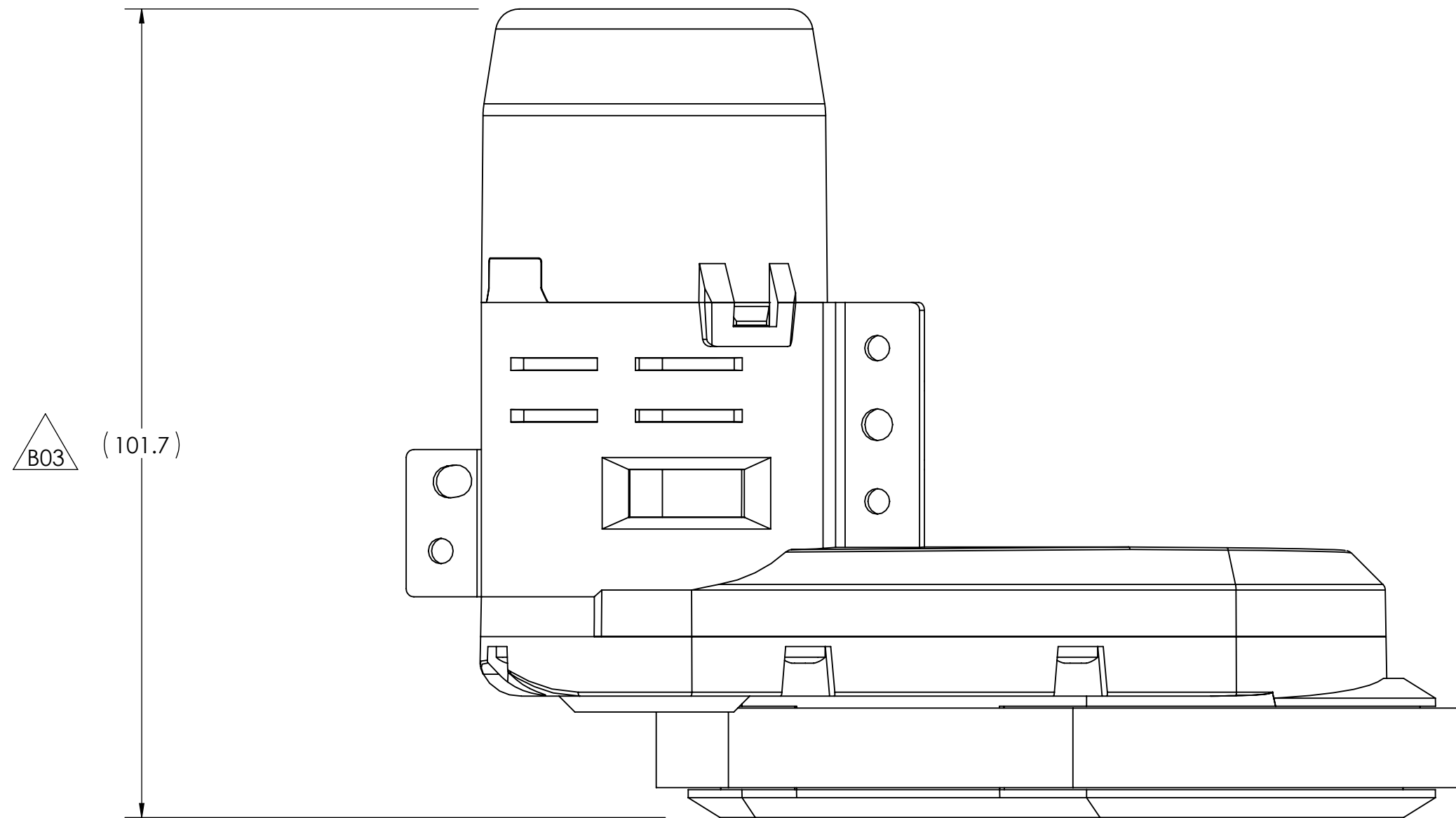
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NOTES, UNLESS OTHERWISE SPECIFIED:

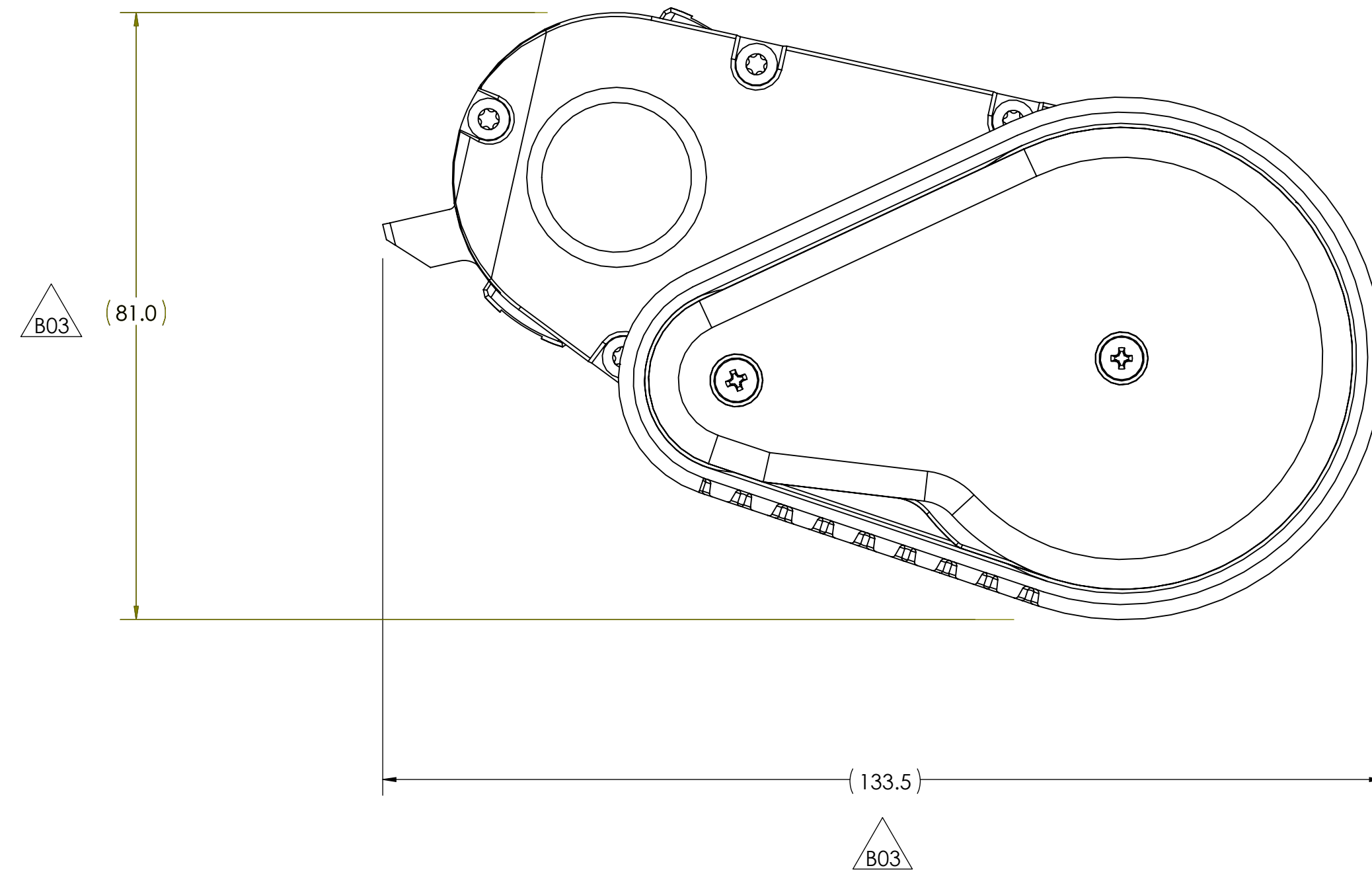
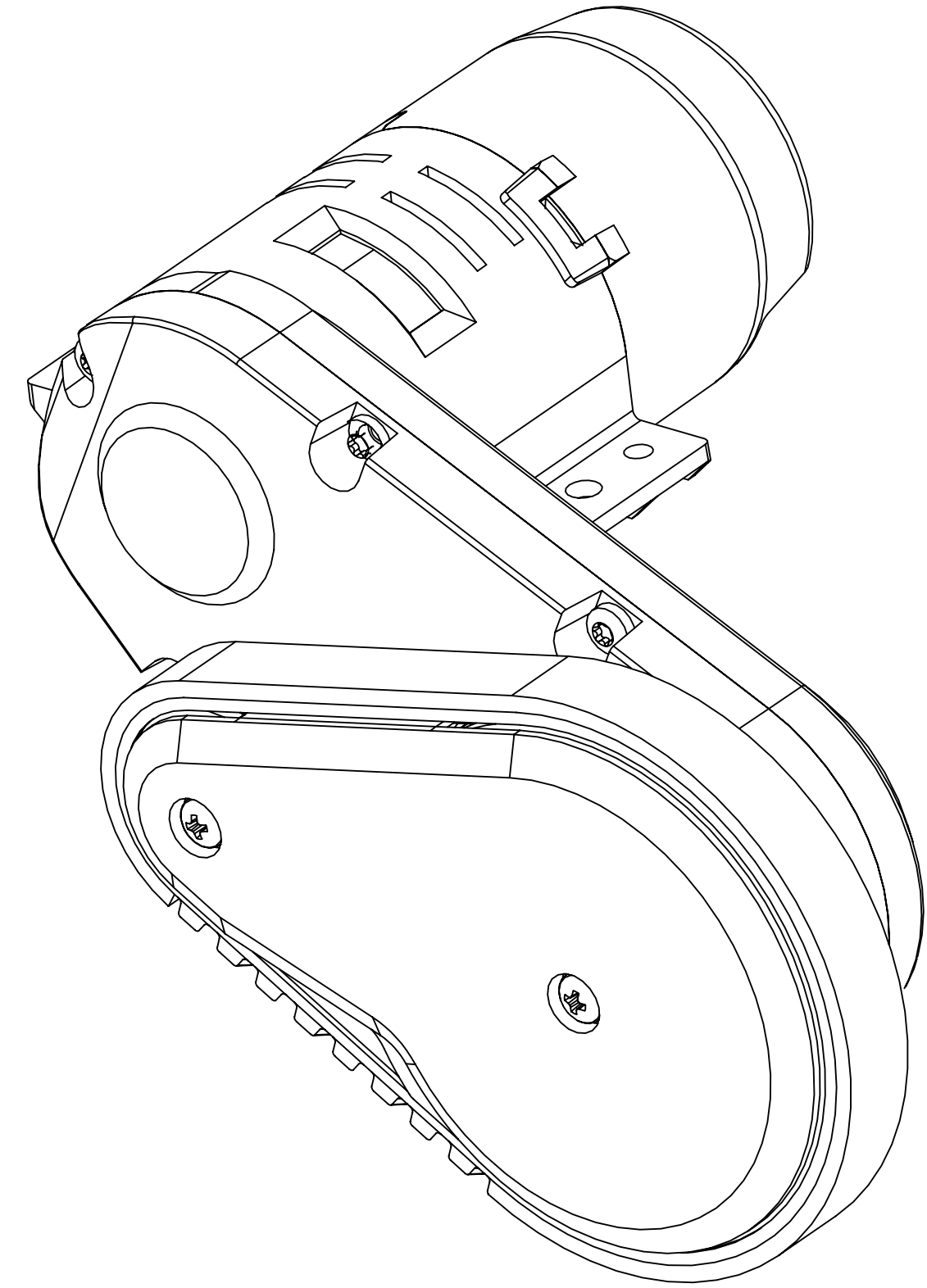
1. REFER TO BOM FOR COMPLETE AND CURRENT LIST OF MATERIALS. VENDOR NAME AND VENDOR PN ARE FOR REFERENCE ONLY.
2. COMPONENTS SHOWN WITHOUT ITEM NUMBERS ARE FOR REFERENCE ONLY AND REPORT TO UPPER LEVEL ASSEMBLIES.
3. SOME HARDWARE NOT SHOWN FOR CLARITY.
4. COMPONENTS MUST BE ROHS COMPLIANT AND TRACEABILITY OF SUCH MUST BE MADE AVAILABLE UPON REQUEST.
5. FOLLOW MANUFACTURER'S ASSEMBLY INSTRUCTIONS AND ESD HANDLING PRACTICES.
6. THREADED FASTENERS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS TORQUE SPECIFICATION UNLESS OTHERWISE SPECIFIED. INSTALLATION TORQUE TO BE:

 10 ± 1 N-m (89 ± 9 lb-in).

 5 ± 0.5 N-m (44 ± 4 lb-in).
7. REFER TO MAYFIELD ROBOTICS QA-00025 FOR GENERAL INSPECTION REQUIREMENTS AND SPECIFIC REQUIREMENTS FOR DIMENSIONS INCLUDING "CC-", AN OVAL, AND/OR OTHER MODIFIERS.
8. FINAL ASSEMBLY METHOD TO BE REVIEWED AND APPROVED IN WRITING BY MAYFIELD ROBOTICS.



REVISION TABLE				
ECO	REVISION	DESCRIPTION	DATE	APPROVED
	B	RELEASE FOR TOOLING	22JUN17	J UMHOEFER
	B03	INSERTED SHEET 4, ADDED CC-01 & CC-02, REVISED ASSEMBLY ORDER, ADDED NOTES FOR GREASE, ADDED REQUIREMENTS, REVISED BOM ORDER	31AUG17	P AUMANN
	B04	ADDED CM-00273 VENDOR PN	05DEC17	J UMHOEFER
	B05	CHANGED PN OM-00101 TO CN-00022	19JAN18	J UMHOEFER



16	6	OM-00070	SCREW,K30X6,PT PAN HEAD	BOSSARD	BN 13265 3060251
15	4	OM-00054	SCREW, PHP, M3X6		
14	1	CM-00322	PLATE,DRIVE COVER,LEFT		
13	1	CM-00330	ASM,PULLEY,DRIVE		
12	1	CM-00331	ASM,PULLEY,IDLER		
11	1	CM-00273	DRIVE WHEEL BELT	VOSS BELTING & SPECIALTY	BN232-50
10	1	CM-00329	PINION,WHEEL		
9	1	CM-00321	DRIVE HSG COVER, LEFT		
8	1	CN-00022	GREASE, WHITE LITHIUM	TBD	TBD
7	1	CM-00349	IDLER,BELT		
6	1	CM-00327	ASM,PULLEY,WHEEL		
5	1	OM-00106	BELT,INTERNAL,DRIVE	TBD	TBD
4	1	CM-00249	CAP,MOTOR		
3	1	CM-00326	MOTOR PULLEY ASSEMBLY		
2	1	OE-00045	MOTOR MABUCHI RS-555VC-25110	MABUCHI	RS-555VW-25110 (100CPR ENCODER)
1	1	CM-00320	HOUSING,DRIVE,LEFT		
ITEM NO	QTY	PART NUMBER	DESCRIPTION	VENDOR	VENDOR PN

 1.0 REQUIREMENTS

1.1 PERFORMANCE SPECIFICATIONS

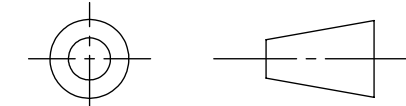
- 1.1.1 NO-LOAD CURRENT: MOTOR OE-00045 TO BE SUPPLIED WITH 6.4 ± 0.1 V, CURRENT TO BE 0.45 A MAX
- 1.1.2 NO-LOAD NOISE: ASSEMBLY TO BE PLACED ON FIXTURE MF-Fxxx (STEEL PLATE) IN AN ENVIRONMENT WITH AMBIENT NOISE LESS THAN 35 DB(A). MOTOR OE-00045 TO BE SUPPLIED WITH 6.4 ± 0.1 V, NOISE TO BE 45 DB(A) MAX, WHEN MEASURED 1.0M FROM BELT CM-00273
- 1.1.3 STALL: BACK SHAFT ENCODER OF MOTOR OE-00045 MUST NOT SPIN WHEN BELT CM-00273 IS HELD FIXED FOR 2 SEC, AT MOTOR VOLTAGE 20 ± 0.5 V

1.2 VISUAL SPECIFICATIONS

- ### 1.2.1 ALL EXTERNAL SURFACES TO BE CLEAN OF GREASE

UNLESS OTHERWISE
SPECIFIED, DIMENSIONS
ARE IN
MILLIMETERS
INTERPRET DIMENSIONS
AND TOLERANCES
PER ASME Y14.5M
TRAILING ZEROS
DENOTE TOLERANCE

DO NOT SCALE DRAWING
THIRD ANGLE PROJECTION



TOLERANCES

$$\begin{aligned} X &= \pm 0.5 \\ X.X &= \pm 0.25 \\ X.XX &= \pm 0.13 \end{aligned}$$

UNLESS OTHERWISE SPECIFIED

	APPROVED	DATE
G	DRAWN BY J BECK	05JUN17
N	DESIGNED BY J BECK	24MAY17

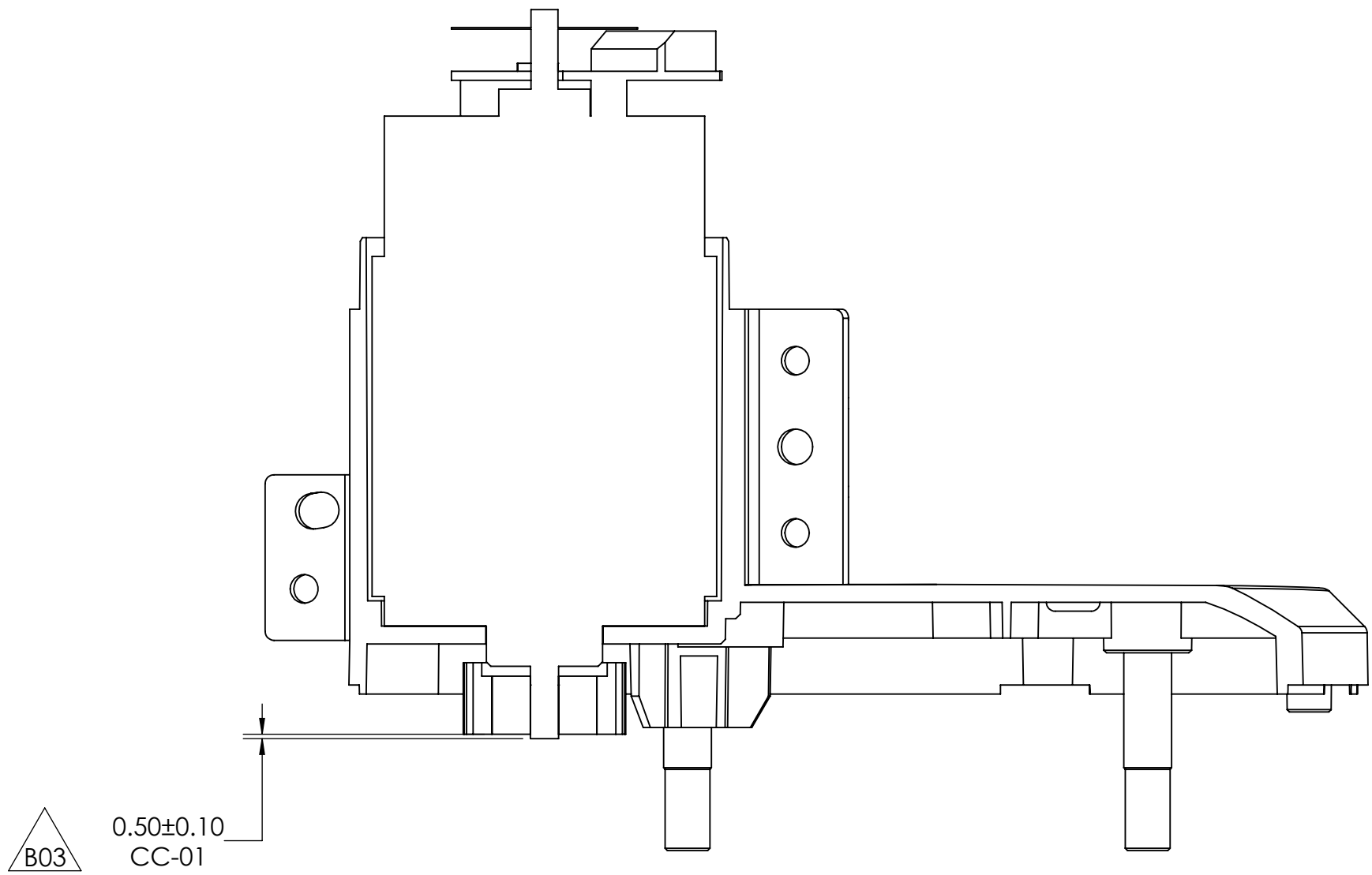


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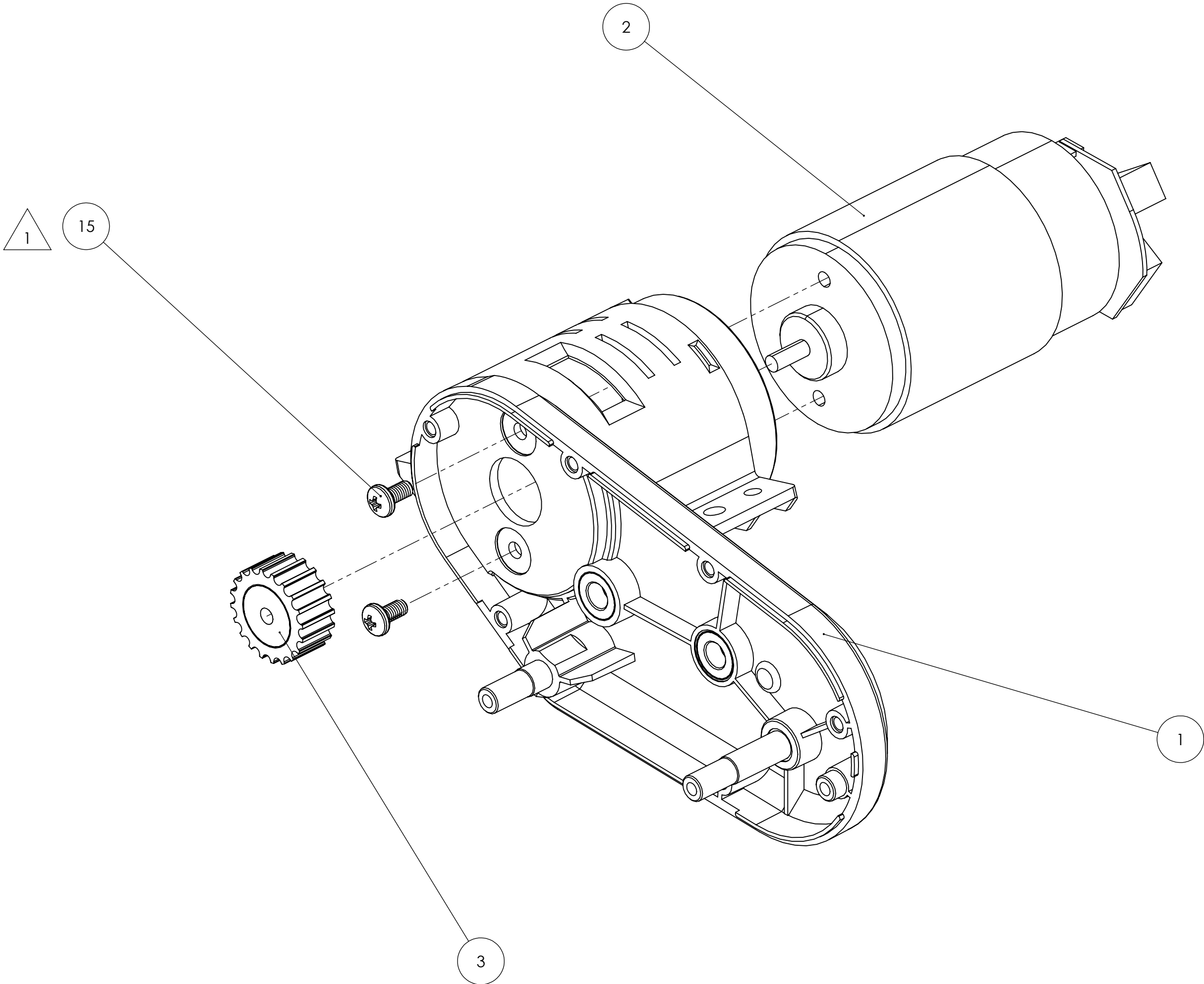
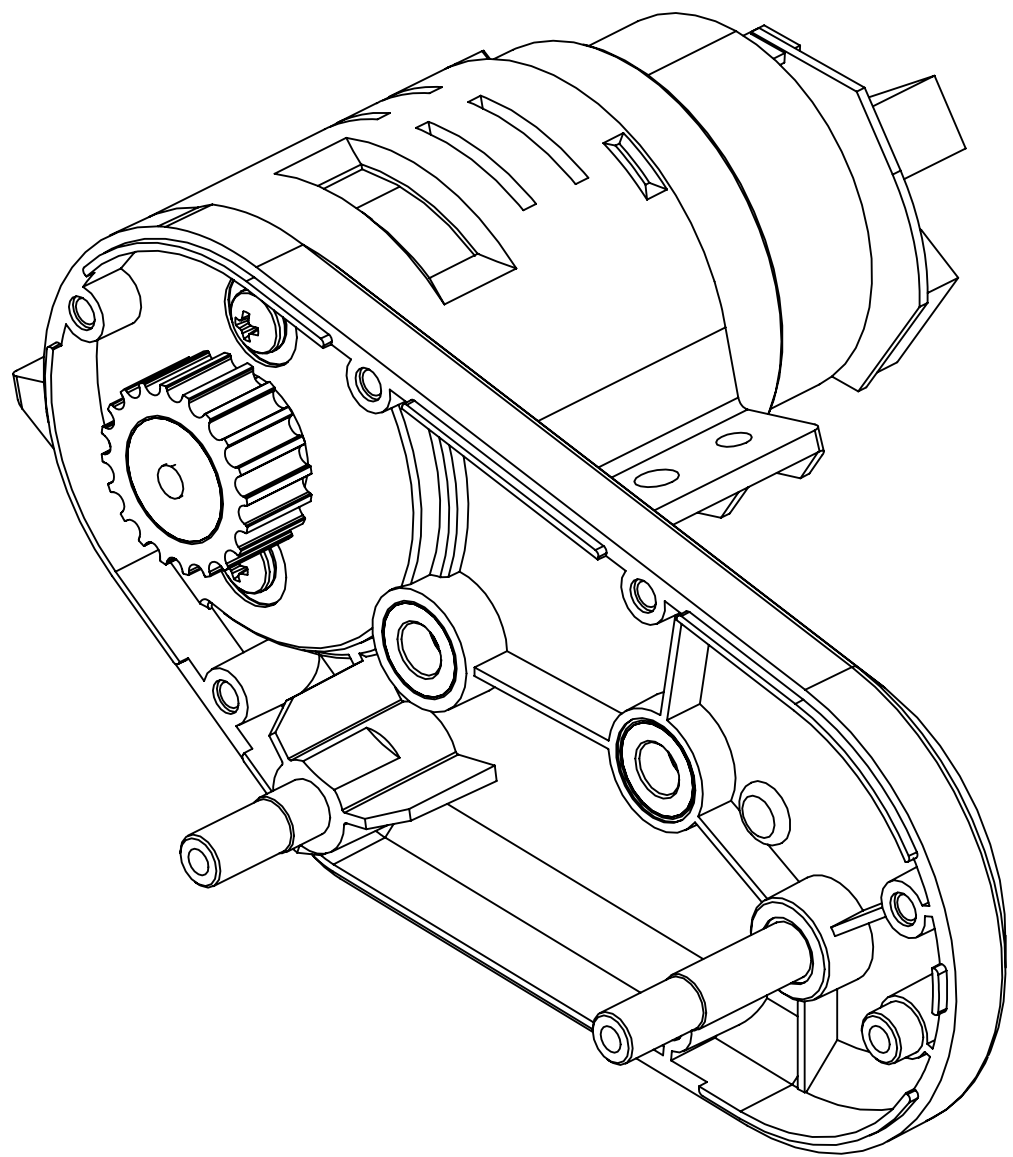
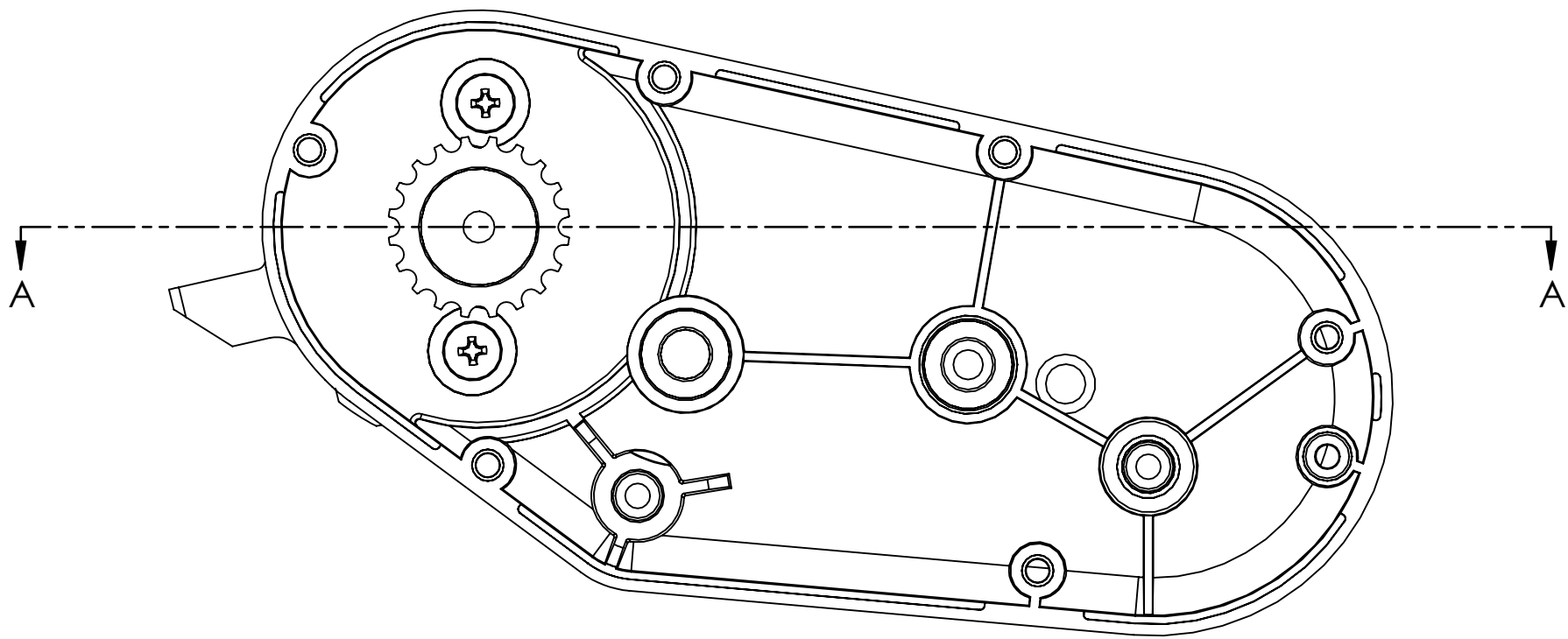
DRIVE ENGINE SUBASSY, LEFT

DWG NUMBER		SA-00065		REV	B05
SIZE	D	SCALE	3:2	SHEET	1 of 6

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B03 SECTION A-A



INNER HOUSING WITH MOTOR (EXPLODED)

16	6	OM-00070
15	4	OM-00054
14	1	CM-00322
13	1	CM-00330
12	1	CM-00331
11	1	CM-00273
10	1	CM-00329
9	1	CM-00321
8	1	CN-00022
7	1	CM-00349
6	1	CM-00327
5	1	OM-00106
4	1	CM-00249
3	1	CM-00326
2	1	OE-00045
1	1	CM-00320
ITEM NO	QTY	PART NUMBER
BILL OF MATERIALS		

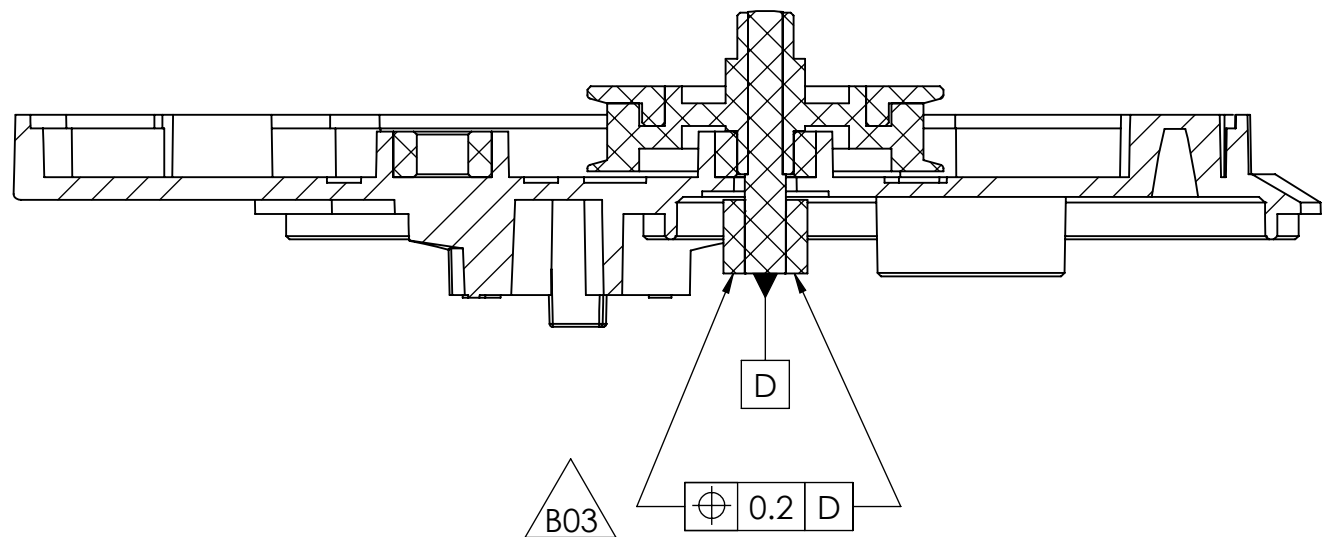


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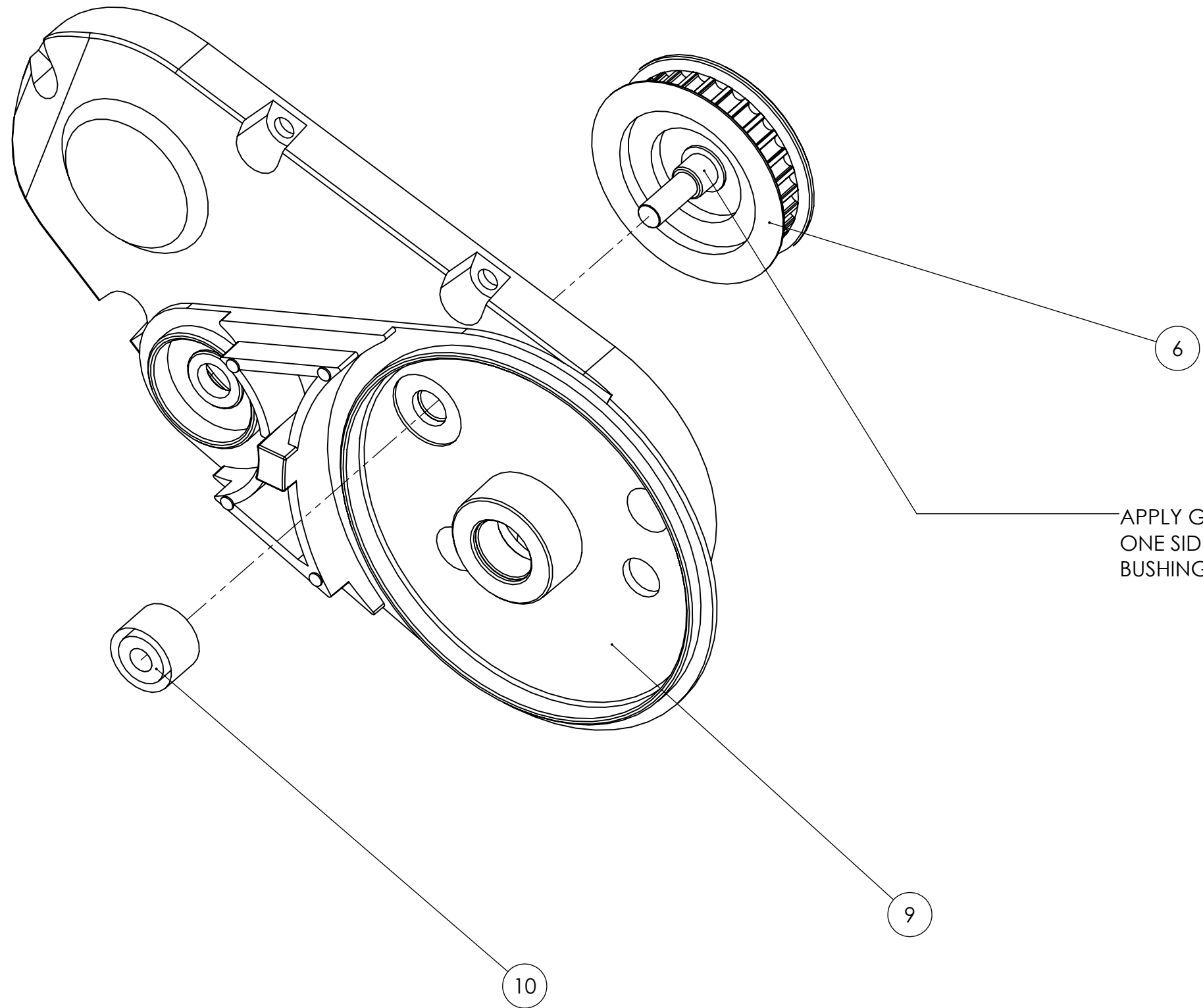
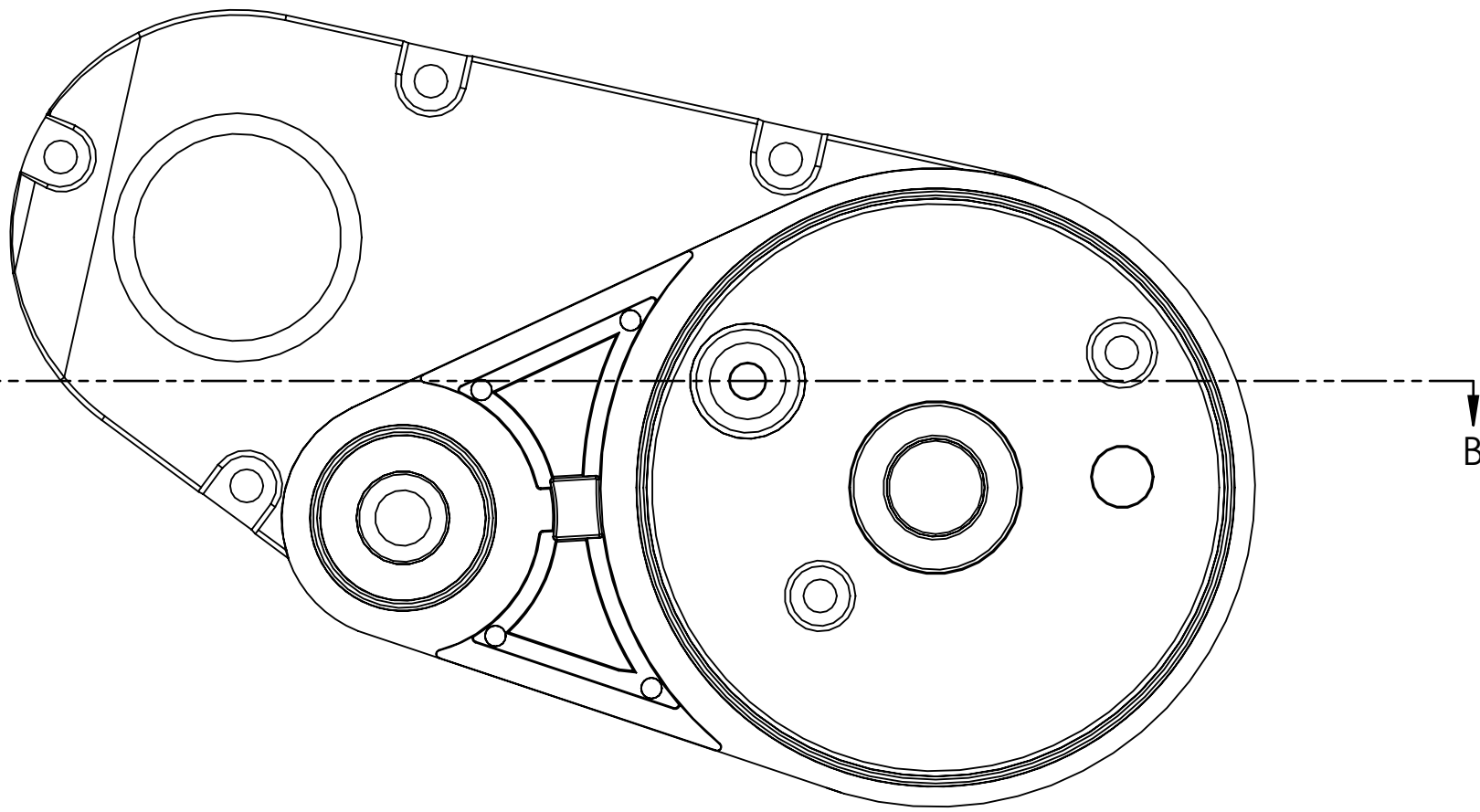
DRIVE ENGINE SUBASSY, LEFT

DWG NUMBER	SA-00065	REV	B05
SIZE	D	SCALE	3:2
		SHEET	2 of 6

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SECTION B-B



APPLY GREASE TO AT LEAST ONE SIDE OF EVERY SHAFT & BUSHING INTERFACE.

$B03$ OUTER HOUSING WITH PULLEY & PINION (EXPLODED)

16	6	OM-00070
15	4	OM-00054
14	1	CM-00322
13	1	CM-00330
12	1	CM-00331
11	1	CM-00273
10	1	CM-00329
9	1	CM-00321
8	1	CN-00022
7	1	CM-00349
6	1	CM-00327
5	1	OM-00106
4	1	CM-00249
3	1	CM-00326
2	1	OE-00045
1	1	CM-00320
ITEM NO	QTY	PART NUMBER
BILL OF MATERIALS		



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DRIVE ENGINE SUBASSY, LEFT

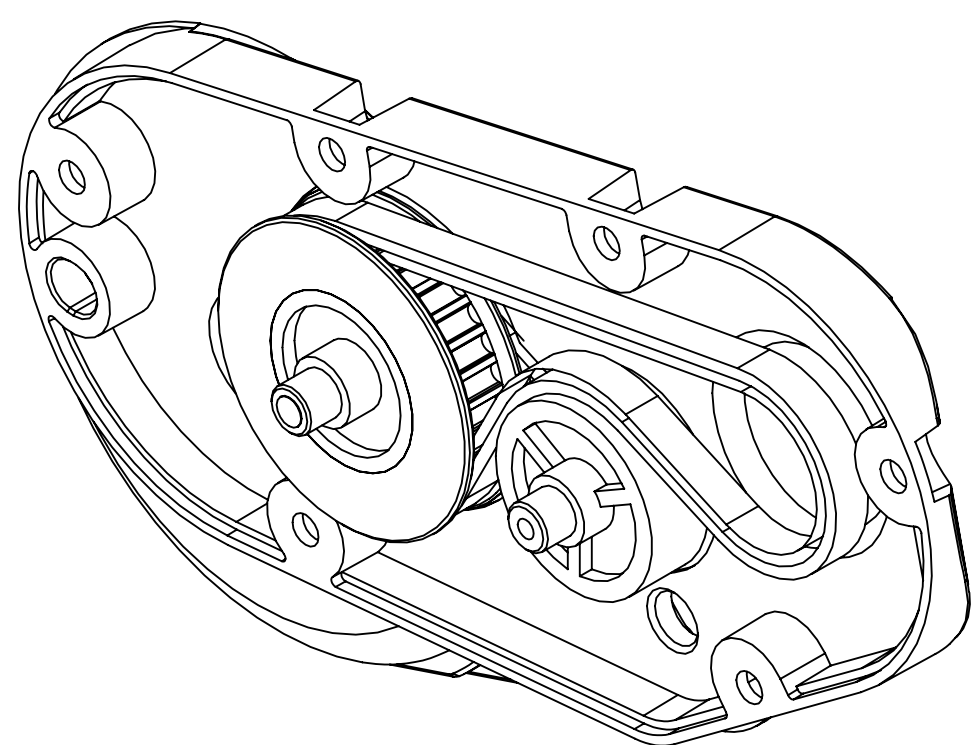
DWG NUMBER	SA-00065	REV	B05
SIZE	D	SCALE	3:2
SHEET	3 of 6		

A

1



(7)

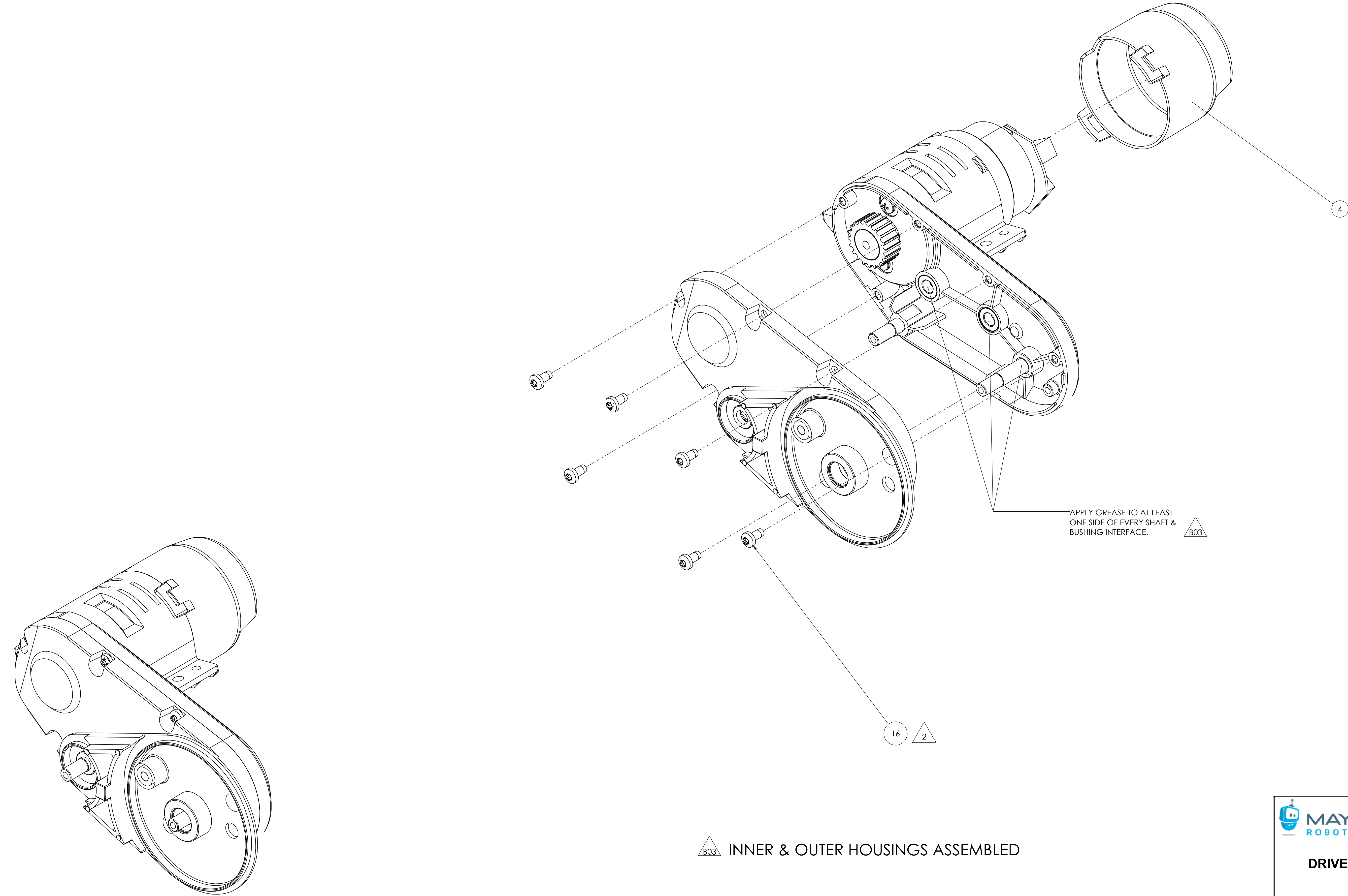
E

DRIVE ENGINE SUBASSY, LEFT


DWG NUMBER		SA-00065		REV	B05
SIZE	D	SCALE	3:2	SHEET	4 of 6

1

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16	6	OM-00070
15	4	OM-00054
14	1	CM-00322
13	1	CM-00330
12	1	CM-00331
11	1	CM-00273
10	1	CM-00329
9	1	CM-00321
8	1	CN-00022
7	1	CM-00349
6	1	CM-00327
5	1	OM-00106
4	1	CM-00249
3	1	CM-00326
2	1	OE-00045
1	1	CM-00320
ITEM NO	QTY	PART NUMBER
BILL OF MATERIALS		

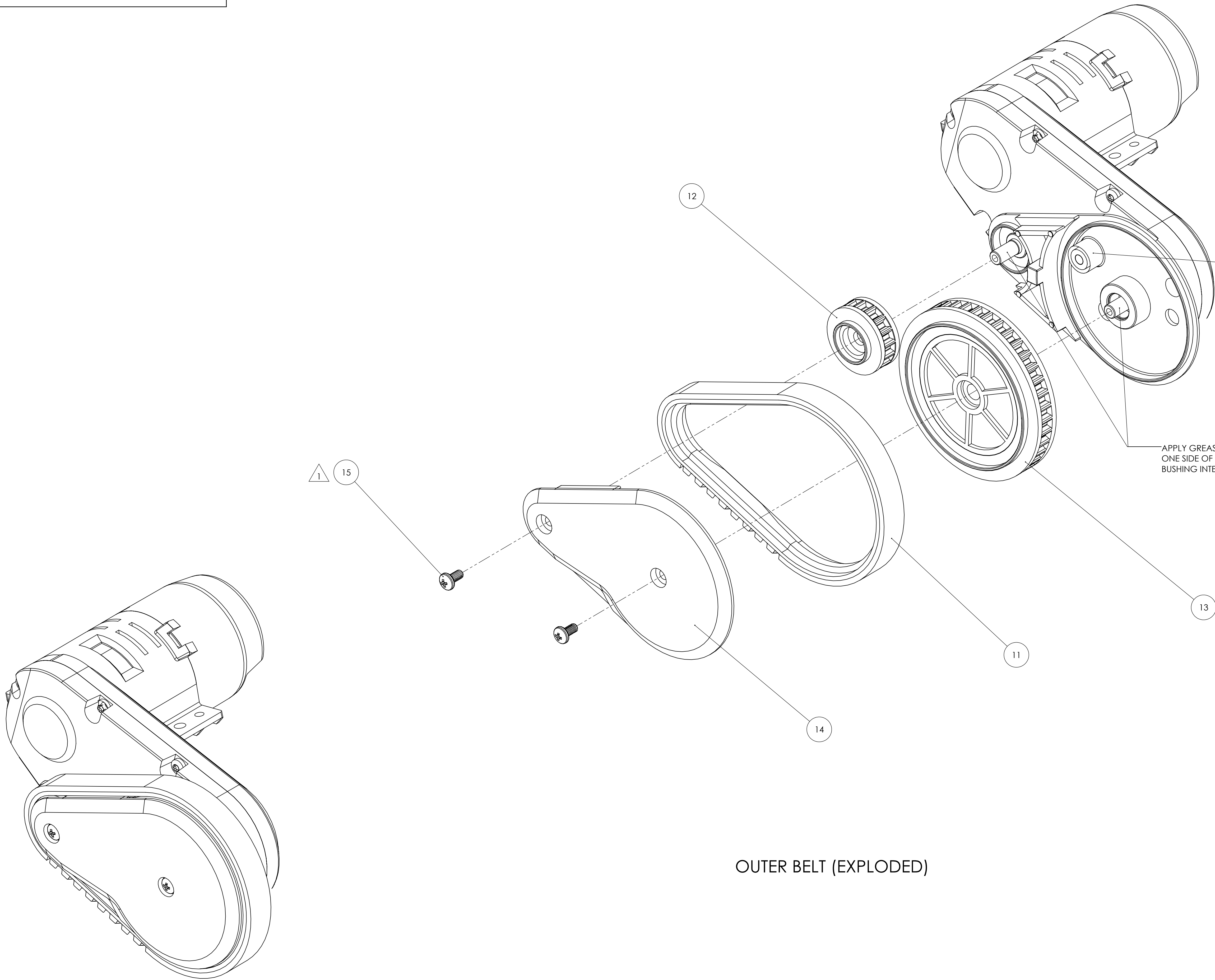


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DRIVE ENGINE SUBASSY, LEFT

DWG NUMBER	SA-00065	REV	B05
SIZE	D	SCALE	3:2
		SHEET	5 of 6

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APPLY GREASE TO GEAR
TEETH PER MANUFACTURER
RECOMMENDATION.

APPLY GREASE TO AT LEAST
ONE SIDE OF EVERY SHAFT &
BUSHING INTERFACE.

B03

16	6	OM-00070
15	4	OM-00054
14	1	CM-00322
13	1	CM-00330
12	1	CM-00331
11	1	CM-00273
10	1	CM-00329
9	1	CM-00321
8	1	CN-00022
7	1	CM-00349
6	1	CM-00327
5	1	OM-00106
4	1	CM-00249
3	1	CM-00326
2	1	OE-00045
1	1	CM-00320
ITEM NO	QTY	PART NUMBER

BILL OF MATERIALS



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DRIVE ENGINE SUBASSY, LEFT

DWG NUMBER	SA-00065	REV	B05
SIZE	D	SCALE	3:2
SHEET	6 of 6		