

Drawing list on second page

DRAWING LIST

Document Number	Title	Rev	Date
Installation Data			
+ 6004-II	Installation Instructions	4	1 JUL 2024
+ 6004	Hopper Packer Installation	2	4 APR 2024
+ 6004-0-1	Unit Wiring Overview	1	5 JUN 2023
+ 6004-0-2	Door Mounting	1	16 JUN 2023
+ 6004-0-3	Auger Mounting (optional)	1	16 JUN 2023
+ 6004-0-4	Motor Controller Mounting	4	1 JUL 2024
+ 6004-0-5	Wire Routing and Installation	1	16 JUN 2023
Manufacturing Data			
*+ 6004-01	Hopper Packer 802	2	18 JUL 2024
*+ 6004-01-01	Door Assembly 802	1	4 MAR 2023
*+ 6004-01-01-01	802 Door Frame Assy	1	4 MAR 2023
6004-01-01-01-01	802 Door Frame	1	4 MAR 2023
6004-01-01-01-01-01	Door Frame Leg	1	4 MAR 2023
6004-01-01-01-01-02	Door Frame Tube Guide	1	4 MAR 2023
6004-01-01-01-01-03	Door Frame Tube Guide 2	1	4 MAR 2023
6004-01-01-01-01-04	Door Frame Cross Support Drilled	1	4 MAR 2023
6004-01-01-01-01-05	Door Frame Cross Support End	1	4 MAR 2023
6004-01-01-01-01-07	Door Frame Pad	1	4 MAR 2023
6004-01-01-01-01-08	SS Coupling Nut	1	4 MAR 2023
6004-01-01-01-01-09	Door Frame Rod Adapter Plate	1	4 MAR 2023
6004-01-01-01-02	802 Slide Rod Assy	1	4 MAR 2023
6004-01-01-01-02-01	Slide Rod 802	1	4 MAR 2023
6004-01-01-01-02-02	Slide Rod End Tab	1	4 MAR 2023
6004-01-01-01-02-03	½-20 Threaded Insert	1	4 MAR 2023
6004-01-01-01-02-04	½-20 Stud	1	4 MAR 2023
6004-01-01-01-02-05	½-20 SS Jam Nut	1	4 MAR 2023
6004-01-01-01-03	Hinge	1	4 MAR 2023
6004-01-01-01-03-01	Upper Hinge Plate AT-	1	4 MAR 2023
6004-01-01-01-03-02	Actuator Attachment AT-	1	4 MAR 2023
6004-01-01-01-04	Actuator Doubler	1	4 MAR 2023
6004-01-01-01-05	Outer Hinge	1	4 MAR 2023
6004-01-01-01-06	Hinge Doubler Plate	1	4 MAR 2023
6004-01-01-01-07	Slide Latch	1	4 MAR 2023
6004-01-01-01-08	Slide Stop	1	4 MAR 2023
6004-01-01-01-10	Linear Actuator	2	18 JUL 2024
6004-01-01-01-11	SS Clevis Pin 3/8 X 1	1	4 MAR 2023
6004-01-01-01-12	Ball Joint Rod End	1	4 MAR 2023
6004-01-01-01-13	SS Ball Bearing 3/8 ID	1	4 MAR 2023
6004-01-01-01-15	SS Torsion Spring	1	4 MAR 2023
6004-01-01-01-16	Nylon Spacer	1	4 MAR 2023
6004-01-01-01-17	Plastic Spacer	1	4 MAR 2023
6004-01-01-01-18	SHCS SS 10-32 1-5/8	1	4 MAR 2023
6004-01-01-01-19	Button Head Screw SS 10-32 x 1.75	1	4 MAR 2023
6004-01-01-01-20	SS Hex Head M18 x 1.5mm 45mm	1	4 MAR 2023
6004-01-01-01-21	M10 SS Washer	1	4 MAR 2023
6004-01-01-01-22	M10 x 1.5mm SS Lock Nut	1	4 MAR 2023
6004-01-01-01-23	7/16-22 SS Jam Nut	1	4 MAR 2023
6004-01-01-01-24	SS Clevis Pin 5/16 x 1-5/8	1	4 MAR 2023

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	6004-01-01-01-25	Latch Pivot for SS Frame	1	4 MAR 2023
	6004-01-01-01-26	3/8-24 x 1-3/4" SS Hex Bolt	1	4 MAR 2023
*+	6004-01-01-02	Roller Latch Assembly	1	4 MAR 2023
	6004-01-01-02-01	Roller Latch Housing	1	4 MAR 2023
	6004-01-01-02-02	Roller Latch Doubler	1	4 MAR 2023
*+	6004-01-01-03	Door Stop Assembly	1	4 MAR 2023
	6004-01-01-03-01	Stop Angle Bar	1	4 MAR 2023
	6004-01-01-03-02	Stop Rubber Bumper	1	4 MAR 2023
	6004-01-01-03-03	1/4" SS Oversized Washer	1	4 MAR 2023
*+	6004-01-01-04	Mechanical Latch Kit	1	4 MAR 2023
	6004-01-01-04-01	Hold Down Clamp	1	4 MAR 2023
*+	6004-01-01-05	Door Wire Kit	1	4 MAR 2023
	6004-01-01-05-01	Door Wire Harness	2	1 FEB 2024
	6004-01-01-05-01-01	SPDT ON/OFF/ON Switch	1	4 MAR 2023
	6004-01-01-05-01-02	DPST ON / OFF Switch	1	4 MAR 2023
	6004-01-01-05-01-03	6 Pin ATM04-6P	1	4 MAR 2023
*+	6004-01-02	Hopper Packer Auger 802	1	4 MAR 2023
*+	6004-01-02-01	Auger Motor Mount Assembly	1	4 MAR 2023
	6004-01-02-01-01	Motor Housing	1	4 MAR 2023
	6004-01-02-01-01-01	Auger Motor Flange	1	4 MAR 2023
	6004-01-02-01-01-02	Auger Motor Tube	1	4 MAR 2023
	6004-01-02-01-01-03	Auger Motor Mount Plate	1	4 MAR 2023
	6004-01-02-01-01-04	4" CAM Lock	1	4 MAR 2023
	6004-01-02-01-01-05	Auger Motor Tab	1	4 MAR 2023
	6004-01-02-01-02	Motor Support Arm	1	4 MAR 2023
	6004-01-02-01-03	19mm Shaft Coupling	1	4 MAR 2023
	6004-01-02-01-04	Shaft Spider	1	4 MAR 2023
	6004-01-02-01-05	M6 x 1mm, 16mm SHCS	1	4 MAR 2023
	6004-01-02-01-06	1/4-20 x 7/8 Hex Screw	1	4 MAR 2023
	6004-01-02-01-07	4" Male Cam Plug	1	4 MAR 2023
*+	6004-01-02-02	AT-802 Auger Shaft Assembly	1	4 MAR 2023
	6004-01-02-02-01	Male Cam Lock Mount	1	4 MAR 2023
	6004-01-02-02-02	1" Shaft Coupling	1	4 MAR 2023
	6004-01-02-02-03	5/16-18 x 3/4 Hex Screw	1	4 MAR 2023
	6004-01-02-02-04	1/4 x 1 Round Key	1	4 MAR 2023
	6004-01-02-02-05	1" Shaft Lip Seal	1	4 MAR 2023
	6004-01-02-02-06	1" 2-Bolt Flange Bearing	1	4 MAR 2023
	6004-01-02-02-07	5/16-24 x 3/4 SS Hex Screw	1	4 MAR 2023
	6004-01-02-02-10	802 Auger Shaft	1	4 MAR 2023
*+	6004-01-02-03	Auger Support Assembly	1	4 MAR 2023
	6004-01-02-03-01	Auger Support	1	4 MAR 2023
	6004-01-02-03-02	1" 4-Bolt Flange Bearing	1	4 MAR 2023
*+	6004-01-02-04	Forward Wall Kit	3	23 AUG 2024
	6004-01-02-04-01	FWD Wall Doubler	2	1 JUL 2024
	6004-01-02-04-02	FWD Wall Access Panel	1	4 MAR 2023
	6004-01-02-04-03	6-32 Clip Nut	2	1 JUL 2024
	6004-01-02-04-04	6-32 x 3/8 Truss Head SS	2	1 JUL 2024
	6004-01-02-04-05	#6 SS Washer	2	1 JUL 2024
	6004-01-02-04-06	6-32 Lock Nut SS	2	1 JUL 2024
	6004-01-02-04-07	6-32 x 1/2 Truss Head SS	2	1 JUL 2024
	6004-01-02-04-08	HT Grommet 1" x 1/4"	2	1 JUL 2024
	6004-01-02-04-09	HT Grommet 1' x 3/8"	2	1 JUL 2024

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	6004-01-02-04-10	Grommet Shield 2 Piece	2	1 JUL 2024
	6004-01-02-04-10-01	Grommet Shield	2	1 JUL 2024
*+	6004-01-02-05	Auger Motor and Controller	4	1 JUL 2024
	6004-01-02-05-01	Motor & Gearbox	2	29 APR 2024
	6004-01-02-05-02	Motor Controller	1	4 MAR 2023
	6004-01-02-05-03	Motor Controller Box	1	4 APR 2024
*+	6004-01-02-06	Auger Wire Kit	1	4 MAR 2023
*+	6004-01-02-06-01	Auger Wire Harness	2	16 APR 2024
	6004-01-02-06-01-01	SPST MOM/OFF/MOM Switch	1	4 MAR 2023
	6004-01-02-06-01-02	Switch Diode	1	4 MAR 2023
	6004-01-02-06-01-02-01	Diode	1	4 MAR 2023
	6004-01-02-06-01-03	9 Pin Socket Connector	1	4 MAR 2023
	6004-01-02-06-01-04	9 Pin Pin Connector	1	4 MAR 2023
	6004-01-02-06-02	10 Gauge Wires	2	16 APR 2024
*+	6004-01-02-07	Baffle Kit AT-802	1	4 MAR 2023
	6004-01-02-07-01	AT-802 Hopper Baffle	1	4 MAR 2023
	6004-01-02-07-02	10-32 x 2" SS Hex Screw	1	4 MAR 2023
*+	6004-02	Hopper Packer 502 602	2	18 JUL 2024
*+	6004-02-01	Door Assembly 502 602	1	4 MAR 2023
*+	6004-02-01-01	502 602 Door Frame Assy	1	4 MAR 2023
	6004-02-01-01-01	502 602 Door Frame	1	4 MAR 2023
	6004-02-01-01-01-01	Door Frame Leg	1	4 MAR 2023
	6004-02-01-01-02	502 602 Slide Rod Assy	1	4 MAR 2023
	6004-02-01-01-02-01	Slide Rod 502 602	1	4 MAR 2023
*+	6004-02-02	Hopper Packer Auger 502 602	1	4 MAR 2023
*+	6004-02-02-02	502 602 Auger Shaft Assy	1	4 MAR 2023
	6004-02-02-02-10	502 602 Auger Shaft	1	4 MAR 2023
*+	6004-03	Hopper Packer 402	2	18 JUL 2024
*+	6004-03-01	Door Assembly 402	1	4 MAR 2023
*+	6004-03-01-01	402 Door Frame Assy	1	4 MAR 2023
	6004-03-01-01-01	402 Door Frame	1	4 MAR 2023
	6004-03-01-01-01-04	Door Frame Cross Support 402 Drilled	1	4 MAR 2023
	6004-03-01-01-01-09	Door Frame Coupling Adapter	1	4 MAR 2023
	6004-03-01-01-02	402 Slide Rod Assy	1	4 MAR 2023
	6004-03-01-01-02-01	Slide Rod 402	1	4 MAR 2023
	6004-03-01-01-03	Hinge AT-402	2	18 JUL 2024
	6004-03-01-01-03-01	Upper Hinge Plate AT-402	1	4 MAR 2023
	6004-03-01-01-03-02	Actuator Attachment AT-402	1	4 MAR 2023
	6004-03-01-01-03-03	Upper Hinge Brace AT-402	1	4 MAR 2023
	6004-03-01-01-05	Outer Hinge AT-402	1	4 MAR 2023
*+	6004-03-01-02	Roller Latch Housing 402 Assy	1	4 MAR 2023
	6004-03-01-02-02	Roller Latch Doubler 402	1	4 MAR 2023
*+	6004-03-02	Hopper Packer Auger 402	1	4 MAR 2023
*+	6004-03-02-02	402 Auger Shaft Assy	1	4 MAR 2023
	6004-03-02-02-10	402 Auger Shaft	1	4 MAR 2023
*+	6004-03-02-03	Auger Support Assembly 402	1	4 MAR 2023
	6004-03-02-03-01	Auger Support 400	1	4 MAR 2023
*+	6004-04	Hopper Packer 510	2	18 JUL 2024
*+	6004-04-01	Door Assembly 510	1	4 MAR 2023
*+	6004-04-01-01	510 Door Frame Assy	1	4 MAR 2023
	6004-04-01-01-01	510 Door Frame	1	4 MAR 2023
	6004-04-01-01-01-01	510 Door Frame Leg	1	4 MAR 2023

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	6004-04-01-01-01-04	510 Door Frame Cross Support Aft	1	4 MAR 2023
	6004-04-01-01-01-05	510 Door Frame Cross Support Front	1	4 MAR 2023
	6004-04-01-01-01-10	510 Door Cross Plate	1	4 MAR 2023
	6004-04-01-01-01-02	510 Slide Rod Assy	1	4 MAR 2023
	6004-04-01-01-02-01	Slide Rod 510	1	4 MAR 2023
	6004-04-01-01-01-03	Hinge 510	1	4 MAR 2023
	6004-04-01-01-03-01	Upper Hinge Plate 510	1	4 MAR 2023
	6004-04-01-01-03-02	Actuator Attachment Thrush	1	4 MAR 2023
	6004-04-01-01-03-03	Upper Hinge Brace 510	1	4 MAR 2023
	6004-04-01-01-01-05	Outer Hinge Thrush	1	4 MAR 2023
	6004-04-01-01-25	Latch Pivot, Thrush SS Frame	1	4 MAR 2023
	6004-04-01-01-30	Silicon Rubber Seal Thrush	1	4 MAR 2023
	6004-04-01-01-31	510 Hopper Lid	1	4 MAR 2023
	6004-04-01-01-32	510 Cover Plate	1	4 MAR 2023
	6004-04-01-01-33	510 Lip Plate	1	4 MAR 2023
*+	6004-04-02	Hopper Packer Auger 510	1	4 MAR 2023
*+	6004-04-02-03	Auger Support Assy Thrush	1	4 MAR 2023
	6004-04-02-03-01	Auger Support Thrush	1	4 MAR 2023
*+	6004-05	Hopper Packer 710	2	18 JULY 2024
*+	6004-05-01	Door Assembly 710	1	4 MAR 2023
*+	6004-05-01-01	710 Door Frame Assy	1	4 MAR 2023
	6004-05-01-01-01	710 Door Frame	1	4 MAR 2023
	6004-05-01-01-01-01	710 Door Frame Leg	1	4 MAR 2023
	6004-05-01-01-01-04	710 Door Frame Cross Support	1	4 MAR 2023
	6004-05-01-01-01-10	710 Door Cross Plate	1	4 MAR 2023
	6004-05-01-01-01-03	Hinge 710	1	4 MAR 2023
	6004-05-01-01-03-01	Upper Hinge Plate 710	1	4 MAR 2023
	6004-05-01-01-03-03	Upper Hinge Brace 710	1	4 MAR 2023
	6004-05-01-01-31	710 Hopper Lid	1	4 MAR 2023
	6004-05-01-01-32	710 Cover Plate	1	4 MAR 2023
	6004-05-01-01-33	710 Lip Plate	1	4 MAR 2023
*+	6004-05-02	Hopper Packer Auger 710	1	4 MAR 2023
Engineering Analysis				
	6004-WEIGHT	Weight & Balance Analysis	2	4 APR 2024
	6004-ELECTRICAL	Electrical Load Analysis	1	7 MAR 2023
Continued Airworthiness				
	6004-ICA	Instruction for Continued Airworthiness	1	12 DEC 2023
Airplane Flight Manual Supplement				
	6004-FMS	Airplane Flight Manual Supplement	1	FAA DATE
Ground Test				
+	6004-GROUND TEST	Ground Test Plan	1	12 DEC 2023
Note:				
*	Indicates Manufacturing Drawing is included in Installation Package			
+	Indicates Document or Drawing is part of ICA			

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Conformity Parts List:

Drawing 6004-01-01 Rev 2 Dated 02/01/2024

Assy: 6004-01-01

Sub Assy: 6004-01-01-01

Sub Assy: 6004-01-01-01-01

Detail Part 6004-01-01-01-01 -01

Detail Part 6004-01-01-01-01 -02

Detail Part 6004-01-01-01-01 -03

Detail Part 6004-01-01-01-01-04

Detail Part 6004-01-01-01-01-05

Detail Part 6004-01-01-01-01-07

Detail Part 6004-01-01-01-01-08

Detail Part 6004-01-01-01-01-09

Sub-Assy: 6004-01-01-01-02

Detail Part 6004-01-01-01-02-01

Detail Part 6004-01-01-01-02-02

Detail Part 6004-01-01-01-02-03

Detail Part 6004-01-01-01-02-04

Detail Part 6004-01-01-01-02-05

Sub-Assy: 6004-01-01-01-03

Detail Part 6004-01-01-01-03-01

Detail Part 6004-01-01-01-03-02

Detail Part 6004-01-01-01-04

Detail Part 6004-01-01-01-05

Detail Part 6004-01-01-01-06

Detail Part 6004-01-01-01-07

Detail Part 6004-01-01-01-08

Detail Part 6004-01-01-01-10

Detail Part 6004-01-01-01-11

Detail Part 6004-01-01-01-12

Detail Part 6004-01-01-01-13

Detail Part 6004-01-01-01-15

Detail Part 6004-01-01-01-16

Detail Part 6004-01-01-01-17

Detail Part 6004-01-01-01-18

Detail Part 6004-01-01-01-19

Detail Part 6004-01-01-01-20

Detail Part 6004-01-01-01-21

Detail Part 6004-01-01-01-22

Detail Part 6004-01-01-01-23

Detail Part 6004-01-01-01-24

Detail Part 6004-01-01-01-25

Detail Part 6004-01-01-01-26

Sub Assy: 6004-01-01-02

Detail Part 6004-01-01-02-01

Detail Part 6004-01-01-02-02

Sub Assy: 6004-01-01-03

Detail Part 6004-01-01-03-01

Detail Part 6004-01-01-03-02

Detail Part 6004-01-01-03-03

Sub Assy: 6004-01-01-04
Detail Part 6004-01-01-04-01
Sub Assy: 6004-01-01-05
Sub-Assy: 6004-01-01-05-01
Detail Part 6004-01-01-05-01-01
Detail Part 6004-01-01-05-01-03
Detail Part 6004-01-01-05-01-10
Detail Part 6004-01-01-05-01-02

Drawing 6004-01-02 Rev 1 Dated 3/4/2023

Assy: 6004-01-02
Sub Assy: 6004-01-02-01
Sub Assy: 6004-01-02-01-01
Detail Part 6004-01-02-01-01-01
Detail Part 6004-01-02-01-01-02
Detail Part 6004-01-02-01-01-03
Detail Part 6004-01-02-01-01-04
Detail Part 6004-01-02-01-01-05
Detail Part 6004-01-02-01-01-01 (conformed on Drawing 6004-01-02 Rev 1)
Detail Part 6004-01-02-01-02
Detail Part 6004-01-02-01-03
Detail Part 6004-01-02-01-04
Detail Part 6004-01-02-01-05
Detail Part 6004-01-02-01-06
Detail Part 6004-01-02-01-07
Sub Assy: 6004-01-02-02
Detail Part 6004-01-02-02-01
Detail Part 6004-01-02-02-02
Detail Part 6004-01-02-02-03
Detail Part 6004-01-02-02-04
Detail Part 6004-01-02-02-05
Detail Part 6004-01-02-02-06
Detail Part 6004-01-02-02-07
Detail Part 6004-01-02-02-10
Sub Assy: 6004-01-02-03
Detail Part 6004-01-02-03-01
Detail Part 6004-01-02-03-02
Detail Part 6004-01-01-03-03 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-02-04
Detail Part 6004-01-02-04-01
Detail Part 6004-01-02-04-02
Detail Part 6004-01-02-04-03
Detail Part 6004-01-02-04-04
Detail Part 6004-01-02-04-05
Detail Part 6004-01-02-04-06
Detail Part 6004-01-02-04-07
Detail Part 6004-01-02-04-08
Detail Part 6004-01-02-04-09
Sub Assy: 6004-01-02-04-10
Detail Part 6004-01-02-04-10-01
Sub Assy: 6004-01-02-05
Detail Part 6004-01-02-05-01

- Detail Part 6004-01-02-05-02
- Detail Part 6004-01-02-05-03
- Detail Part 6004-01-02-04-08 (conformed on Drawing 6004-01-02 Rev 1)
- Detail Part 6004-01-02-04-09 (conformed on Drawing 6004-01-02 Rev 1)
- Sub Assy: 6004-01-02-06
 - Sub Assy: 6004-01-02-06-01
 - Detail Part 6004-01-02-06-01-01
 - Sub Assy: 6004-01-02-06-01-02
 - Detail Part 6004-01-02-06-01-02-01
 - Detail Part 6004-01-02-06-01-03
 - Detail Part 6004-01-02-06-01-04
 - Detail Part 6004-01-02-06-02
- Sub Assy: 6004-01-02-07
 - Detail Part 6004-01-02-07-01
 - Detail Part 6004-01-02-07-02

Drawing 6004-02-01 Rev 1 Dated 3/4/2023

Assy: 6004-02-01

- Sub Assy: 6004-02-01-01
 - Sub Assy: 6004-02-01-01-01
 - Detail Part 6004-02-01-01-01-01
 - Detail Part 6004-01-01-01-01-02 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-01-03 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-01-04 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-01-05 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-01-07 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-01-08 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-01-09 (conformed on Drawing 6004-01-01 Rev 1)
 - Sub-Assy: 6004-02-01-01-02
 - Detail Part 6004-02-01-01-02-01
 - Detail Part 6004-01-01-01-02-02 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-02-03 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-02-04 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-02-05 (conformed on Drawing 6004-01-01 Rev 1)
 - Sub-Assy: 6004-01-01-01-03 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-04 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-05 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-06 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-07 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-08 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-10 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-11 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-12 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-13 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-15 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-17 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-18 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-19 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-20 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-21 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-22 (conformed on Drawing 6004-01-01 Rev 1)
 - Detail Part 6004-01-01-01-23 (conformed on Drawing 6004-01-01 Rev 1)

Detail Part 6004-01-01-01-24 (conformed on Drawing 6004-01-01 Rev 1)
Detail Part 6004-01-01-01-25 (conformed on Drawing 6004-01-01 Rev 1)
Detail Part 6004-01-01-01-26 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-01-02 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-01-03 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-01-04 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-01-05 (conformed on Drawing 6004-01-01 Rev 1)

Drawing 6004-02-02 Rev 1 Dated 3/4/2023

Assy: 6004-02-02

Sub Assy: 6004-01-02-01 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-02-02-02
Detail Part 6004-01-02-02-01 (conformed on Drawing 6004-01-02 Rev 1)
Detail Part 6004-01-02-02-02 (conformed on Drawing 6004-01-02 Rev 1)
Detail Part 6004-01-02-02-03 (conformed on Drawing 6004-01-02 Rev 1)
Detail Part 6004-01-02-02-04 (conformed on Drawing 6004-01-02 Rev 1)
Detail Part 6004-01-02-02-05 (conformed on Drawing 6004-01-02 Rev 1)
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Detail Part 6004-02-02-02-10
Sub Assy: 6004-01-02-03 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-01-02-04 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-01-02-05 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-01-02-06 (conformed on Drawing 6004-01-02 Rev 1)

Drawing 6004-03-01 Rev 1 Dated 3/4/2023

Assy: 6004-03-01

Sub Assy: 6004-03-01-01
Sub Assy: 6004-03-01-01-01
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Detail Part 6004-01-01-01-02-05 (conformed on Drawing 6004-01-01 Rev 1)
Sub-Assy: 6004-03-01-01-03
Detail Part 6004-03-01-01-03-01
Detail Part 6004-03-01-01-03-02
Detail Part 6004-03-01-01-03-03
Detail Part 6004-01-01-01-04 (conformed on Drawing 6004-01-01 Rev 1)
Detail Part 6004-03-01-01-05
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Detail Part 6004-01-01-01-25 (conformed on Drawing 6004-01-01 Rev 1)
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Sub Assy: 6004-03-01-02
Detail Part 6004-01-01-02-01 (conformed on Drawing 6004-01-01 Rev 1)
Detail Part 6004-03-01-02-02
Sub Assy: 6004-01-01-04 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-01-05 (conformed on Drawing 6004-01-01 Rev 1)

Drawing 6004-03-02 Rev 1 Dated 3/4/2023

Assy: 6004-03-02

Sub Assy: 6004-01-02-01 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-03-02-02
Detail Part 6004-01-02-02-01 (conformed on Drawing 6004-01-02 Rev 1)
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Detail Part 6004-03-02-02-10
Sub Assy: 6004-03-02-03
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Detail Part 6004-01-02-03-02 (conformed on Drawing 6004-01-02 Rev 1)
Detail Part 6004-03-02-03-01
Sub Assy: 6004-01-02-04 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-01-02-05 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-01-02-06 (conformed on Drawing 6004-01-02 Rev 1)

Drawing 6004-04-01 Rev 1 Dated 3/4/2023

Assy: 6004-04-01

Sub Assy: 6004-04-01-01
Sub Assy: 6004-04-01-01-01
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Sub-Assy: 6004-04-01-01-02
Detail Part 6004-04-01-01-02-01
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Detail Part 6004-01-01-01-02-04 (conformed on Drawing 6004-01-01 Rev 1)
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Sub-Assy: 6004-04-01-01-03
Detail Part 6004-04-01-01-03-01
Detail Part 6004-04-01-01-03-02
Detail Part 6004-04-01-01-03-03
Detail Part 6004-04-01-01-05
Detail Part 6004-01-01-01-07 (conformed on Drawing 6004-01-01 Rev 1)
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Detail Part 6004-04-01-01-33
Detail Part 6004-01-02-04-05 (conformed on Drawing 6004-01-02 Rev 1)
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Sub Assy: 6004-01-01-02 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-01-03 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-01-04 (conformed on Drawing 6004-01-01 Rev 1)
Sub Assy: 6004-01-01-05 (conformed on Drawing 6004-01-01 Rev 1)

Drawing 6004-04-02 Rev 1 Dated 3/4/2023

Assy: 6004-04-02

Sub Assy: 6004-01-02-01 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-01-02-02 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-04-02-03
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Detail Part 6004-04-02-03-01
Sub Assy: 6004-01-02-04 (conformed on Drawing 6004-01-02 Rev 1)
Sub Assy: 6004-01-02-05 (conformed on Drawing 6004-01-02 Rev 1)
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Drawing 6004-05-01 Rev 1 Dated 3/4/2023

Assy: 6004-05-01

Sub Assy: 6004-05-01-01

Sub Assy: 6004-05-01-01-01

Detail Part 6004-05-01-01-01-01

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Detail Part 6004-01-01-01-01-03 (conformed on Drawing 6004-01-01 Rev 1)

Detail Part 6004-05-01-01-01-04

Detail Part 6004-01-01-01-01-08 (conformed on Drawing 6004-01-01 Rev 1)

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Sub-Assy: 6004-04-01-01-02 (conformed on Drawing 6004-04-01 Rev 1)

Sub-Assy: 6004-05-01-01-03

Detail Part 6004-05-01-01-03-01

Detail Part 6004-04-01-01-03-02 (conformed on Drawing 6004-04-01 Rev 1)

Detail Part 6004-05-01-01-03-03

Detail Part 6004-04-01-01-05 (conformed on Drawing 6004-04-01 Rev 1)

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Detail Part 6004-01-01-01-17 (conformed on Drawing 6004-01-01 Rev 1)

Detail Part 6004-01-01-01-18 (conformed on Drawing 6004-01-01 Rev 1)

Detail Part 6004-01-01-01-19 (conformed on Drawing 6004-01-01 Rev 1)

Detail Part 6004-01-01-01-20 (conformed on Drawing 6004-01-01 Rev 1)

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Detail Part 6004-04-01-01-25 (conformed on Drawing 6004-04-01 Rev 1)

Detail Part 6004-01-01-01-26 (conformed on Drawing 6004-01-01 Rev 1)

Detail Part 6004-04-01-01-30 (conformed on Drawing 6004-04-01 Rev 1)

Detail Part 6004-05-01-01-31

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Detail Part 6004-01-02-04-06 (conformed on Drawing 6004-01-02 Rev 1)

Detail Part 6004-01-02-04-07 (conformed on Drawing 6004-01-02 Rev 1)

Sub Assy: 6004-01-01-02 (conformed on Drawing 6004-01-01 Rev 1)

Sub Assy: 6004-01-01-03 (conformed on Drawing 6004-01-01 Rev 1)

Sub Assy: 6004-01-01-04 (conformed on Drawing 6004-01-01 Rev 1)

Sub Assy: 6004-01-01-05 (conformed on Drawing 6004-01-01 Rev 1)

Drawing 6004-05-02 Rev 1 Dated 3/4/2023

Assy: 6004-05-02

Sub Assy: 6004-01-02-01 (conformed on Drawing 6004-01-02 Rev 1)

Sub Assy: 6004-01-02-02 (conformed on Drawing 6004-01-02 Rev 1)

Sub Assy: 6004-04-02-03 (conformed on Drawing 6004-04-02 Rev 1)

Sub Assy: 6004-01-02-04 (conformed on Drawing 6004-01-02 Rev 1)

Sub Assy: 6004-01-02-05 (conformed on Drawing 6004-01-02 Rev 1)

Sub Assy: 6004-01-02-06 (conformed on Drawing 6004-01-02 Rev 1)

End of Conformity Parts List

INSTALLATION INSTRUCTIONS

Contents

710 Thrush represents Thrush models: S2R-T660, S2RHG-T65

PARTS LIST

Qty	Description		Part Number
1	Door Frame Assembly	AT-802	6004-01-01-01
		AT-502 and AT-602	6004-02-01-01
		AT-402	6004-03-01-01
		Thrush 510	6004-04-01-01
		Thrush 710	6004-05-01-01
1	Roller Latch Assembly	AT-802, AT-602, AT-502, 510, 710	6004-01-01-02
		AT-402	6004-03-01-02
1	Door Stop Assembly	AT-802, AT-602, AT-502, 510, 710	6004-01-01-03
2	Mechanical Latch Kit	All Models	6004-01-01-04
1	Door Wire Kit	All Models	6004-01-01-05
1	Auger Motor Assembly	All Models	6004-01-02-01
1	Auger Shaft Assembly	AT-802, 510, 710	6004-01-02-02
		AT-502 and AT-602	6004-02-02-02
		AT-402	6004-03-02-02
1	Auger Support Assembly	AT-802, AT-602, AT-502	6004-01-02-03
		AT-402	6004-03-02-03
		510, 710	6004-04-02-03
1	Forward Wall Kit	All Models	6004-01-02-04
1	Auger Motor & Controller	All Models	6004-01-02-05
1	Auger Wire Kit	All Models	6004-01-02-06
1	Baffle Kit	AT-802	6004-01-02-07
		AT-602, AT-502, AT-402, 510, 710	NA

INSTALLATION: Airplane
OPENING AIRCRAFT

1. Remove Left, Right and Top Cowls.
2. Disconnect the battery
3. Remove upper skin panels on right side above the wing and below the cockpit door.
4. Remove Hopper door latches, handle, bumpers, and hinge. (hardware can be re-installed to fill holes in door and hopper or holes can be filled with fiberglass)
5. Remove Reabe hopper Qty probe if installed forward of hopper door.
6. Remove Rinse tank if installed on engine mount forward of firewall.

DOOR SEAL THRUSH

1. Thrush aircraft only, Hopper Door is not reused, Hopper Door should be weighed and can be set aside.
2. Prepare seal channel by brushing flat latex paint all around in seal channel.
3. Mix Evercoat Fiberglass resin with hardener and pour in channel trying to keep even with inside edge of channel.
4. Use aluminum tape as required to mask off around inside edge of channel and outside edge of channel.
5. Let resin harden at least 1 to 2 hours before proceeding.

LOCATING AND MOUNTING PARTS

1. Draw an aircraft center line on top of hopper from the firewall to 4 inches aft of the door opening.
2. Draw a line 9-1/2" aft of the inside forward hopper wall extending 3.5" left and right of the center line. (this is easiest to accomplish by measuring from inside FWD wall of hopper to the lip of the door opening and then moving that distance minus the 9-1/2" FWD along the outside of the hopper, The Centerline and New 9-1/2" marked line should be perpendicular)
3. Place Door Frame Assembly on top of hopper (with doubler plates and hardware removed) align center of door frame with centerline on top of hopper. See Drawing 6004-0-2
 - a. **Thrush:** The Door and Frame Assembly sit in the recess in the top of the hopper. Attempt to center the assembly both fore aft and left-right. Once aligned, match drill (4) 1/4" size holes and (8 holes on 510) or (10 holes on 710) #9 size holes through.
 - b. **Air Tractor:** The fore aft location is found by placing 9-1/2" line to be visible through 1/4" holes in Door frame assembly, (AT-802 uses holes farthest aft, AT-502 and 602 use holes farthest forward, AT-400 uses the only set) once aligned,

match drill (4 holes on AT-502, 602, 802) or (2 holes on AT-400) 1/4" size holes and (10) #9 size holes through. The Additional (4) (2 each side) #9 door hinge mount holes can be drilled using a #9 drill.

Note: Some other hardware may need to be removed and have holes plugged or have holes transferred to door hinge frame, Examples Rinse systems and GPS lightbar mounts, or old holes just plugged with screws.

See Drawing 6004-0-2 for door frame mounting illustrations.

4. Install 3/16 Hardware and doubler plates (Air Tractor only), Door Hinge doubler may need to be pre-bent to aid in fit and alignment, Drill (4) remaining #9 holes from Door hinge doubler out, two holes forward of each hinge (if required). Install 3/16" hardware and seal with Hopper Sealant.
5. Auger Motor Bracket Install See Drawing 6004-0-3
 - a. **Air Tractor:** Install 1/4" hardware to hold door hinge on and using 1/4" holes that were drilled on the 9-1/2" line mount auger motor hanging bracket. (End doubler and hardware must be removed)
 - b. **Thrush:** Drill (2) 1/4" holes on 9-1/2" line one left one right 3-1/16" from the centerline. Install 1/4" hardware holes that were drilled on the 9-1/2" line mount auger motor hanging bracket. (End doubler and hardware must be removed)
6. With aft end of auger motor supported by hanging bracket, hold motor flush to FWD inside wall of hopper. Center of Motor should be aligned with center line of aircraft and 7" from the top inside wall of the hopper. Drill far left and far right 1/4" bolt flange holes.
7. Remove Auger Motor Housing by pulling nuts off 1/4" bolts on 9-1/2" line, Re-install nuts after Auger Motor Housing is removed
8. Place Auger Motor Doubler on forward inside wall of hopper using (2) 1/4" holes just drilled, pin doubler in place and Drill remaining (6) 1/4" holes and using a 4.5" hole saw drill out hole in center of Auger Motor Doubler.
9. Transfer Center of 4.5" forward onto firewall forward of hopper. (Drilling a small 1/8" hole is a good way to transfer the hole so it can be seen from front side of firewall)
10. Using "Transferred Hole Center" cut an 8-1/8" Dia hole in the firewall
11. Using FWD Wall Access Panel and FWD Wall Doubler as guide, (24) drill holes for #6 mounting hardware, Clean and deburr holes See Drawing 6004-0-4
12. Secure FWD WALL Doubler to backside of firewall using #6 hardware (Part Numbers 6004-01-02-04-03, 6004-01-02-04-04 and 6004-01-02-04-05, Clip nuts are connected onto FWD WALL DOUBLER) seal with High Temp Sealant (Flamemaster CS-1900, Pro-Seal B2, Permatex 81630 Ultra Red, Or Permatex 81160 Red RTV) per manufacture's instruction. Completely covering faying surfaces with sealant and tighten hardware immediately after application of sealant. See Drawing 6004-0-4
13. Install Auger Motor Housing to Forward hopper wall using supplied 1/4" hardware and seal flange to hopper wall using Hopper Sealant.

Note: Hopper Sealant refers to Flamemaster CS-3204 or similar tank sealant.

14. Install 1/4" hardware though Stationary Door Frame, Seal using Hopper Sealant and make

sure to connect Auger Motor Hanging Bracket.

15. Pull both 10mm bolts from linear actuator set linear actuator aside
16. Place door frame down on top of hopper.
17. Using 7/16” rod ends adjust that aft end of door frame is centered on center line. (a minimum of 2 threads and a max of 10 threads should be visible past the jam nut) (This adjustment should only be required on Air Tractor models)
18. Make sure slide rod is locked in open position (the Spring-loaded catch must engage slide rod)
19. With actuator fully retracted attach actuator to both frame attachment and Stationary actuator attachment, adjust slide lock ½-20 adjustment to have frame rest in 90 to 100 deg open position.
20. Place Hopper Door on opening and center in opening. (Air Tractor Only)
21. Disconnect stationary side of actuator by removing 10mm nut and bolt
22. Lower Door frame onto Door (Air Tractor) or Door Opening (Thrush)
23. Check that Door is centered fore and aft and left and right, as well as aligned.
24. Check that frame is aligned and comes down with the slide lock centered.
25. Tighten 7/16 jam nuts on hinge rod ends to 250 in lbs., verify the rod ends are vertically aligned.
26. Tighten ½” Jam nut on slide rod to 500 in lbs., verify the eye bolt is vertically aligned with hole offset up
27. Final check that lid and frame look centered and aligned
28. Drill #9 holes for 3/16 hardware to attach door to door frame. (Air Tractor Only)
29. Insert 4 corner 3/16 bolts to temporally pin door to door frame (Air Tractor Only)
30. With slide rod fully retracted to open position align Latch Housing tangent to end of roller bearing, check free sitting height of door against top of hopper if door is resting max door height above top of hopper, .8” If too high trim seal or adjust frame or shims to allow door to rest at or below proper height. See Drawing 6004-0-2 Sheet 7 & Figure 1.

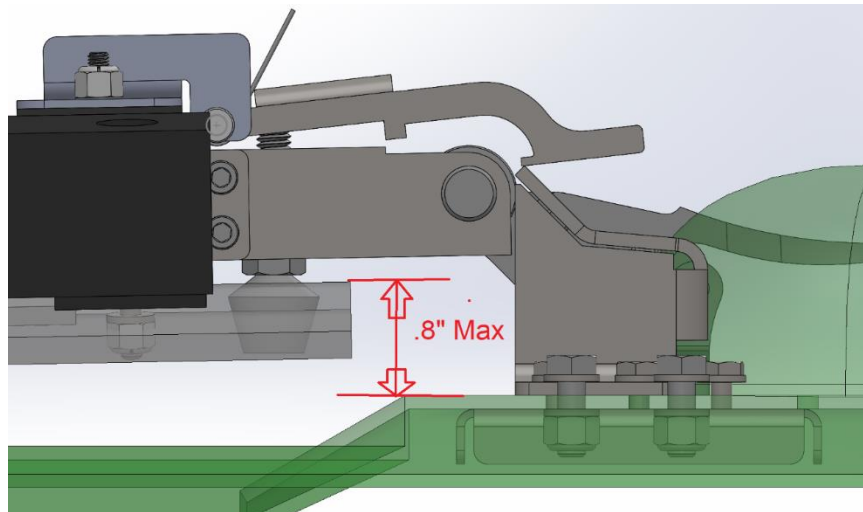


Figure 1

31. Mark position of Roller Latch Assembly, this is the farthest forward Roller Latch Assembly position.
32. Apply closing force to door frame. 200 lbs. +/- 20 LBS of down force to compress the seal, this force is best applied to the lid frame on the aft ¼ of the frame.
33. Fully extend the actuator
34. Re connect the actuator to the stationary attachment using 10mm hardware.
35. Check location and clearance of Roller Latch Assembly and roller bearing.
36. If roller is too low, stainless steel spacer washers can be used under lid frame mounting pads to force lid down and frame up. If Roller latch is too high, the check clearance and fit for seal but, if necessary, Roller Latch Assembly can be moved aft to give more clearance.
37. Once Roller Latch Assembly is positioned. Drill (6) #9 holes for Latch housing and Latch Housing Doubler plate. Two of the holes are drilled from doubler plate up. (NOTE: AT-400 only has 4 mount holes all are drilled from outside)
38. Secure Roller Latch Assembly to hopper using 3/16 hardware Seal hardware with Hopper Sealant. It might prove to be helpful to Disconnect 10 mm bolts from actuator so you can more freely move the door open and closed.
39. Secure Door to Door frame using 3/16 hardware Seal hardware with Hopper Sealant. It might prove to be helpful to Disconnect 10 mm bolts from actuator so you can more freely move the door open and closed.
40. Drill (2) ¼" holes in the hopper door, 3 Inches aft of the front edge 1" right and left of center, Install Door Stop Bumper with included hardware and seal with Hopper Sealant. Not done on AT-400 See drawing 6004-0-3
41. From inside hopper position Aft Auger support, See Drawing 6004-0-3.
 - a. Air Tractor AT-502, 602, & 802: Support tends to be as far right as possible till it touches the vent ball hold down frame (green arrow Figure 2), and just aft of the tab that holds the vent ball down (red arrow Figure 2). See Drawing 6004-0-3 & Figure 2.

- b. Air Tractor AT-400: Support needs to be checked with vent assembly, to install or remove auger the auger shaft may need to slide into slots in hopper vent.
- c. Thrush: Verify support position prevents auger from sliding aft to touch aft hopper wall during auger installation or removal.

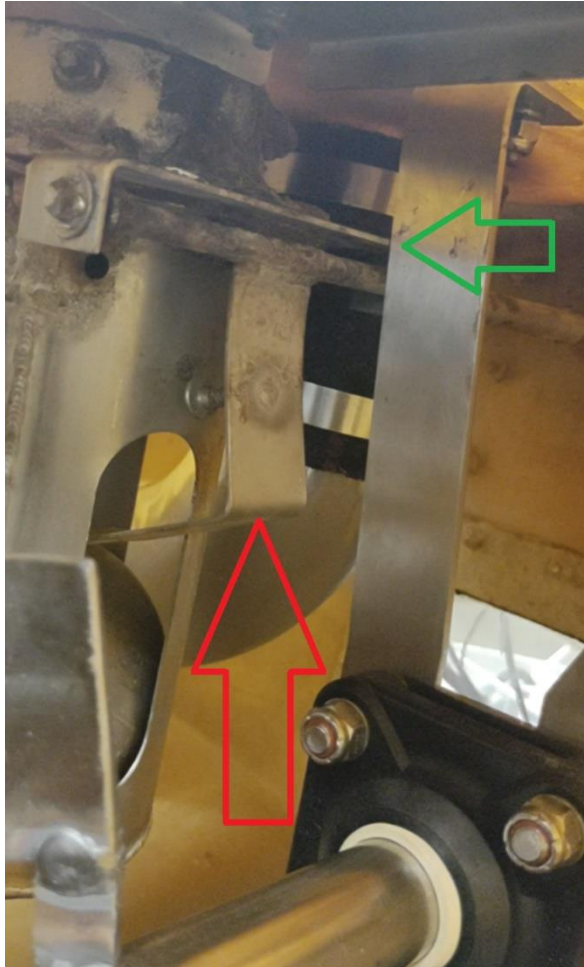


Figure 2

- 42. Check that support does not interfere with Roller Latch Assembly or vent operation
- 43. Drill (3) 1/4" holes from inside hopper using aft auger support as guide.
- 44. Mount aft auger support with 1/4" hardware, Seal hardware with Hopper Sealant Note: Large Area washer on outside of hopper.
- 45. Mount 2 Mechanical latches on top of hopper to catch aft side of door but miss the hopper door frame and vent system. Drill (8) 1/4" holes and use included hardware, to mount clamps. Seal holes with Hopper Sealant. See Drawing 6004-0-2
- 46. AT-502 and AT-602 Trim Center baffle with a rectangular cutout centered on the top 10" wide and 11" tall with .5" radius on the 4 new corners.
- 47. Install auger, first front end with cam lock is inserted into the front of the hopper extending past motor housing, Second the aft end is inserted into the spherical ball of the aft auger support. Third the 4" camlock is inserted and aligned at the same time as the love joy connectors. Once the camlock is slid in the cam lock can be actuated closed.

Notes: First time installing auger having 5/16" bolts on bearing support loose will help in getting alignment. Also keeping Spider out of love joy will ease in first installation and fitting. Once Installed level the 2 bolts of the cam lock and mark the Bearing Retainer so you know the top. Then you can tighten the two 5/16" bolts to 60 In Lbs.

48. Mount Motor Controller and Motor Controller Box. See Drawing 6004-0-4
 - a. Remove Motor Controller Box cover (part with flanges that overlap other part) and set aside.
 - b. Place Motor Controller in Motor Controller Box housing (part with only 2 bends), position controller so there is clearance for wires on all sides of controller and connectors on 2 adjacent sides. Match drill (4) #F holes for mounting Motor Controller and Motor Controller Box housing.
 - c. Drill (2) 1" holes in sides of Motor Controller Box Housing sides for cable passthrough holes, holes are positioned as routing requires, holes can be on either or both sides of box, maintain 1/4" to 1/2" edge distance from edge of hole to edge of housing.
 - d. Mount Motor Controller and Motor Controller Box on left side of firewall just past the end of the rinse tank the same height as the access panel using 1/4" hardware and #F drill for holes. Make sure Motor wires can reach motor controller before drilling mounting holes in firewall, Motor Controller connectors must all remain inside Motor Controller Box. See Drawing 6004-0-4
49. Drill 1" holes for wires to pass through fire wall or access panel. Depending on path taken Reference Drawing 6004-0-4
50. Install wires through 1" holes in firewall and Motor Controller Box also install grommets in same 1" holes on firewall and in Motor Controller box . Part # 6004-01-02-04-08 and 6004-01-02-04-09

Note: Wire Routing: Make sure that the wire does not chafe against control cables, airframe structure, moving parts etc., or come in contact with the fuel line. Where physical separation of the electrical wiring or conduit from the fuel lines is impracticable, locate the wiring above the fuel line and properly secure it to the airframe structure. Wire Should be supported every 18 inches to fasten to aircraft or wire bundles to prevent harmful movement of wire.

In no case should wiring be supported by the fuel line.
51. Install Grommet heat shields on firewall Part # 6004-01-02-04-10, using supplied #6 hardware Part # 6004-01-02-04-05, 6004-01-02-04-06 and 6004-01-02-04-07 and drilling #27 to mount shields. Reference Drawing 6004-0-4
52. Connect Auger Motor to Auger Controller, U-WHITE, V-BLACK, W-RED, 6 Pin connects to 6-pin, connectors must be inside Motor Controller Box. See wire Drawing 6004-0-1 All three motor wires on terminals on Auger Controller is covered by silicone rubber boot (MS-25171-1S).
53. Run Auger Ground Line (Supplied Black or White 10-gauge wire) from B- Terminal on Auger Controller to an air frame ground, recommended forward of the firewall. Auger Ground Line must exit Motor Controller Box through hole sealed with gromet. Excess wire can be trimmed, Good Grounds can be found by battery boxes and main Relays. Terminate the wires with Yellow #10 crimp terminals (TE 36161 or equivalent) or

appropriately sized terminal for aircraft ground. Connect wire to Controller and Ground. Secure wire along path using tie wraps.

Note: If no suitable ground is available, install a ground stud using either the aircraft maintenance/wiring manual or AC 43.13-1B For stack-up see Table 11-14 or Figure 11.20 from AC 43.13-1B

Recommended hardware for stud on Steel structure: MS35207-265 Screw, Structure, AN345-10 Plain Nut, AN960-10 Washer, Tinned Copper Terminal, AN960-10 Washer, MS35333-39 Lock Washer, AN365-1032A Locknut

Note: All labels and placards identified to be installed, are customer supplied and must be in bold white on black 1/8" font indelible material and permanently marked. Placards and labels must be smaller than 2" x 3" x 0.7"

54. Find two breaker locations Label one "Auger Power", and label the other "Hopper Packer" The breakers should be next to each other.
55. Install a 40 Amp pull type breaker (Tyco Electronics W23-X1A1G-40 or equivalent) into the position labeled Auger Power.
56. Using 10-gauge wire (M22759-16-10-2, a piece of the supplied 10-gauge wire, or from AC 43.13-1B tables 11-11 & 11-12) connect the 40-amp braker to the Aircraft Main Buss Bar. Terminate the wires with Yellow #10 crimp terminals (TE 36161 or equivalent) or appropriately sized terminal for Breaker and buss bar. Connect wire to Buss Bar and Breaker.
57. Install a 7.5 Amp pull type breaker (Klixon PN 7277-2-7.5 or equivalent) into the position labeled Hopper Packer.
58. Using 16-gauge wire (M22759-16-16-2, a piece of excess length cut off of the Door Wire Harness 6004-01-01-05-01, or from AC 43.13-1B tables 11-11 & 11-12) connect the 7.5-amp braker to the Aircraft Main Buss Bar. Terminate the wires with Red #6 crimp terminals (TE 171508-1 or equivalent) or appropriately sized terminal for Breaker and buss bar. Connect wire to Buss Bar and Breaker.
59. Find and locate 3 switch locations next to each other for the control switches, A new panel tab can be made from .063" aluminum if no space is available (the new panel tab is customer fabricated and the detail can be found on install drawing 6004-0-5). The 3 switches should be next to each other and labeled,

"Hopper Packer" with the down position labeled "Off" and the Up Position "ON"

"Hopper Door" with the down position labeled "Closed" and the Up Position "Open"

"Hopper Auger" with the down position labeled "REV" and the Up Position "FWD"

See Drawing 6004-0-5
60. Install placards by Hopper Packer Switches "DO NOT ATTEMPT TO TAXI OR TAKE OFF WITH THE HOPPER PACKER ON" and "DO NOT ATTEMPT TO OPEN HOPPER DOOR DURING FLIGHT"
61. Install the Hopper Packer Power switch into the hole labeled Hopper Packer. The toggle switch is to be protected from inadvertent actuation by use of a Switch Guard (MS2522-1 or equivalent). Using 16-gauge wire (M22759-16-16-2, a piece of excess length cut off of the Door Wire Harness 6004-01-01-05-01, or from AC 43.13-1B tables 11-11 & 11-12)

and the Red #6 Terminals (TE 171508-1 or equivalent) connect the 2 center terminals of the switch to HOPPER PACKER 7.5-amp Breaker. The switch should be installed so the empty terminal positions are up, the middle terminal positions are connected to the breaker and the lower terminal positions send power out to the Linear Actuator and Auger Controller. See Drawing 6004-0-1

62. Run Auger Power Line (Supplied Red or White 10-gauge wire) from B+ Terminal on Auger Controller to 40 Amp Braker on Lower Dash, Possible paths are to pass through the firewall using one of the new grommets or one of the existing passthroughs on the right side of the aircraft between the upper and lower engine mounts. Then Follow the upper right longeron, or other path with ample means to secure wire, aft and pass into the cockpit using an existing pass through or enter cockpit through ½" inch hole drilled in right sidewall of cockpit below door frame and close with grommet (AN931-4-7 or equivalent) or appropriately sized for hole and wire. Terminate the wires with Yellow #10 crimp terminals (TE 36161 or equivalent) or appropriately sized terminal for Breaker. Auger Power Line must exit Motor Controller Box through hole sealed with gromet. Connect wire to Controller and Breaker. Secure wire along path using appropriately sized cable ties (MS3367-1-9 or similar). Wire on B+ Terminal on Auger Controller is covered by silicone rubber boot (MS-25171-1S or similar).
63. Connect Auger harness to Auger controller. All connectors must be inside Motor Controller Box. Auger Harness wires must exit Motor Controller Box through hole sealed with gromet.
64. Follow Auger Power line back into cockpit. Install the switch to the hole labeled Hopper Auger, Connect the Auger PWR IN line (BLUE or WHITE) to one of the unused lower terminals on the Hopper Packer Switch. Secure wire along path using appropriately sized cable ties (MS3367-1-9 or similar).
65. Secure Linear actuator wire along path shown in drawing 6004-0-5 Adel clamps (MS21919-CG4 or similar), cable ties (MS3367-1-9 or similar) or silicone (Permatex Ultra Black RTV) as appropriate. If the Actuator wire meets up with the Hopper QTY cable follow that cable to the right side upper longeron. Otherwise secure the wire to the hopper going down the right side of the hopper to the hopper flange.
66. For Linear actuator wire passing thought the skin at the hopper flange see Drawing 6004-0-5 to cut slot and secure as required.
67. Connect Hopper Door Harness to Linear Actuator wire, it is recommended to have the connector close to where the wire first enters the fuselage and is easily accessible. Coil up excess Actuator wire and secure with appropriately sized cable ties (MS3367-1-9 or similar). Run the Door Harness to follow the Auger Power Line into the cockpit. Once in the cockpit install the Door Switch in the hole labeled "Hopper Door" The Green wire should be up when the switch is installed. The Red wire will connect to the un used lower terminal of the HOPPER PACKER switch. And the Blue Wire will go to the Ground Buss. Wire can be shortened and re-terminated if desired, or excess wire can be coiled up and secured with cable ties (MS3367-1-9 or similar).
68. Install FWD Wall Access Panel using #6 hardware (Part Numbers 6004-01-02-04-03, 6004-01-02-04-04 and 6004-01-02-04-05, Clip nuts are connected onto FWD WALL DOUBLER) seal with High Temp Sealant (Flamemaster CS-1900, Pro-Seal B2, Permatex 81630 Ultra Red, Or Permatex 81160 Red RTV) per manufacture's instruction. Completely covering faying surfaces with sealant and tighten hardware immediately after application of sealant. See Drawing 6004-0-4

69. Install Motor Controller Box cover. Make sure all Motor Controller connectors are inside Motor Controller Box. There are to be no holes in Motor Controller Box that are not plugged or sealed with a gromet.
70. On AT-802 that requires an upper baffle layout and drill mounting holes for baffle as shown in drawing 6004-0-3 using #9 drill, secure Baffle stand offs using 3/16 diameter extra-long hard ware, and secure baffle to baffle stand off using (2) self-locking nuts, one above and one below the baffle, See Drawing 6004-0-3
71. (Air Tractor Only) Re-Install hopper Qty Probe Using upper hole location in hinge plate. For AT-400, AT-502 and AT-602 Same Bottom mount is used. For AT-802 similar bottom mount but moved from brace on right side of Gate Box to brace on Left side of Gate Box. See Drawing 6004-0-2
72. Re-install the Hopper rinse tank, if removed.
73. Connect Battery and preform function test.
74. Re-install all panels and cowls
75. Update aircraft Records

Auger Shaft Assembly Removal

1. Open Hopper Door
2. Pull "Hopper Packer" breaker
3. Open Cam Lock arms
4. Slide Auger Shaft Assembly aft to clear cam lock
5. Slide Auger Shaft Assembly forward past Motor Housing to free Auger Shaft Assembly from Auger Support Assembly.
6. Pull aft end of Auger Shaft Assembly out of hopper out followed by rest of Auger Shaft Assembly
7. Install 4" Male Cam Plug P# 6004-01-02-01-07 into Motor Housing
8. Close Cam Lock arms
9. Energize "Hopper Packer" breaker
10. Test
11. Assembly part number gets "-AR" (for Auger Removed) Example:
6004-01 would have the auger installed
6004-01-AR would have the auger removed and plug installed
12. Update aircraft Records (weight data is in 6004-Weight)

Aircraft	Hopper Packer Assembly Number with Auger Installed	Auger Shaft Assembly Number	Hopper Packer Assembly Number with Auger Removed
AT-802	6004-01	6004-01-02	6004-01-AR
AT-502 or AT-602	6004-02	6004-02-02	6004-02-AR
AT-400	6004-03	6004-03-02	6004-03-AR
510 Thrush	6004-04	6004-01-02	6004-04-AR
710 Thrush	6004-05	6004-01-02	6004-05-AR

Auger Shaft Assembly Installation

1. Open Hopper Door
2. Pull “Hopper Packer” breaker
3. Open Cam Lock arms
4. Remove 4” Male Cam Plug from Motor Housing
5. Auger Shaft Assembly Replacement same for all models (See Drawing 6004-0-3)
6. Insert front end of Auger Shaft Assembly in to hopper forward past Motor Housing
7. Slide aft end of Auger Shaft Assembly into Auger Support Assembly sliding Auger Shaft Assembly Aft
8. Slide Auger Shaft Assembly forward into Motor Housing, lining up Shaft Couplings
9. Close Cam Lock Arms
10. Secure Cam Lock Arms
11. Energize “Hopper Packer” breaker
13. Test
14. Assembly part number remove “-AR” suffix (for Auger Removed) Example:
6004-01 would have the auger installed
6004-01-AR would have the auger removed and plug installed
15. Update aircraft Records (weight data is in 6004-Weight)

TROUBLE SHOOTING

If the unit is not powering on, check the power supply for the box.

- Check Both circuit breakers
- Refer to 6004-ICA

TESTING

See Document 6004-Ground Test

OPERATION INSTRUCTIONS

Normal Operation:

See 6004-FMS & 6004-ICA for detailed instructions.

During all operations except ground loading the HOPPER PACKER switch should be in the OFF position.

To Load Material:

Turn HOPPER PACKER switch to On.

Move HOPPER DOOR switch to the Center position.

Move HOPPER DOOR switch to the Open Position (door will now move to the fully open position)

Use the HOPPER AUGER switch to push the pile of material Forward or Aft to fill the hopper.

Move HOPPER DOOR switch to the Center position.

Move HOPPER DOOR switch to the Close Position (door will now move to the Closed position)

Verify the Roller Latch made it low enough to get in the Roller Latch Assembly and the Hopper door is latched closed.

If Door failed to Latch cycle HOPPER DOOR Open and Closed to re attempt latching.

Once door is Latched closed

Turn HOPPER PACKER switch to Off.

- NOTES:
- 6004-01 HOPPER PACKER 802 IS USED ON AIR TRACTOR AIRCRAFT AT-802 MODELS
6004-02 HOPPER PACKER 502 602 IS USED ON AIR TRACTOR AIRCRAFT AT-502 AND 602 MODELS
6004-03 HOPPER PACKER 402 IS USED ON AIR TRACTOR AIRCRAFT AT-402 MODELS
6004-04 HOPPER PACKER 510 IS USED ON THRUSH AIRCRAFT 510 MODELS
6004-05 HOPPER PACKER 710 IS USED ON THRUSH AIRCRAFT 710 AND 550 MODELS
 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - SEE INSTALLATION DRAWINGS FOR DETAILED INSTALLATION, DIMENSION AND MOUNTING DATA
CHECK THE DRAWING LIST "6004 DL" FOR A COMPLETE LIST OF INSTALLATION DRAWINGS.
 - 6004-01-02-05-03 MOTOR CONTROLLER BOX IS HIDDEN FROM VIEW FOR CLARITY ON MOST
INSTALLION DRAWINGS BUT IS PRESENT ON THE MORE RELEVANT DRAWINGS.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	6/5/2023	TRR
2	ADDED NOTE #4 ON HIDDEN BOX	04/04/2024	TRR



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TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

SPEC

TITLE:

HOPPER PACKER INSTALLATION

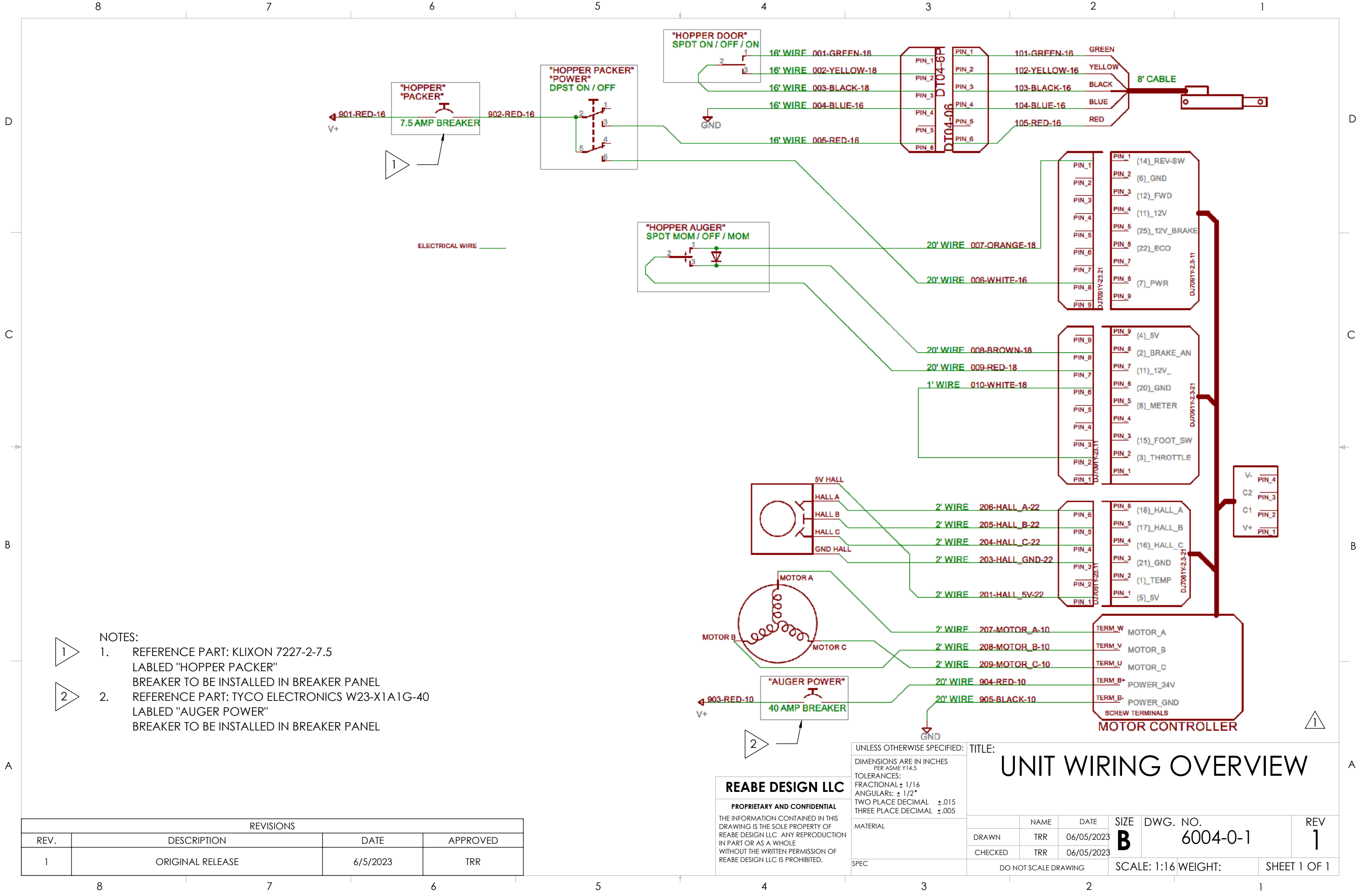
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CHECKED	TRR	06/05/2023			

DO NOT SCALE DRAWING

SCALE: 1:32

WEIGHT:

SHEET 1 OF 1



NOTES:

- REFERENCE PART: KLIXON 7227-2-7.5 LABLED "HOPPER PACKER" BREAKER TO BE INSTALLED IN BREAKER PANEL
- REFERENCE PART: TYCO ELECTRONICS W23-X1A1G-40 LABLED "AUGER POWER" BREAKER TO BE INSTALLED IN BREAKER PANEL

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	6/5/2023	TRR

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THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

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UNIT WIRING OVERVIEW

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CHECKED	TRR	06/05/2023		1
DO NOT SCALE DRAWING			SCALE: 1:16	WEIGHT:
			SHEET 1 OF 1	

- NOTES:
1. PROCESSES OR PROCEDURES IN 6004-II INSTALL INSTRUCTIONS SUPERSEDES INFORMATION ON THIS DRAWING
 2. SEAL ALL NEW HOLES PENETRATING HOPPER WITH HOPPER SEALANT (FLAMEMASTER CS-3204 OR SIMILAR TANK SEALANT)

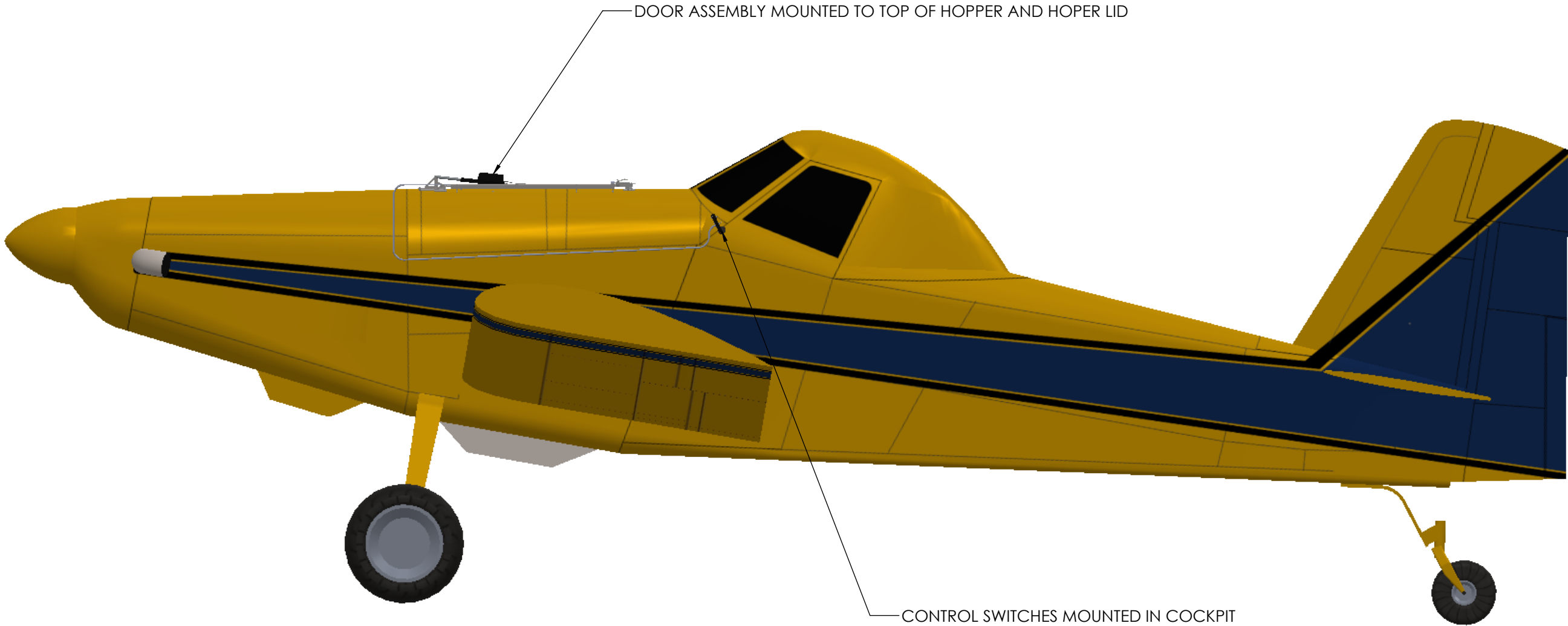
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	6/16/2023	TRR

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C

B

A



1

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FRACTIONAL $\pm 1/16$

ANGULARS: $\pm 1/2^\circ$

TWO PLACE DECIMAL $\pm .015$

THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

TITLE:				DOOR MOUNTING			
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CHECKED		TRR	06/16/2023	B	6004-0-2	1	
DO NOT SCALE DRAWING				SCALE: 1:32	WEIGHT:	SHEET 1 OF 8	

802 DOOR FRAME MOUNTING

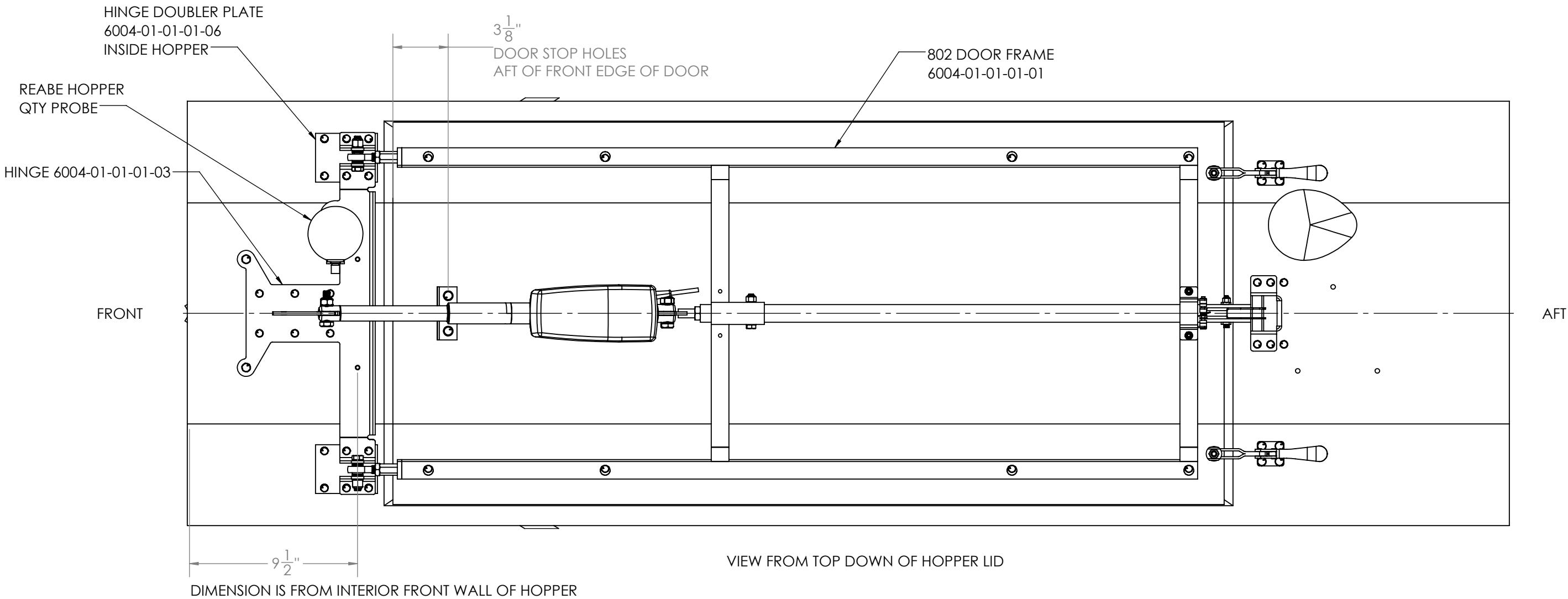
1. WITH ACTUATOR EXTENDED OR DISCONNECTED LAY DOOR FRAME ASSEMBLY ON TOP HOPPER.
2. ALIGN HINGE (6004-01-01-01-03) WITH AIRCRAFT CENTER LINE, AND 1/4" MOUNT HOLES WITH LINE 9-1/2" AFT OF INTERIOR FRONT WALL OF HOPPER.
3. MATCH DRILL (4) 1/4" HOLES AND (10) 3/16" HOLES FROM HINGE (6004-01-01-01-03) TO TOP OF HOPPER.
4. MOVE FRAME TO CLEAN HOLES, REPOSITION FRAME, THEN INSTALL HINGE TO TOP OF HOPPER USING APPROPRIATE DOUBLERS, SUPPLIED HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.
5. MATCH DRILL REMAINING (8) (4 EACH SIDE) 3/16" HOLES FOR HINGE DOUBLER PLATE (6004-01-01-01-06) CLEAN HOLES AND INSTALL HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.
6. ADJUST ROD ENDS TO CENTER AFT END OF DOOR FRAME PER INSTALL INSTRUCTIONS
7. CENTER AND ALIGN HOPPER DOOR (LID) IN OPENING, UNDER DOOR FRAME, MATCH DRILL (8) 3/16" HOLES FROM DOOR FRAME TO HOPPER DOOR (LID)
8. CLEAN HOLES, INSTALL HARDWARE, CHECK FIT, INSTALL SHIMS IF NEEDED AND SEALANT PER INSTALL INSTRUCTIONS.
9. REABE HOPPER QTY PROBE IS INSTALLED IN INBOARD 3/4" HOLE IN HINGE (6004-01-01-01-03) PER HOPPER GAUGE INSTALL INSTRUCTIONS.
10. CENTER DOOR STOP LEFT TO RIGHT ON HOPPER DOOR (LID) WITH CENTER OF HOLES 3-1/8" AFT OF FRONT EDGE OF DOOR
11. MATCH DRILL REMAINING (2) 1/4" HOLES FOR DOOR STOP CLEAN HOLES AND INSTALL HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.

D

C

B

A

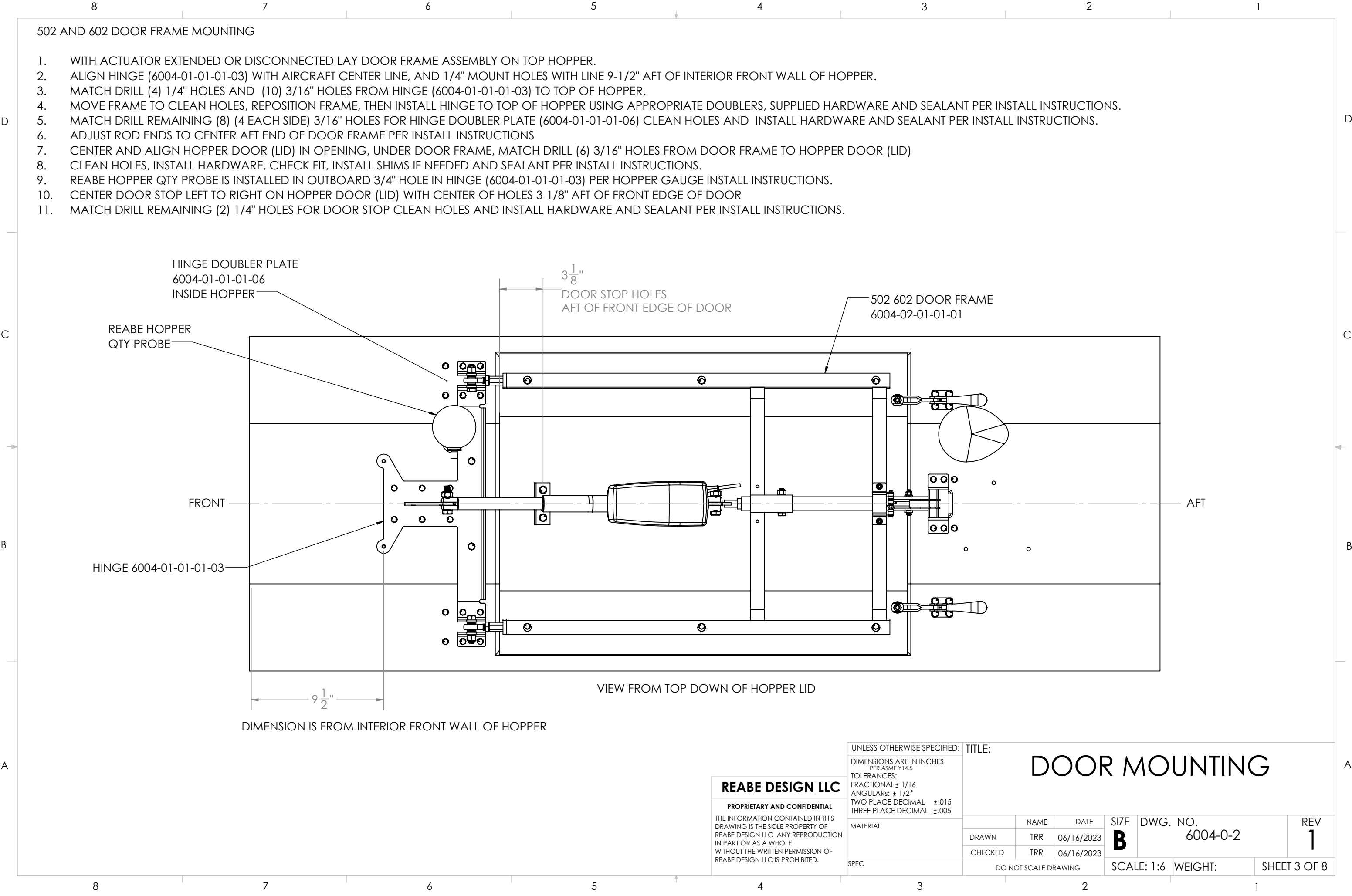


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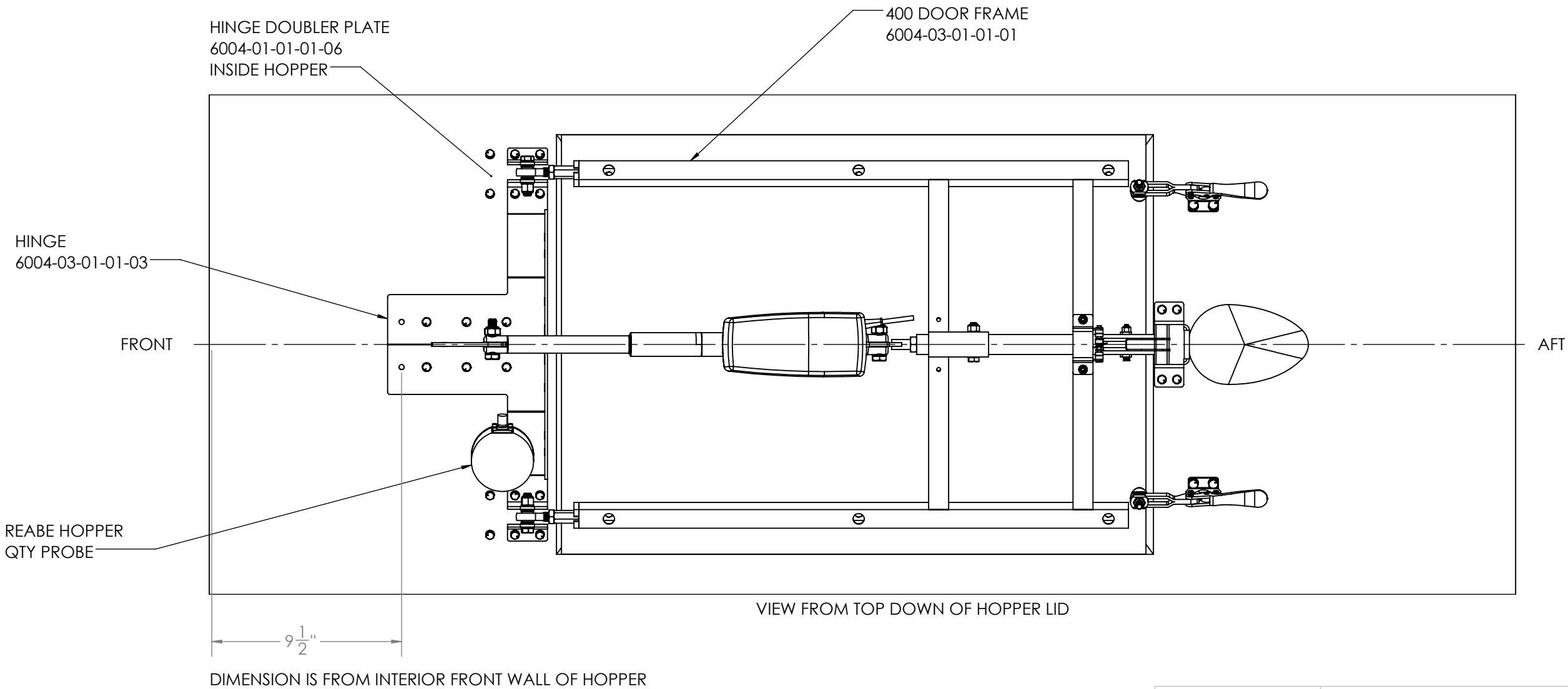
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400 DOOR FRAME MOUNTING

1. WITH ACTUATOR EXTENDED OR DISCONNECTED LAY DOOR FRAME ASSEMBLY ON TOP HOPPER.
2. ALIGN HINGE (6004-03-01-01-03) WITH AIRCRAFT CENTER LINE, AND 1/4" MOUNT HOLES WITH LINE 9-1/2" AFT OF INTERIOR FRONT WALL OF HOPPER.
3. MATCH DRILL (2) 1/4" HOLES AND (10) 3/16" HOLES FROM HINGE (6004-03-01-01-03) TO TOP OF HOPPER.
4. MOVE FRAME TO CLEAN HOLES, REPOSITION FRAME, THEN INSTALL HINGE TO TOP OF HOPPER USING APPROPRIATE DOUBLERS, SUPPLIED HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.
5. MATCH DRILL REMAINING (8) (4 EACH SIDE) 3/16" HOLES FOR HINGE DOUBLER PLATE (6004-01-01-01-06) CLEAN HOLES AND INSTALL HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.
6. ADJUST ROD ENDS TO CENTER AFT END OF DOOR FRAME PER INSTALL INSTRUCTIONS
7. CENTER AND ALIGN HOPPER DOOR (LID) IN OPENING, UNDER DOOR FRAME, MATCH DRILL (6) 3/16" HOLES FROM DOOR FRAME TO HOPPER DOOR (LID)
8. CLEAN HOLES, INSTALL HARDWARE, CHECK FIT, INSTALL SHIMS IF NEEDED AND SEALANT PER INSTALL INSTRUCTIONS.
9. REABE HOPPER QTY PROBE IS INSTALLED IN 3/4" HOLE IN HINGE (6004-03-01-01-03) PER HOPPER GAUGE INSTALL INSTRUCTIONS.



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	CHECKED	TRR	06/16/2023			
SPEC	DO NOT SCALE DRAWING			SCALE: 1:6	WEIGHT:	SHEET 4 OF 8

510 DOOR FRAME MOUNTING

1.

REMOVE HOPPER DOOR, FILL HOPPER DOOR SEAL AREA WITH FILLER PER INSTALL INSTRUCTIONS.
2.

WITH ACTUATOR EXTENDED OR DISCONNECTED LAY DOOR FRAME ASSEMBLY IN DOOR OPENING ON TOP HOPPER.
3.

ADJUST ROD ENDS TO CENTER AFT END OF DOOR FRAME PER INSTALL INSTRUCTIONS
4.

ALIGN HINGE (6004-04-01-01-03) WITH AIRCRAFT CENTER LINE, CENTER DOOR FRAME ASSEMBLY FOR/AFT IN OPENING.
5.

MATCH DRILL (4) 1/4" HOLES FROM HINGE (6004-04-01-01-03) AND (8) 3/16" HOLES FROM 510 COVER PLATE (6004-04-01-01-32) TO TOP OF HOPPER.
6.

MOVE FRAME TO CLEAN HOLES, REPOSITION FRAME, THEN INSTALL HINGE TO TOP OF HOPPER USING APPROPRIATE DOUBLERS, SUPPLIED HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.

510 COVER PLATE
6004-04-01-01-32

HINGE
6004-04-01-01-03

FRONT

AFT

VIEW FROM TOP DOWN OF HOPPER LID

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ANGULARs: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

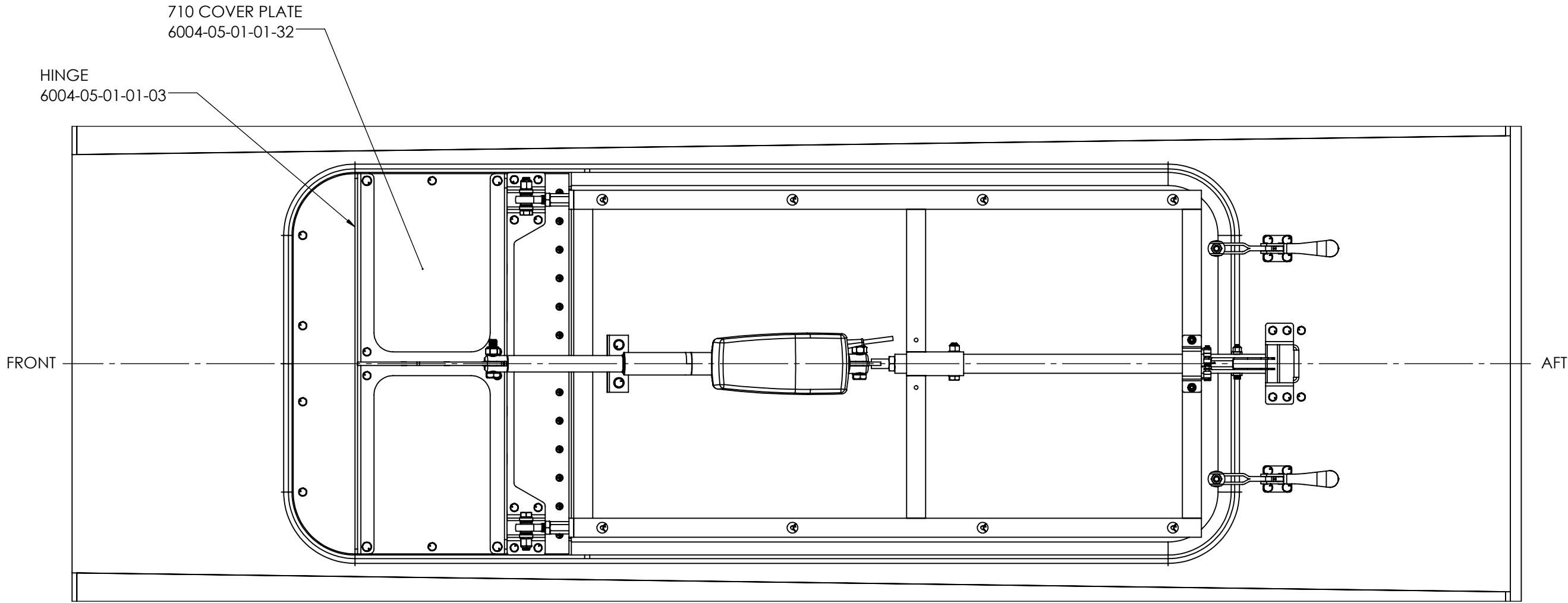
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DOOR MOUNTING

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CHECKED	TRR	06/16/2023			
DO NOT SCALE DRAWING			SCALE: 1:6	WEIGHT:	SHEET 5 OF 8

710 DOOR FRAME MOUNTING

1. REMOVE HOPPER DOOR, FILL HOPPER DOOR SEAL AREA WITH FILLER PER INSTALL INSTRUCTIONS.
2. WITH ACTUATOR EXTENDED OR DISCONNECTED LAY DOOR FRAME ASSEMBLY IN DOOR OPENING ON TOP HOPPER.
3. ADJUST ROD ENDS TO CENTER AFT END OF DOOR FRAME PER INSTALL INSTRUCTIONS
4. ALIGN HINGE (6004-05-01-01-03) WITH AIRCRAFT CENTER LINE, CENTER DOOR FRAME ASSEMBLY FOR/AFT IN OPENING.
5. MATCH DRILL (4) 1/4" HOLES FROM HINGE (6004-04-01-01-03) AND (10) 3/16" HOLES FROM 710 COVER PLATE (6004-05-01-01-32) TO TOP OF HOPPER.
6. MOVE FRAME TO CLEAN HOLES, REPOSITION FRAME, THEN INSTALL HINGE TO TOP OF HOPPER USING APPROPRIATE DOUBLERS, SUPPLIED HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.



VIEW FROM TOP DOWN OF HOPPER LID

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ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

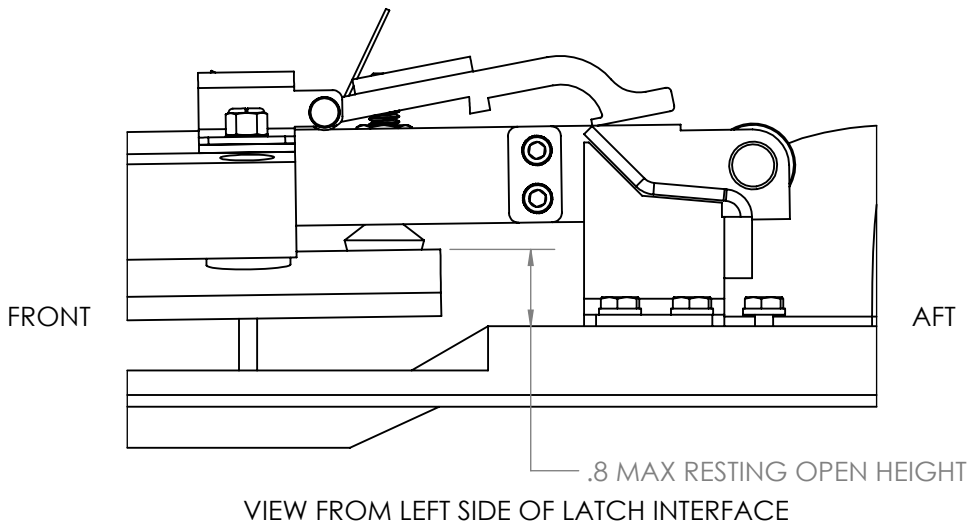
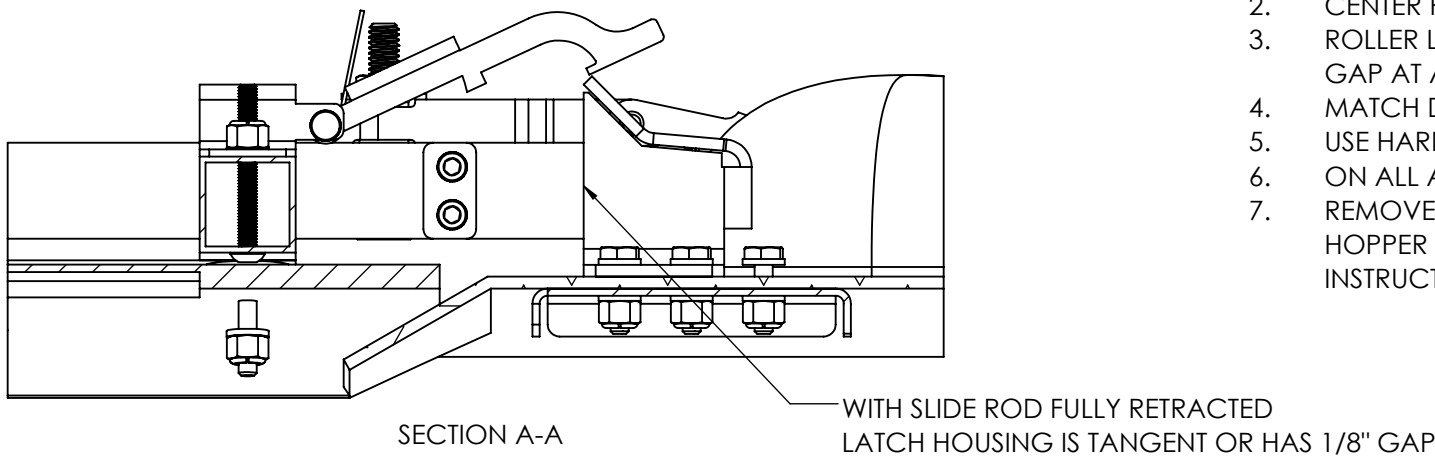
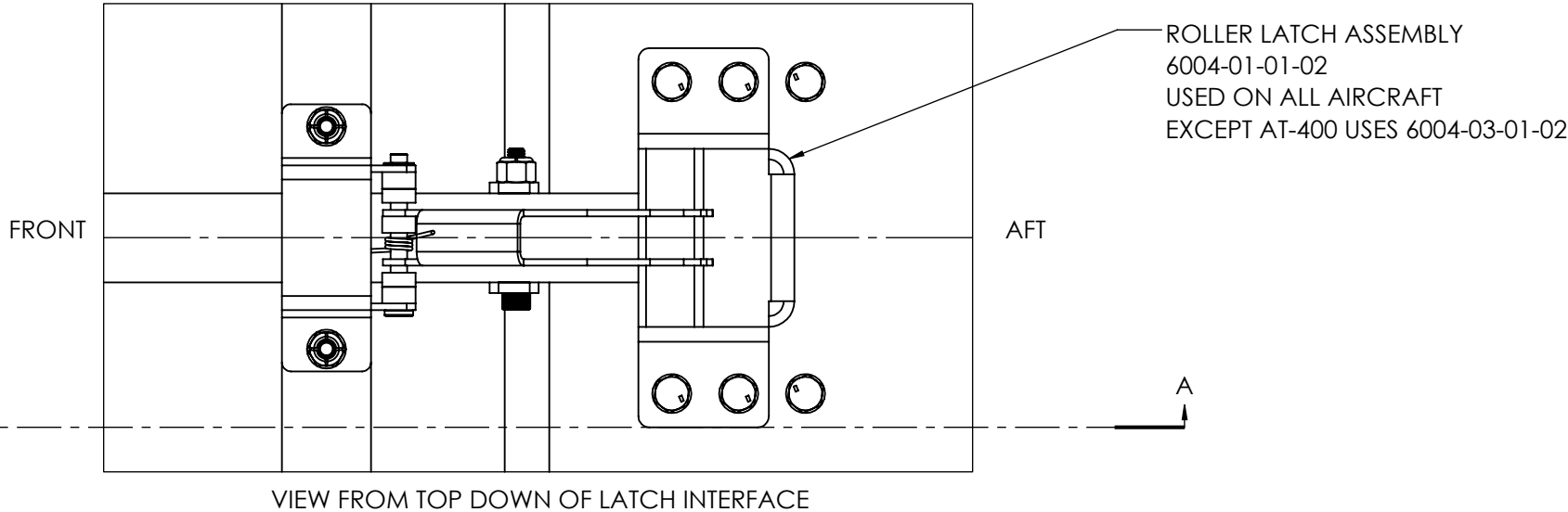
MATERIAL

SPEC

TITLE:

DOOR MOUNTING

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	06/16/2023	B	6004-0-2	1
CHECKED	TRR	06/16/2023			
DO NOT SCALE DRAWING			SCALE: 1:6	WEIGHT:	SHEET 6 OF 8

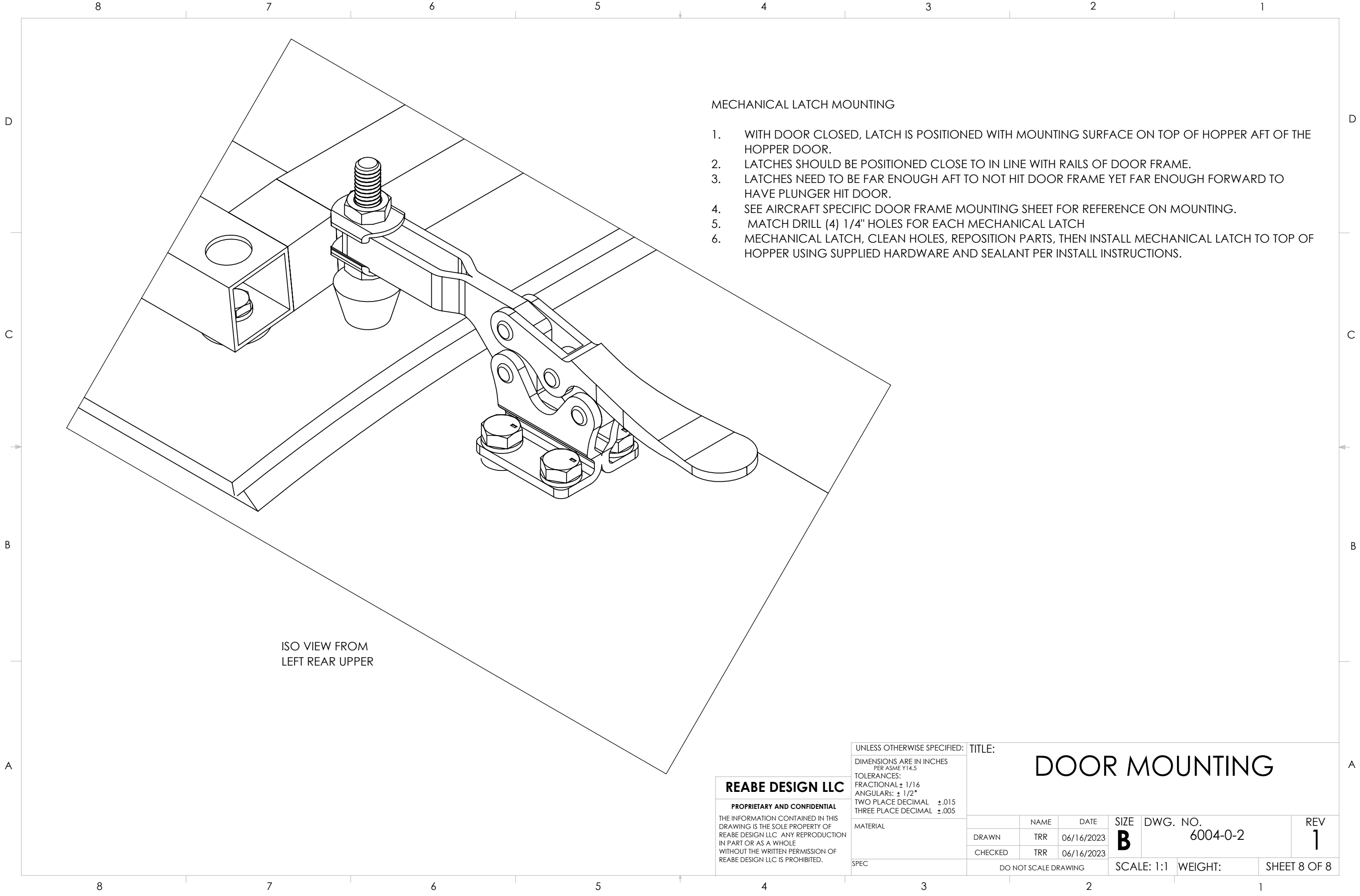


ROLLER LATCH ASSEMBLY MOUNTING

1. WITH SLIDE ROD FULLY RETRACTED AND DOOR IN CLOSED POSITION.
2. CENTER ROLLER LATCH ASSEMBLY ON AIRCRAFT CENTERLINE.
3. ROLLER LATCH ASSEMBLY IS TANGENT TO BEARING AT FORWARD MOST POSITION, AND THERE IS A 1/8" GAP AT AFT MOST POSITION.
4. MATCH DRILL (4) 3/16" HOLES THROUGH TOP OF HOPPER.
5. USE HARDWARE AND INSTALL DOUBLER PLATE INSIDE HOPPER BELOW ROLLER LATCH.
6. ON ALL AIRCRAFT EXCEPT AT-400 MATCH DRILL (2) REMAINING 3/16" HOLES FROM INSIDE OUT.
7. REMOVE ROLLER LATCH, CLEAN HOLES, REPOSITION PARTS, THEN INSTALL ROLLER HOPPER TO TOP OF HOPPER USING APPROPRIATE DOUBLER, SUPPLIED HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.

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DIMENSIONS ARE IN INCHES PER ASME Y14.5		DOOR MOUNTING								
TOLERANCES:										
FRACTIONAL: ± 1/16										
ANGULARS: ± 1/2°										
TWO PLACE DECIMAL ±.015		MATERIAL		DWG. NO.		REV				
THREE PLACE DECIMAL ±.005				6004-0-2		1				
SPEC		DO NOT SCALE DRAWING		SIZE B	SCALE: 1:2		WEIGHT:		SHEET 7 OF 8	
		DRAWN	TRR	06/16/2023						
		CHECKED	TRR	06/16/2023						



ISO VIEW FROM
LEFT REAR UPPER

MECHANICAL LATCH MOUNTING

1. WITH DOOR CLOSED, LATCH IS POSITIONED WITH MOUNTING SURFACE ON TOP OF HOPPER AFT OF THE HOPPER DOOR.
2. LATCHES SHOULD BE POSITIONED CLOSE TO IN LINE WITH RAILS OF DOOR FRAME.
3. LATCHES NEED TO BE FAR ENOUGH AFT TO NOT HIT DOOR FRAME YET FAR ENOUGH FORWARD TO HAVE PLUNGER HIT DOOR.
4. SEE AIRCRAFT SPECIFIC DOOR FRAME MOUNTING SHEET FOR REFERENCE ON MOUNTING.
5. MATCH DRILL (4) 1/4" HOLES FOR EACH MECHANICAL LATCH
6. MECHANICAL LATCH, CLEAN HOLES, REPOSITION PARTS, THEN INSTALL MECHANICAL LATCH TO TOP OF HOPPER USING SUPPLIED HARDWARE AND SEALANT PER INSTALL INSTRUCTIONS.

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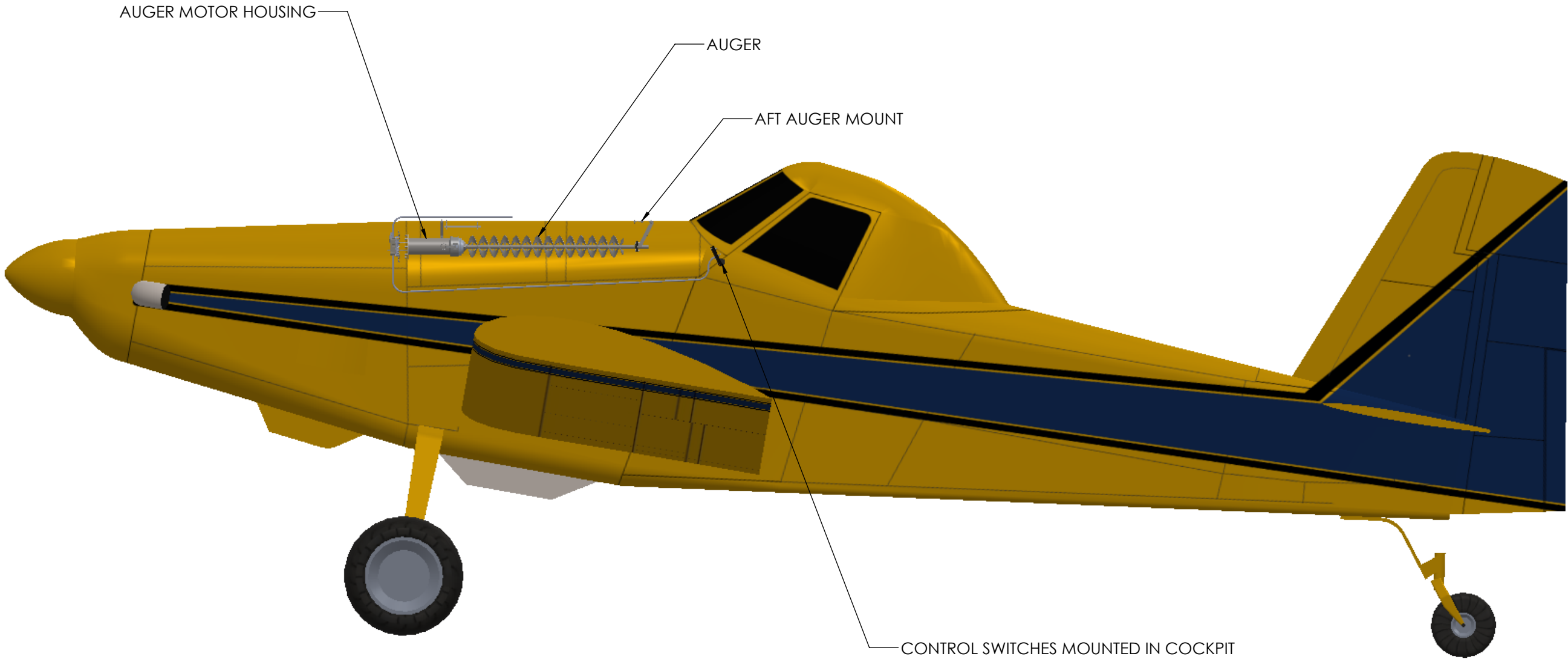
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TOLERANCES:								
FRACTIONAL ± 1/16 ANGULARs: ± 1/2° TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005								
MATERIAL				NAME	DATE	SIZE	DWG. NO.	REV
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			CHECKED	TRR	06/16/2023			
SPEC			DO NOT SCALE DRAWING			SCALE: 1:1	WEIGHT:	SHEET 8 OF 8

- NOTES:
1. PROCESSES OR PROCEDURES IN 6004-II INSTALL INSTRUCTIONS SUPERSEDES INFORMATION ON THIS DRAWING
 2. SEAL ALL NEW HOLES PENETRATING HOPPER WITH HOPPER SEALANT (FLAMEMASTER CS-3204 OR SIMILAR TANK SEALANT)

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	6/16/2023	TRR



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TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

TITLE:

AUGER MOUNTING

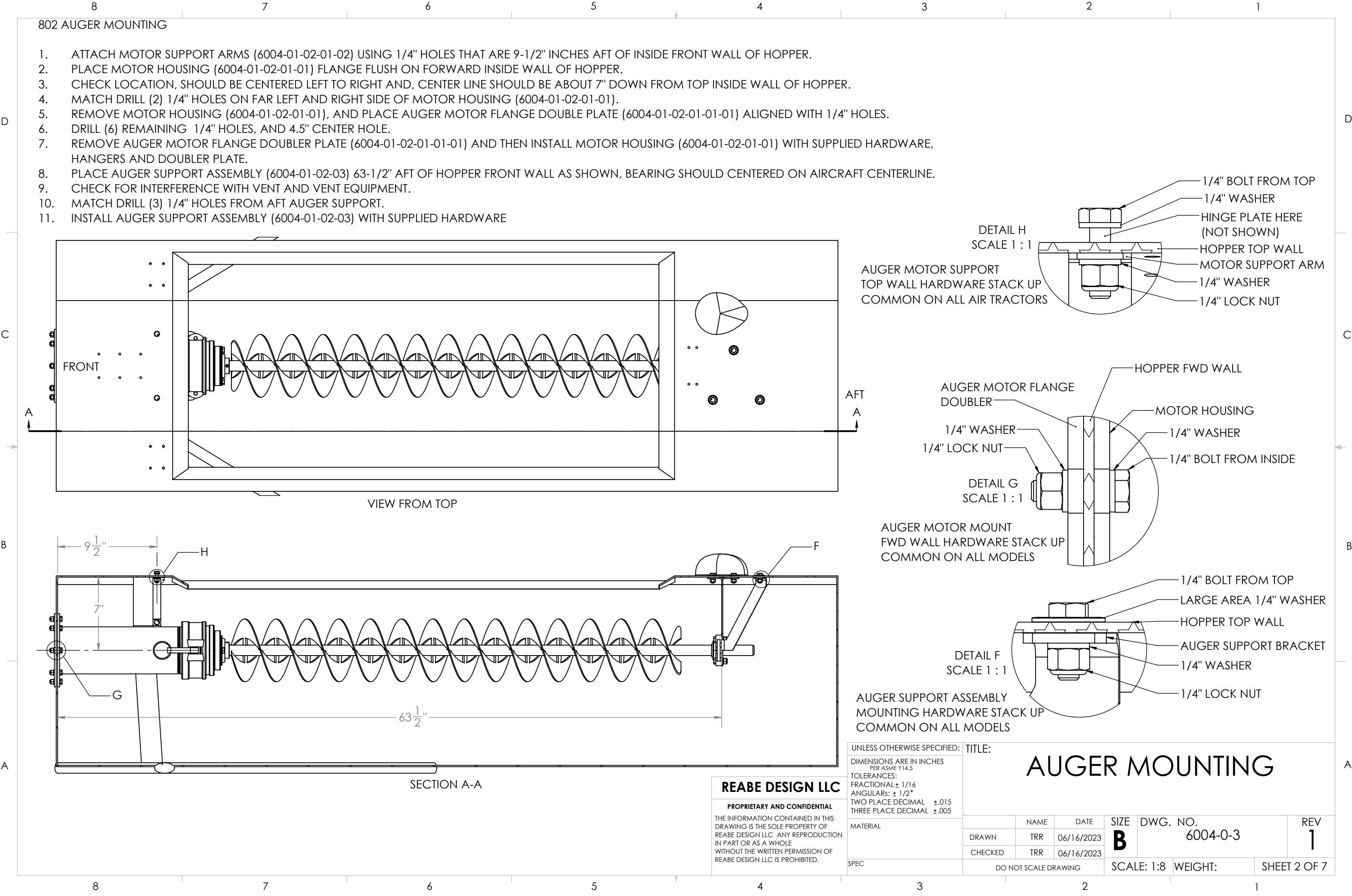
	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	06/16/2023	B	6004-0-3	1
CHECKED	TRR	06/16/2023			

DO NOT SCALE DRAWING

SCALE: 1:8

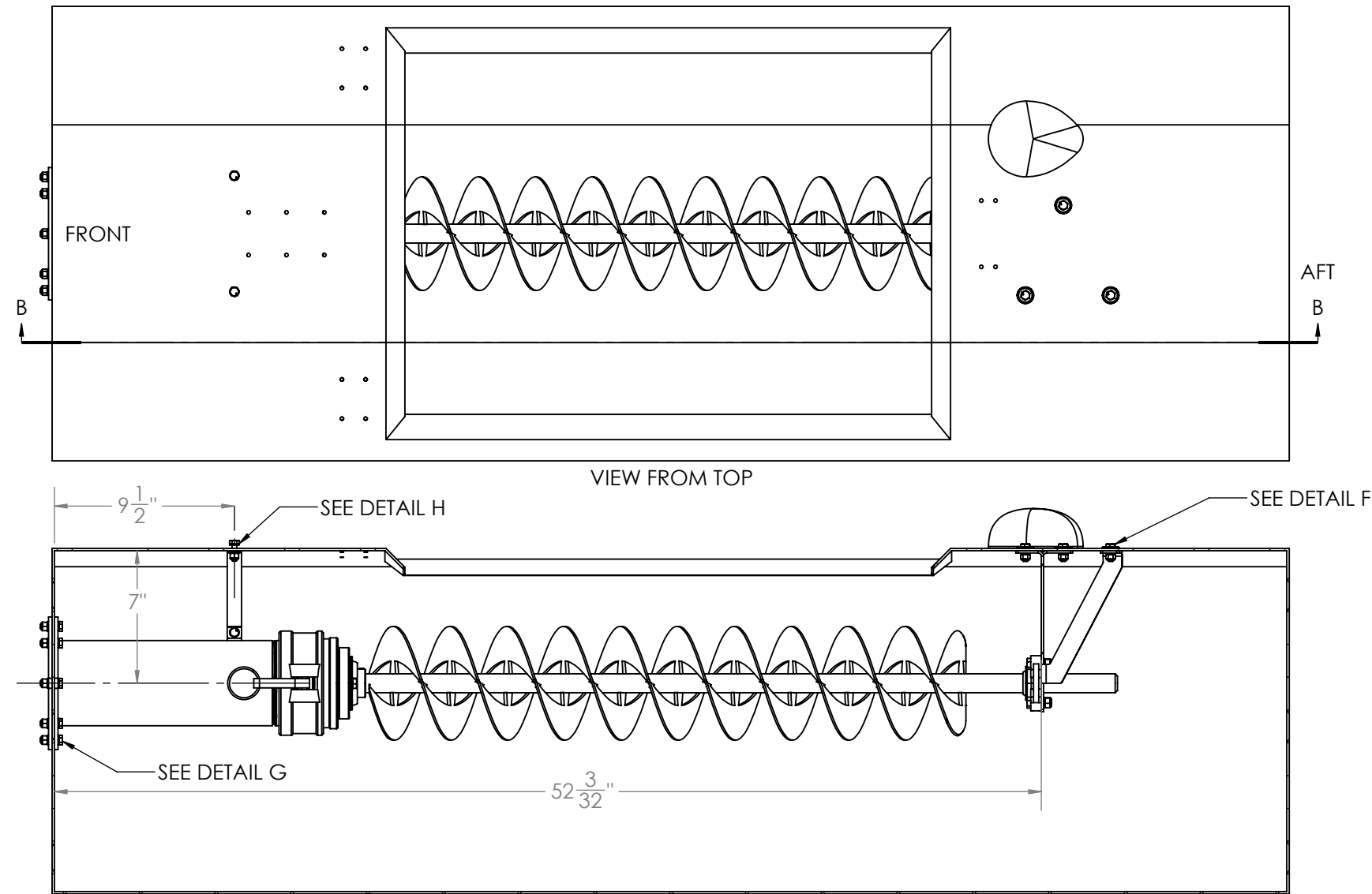
WEIGHT:

SHEET 1 OF 7



502 OR 602 AUGER MOUNTING

1. ATTACH MOTOR SUPPORT ARMS (6004-01-02-01-02) USING 1/4" HOLES THAT ARE 9-1/2" INCHES AFT OF INSIDE FRONT WALL OF HOPPER.
2. PLACE MOTOR HOUSING (6004-01-02-01-01) FLANGE FLUSH ON FORWARD INSIDE WALL OF HOPPER.
3. CHECK LOCATION, SHOULD BE CENTERED LEFT TO RIGHT AND, CENTER LINE SHOULD BE ABOUT 7" DOWN FROM TOP INSIDE WALL OF HOPPER.
4. MATCH DRILL (2) 1/4" HOLES ON FAR LEFT AND RIGHT SIDE OF MOTOR HOUSING (6004-01-02-01-01).
5. REMOVE MOTOR HOUSING (6004-01-02-01-01), AND PLACE AUGER MOTOR FLANGE DOUBLE PLATE (6004-01-02-01-01-01) ALIGNED WITH 1/4" HOLES.
6. DRILL (6) REMAINING 1/4" HOLES, AND 4.5" CENTER HOLE.
7. REMOVE AUGER MOTOR FLANGE DOUBLER PLATE (6004-01-02-01-01-01) AND THEN INSTALL MOTOR HOUSING (6004-01-02-01-01) WITH SUPPLIED HARDWARE, HANGERS AND DOUBLER PLATE.
8. PLACE AUGER SUPPORT ASSEMBLY (6004-01-02-03) 52-3/32" AFT OF HOPPER FRONT WALL AS SHOWN, BEARING SHOULD BE CENTERED ON AIRCRAFT CENTERLINE.
9. CHECK FOR INTERFERENCE WITH VENT AND VENT EQUIPMENT.
10. MATCH DRILL (3) 1/4" HOLES FROM AFT AUGER SUPPORT.
11. INSTALL AUGER SUPPORT ASSEMBLY (6004-01-02-03) WITH SUPPLIED HARDWARE



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FRACTIONAL $\pm 1/16$

ANGULARS: $\pm 1/2^\circ$

TWO PLACE DECIMAL $\pm .015$

THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

TITLE:

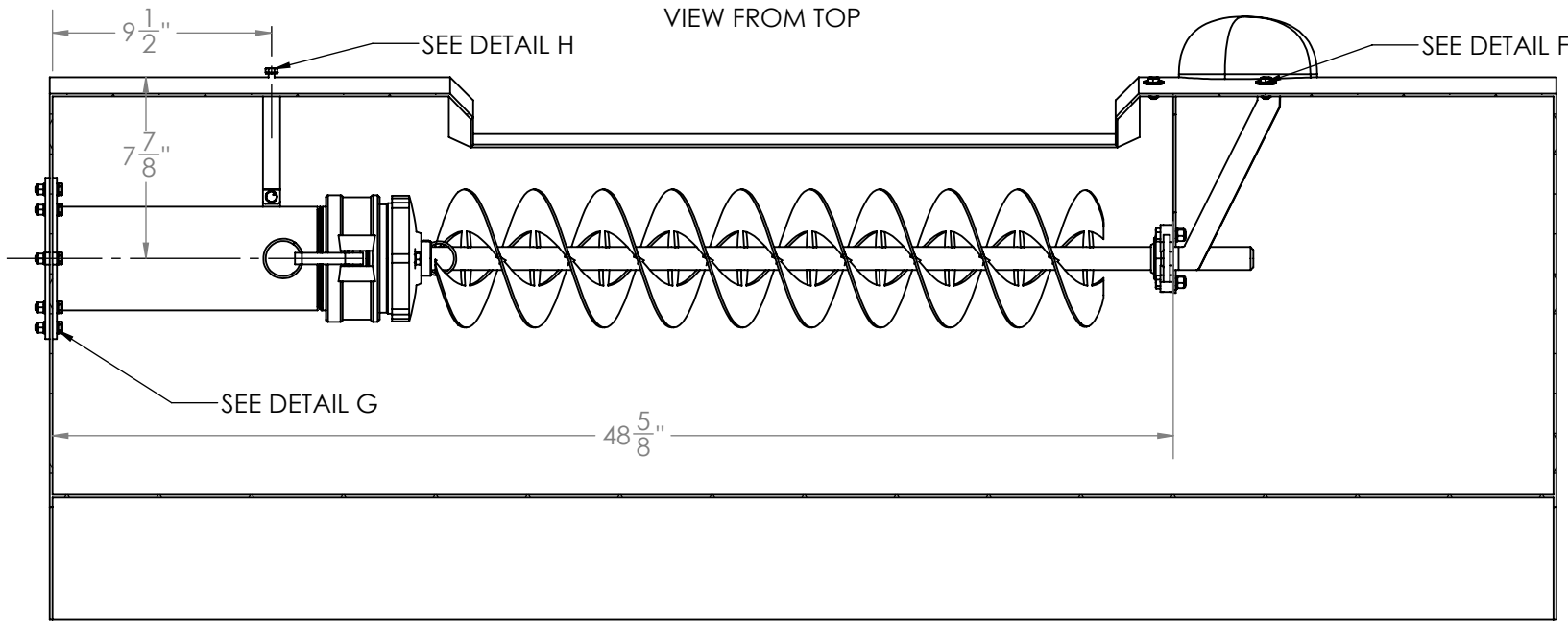
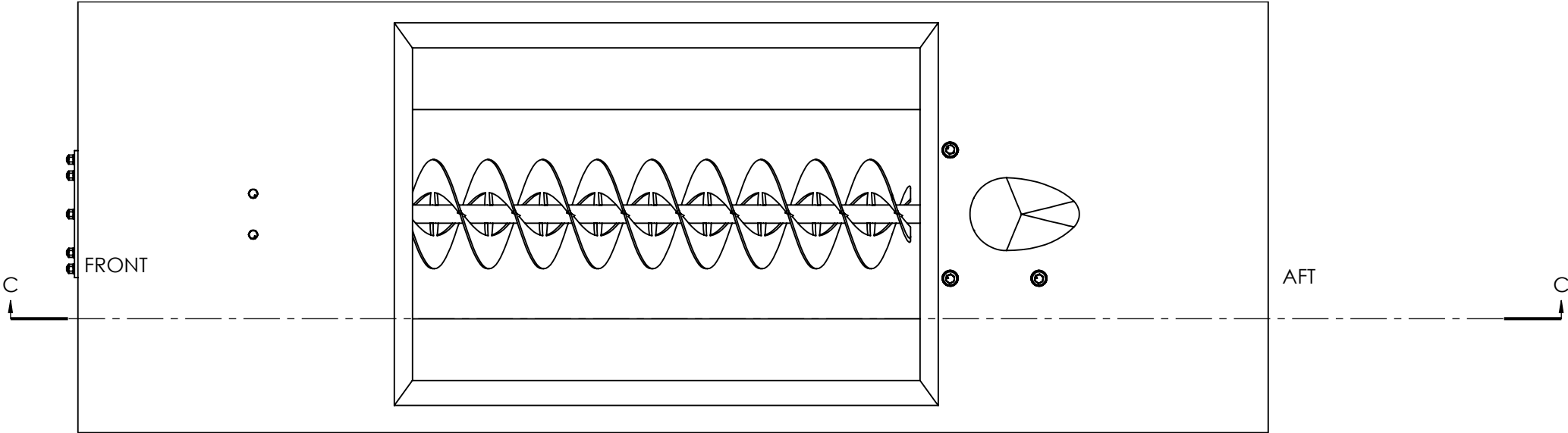
AUGER MOUNTING

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	06/16/2023	B	6004-0-3	1
CHECKED	TRR	06/16/2023			

DO NOT SCALE DRAWING	SCALE: 1:8	WEIGHT:	SHEET 3 OF 7

400 AUGER MOUNTING

1. ATTACH MOTOR SUPPORT ARMS (6004-01-02-01-02) USING 1/4" HOLES THAT ARE 9-1/2" INCHES AFT OF INSIDE FRONT WALL OF HOPPER.
2. PLACE MOTOR HOUSING (6004-01-02-01-01) FLANGE FLUSH ON FORWARD INSIDE WALL OF HOPPER.
3. CHECK LOCATION, SHOULD BE CENTERED LEFT TO RIGHT AND, CENTER LINE SHOULD BE ABOUT 7-7/8" DOWN FROM TOP OUTSIDE WALL OF HOPPER.
4. MATCH DRILL (2) 1/4" HOLES ON FAR LEFT AND RIGHT SIDE OF MOTOR HOUSING (6004-01-02-01-01).
5. REMOVE MOTOR HOUSING (6004-01-02-01-01), AND PLACE AUGER MOTOR FLANGE DOUBLER PLATE (6004-01-02-01-01-01) ALIGNED WITH 1/4" HOLES.
6. DRILL (6) REMAINING 1/4" HOLES, AND 4.5" CENTER HOLE.
7. REMOVE AUGER MOTOR FLANGE DOUBLER PLATE (6004-01-02-01-01-01) AND THEN INSTALL MOTOR HOUSING (6004-01-02-01-01) WITH SUPPLIED HARDWARE, HANGERS AND DOUBLER PLATE.
8. PLACE AUGER SUPPORT ASSEMBLY (6004-03-02-03) 48-5/8" AFT OF HOPPER FRONT WALL AS SHOWN, BEARING SHOULD BE CENTERED ON AIRCRAFT CENTERLINE.
9. CHECK FOR INTERFERENCE WITH VENT AND VENT EQUIPMENT.
10. MATCH DRILL (3) 1/4" HOLES FROM AFT AUGER SUPPORT.
11. INSTALL AUGER SUPPORT ASSEMBLY (6004-03-02-03) WITH SUPPLIED HARDWARE



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ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

TITLE:

AUGER MOUNTING

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	06/16/2023	B	6004-0-3	1
CHECKED	TRR	06/16/2023			
DO NOT SCALE DRAWING			SCALE: 1:8	WEIGHT:	SHEET 4 OF 7

- D



AFT



A

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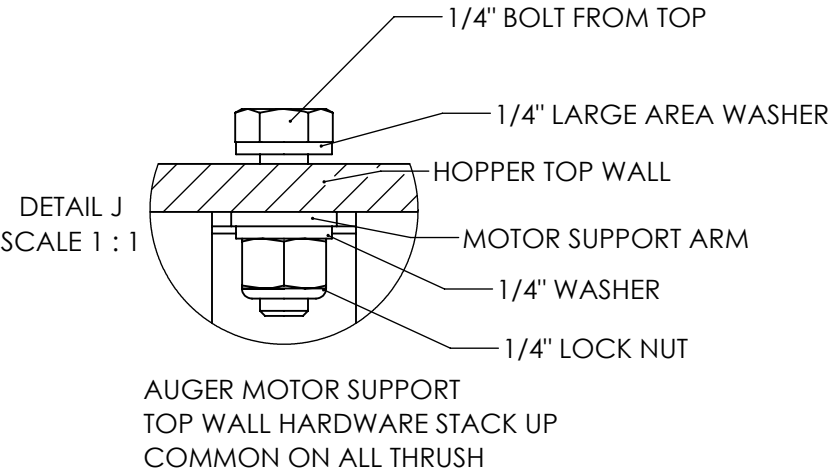
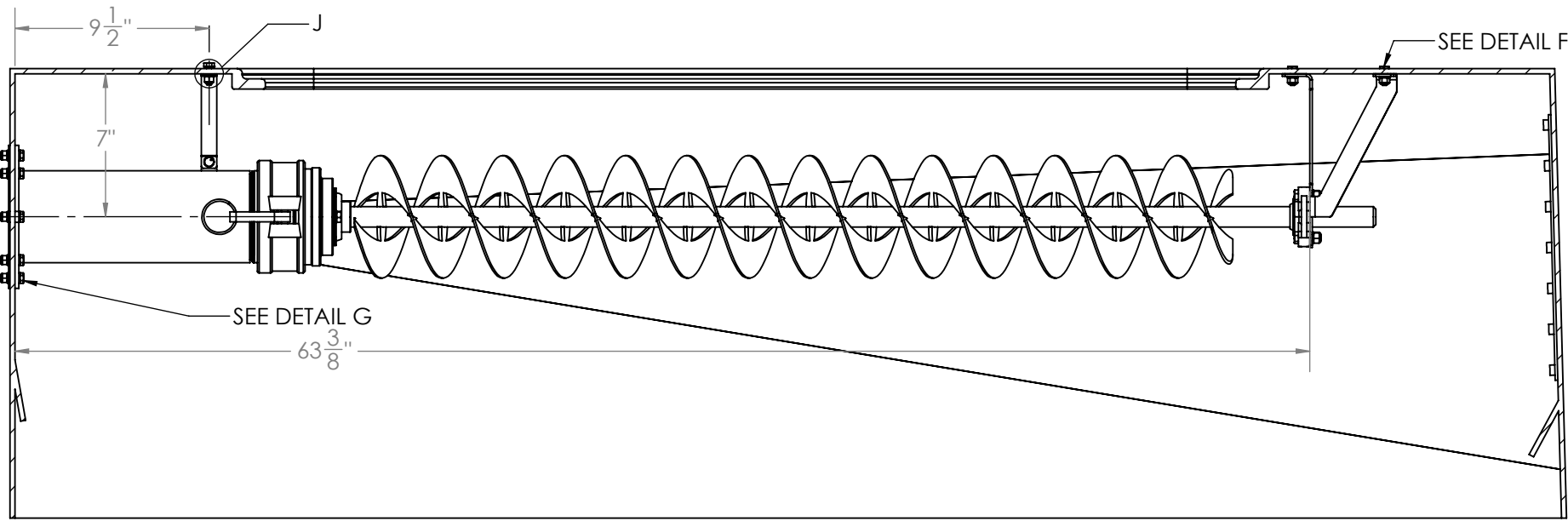
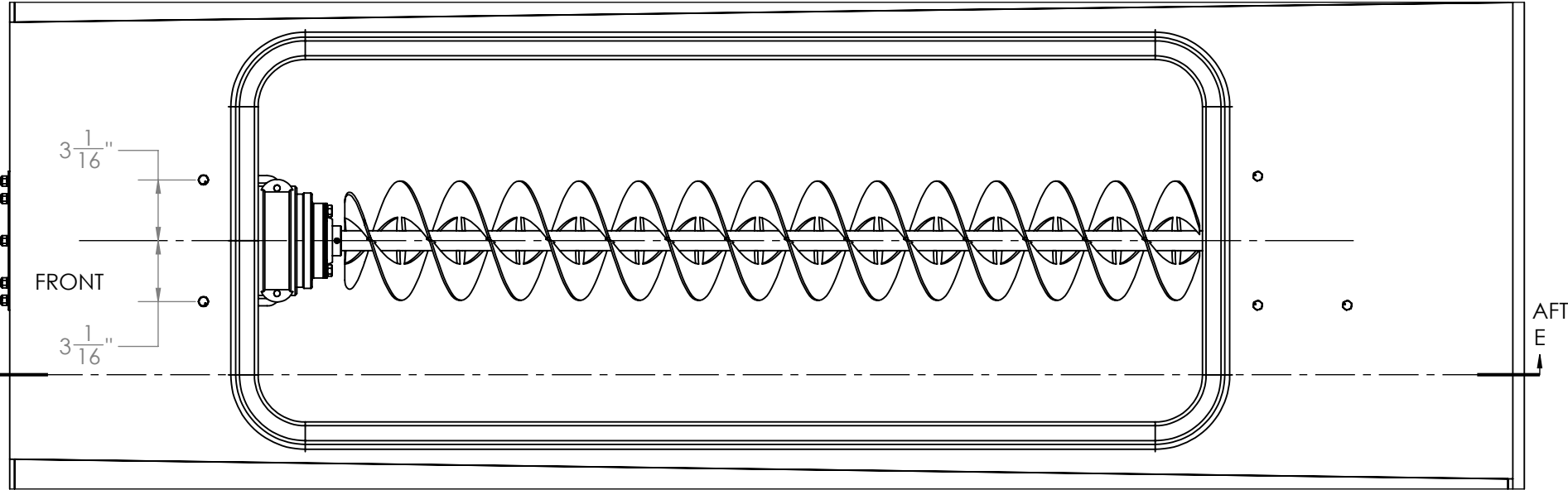
N	MATERIAL
	SPED

AUGER MOUNTING

A

710 AUGER MOUNTING

1. ATTACH MOTOR SUPPORT ARMS (6004-01-02-01-02) USING 1/4" HOLES THAT ARE 9-1/2" INCHES AFT OF INSIDE FRONT WALL OF HOPPER.
2. PLACE MOTOR HOUSING (6004-01-02-01-01) FLANGE FLUSH ON FORWARD INSIDE WALL OF HOPPER.
3. CHECK LOCATION, SHOULD BE CENTERED LEFT TO RIGHT AND, CENTER LINE SHOULD BE ABOUT 7" DOWN FROM TOP INSIDE WALL OF HOPPER.
4. MATCH DRILL (2) 1/4" HOLES ON FAR LEFT AND RIGHT SIDE OF MOTOR HOUSING (6004-01-02-01-01).
5. REMOVE MOTOR HOUSING (6004-01-02-01-01), AND PLACE AUGER MOTOR FLANGE DOUBLE PLATE (6004-01-02-01-01-01) ALIGNED WITH 1/4" HOLES.
6. DRILL (6) REMAINING 1/4" HOLES, AND 4.5" CENTER HOLE.
7. REMOVE AUGER MOTOR FLANGE DOUBLER PLATE (6004-01-02-01-01-01) AND THEN INSTALL MOTOR HOUSING (6004-01-02-01-01) WITH SUPPLIED HARDWARE, HANGERS AND DOUBLER PLATE.
8. PLACE AUGER SUPPORT ASSEMBLY (6004-04-02-03) 63-3/8" AFT OF HOPPER FRONT WALL AS SHOWN, BEARING SHOULD BE CENTERED ON AIRCRAFT CENTERLINE.
9. <PARA >MATCH DRILL (3) 1/4" HOLES FROM AFT AUGER SUPPORT.
10. INSTALL AUGER SUPPORT ASSEMBLY (6004-04-02-03) WITH SUPPLIED HARDWARE



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TOLERANCES:						
FRACTIONAL ± 1/16						
ANGULARS: ± 1/2°						
TWO PLACE DECIMAL ±.015						
THREE PLACE DECIMAL ±.005						
MATERIAL		NAME	DATE	SIZE	DWG. NO.	REV
	DRAWN	TRR	06/16/2023	B	6004-0-3	1
	CHECKED	TRR	06/16/2023			
SPEC	DO NOT SCALE DRAWING			SCALE: 1:8	WEIGHT:	SHEET 6 OF 7

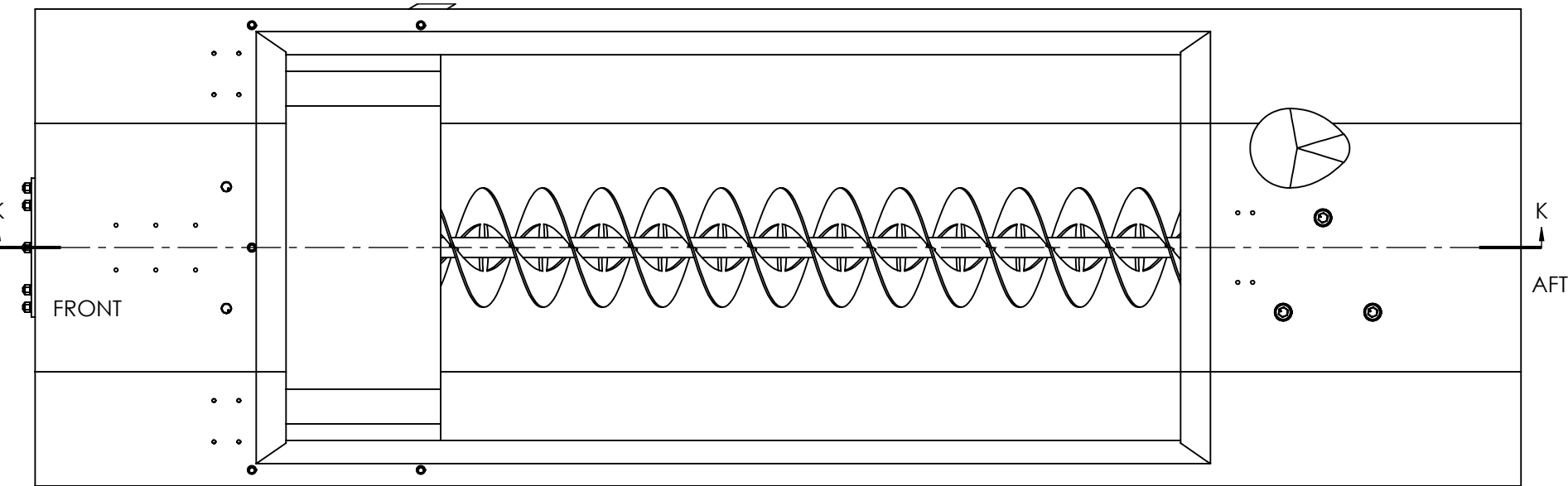
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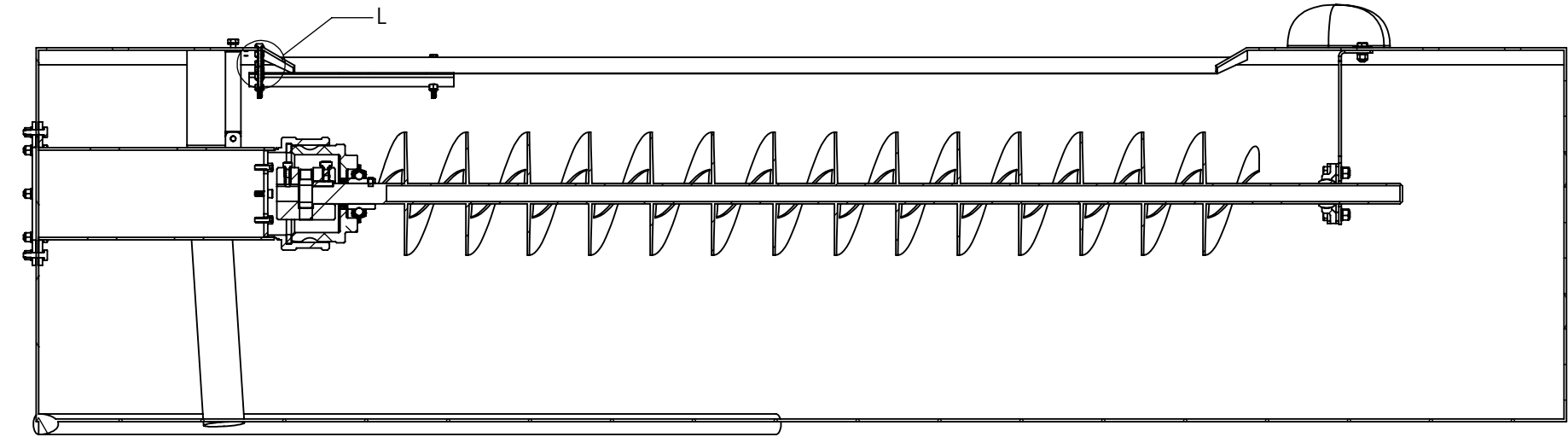
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802 HOPPER BAFFLE

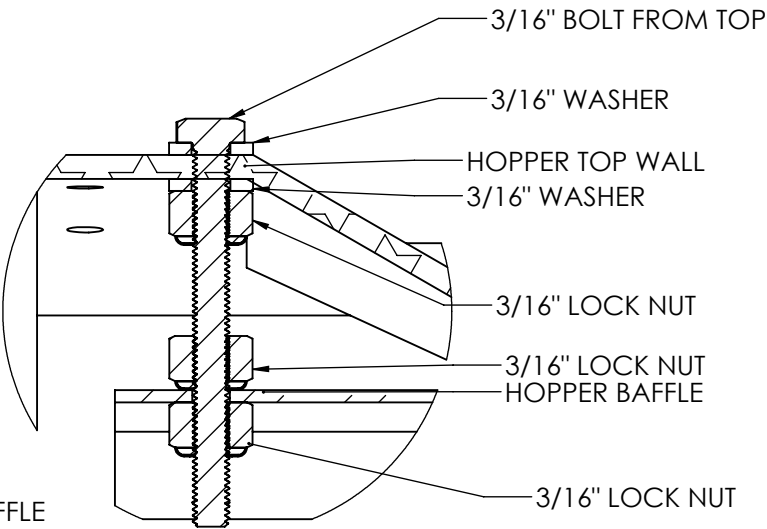
1. DRILL (1) 3/16" HOLE ON TOP OF HOPPER FORWARD OF THE DOOR AFT OF THE HINGE.
2. INSTALL 3/16" HARD WARE STACK UP IN HOLE AND INSTALL HOPPER BAFFLE (6004-01-02-07-01) USING THIS FORWARD CENTER HOLE.
3. DRILL REMAINING (4) 3/16" HOLES FROM BAFFLE OUT. (HOLES NEED TO BE OUTSIDE DOOR SEAL AREA)
4. INSTALL REMAINING 3/16" BOLT STACK UPS.



VIEW FROM TOP



SECTION K-K



HOPPER BAFFLE
HARDWARE STACK UP
USED ON AT-802

DETAIL L
SCALE 1 : 1

UNLESS OTHERWISE SPECIFIED:		TITLE:							
DIMENSIONS ARE IN INCHES PER ASME Y14.5		AUGER MOUNTING							
TOLERANCES:									
FRACTIONAL ± 1/16									
ANGULARS: ± 1/2°									
TWO PLACE DECIMAL ±.015		MATERIAL		SIZE		DWG. NO.		REV	
THREE PLACE DECIMAL ±.005				B		6004-0-3		1	
SPEC		DO NOT SCALE DRAWING		SCALE: 1:8		WEIGHT:		SHEET 7 OF 7	

- NOTES:
- SEE PROCESSES OR PROCEDURES IN 6004-II INSTALL INSTRUCTIONS
 - SEAL NEW FIREWALL ACCESS PANEL AND DOUBLER WITH FIREWALL SEALANT (FLAMEMASTER CS-1900, PRO-SEAL B2, PERMATEx 81630 ULTRA RED, OR PERMATEx 81160 RED RTV) COVER 100% OF FAYING SURFACES WITH SEALANT. INSTALL DOUBLER ATTACHMENT HARDWARE WHILE SEALANT IS WET.
 - DOUBLER IS INSTALLED ON AFT SIDE OF FIREWALL.
 - 6004-01-02-05-03 MOTOR CONTROLLER BOX WILL NEED MOUNTING AND GROMIT HOLLES DRILLED.

2 3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	6/16/2023	TRR
2	UPDATE NOTES, ADD HW P#S, & MOTOR CONTROLLER BOX	4/4/2024	TRR
3	FIX SPELLING AND ADDED BOTH SIDES TO 1" HOLE NOTE	04/29/2024	TRR
4	INCREASED #6 MOUNT HOLES, LOCKNUTS ARE ALL METAL, CLARIFIED CLIP NUT INSTALLATION	07/01/2024	TRR

D

D

TOP

C

C

B

B

A

A

AIRCRAFT
RIGHT SIDE

AIRCRAFT
LEFT SIDE

CENTERED IN FRONT OF
AUGER MOTOR MOUNT

Ø 8.638 B. C.

(24) Ø .144 THRU ON B.C. 4

Ø 8 1/8" THRU

(4) Ø .144 THRU
(2) PER 1.0" HOLE

1 1/8"

2 1/4"

2"

Ø 1.0 THRU

(4) Ø .257 THRU
FOR CONTROLLER MOUNT

2 7/16"

4 13/16"

3 1/4"

1" HOLE CAN BE LOCATED HERE
OR ON ACCESS PANEL

10 3/8"

MAKE SURE CONTROLLER
IS OUTBOARD OF RINSE TANK

1

BOTTOM

VIEW OF METAL WALL JUST FORWARD OF HOPPER
LOOKING FROM FRONT TO AFT

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ANGULARS: ± 1/2°
TWO PLACE DECIMAL ± .015
THREE PLACE DECIMAL ± .005

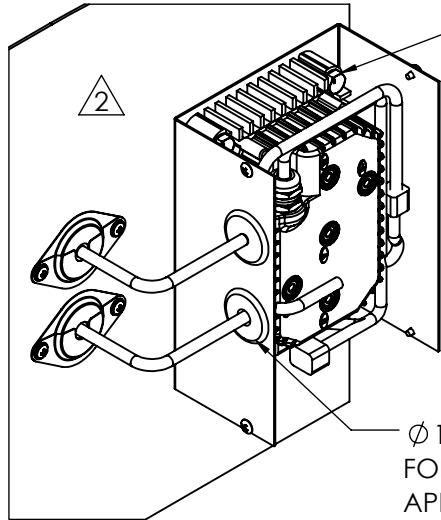
MATERIAL

SPEC

TITLE:

MOTOR CONTROLLER
MOUNTING

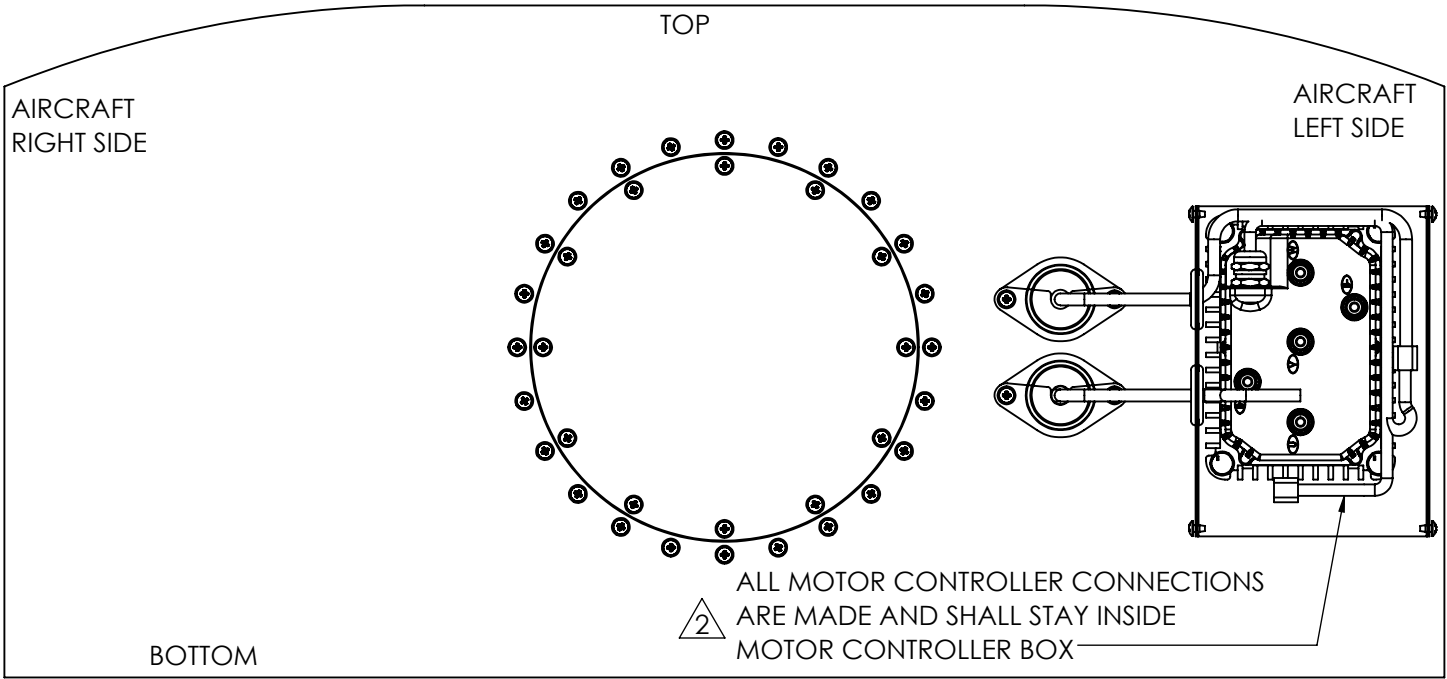
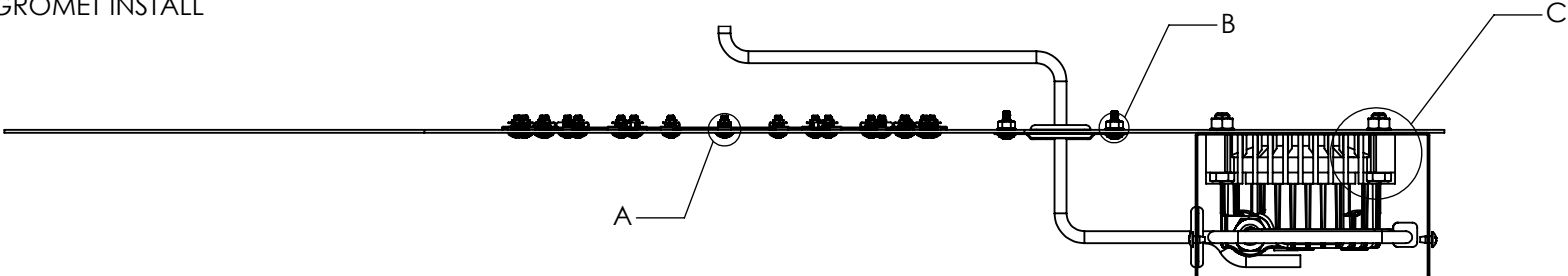
	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	06/16/2023	B	6004-0-4	4
CHECKED	TRR	06/16/2023			
DO NOT SCALE DRAWING			SCALE: 1:2	WEIGHT:	SHEET 1 OF 2



(4) Ø0.257 HOLES MATCH DRILLED FROM MOTOR CONTROLLER TO MOTOR CONTROLLER BOX HOUSING

Ø 1.0" HOLES DRILLED IN MOTOR CONTROLLER BOX SIDE WALL FOR WIRE PASS THROUGH, ARE SEALED WITH MS35489-8X OR EQUIVALENT APPROPRIATELY SIZED GROMMET.
Ø 1.0" HOLES CAN BE ON EITHER SIDE WALL OF THE BOX, WIRE JUST NEEDS TO ROUTE TO THE HOLE

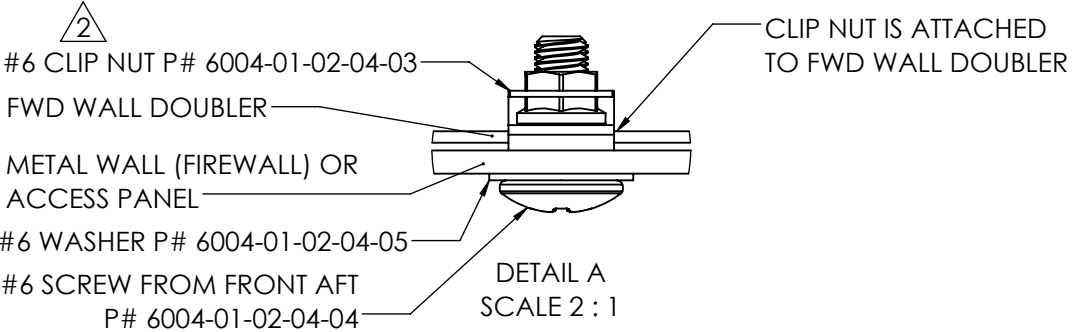
ISO VIEW OF MOTOR CONTROLLER BOX AND GROMMET INSTALL



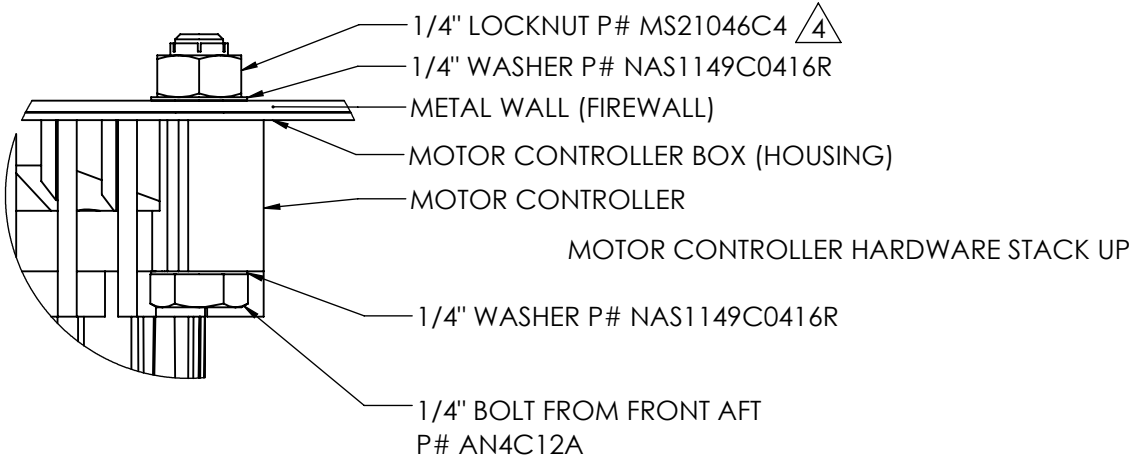
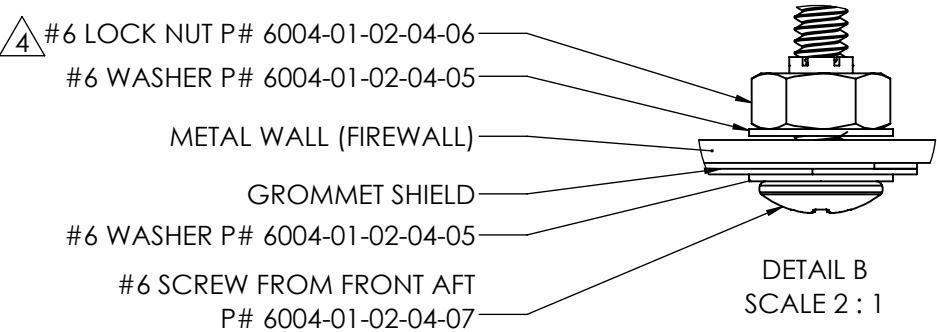
VIEW OF METAL WALL JUST FORWARD OF HOPPER
LOOKING FROM FRONT TO AFT

(2) ALL MOTOR CONTROLLER CONNECTIONS ARE MADE AND SHALL STAY INSIDE MOTOR CONTROLLER BOX

FWD WALL ACCESS PANEL HARDWARE STACK UP



GROMMET SHIELD HARDWARE STACK UP



DETAIL C
SCALE 1 : 1

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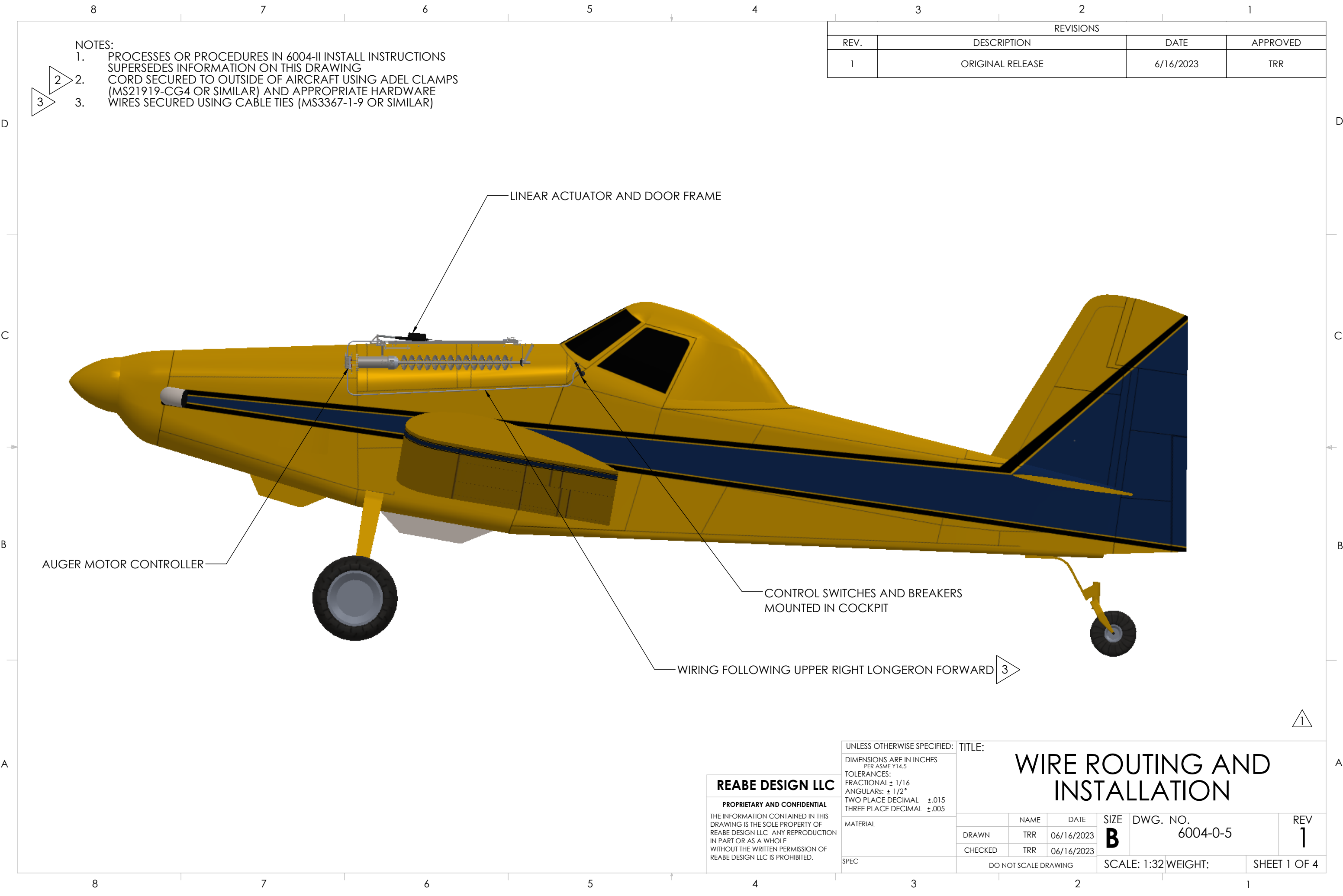
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ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

TITLE:

MOTOR CONTROLLER MOUNTING

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	06/16/2023	B	6004-0-4	4
CHECKED	TRR	06/16/2023			
DO NOT SCALE DRAWING			SCALE: 1:4	WEIGHT:	SHEET 2 OF 2



NOTES:

- 1. PROCESSES OR PROCEDURES IN 6004-II INSTALL INSTRUCTIONS SUPERSEDES INFORMATION ON THIS DRAWING
- 2. CORD SECURED TO OUTSIDE OF AIRCRAFT USING ADEL CLAMPS (MS21919-CG4 OR SIMILAR) AND APPROPRIATE HARDWARE
- 3. WIRES SECURED USING CABLE TIES (MS3367-1-9 OR SIMILAR)

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	6/16/2023	TRR

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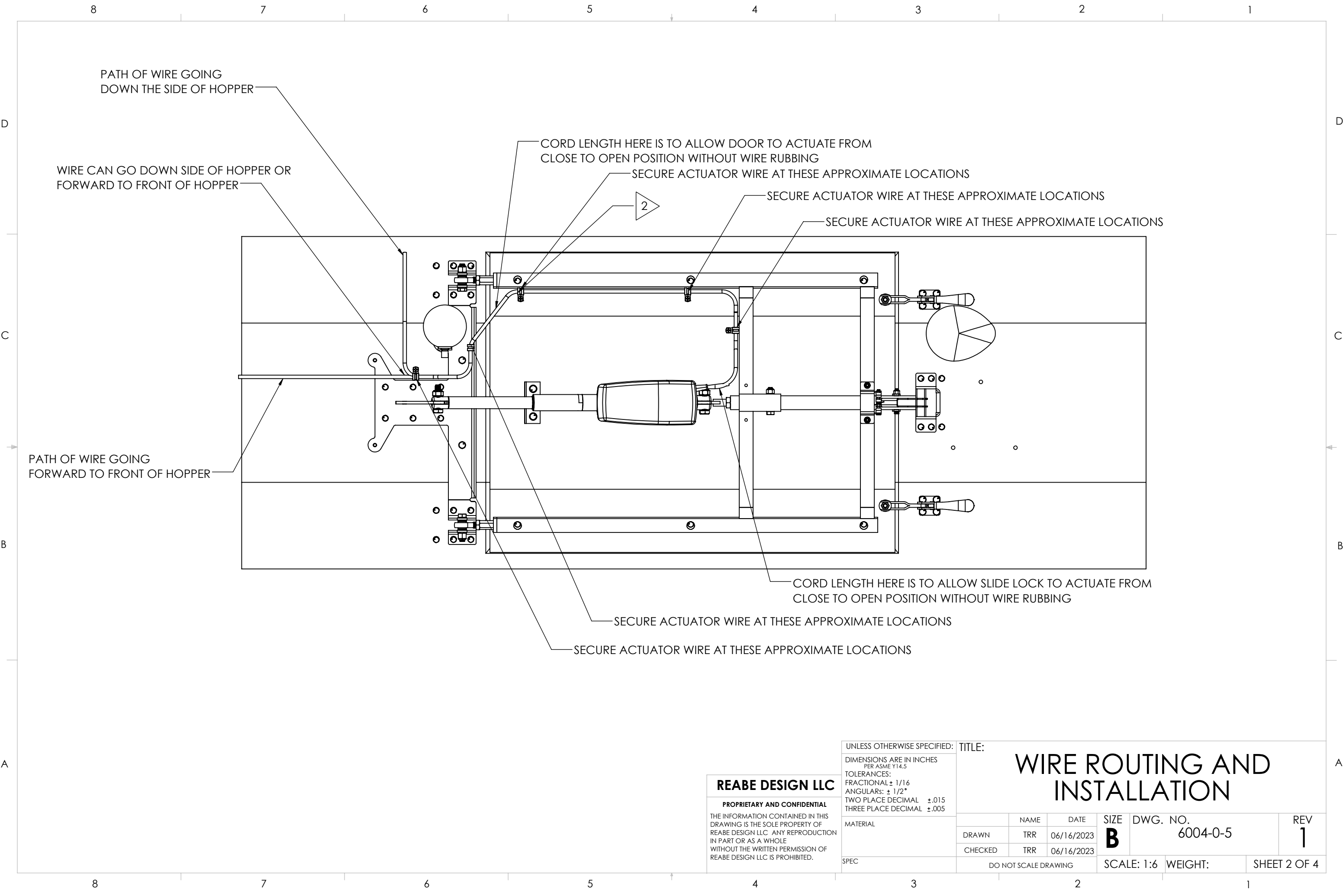
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TOLERANCES:	
FRACTIONAL ± 1/16	
ANGULARs: ± 1/2°	
TWO PLACE DECIMAL ±.015	
THREE PLACE DECIMAL ±.005	
MATERIAL	
SPEC	

TITLE:

WIRE ROUTING AND INSTALLATION

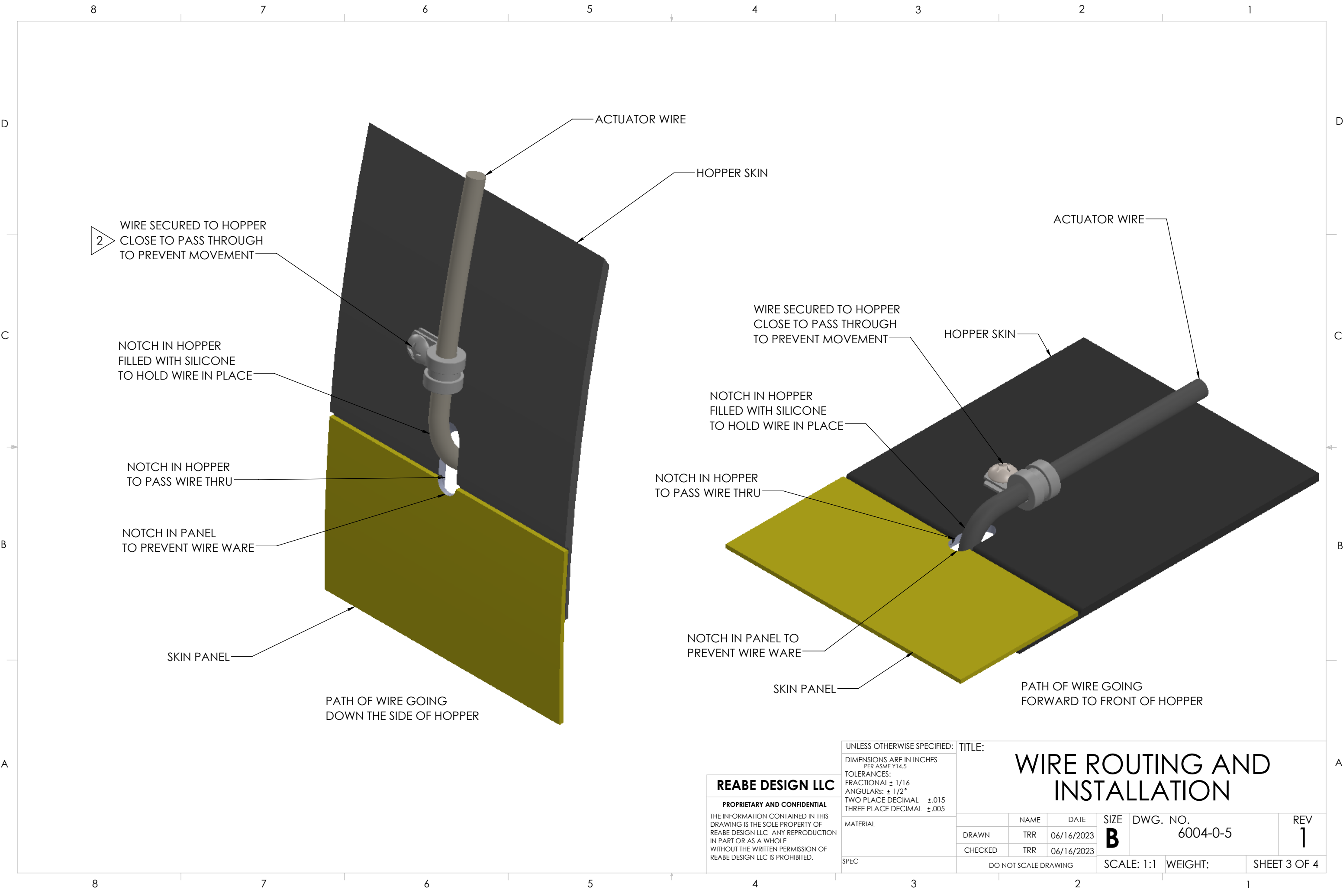
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CHECKED	TRR	DATE	06/16/2023	B	6004-0-5	1
DO NOT SCALE DRAWING			SCALE: 1:32 WEIGHT:		SHEET 1 OF 4	



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DIMENSIONS ARE IN INCHES PER ASME Y14.5 TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULARS: $\pm 1/2^\circ$ TWO PLACE DECIMAL $\pm .015$ THREE PLACE DECIMAL $\pm .005$			WIRE ROUTING AND INSTALLATION		
MATERIAL			NAME	DATE	SIZE
SPEC			DRAWN	TRR	06/16/2023
			CHECKED	TRR	06/16/2023
DO NOT SCALE DRAWING			SCALE: 1:6		WEIGHT:
			DWG. NO. 6004-0-5		REV 1
			SHEET 2 OF 4		



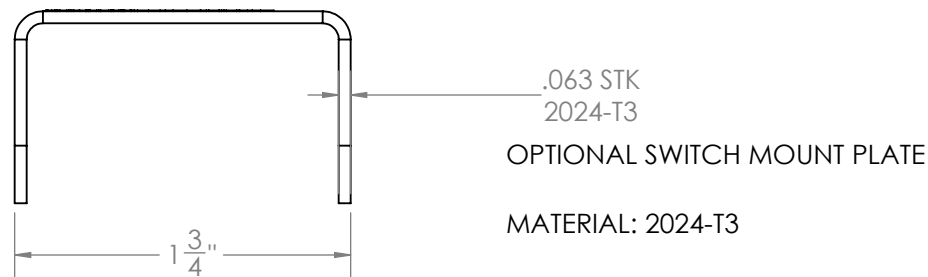
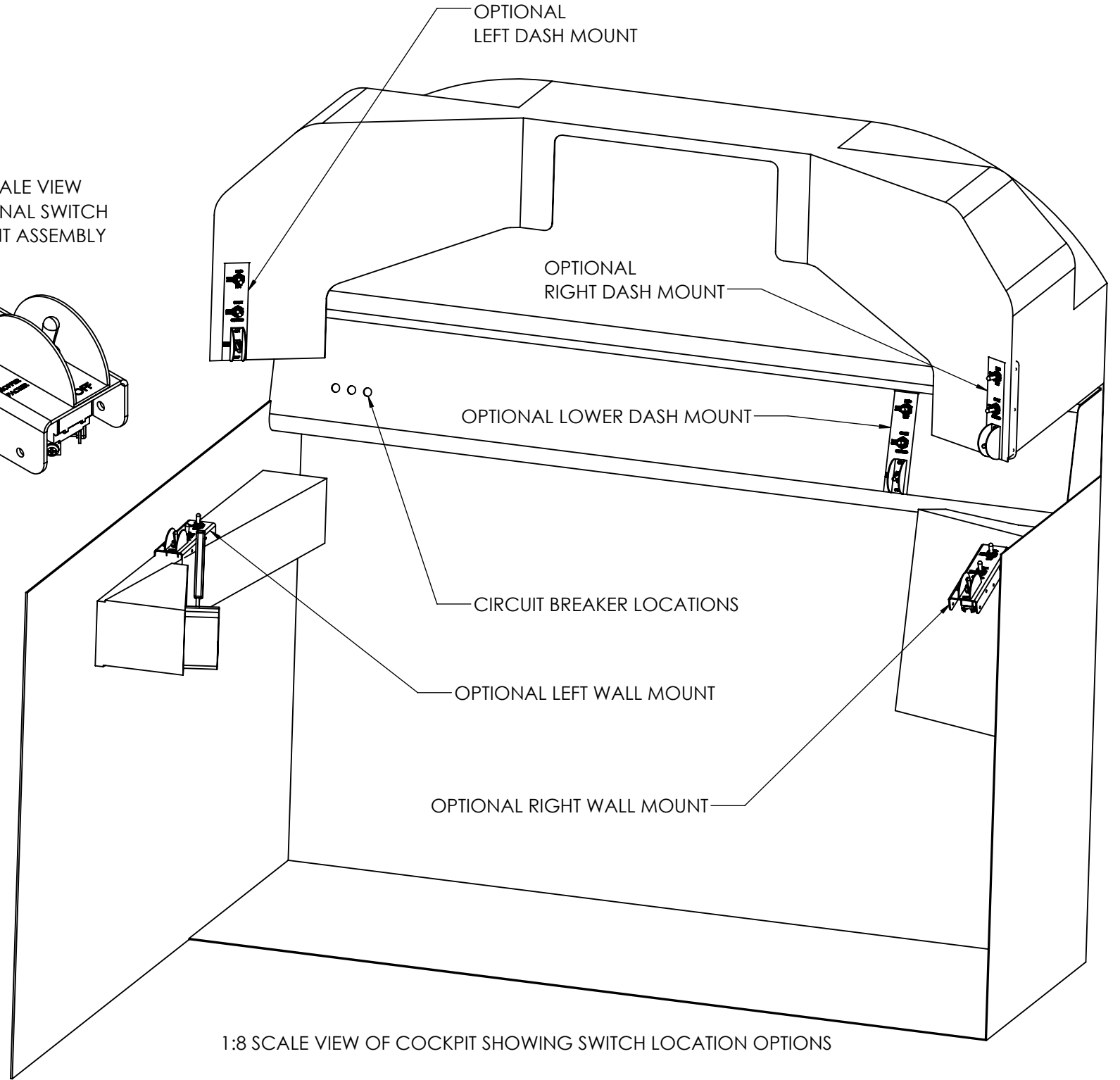
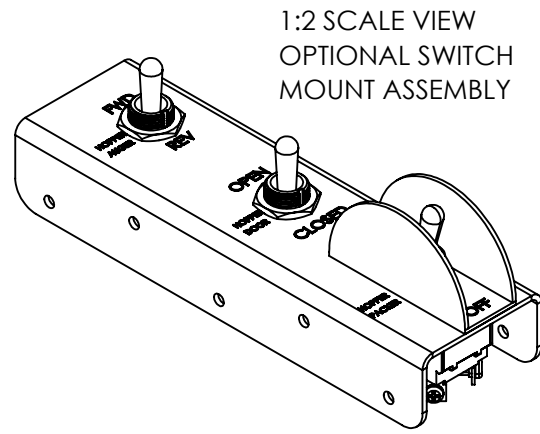
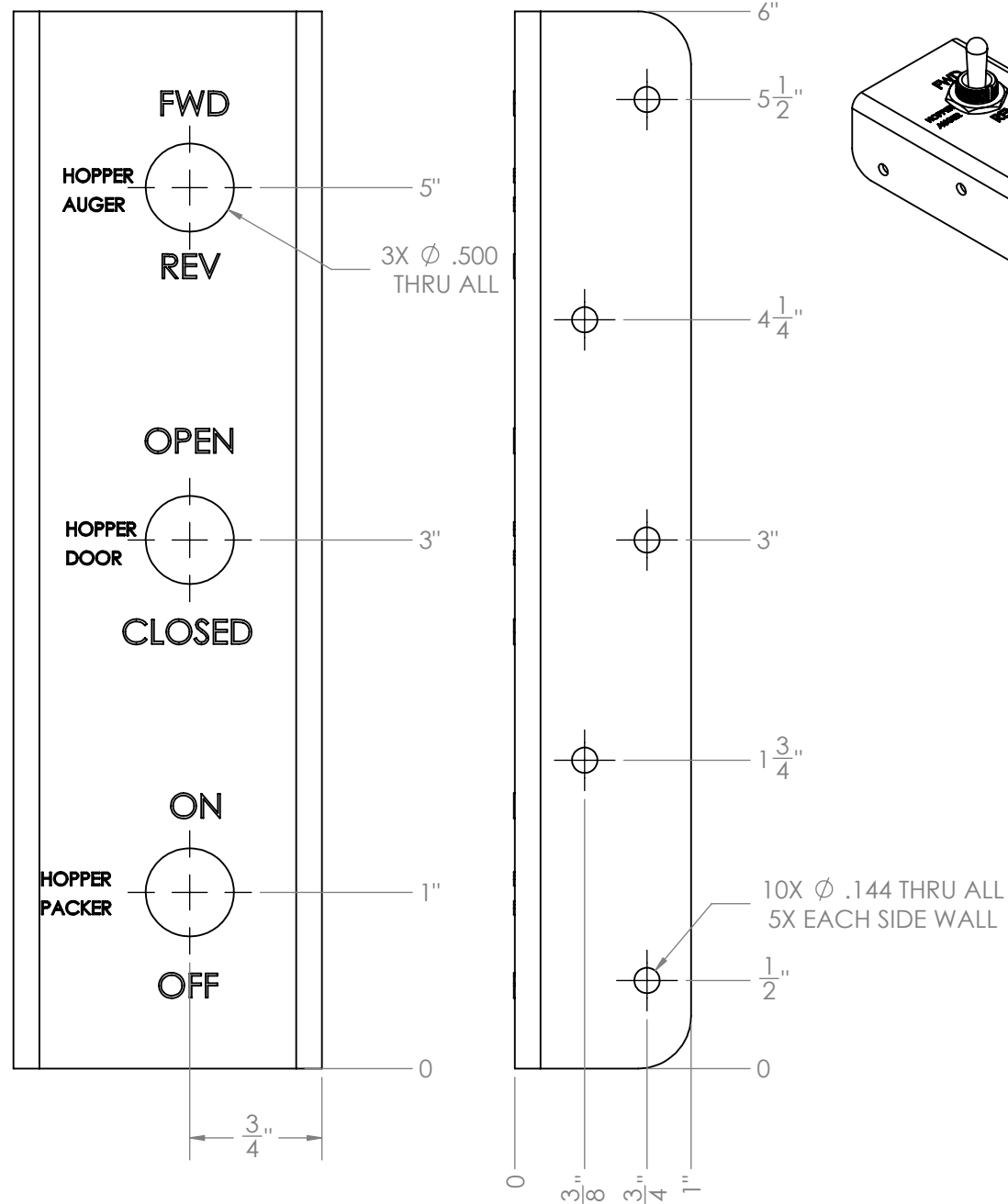
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TOLERANCES:	
FRACTIONAL	± 1/16
ANGULARS	± 1/2°
TWO PLACE DECIMAL	±.015
THREE PLACE DECIMAL	±.005
MATERIAL	
SPEC	

TITLE:				
WIRE ROUTING AND INSTALLATION				
DRAWN	NAME	DATE	SIZE	DWG. NO.
	TRR	06/16/2023	B	6004-0-5
CHECKED	TRR	06/16/2023	SCALE: 1:1	
DO NOT SCALE DRAWING			WEIGHT:	SHEET 3 OF 4

- NOTE:
- SWITCHES CAN BE HORIZONTALLY OR VERTICALLY ARRANGED.
 - SWITCHES SHOULD BE GROUPED NEXT TO EACH OTHER.
 - SWITCHES CAN BE MOUNTED IN EXISTING DASH HOLES OR ON SWITCH MOUNT PLATE



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TOLERANCES:
FRACTIONAL ± 1/16
ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

SPEC

TITLE:

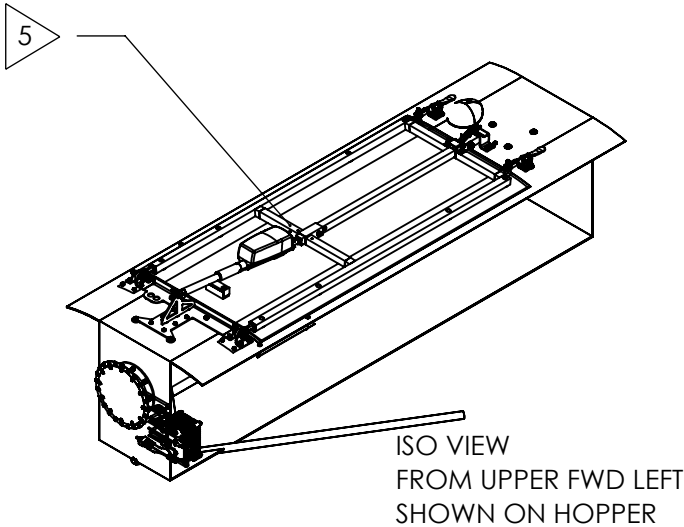
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DRAWN	NAME	DATE	SIZE	DWG. NO.	REV
CHECKED	TRR	06/16/2023	B	6004-0-5	1

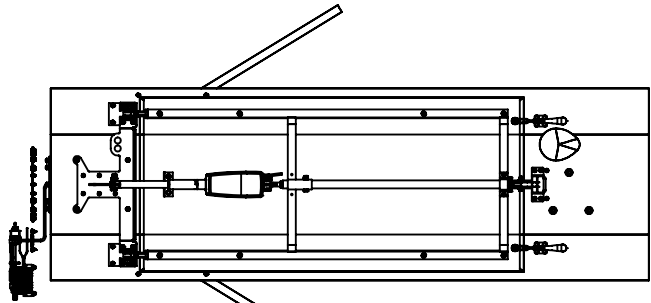
DO NOT SCALE DRAWING SCALE: 1:1 WEIGHT: SHEET 4 OF 4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-01	DOOR ASSEMBLY 802	1
2	6004-01-02	HOPPER PACKER AUGER 802	1

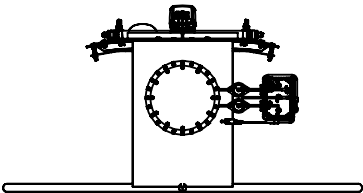
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR
2	ADDED NOTE 5	07/18/2024	TRR



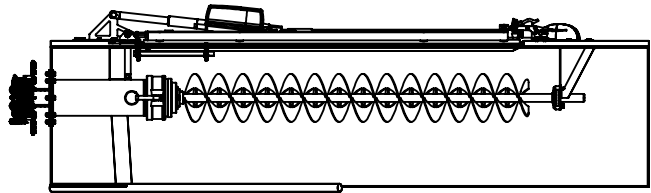
ISO VIEW
FROM UPPER FWD LEFT
SHOWN ON HOPPER



VIEWFROM TOP
SHOWN ON HOPPER



VIEWFROM FRONT
SHOWN ON HOPPER



VIEWFROM LEFT
SHOWN ON HOPPER

NOTES:

1. ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
2. SEE SUB-ASSEMBLY OR INSTALL INSTRUCTIONS FOR ASSEMBLY AND STACK UP DATA
3. SEE PART DRAWING FOR MATERIAL DATA
4. SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
5. APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 9, OR 12

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ANGULARs: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

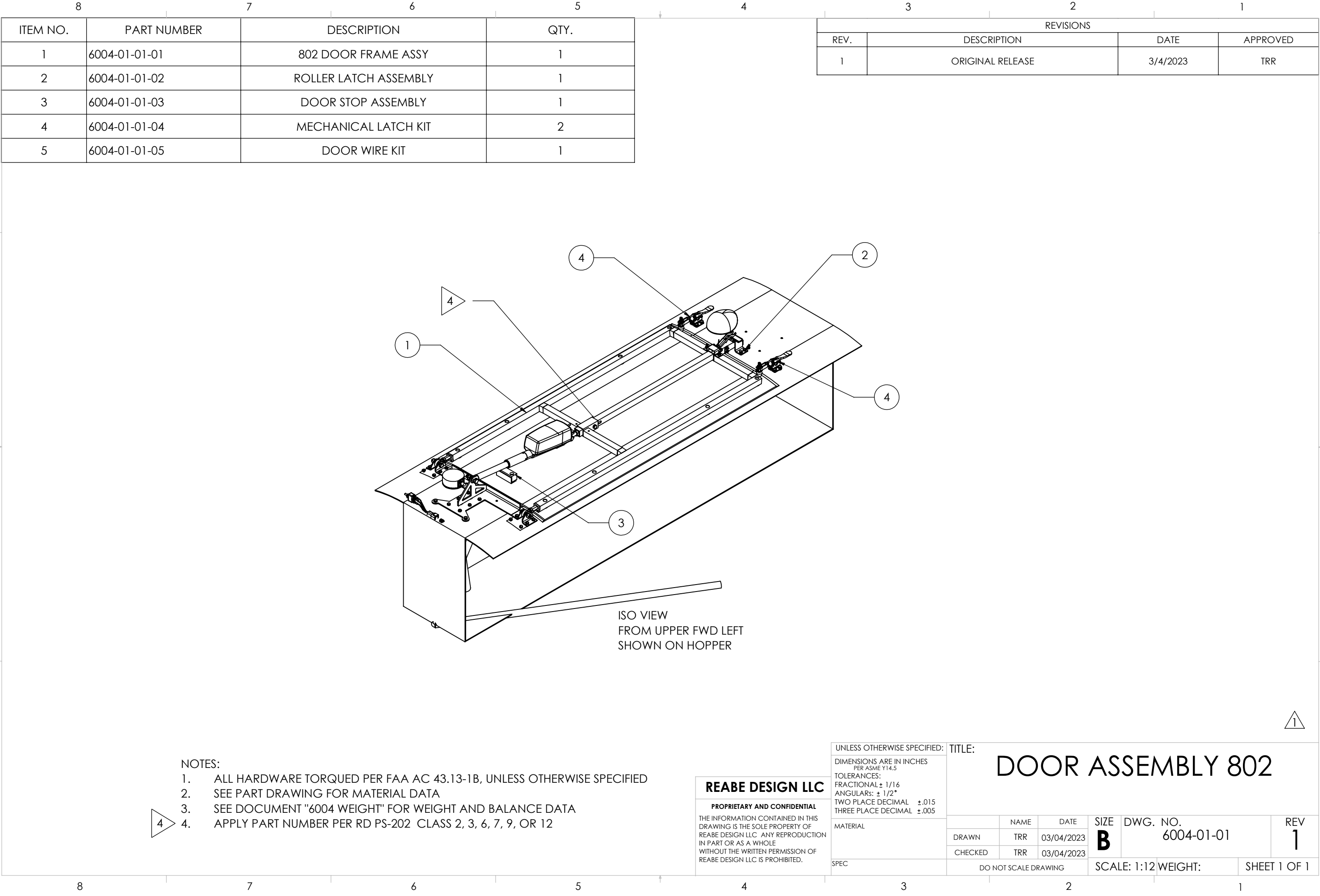
TITLE:

HOPPER PACKER 802

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-01	2
CHECKED	TRR	03/04/2023			

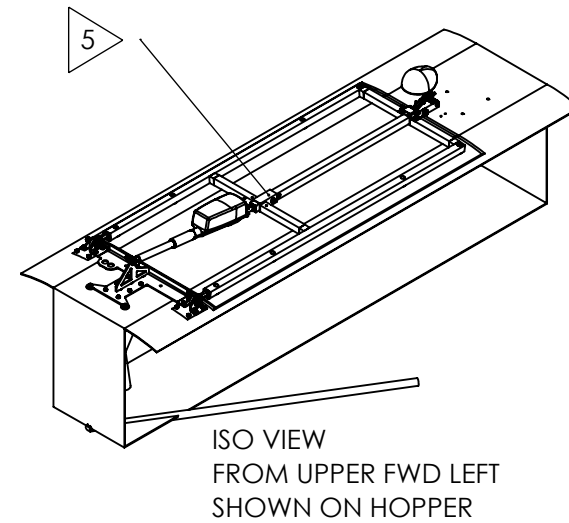
DO NOT SCALE DRAWING

SCALE: 1:24WEIGHT: SHEET 1 OF 1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-01-01-01	802 DOOR FRAME	1
2	6004-01-01-01-02	802 SLIDE ROD ASSY	1
3	6004-01-01-01-03	HINGE	1
4	6004-01-01-01-04	ACTUATOR DOUBLER	1
5	6004-01-01-01-05	OUTER HINGE	2
6	6004-01-01-01-06	HINGE DOUBLER PLATE	2
7	6004-01-01-01-07	SLIDE LATCH	1
8	6004-01-01-01-08	SLIDE STOP	2
9	6004-01-01-01-10	LINEAR ACTUATOR	1
10	6004-01-01-01-11	SS CLEVIS PIN 3/8 X 1	1
11	6004-01-01-01-12	BALL JOINT ROD END	2
12	6004-01-01-01-13	SS BALL BEARING 3/8 ID	2
13	6004-01-01-01-15	SS TORSION SPRING	1
14	6004-01-01-01-16	NYLON SPACER	2
15	6004-01-01-01-17	PLASTIC SPACER	3
16	6004-01-01-01-18	SHCS SS 10-32 1-5/8	2
17	6004-01-01-01-19	BUTTON HEAD SCREW SS 10-32 X 1.75	2
18	6004-01-01-01-20	SS HEX HEAD M10 X 1.5 MM 45 MM	2
19	6004-01-01-01-21	M10 SS WASHER	4
20	6004-01-01-01-22	M10 X 1.5MM SS LOCK NUT	2
21	6004-01-01-01-23	7/16-20 SS JAM NUT	2
22	6004-01-01-01-24	SS CLEVIS PIN 5/16 X 1-5/8	1
23	6004-01-01-01-25	LATCH PIVOT FOR SS FRAME	1
24	6004-01-01-01-26	3/8-24 X 1-3/4" SS HEX BOLT	2
25	NAS1149C0663R	3/8 .063 WASHER SS	17
26	MS21044C6	3/8-24 SS LOCKNUT	2
27	AN960C516L	5/16 SS WASHER .032"	2
28	AN365C524	5/16-24 SS NYLON LOCK NUT	1
29	MS35308-339	5/16-24 X 1-3/4 SS HEX SCREW	1
30	MS21044C3	10-32 SS LOCKNUT	30
31	NAS1149C0316R	#10 SS WASHER .016"	2
32	NAS1149C0336R	#10 SS WASHER .063"	52
33	AN3C6A	10-32 SS DASH 6	18
34	AN3C12A	3/16 SS BOLT	8
35	AN960C416	1/4 SS WASHER .063"	4
36	AN365C428	1/4-28 SS NYLON LOCK NUT	2
37	AN4C6A	1/4-28 SS BOLT	2

3		2		1	
REVISIONS					
REV.	DESCRIPTION			DATE	APPROVED
1	ORIGINAL RELEASE			3/4/2023	TRR



ISO VIEW
FROM UPPER FWD LEFT
SHOWN ON HOPPER

NOTES:

1. ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
2. PIVOT POINT BOLTS DO NOT PINCH JOINT
3. SEE PART DRAWING FOR MATERIAL DATA
4. SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
5. APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12

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TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

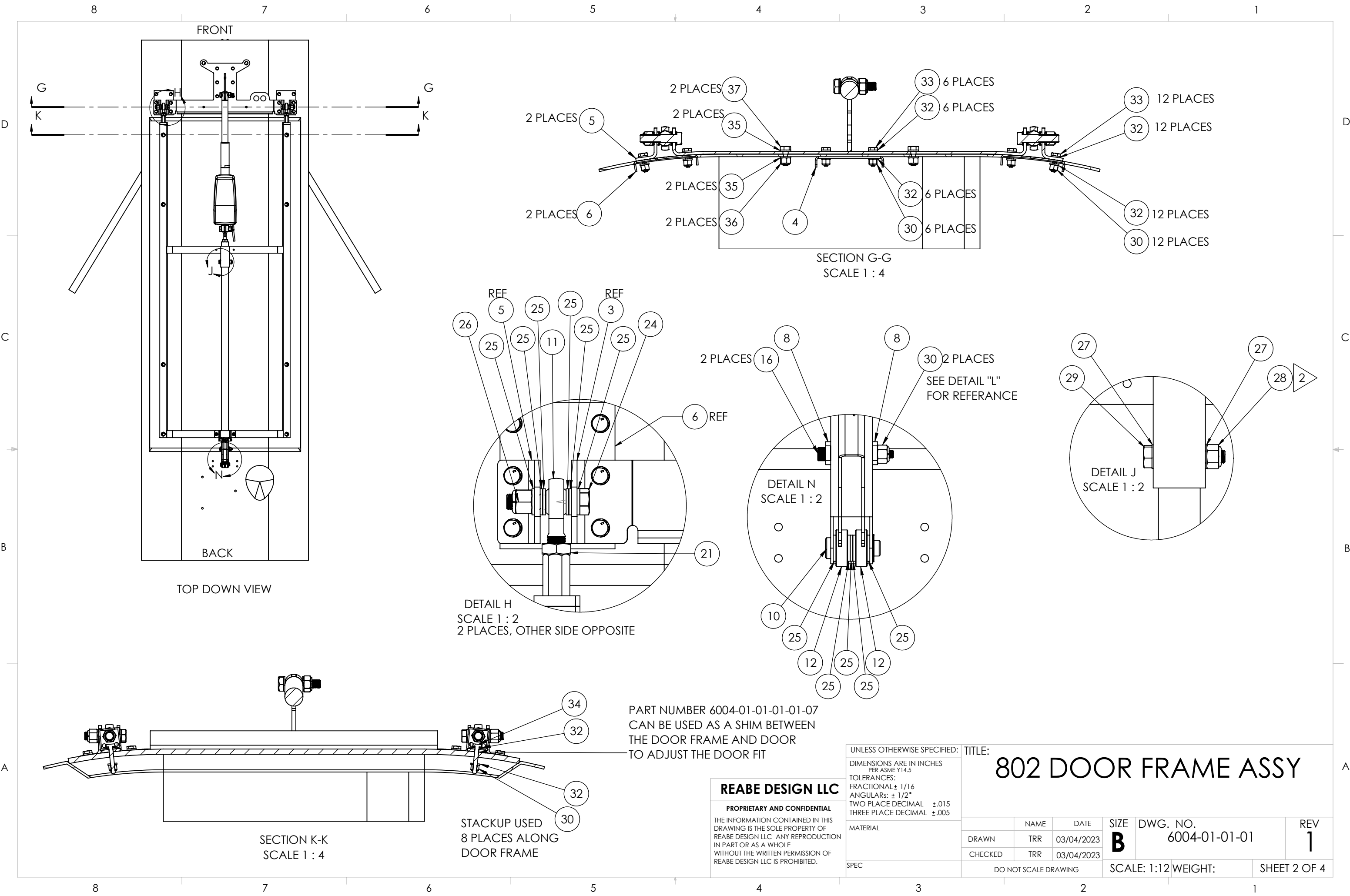
SPEC

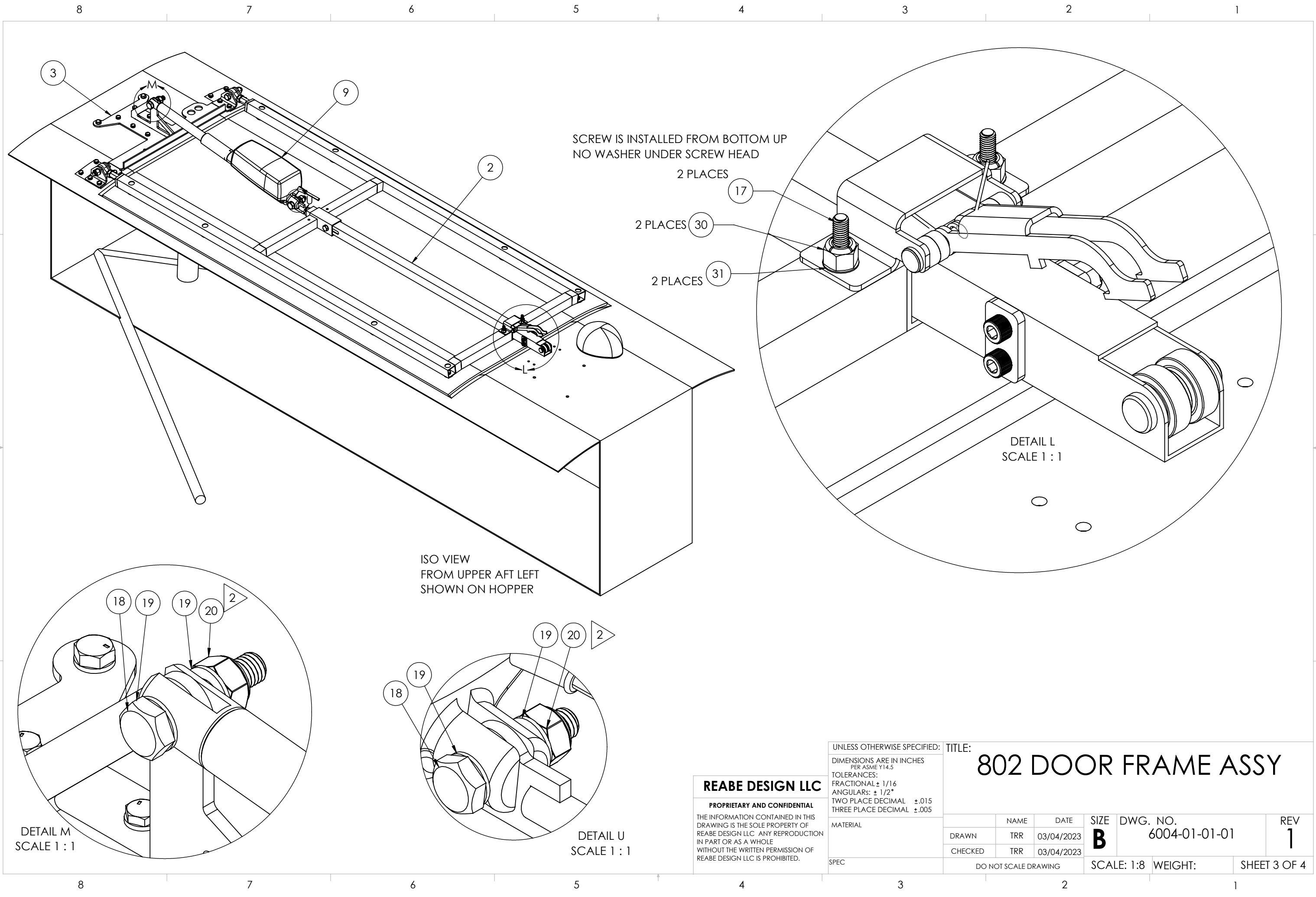
0:	TITLE:
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802 DOOR FRAME ASSY

	NAME	DATE	SIZE B	DWG. NO. 6004-01-01-01	REV 1
DRAWN	TRR	03/04/2023			
CHECKED	TRR	03/04/2023			

SCALE: 1:24	WEIGHT:	SHEET 1 OF 4
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TOLERANCES:

FRACTIONAL $\pm 1/16$

ANGULARS: $\pm 1/2^\circ$

TWO PLACE DECIMAL $\pm .015$

THREE PLACE DECIMAL $\pm .005$

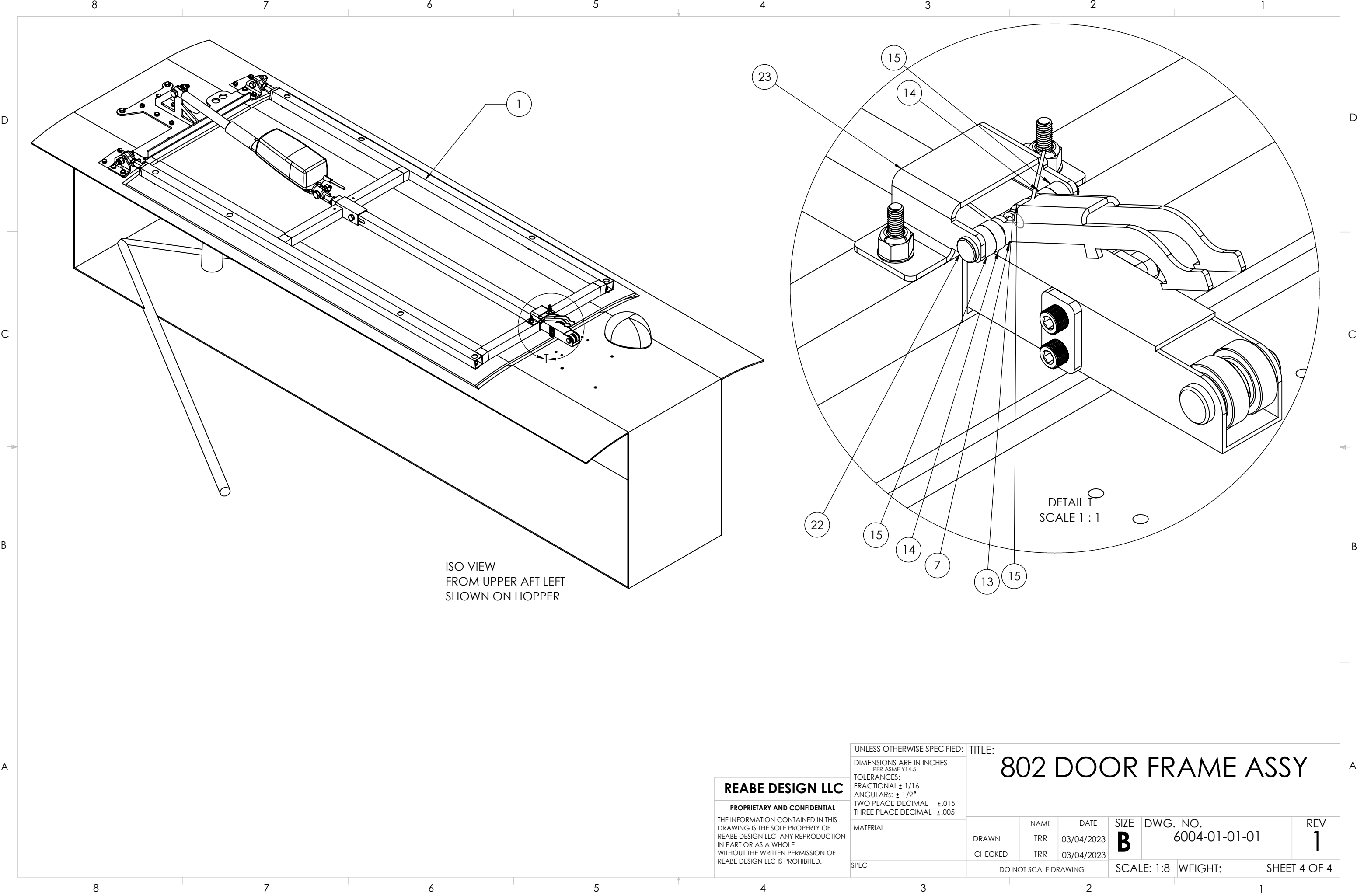
MATERIAL

SPEC

TITLE:

802 DOOR FRAME ASSY

DRAWN		NAME	DATE	SIZE	DWG. NO.	REV
CHECKED		TRR	03/04/2023	B	6004-01-01-01	1
DO NOT SCALE DRAWING				SCALE: 1:8	WEIGHT:	SHEET 3 OF 4



ISO VIEW
FROM UPPER AFT LEFT
SHOWN ON HOPPER

DETAIL T
SCALE 1 : 1

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TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

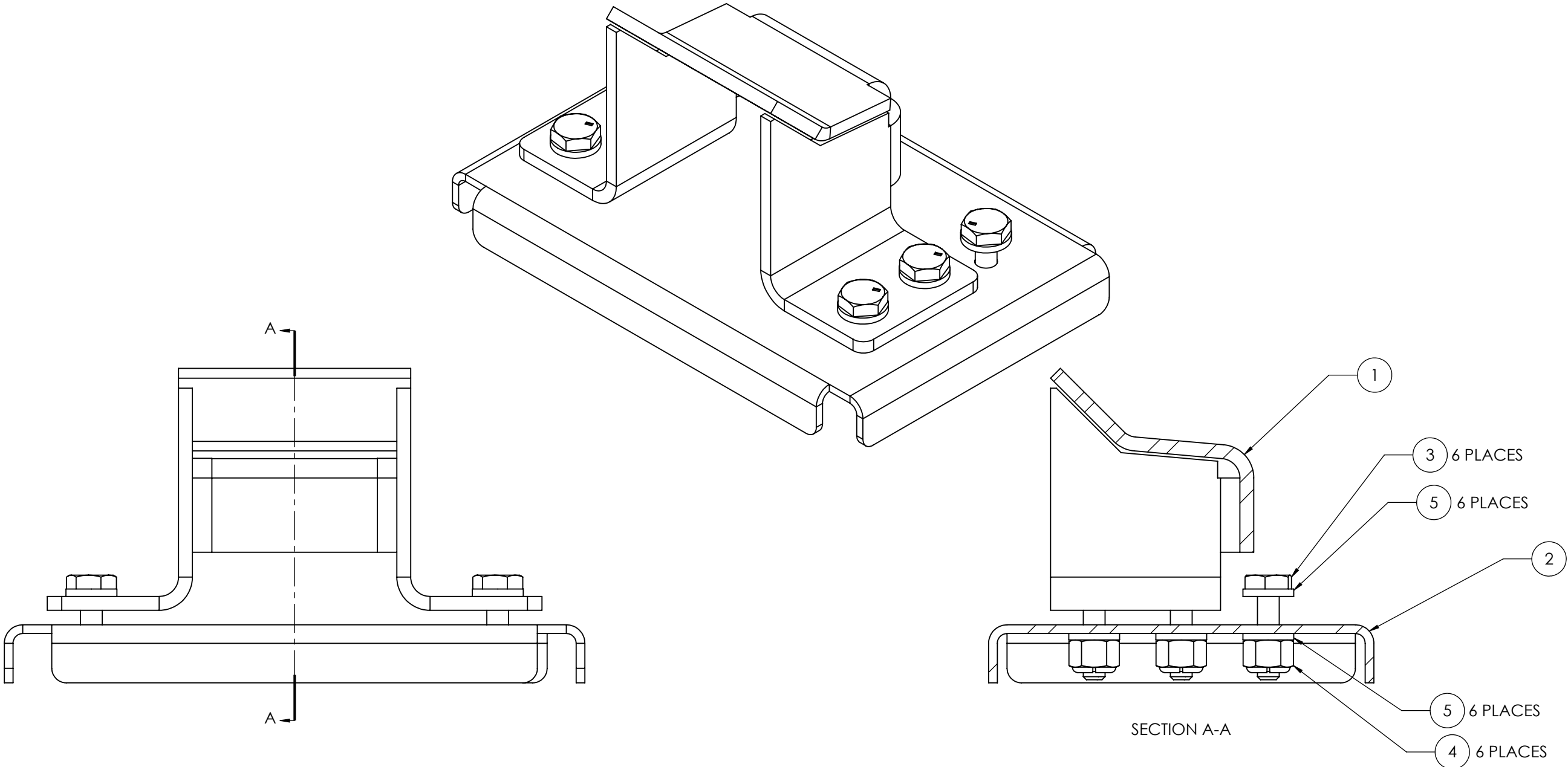
TITLE:

802 DOOR FRAME ASSY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-01-01-01	1
CHECKED	TRR	03/04/2023			
DO NOT SCALE DRAWING			SCALE: 1:8	WEIGHT:	SHEET 4 OF 4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-01-02-01	ROLLER LATCH HOUSING	1
2	6004-01-01-02-02	ROLLER LATCH DOUBLER	1
3	AN3C6A	10-32 SS DASH 6	6
4	MS21044C3	10-32 SS LOCKNUT	6
5	NAS1149C0336R	#10 SS WASHER .063"	12

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR



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TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

TITLE:

ROLLER LATCH ASSEMBLY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-01-01-02	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING

SCALE: 1:1

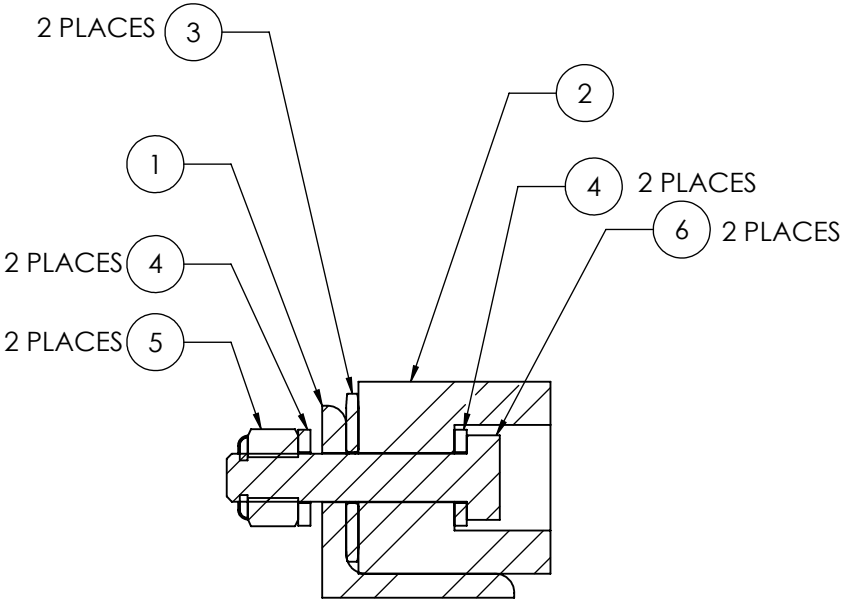
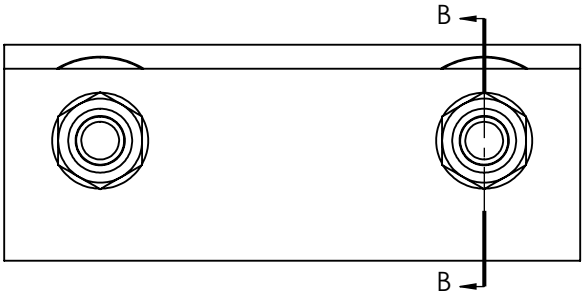
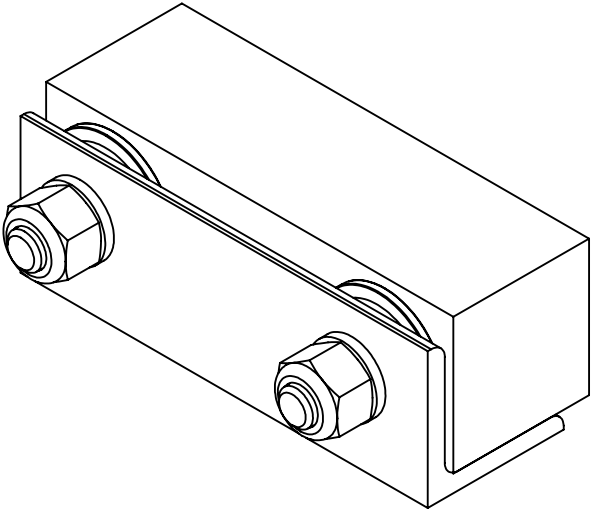
WEIGHT:

SHEET 1 OF 1

- NOTES:
- HAND TIGHTEN HARDWARE. HARDWARE WILL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
 - SEE PART DRAWING FOR MATERIAL DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-01-03-01	STOP ANGLE BAR	1
2	6004-01-01-03-02	STOP RUBBER BUMPER	1
3	6004-01-01-03-03	1/4" SS OVERSIZED WASHER	2
4	AN960C416	1/4 SS WASHER .063"	4
5	AN365C428	1/4-28 SS NYLON LOCK NUT	2
6	AN4C12A	1/4-28 SS BOLT	2

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR



SECTION B-B

- NOTES:
- HAND TIGHTEN HARDWARE. HARDWARE WITLL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
 - SEE PART DRAWING FOR MATERIAL DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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TOLERANCES:
FRACTIONAL ± 1/16
ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

TITLE:

DOOR STOP ASSEMBLY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-01-01-03	1
CHECKED	TRR	03/04/2023			

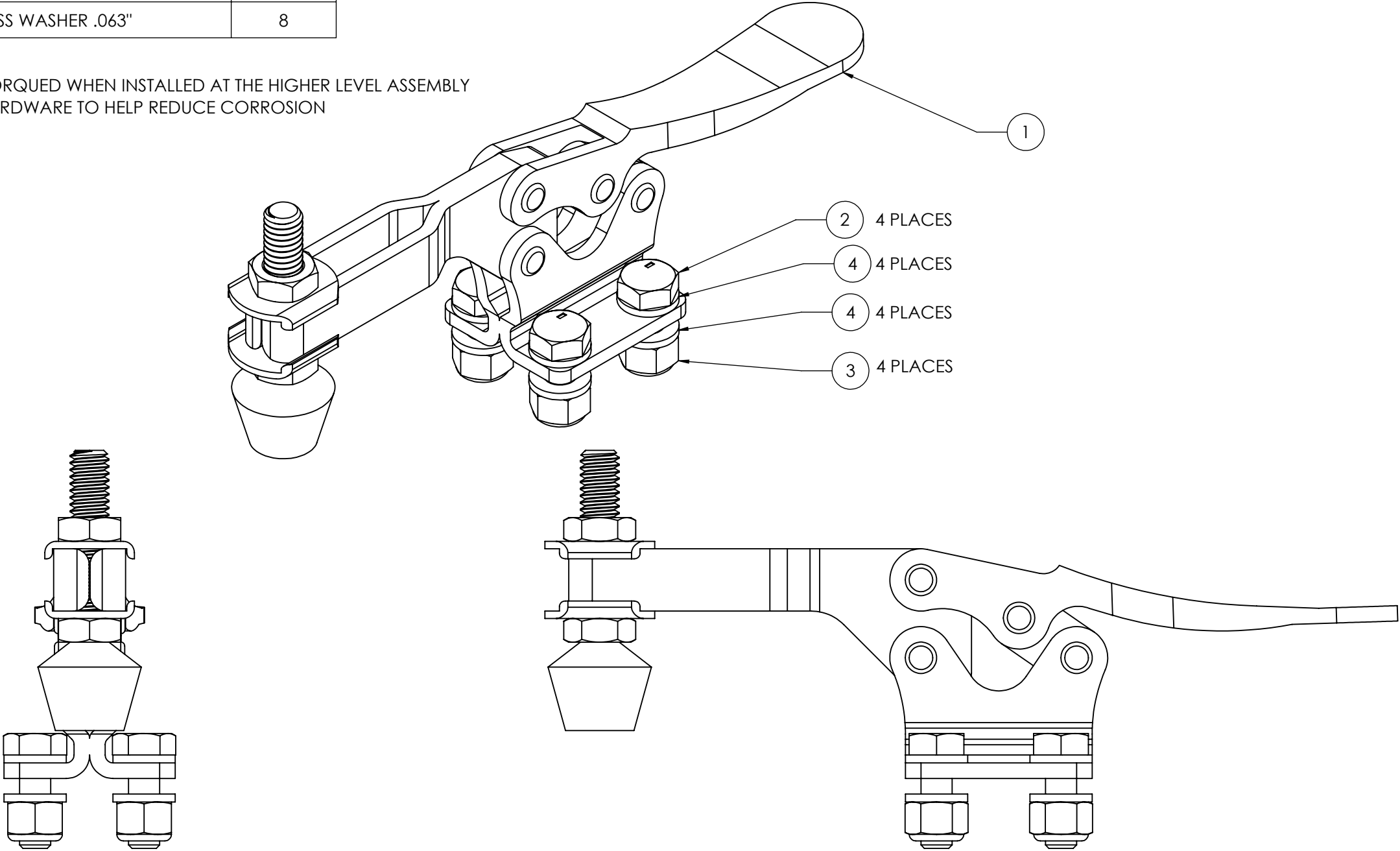
SPECDO NOT SCALE DRAWINGSCALE: 1:1WEIGHT:SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-01-04-01	HOLD DOWN CLAMP	1
2	AN4C6A	1/4-28 SS BOLT	4
3	AN365C428	1/4-28 SS NYLON LOCK NUT	4
4	AN960C416	1/4 SS WASHER .063"	8

NOTES:

- HAND TIGHTEN HARDWARE. HARDWARE WITLL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
- 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
- SEE PART DRAWING FOR MATERIAL DATA
- APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR



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ANGULARs: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

SPEC

TITLE:
MECHANICAL LATCH KIT

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-01-01-04	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING

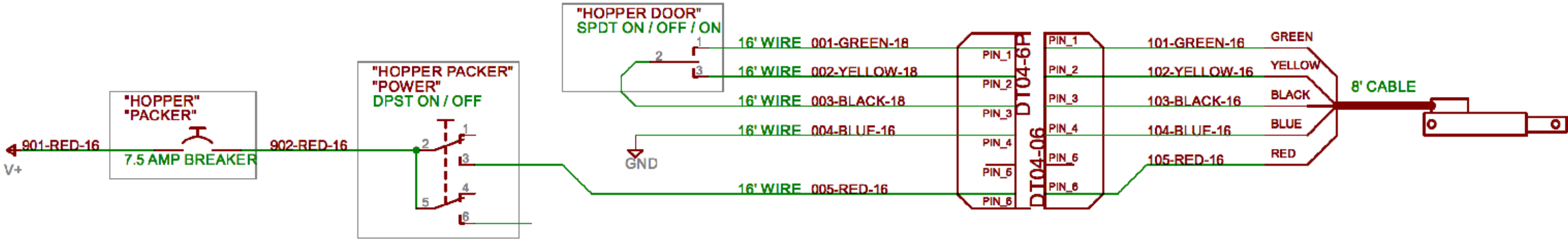
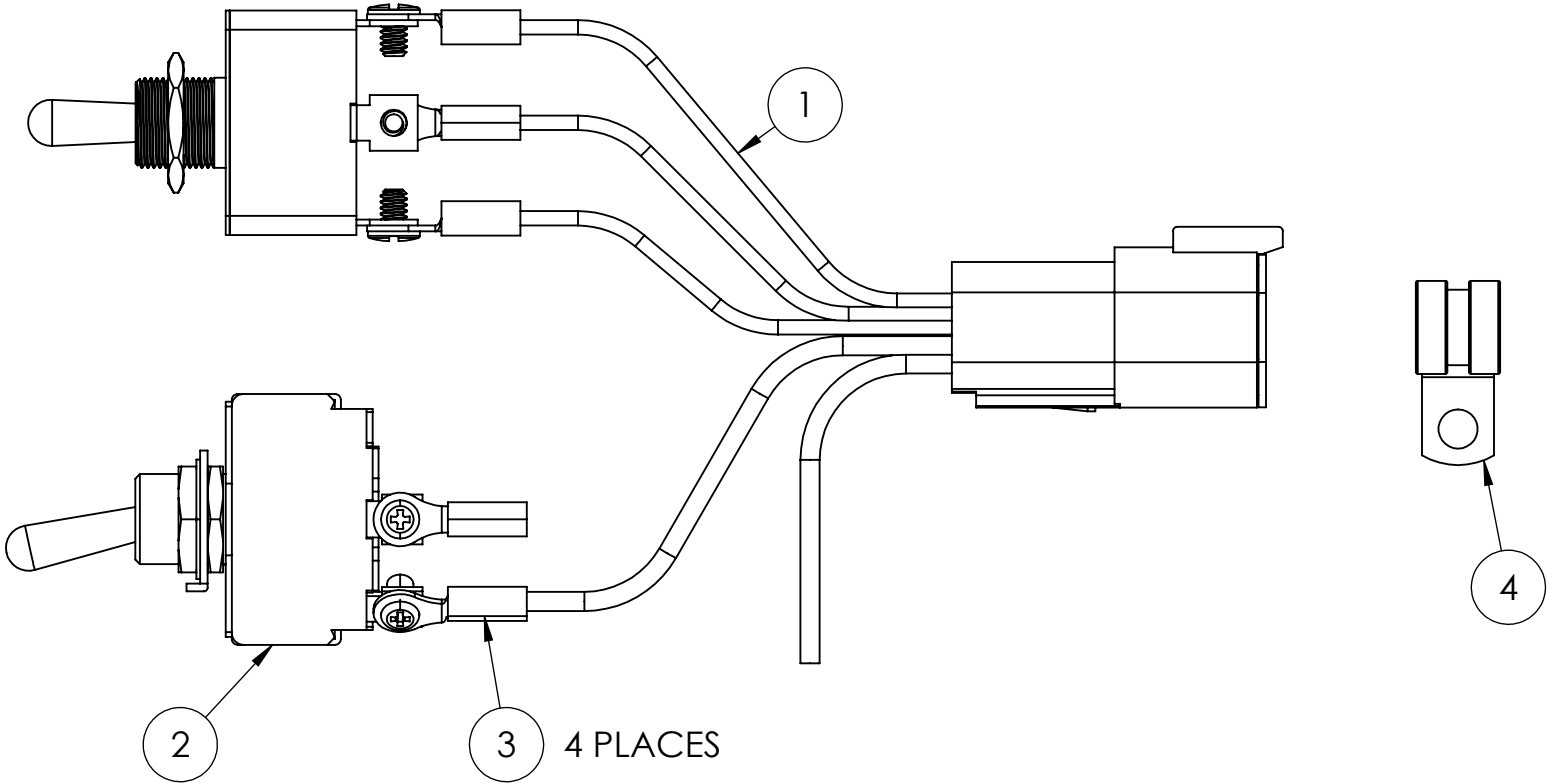
SCALE: 1:1

WEIGHT:

SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-01-05-01	DOOR WIRE HARNESS	1
2	6004-01-01-05-01-02	DPST ON / OFF SWITCH	1
3	171508-1	CONN RING CIRC 16-22AWG #6 CRIMP	4
4	MS21919-CG4	LOOP CLAMP	1

REVISIONS				
REV.	DESCRIPTION	DATE	DFT	APP
1	ORIGINAL RELEASE	3/4/2023	TRR	TRR



- NOTE
1. SINGLE CONDUCTOR WIRE IS M22759-16-20-9 OR SIMILAR CORRECT FOR GAUGE AND COLOR
 2. #6 RING TERMINAL IS 171508-1 OR SIMILAR
 3. SCHEMATIC DIAGRAM USED TO SHOW WIRE CONNECTIONS
 4. APPLY PART NUMBER PER RD PS-202 CLASS 8

REABE DESIGN LLC

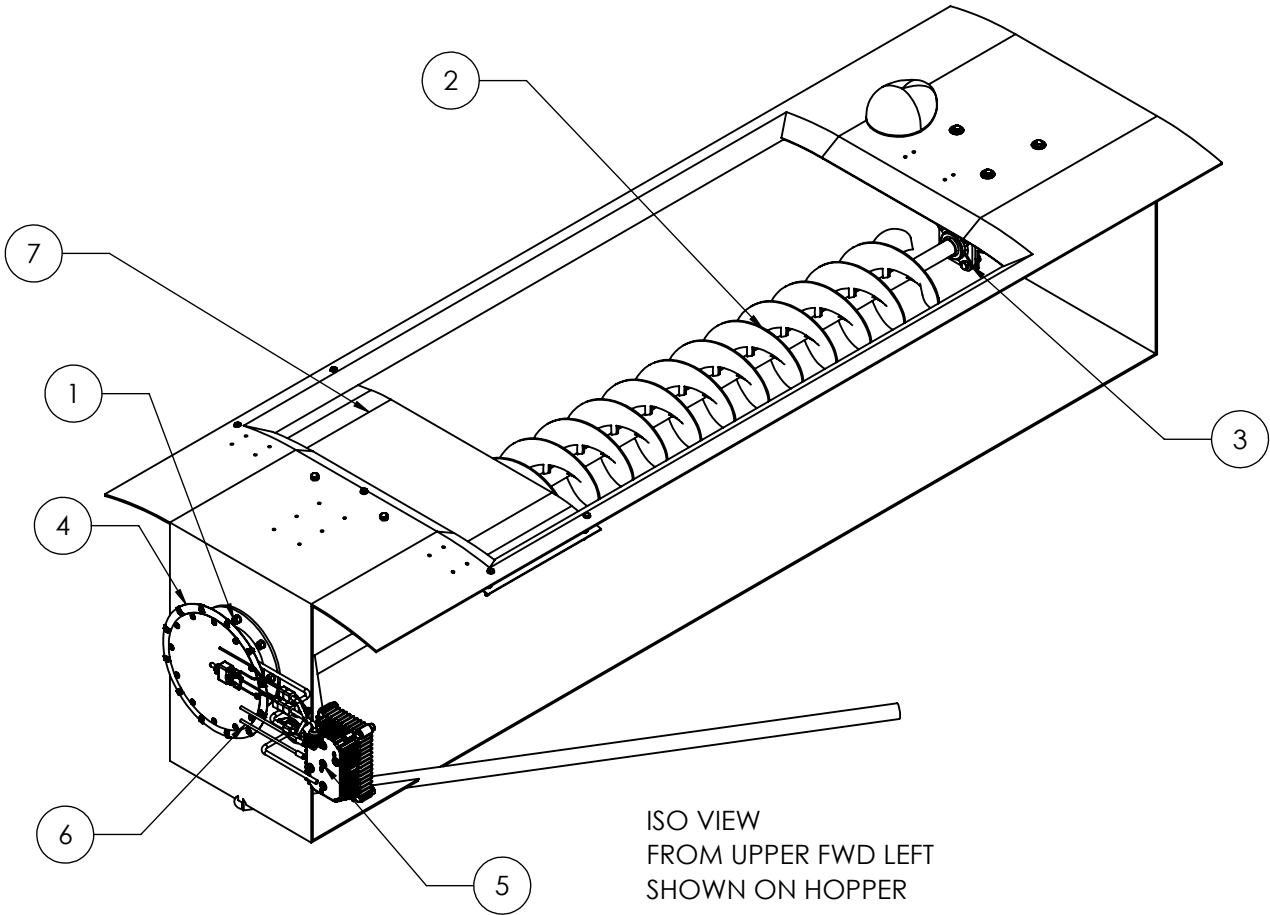
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TOLERANCES:							
FRACTIONAL ± 1/16							
ANGULARs: ± 1/2°							
TWO PLACE DECIMAL ±.015		DWG. NO. 6004-01-01-05					
THREE PLACE DECIMAL ±.005							
MATERIAL							
		NAME	DATE	SIZE	REV 1		
DRAWN		TRR	03/04/2023	B			
CHECKED		TRR	03/04/2023				
SPEC		DO NOT SCALE DRAWING			SCALE: 1:1	WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-01	AUGER MOTOR MOUNT ASSEMBLY	1
2	6004-01-02-02	AT-802 AUGER SHAFT ASSEMBLY	1
3	6004-01-02-03	AUGER SUPPORT ASSEMBLY	1
4	6004-01-02-04	FORWARD WALL KIT	1
5	6004-01-02-05	AUGER MOTOR AND CONTROLLER	1
6	6004-01-02-06	AUGER WIRE KIT	1
7	6004-01-02-07	BAFFLE KIT AT-802	1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR



- NOTES:
- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 - SEE PART DRAWING FOR MATERIAL DATA
 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12

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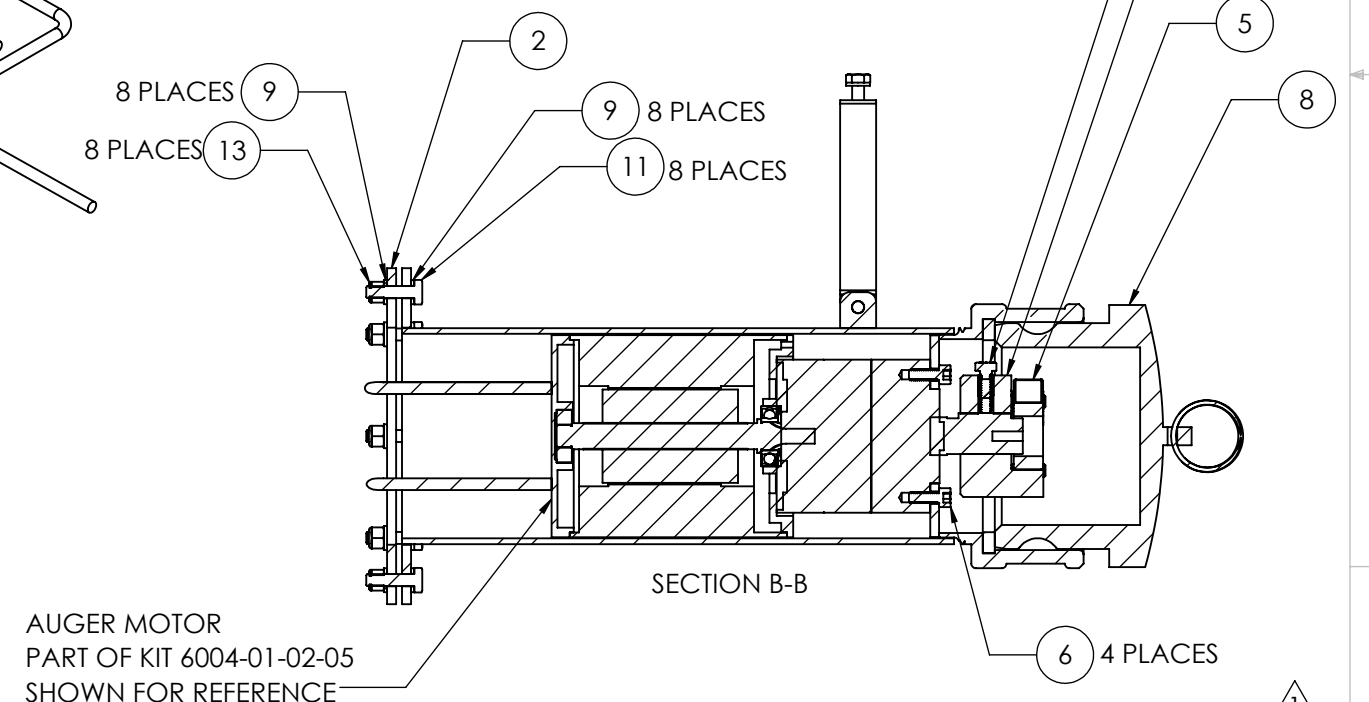
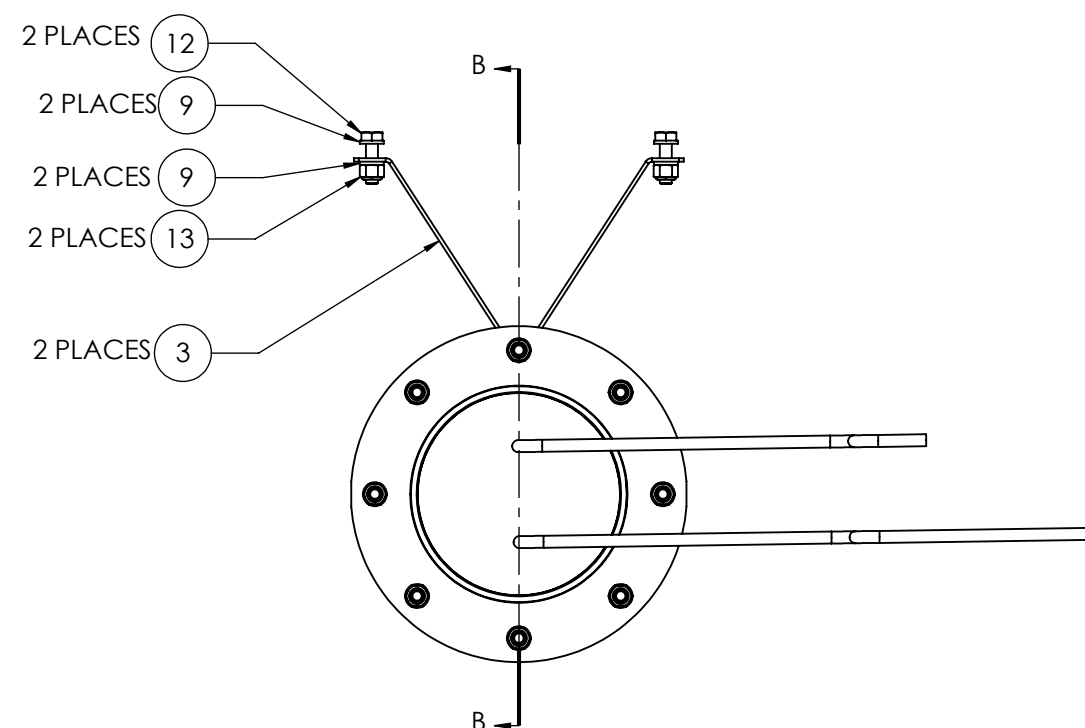
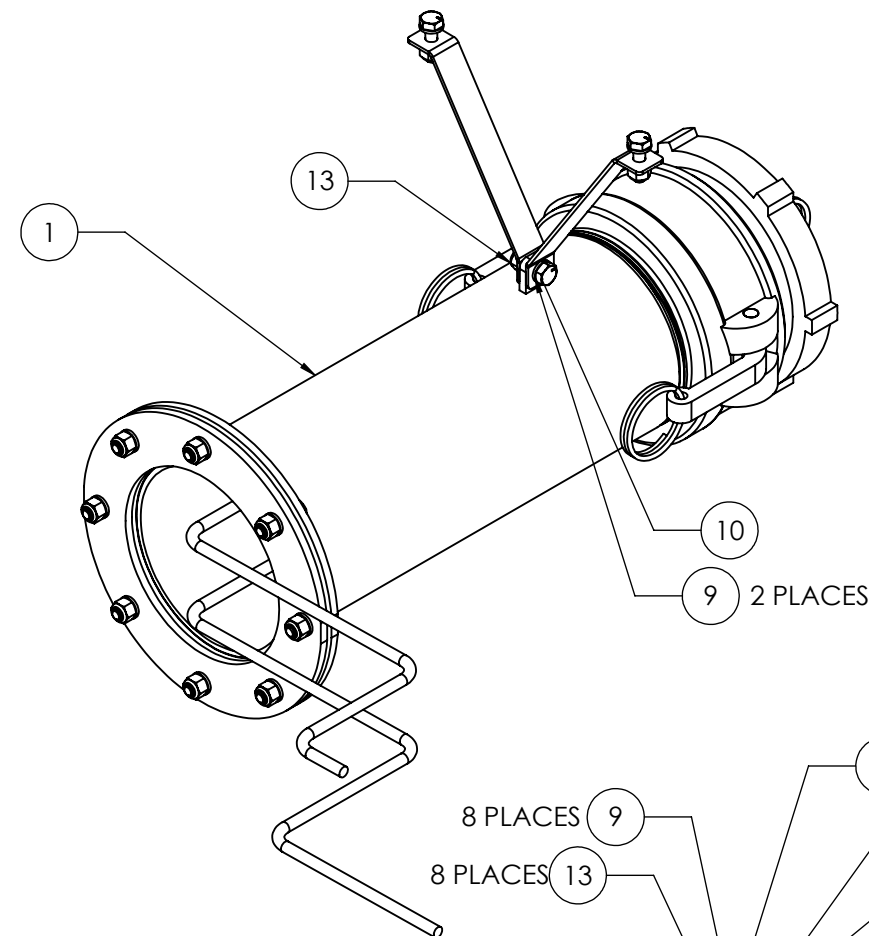
PROPRIETARY AND CONFIDENTIAL

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DIMENSIONS ARE IN INCHES PER ASME Y14.5		HOPPER PACKER AUGER 802				
TOLERANCES:						
FRACTIONAL: ± 1/16						
ANGULARs: ± 1/2°						
TWO PLACE DECIMAL ±.015						
THREE PLACE DECIMAL ±.005						
MATERIAL		NAME	DATE	SIZE	DWG. NO.	REV
	DRAWN	TRR	03/04/2023	B	6004-01-02	1
	CHECKED	TRR	03/04/2023			
SPEC	DO NOT SCALE DRAWING			SCALE: 1:12	WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-01-01	MOTOR HOUSING	1
2	6004-01-02-01-01-01	AUGER MOTOR FLANGE	1
3	6004-01-02-01-02	MOTOR SUPPORT ARM	2
4	6004-01-02-01-03	19MM SHAFT COUPLING	1
5	6004-01-02-01-04	SHAFT SPIDER	1
6	6004-01-02-01-05	M6 X 1mm, 16mm SHCS	4
7	6004-01-02-01-06	1/4-20 X 7/8 HEX SCREW	1
8	6004-01-02-01-07	4' MALE CAM PLUG	1
9	AN960C416	1/4 SS WASHER .063"	22
10	AN4C6A	1/4-28 SS BOLT	1
11	AN4C10A	1/4 SS BOLT	8
12	AN4C7A	1/4 SS BOLT	2
13	AN365C428	1/4-28 SS NYLON LOCK NUT	11

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR



NOTES:

1. HAND TIGHTEN HARDWARE. HARDWARE WILL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
2. 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
3. <PARA >SEE PART DRAWING FOR MATERIAL DATA
4. <PARA >APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

D:	TITLE:
----	--------

AUGER MOTOR MOUNT ASSEMBLY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-01-02-01	1
CHECKED	TRR	03/04/2023			

SCALE: 1:4

WEIGHT:

SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-02-01	MALE CAM LOCK MOUNT	1
2	6004-01-02-02-02	1" SHAFT COUPLING	1
3	6004-01-02-02-03	5/16-18 X 3/4 HEX SCREW	1
4	6004-01-02-02-04	1/4 X 1 ROUND KEY	1
5	6004-01-02-02-05	1" SHAFT LIP SEAL	1
6	6004-01-02-02-06	1" 2-BOLT FLANGE BEARING	1
7	6004-01-02-02-10	802 AUGER SHAFT	1
8	6004-01-02-02-07	5/16-24 X 3/4 SS HEX SCREW	2
9	AN960C516L	5/16 SS WASHER .032"	2

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR

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C

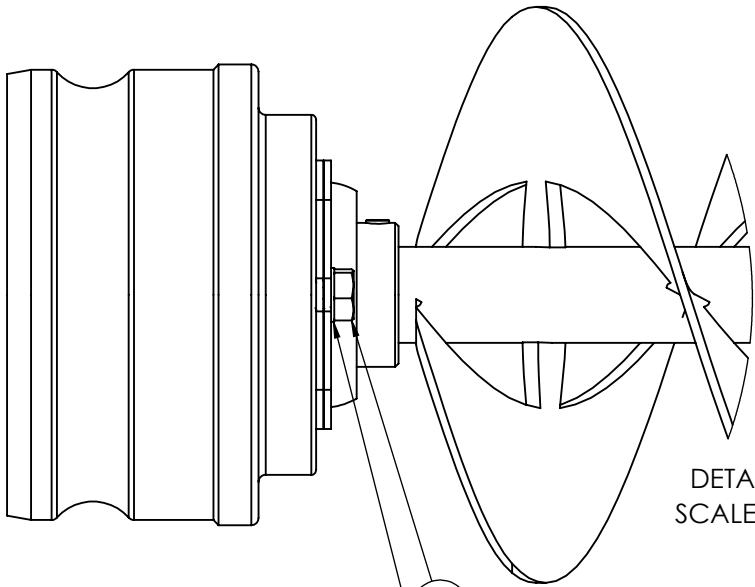
C

B

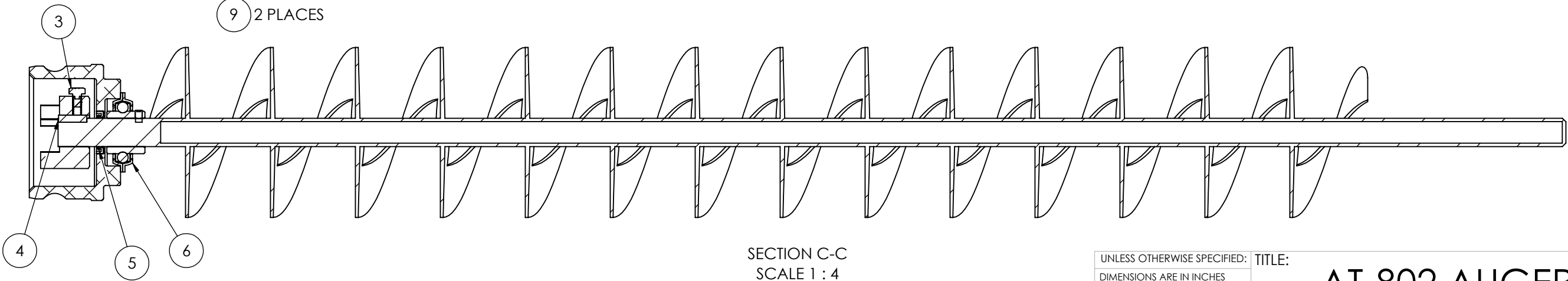
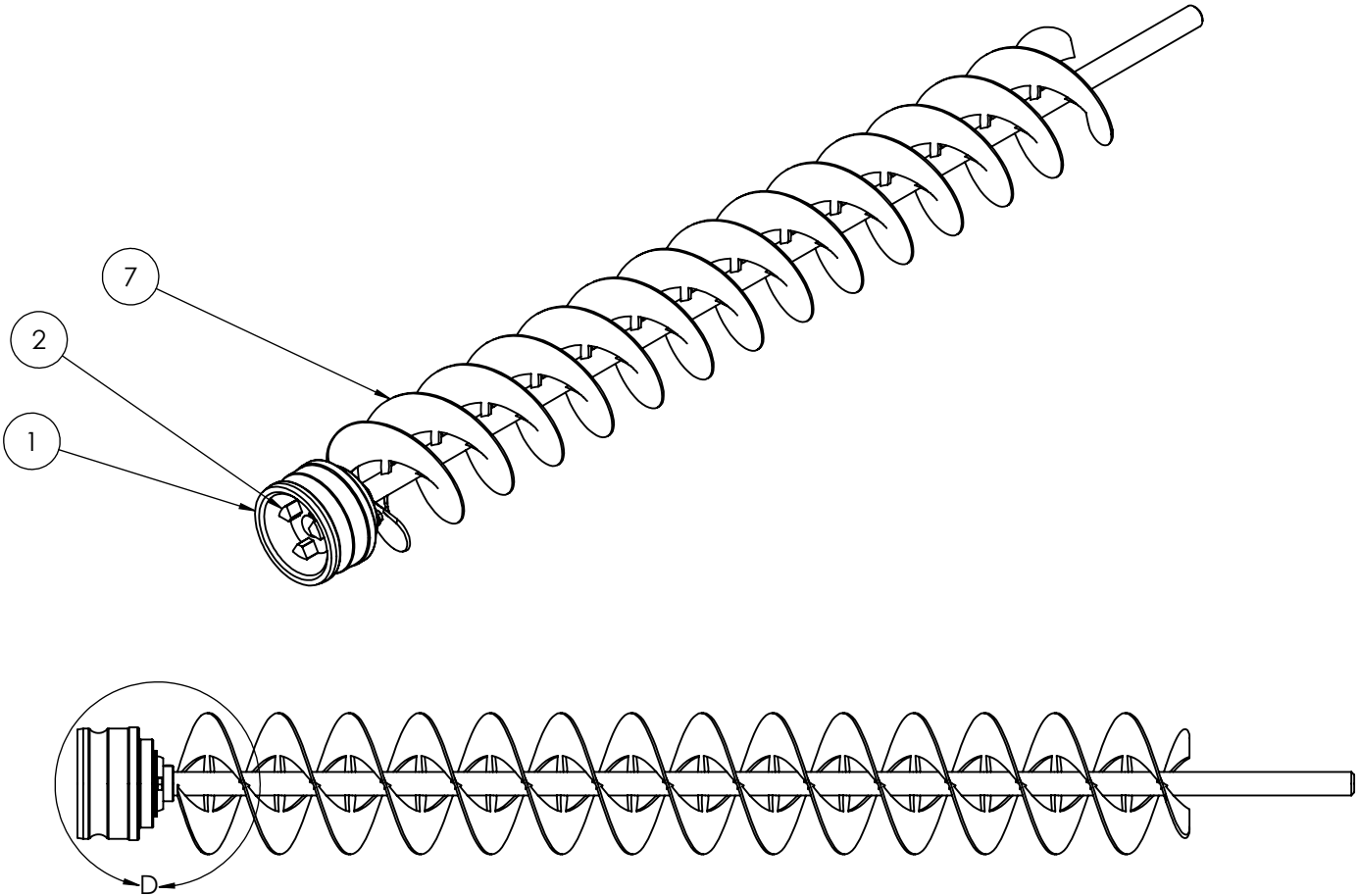
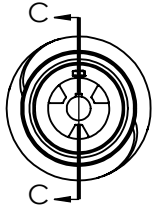
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A

A



DETAIL D
SCALE 1 : 2



SECTION C-C
SCALE 1 : 4

NOTES:

- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
- 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
- SEE PART DRAWING FOR MATERIAL DATA
- APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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FRACTIONAL $\pm 1/16$
ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

TITLE:

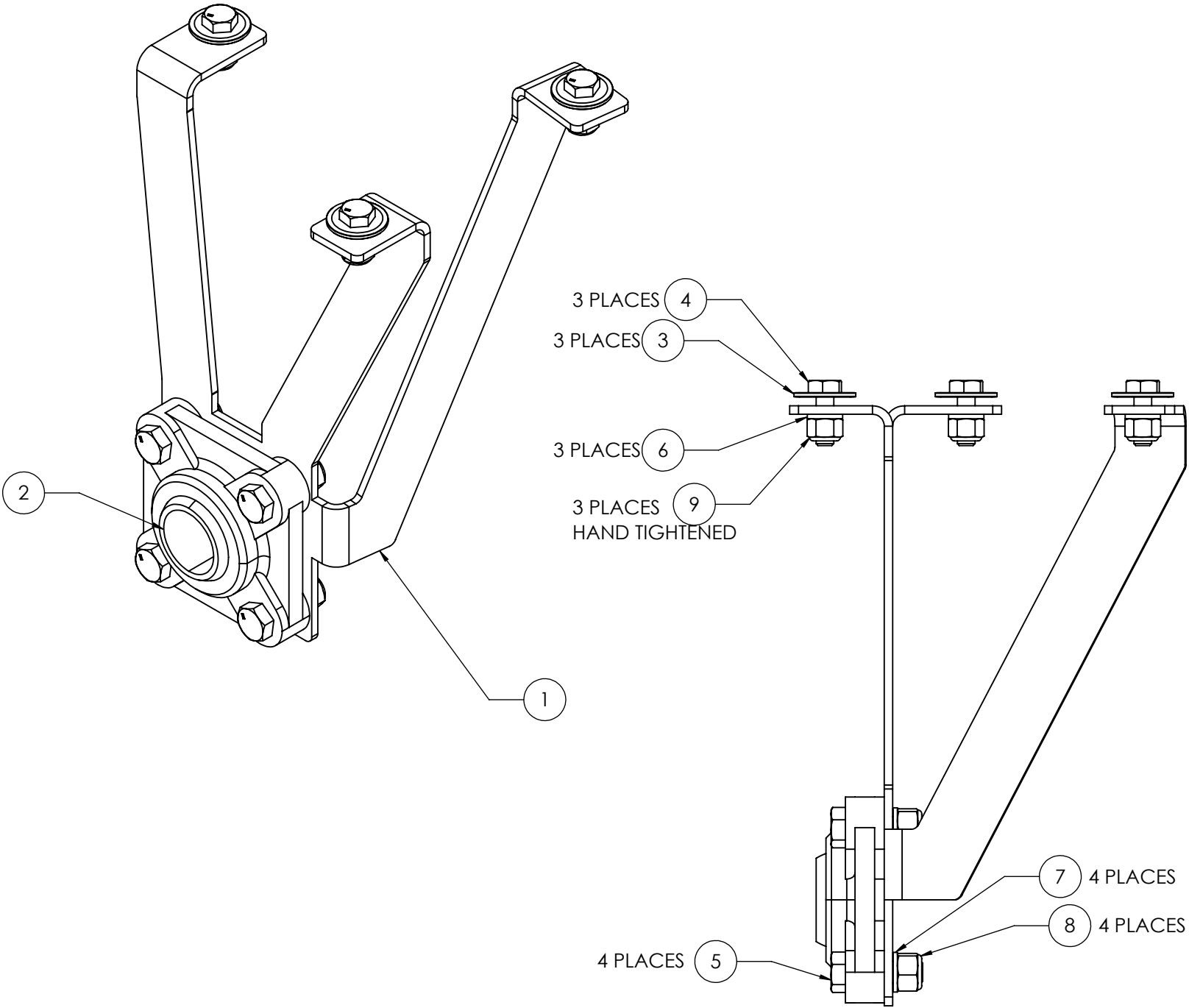
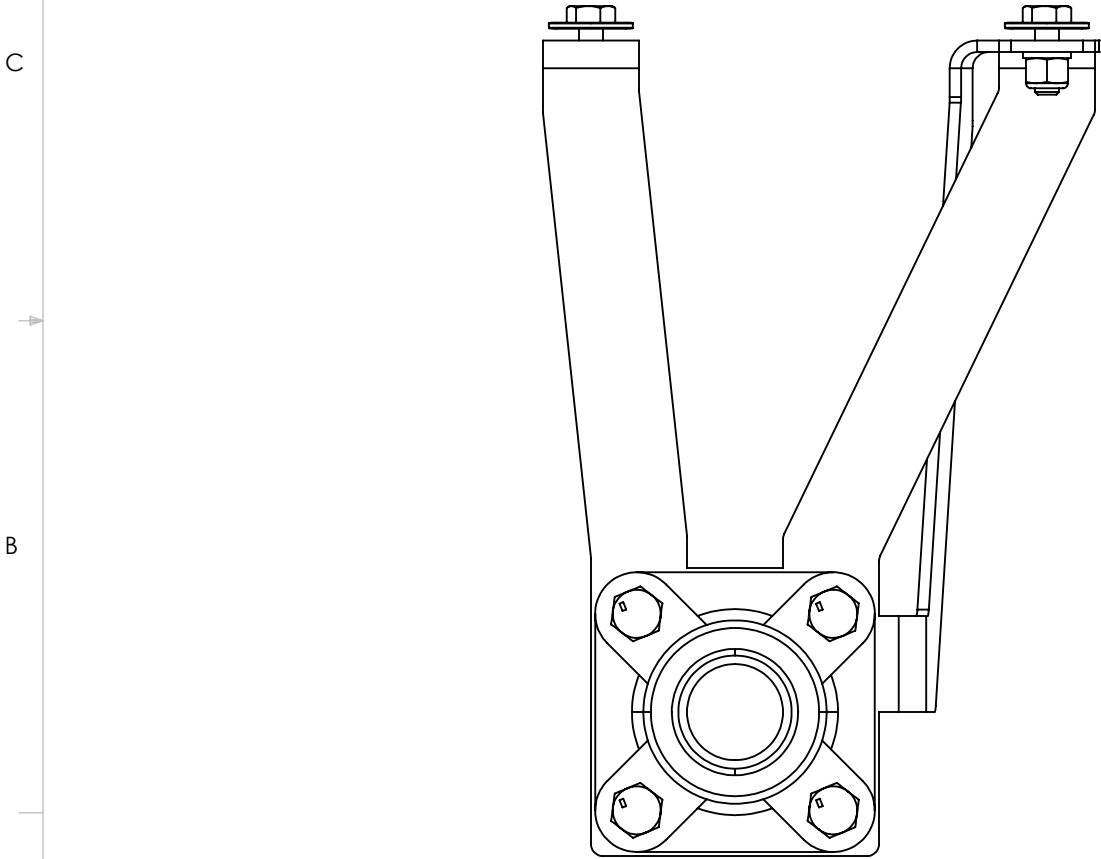
AT-802 AUGER SHAFT
ASSEMBLY

DRAWN	NAME	DATE	SIZE	DWG. NO.	REV
CHECKED	TRR	03/04/2023	B	6004-01-02-02	1

DO NOT SCALE DRAWING SCALE: 1:8 WEIGHT: SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-03-01	AUGER SUPPORT	1
2	6004-01-02-03-02	1" 4-BOLT FLANGE BEARING	1
3	6004-01-01-03-03	1/4" SS OVERSIZED WASHER	3
4	AN4C6A	1/4-28 SS BOLT	3
5	AN5C10A	5/16-24 SS BOLT	4
6	AN960C416	1/4 SS WASHER .063"	3
7	AN960C516	5/16 SS WASHER .063"	4
8	AN365C524	5/16-24 SS NYLON LOCK NUT	4
9	AN365C428	1/4-28 SS NYLON LOCK NUT	3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR



- NOTES:
- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 - HAND TIGHTENED HARDWARE WILL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
 - SEE PART DRAWING FOR MATERIAL DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 6, 7, OR 12

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ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

TITLE:
AUGER SUPPORT ASSEMBLY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-01-02-03	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING

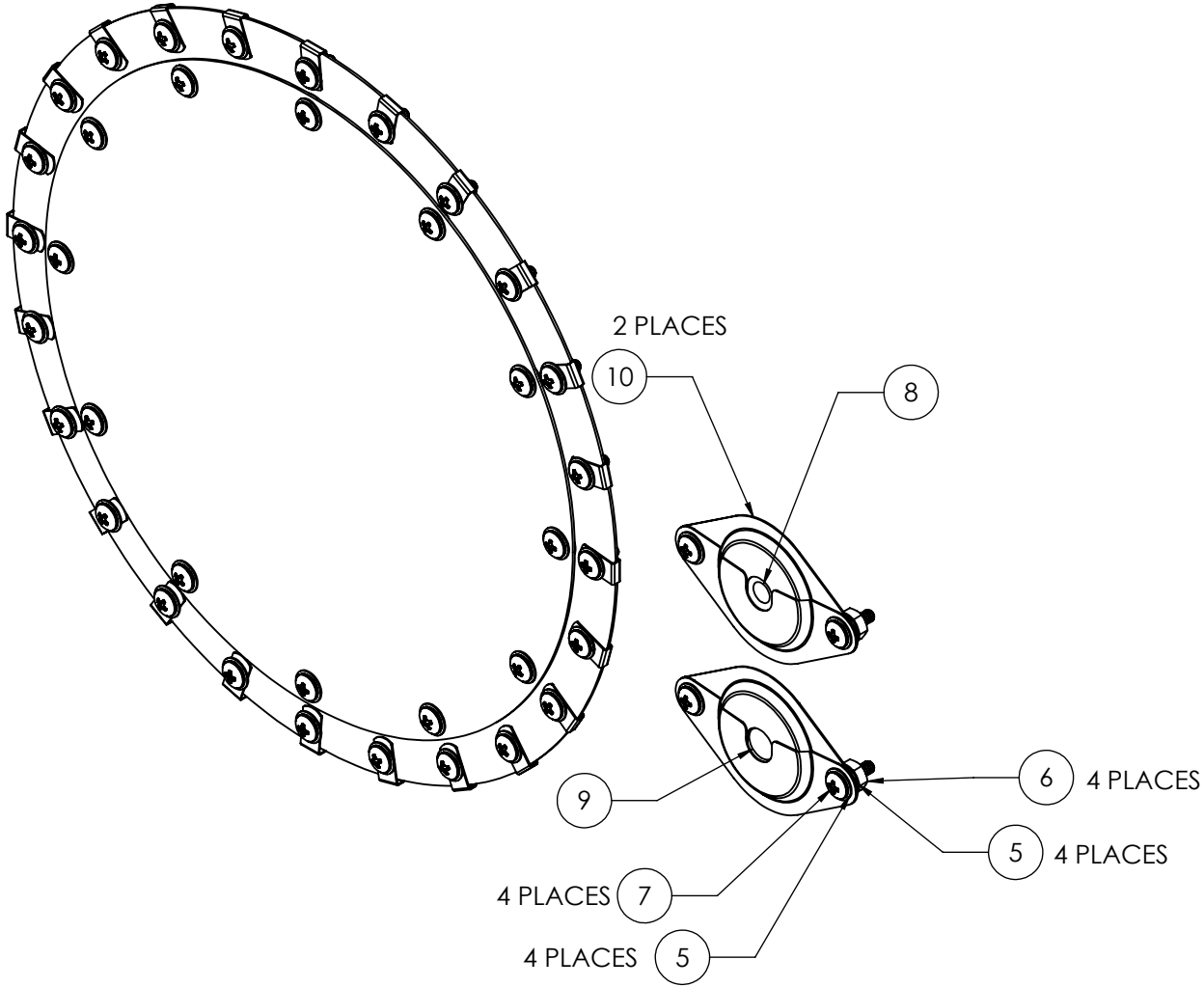
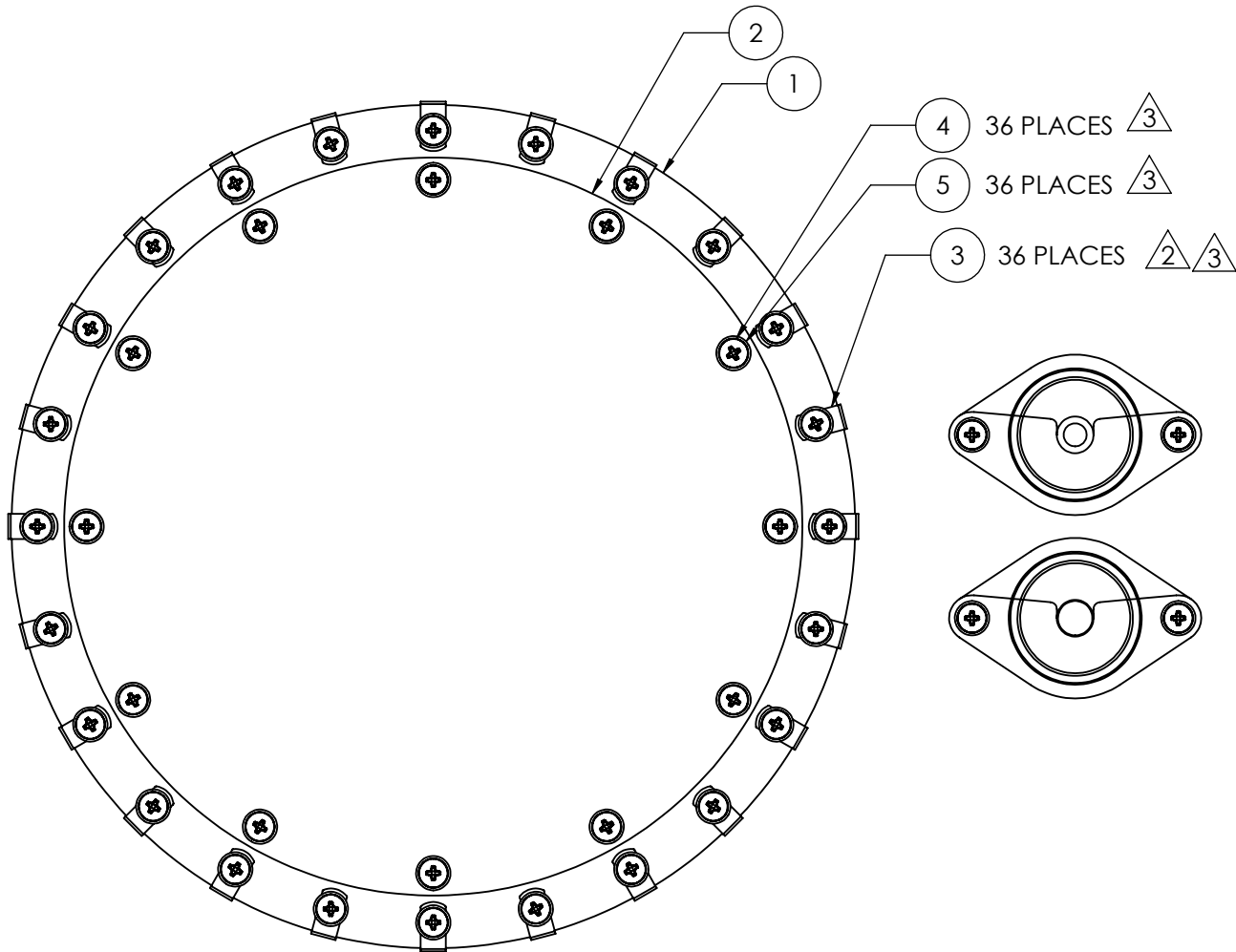
SCALE: 1:2

WEIGHT:

SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-04-01	FWD WALL DOUBLER	1
2	6004-01-02-04-02	FWD WALL ACCESS PANEL	1
3	6004-01-02-04-03	6-32 CLIP NUT	36
4	6004-01-02-04-04	6-32 X 3/8 TRUSS HEAD SS	36
5	6004-01-02-04-05	#6 SS WASHER	44
6	6004-01-02-04-06	6-32 LOCK NUT SS	4
7	6004-01-02-04-07	6-32 X 1/2 TRUSS HEAD SS	4
8	6004-01-02-04-08	HT GROMMET 1" X 1/4"	1
9	6004-01-02-04-09	HT GROMMET 1" X 3/8"	1
10	6004-01-02-04-10	GROMMET SHIELD 2 PIECE	2

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR
2	DOUBLED FASTENERS ON OUTER RING, LOCKNUTS CHANGED TO ALL METAL	07/01/2024	TRR
3	ZONE C5: CORRECTED ITEM CALLOUTS FROM 24 TO 36 FOR ITEMS 3, 4, 5	08/23/2024	TRR



- NOTE
- HAND TIGHTEN HARDWARE, HARDWARE WILL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - PARTS WILL BE BAGGED AFTER HARDWARE IS ASSEMBLED
 - APPLY PART NUMBER PER RD PS-202 CLASS 8



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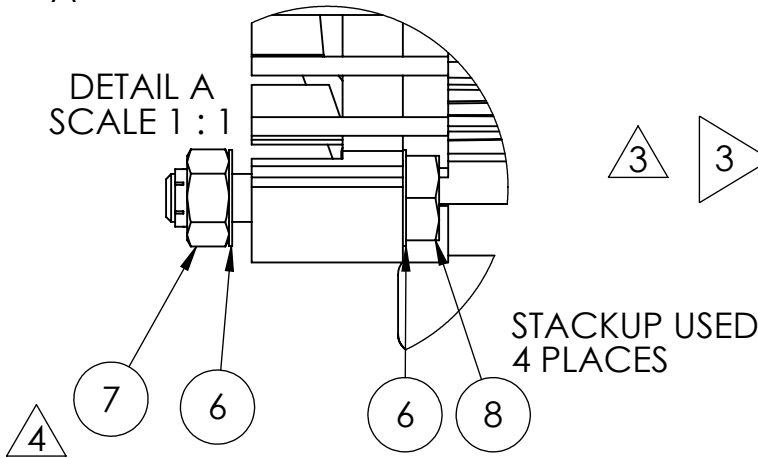
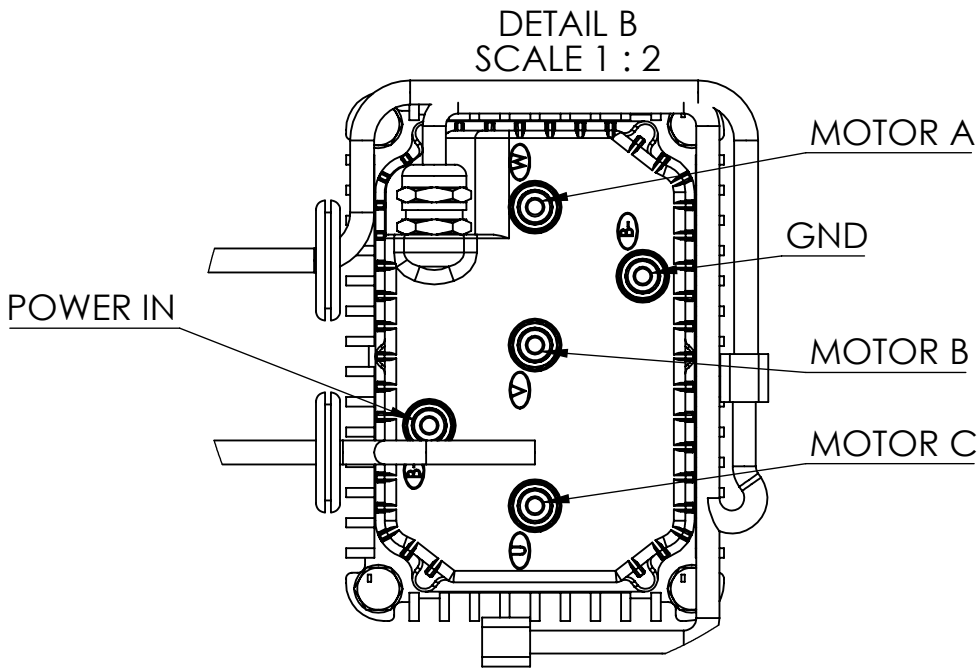
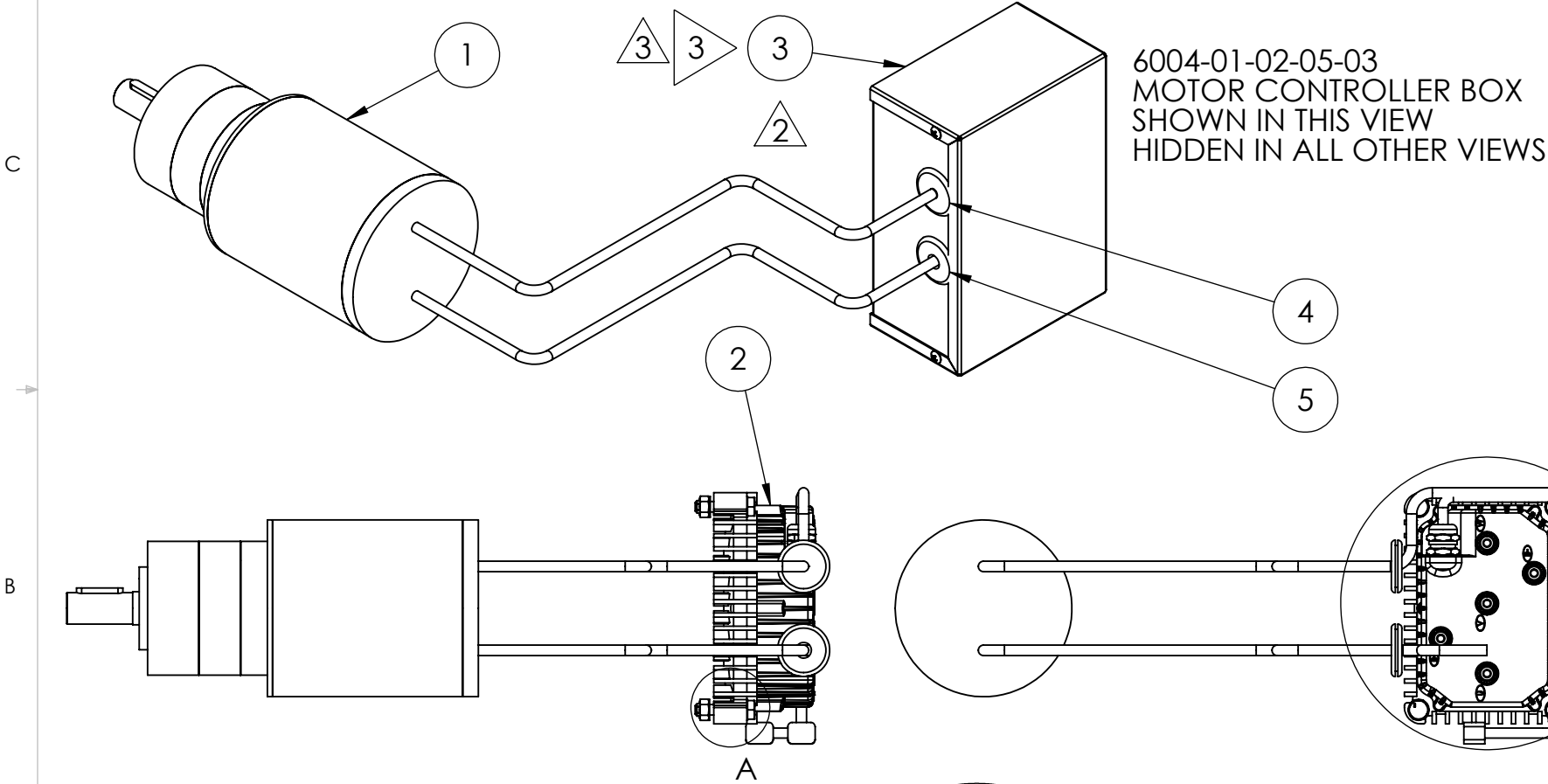
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DIMENSIONS ARE IN INCHES PER ASME Y14.5 TOLERANCES: FRACTIONAL: ± 1/16 ANGULARS: ± 1/2° TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005		FORWARD WALL KIT				
MATERIAL		NAME	DATE	SIZE	DWG. NO.	REV
	DRAWN	TRR	03/04/2023	B	6004-01-02-04	3
	CHECKED	TRR	03/04/2023			
SPEC	DO NOT SCALE DRAWING			SCALE: 1:2	WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-05-01	MOTOR & GEARBOX	1
2	6004-01-02-05-02	MOTOR CONTROLLER	1
3	6004-01-02-05-03	MOTOR CONTROLLER BOX	1
4	6004-01-02-04-08	HT GROMMET 1" X 1/4"	1
5	6004-01-02-04-09	HT GROMMET 1" X 3/8"	1
6	NAS1149C0416R	1/4" SS WASHER .016" THK	8
7	MS21046C4	1/4-28 ALL METAL LOCKNUT SS	4
8	AN4C12A	1/4-28 SS BOLT	4

REVISIONS				
REV.	DESCRIPTION	DATE	DFT	APP
1	ORIGINAL RELEASE	3/4/2023	TRR	TRR
2	ADDED 6004-01-02-05-03	04/04/2024	TRR	TRR
3	ADDED NOTE 3 ON BOX HOLES	04/29/2024	TRR	TRR
4	1/4" LOCKNUT CHANGED TO ALL METAL	07/01/2024	TRR	TRR



- NOTES:
- HAND TIGHTEN HARDWARE. HARDWARE WILL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7
 - HOLES IN BOX DRILLED AT INSTALL, HOLES FOR GROMMET AND WIRE CAN BE ON EITHER SIDE OF BOX

FUNCTION	CONNECTOR PIN	-SI MOTOR
5v HALL	PIN 1	RED
GND HALL	PIN 3	BLACK
HALL A	PIN 6	BLUE
HALL B	PIN 5	GRAY
HALL C	PIN 4	VIOLET
MOTOR A		RED
MOTOR B		BLACK
MOTOR C		WHITE

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TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARs: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

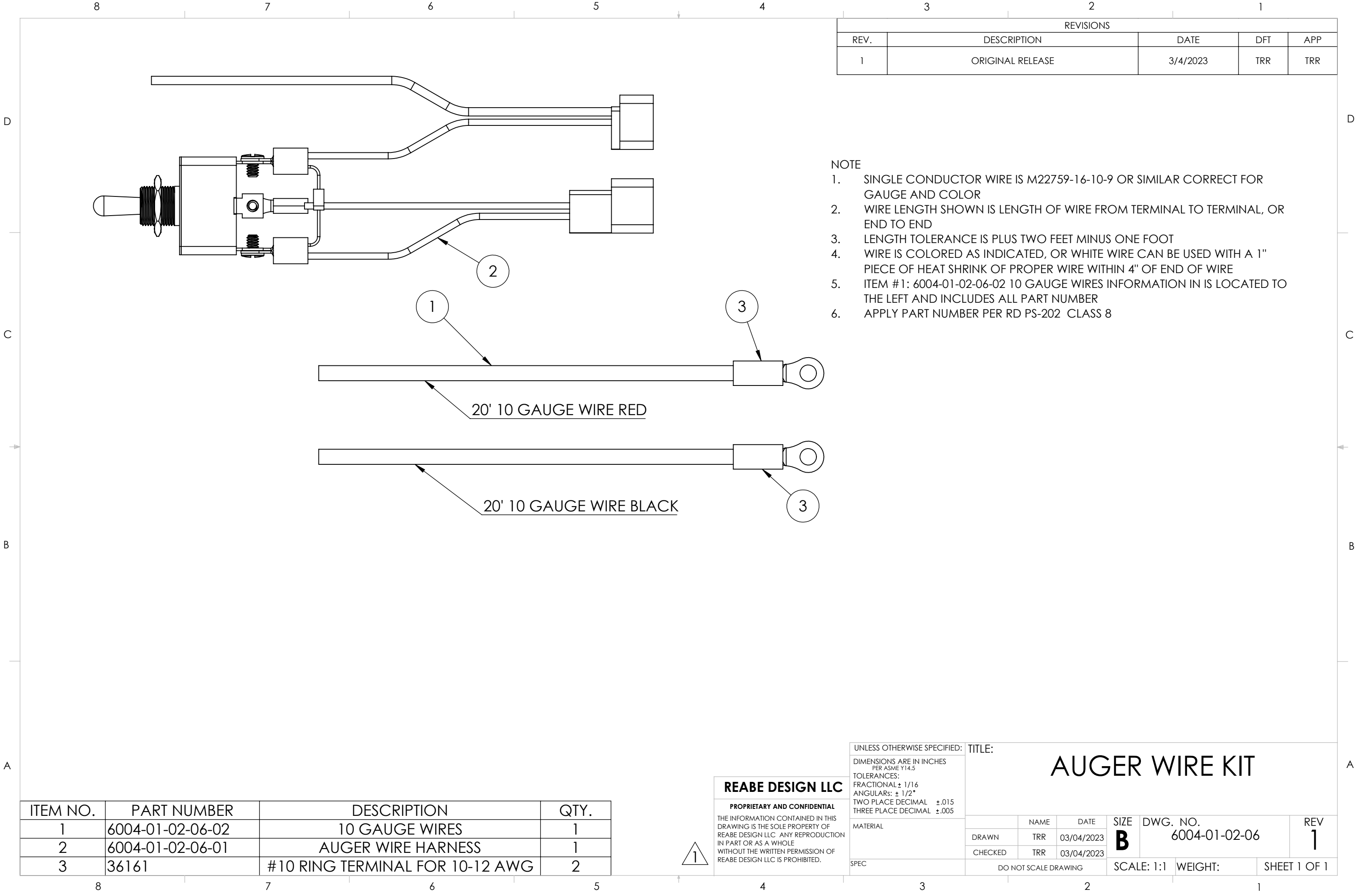
MATERIAL

SPEC

TITLE:

AUGER MOTOR AND
CONTROLLER

DRAWN	NAME	DATE	SIZE	DWG. NO.	REV
TRR	TRR	03/04/2023	B	6004-01-02-05	4
CHECKED	TRR	03/04/2023			
DO NOT SCALE DRAWING			SCALE: 1:4	WEIGHT:	SHEET 1 OF 1



REVISIONS				
REV.	DESCRIPTION	DATE	DFT	APP
1	ORIGINAL RELEASE	3/4/2023	TRR	TRR

- NOTE
1. SINGLE CONDUCTOR WIRE IS M22759-16-10-9 OR SIMILAR CORRECT FOR GAUGE AND COLOR
 2. WIRE LENGTH SHOWN IS LENGTH OF WIRE FROM TERMINAL TO TERMINAL, OR END TO END
 3. LENGTH TOLERANCE IS PLUS TWO FEET MINUS ONE FOOT
 4. WIRE IS COLORED AS INDICATED, OR WHITE WIRE CAN BE USED WITH A 1" PIECE OF HEAT SHRINK OF PROPER WIRE WITHIN 4" OF END OF WIRE
 5. ITEM #1: 6004-01-02-06-02 10 GAUGE WIRES INFORMATION IN IS LOCATED TO THE LEFT AND INCLUDES ALL PART NUMBER
 6. APPLY PART NUMBER PER RD PS-202 CLASS 8

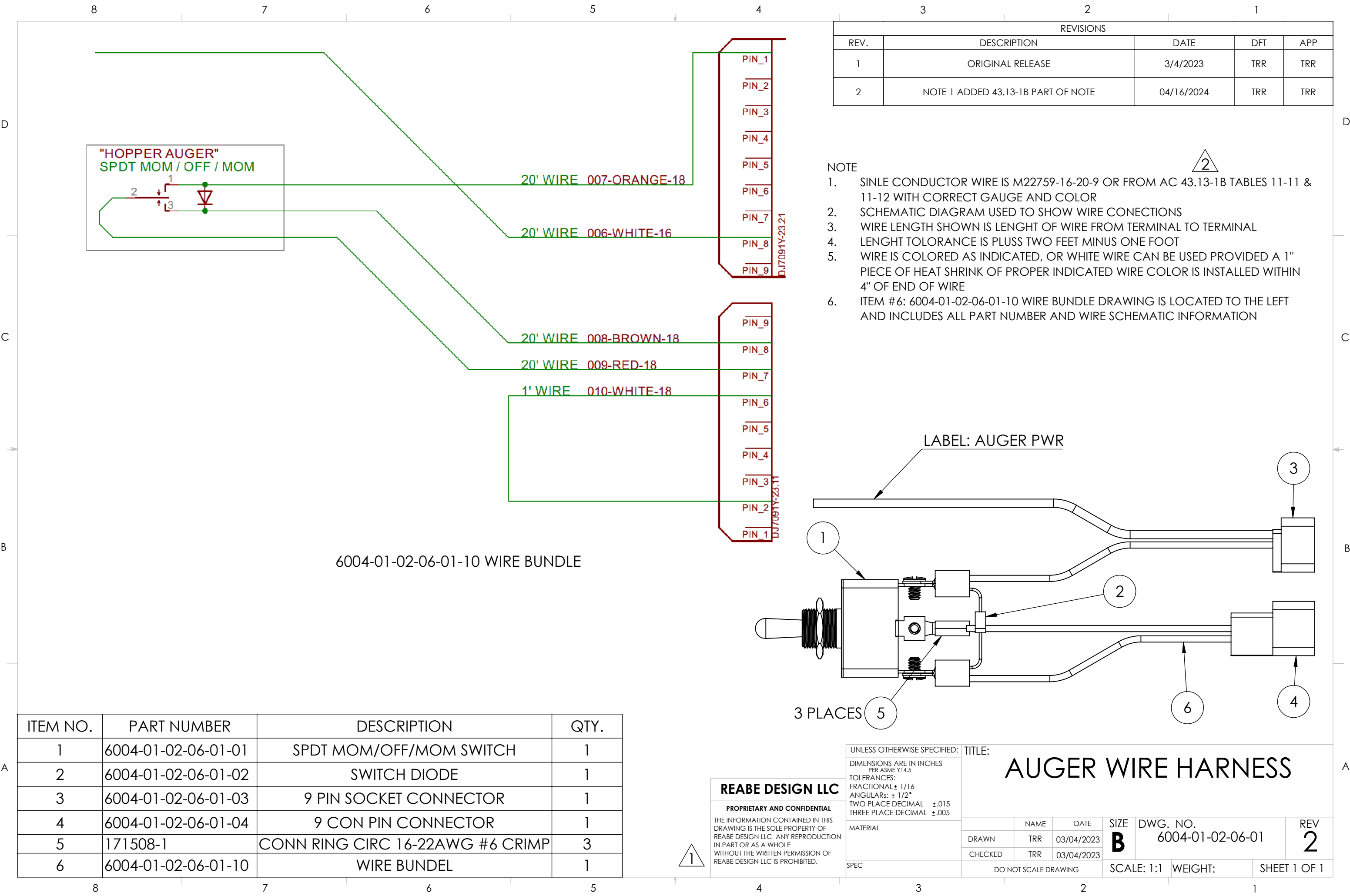
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-06-02	10 GAUGE WIRES	1
2	6004-01-02-06-01	AUGER WIRE HARNESS	1
3	36161	#10 RING TERMINAL FOR 10-12 AWG	2

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UNLESS OTHERWISE SPECIFIED:		TITLE:				
DIMENSIONS ARE IN INCHES PER ASME Y14.5		AUGER WIRE KIT				
TOLERANCES:						
FRACTIONAL ± 1/16						
ANGULARs: ± 1/2°						
TWO PLACE DECIMAL ±.015						
THREE PLACE DECIMAL ±.005						
MATERIAL		NAME	DATE	SIZE	DWG. NO.	REV
	DRAWN	TRR	03/04/2023	B	6004-01-02-06	1
	CHECKED	TRR	03/04/2023			
SPEC	DO NOT SCALE DRAWING			SCALE: 1:1	WEIGHT:	SHEET 1 OF 1



REVISIONS				
REV.	DESCRIPTION	DATE	DFT	APP
1	ORIGINAL RELEASE	3/4/2023	TRR	TRR
2	NOTE 1 ADDED 43.13-1B PART OF NOTE	04/16/2024	TRR	TRR

- NOTE
- SINLE CONDUCTOR WIRE IS M22759-16-20-9 OR FROM AC 43.13-1B TABLES 11-11 & 11-12 WITH CORRECT GAUGE AND COLOR
 - SCHEMATIC DIAGRAM USED TO SHOW WIRE CONECTIONS
 - WIRE LENGTH SHOWN IS LENGHT OF WIRE FROM TERMINAL TO TERMINAL
 - LENGHT TOLORANCE IS PLUS TWO FEET MINUS ONE FOOT
 - WIRE IS COLORED AS INDICATED, OR WHITE WIRE CAN BE USED PROVIDED A 1" PIECE OF HEAT SHRINK OF PROPER INDICATED WIRE COLOR IS INSTALLED WITHIN 4" OF END OF WIRE
 - ITEM #6: 6004-01-02-06-01-10 WIRE BUNDLE DRAWING IS LOCATED TO THE LEFT AND INCLUDES ALL PART NUMBER AND WIRE SCHEMATIC INFORMATION

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-06-01-01	SPDT MOM/OFF/MOM SWITCH	1
2	6004-01-02-06-01-02	SWITCH DIODE	1
3	6004-01-02-06-01-03	9 PIN SOCKET CONNECTOR	1
4	6004-01-02-06-01-04	9 CON PIN CONNECTOR	1
5	171508-1	CONN RING CIRC 16-22AWG #6 CRIMP	3
6	6004-01-02-06-01-10	WIRE BUNDEL	1

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MATERIAL				NAME	DATE	SIZE	DWG. NO.	REV
			DRAWN	TRR	03/04/2023	B	6004-01-02-06-01	2
			CHECKED	TRR	03/04/2023			
SPEC			DO NOT SCALE DRAWING			SCALE: 1:1	WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-07-01	AT-802 HOPPER BAFFLE	1
2	6004-01-02-07-02	10-32 X 2" SS HEX SCREW	5
3	NAS1149C0336R	#10 SS WASHER .063"	10
4	MS21044C3	10-32 SS LOCKNUT	15

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR

D

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- NOTES:
- HAND TIGHTEN HARDWARE. HARDWARE WITLL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
 - SEE PART DRAWING FOR MATERIAL DATA
 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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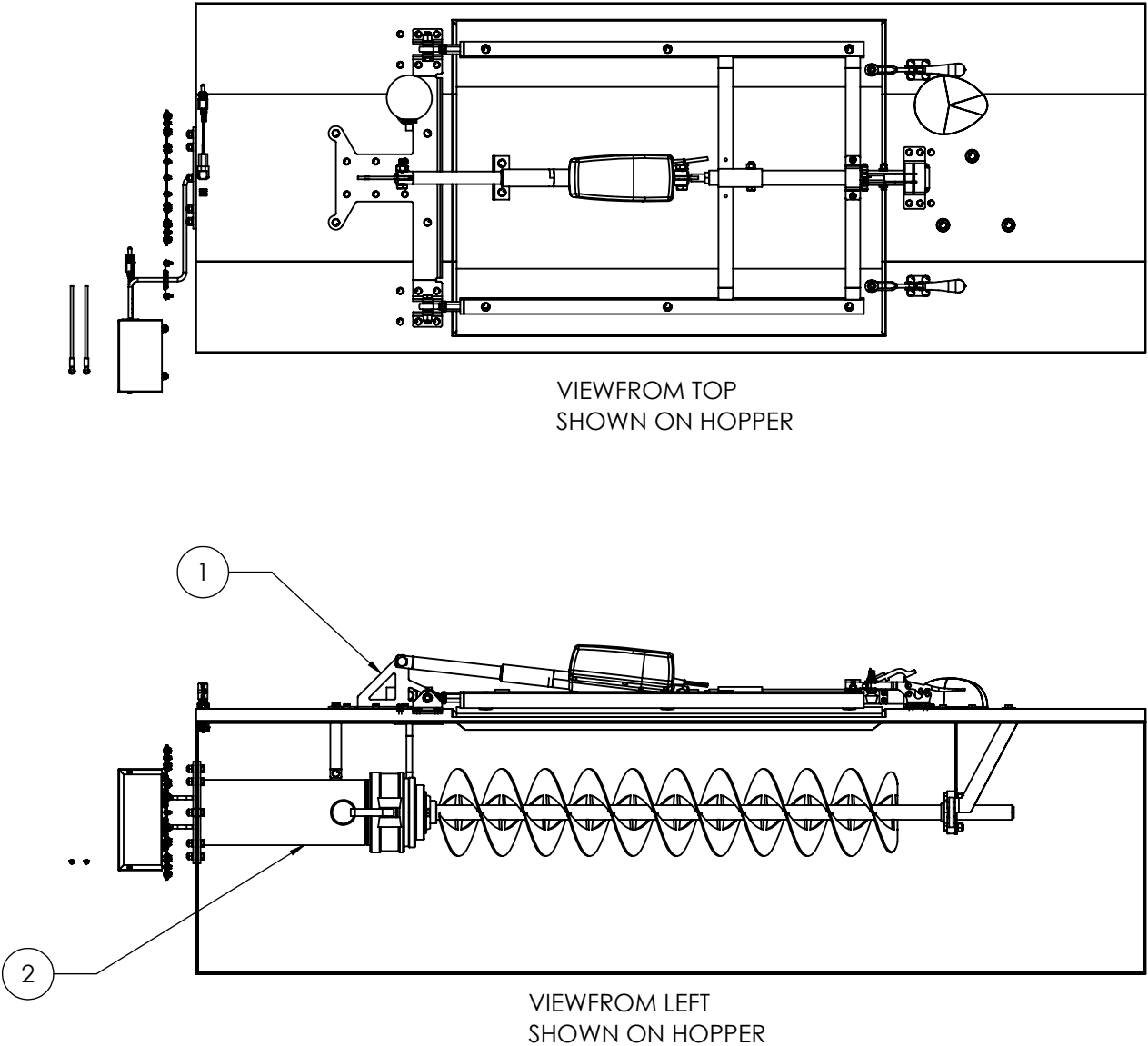
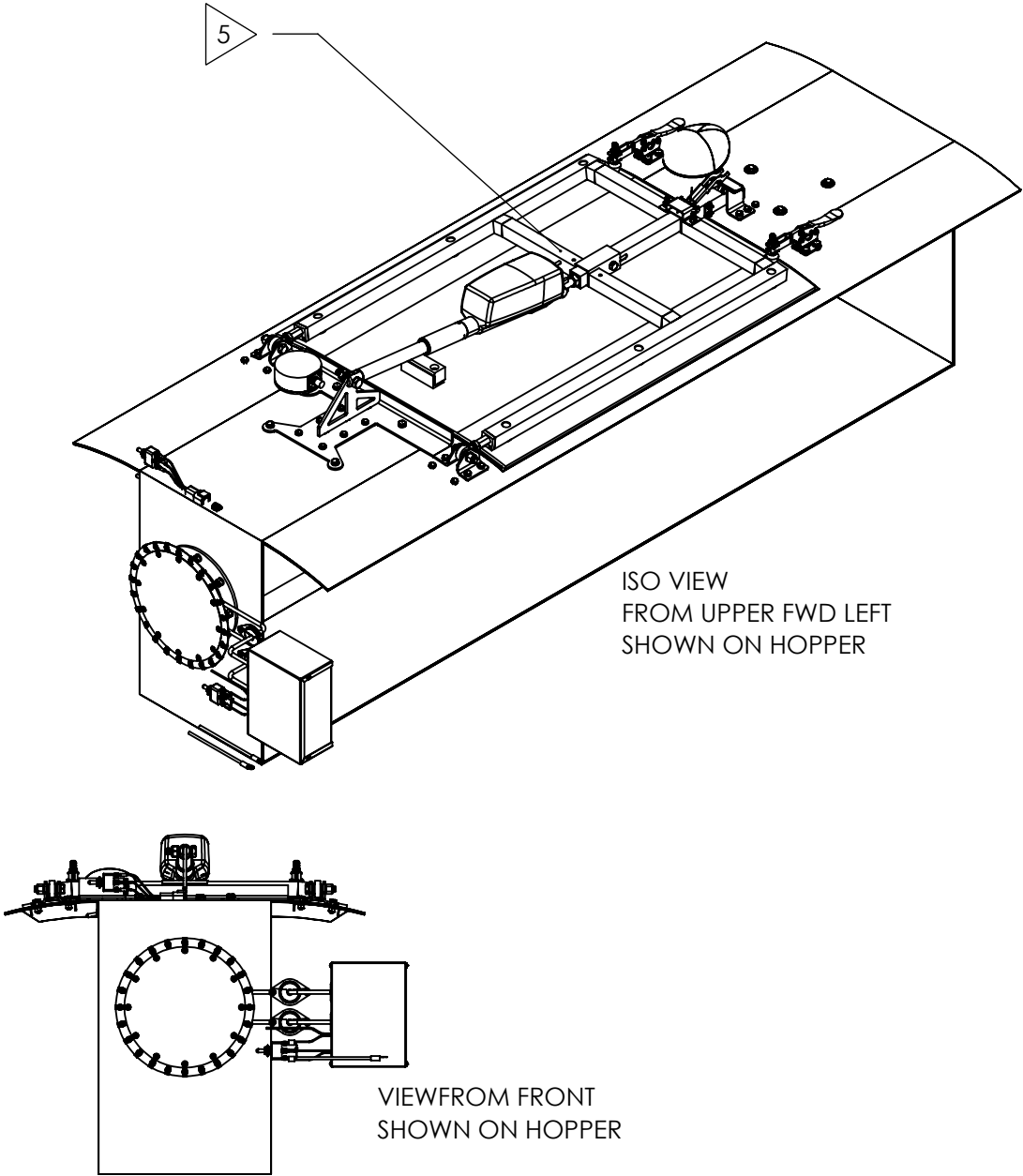
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TOLERANCES:	
FRACTIONAL ± 1/16	
ANGULARs: ± 1/2°	
TWO PLACE DECIMAL ±.015	
THREE PLACE DECIMAL ±.005	
MATERIAL	
SPEC	

TITLE:		BAFFLE KIT AT-802			
	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-01-02-07	1
CHECKED	TRR	03/04/2023			
DO NOT SCALE DRAWING			SCALE: 1:2	WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-02-01	DOOR ASSEMBLY 502 602	1
2	6004-02-02	HOPPER PACKER AUGER 502 602	1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR
2	ADDED NOTE 5	07/18/2024	TRR



NOTES:

1. ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
2. SEE SUB-ASSEMBLY OR INSTALL INSTRUCTIONS FOR ASSEMBLY AND STACK UP DATA
3. SEE PART DRAWING FOR MATERIAL DATA
4. SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
5. APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 9, OR 12

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TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

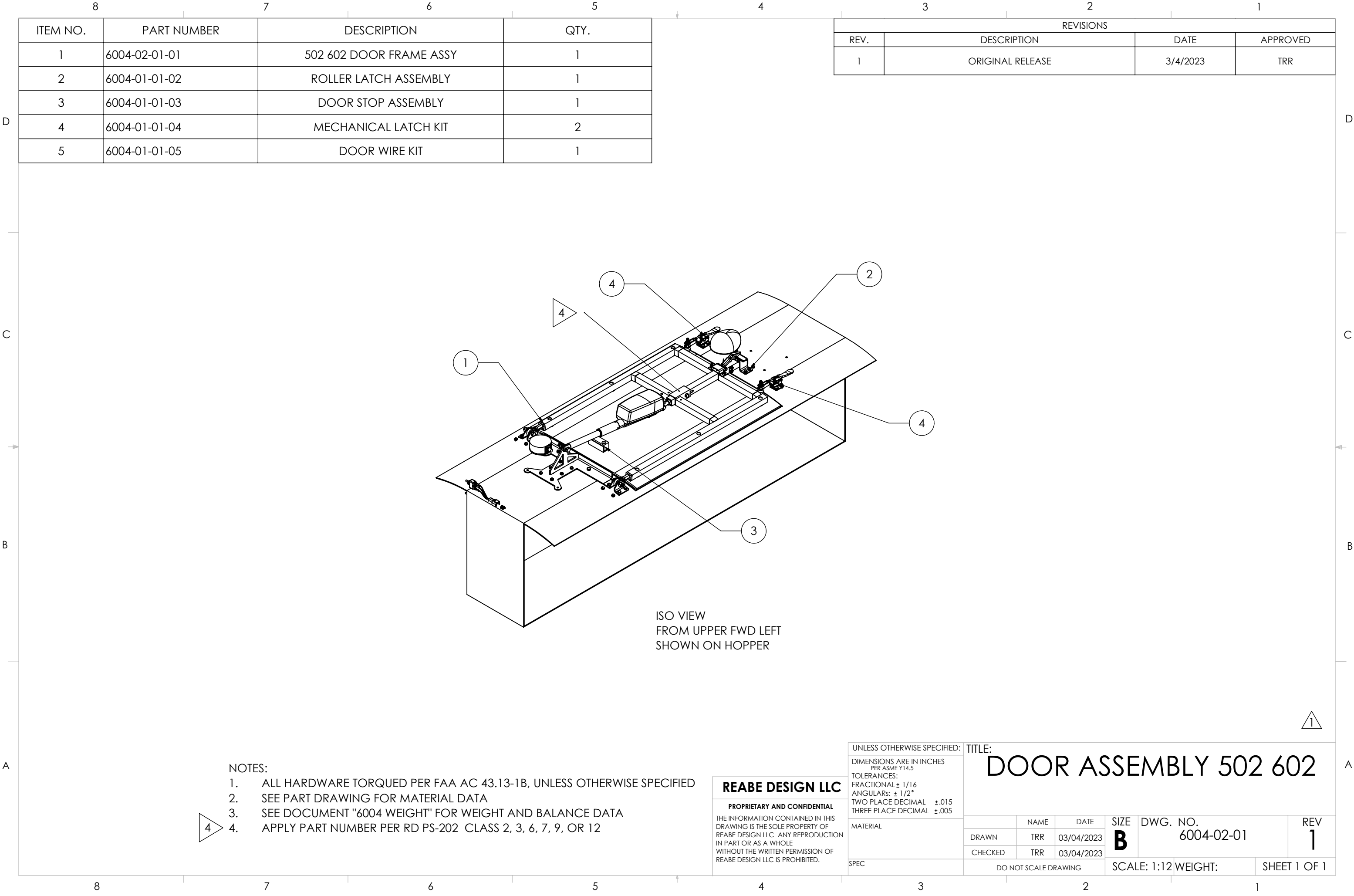
SPEC

TITLE:

HOPPER PACKER 502 602

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-02	2
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING SCALE: 1:12 WEIGHT: SHEET 1 OF 1



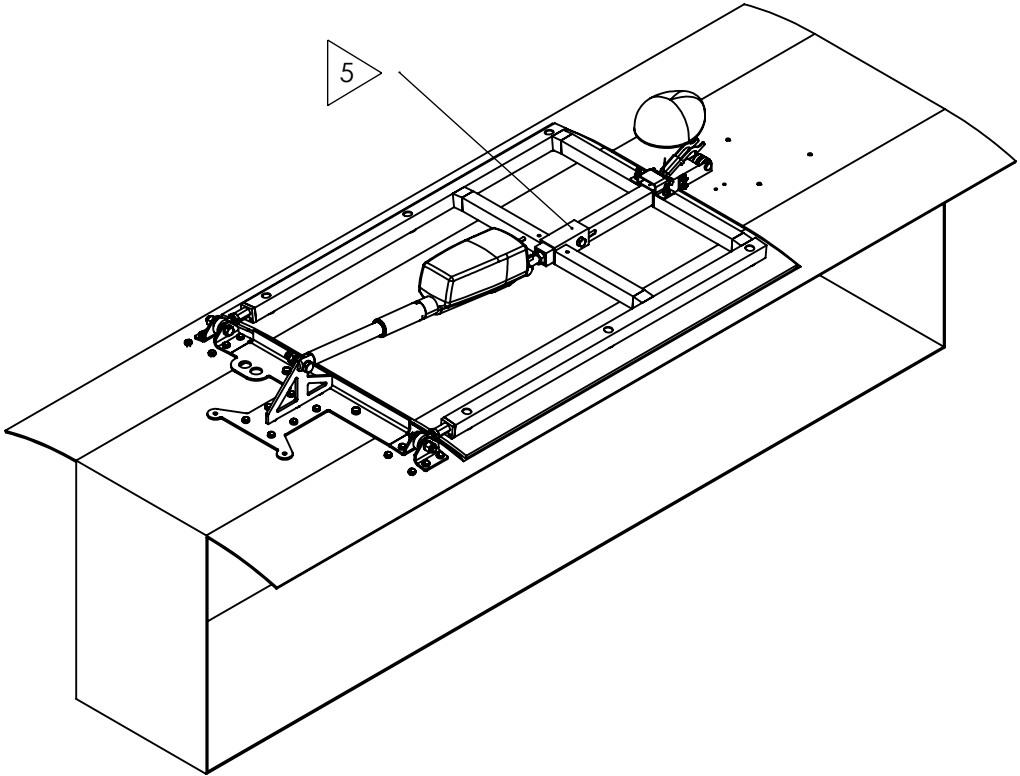
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	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.				
	1	6004-02-01-01-01	502 602 DOOR FRAME	1				
	2	6004-02-01-01-02	502 602 SLIDE ROD ASSY	1				
	3	6004-01-01-01-03	HINGE	1				
	4	6004-01-01-01-04	ACTUATOR DOUBLER	1				
D	5	6004-01-01-01-05	OUTER HINGE	2				
	6	6004-01-01-01-06	HINGE DOUBLER PLATE	2				
	7	6004-01-01-01-07	SLIDE LATCH	1				
	8	6004-01-01-01-08	SLIDE STOP	2				
	9	6004-01-01-01-10	LINEAR ACTUATOR	1				
	10	6004-01-01-01-11	SS CLEVIS PIN 3/8 X 1	1				
	11	6004-01-01-01-12	BALL JOINT ROD END	2				
	12	6004-01-01-01-13	SS BALL BEARING 3/8 ID	2				
	13	6004-01-01-01-15	SS TORSION SPRING	1				
	14	6004-01-01-01-16	NYLON SPACER	2				
	15	6004-01-01-01-17	PLASTIC SPACER	3				
	16	6004-01-01-01-18	SHCS SS 10-32 1-5/8	2				
	17	6004-01-01-01-19	BUTTON HEAD SCREW SS 10-32 X 1.75	2				
C	18	6004-01-01-01-20	SS HEX HEAD M10 X 1.5 MM 45 MM	2				
	19	6004-01-01-01-21	M10 SS WASHER	4				
	20	6004-01-01-01-22	M10 X 1.5MM SS LOCK NUT	2				
	21	6004-01-01-01-23	7/16-20 SS JAM NUT	2				
	22	6004-01-01-01-25	LATCH PIVOT FOR SS FRAME	1				
	23	6004-01-01-01-24	SS CLEVIS PIN 5/16 X 1-5/8	1				
	24	6004-01-01-01-26	3/8-24 X 1-3/4" SS HEX BOLT	2				
	25	NAS1149C0663R	3/8 .063 WASHER SS	17				
	26	MS21044C6	3/8-24 SS LOCKNUT	2				
	27	AN960C516L	5/16 SS WASHER .032"	2				
	28	AN365C524	5/16-24 SS NYLON LOCK NUT	1				
	29	MS35308-339	5/16-24 X 1-3/4 SS HEX SCREW	1				
	30	MS21044C3	10-32 SS LOCKNUT	28				
B	31	NAS1149C0316R	#10 SS WASHER .016"	2				
	32	NAS1149C0336R	#10 SS WASHER .063"	48				
	33	AN3C6A	10-32 SS DASH 6	18				
	34	AN3C12A	3/16 SS BOLT	6				
	35	AN4C6A	1/4-28 SS BOLT	2				
	36	AN365C428	1/4-28 SS NYLON LOCK NUT	2				
	37	AN960C416	1/4 SS WASHER .063"	4				

A

NOTES:

- 2
- 5
- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 - PIVOT POINT BOLTS DO NOT PINCH JOINT
 - SEE PART DRAWING FOR MATERIAL DATA
 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR



ISO VIEW
FROM UPPER FWD LEFT
SHOWN ON HOPPER

1

A

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DIMENSIONS ARE IN INCHES
PER ASME Y14.5
TOLERANCES:
FRACTIONAL ± 1/16
ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

SPEC

TITLE:
502 602 DOOR FRAME ASSY

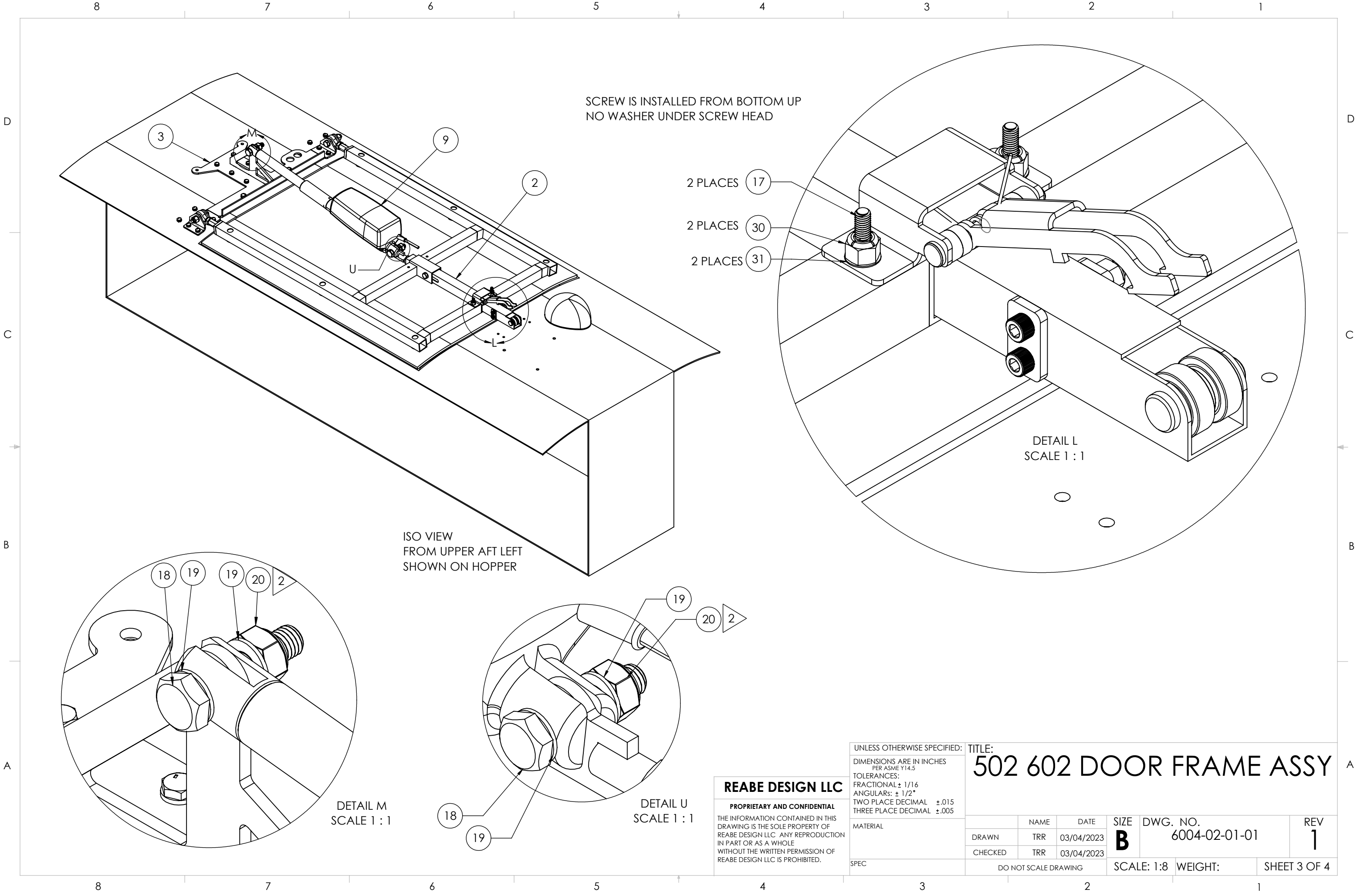
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CHECKED	TRR	03/04/2023			

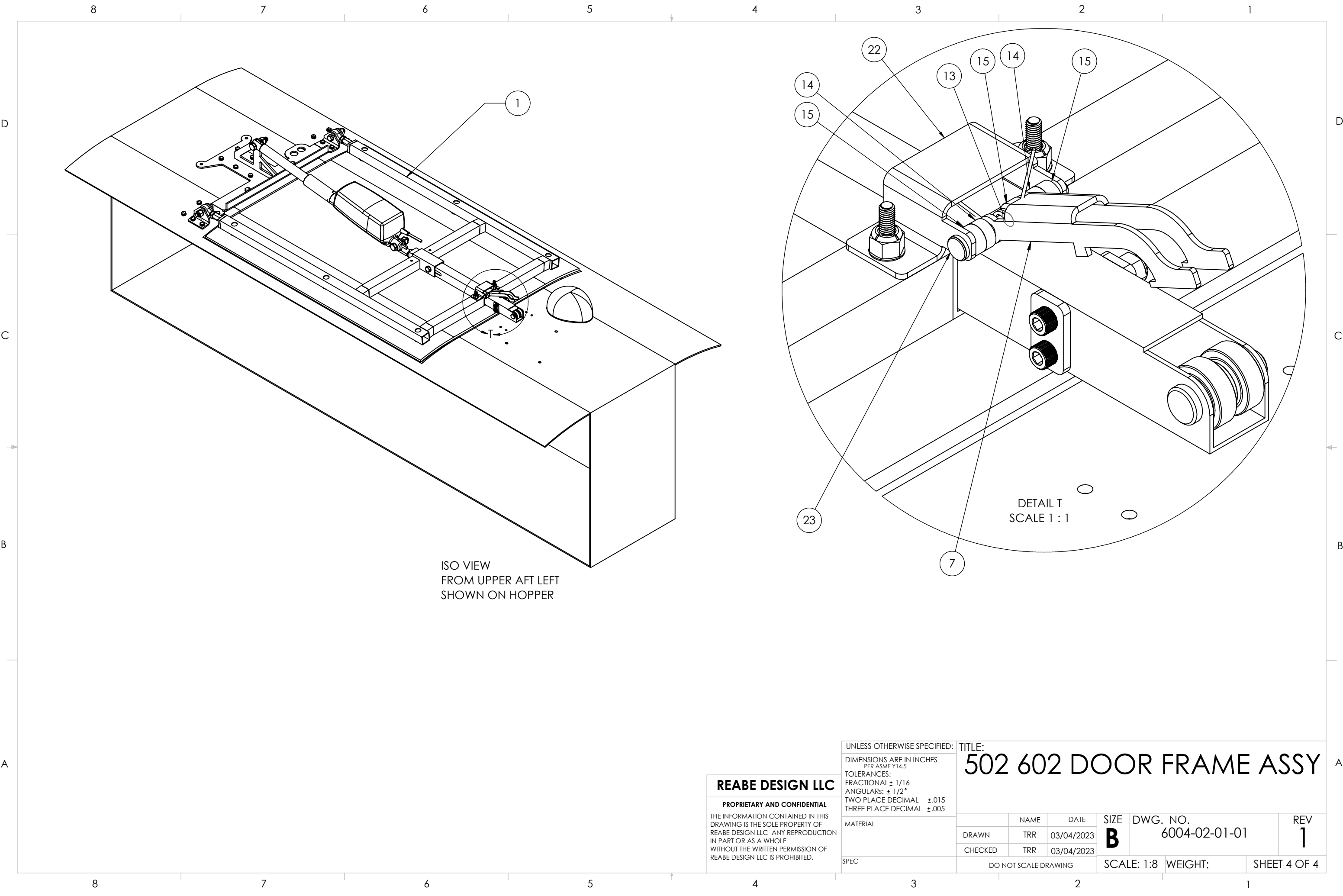
DO NOT SCALE DRAWING

SCALE: 1:12

WEIGHT:

SHEET 1 OF 4





ISO VIEW
FROM UPPER AFT LEFT
SHOWN ON HOPPER

DETAIL T
SCALE 1 : 1

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PER ASME Y14.5
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

TITLE:

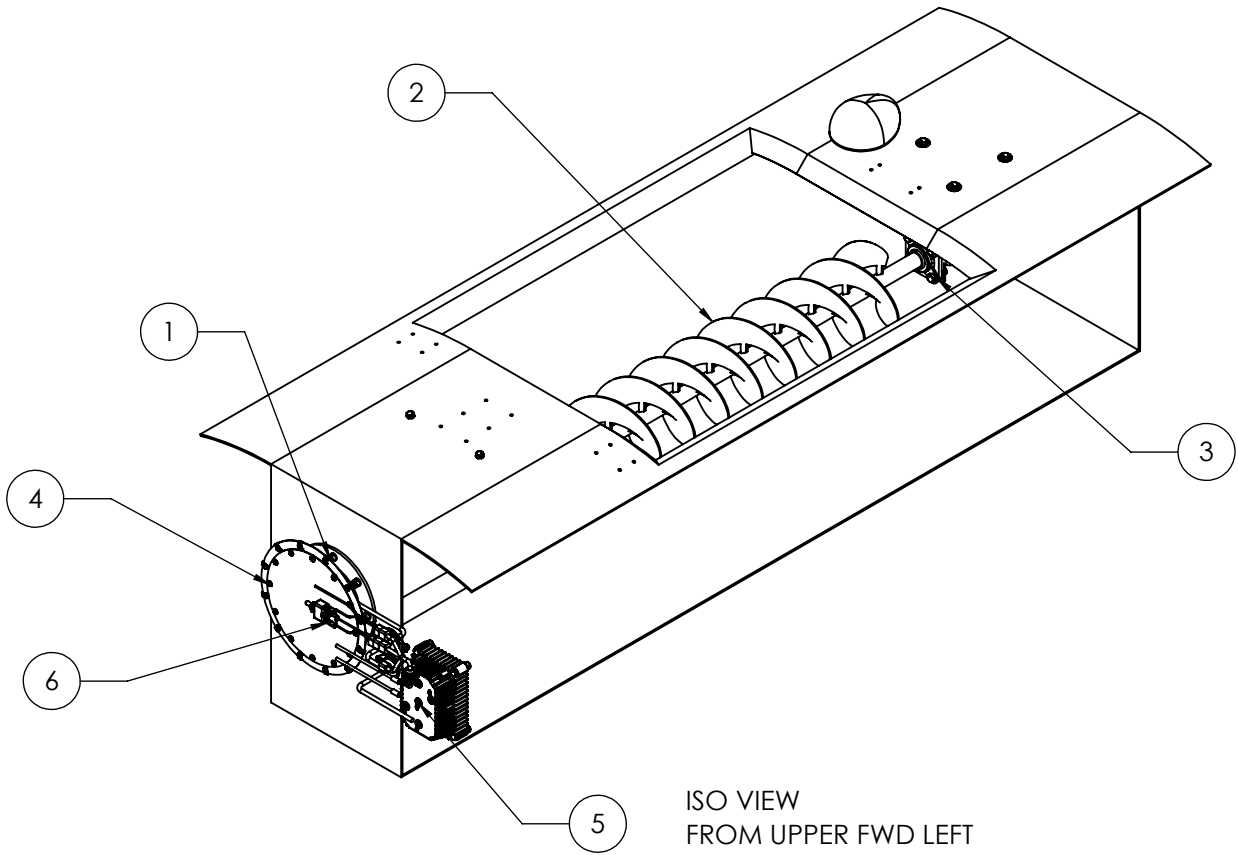
502 602 DOOR FRAME ASSY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-02-01-01	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING SCALE: 1:8 WEIGHT: SHEET 4 OF 4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-01	AUGER MOTOR MOUNT ASSEMBLY	1
2	6004-02-02-02	502 602 AUGER SHAFT ASSY	1
3	6004-01-02-03	AUGER SUPPORT ASSEMBLY	1
4	6004-01-02-04	FORWARD WALL KIT	1
5	6004-01-02-05	AUGER MOTOR AND CONTROLLER	1
6	6004-01-02-06	AUGER WIRE KIT	1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR



ISO VIEW
FROM UPPER FWD LEFT
SHOWN ON HOPPER

- NOTES:
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 - SEE PART DRAWING FOR MATERIAL DATA
 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12

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DIMENSIONS ARE IN INCHES PER ASME Y14.5			HOPPER PACKER AUGER 502 602					
TOLERANCES:								
FRACTIONAL ± 1/16								
ANGULARs: ± 1/2°								
TWO PLACE DECIMAL ±.015								
THREE PLACE DECIMAL ±.005								
MATERIAL				NAME	DATE	SIZE	DWG. NO.	REV
			DRAWN	TRR	03/04/2023	B	6004-02-02	1
			CHECKED	TRR	03/04/2023			
SPEC			DO NOT SCALE DRAWING			SCALE: 1:12 WEIGHT:		SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-02-01	MALE CAM LOCK MOUNT	1
2	6004-01-02-02-02	1" SHAFT COUPLING	1
3	6004-01-02-02-03	5/16-18 X 3/4 HEX SCREW	1
4	6004-01-02-02-04	1/4 X 1 ROUND KEY	1
5	6004-01-02-02-05	1" SHAFT LIP SEAL	1
6	6004-01-02-02-06	1" 2-BOLT FLANGE BEARING	1
7	6004-02-02-02-10	502 602 AUGER SHAFT	1
8	6004-01-02-02-07	5/16-24 X 3/4 SS HEX SCREW	2
9	AN960C516L	5/16 SS WASHER .032"	2

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR

D

D

C

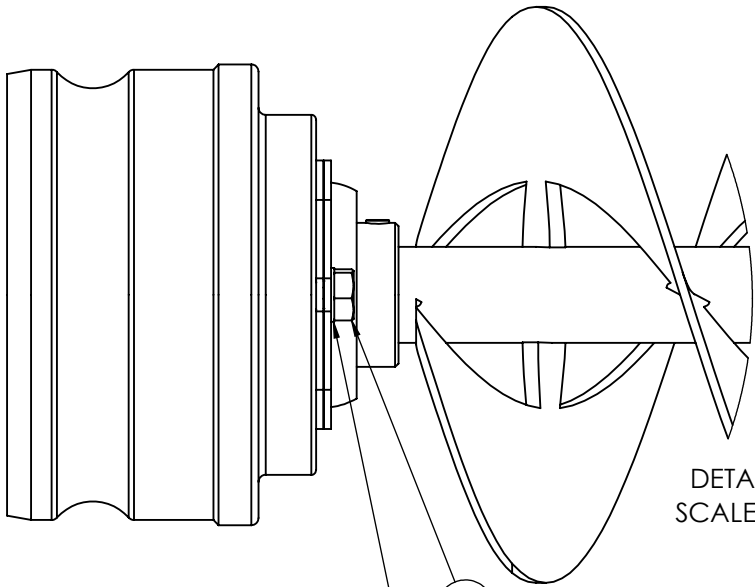
C

B

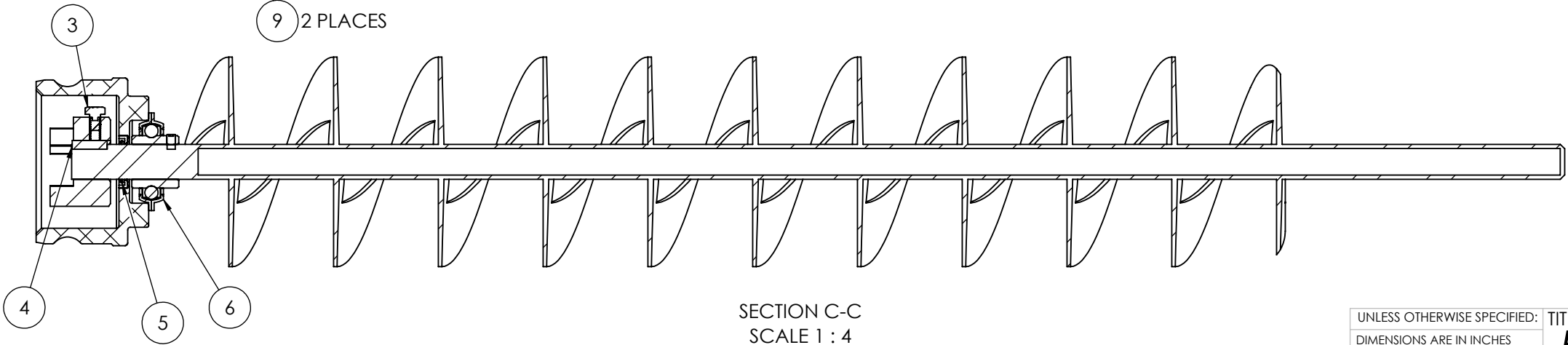
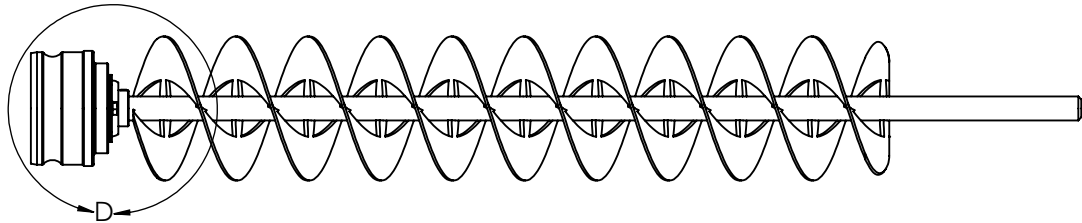
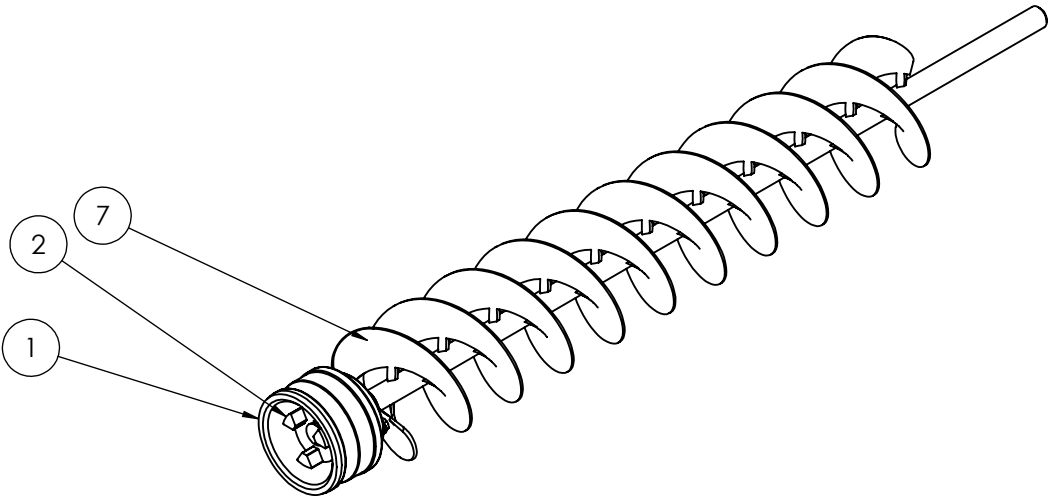
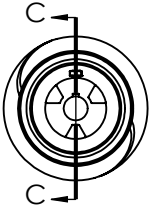
B

A

A



DETAIL D
SCALE 1 : 2



SECTION C-C
SCALE 1 : 4

NOTES:

- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
- 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
- SEE PART DRAWING FOR MATERIAL DATA
- APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

TITLE:

502 602 AUGER SHAFT ASSY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-02-02-02	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING SCALE: 1:8 WEIGHT: SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-03-01	DOOR ASSEMBLY 402	1
2	6004-03-02	HOPPER PACKER AUGER 402	1

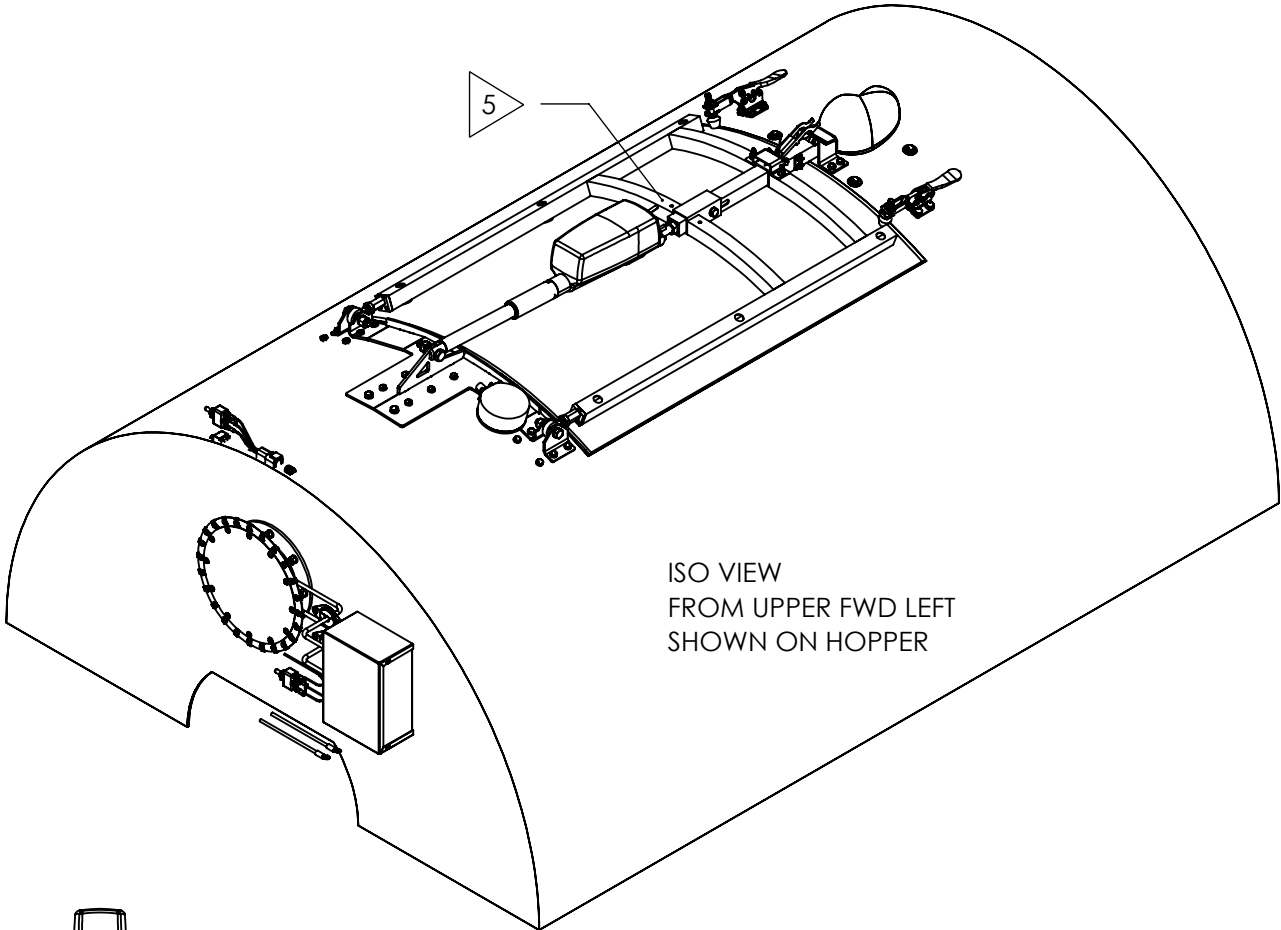
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR
2	ADDED NOTE 5	07/18/2024	TRR

D

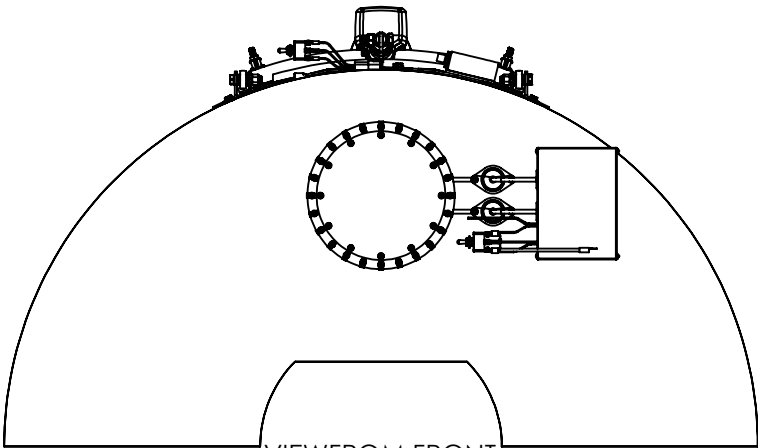
C

B

A



ISO VIEW
FROM UPPER FWD LEFT
SHOWN ON HOPPER



VIEWFROM FRONT
SHOWN ON HOPPER

NOTES:

- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
- SEE SUB-ASSEMBLY OR INSTALL INSTRUCTIONS FOR ASSEMBLY AND STACK UP DATA
- SEE PART DRAWING FOR MATERIAL DATA
- SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
- APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 9, OR 12

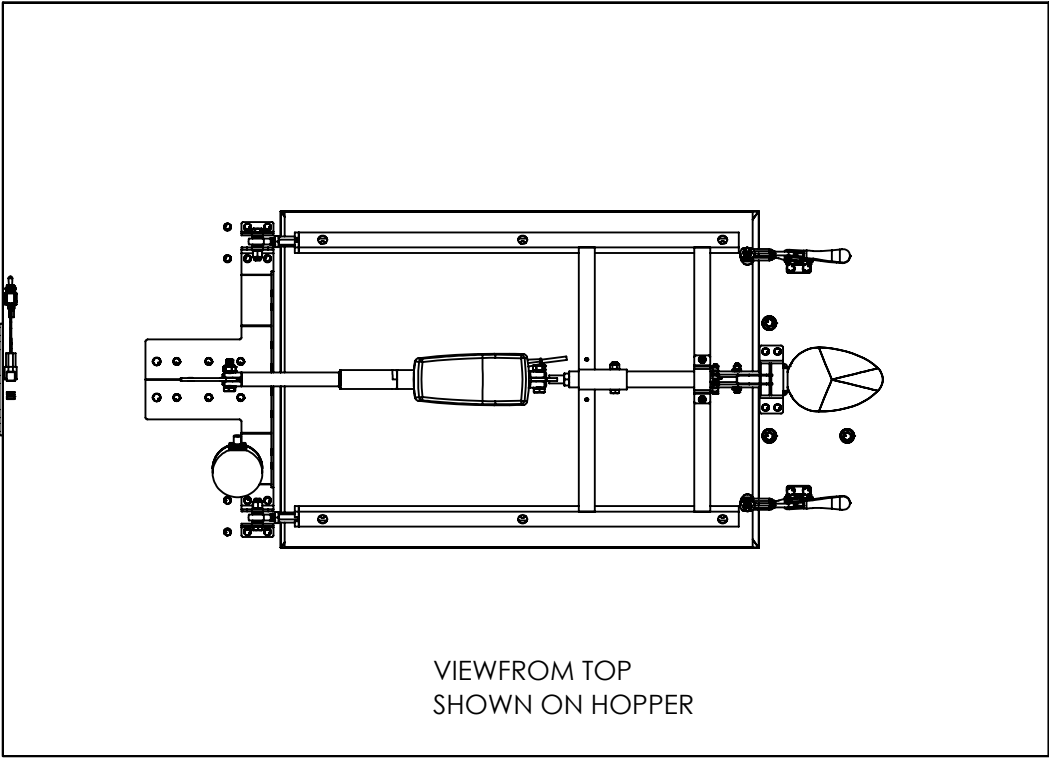


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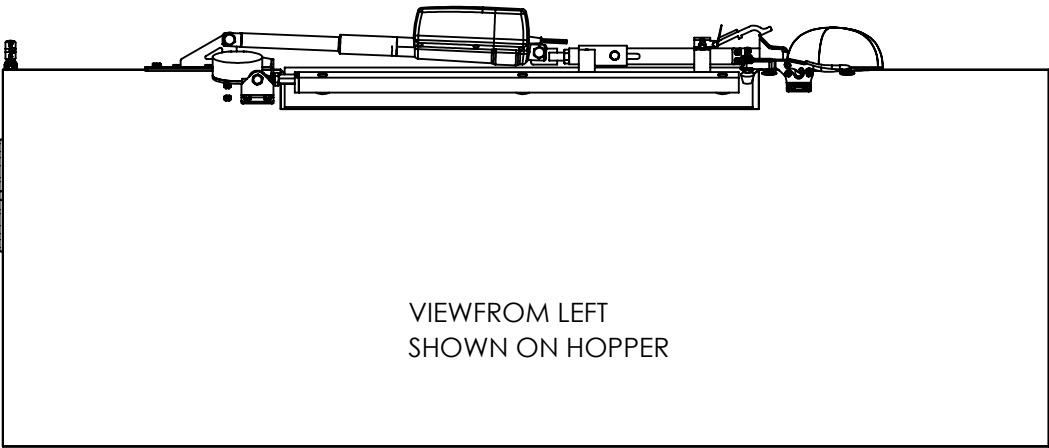
C

B

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VIEWFROM TOP
SHOWN ON HOPPER



VIEWFROM LEFT
SHOWN ON HOPPER



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PER ASME Y14.5
TOLERANCES:
FRACTIONAL ± 1/16
ANGULARs: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

TITLE:
HOPPER PACKER 402

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-03	2
CHECKED	TRR	03/04/2023			

SPECDO NOT SCALE DRAWINGSCALE: 1:12WEIGHT:SHEET 1 OF 1

8

7

6

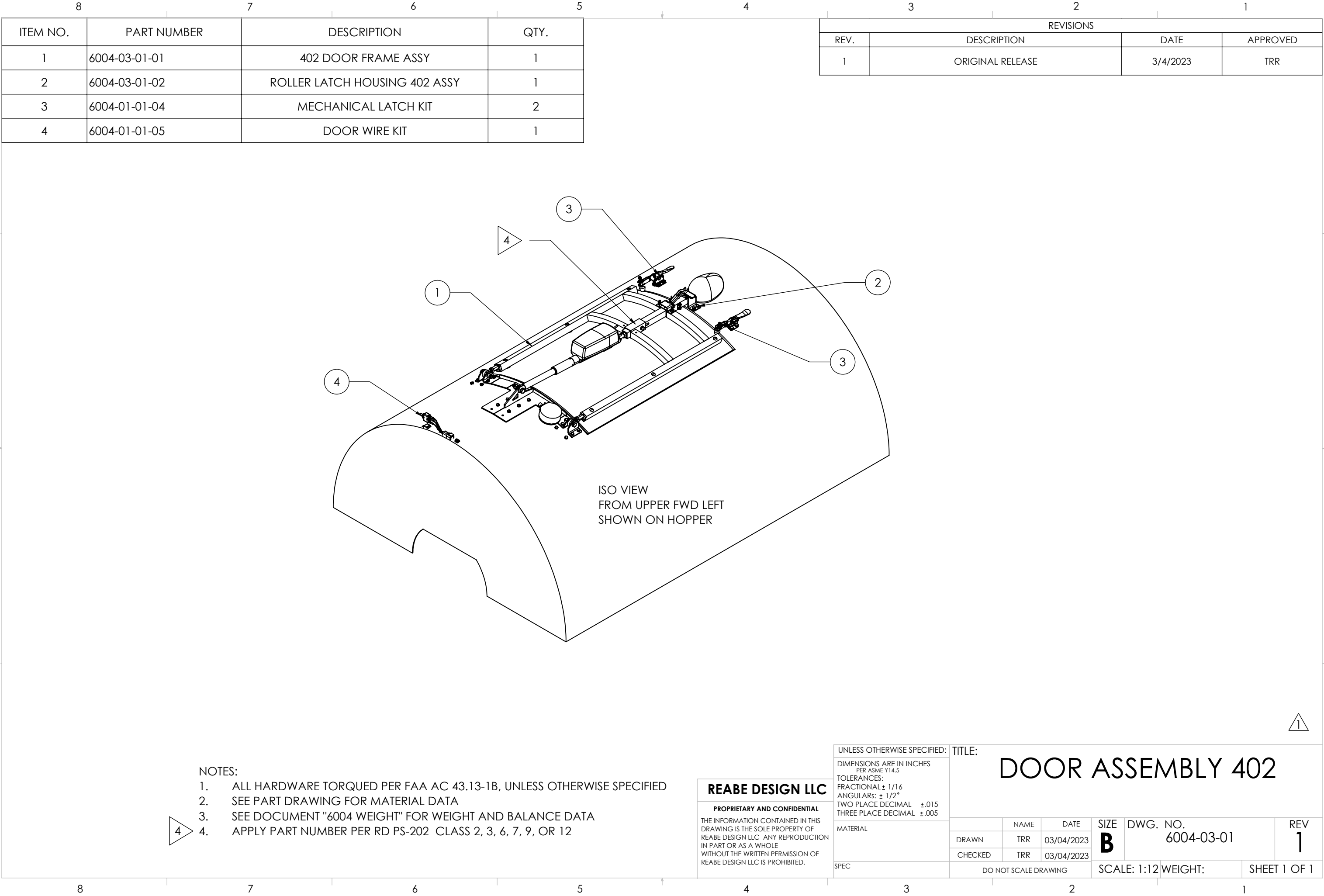
5

4

3

2

1



	8	7	6	5
	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
	1	6004-03-01-01-01	402 DOOR FRAME	1
	2	6004-03-01-01-02	402 SLIDE ROD ASSY	1
	3	6004-03-01-01-03	HINGE AT-402	1
D	4	6004-01-01-01-04	ACTUATOR DOUBLER	1
	5	6004-03-01-01-05	OUTER HINGE 402	2
	6	6004-01-01-01-06	HINGE DOUBLER PLATE	2
	7	6004-01-01-01-07	SLIDE LATCH	1
	8	6004-01-01-01-08	SLIDE STOP	2
	9	6004-01-01-01-10	LINEAR ACTUATOR	1
	10	6004-01-01-01-11	SS CLEVIS PIN 3/8 X 1	1
	11	6004-01-01-01-12	BALL JOINT ROD END	2
C	12	6004-01-01-01-13	SS BALL BEARING 3/8 ID	2
	13	6004-01-01-01-15	SS TORSION SPRING	1
	14	6004-01-01-01-16	NYLON SPACER	2
	15	6004-01-01-01-17	PLASTIC SPACER	3
	16	6004-01-01-01-18	SHCS SS 10-32 1-5/8	2
	17	6004-01-01-01-19	BUTTON HEAD SCREW SS 10-32 X 1.75	2
	18	6004-01-01-01-20	SS HEX HEAD M10 X 1.5 MM 45 MM	2
	19	6004-01-01-01-21	M10 SS WASHER	4
	20	6004-01-01-01-22	M10 X 1.5MM SS LOCK NUT	2
B	21	6004-01-01-01-23	7/16-20 SS JAM NUT	2
	22	6004-01-01-01-24	SS CLEVIS PIN 5/16 X 1-5/8	1
	23	6004-01-01-01-25	LATCH PIVOT FOR SS FRAME	1
	24	6004-01-01-01-26	3/8-24 X 1-3/4" SS HEX BOLT	2
	25	NAS1149C0663R	3/8 .063 WASHER SS	17
	26	MS21044C6	3/8-24 SS LOCKNUT	2
	27	AN960C516L	5/16 SS WASHER .032"	2
	28	AN365C524	5/16-24 SS NYLON LOCK NUT	1
	29	MS35308-339	5/16-24 X 1-3/4 SS HEX SCREW	1
	30	MS21044C3	10-32 SS LOCKNUT	28
	31	NAS1149C0316R	#10 SS WASHER .016"	2
	32	NAS1149C0336R	#10 SS WASHER .063"	48
	33	AN3C6A	10-32 SS DASH 6	18
A	34	AN3C12A	3/16 SS BOLT	6
	8	7	6	5

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR

6004-03-01-01-SS
ISO VIEW
FROM UPPER FWD LEFT
SHOWN ON HOPPER

NOTES:

- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
- PIVOT POINT BOLTS DO NOT PINCH JOINT
- SEE PART DRAWING FOR MATERIAL DATA
- SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
- APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12

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PER ASME Y14.5
TOLERANCES:
FRACTIONAL ± 1/16
ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

SPEC

TITLE:
402 DOOR FRAME ASSY

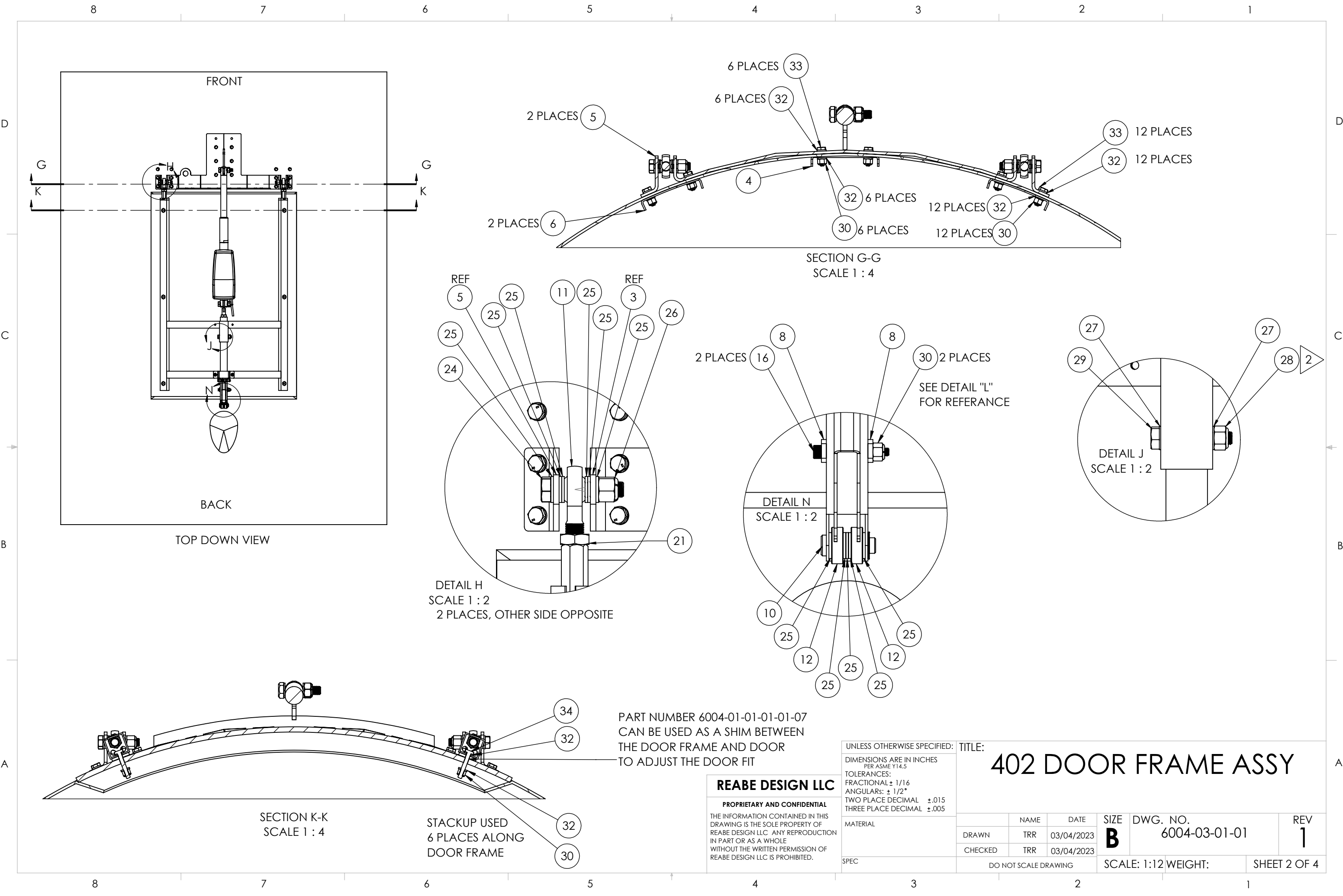
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DRAWN	TRR	03/04/2023	B	6004-03-01-01	1
CHECKED	TRR	03/04/2023			

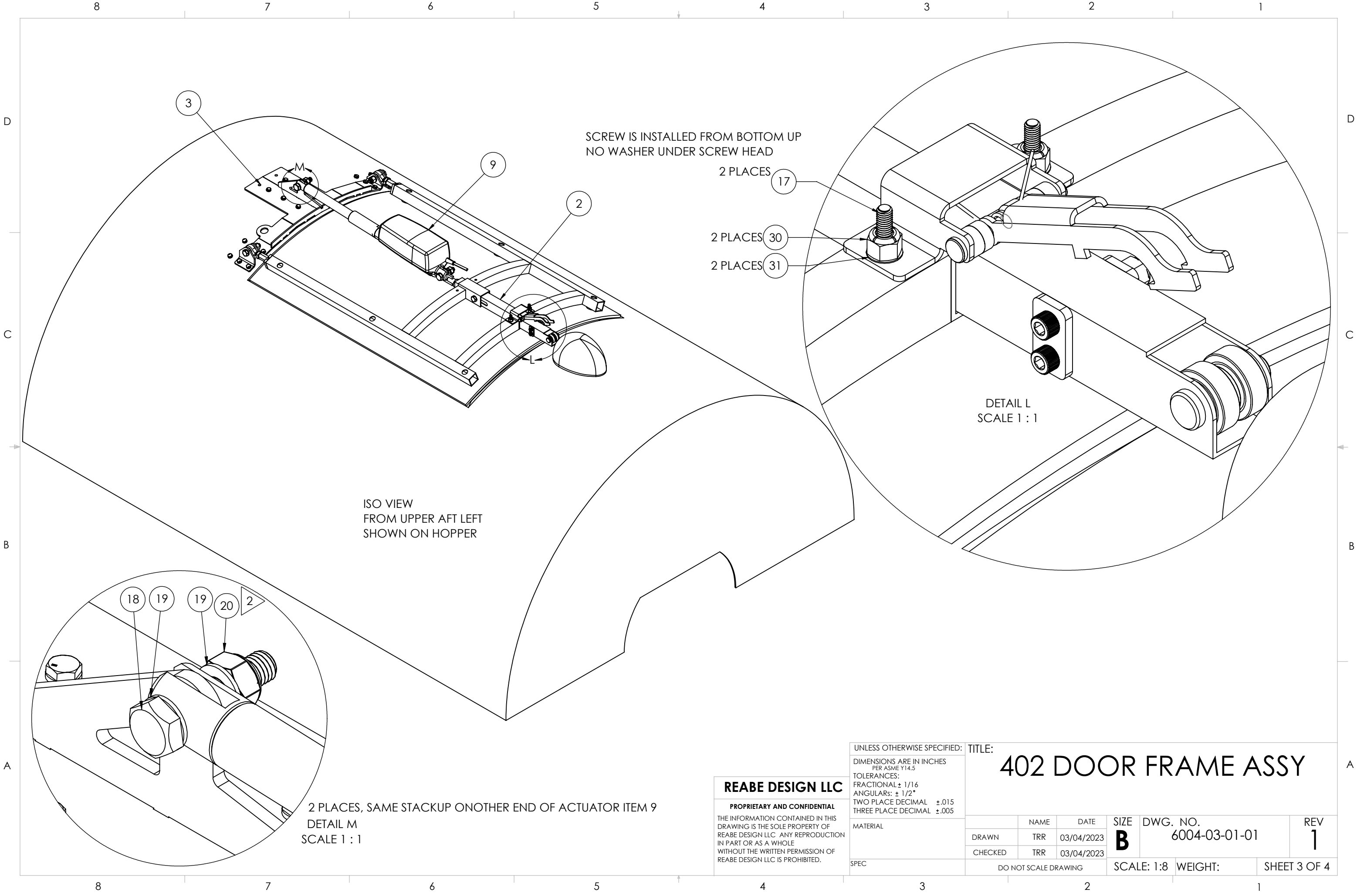
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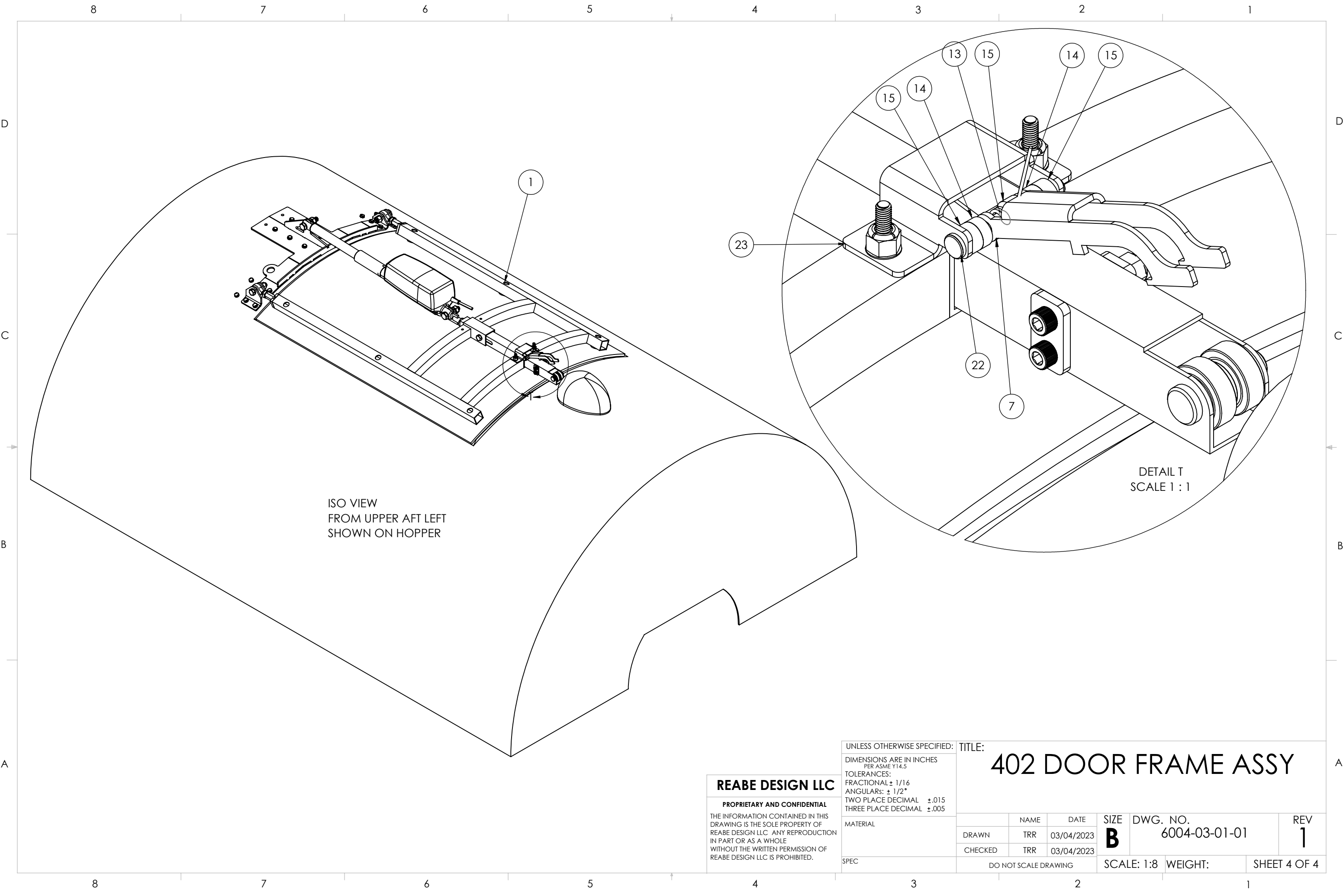
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WEIGHT:

SHEET 1 OF 4







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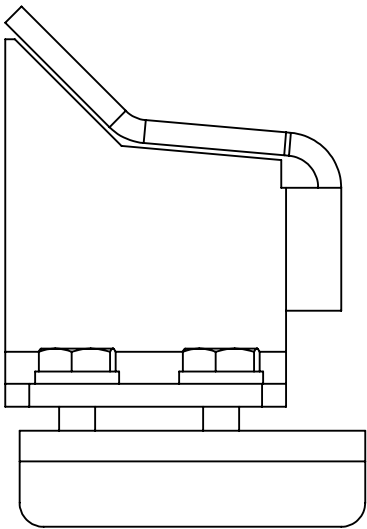
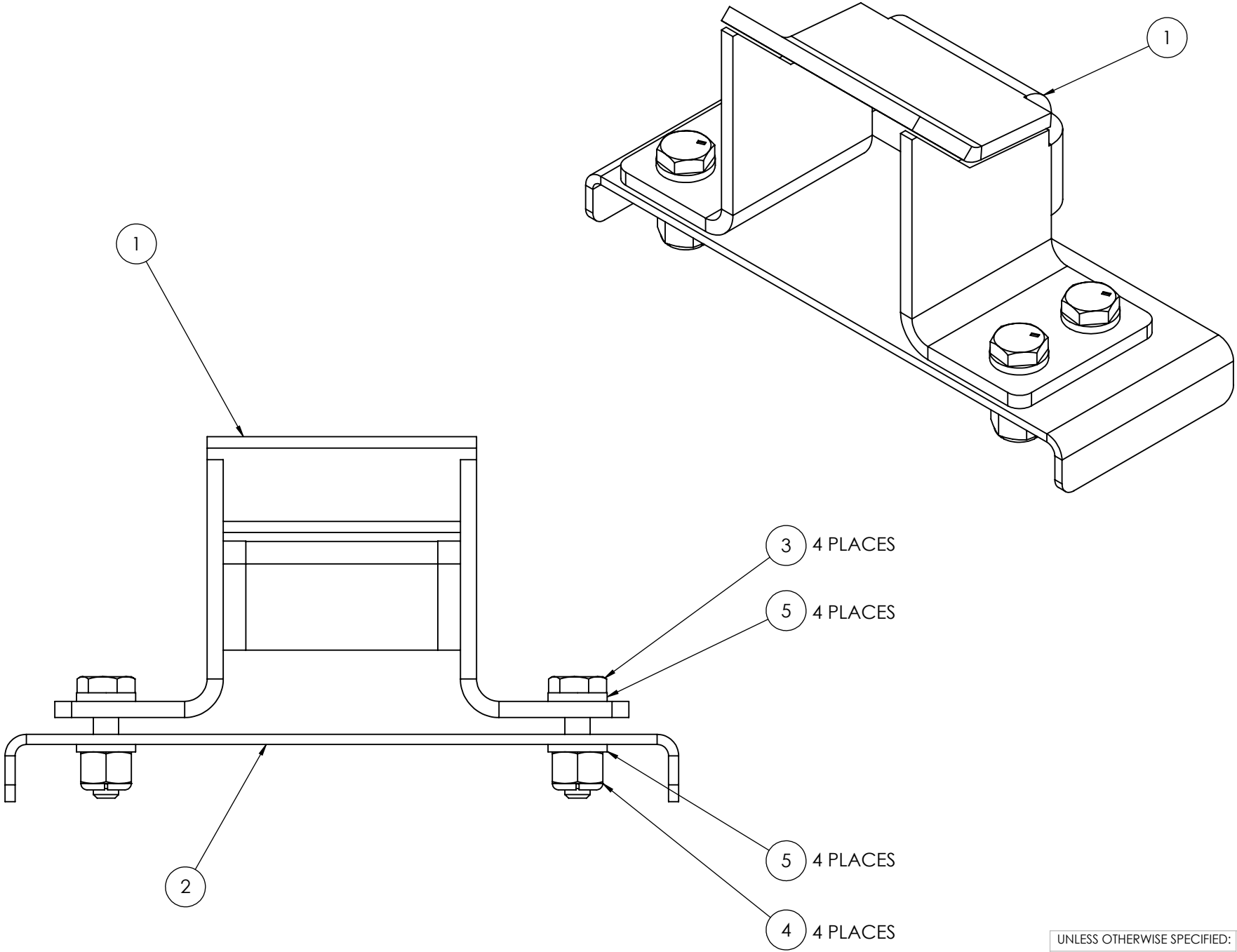
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UNLESS OTHERWISE SPECIFIED:			TITLE:					
DIMENSIONS ARE IN INCHES PER ASME Y14.5			402 DOOR FRAME ASSY					
TOLERANCES:								
FRACTIONAL: ± 1/16								
ANGULARS: ± 1/2°								
TWO PLACE DECIMAL ±.015								
THREE PLACE DECIMAL ±.005								
MATERIAL				NAME	DATE	SIZE	DWG. NO.	REV
			DRAWN	TRR	03/04/2023	B	6004-03-01-01	1
			CHECKED	TRR	03/04/2023			
SPEC			DO NOT SCALE DRAWING			SCALE: 1:8	WEIGHT:	SHEET 4 OF 4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-01-02-01	ROLLER LATCH HOUSING	1
2	6004-03-01-02-02	ROLLER LATCH DOUBLER 402	1
3	AN3C6A	10-32 SS DASH 6	4
4	MS21044C3	10-32 SS LOCKNUT	4
5	NAS1149C0336R	#10 SS WASHER .063"	8

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR



- NOTES:
- HAND TIGHTEN HARDWARE. HARDWARE WITLL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
 - SEE PART DRAWING FOR MATERIAL DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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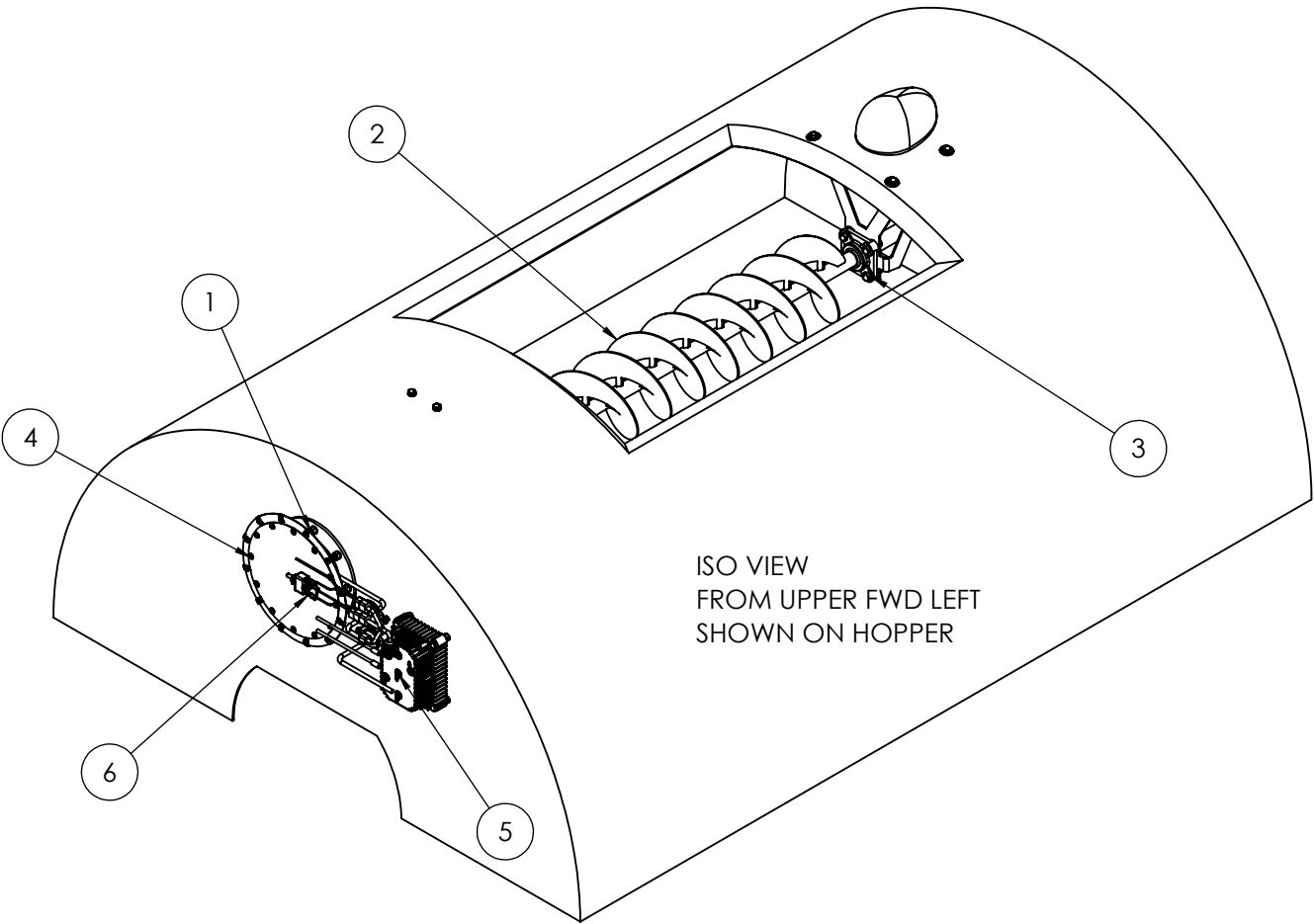
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TOLERANCES:	
FRACTIONAL $\pm 1/16$	
ANGULARs: $\pm 1/2^\circ$	
TWO PLACE DECIMAL $\pm .015$	
THREE PLACE DECIMAL $\pm .005$	
MATERIAL	
SPEC	

TITLE:					
ROLLER LATCH HOUSING 402 ASSY					
DRAWN		NAME	DATE	SIZE	DWG. NO.
CHECKED		TRR	03/04/2023	B	6004-03-01-02
DO NOT SCALE DRAWING		SCALE: 1:1		WEIGHT:	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-01	AUGER MOTOR MOUNT ASSEMBLY	1
2	6004-03-02-02	402 AUGER SHAFT ASSY	1
3	6004-03-02-03	AUGER SUPPORT ASSEMBLY 400	1
4	6004-01-02-04	FORWARD WALL KIT	1
5	6004-01-02-05	AUGER MOTOR AND CONTROLLER	1
6	6004-01-02-06	AUGER WIRE KIT	1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR



ISO VIEW
FROM UPPER FWD LEFT
SHOWN ON HOPPER

- NOTES:
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 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
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TOLERANCES:	
FRACTIONAL $\pm 1/16$	
ANGULARs: $\pm 1/2^\circ$	
TWO PLACE DECIMAL $\pm .015$	
THREE PLACE DECIMAL $\pm .005$	
MATERIAL	
SPEC	

TITLE:				
HOPPER PACKER AUGER 402				
DRAWN		NAME	DATE	SIZE
CHECKED		TRR	03/04/2023	B
DO NOT SCALE DRAWING		DWG. NO.		REV
SCALE: 1:12		6004-03-02		1
WEIGHT:		SHEET 1 OF 1		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-02-01	MALE CAM LOCK MOUNT	1
2	6004-01-02-02-02	1" SHAFT COUPLING	1
3	6004-01-02-02-03	5/16-18 X 3/4 HEX SCREW	1
4	6004-01-02-02-04	1/4 X 1 ROUND KEY	1
5	6004-01-02-02-05	1" SHAFT LIP SEAL	1
6	6004-01-02-02-06	1" 2-BOLT FLANGE BEARING	1
7	6004-03-02-02-10	402 AUGER SHAFT	1
8	6004-01-02-02-07	5/16-24 X 3/4 SS HEX SCREW	2
9	AN960C516L	5/16 SS WASHER .032"	2

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR

D

D

C

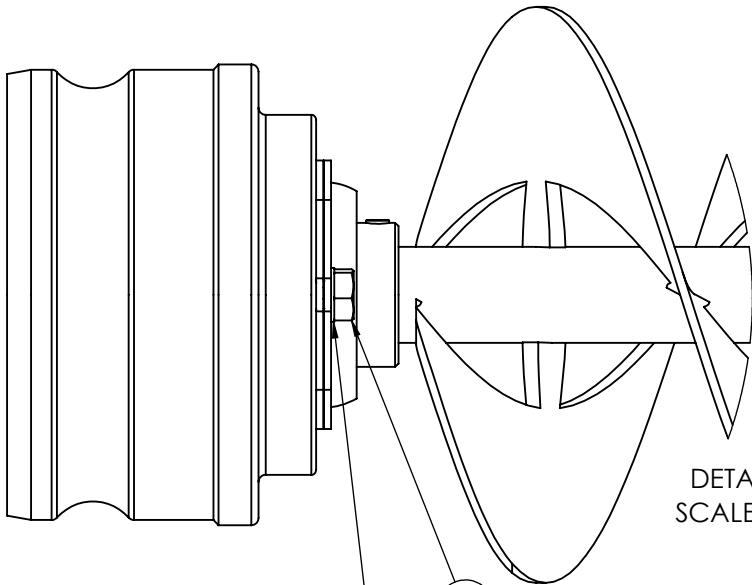
C

B

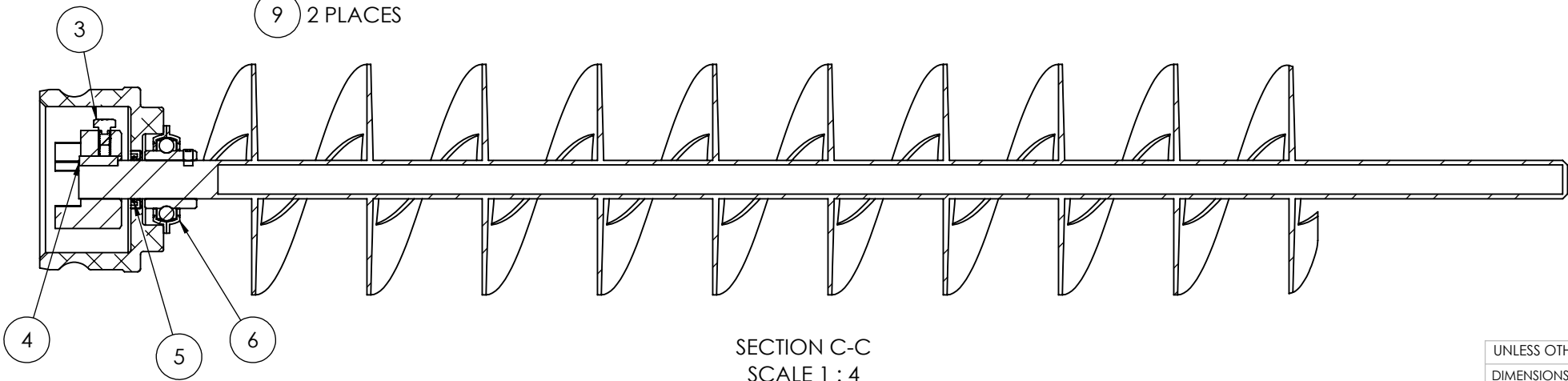
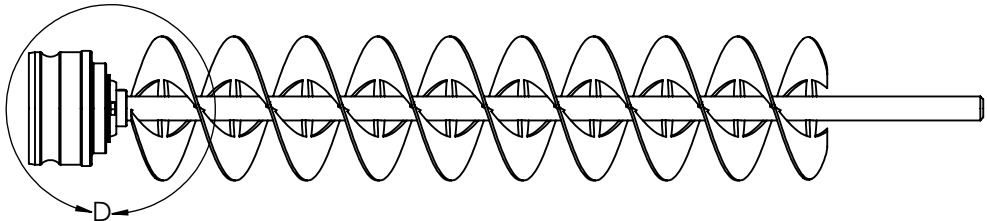
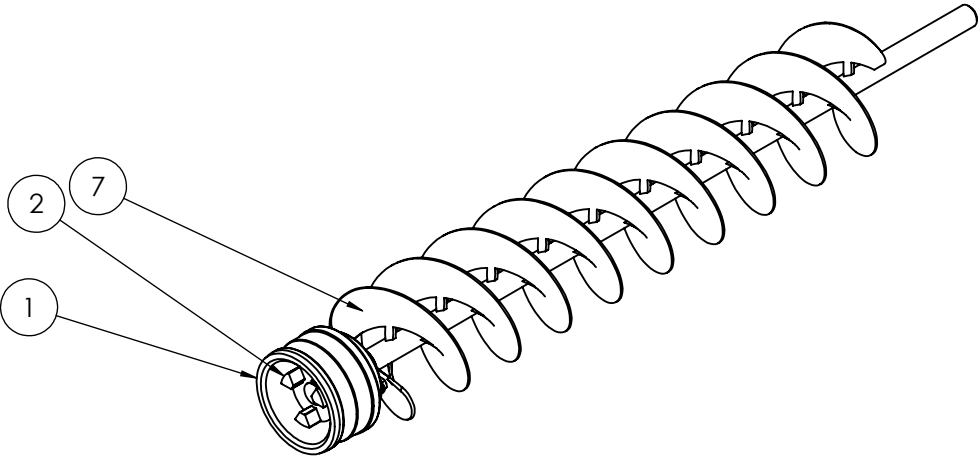
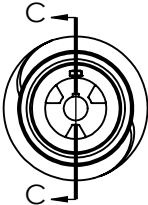
B

A

A



DETAIL D
SCALE 1 : 2



SECTION C-C
SCALE 1 : 4

NOTES:

1. ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
2. 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
3. SEE PART DRAWING FOR MATERIAL DATA
4. APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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DIMENSIONS ARE IN INCHES
PER ASME Y14.5
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARS: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

MATERIAL

SPEC

TITLE:

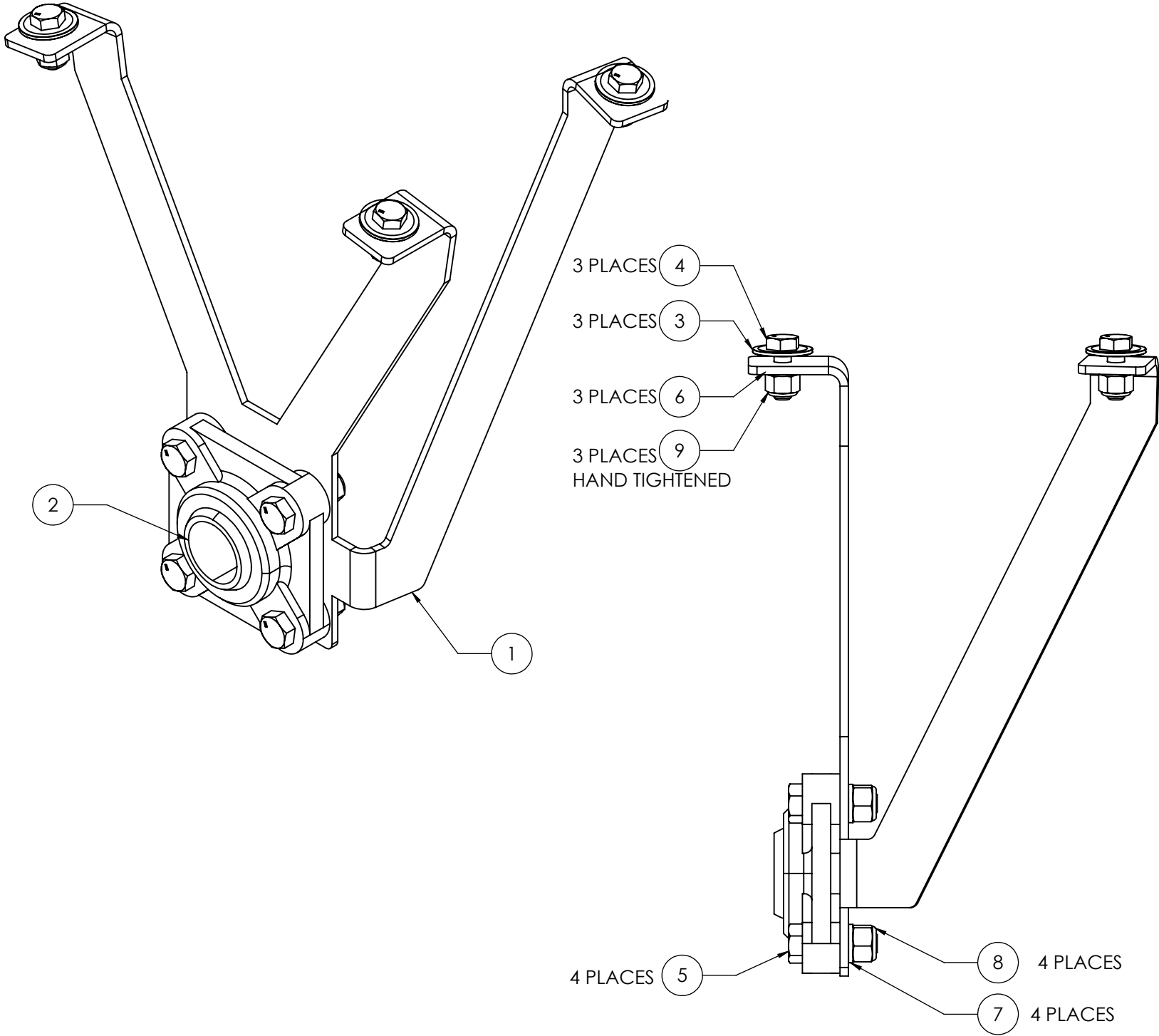
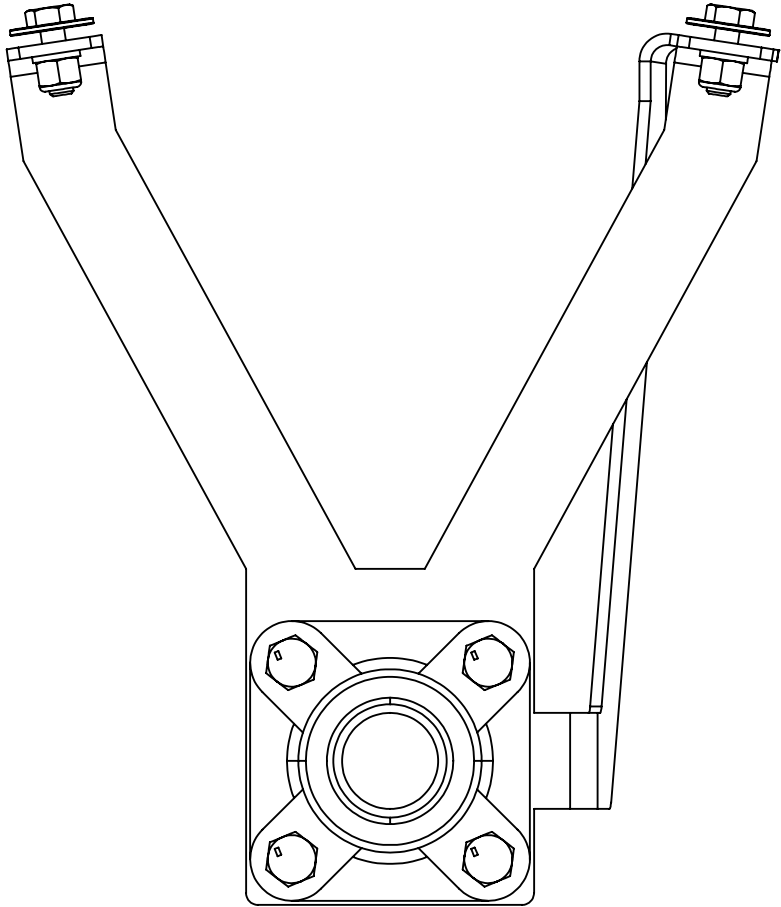
402 AUGER SHAFT ASSY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-03-02-02	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING SCALE: 1:8 WEIGHT: SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-03-02-03-01	AUGER SUPPORT 400	1
2	6004-01-02-03-02	1" 4-BOLT FLANGE BEARING	1
3	6004-01-01-03-03	1/4" SS OVERSIZED WASHER	3
4	AN4C6A	1/4-28 SS BOLT	3
5	AN5C10A	5/16-24 SS BOLT	4
6	AN960C416	1/4 SS WASHER .063"	3
7	AN960C516	5/16 SS WASHER .063"	4
8	AN365C524	5/16-24 SS NYLON LOCK NUT	4
9	AN365C428	1/4-28 SS NYLON LOCK NUT	3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR



- NOTES:
- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 - HAND TIGHTENED HARDWARE WILL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
 - SEE PART DRAWING FOR MATERIAL DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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UNLESS OTHERWISE SPECIFIED:		TITLE:							
DIMENSIONS ARE IN INCHES PER ASME Y14.5		AUGER SUPPORT ASSEMBLY 400							
TOLERANCES:									
FRACTIONAL ± 1/16									
ANGULARs: ± 1/2°									
TWO PLACE DECIMAL ±.015		MATERIAL		SIZE		DWG. NO.		REV	
THREE PLACE DECIMAL ±.005				B		6004-03-02-03		1	
SPEC				DO NOT SCALE DRAWING		SCALE: 1:2		WEIGHT:	
		DRAWN		TRR		03/04/2023			
		CHECKED		TRR		03/04/2023			

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-04-01	DOOR ASSEMBLY 510	1
2	6004-04-02	HOPPER PACKER AUGER 510	1

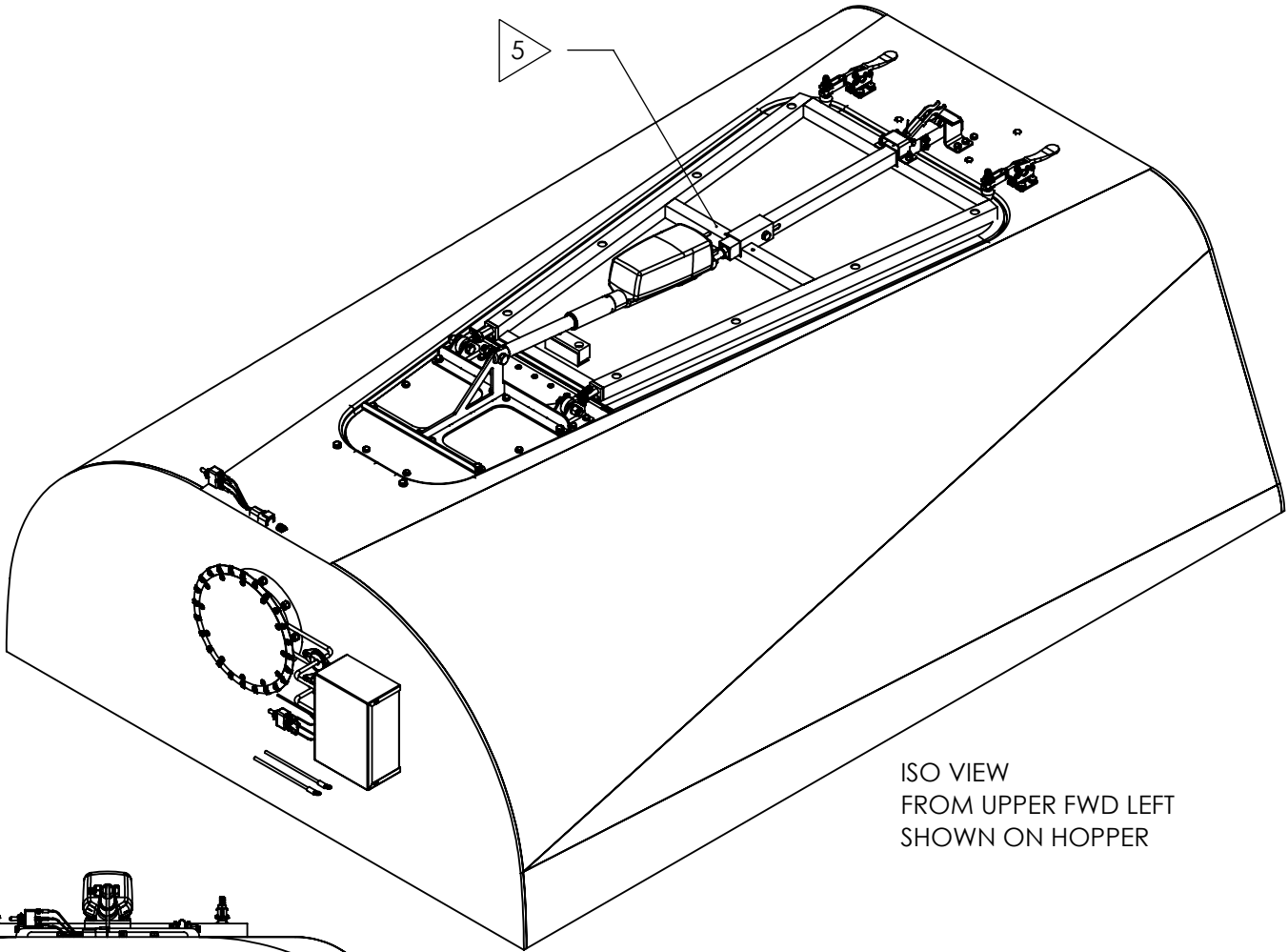
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR
2	ADDED NOTE 5	07/18/2024	TRR

D

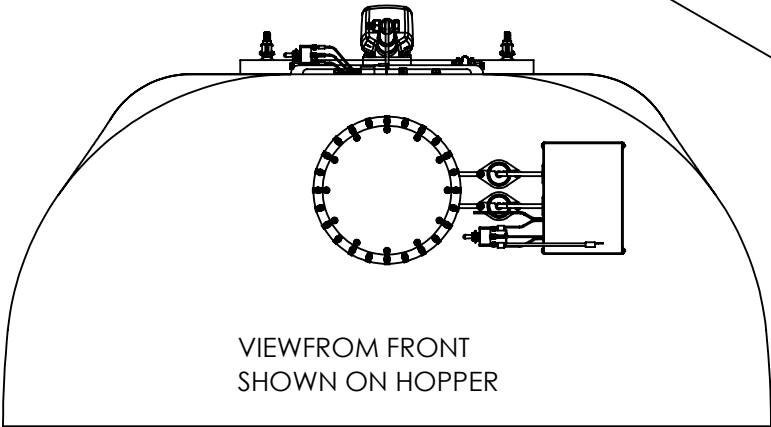
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B

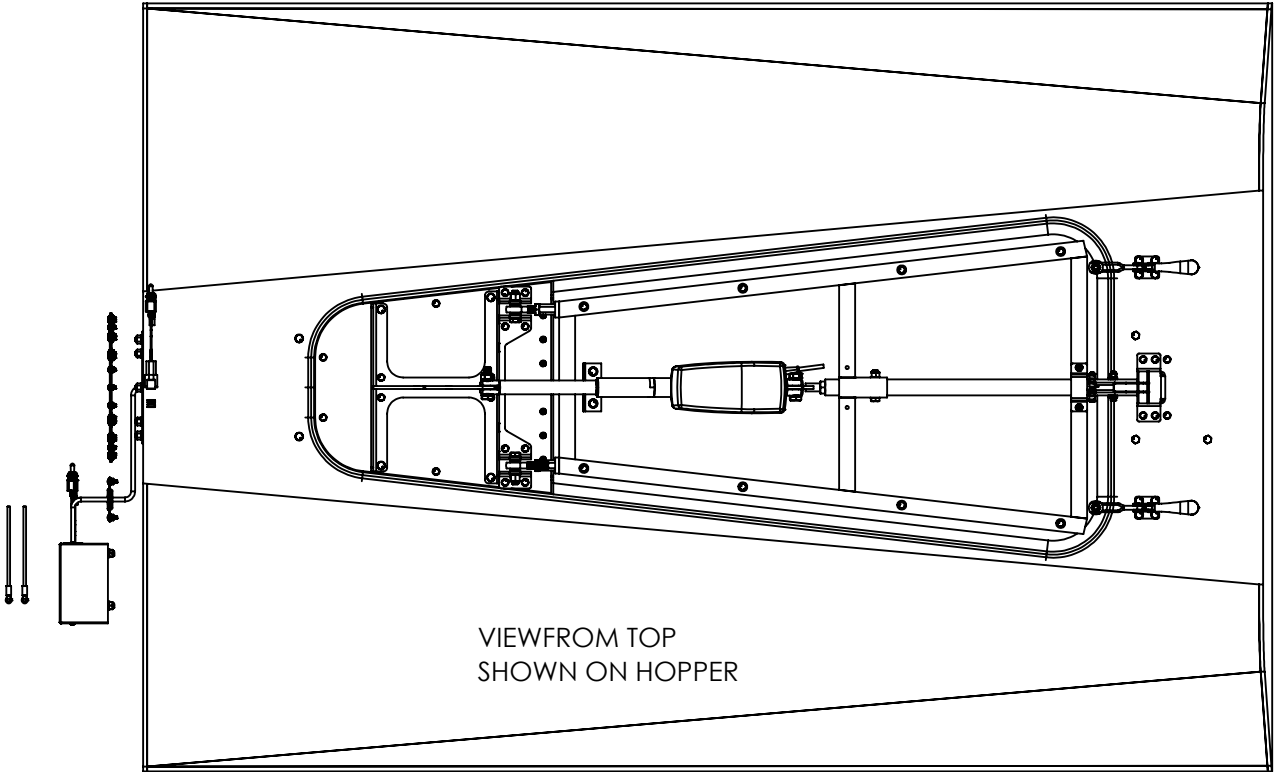
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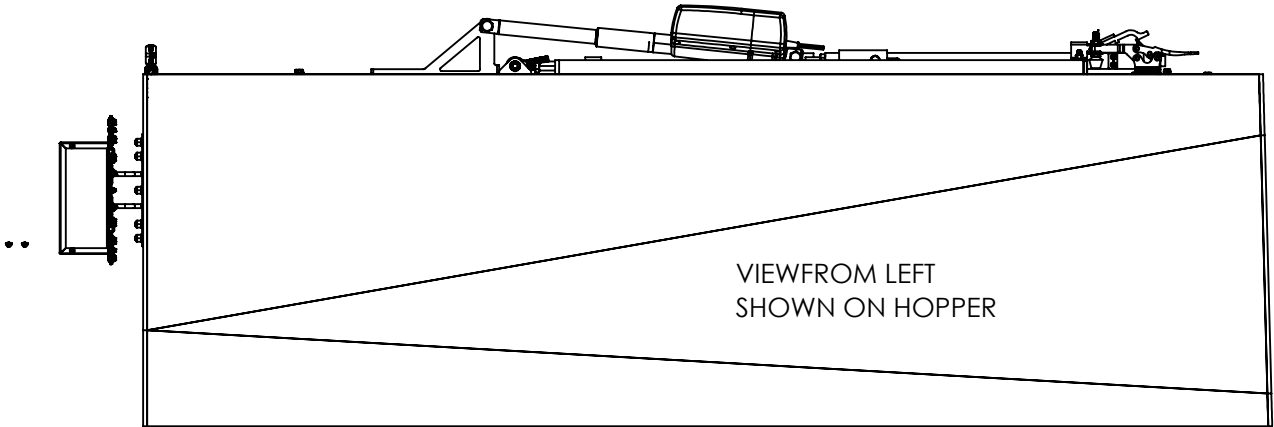
ISO VIEW
FROM UPPER FWD LEFT
SHOWN ON HOPPER



VIEW FROM FRONT
SHOWN ON HOPPER



VIEW FROM TOP
SHOWN ON HOPPER



VIEW FROM LEFT
SHOWN ON HOPPER

1

- NOTES:
- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 - SEE SUB-ASSEMBLY OR INSTALL INSTRUCTIONS FOR ASSEMBLY AND STACK UP DATA
 - SEE PART DRAWING FOR MATERIAL DATA
 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 9, OR 12

2 5

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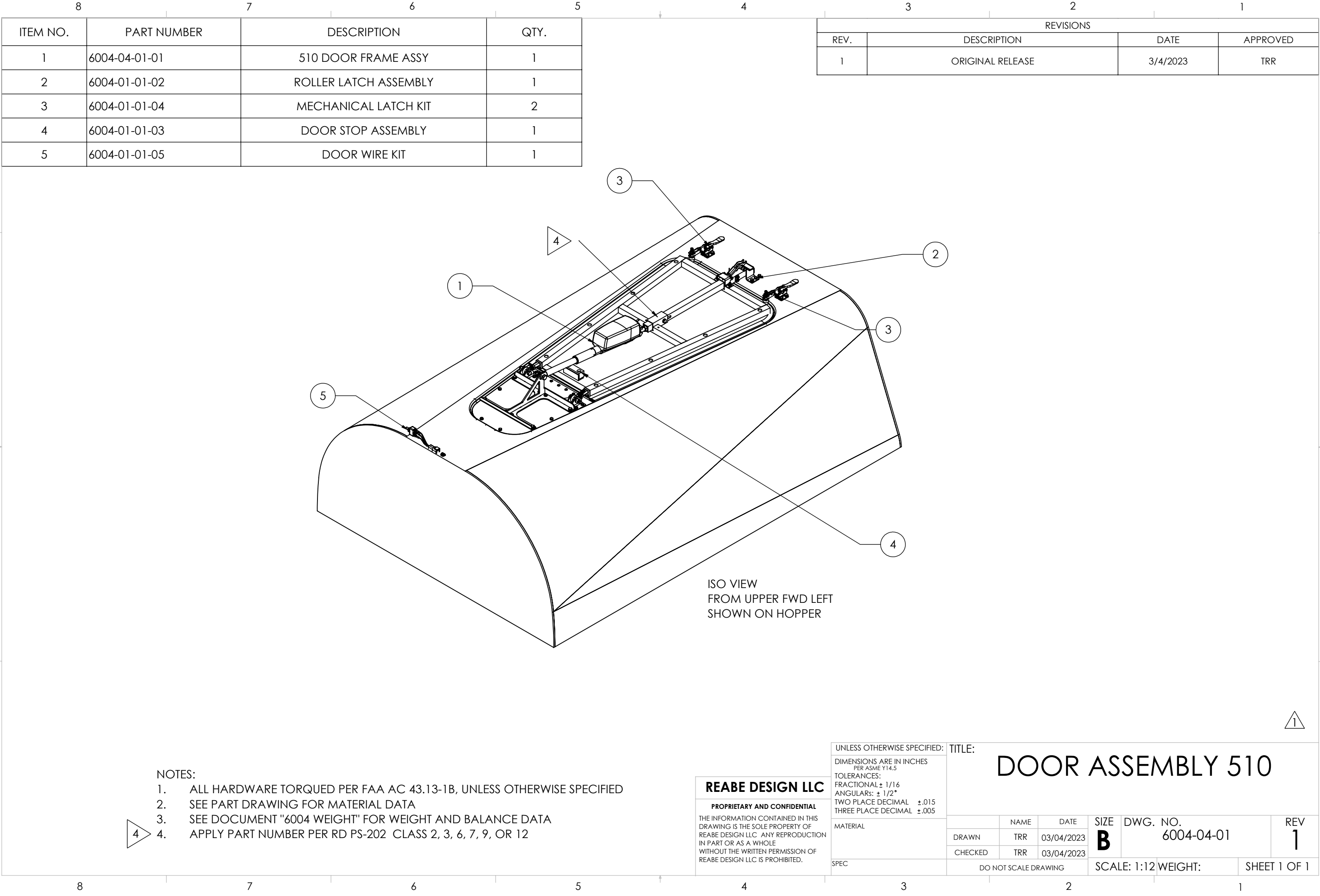
UNLESS OTHERWISE SPECIFIED:		TITLE:						
DIMENSIONS ARE IN INCHES PER ASME Y14.5		HOPPER PACKER 510						
TOLERANCES:								
FRACTIONAL: ± 1/16								
ANGULARs: ± 1/2°								
TWO PLACE DECIMAL ±.015		MATERIAL						
THREE PLACE DECIMAL ±.005								
SPEC		NAME		DATE	SIZE	DWG. NO.	REV	
		DRAWN		TRR	03/04/2023	B	6004-04	2
		CHECKED		TRR	03/04/2023			
DO NOT SCALE DRAWING		SCALE: 1:12		WEIGHT:		SHEET 1 OF 1		

D

C

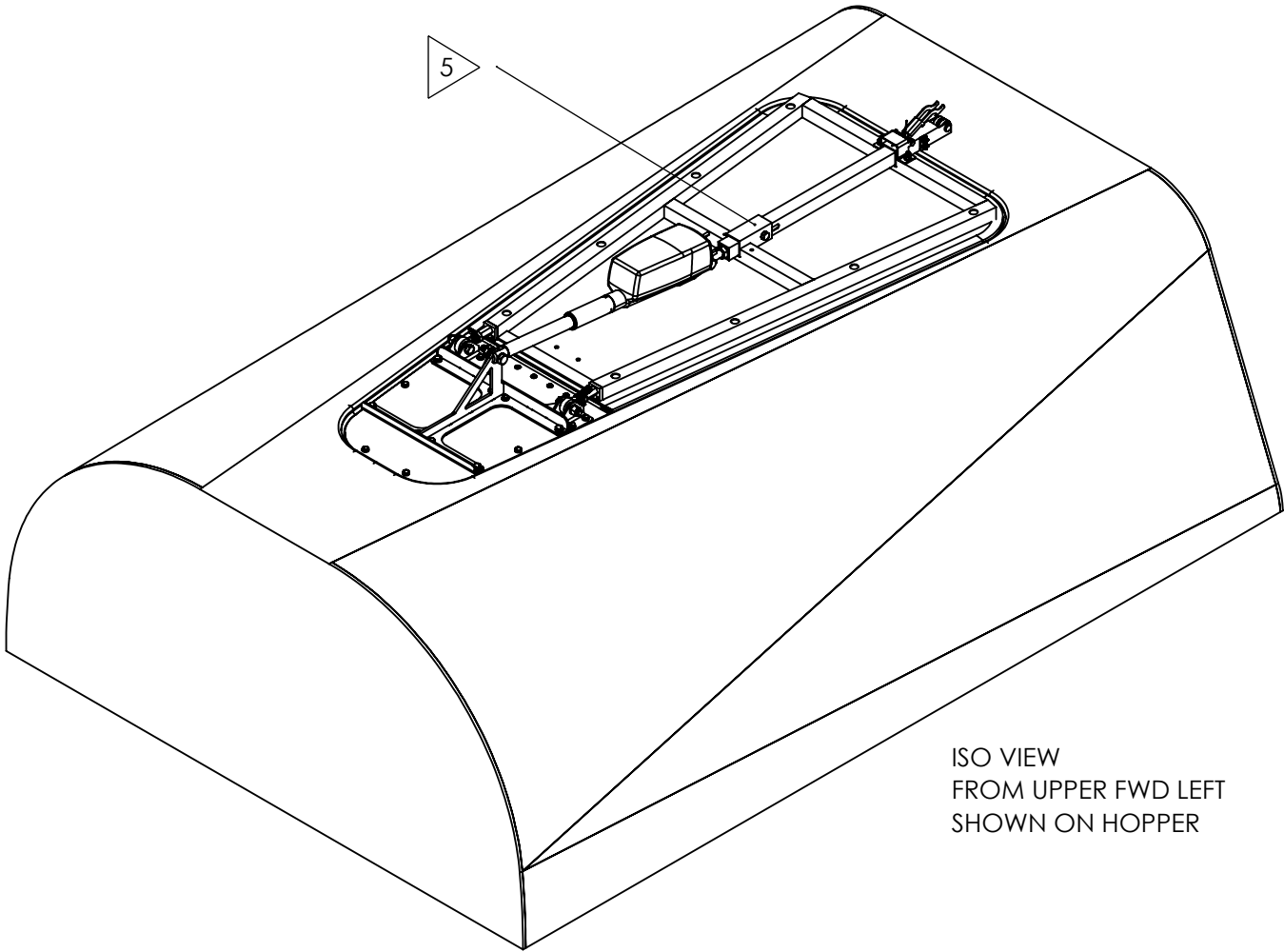
B

A



	8	7	6	5
	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
	1	6004-04-01-01-01	510 DOOR FRAME	1
	2	6004-04-01-01-02	510 SLIDE ROD ASSY	1
	3	6004-04-01-01-03	HINGE 510	1
	4	6004-04-01-01-05	OUTER HINGE THRUSH	2
D	5	6004-01-01-01-07	SLIDE LATCH	1
	6	6004-01-01-01-08	SLIDE STOP	2
	7	6004-01-01-01-10	LINEAR ACTUATOR	1
	8	6004-01-01-01-11	SS CLEVIS PIN 3/8 X 1	1
	9	6004-01-01-01-12	BALL JOINT ROD END	2
	10	6004-01-01-01-13	SS BALL BEARING 3/8 ID	2
	11	6004-01-01-01-15	SS TORSION SPRING	1
	12	6004-01-01-01-16	NYLON SPACER	2
	13	6004-01-01-01-17	PLASTIC SPACER	3
	14	6004-01-01-01-18	SHCS SS 10-32 1-5/8	2
	15	6004-01-01-01-19	BUTTON HEAD SCREW SS 10-32 X 1.75	2
	16	6004-01-01-01-20	SS HEX HEAD M10 X 1.5 MM 45 MM	2
	17	6004-01-01-01-21	M10 SS WASHER	4
	18	6004-01-01-01-22	M10 X 1.5MM SS LOCK NUT	2
C	19	6004-01-01-01-23	7/16-20 SS JAM NUT	2
	20	6004-01-01-01-24	SS CLEVIS PIN 5/16 X 1-5/8	1
	21	6004-04-01-01-25	LATCH PIVOT, THRUSH SS FRAME	1
	22	6004-01-01-01-26	3/8-24 X 1-3/4" SS HEX BOLT	2
	23	6004-04-01-01-30	SILICON RUBBER SEAL THRUSH	1
	24	6004-04-01-01-31	510 HOPPER LID	1
	25	6004-04-01-01-32	510 COVER PLATE	1
	26	6004-04-01-01-33	510 LIP PLATE	1
	27	NAS1149C0663R	3/8 .063 WASHER SS	17
	28	6004-01-02-04-05	#6 SS WASHER	14
	29	6004-01-02-04-06	6-32 LOCK NUT SS	7
	30	6004-01-02-04-07	6-32 X 1/2 TRUSS HEAD SS	7
	31	MS21044C6	3/8-24 SS LOCKNUT	2
B	32	AN960C516L	5/16 SS WASHER .032"	2
	33	AN365C524	5/16-24 SS NYLON LOCK NUT	1
	34	MS35308-339	5/16-24 X 1-3/4 SS HEX SCREW	1
	35	MS21044C3	10-32 SS LOCKNUT	28
	36	NAS1149C0316R	#10 SS WASHER .016"	2
	37	NAS1149C0336R	#10 SS WASHER .063"	48
	38	AN3C12A	3/16 SS BOLT	4
	39	AN3C5A	3/16 -5 SS	16
	40	AN3C10A	3/16 -10 STAINLESS BOLT	4
	41	AN960C416	1/4 SS WASHER .063"	8
	42	AN4C12A	1/4-28 SS BOLT	4
	43	AN365C428	1/4-28 SS NYLON LOCK NUT	4

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR



NOTES:

- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
- PIVOT POINT BOLTS DO NOT PINCH JOINT
- SEE PART DRAWING FOR MATERIAL DATA
- SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
- APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12

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PER ASME Y14.5
TOLERANCES:
FRACTIONAL ± 1/16
ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

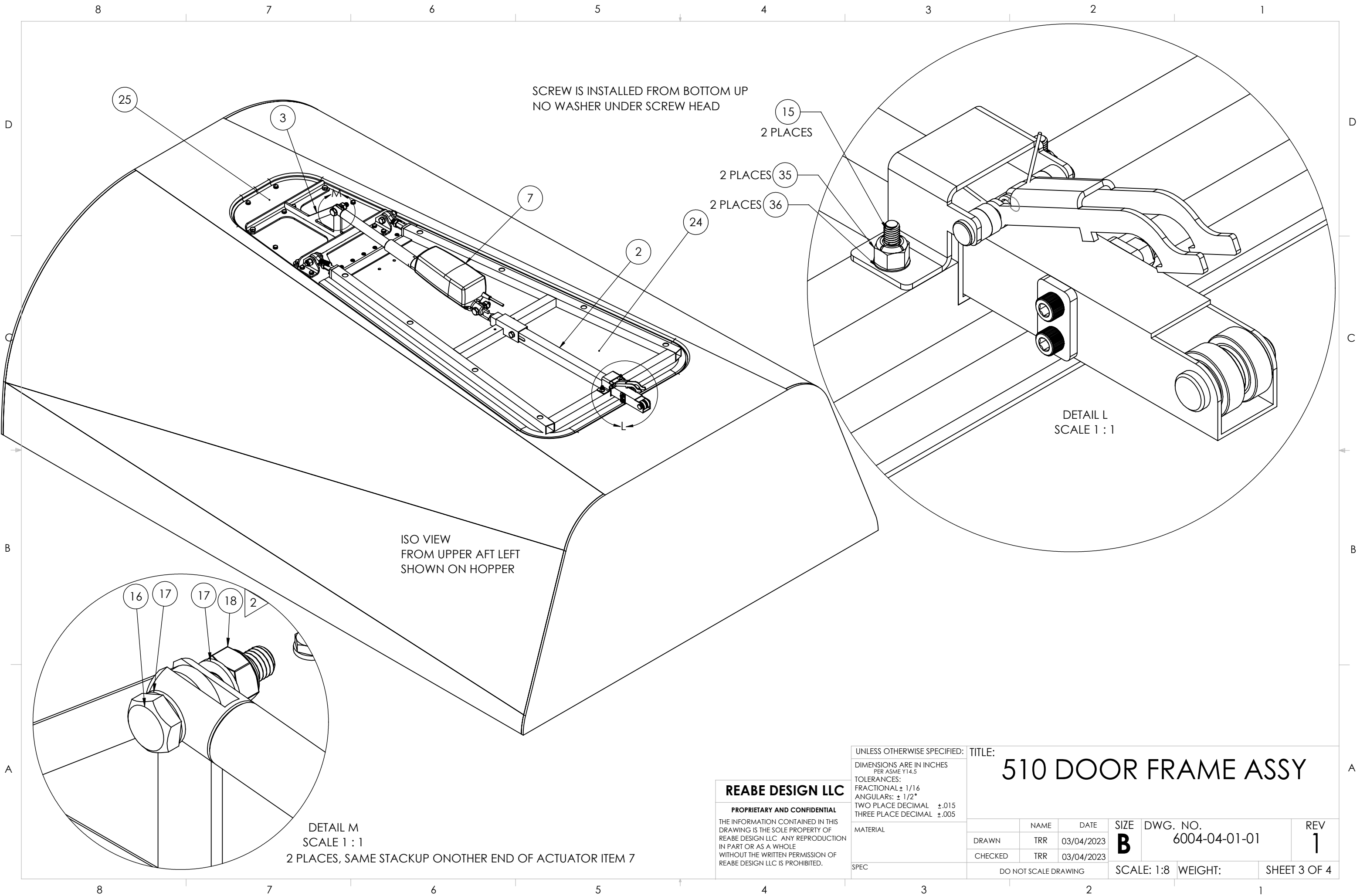
SPEC

TITLE:

510 DOOR FRAME ASSY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-04-01-01	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING SCALE: 1:12 WEIGHT: SHEET 1 OF 4



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PER ASME Y14.5
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULARs: $\pm 1/2^\circ$
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

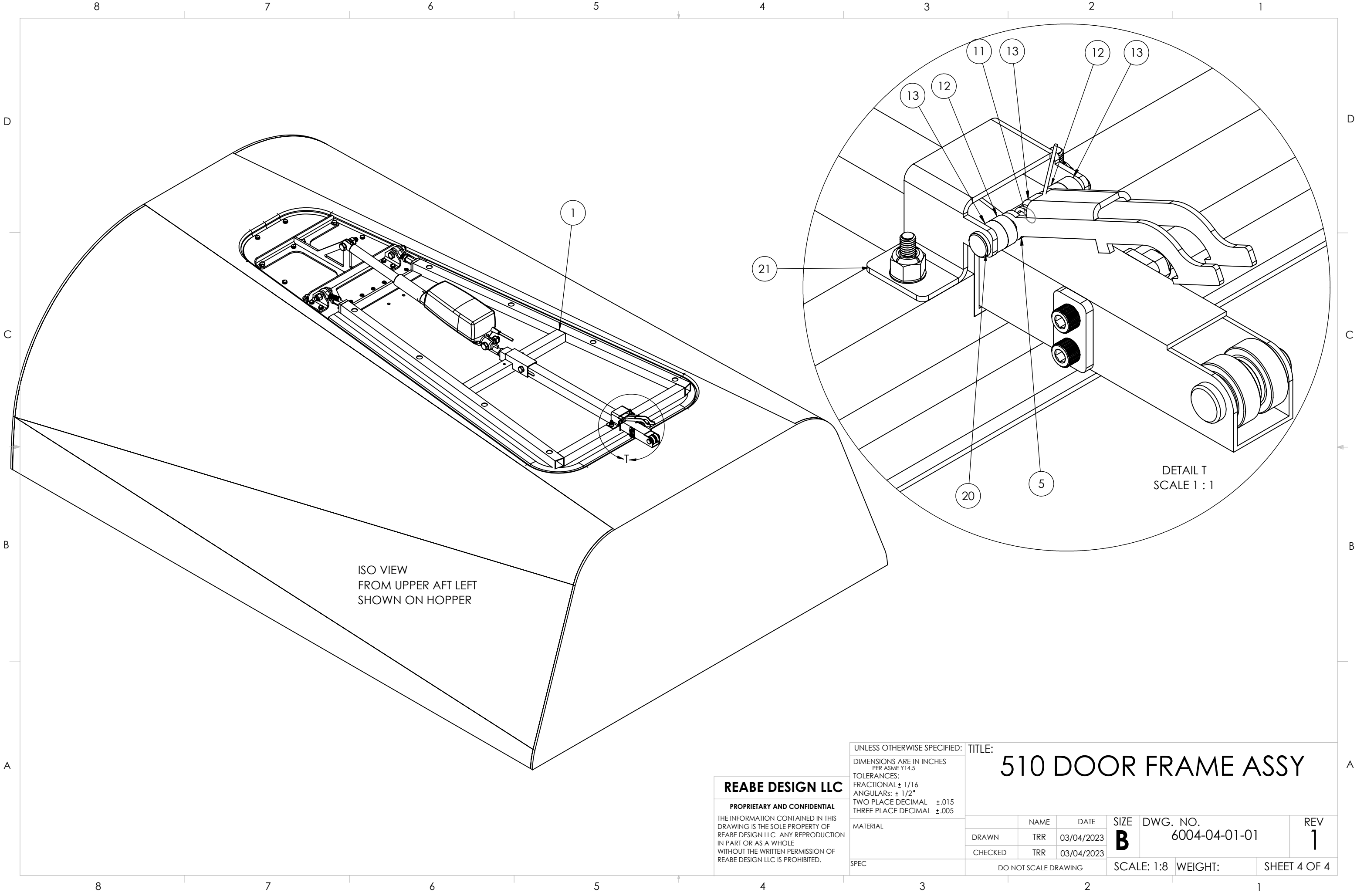
MATERIAL

SPEC

TITLE:

510 DOOR FRAME ASSY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-04-01-01	1
CHECKED	TRR	03/04/2023			
DO NOT SCALE DRAWING			SCALE: 1:8	WEIGHT:	SHEET 3 OF 4



ISO VIEW
FROM UPPER AFT LEFT
SHOWN ON HOPPER

DETAIL T
SCALE 1 : 1

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TOLERANCES:
FRACTIONAL ± 1/16
ANGULARs: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

SPEC

TITLE:

510 DOOR FRAME ASSY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-04-01-01	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING

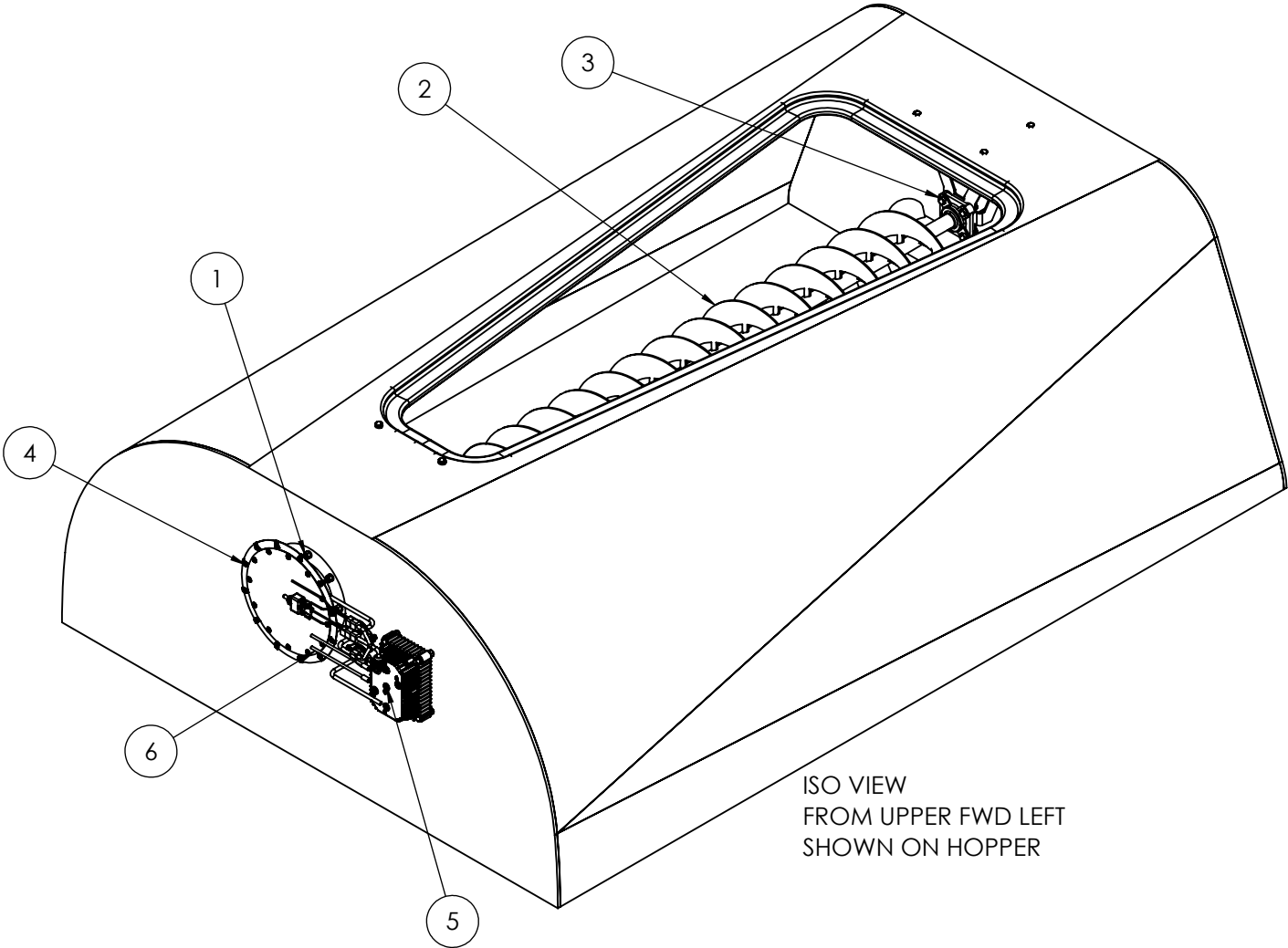
SCALE: 1:8

WEIGHT:

SHEET 4 OF 4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-01	AUGER MOTOR MOUNT ASSEMBLY	1
2	6004-01-02-02	AT-802 AUGER SHAFT ASSEMBLY	1
3	6004-04-02-03	AUGGER SUPPORT ASSY THRUSH	1
4	6004-01-02-04	FORWARD WALL KIT	1
5	6004-01-02-05	AUGER MOTOR AND CONTROLLER	1
6	6004-01-02-06	AUGER WIRE KIT	1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR



- NOTES:
- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
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 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12

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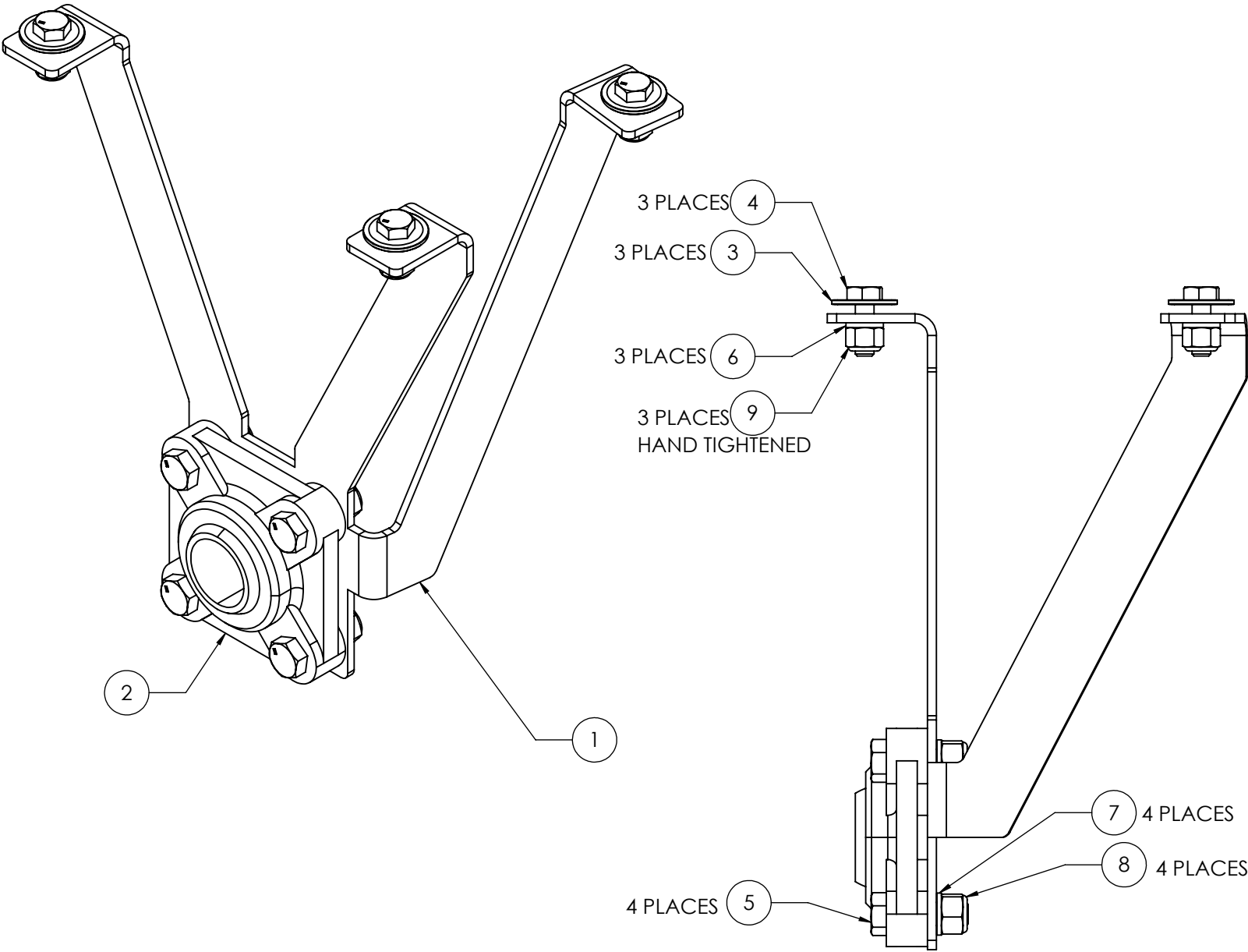
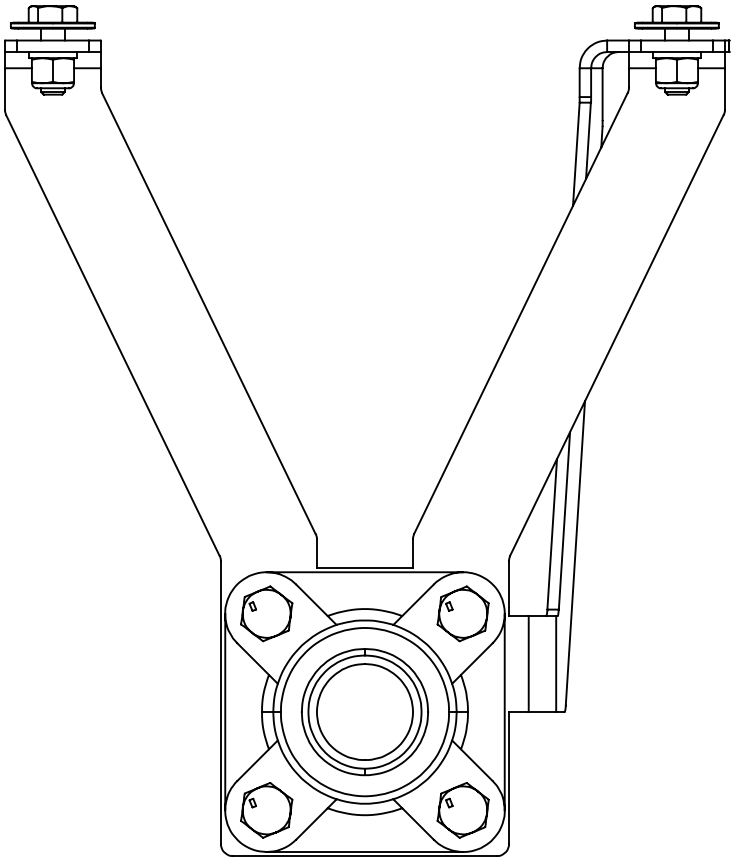
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TOLERANCES:	
FRACTIONAL $\pm 1/16$	
ANGULARs: $\pm 1/2^\circ$	
TWO PLACE DECIMAL $\pm .015$	
THREE PLACE DECIMAL $\pm .005$	
MATERIAL	
SPEC	

TITLE:		HOPPER PACKER AUGER 510			
SIZE	DWG. NO.	REV			
B	6004-04-02	1			
DO NOT SCALE DRAWING		SCALE: 1:12		WEIGHT:	
				SHEET 1 OF 1	

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-04-02-03-01	AUGER SUPPORT THRUSH	1
2	6004-01-02-03-02	1" 4-BOLT FLANGE BEARING	1
3	6004-01-01-03-03	1/4" SS OVERSIZED WASHER	3
4	AN4C6A	1/4-28 SS BOLT	3
5	AN5C10A	5/16-24 SS BOLT	4
6	AN960C416	1/4 SS WASHER .063"	3
7	AN960C516	5/16 SS WASHER .063"	4
8	AN365C524	5/16-24 SS NYLON LOCK NUT	4
9	AN365C428	1/4-28 SS NYLON LOCK NUT	3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/04/2023	TRR



- NOTES:
- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 - HAND TIGHTENED HARDWARE WILL BE TORQUED WHEN INSTALLED AT THE HIGHER LEVEL ASSEMBLY
 - 18-8 SS HARDWARE CAN BE REPLACED BY 316 SS HARDWARE TO HELP REDUCE CORROSION
 - SEE PART DRAWING FOR MATERIAL DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 6 OR 7

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DIMENSIONS ARE IN INCHES
PER ASME Y14.5

TOLERANCES:
FRACTIONAL ± 1/16
ANGULARs: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

SPEC

TITLE:

AUGGER SUPPORT ASSY

THRUSH

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-04-02-03	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING

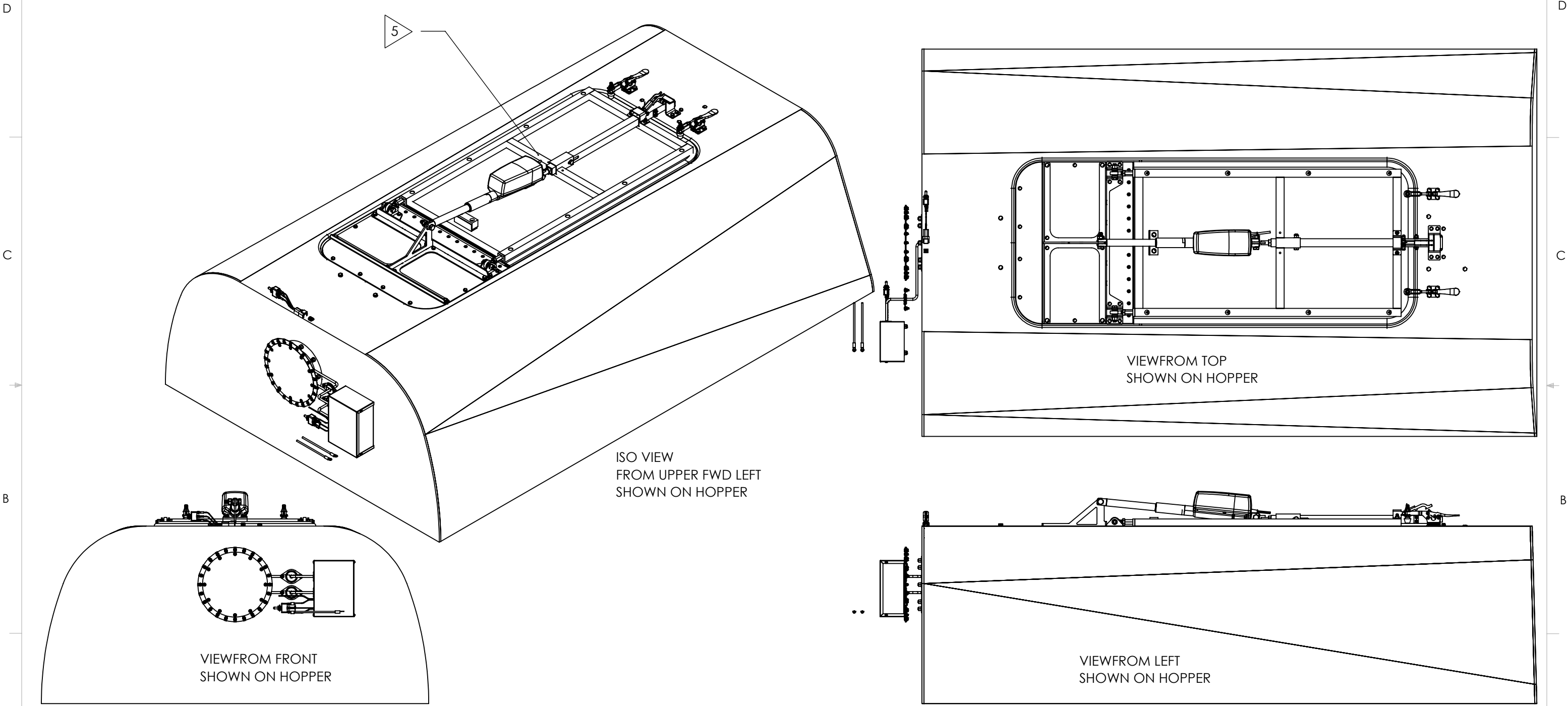
SCALE: 1:2

WEIGHT:

SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-05-01	DOOR ASSEMBLY 710	1
2	6004-05-02	HOPPER PACKER AUGER 710	1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR
2	ADDED NOTE 5	07/18/2024	TRR



- NOTES:
1. ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 2. SEE SUB-ASSEMBLY OR INSTALL INSTRUCTIONS FOR ASSEMBLY AND STACK UP DATA
 3. SEE PART DRAWING FOR MATERIAL DATA
 4. SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 5. APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 9, OR 12



1

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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
PER ASME Y14.5

TOLERANCES:
FRACTIONAL ± 1/16
ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

SPEC

TITLE:

HOPPER PACKER 710

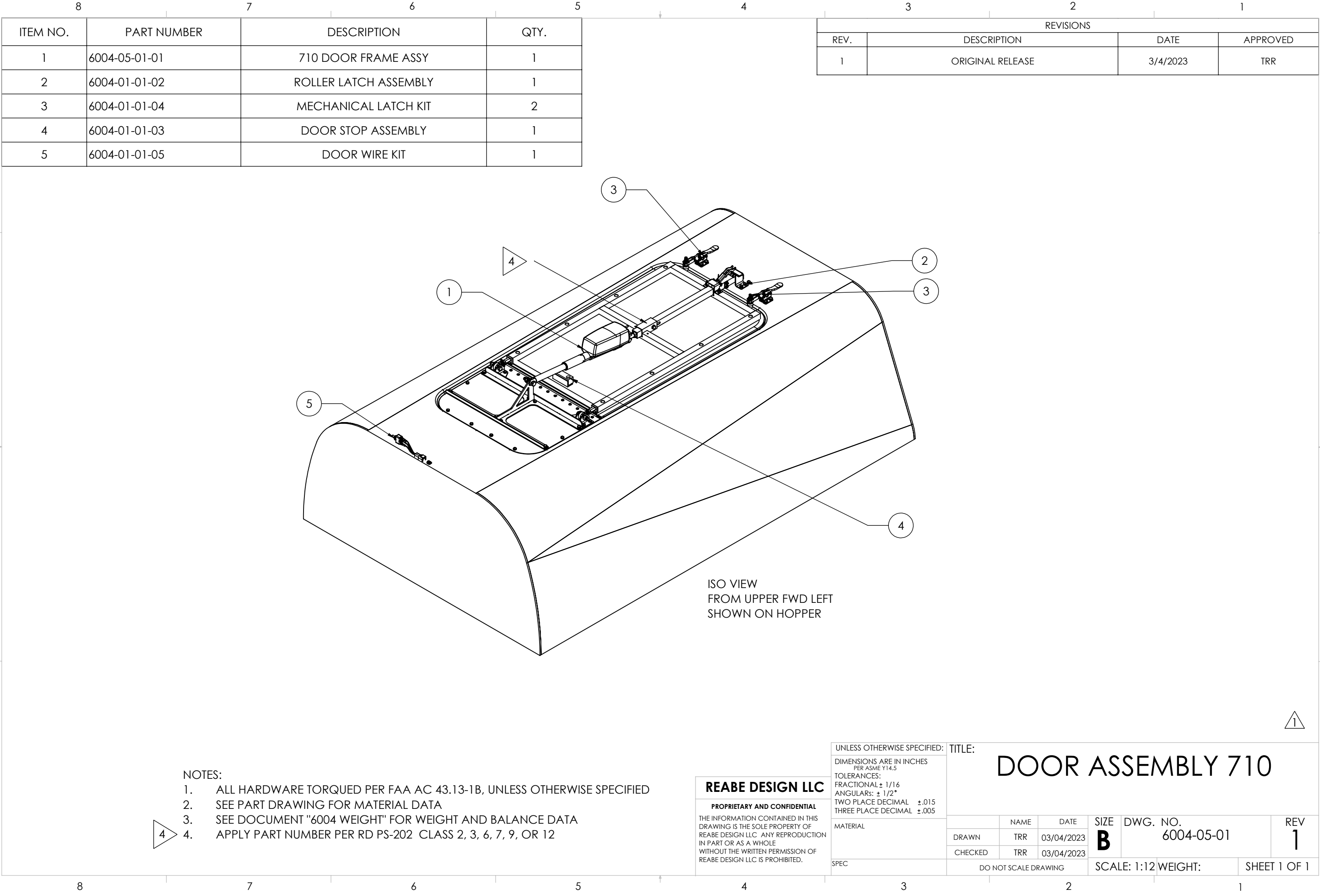
	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-05	2
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING

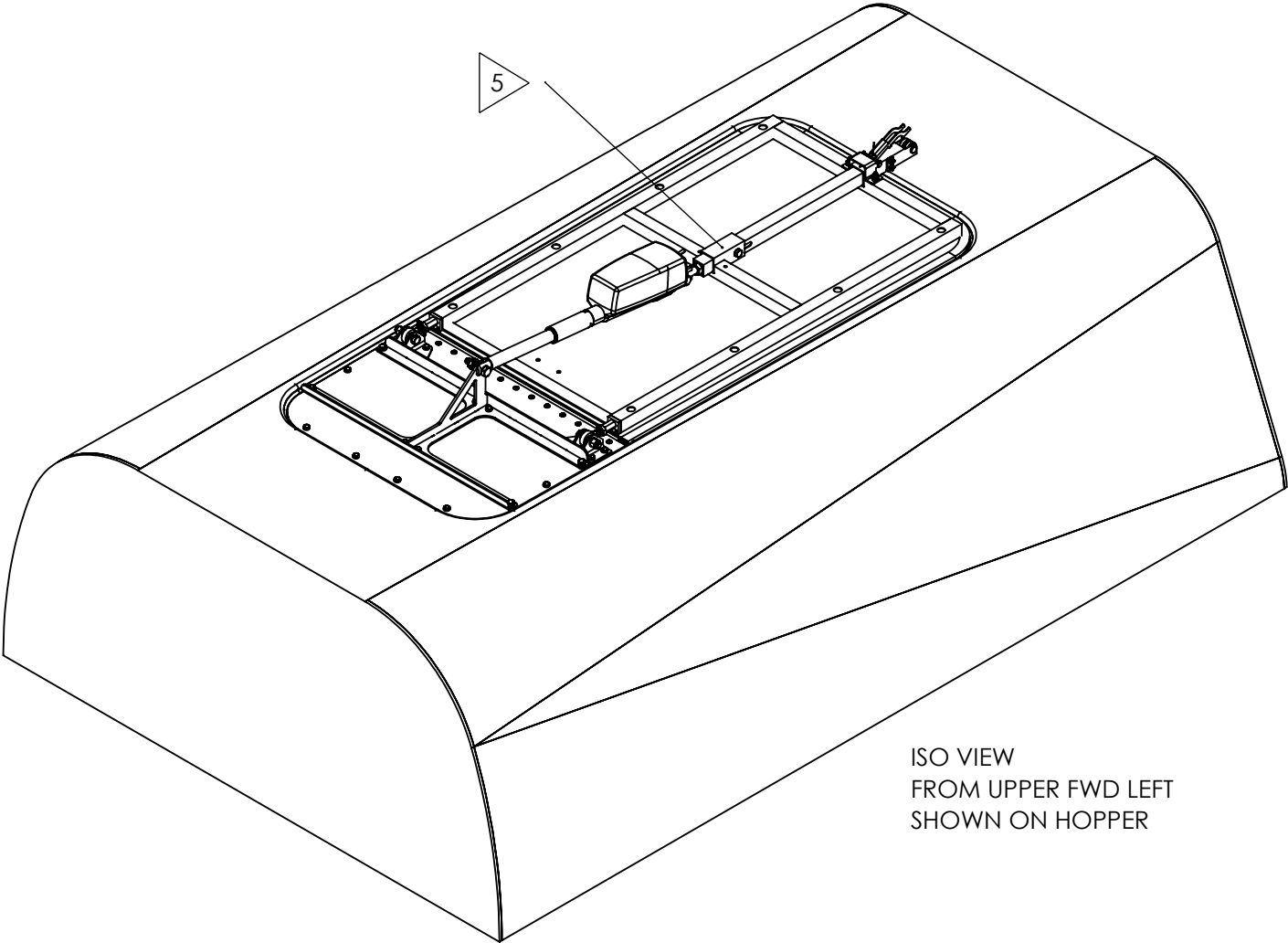
SCALE: 1:12

WEIGHT:

SHEET 1 OF 1



	8	7	6	5		4	3	2	1
	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.					
	1	6004-05-01-01-01	710 DOOR FRAME	1					
	2	6004-04-01-01-02	510 SLIDE ROD ASSY	1					
	3	6004-05-01-01-03	HINGE 710	1					
D	4	6004-04-01-01-05	OUTER HINGE THRUSH	2					
	5	6004-01-01-01-07	SLIDE LATCH	1					
	6	6004-01-01-01-08	SLIDE STOP	2					
	7	6004-01-01-01-10	LINEAR ACTUATOR	1					
	8	6004-01-01-01-11	SS CLEVIS PIN 3/8 X 1	1					
	9	6004-01-01-01-12	BALL JOINT ROD END	2					
	10	6004-01-01-01-13	SS BALL BEARING 3/8 ID	2					
	11	6004-01-01-01-15	SS TORSION SPRING	1					
	12	6004-01-01-01-16	NYLON SPACER	2					
	13	6004-01-01-01-17	PLASTIC SPACER	3					
	14	6004-01-01-01-18	SHCS SS 10-32 1-5/8	2					
	15	6004-01-01-01-19	BUTTON HEAD SCREW SS 10-32 X 1.75	2					
	16	6004-01-01-01-20	SS HEX HEAD M10 X 1.5 MM 45 MM	2					
C	17	6004-01-01-01-21	M10 SS WASHER	4					
	18	6004-01-01-01-22	M10 X 1.5MM SS LOCK NUT	2					
	19	6004-01-01-01-23	7/16-20 SS JAM NUT	2					
	20	6004-01-01-01-24	SS CLEVIS PIN 5/16 X 1-5/8	1					
	21	6004-04-01-01-25	LATCH PIVOT, THRUSH SS FRAME	1					
	22	6004-01-01-01-26	3/8-24 X 1-3/4" SS HEX BOLT	2					
	23	6004-04-01-01-30	SILICON RUBBER SEAL THRUSH	1					
	24	6004-05-01-01-31	710 HOPPER LID	1					
	25	6004-05-01-01-32	710 COVER PLATE	1					
	26	6004-05-01-01-33	710 LIP PLATE	1					
	27	6004-01-02-04-05	#6 SS WASHER	26					
	28	6004-01-02-04-06	6-32 LOCK NUT SS	13					
	29	6004-01-02-04-07	6-32 X 1/2 TRUSS HEAD SS	13					
B	30	NAS1149C0663R	3/8 .063 WASHER SS	17					
	31	MS21044C6	3/8-24 SS LOCKNUT	2					
	32	AN960C516L	5/16 SS WASHER .032"	2					
	33	AN365C524	5/16-24 SS NYLON LOCK NUT	1					
	34	MS35308-339	5/16-24 X 1-3/4 SS HEX SCREW	1					
	35	MS21044C3	10-32 SS LOCKNUT	30					
	36	NAS1149C0316R	#10 SS WASHER .016"	2					
	37	NAS1149C0336R	#10 SS WASHER .063"	52					
	38	AN3C12A	3/16 SS BOLT	4					
	39	AN3C5A	3/16 -5 SS	16					
	40	AN3C10A	3/16 -10 STAINLESS BOLT	6					
	41	AN960C416	1/4 SS WASHER .063"	8					
	42	AN4C12A	1/4-28 SS BOLT	4					
A	43	AN365C428	1/4-28 SS NYLON LOCK NUT	4					



- NOTES:
- ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 - PIVOT POINT BOLTS DO NOT PINCH JOINT
 - SEE PART DRAWING FOR MATERIAL DATA
 - SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12
 - (*) IN A PART BALLON INDICATES PARTS BEING BOLTED TOGHER IN STACKUP

REABE DESIGN LLC

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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
PER ASME Y14.5
TOLERANCES:
FRACTIONAL ± 1/16
ANGULARS: ± 1/2°
TWO PLACE DECIMAL ±.015
THREE PLACE DECIMAL ±.005

MATERIAL

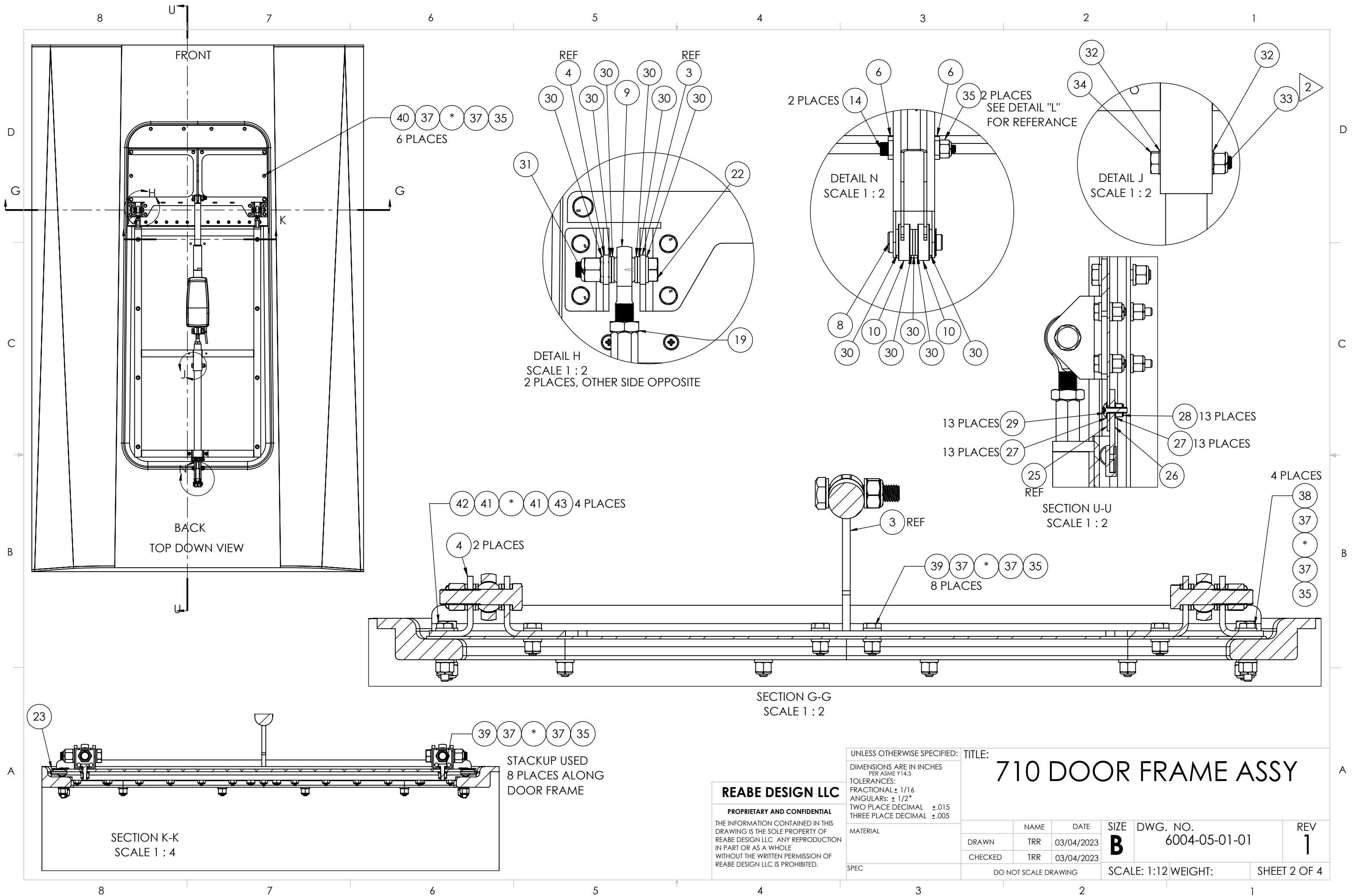
SPEC

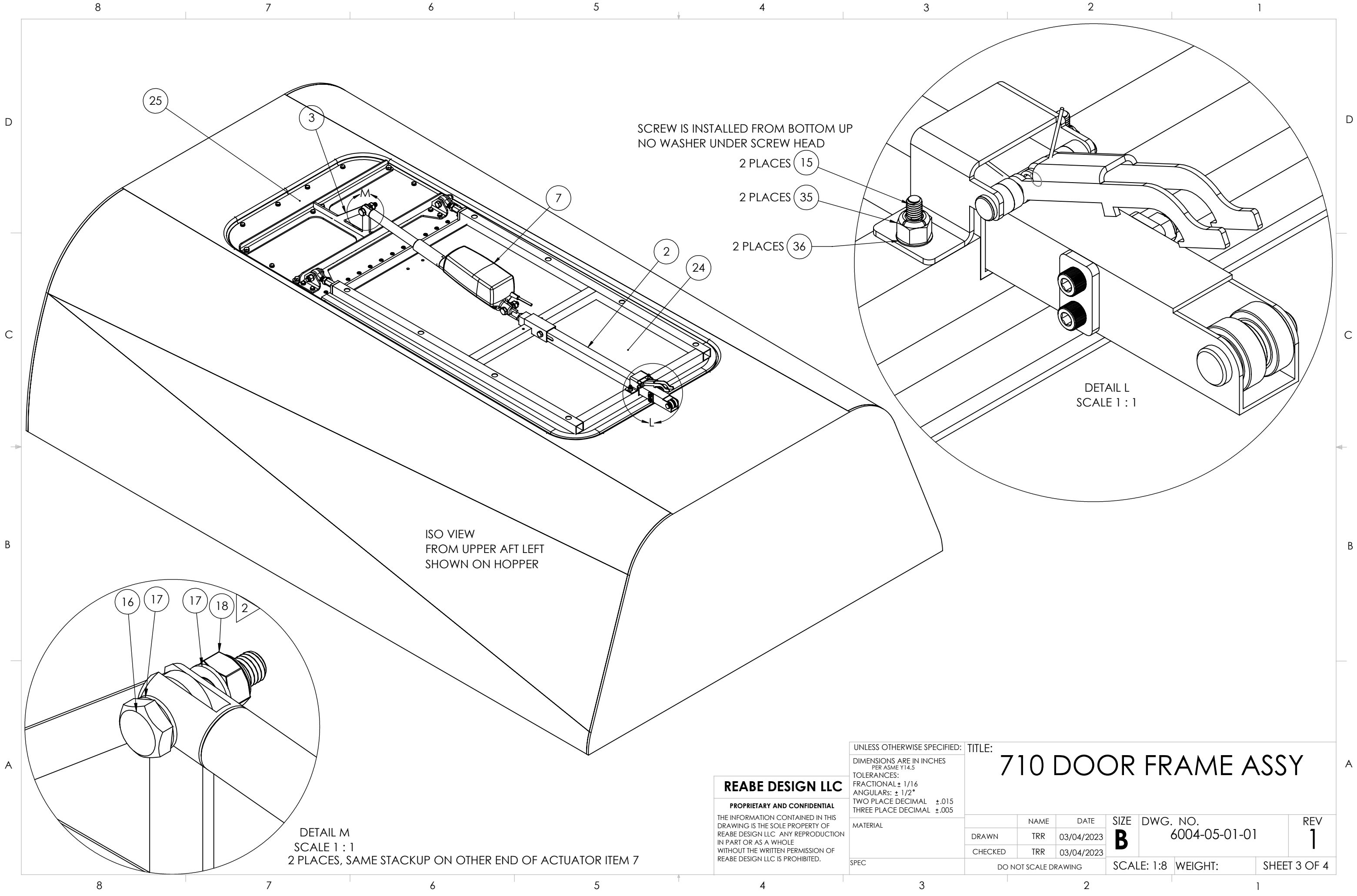
TITLE:

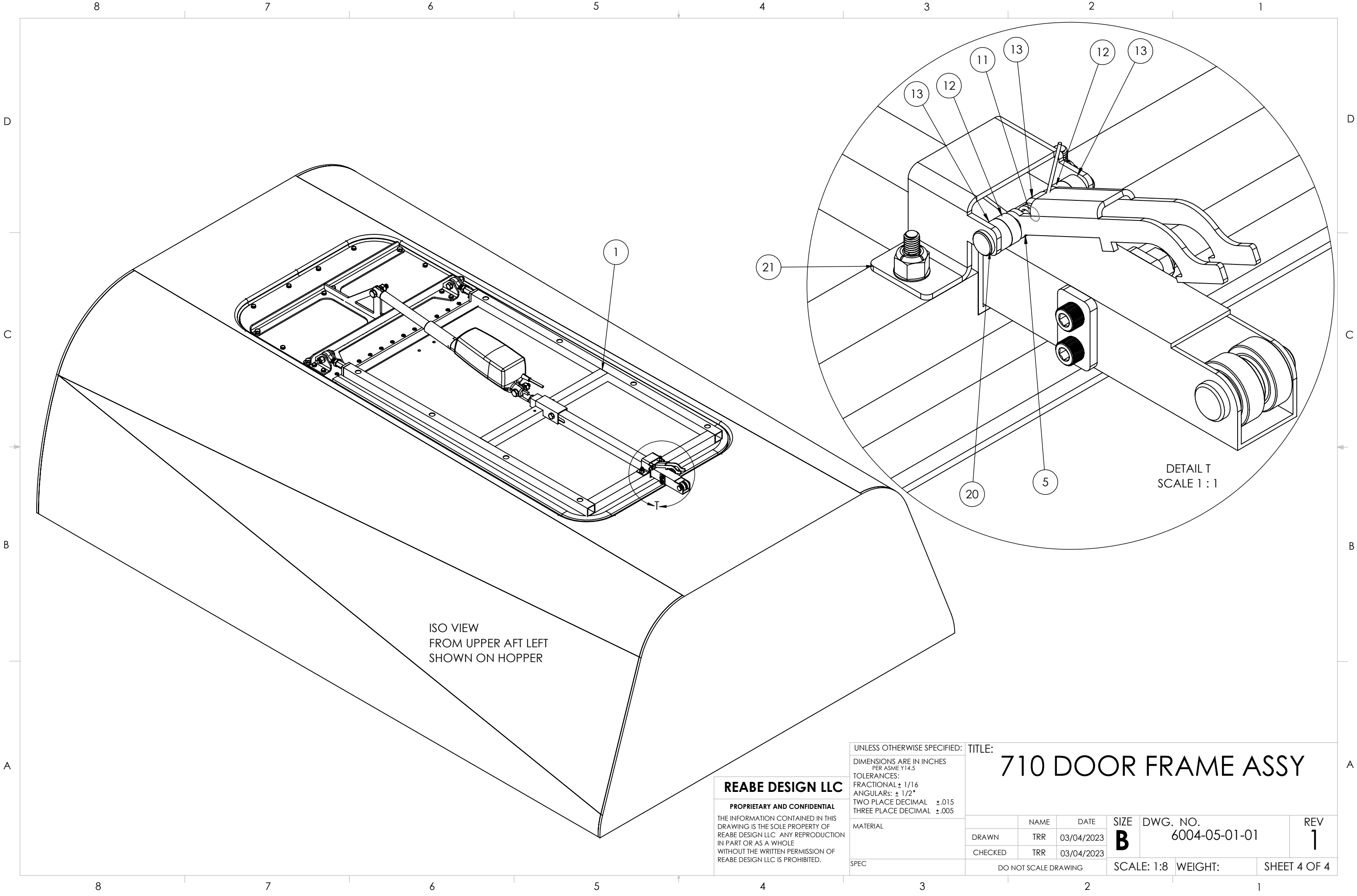
710 DOOR FRAME ASSY

	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN	TRR	03/04/2023	B	6004-05-01-01	1
CHECKED	TRR	03/04/2023			

DO NOT SCALE DRAWING SCALE: 1:12 WEIGHT: SHEET 1 OF 4

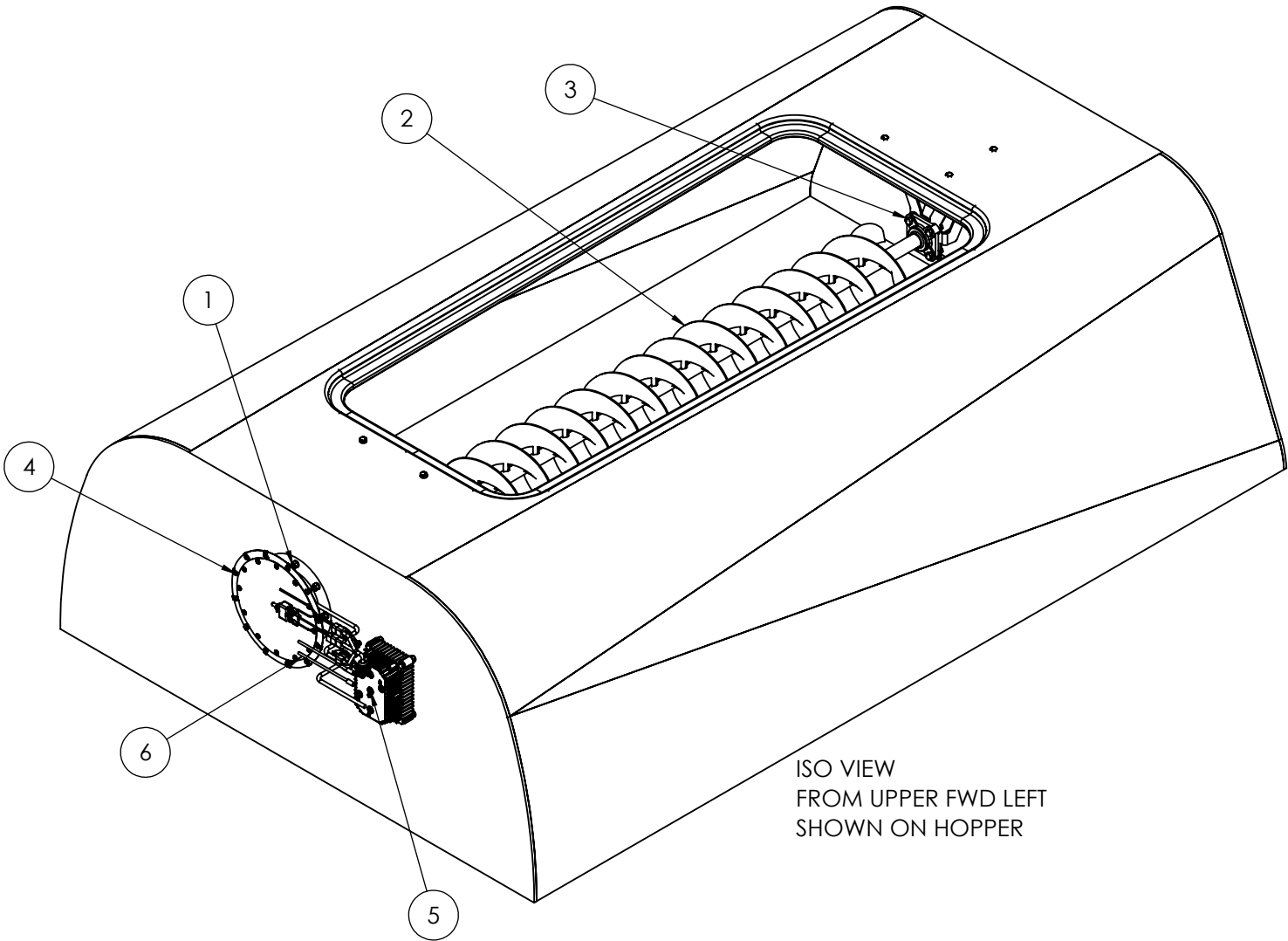






ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6004-01-02-01	AUGER MOTOR MOUNT ASSEMBLY	1
2	6004-01-02-02	AT-802 AUGER SHAFT ASSEMBLY	1
3	6004-04-02-03	AUGGER SUPPORT ASSY THRUSH	1
4	6004-01-02-04	FORWARD WALL KIT	1
5	6004-01-02-05	AUGER MOTOR AND CONTROLLER	1
6	6004-01-02-06	AUGER WIRE KIT	1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE	3/4/2023	TRR



- NOTES:
- 1. ALL HARDWARE TORQUED PER FAA AC 43.13-1B, UNLESS OTHERWISE SPECIFIED
 - 2. SEE PART DRAWING FOR MATERIAL DATA
 - 3. SEE DOCUMENT "6004 WEIGHT" FOR WEIGHT AND BALANCE DATA
 - 4. APPLY PART NUMBER PER RD PS-202 CLASS 2, 3, 6, 7, 9, OR 12

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UNLESS OTHERWISE SPECIFIED:		TITLE:				
DIMENSIONS ARE IN INCHES PER ASME Y14.5		HOPPER PACKER AUGER 710				
TOLERANCES:						
FRACTIONAL ± 1/16						
ANGULARs: ± 1/2°						
TWO PLACE DECIMAL ±.015						
THREE PLACE DECIMAL ±.005						
MATERIAL		NAME	DATE	SIZE	DWG. NO.	REV
	DRAWN	TRR	03/04/2023	B	6004-05-02	1
	CHECKED	TRR	03/04/2023			
SPEC	DO NOT SCALE DRAWING			SCALE: 1:12	WEIGHT:	SHEET 1 OF 1

DWG. NO. 6004-05-02

1

TITLE WEIGHT & BALANCE ANALYSIS				Document Number 6004-WEIGHT	REVISION LEVEL Rev 2
ORIGINATOR TRR			ISSUE DATE 07 MARCH 2023	APPROVED BY TRR	
REVISION HISTORY	REVISION DATE	REVISED BY	APPROVED BY	DESCRIPTION OF REVISION	
1	3/7/23	TRR	TRR	DOCUMENT CREATED	
2	4/4/24	TRR	TRR	ADDED MOTOR CONTROLLER BOX 0.6 LBS	

WEIGHT & BALANCE ANALYSIS

Weight and balance computation is required after installation. Follow the guidelines as established in AC 43.13-1B, Chapter 10, Section 2. Make appropriate entries in the equipment list indicating items added, removed, or relocated along with the date accomplished. Include your name and certificate number in the aircraft records. The table below identifies the weight of the items included in this system.

		Hopper Packer
Items Added		Weight Lbs.
Hopper Door Assembly		
AT-802	P# 6004-01-01	24.4
AT-502 or 602	P# 6004-02-01	20.7
AT-400	P# 6004-03-01	20.2
510 Thrush	P# 6004-04-01	32.2
710 Thrush	P# 6004-05-01	38.2
Auger & Motor Assembly -SI or -TR		
AT-802	P# 6004-01-02	64.7
AT-502 or 602	P# 6004-02-02	56.2
AT-400	P# 6004-03-02	55.2
510 Thrush	P# 6004-04-02	60.4
710 Thrush	P# 6004-05-02	60.4
Auger Sub Assembly (Subtract if removed)		
AT-802	P# 6004-01-02-02	21.5
AT-502 or 602	P# 6004-02-02-02	17.3
AT-400	P# 6004-03-02-02	16.2
510 Thrush	P# 6004-01-02-02	21.5
710 Thrush	P# 6004-01-02-02	21.5
Auger Motor Plug (Add if installed)		
4" Cam Plug	P# 6004-01-02-01-07	.5
System Total (W/Auger Installed)		(approximate)
AT-802	P# 6004-01	89.1
AT-502 or 602	P# 6004-02	76.9
AT-400	P# 6004-03	75.4
510 Thrush	P# 6004-04	92.6
710 Thrush	P# 6004-05	98.6

Items Removed	Weight Lbs.
Door latch hardware, Clamps, & Lid for Thrush	
Cut out Baffle	
Hopper Lid (Thrush Models only)	
System Total	(approximate)
Net Weight Change	

ELECTRICAL LOAD ANALYSIS				Document Number 6004-ELECTRICAL	REVISION LEVEL Rev 1
ORIGINATOR TRR		ISSUE DATE 07 MARCH 2023		APPROVED BY TRR	
REVISION HISTORY 1	REVISION DATE 3/7/23	REVISED BY TRR	APPROVED BY TRR	DESCRIPTION OF REVISION DOCUMENT CREATED	

ELECTRICAL LOAD ANALYSIS

An electrical load analysis should be completed on each aircraft prior to installation in accordance with AC 43.13-1B, Chapter 11. Reference following values for computation. The Hopper packer is only used on the Ground and is powered off at all times during flight.

24VDC Hopper Packer

Average Continuous Load 0 Amp
Average Momentary Load 5 Amps
Maximum Momentary Load 30 Amps

TYPICAL AIRCRAFT AS MANUFACTURED:

250 Amp Starter/Generator
150 Amp Main Buss on AT-402, 502, 504,602
120 Amp Main Buss on AT-802, 510 and 710 Thrush
100 Amp Air Conditioner Buss on 510 and 710 Thrush

IN-FLIGHT POWER CONSUMPTION:

9.0 Amp Generator Control Unit (field current)	13.4 Amp Flaps
1.1 Amp Instruments	4.0 Amp Smoker
18.0 Amp Landing lights	18.3 Amp Rinse Pump
7.0 Amp Nav/Strobe lights	6.5 Amp Windshield Washer/Wiper
2.0 Amp Instrument lights	
3.5 Amp Spray pump brake	
22.0 Amp Air Conditioning Blowers	
.0 Amp Hopper Packer	.0 Amp Hopper Packer
62.6 Amp Continuous	42.2 Amp Momentary

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS				Document Number 6004-ICA	REVISION LEVEL Rev 1
ORIGINATOR TRR		ISSUE DATE 12 DEC 2023		APPROVED BY TRR	
REVISION HISTORY 1	REVISION DATE 12/12/23	REVISED BY TRR	APPROVED BY TRR	DESCRIPTION OF REVISION DOCUMENT CREATED	

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

FOR

INSTALLATION OF THE REABE HOPPER PACKER

ON

AIR TRACTOR

AT-400, AT-400A, AT-402, AT-402A, AT-402B,

AT-502, AT-502A, AT-502B, AT-504, AT-602, AT-802, AT-802A

AND

THRUSH AIRCRAFT

S2R-G10, S2R-G5, S2R-T34, S2R-T65, S2R-G1, S2R-T15, S2RHG-T65, S2RHG-T34,
S2R-T45, S2R-T660, S2R-T11, S2R-G6, S2R-H80, S2R-510

1) INTRODUCTION

The Reabe Design "Hopper Packer":

- A. Provides toggle switch control open and close the hopper door (lid).
- B. Provides toggle switch control of auger in the hopper to level out the dry load.

Modification of an aircraft obligates the aircraft operator to include the maintenance information provided by this document in the Operator's Maintenance Manual and the Operator's aircraft scheduled maintenance program.

Proprietary Drawings included in the Instructions for Continued Airworthiness may be shared with the maintenance provider for the purpose of maintaining this aircraft.

2) DESCRIPTION

The standard hopper door (lid) on most agricultural aircraft requires a person to climb up on the wing of the plane to open the hopper door to load the dry material. The person up on the wing will also push the pile of material into the corners of the hopper to be able to get a full load on board. The Reabe Hopper Packer is a modification to the hopper door to incorporate an electric actuator and auger to open and close the hopper door and level the load in the hopper.

The Reabe Hopper Packer consists of: a Hopper Door Frame and Actuator, Auger Motor & Controller, Auger, Hopper Packer ON/OFF switch, Hopper Door Open/Closed switch, Hopper Auger Fwd/Rev Switch, cabling, and bracketry.

3) CONTROL

For the Reabe Hopper Packer to operate properly, the hopper door (lid) should be adjusted square and have proper fitting seal. Power is provided through a 7.5 amp "Hopper Packer" breaker and 40 amp "Auger Power" breaker. If master power is off or breakers are off or "Hopper Packer" switch is off the door and auger will not operate.

The Hopper Packer is designed to aid in ground loading procedures and as such should only have the "Hopper Packer" switch ON during Ground loading. The Hopper Packer switch is to always be OFF during any portion of flight.

The Hopper Packer system is turned on by setting the Hopper Packer switch to ON when the aircraft master power is on. When the system is on the hopper door can be opened by setting the Hopper Door switch to the OPEN position, this will cause the actuator to retract, unlatching and opening the door. Also when the Hopper Packer system is on the hopper door can be closed by setting the Hopper Door switch to the Closed position, this will cause the actuator to extend, closing and latching the door. Last when the Hopper Packer system is on the auger can be rotated in either the forward or reverse direction by holding the Hopper Auger switch in the FWD or REV position, the Hopper Auger switch is spring loaded to return to the center (off) position.

The Hopper Packer system is turned off by setting the Hopper Packer switch to OFF. When the system is off neither the Hopper Door or Hopper Auger will not respond to actuation of their switches.

----- WARNING-----

Do not attempt to operate the door or the auger during flight.

Keep personnel away from hopper door during loading. The door and the auger can cause serious injury during operation

----- CAUTION-----

Do not allow any foreign object, which could interfere with the auger to enter the hopper. Such objects must be removed before operating the auger.

Do not attempt to close the hopper door if solids are protruding above the hopper contour.

The auger may only be used for leveling of non-explosive and non-flammable solids. The auger should be removed and plug installed during operations involving spreading of liquids.

See Airplane Flight Manual Supplement, 6004-FMS, for additional information.

4) SERVICING

None

5) MAINTENANCE

----- CAUTION -----

Do not allow body parts (fingers) to enter the hopper door opening or other pinch points, and stay clear of the auger when power is on. We recommend blocking the door open with wood anytime body parts will be entering a pinch point.

Wash external parts, and parts in hopper after dispensing fertilizer.

It is the owner/operator's responsibility to ensure that the maintenance performed on the system does not adversely affect its intended function. External parts, and parts in hopper may be pressure washed except electrical connections

AT ANNUAL INSPECTION:

- A. Re-grease electrical connectors on system with dielectric grease, (Dow Corning DC-4, or similar), inspect for corrosion on system and in auger camlock.
- B. With auger removed, run auger motor in forward and reverse direction, monitor for excessive noise or grinding sound. Contact Reabe Design if detected.
- C. Cycle Door open and closed using actuator, monitor for excessive noise or grinding sound. Contact Reabe Design if detected.
- D. Check that Slide Latch is catching and holding Slide Rod, with door fully open jiggle door to make sure Slide Latch holds Slide Rod. See Drawing 6004-0-2 Sheet 7
- E. Inspect camlock parts for wear or evidence of poor sealing, replace seal and worn parts if evidence is found.
- F. Inspect auger shaft coupling hubs and spider. Spider can be reduced to ½ original width of fingers, if reduced more than that spider should be replaced. Hubs should be solid on the shaft without play in keyway.
- G. Inspect Auger front support bearing in camlock, Radial play exceeding .010 inch is reason for replacement.
- H. Inspect Auger aft support bearing, Radial play exceeding .070 inch is reason for replacement.
- I. Inspect all bolts subject to rotation for wear. If wear causing a reduction of diameter is found, replace bolt.
- J. Inspect rod ends and bushings for wear. Radial play exceeding .010 inch is reason for replacement.
- K. Inspect door seal for wear, tear or cuts and replace, if necessary, per Airframe manual.
- L. Inspect door actuator wire, make sure wire is properly secured, and not damaged or showing signs of wear or chafing. See Drawing 6004-0-5
- M. Inspect placard by Hopper Packer Switches "DO NOT ATTEMPT TO TAXI OR TAKE OFF WITH THE HOPPER PACKER ON" and "DO NOT ATTEMPT TO OPEN HOPPER DOOR DURING FLIGHT"

Inspect labels as follows: system 40-amp breaker "Auger Power", system 7.5-amp breaker "Hopper Packer", "Hopper Packer" switch "Off" and "On", "Hopper Door" switch "Closed" and "Open", "Hopper Auger" switch "Rev" and "FWD".

All labels and placards identified to be installed, are customer supplied and must be in bold white on black 1/8" font indelible material and permanently marked.

- N. Check rigging.

1. Hopper Door adjustment:

- a. Inspect Door seal and adjust rod ends to move door fore & aft, shim using washers by rod ends to move front of door left and right and use rod ends to move aft end of door to obtain a centered level closing position.
- b. Open door fully and check that door opens to between a 90 to 100 deg open position, use adjust slide lock ½-20 adjustment if needed.
- c. Close door to rest on hopper but with slide rod still in retracted position, check for alignment and clearances of roller latch to roller latch assembly. See Drawing 6004-0-2 Sheet 7.
- d. Close door fully and check from proper seal around door.

6) TROUBLESHOOTING

Malfunction: Door not sealing completely
Indication: Leakage from Hopper Door
Action: Inspect Door seal/check rigging

Malfunction: Electrical failure
Indication: Door or Auger not responding to switch actions.
Action: Check breakers, check that Hopper Packer switch is on, check electrical connections, check voltage Auger Controller

If problem persists, conduct Sec. 9) test. Then call Reabe Design LLC @ 321-Air-Tractor

7) REMOVAL REPLACEMENT: (Weight and balance changes to be recorded in Flight Manual using Reabe Design Weight and Balance Analysis Document # 6004-Weight).

1. Motor Controller PN 6004-01-02-05-02 removal
 - a. Pull "Auger Power" and "Hopper Packer" breakers
 - b. Disconnect power cables and unplug controller lines from Motor Controller
 - c. Remove Mounting screws and nuts
2. Motor Controller Replacement (See Drawing 6004-01-02-05 & 6004-0-4)
 - a. Mount Motor Controller using Removed hardware
 - b. Connect power cables and controller lines observing correct polarity and voltage (See drawing 6004-0-1)
 - c. Energize "Auger Power" and "Hopper Packer" breakers
 - d. Test Per Sec. 9) Test
3. Auger Motor PN 6004-01-02-05-01 removal
 - a. Pull "Auger Power" breaker
 - b. Remove FWD Wall Access Panel
 - c. Disconnect Motor power and control lines from Motor Controller
 - d. Remove Auger or Cam Plug to gain access to shaft couplings
 - e. Loosen bolt on 19mm Shaft Coupling and remove coupling form motor shaft
 - f. Remove 4 SHCS holding Auger Motor to Motor Housing
 - g. Pull and Remove motor
4. Auger Motor Replacement (See Drawing 6004-01-02-05 & 6004-01-02-01)

- a. Insert Auger Motor in Motor Housing and secure using removed hardware
 - b. Install 19mm Shaft Coupling on motor shaft and tighten bolt to hold against key
 - c. Install Auger or Cam Plug
 - d. Run from Auger Motor, through Gromit pass through to Motor Controller
 - e. Connect motor power and controller lines observing correct polarity and voltage (See drawing 6004-0-1)
 - f. Install FWD Wall Access Pannel and seal per 6004-II
 - g. Energize "Auger Power" breaker
 - h. Test Per Sec. 9) Test
5. Linear Actuator PN 6004-01-01-01-10 removal
- a. Pull "Hopper Packer" breaker
 - b. Unplug Linear Actuator from Door Wire Harness
 - c. Remove fasteners securing Liner Actuator's cord
 - d. Remove bolts holding both ends of linear actuator to door and door frame
6. Linear Actuator Replacement (See Drawing 6004-0-2 & 6004-0-5)
- a. Install Linear Actuator using Hardware that was removed, Both ends of actuator are Pivot point bolts do not pinch joint.
 - b. Secure Linear Actuator's cord and route back to Door Wire Harness (See Drawing 6004-0-5)
 - c. Plug Linear Actuator into Door Wire Harness
 - d. Tie wrap cables and line such that no interference with moving parts
 - e. Energize "Hopper Packer" Breaker
 - f. Test Per Sec. 9) Test
7. Door Wire Harness PN 6004-01-01-05-01 removal
- a. Pull "Hopper Packer" breaker
 - b. Disconnect Door Wire Harness from the Linear Actuator, Hopper Packer switch, and Ground
 - c. Unmount "Hopper Door" switch
 - d. Unstring Door Wire Harness
8. Door Wire Harness Replacement (See Drawing 6004-0-5 & 6004-II)
- a. Route Door Wire Harness and connect to: Linear Actuator, Hopper Packer switch, and Ground
 - b. Route and remount "Hopper Door" switch
 - c. Tie wrap cables and line such that no interference with moving parts
 - d. Energize "Hopper Packer" breaker
 - e. Test per Sec. 9) Test
9. Auger Wire Harness & Auger Power lines PN 6004-01-02-06-01 & 6004-01-02-06-02
- a. Pull "Hopper Packer" and "Auger Power" breaker
 - b. Disconnect Auger Power lines from Auger Power breaker, Motor Controller, and Ground
 - c. Disconnect Auger wire harness from Hopper Packer Switch, and Motor Controller
 - d. Unmount "Hopper Auger" switch

- e. Unstring Auger Wire Harness & Auger Power lines
- 10. Auger Wire Harness & Auger Power lines Replacement (See Drawing 6004-01-02-05 & 6004-0-1 & 6004-0-4 & 6004-0-5 & 6004-II)
 - a. Route Auger Wire Harness and connect to: Hopper Packer Switch and Motor Controller
 - b. Route Auger Power Lines and connect to: Auger Power breaker, Motor Controller, and Ground
 - c. Route and remount "Hopper Auger" switch
 - d. Tie wrap cables and line such that no interference with moving parts
 - e. Energize "Hopper Packer" and "Auger Power" breaker
 - f. Test per Sec. 9) Test
- 11. 4" Male Cam Plug PN 6004-01-02-01-07
 - a. Open Hopper Door
 - b. Pull "Hopper Packer" breaker
 - c. Open Cam Lock arms
 - d. Pull Plug out of Motor Housing
- 12. 4" Male Cam Plug Replacement (See Drawing 6004-0-3)
 - a. Insert Plug into Motor Housing
 - b. Close Cam Lock Arms
 - c. Secure Cam Lock Arms
 - d. Energize "Hopper Packer" breaker
 - e. Test per Sec. 9) Test
- 13. Auger Shaft Assembly same for all models
 - a. Open Hopper Door
 - b. Pull "Hopper Packer" breaker
 - c. Open Cam Lock arms
 - d. Slide Auger Shaft Assembly aft to clear cam lock
 - e. Slide Auger Shaft Assembly forward past Motor Housing to free Auger Shaft Assembly from Auger Support Assembly.
 - f. Pull aft end of Auger Shaft Assembly out of hopper out followed by rest of Auger Shaft Assembly
- 14. Auger Shaft Assembly Replacement same for all models (See Drawing 6004-0-3)
 - a. Insert front end of Auger Shaft Assembly in to hopper forward past Motor Housing
 - b. Slide aft end of Auger Shaft Assembly into Auger Support Assembly sliding Auger Shaft Assembly Aft
 - c. Slide Auger Shaft Assembly forward into Motor Housing, lining up Shaft Couplings
 - d. Close Cam Lock Arms
 - e. Secure Cam Lock Arms
 - f. Energize "Hopper Packer" breaker
 - g. Test per Sec. 9) Test

- 8) DIAGRAM (see Hopper Packer Installation Drawings 6004 & 6004-0-1 & 6004-0-2 & 6004-0-3 & 6004-0-4 & 6004-0-5)

9) TEST

1. Introduction: The purpose of this test is to provide a method for demonstrating the proper installation and operation of the Reabe Hopper Packer

2. Door Adjustment Verification

- a. Verify when door closes the Slide Latch hits the Roller Latch Assembly releasing the Slide Rod, Allowing the Slide Rod to extend aft latching the door closed.
- b. Verify when door opens the Slide Rod retracts forward and is caught by Slide Latch once clear of the Roller Latch Assembly, holding the Slide Rod from extending until the Slide Latch is released by hitting the Roller Latch Assembly as the door closes.

3. Functional Test

With Master Power Off:

- a. Ensure the AUGER POWER and HOPPER PACKER circuit breakers are pushed in and switch labeled HOPPER PACKER is off, and the switches labeled HOPPER DOOR and HOPPER AUGER are both in their center position.
- b. Turn on aircraft master power, then switch HOPPER PACKER switch to on. Verify that the breakers did not trip and nothing moved.
- c. Move HOPPER DOOR switch to CLOSE position. The Hopper Door will move to the fully closed/latched position, if the door was already closed the actuator will just twitch bumping its stop.
- d. Move HOPPER DOOR switch to Center position.
- e. Move HOPPER DOOR switch to OPEN position. The Hopper Door will move to the fully open position and stop.
- f. Move HOPPER DOOR switch to Center position.
- g. Hold the HOPPER AUGER switch in the FWD position. The auger will rotate in a direction to move material forward in the hopper. Release the HOPPER AUGER switch, the switch will return to its center position and the auger will stop rotating.
- h. Hold the HOPPER AUGER switch in the REV position. The auger will rotate in a direction to move material aft in the hopper. Release the HOPPER AUGER switch, the switch will return to its center position and the auger will stop rotating.
- i. Move HOPPER DOOR switch to CLOSE position, then quickly back to the center position. The Hopper Door will move to close when the switch was in the CLOSED position but will stop when moved to the Center position.
- j. Move HOPPER DOOR switch to CLOSE position. The Hopper Door will move to closed/latched position and will automatically stop once latched.
- k. Move HOPPER PACKER switch to the OFF position.
- l. Move HOPPER DOOR switch to both OPEN and CLOSED positions. Verify there is no movement.
- m. Move the HOPPER AUGER switch to both the FWD and REV positions. Verify there is no movement.
- n. Verify breakers did not trip during testing.

- o. Verify breakers did not trip during testing.

10) PROTECTIVE TREATMENT: Electrical connections on the system are treated with dielectric grease, (Dow Corning DC-4, or similar).

11) DATA:

See Reabe Design Document “6004-DL Drawing List” for full list of required documents for the ICA.

12) SPECIAL TOOLS: None

13) RESERVED

14) TIME BETWEEN OVERHAULS (TBO): None

15) REVISIONS: To be submitted by STC holder, for FAA approval.

For latest revision Contact:

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Email: Troy@ReabeAir.com

Or Visit: www.ReabeAir.com/Support

16) AIRWORTHINESS LIMITATIONS:

Log of Revisions: Section 16 Airworthiness Limitations			
Revision	Description	FAA Approved By	FAA Approval Date
1	Initial Release		

There are no new or additional Airworthiness Limitations associated with this equipment and/or installation.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sections 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

FAA APPROVED

Signature

Date

For: Paul Nguyen

Manager – Central Certification Branch (AIR-760)

Compliance and Airworthiness Division

Federal Aviation Administration

FAA APPROVED
AIRPLANE FLIGHT MANUAL SUPPLEMENT

INSTALLATION OF THE REABE HOPPER PACKER

ON

AIR TRACTOR

AT-400, AT-400A, AT-402, AT-402A, AT-402B, AT-502,
AT-502A, AT-502B, AT-504, AT-602, AT-802, AT-802A

AND

THRUSH AIRCRAFT

S2R-G10, S2R-G5, S2R-T34, S2R-T65, S2R-G1, S2R-T15, S2RHG-T65,
S2RHG-T34, S2R-T45, S2R-T660, S2R-T11, S2R-G6, S2R-H80, S2R-510

Aircraft Model: _____

Serial Number: _____

Registration Number: _____

This supplement must be included in the FAA approved Airplane Flight Manual when the aircraft is modified by the installation of the Reabe Hopper Packer in accordance with STC _____.

Information contained herein supplements or supersedes the basic Airplane Flight Manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this supplement, consult the approved Airplane Flight Manual.

APPROVED BY: _____ Michael Ward, Flight Test Engineer, AIR-712 *for*

Manager, Southwest Flight Test Section, AIR-713
Federal Aviation Administration
Ft. Worth, TX

DATE: June 29, 2023

REABE DESIGN LLC
2552 Coreland Ct.
DePere, WI 54115

Airplane Flight Manual Supplement
Document: 6004-FMS, REV 1
Air Tractor and Thrush Aircraft Models

LOG OF REVISIONS

Revision	Revised Pages	Description of Changes	FAA Approval
1	1 - 6	Initial Release	Michael Ward, FTE, AIR-712 June 29, 2023

SECTION 1: LIMITATIONS

1. DO NOT operate Hopper Packer system during any stages of flight.
2. No other changes to operating limitations are affected by the installation of Hopper Packer.

PLACARDS

The following information is to be displayed in the form of two placards as shown in this FAA Approved Flight Manual Supplement.

Both placards will be installed in the cockpit adjacent to the installed switches for Hopper Packer operation:

**DO NOT ATTEMPT TO TAXI OR TAKE
OFF WITH THE HOPPER PACKER ON**

**DO NOT ATTEMPT TO OPEN
HOPPER DOOR DURING FLIGHT**

SECTION 2: NORMAL PROCEDURES

2.1 PREFLIGHT CHECKS AND PROCEDURES

While conducting the preflight checks for the aircraft as described in the airplane flight manual, simultaneously check the condition of the Auger and Door.

- a) Inspect rod ends and pivot points for wear.
- b) Open Manual Latches if closed.
- c) Turn Master switch “ON”
- d) Turn “Hopper Packer” switch “ON”
- e) Set “Hopper Door” Open/Closed” switch to “Open”, Verify hopper door opens.
- f) Verify Cam Lock levers are fully closed on either auger or plug if auger is removed.

- g) If auger is installed, Cycle “Hopper Auger” Switch to both FWD and REV positions, check for proper rotation.
- h) Set “Hopper Door” Open/Closed switch to “Closed”, Verify hopper door Closes and latches.
- i) Turn “Hopper Packer” switch “OFF”
- j) Turn Master switch “OFF”
- k) Set Manual latches to desired position, latched for Liquid, secured open for Dry.

2.2 HOPPER PACKER OPERATION

This is used for normal dry product loading operation.

Ground

- a) Set Hopper Packer switch to ON
- b) Set Hopper Door switch to Open
- c) Load dry product through open hopper door
- d) Use Hopper Auger switch to level load moving switch to both FWD and REV as necessary
- e) Once loaded, and load is leveled to not extend above the contour of the hopper; Set Hopper Door switch to Closed
- f) Visually verify Hopper door closed and Latch has slid into position
- g) Set Hopper Packer switch to OFF

Flight The unit is designed for ground use only.

- a) Verify the Hopper Packer switch is in OFF position

2.3 WARNINGS

- a) Do not attempt to operate the door or the auger during flight.
- b) Keep personnel away from hopper door during loading. The door and the auger can cause serious injury during operation

2.4 CAUTIONS

- a) Do not allow any foreign object, which could interfere with the auger to enter the hopper. Such objects must be removed before operating the auger.
- b) Do not attempt to close the hopper door if solids are protruding above the hopper contour.
- c) The auger may only be used for leveling of non-explosive and non-flammable solids. The auger should be removed and plug installed during operations involving spreading of liquids.

SECTION 3: EMERGENCY PROCEDURES

No Change

SECTION 4: PERFORMANCE

No Change

SECTION 5: WEIGHT & BALANCE

See weight & balance documents for this aircraft.

SECTION 6: DESCRIPTION OF AIRPLANE AND ITS SYSTEMS (NOT FAA APPROVED)

The manual top hopper door, which is installed on most agricultural aircraft, requires physical exertion to operate. The Reabe Hopper Packer is a modification of the top hopper door to incorporate an electric door opener and auger to level the load.

Manual Door operation is still available, using the Manual latches to hold the door closed in the event of system failure.

The Reabe Hopper Packer consists of:

- a) “HOPPER PACKER” ON/OFF switch mounted in the Cockpit turns the Hopper Packer system On and Off.
- b) “HOPPER DOOR” OPEN/CLOSED switch mounted by the HOPPER PACKER switch provides electric open, close, and stop commands to the Door Actuator.

- c) “HOPPER AUGER” FWD/REV switch mounted by the HOPPER PACKER switch provided electric Forward and Reverse Commands to the Auger Motor & Controller.
- d) Auger Motor & Controller mounted on the front of the Hopper receives commands from the HOPPER AUGER switch and spins the auger to help level the load in the Hopper.
- e) Hopper Door Frame & Actuator mounted on the top of the Hopper and Hopper Door. Receives commands from the HOPPER DOOR switch and opens and closes the Hopper Door.
- f) Auger mounted in the top of the Hopper is spun by the Auger Motor to help level the dry material being loaded in the Hopper.

For the Reabe Hopper Packer to operate, Power is provided through a 7.5 amp “Hopper Packer” and 40 amp “Auger Power” breaker. If master power is off, or Breakers are off, or “Hopper Packer” switch is off the door and auger will not operate.

The Hopper Packer is designed to aid in ground loading procedures and as such should only have the “Hopper Packer” switch ON during Ground loading. The Hopper Packer switch is to always be OFF during any portion of flight.

SECTION 7: HANDLING, SERVICING AND MAINTENANCE (NOT FAA APPROVED)

No Change

GROUND TEST PLAN

PASS _____ FAIL _____

- c. Hold the HOPPER AUGER switch in the FWD position. The auger will rotate in a direction to move material forward in the hopper. Release the HOPPER AUGER switch, the switch will return to its center position and the auger will stop rotating.

PASS _____ FAIL _____

- d. Hold the HOPPER AUGER switch in the REV position. The auger will rotate in a direction to move material aft in the hopper. Release the HOPPER AUGER switch, the switch will return to its center position and the auger will stop rotating.

PASS _____ FAIL _____

- e. Move HOPPER DOOR switch to CLOSE position, then quickly back to the center position. The Hopper Door will move to close when the switch was in the CLOSED position but will stop when moved to the Center position.

PASS _____ FAIL _____

- f. Move HOPPER DOOR switch to CLOSE position. The Hopper Door will move to closed/latched position and will automatically stop once latched.

PASS _____ FAIL _____

- g. Move HOPPER PACKER switch to the OFF position.

- h. Move HOPPER DOOR switch to both OPEN and CLOSED positions. Verify there is no movement.

PASS _____ FAIL _____

- i. Move the HOPPER AUGER switch to both the FWD and REV positions. Verify there is no movement.

PASS _____ FAIL _____

- j. Verify breakers did not trip during testing.

PASS _____ FAIL _____

- k. Turn Aircraft Master power OFF.

- l. * With power on the aircraft and all systems operating normally: operate each aircraft system and equipment through a representative range of its functional envelope while qualitatively assessing EMI/RFI. Note any effects below.

- VHF Comm _____
- VOR/ILS _____
- DME _____
- GPS _____
- _____
- _____

PASS _____ FAIL _____

Ground Test Date: _____

Performed By: _____

	SERVICE INFO LETTER		REABE DESIGN LLC	NUMBER: H-Pack 01
			2552 Coreland Ct, DePere, WI 54115	DATE: 10/20/2024
	BY: TRR		TITLE: Hopper Packer Hall Sensors	REV: 1
	CHKD: TRR		SUBTITLE: Motor Grounding and Auger Controller Mounting	PAGE: 1 OF 2

Subject

Motor Housing Grounding (Hall sensor protection) & Auger Controller Mounting.

Issue

It was found that the Motor Housing does not have its own path to ground, so static from the dry material would collect and damage the hall sensors in the motor and possibly the motor controller.

Summary

There was no direct grounding path for the Motor/Motor Housing. The Static would discharge inside the motor to the hall sensors, Damaging the Hall Sensors and or the Motor Controller.

This would require a change of the Auger Motor and or the Motor Controller.

The Motor Controller was bolted to the firewall with normal bolts and was difficult to change, Blind Fasteners would help with this.

Action to take:

To alleviate and prevent this problem, add a grounding wire from the Motor Housing to a suitable airframe ground.

See Figure 1

For mounting of the Motor Controller, the use of a ¼-28 steel Blind Rivet Nut or Nut plate is recommended.

Example RivNut, NAS1329S480 or similar

Example Nut Plate MS2159-4 with steel rivets



SERVICE INFO
LETTER

BY: TRR

CHKD: TRR

REABE DESIGN LLC

2552 Coreland Ct, DePere, WI 54115

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SUBTITLE: Motor Grounding and Auger
Controller Mounting

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PAGE: 2 OF 2

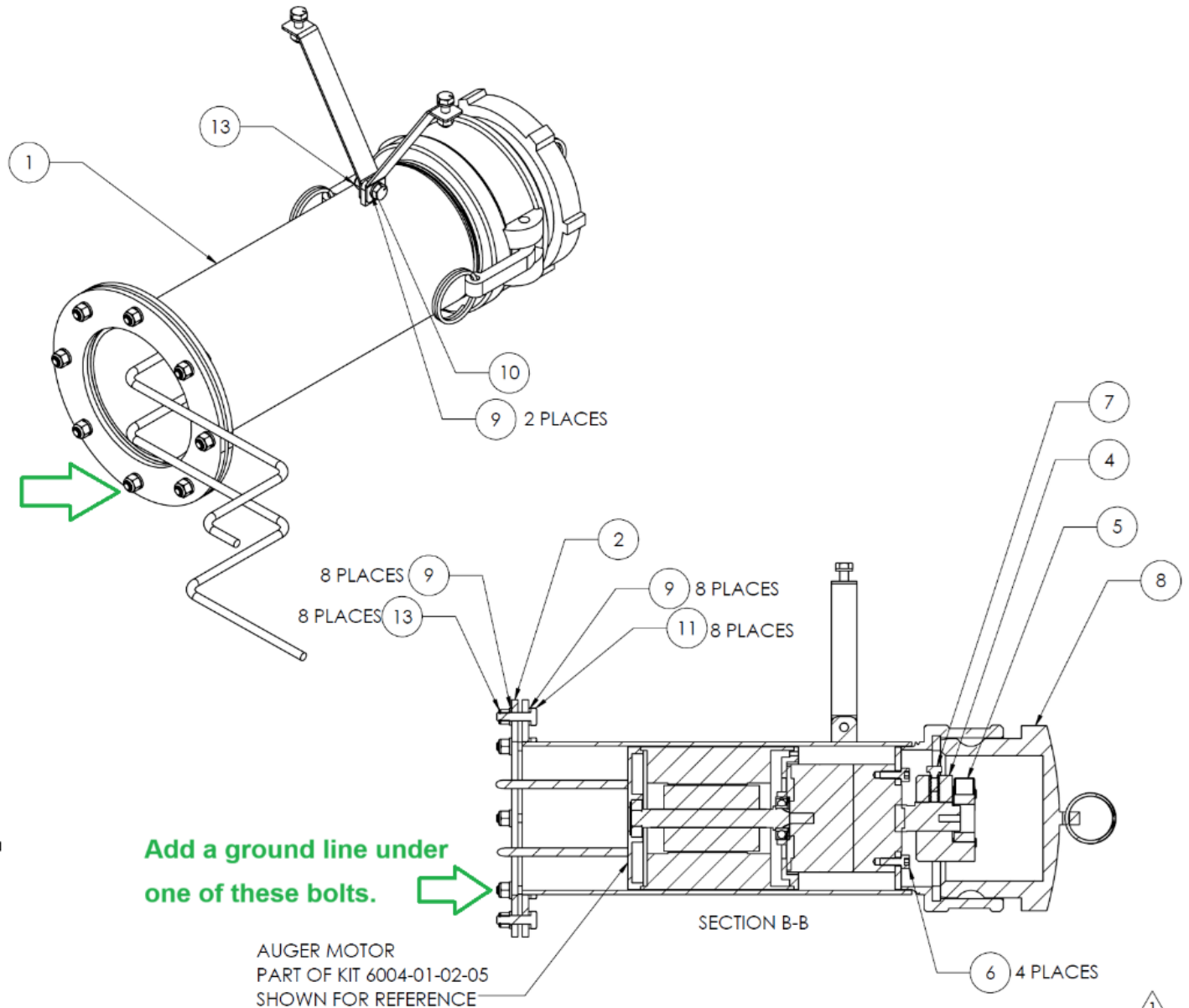


Figure 1