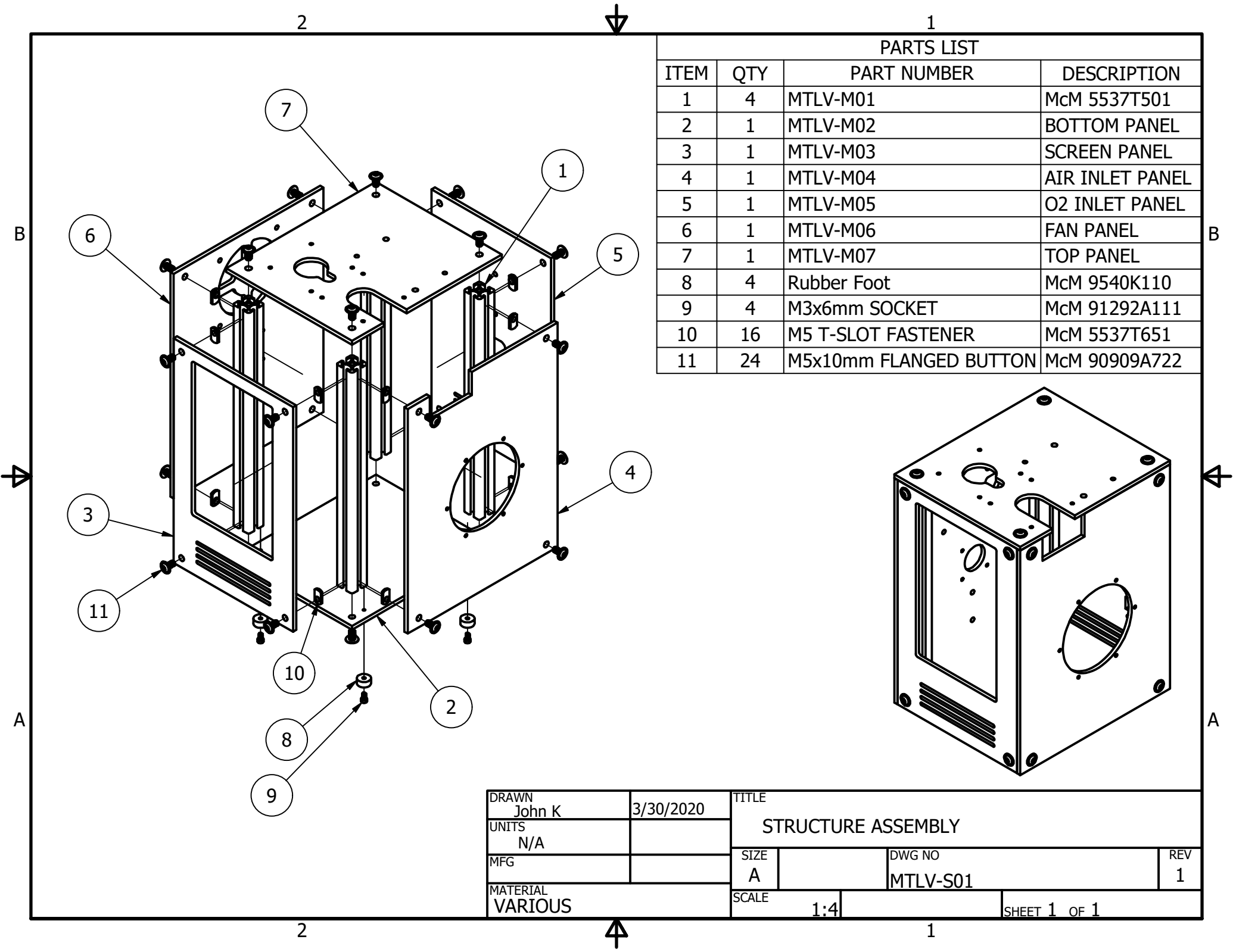
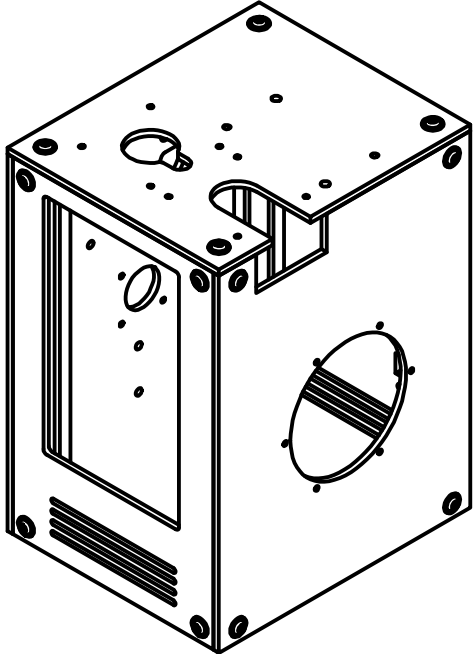


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MTLV-S01	STRUCTURE ASSEMBLY
2	1	MTLV-S02	TURBINE ASSEMBLY
3	1	MTLV-S03	STEPPER ASSEMBLY
4	1	MTLV-S04	AIR OUTLET ASSEMBLY
5	1	MTLV-S05	AIR EXHAUST ASSEMBLY
6	1	MTLV-P15	ESC MOUNT
7	1	RASPBERRY PI LCD	TOUCH SCREEN
8	1	ARDUINO	MEGA2650
9	1	BATTERY	3AH SLA
10	1	MOTOR CONTROLLER	SKYWALKER 20A ESC
11	1	PRESSURE SENSOR	DPTA-20-01B
12	1	CHASSIS FAN	80x80x25mm
13	2	M3x10mm SOCKET	McM 91292A113
14	2	M3x12mm SOCKET	McM 91292A114
15	2	M3 LOCKNUT	McM 90576A102
16	4	M4x12mm SOCKET	McM 91290A148
17	4	M4 LOCKNUT	McM 93625A150

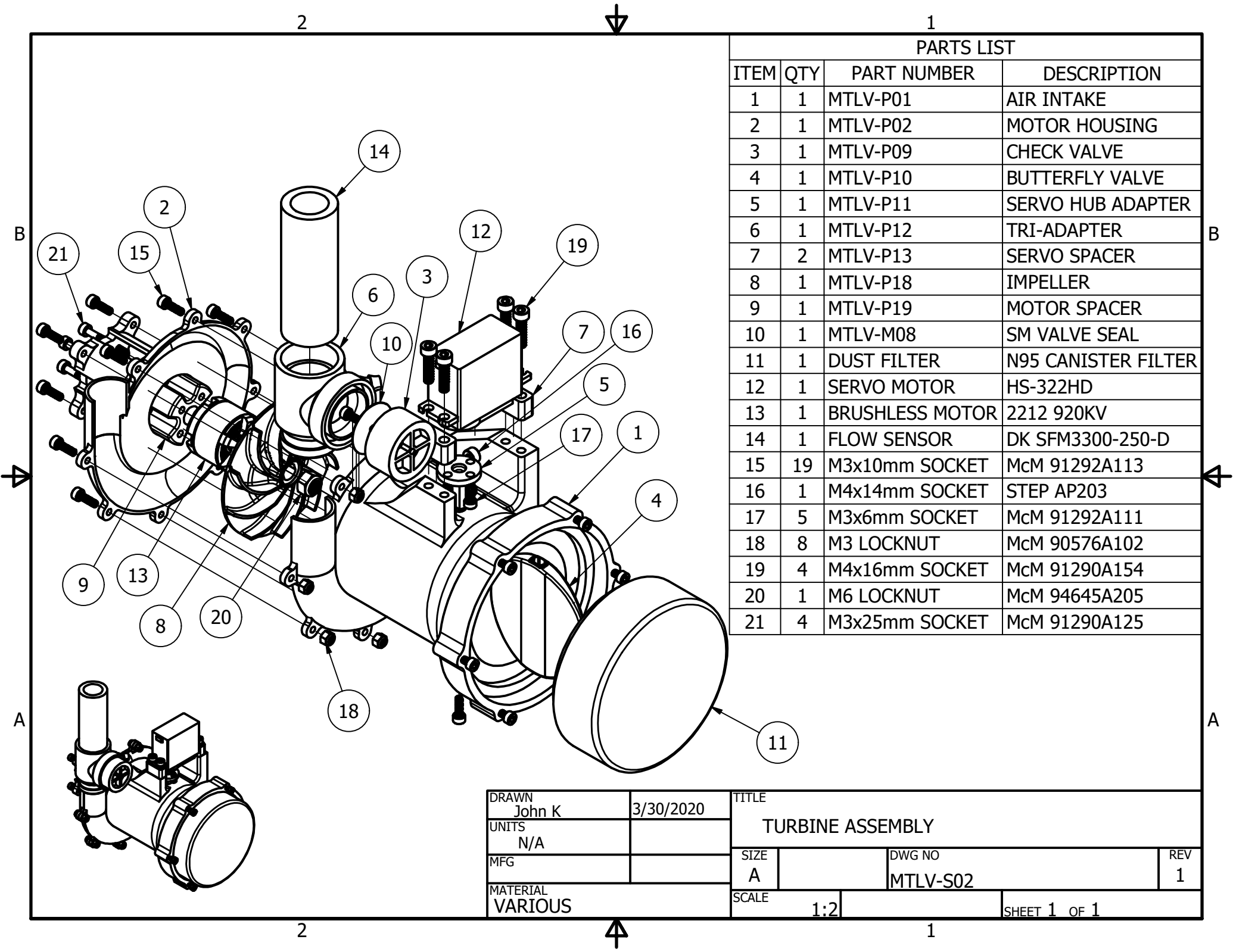
DRAWN John K	3/30/2020	TITLE MTL VENTILATOR		
UNITS N/A				
MFG		SIZE A	DWG NO MTLV	REV 1
MATERIAL VARIOUS		SCALE 1:4	SHEET 1 OF 1	



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	MTLV-M01	McM 5537T501
2	1	MTLV-M02	BOTTOM PANEL
3	1	MTLV-M03	SCREEN PANEL
4	1	MTLV-M04	AIR INLET PANEL
5	1	MTLV-M05	O2 INLET PANEL
6	1	MTLV-M06	FAN PANEL
7	1	MTLV-M07	TOP PANEL
8	4	Rubber Foot	McM 9540K110
9	4	M3x6mm SOCKET	McM 91292A111
10	16	M5 T-SLOT FASTENER	McM 5537T651
11	24	M5x10mm FLANGED BUTTON	McM 90909A722

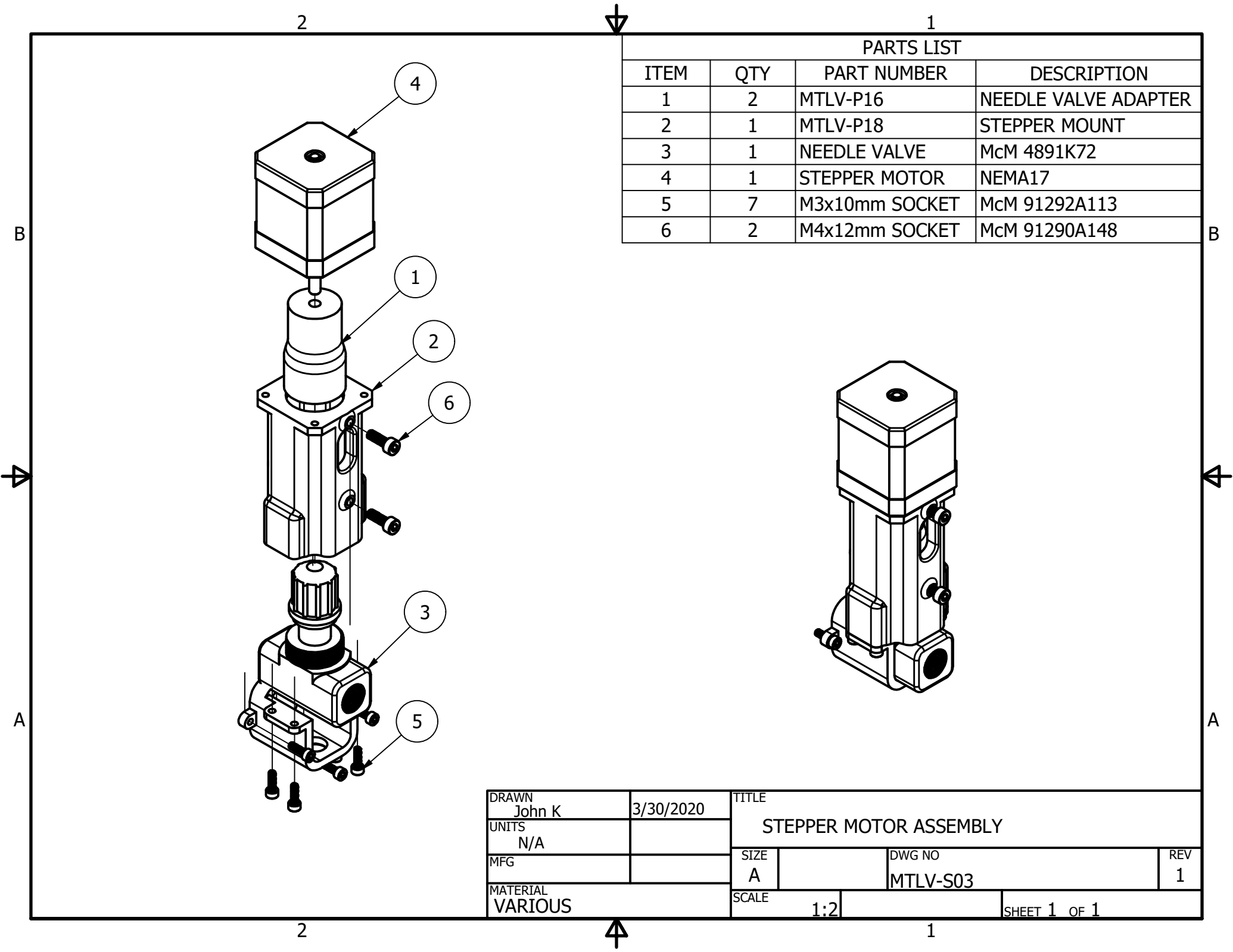


DRAWN John K	3/30/2020	TITLE STRUCTURE ASSEMBLY		
UNITS N/A				
MFG		SIZE A	DWG NO MTLV-S01	REV 1
MATERIAL VARIOUS		SCALE 1:4	SHEET 1 OF 1	

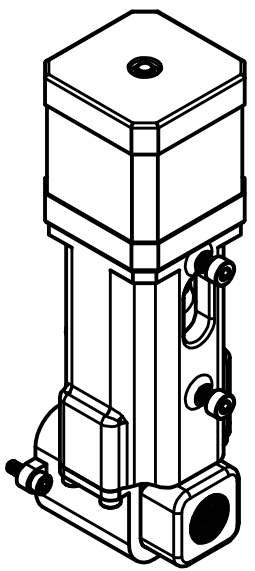


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MTLV-P01	AIR INTAKE
2	1	MTLV-P02	MOTOR HOUSING
3	1	MTLV-P09	CHECK VALVE
4	1	MTLV-P10	BUTTERFLY VALVE
5	1	MTLV-P11	SERVO HUB ADAPTER
6	1	MTLV-P12	TRI-ADAPTER
7	2	MTLV-P13	SERVO SPACER
8	1	MTLV-P18	IMPELLER
9	1	MTLV-P19	MOTOR SPACER
10	1	MTLV-M08	SM VALVE SEAL
11	1	DUST FILTER	N95 CANISTER FILTER
12	1	SERVO MOTOR	HS-322HD
13	1	BRUSHLESS MOTOR	2212 920KV
14	1	FLOW SENSOR	DK SFM3300-250-D
15	19	M3x10mm SOCKET	McM 91292A113
16	1	M4x14mm SOCKET	STEP AP203
17	5	M3x6mm SOCKET	McM 91292A111
18	8	M3 LOCKNUT	McM 90576A102
19	4	M4x16mm SOCKET	McM 91290A154
20	1	M6 LOCKNUT	McM 94645A205
21	4	M3x25mm SOCKET	McM 91290A125

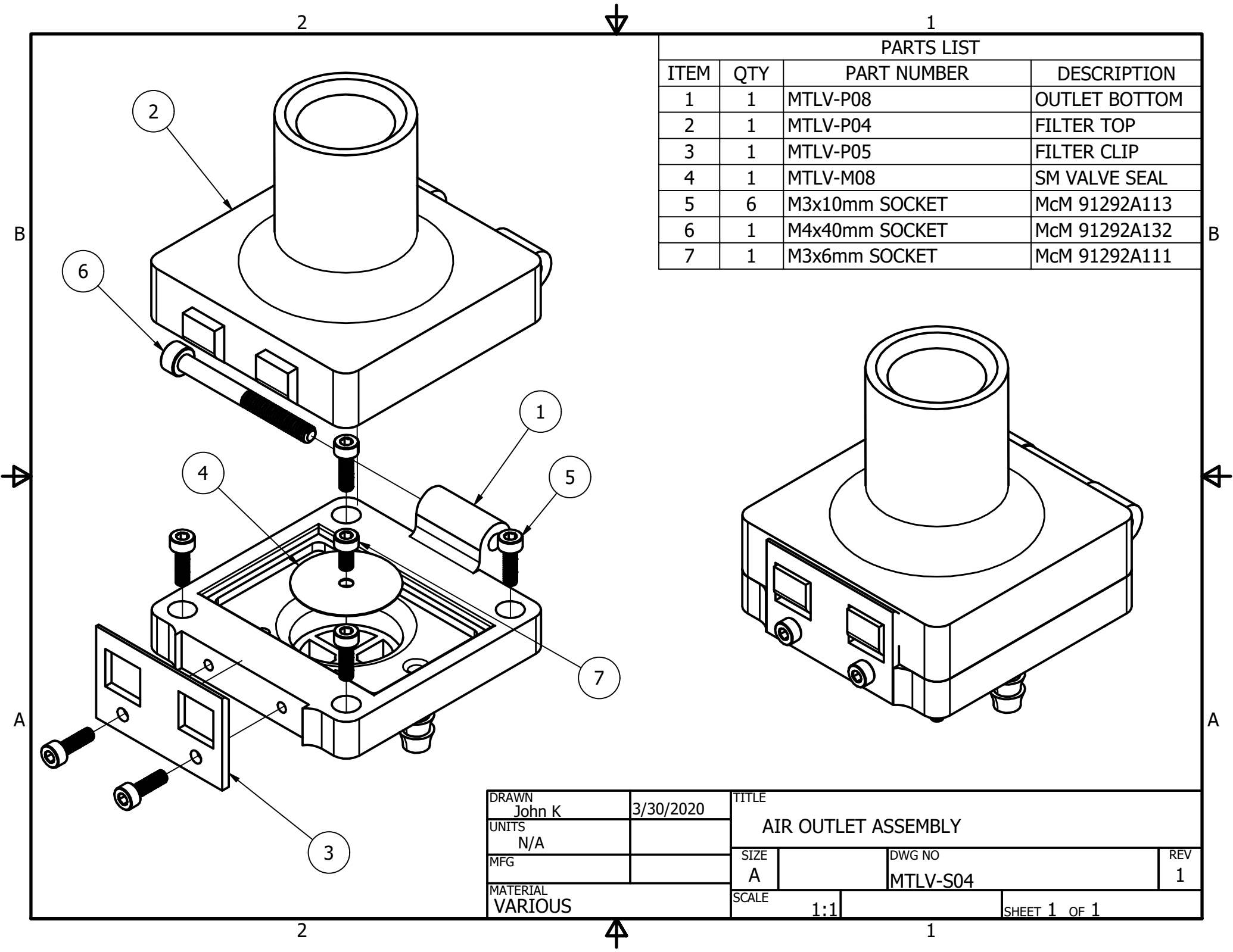
DRAWN John K	3/30/2020	TITLE TURBINE ASSEMBLY		
UNITS N/A				
MFG		SIZE A	DWG NO MTLV-S02	REV 1
MATERIAL VARIOUS		SCALE 1:2	SHEET 1 OF 1	



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	MTLV-P16	NEEDLE VALVE ADAPTER
2	1	MTLV-P18	STEPPER MOUNT
3	1	NEEDLE VALVE	McM 4891K72
4	1	STEPPER MOTOR	NEMA17
5	7	M3x10mm SOCKET	McM 91292A113
6	2	M4x12mm SOCKET	McM 91290A148

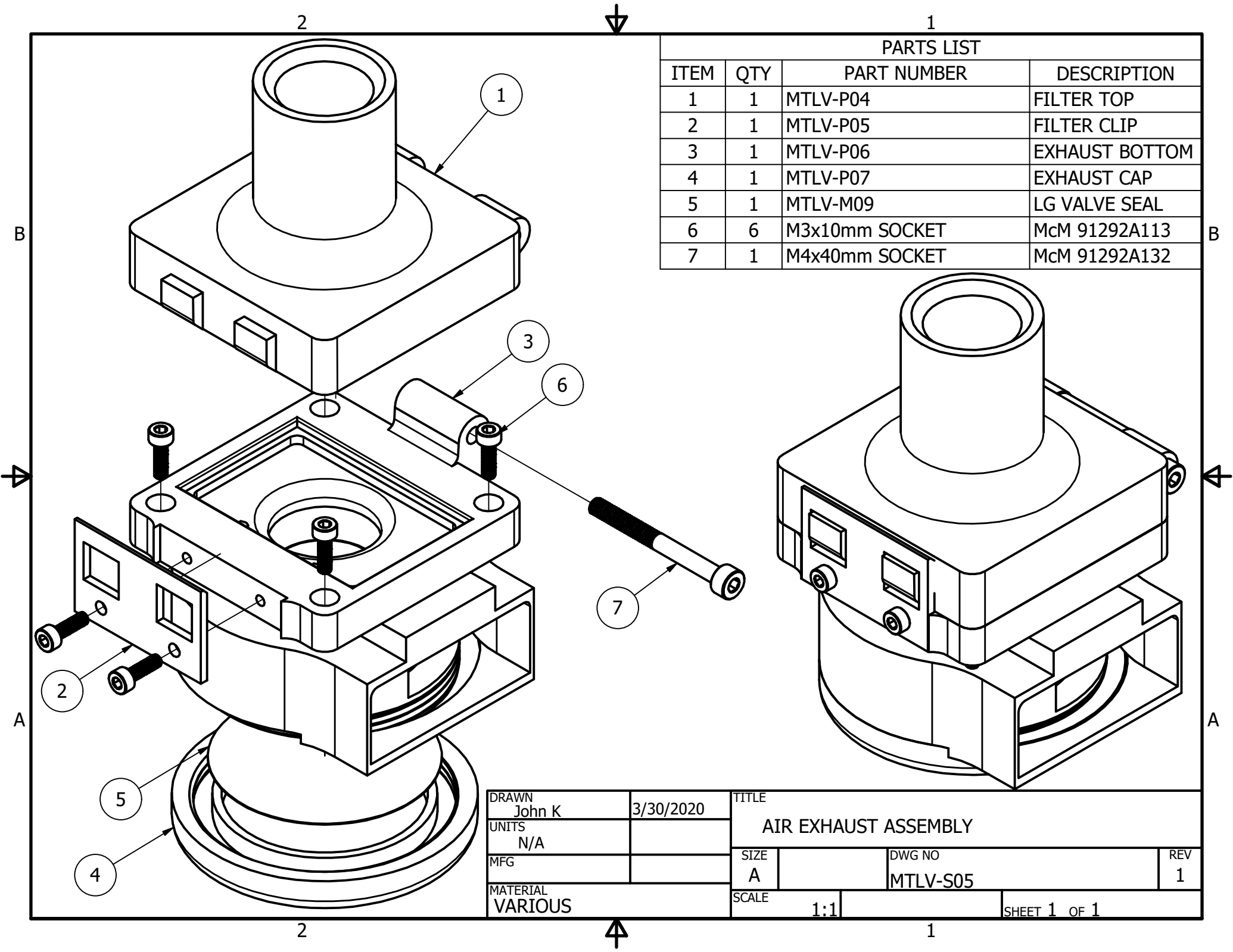


DRAWN John K	3/30/2020	TITLE STEPPER MOTOR ASSEMBLY		
UNITS N/A		SIZE A	DWG NO MTLV-S03	REV 1
MFG		SCALE 1:2	SHEET 1 OF 1	
MATERIAL VARIOUS				



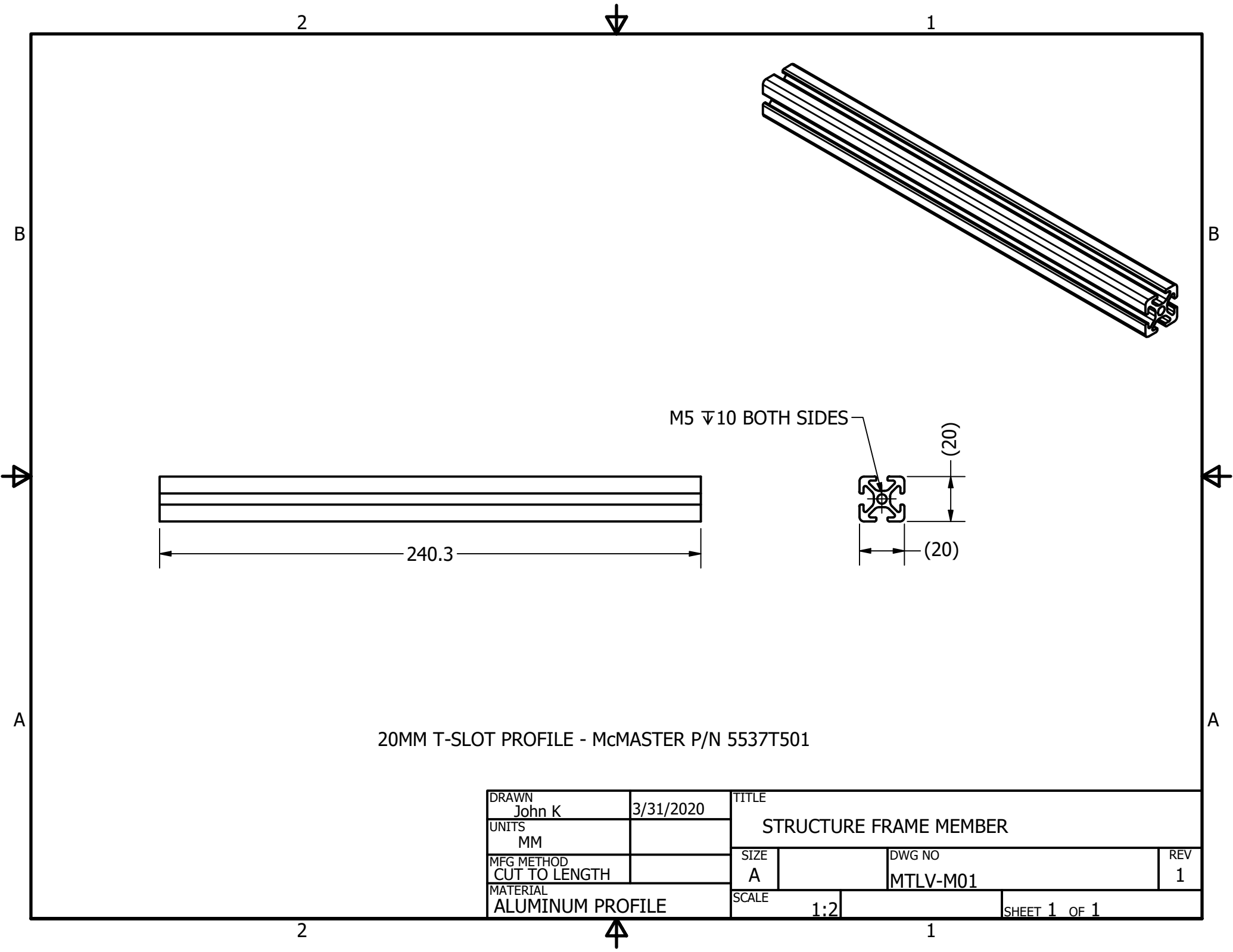
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MTLV-P08	OUTLET BOTTOM
2	1	MTLV-P04	FILTER TOP
3	1	MTLV-P05	FILTER CLIP
4	1	MTLV-M08	SM VALVE SEAL
5	6	M3x10mm SOCKET	McM 91292A113
6	1	M4x40mm SOCKET	McM 91292A132
7	1	M3x6mm SOCKET	McM 91292A111

DRAWN John K	3/30/2020	TITLE AIR OUTLET ASSEMBLY		
UNITS N/A		SIZE A	DWG NO MTLV-S04	REV 1
MFG		SCALE 1:1	SHEET 1 OF 1	
MATERIAL VARIOUS				



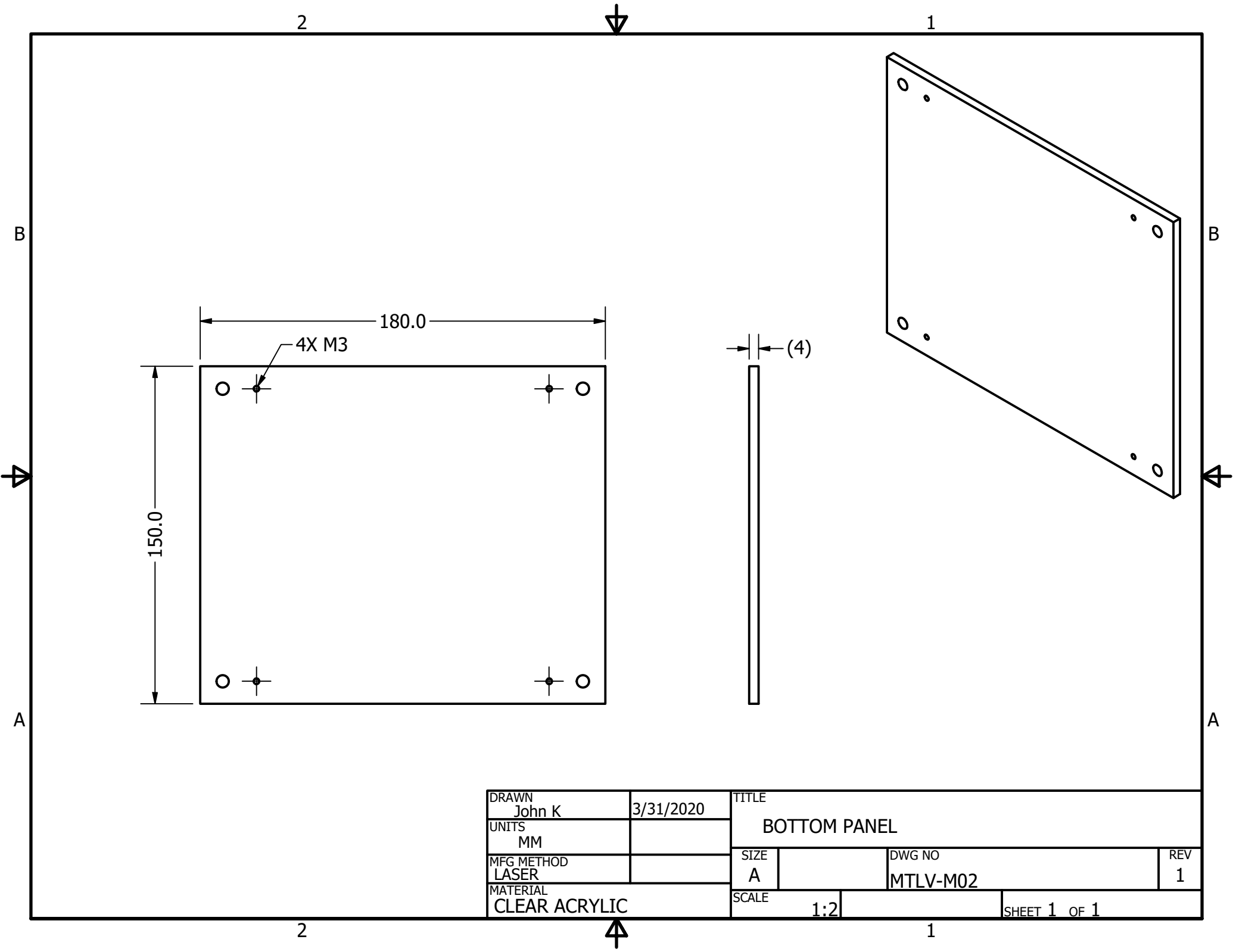
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MTLV-P04	FILTER TOP
2	1	MTLV-P05	FILTER CLIP
3	1	MTLV-P06	EXHAUST BOTTOM
4	1	MTLV-P07	EXHAUST CAP
5	1	MTLV-M09	LG VALVE SEAL
6	6	M3x10mm SOCKET	McM 91292A113
7	1	M4x40mm SOCKET	McM 91292A132

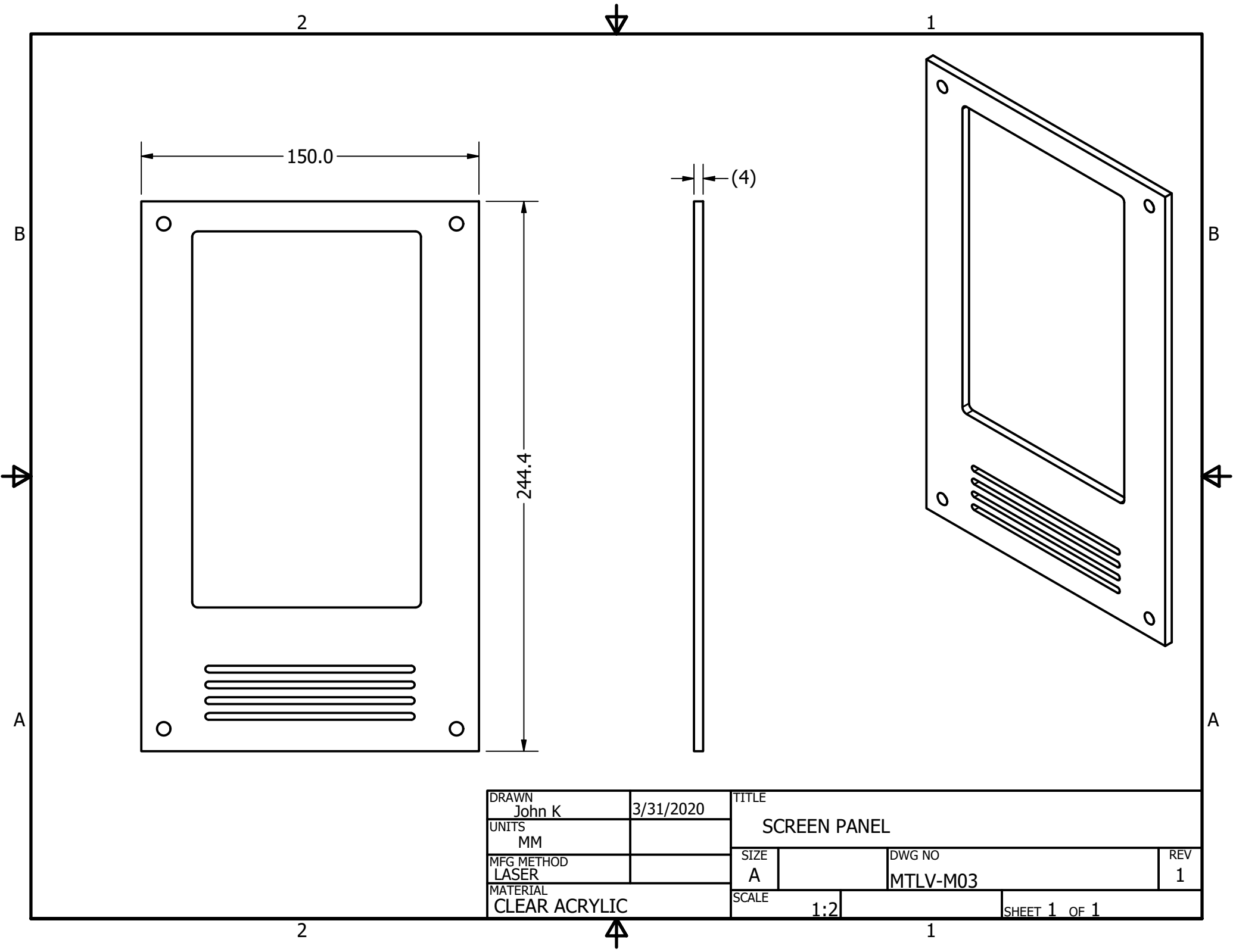
DRAWN John K		3/30/2020		TITLE AIR EXHAUST ASSEMBLY			
UNITS N/A							
MFG				SIZE A		DWG NO MTLV-S05	REV 1
MATERIAL VARIOUS				SCALE 1:1		SHEET 1 OF 1	



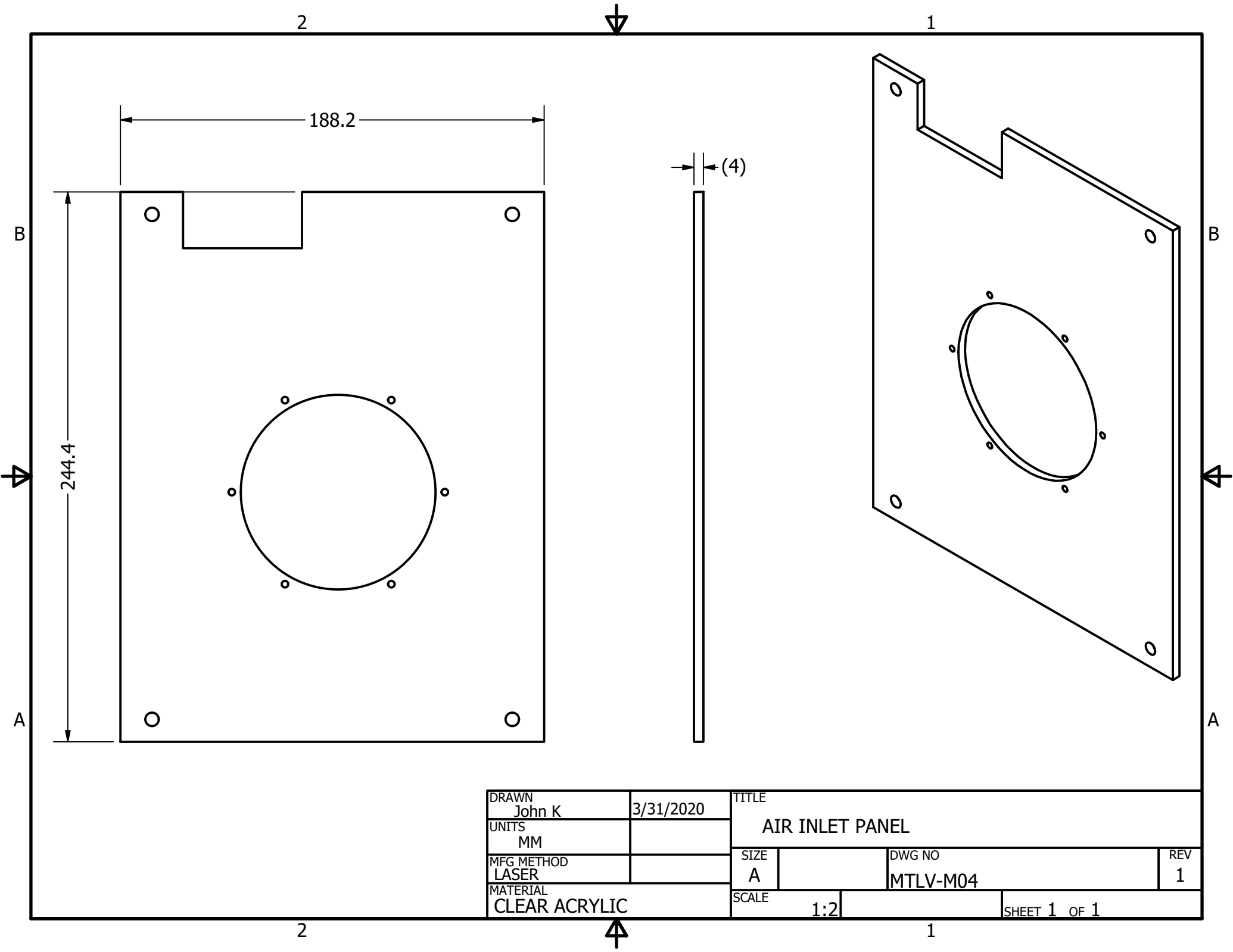
20MM T-SLOT PROFILE - McMASTER P/N 5537T501

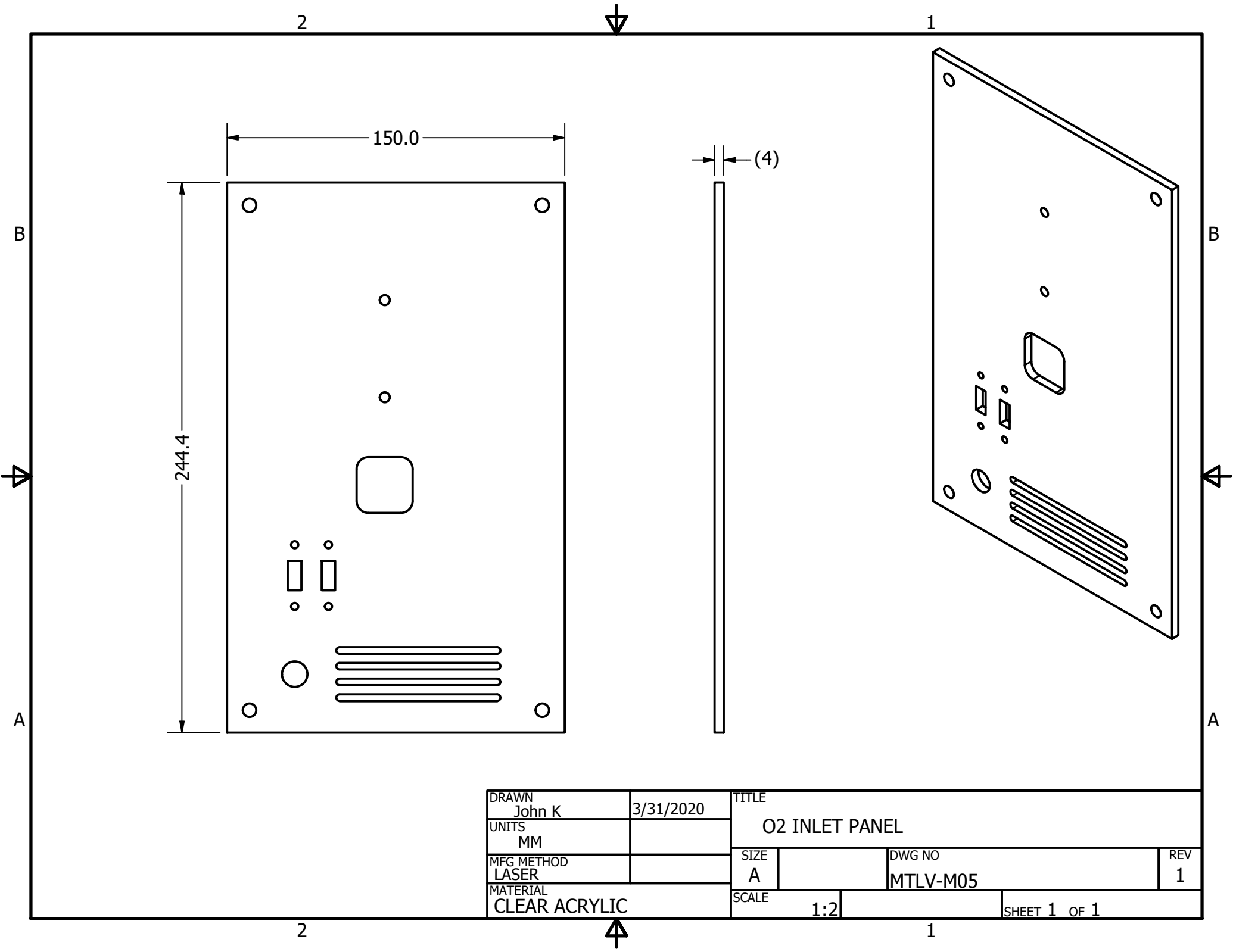
DRAWN John K	3/31/2020	STRUCTURE FRAME MEMBER		
UNITS MM				
MFG METHOD CUT TO LENGTH		SIZE A	DWG NO MTLV-M01	REV 1
MATERIAL ALUMINUM PROFILE		SCALE 1:2	SHEET 1 OF 1	

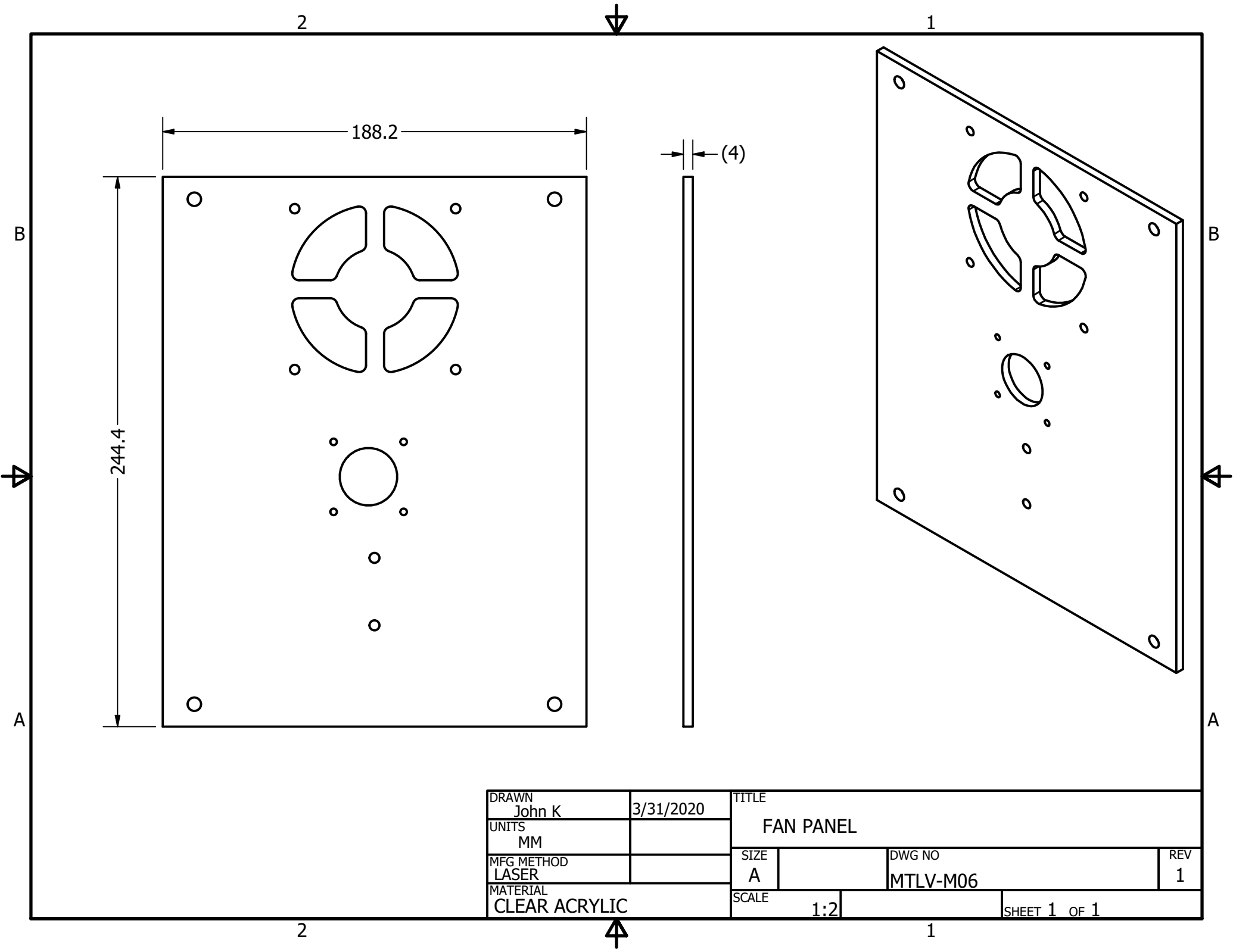


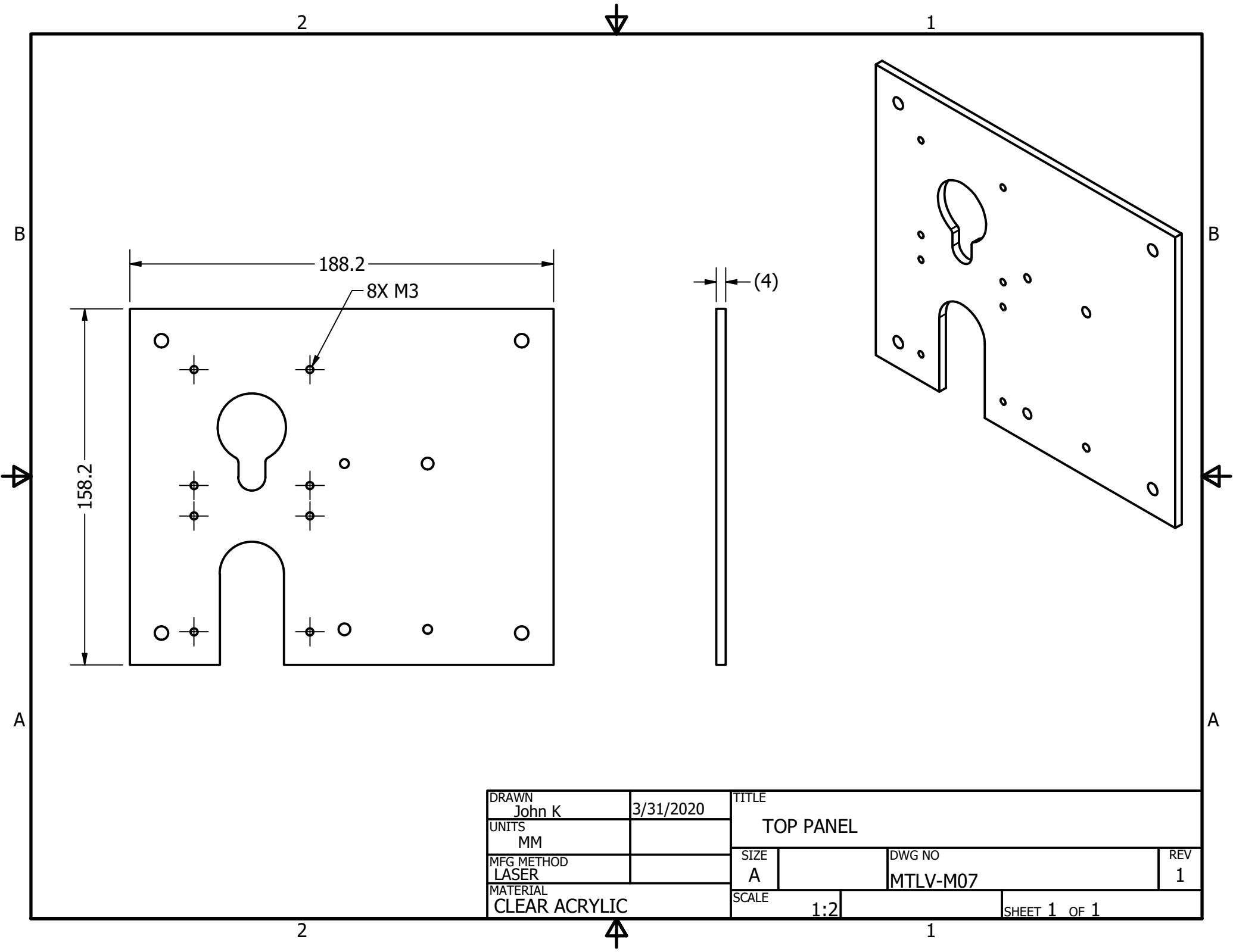


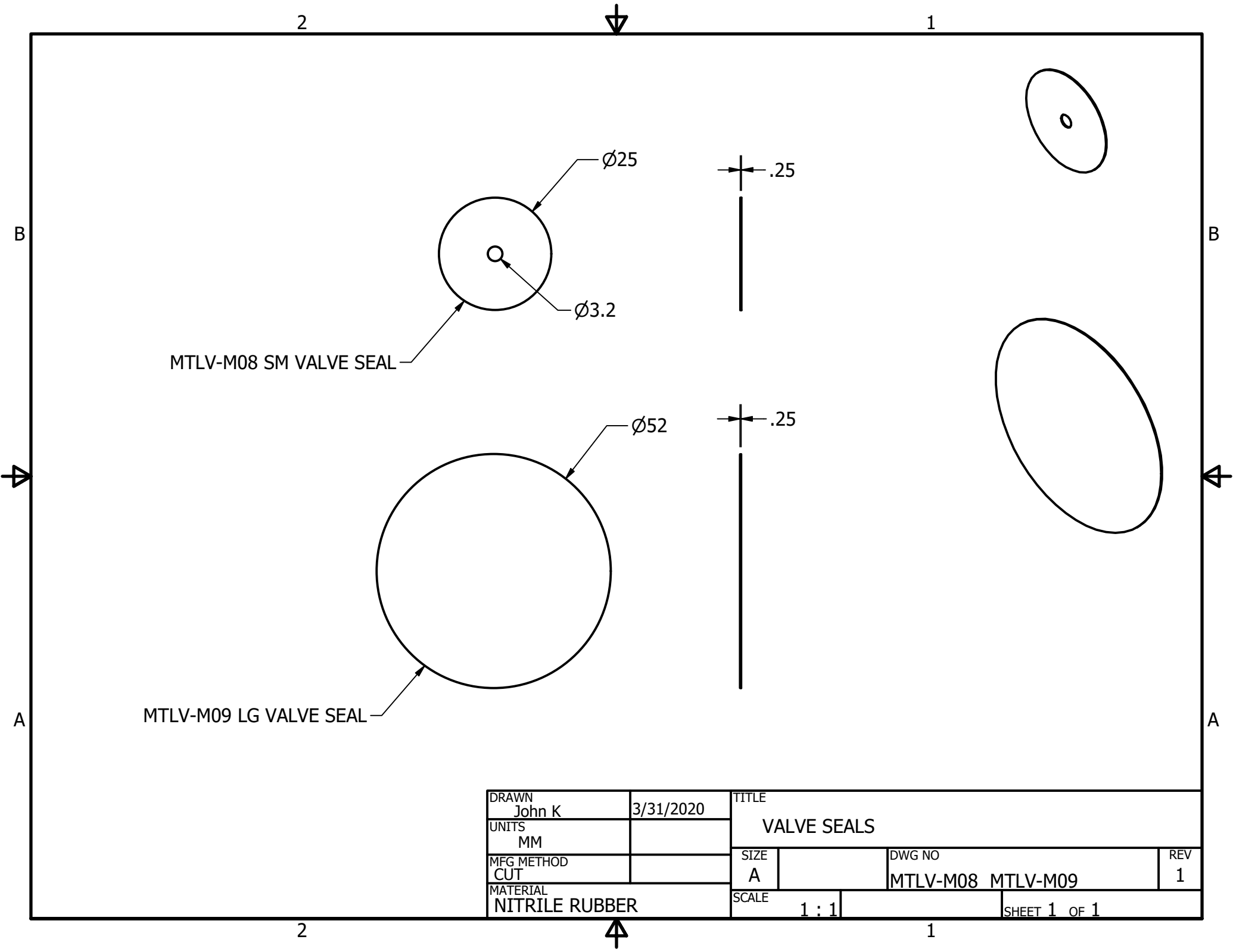
DRAWN John K	3/31/2020	TITLE SCREEN PANEL		
UNITS MM				
MFG METHOD LASER		SIZE A	DWG NO MTLV-M03	REV 1
MATERIAL CLEAR ACRYLIC		SCALE 1:2	SHEET 1 OF 1	







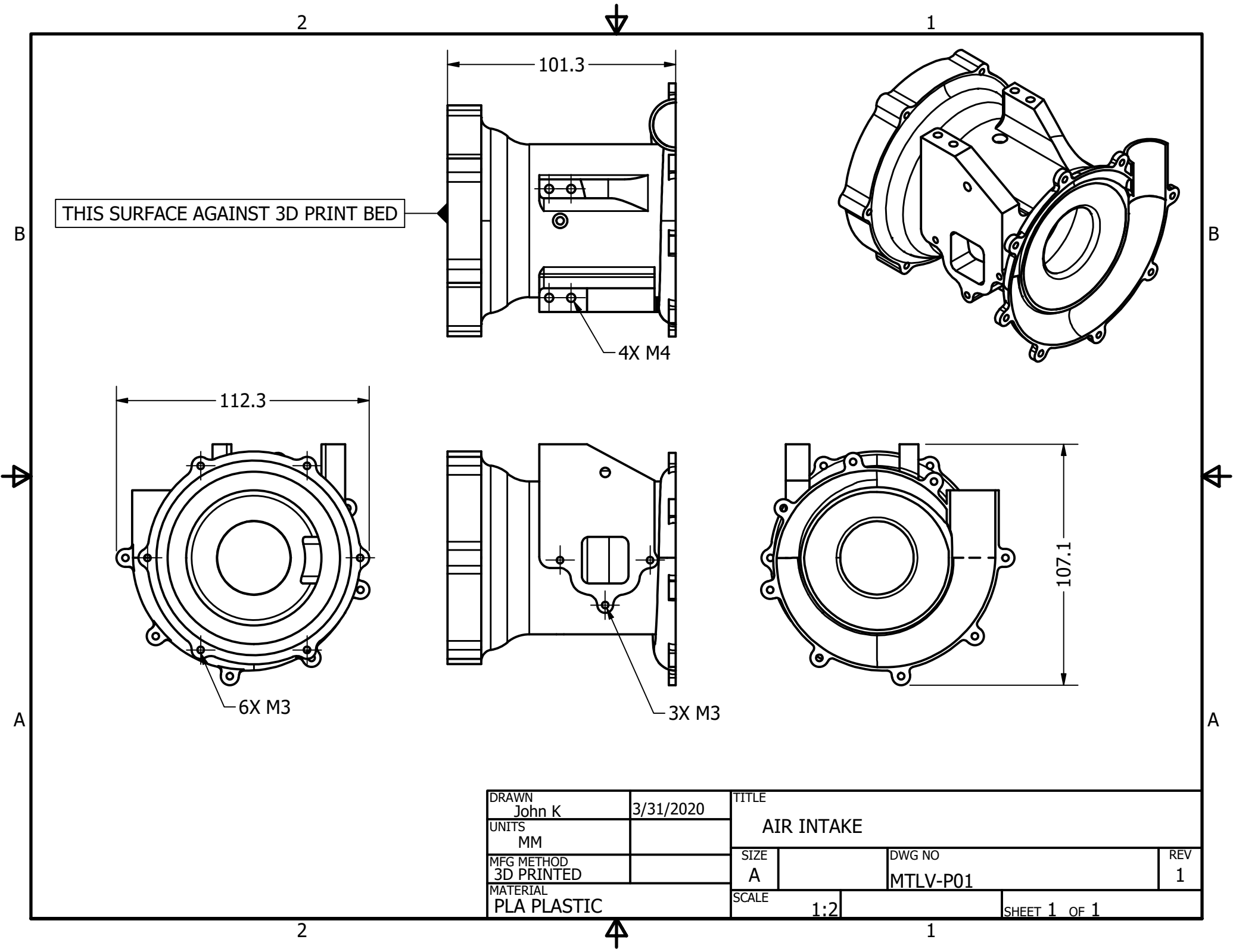




MTLV-M08 SM VALVE SEAL

MTLV-M09 LG VALVE SEAL

DRAWN John K	3/31/2020	TITLE VALVE SEALS		
UNITS MM		SIZE A	DWG NO MTLV-M08 MTLV-M09	REV 1
MFG METHOD CUT		SCALE 1 : 1	SHEET 1 OF 1	
MATERIAL NITRILE RUBBER				



THIS SURFACE AGAINST 3D PRINT BED

101.3

4X M4

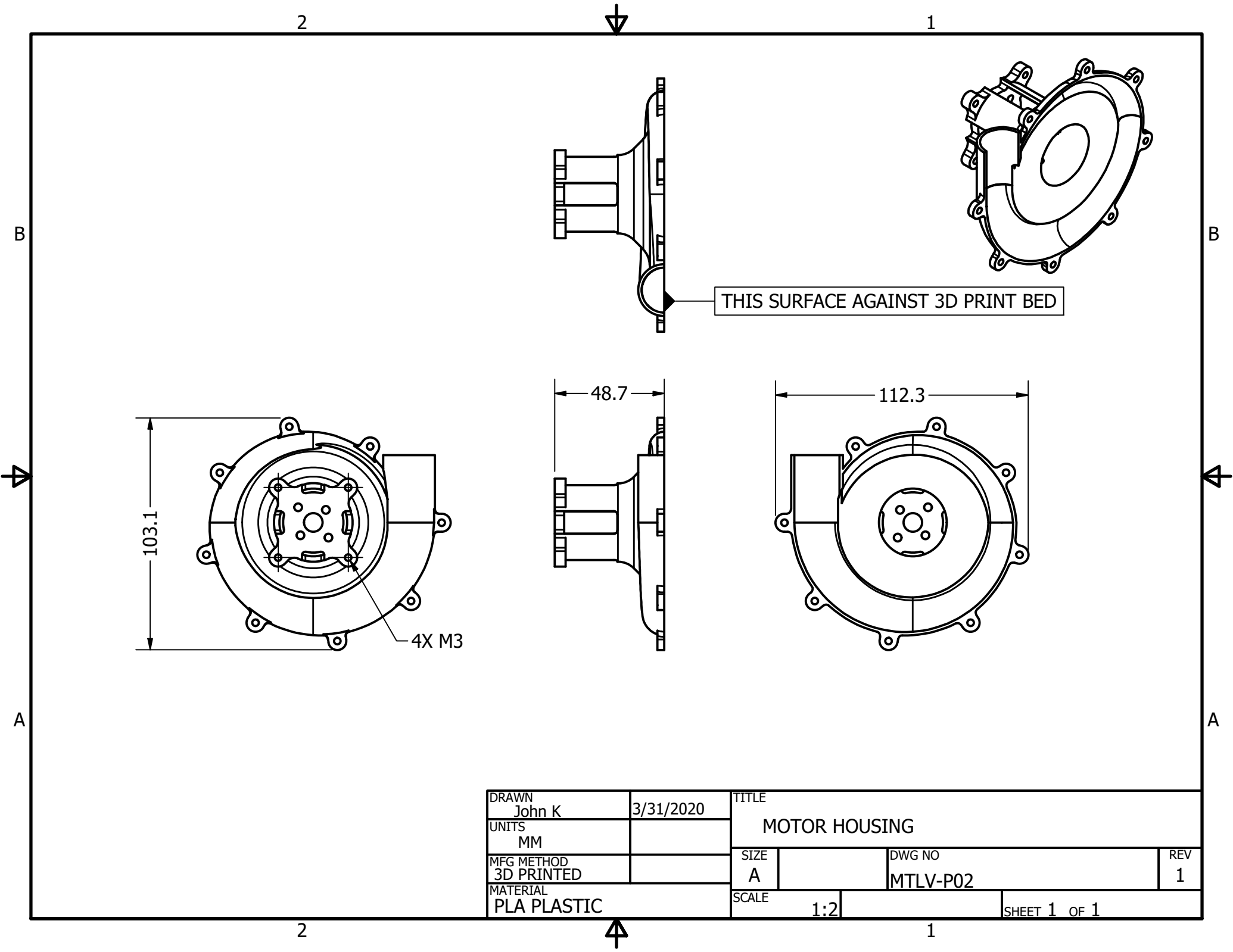
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6X M3

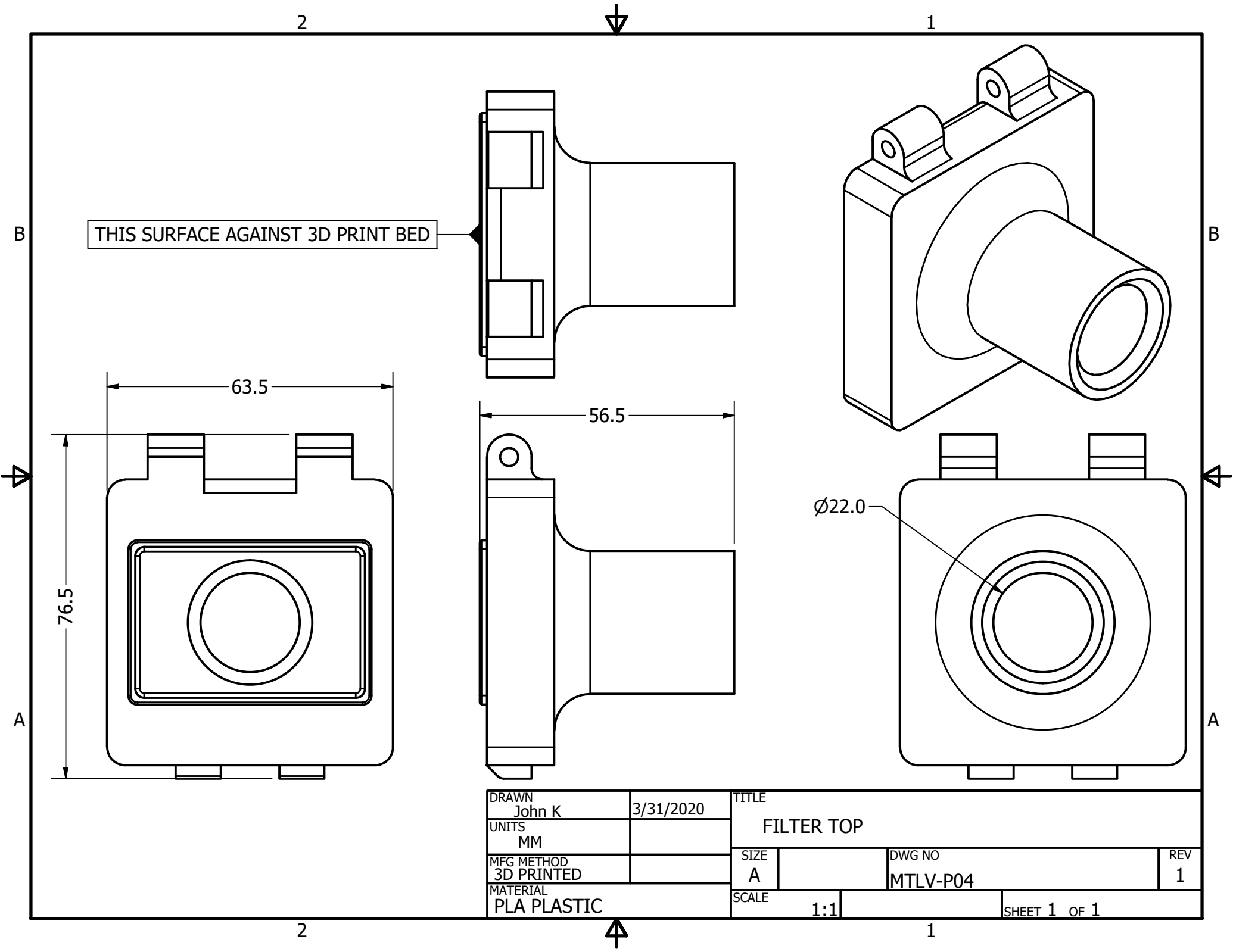
3X M3

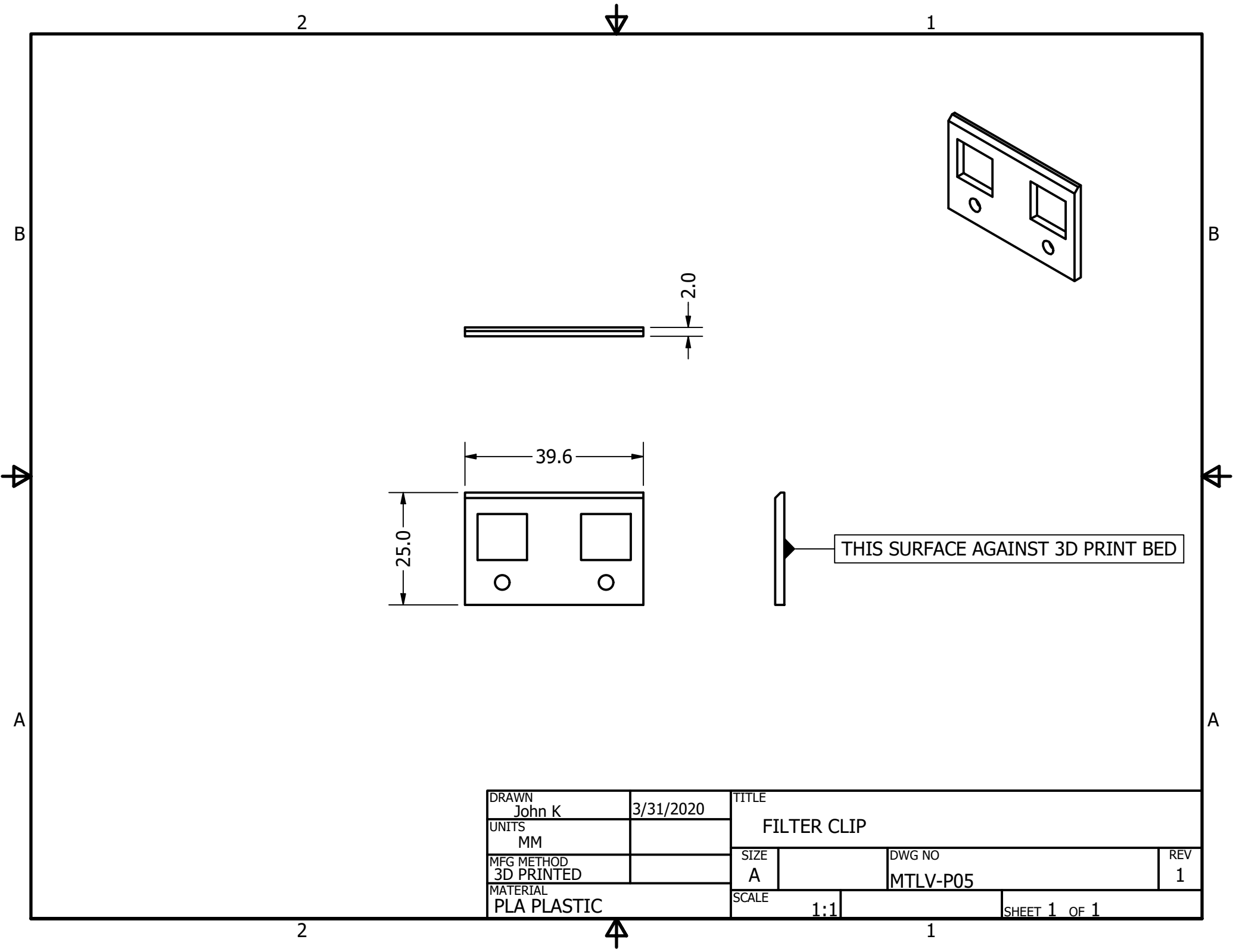
107.1

DRAWN John K	3/31/2020	TITLE AIR INTAKE		
UNITS MM		SIZE A	DWG NO MTLV-P01	REV 1
MFG METHOD 3D PRINTED		SCALE 1:2	SHEET 1 OF 1	
MATERIAL PLA PLASTIC				

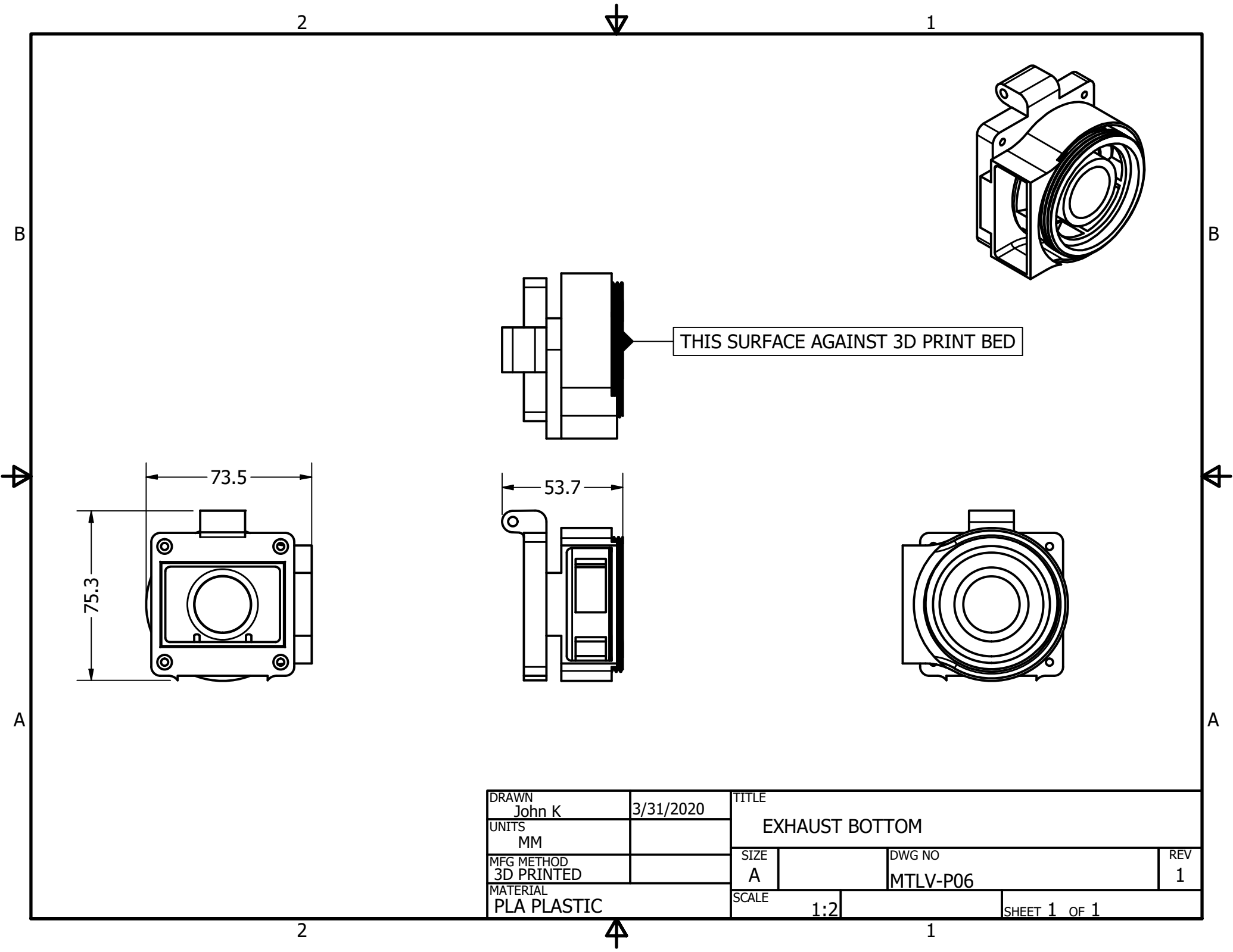


DRAWN John K	3/31/2020	TITLE MOTOR HOUSING		
UNITS MM		SIZE A	DWG NO MTLV-P02	REV 1
MFG METHOD 3D PRINTED		SCALE 1:2	SHEET 1 OF 1	
MATERIAL PLA PLASTIC				

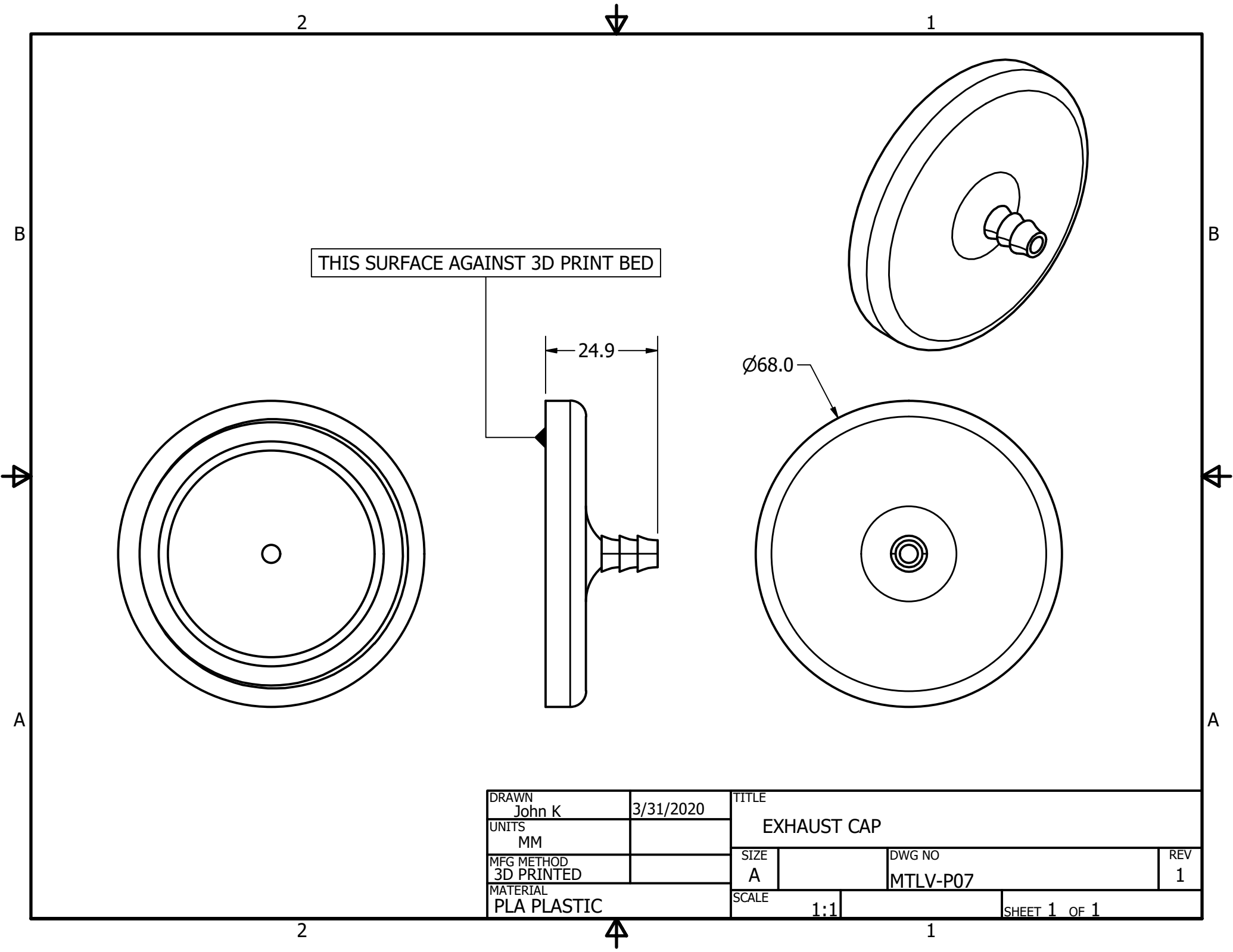


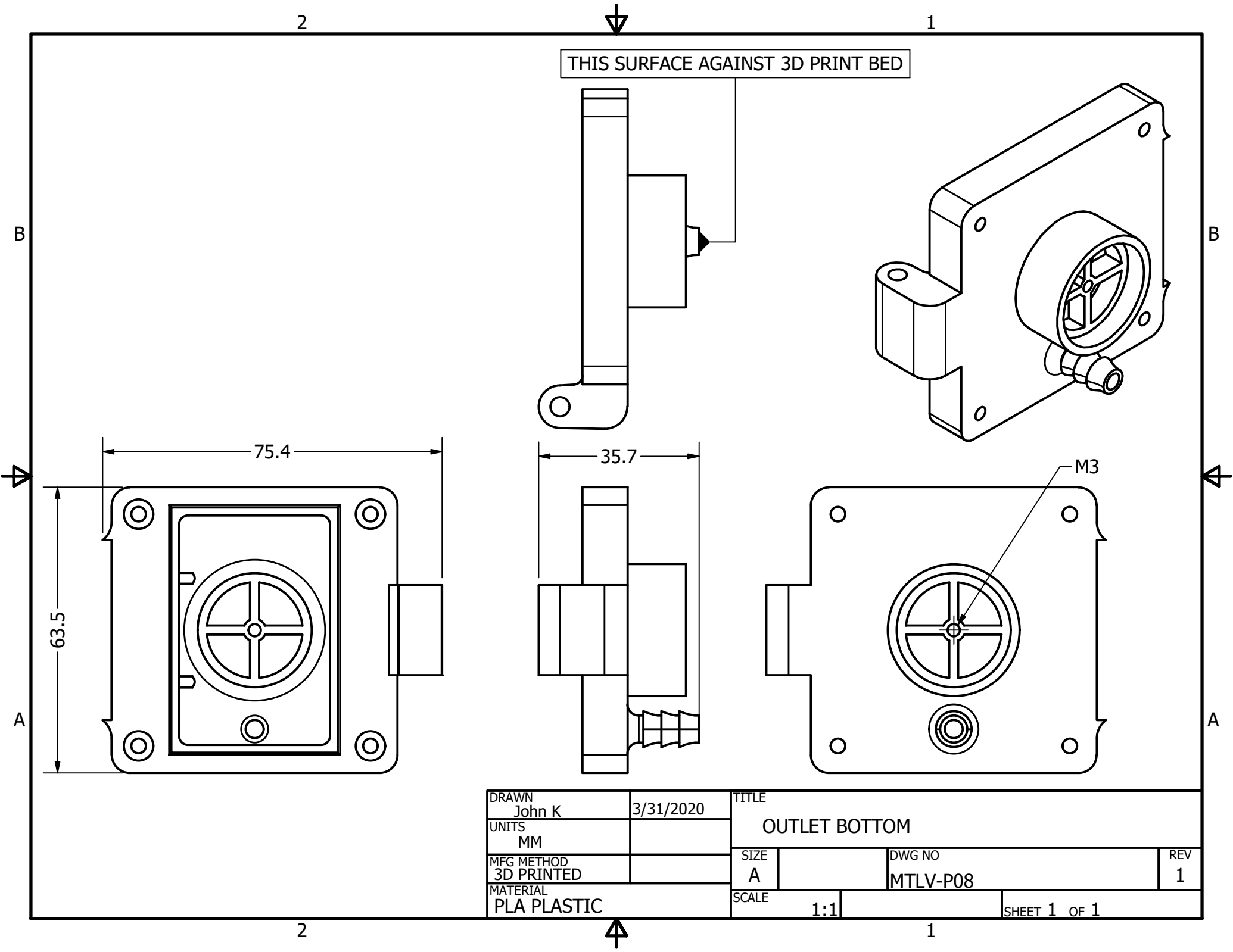


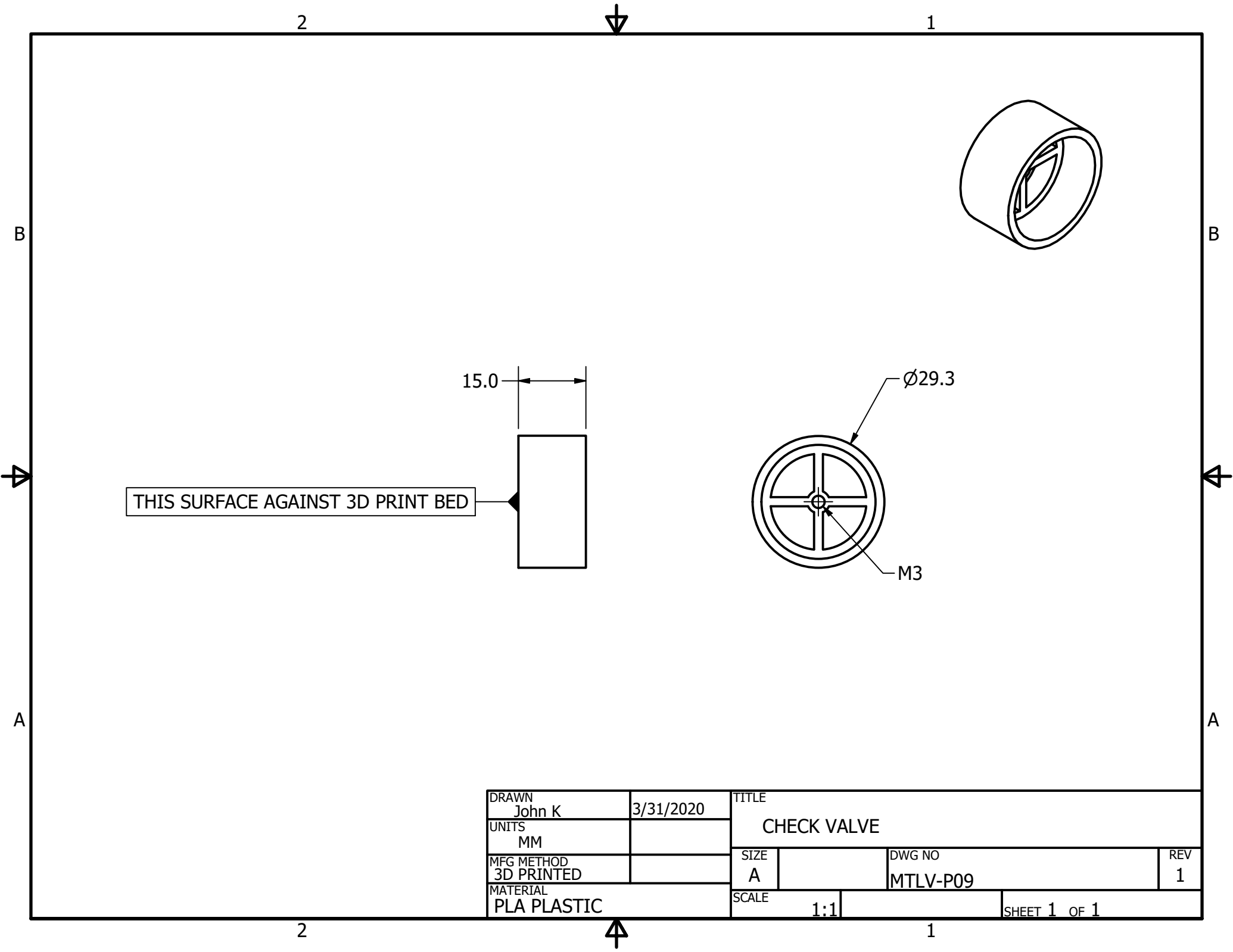
DRAWN John K	3/31/2020	TITLE FILTER CLIP		
UNITS MM		SIZE A	DWG NO MTLV-P05	REV 1
MFG METHOD 3D PRINTED		SCALE 1:1	SHEET 1 OF 1	
MATERIAL PLA PLASTIC				



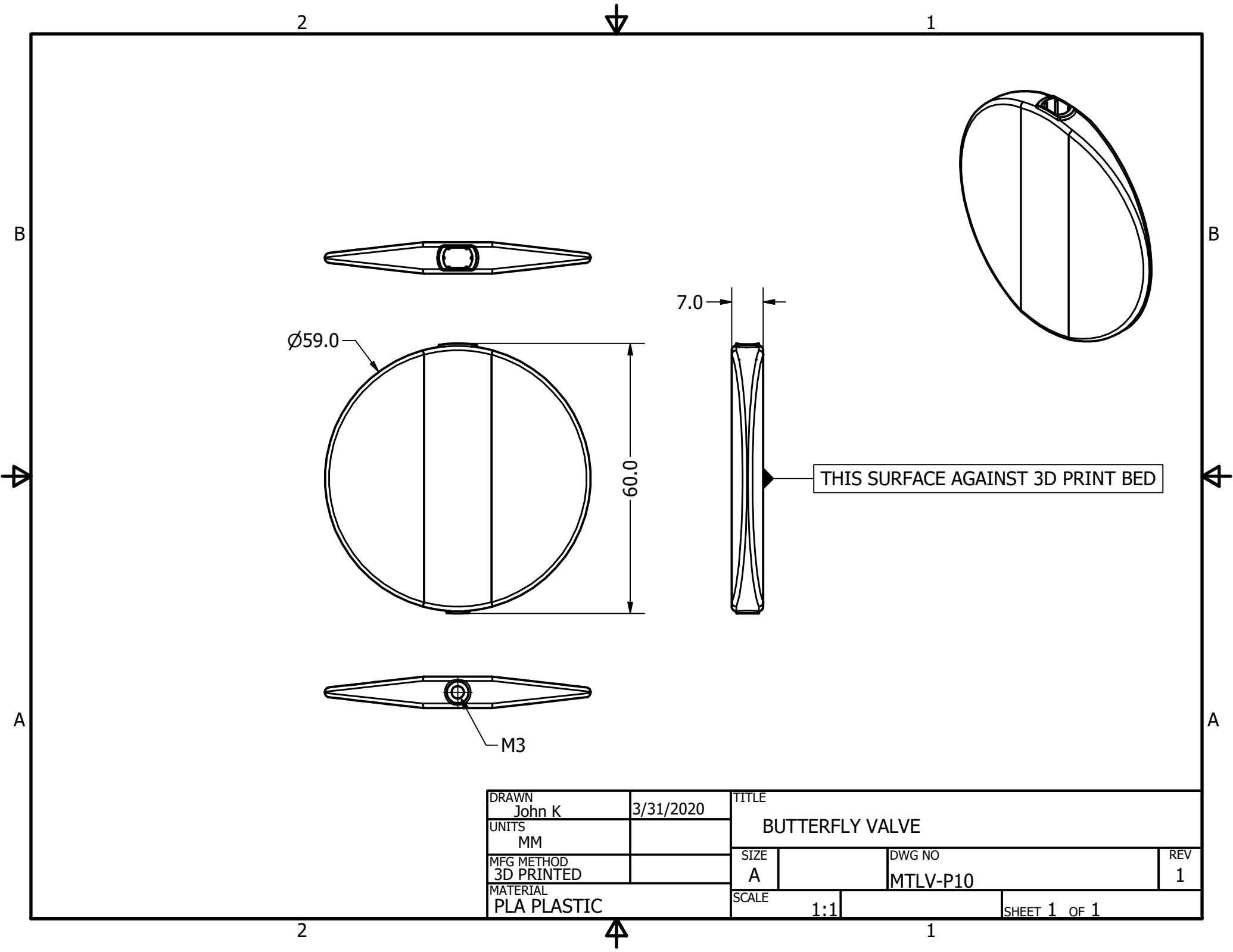
DRAWN John K	3/31/2020	TITLE EXHAUST BOTTOM		
UNITS MM		SIZE A	DWG NO MTLV-P06	REV 1
MFG METHOD 3D PRINTED		SCALE 1:2	SHEET 1 OF 1	
MATERIAL PLA PLASTIC				



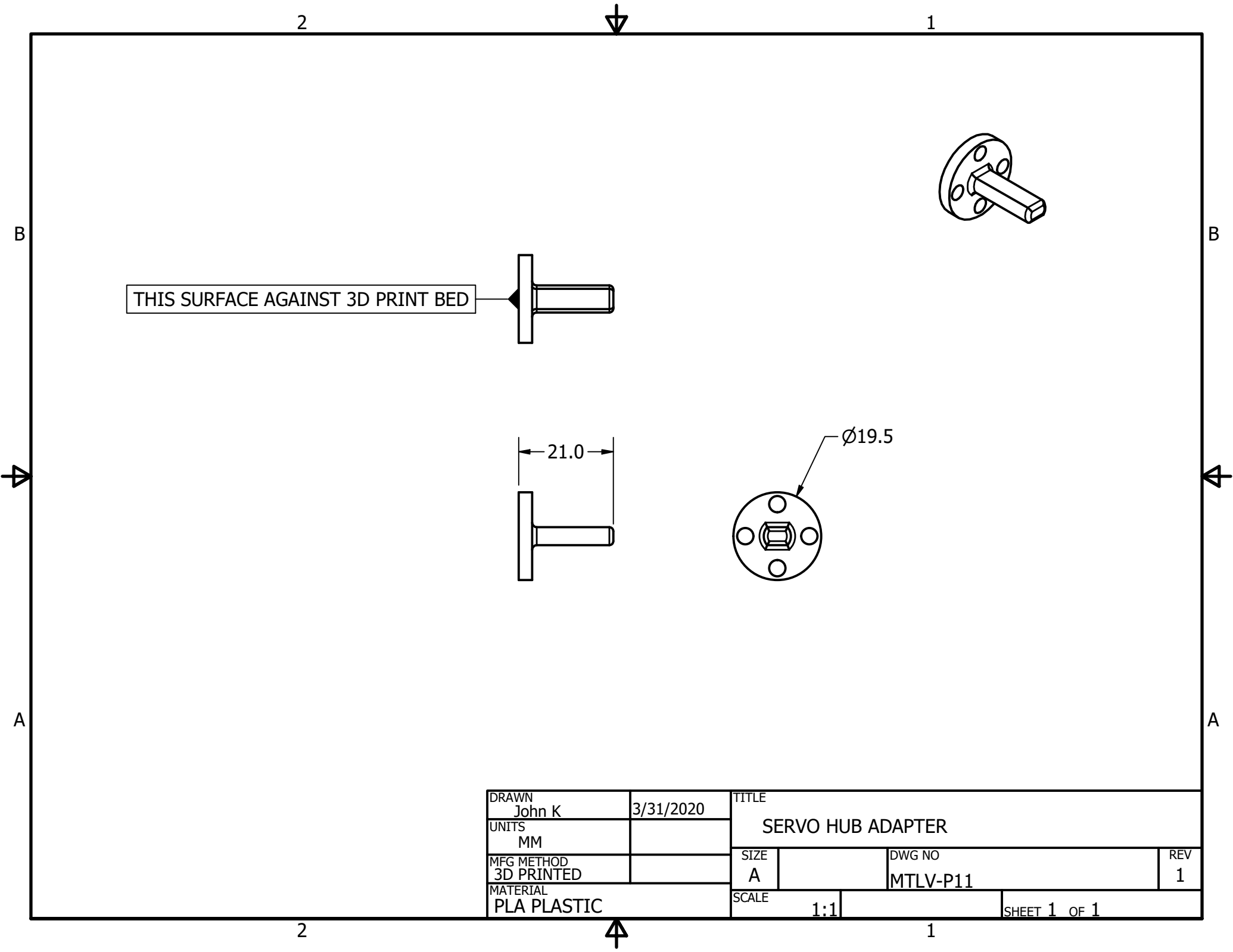




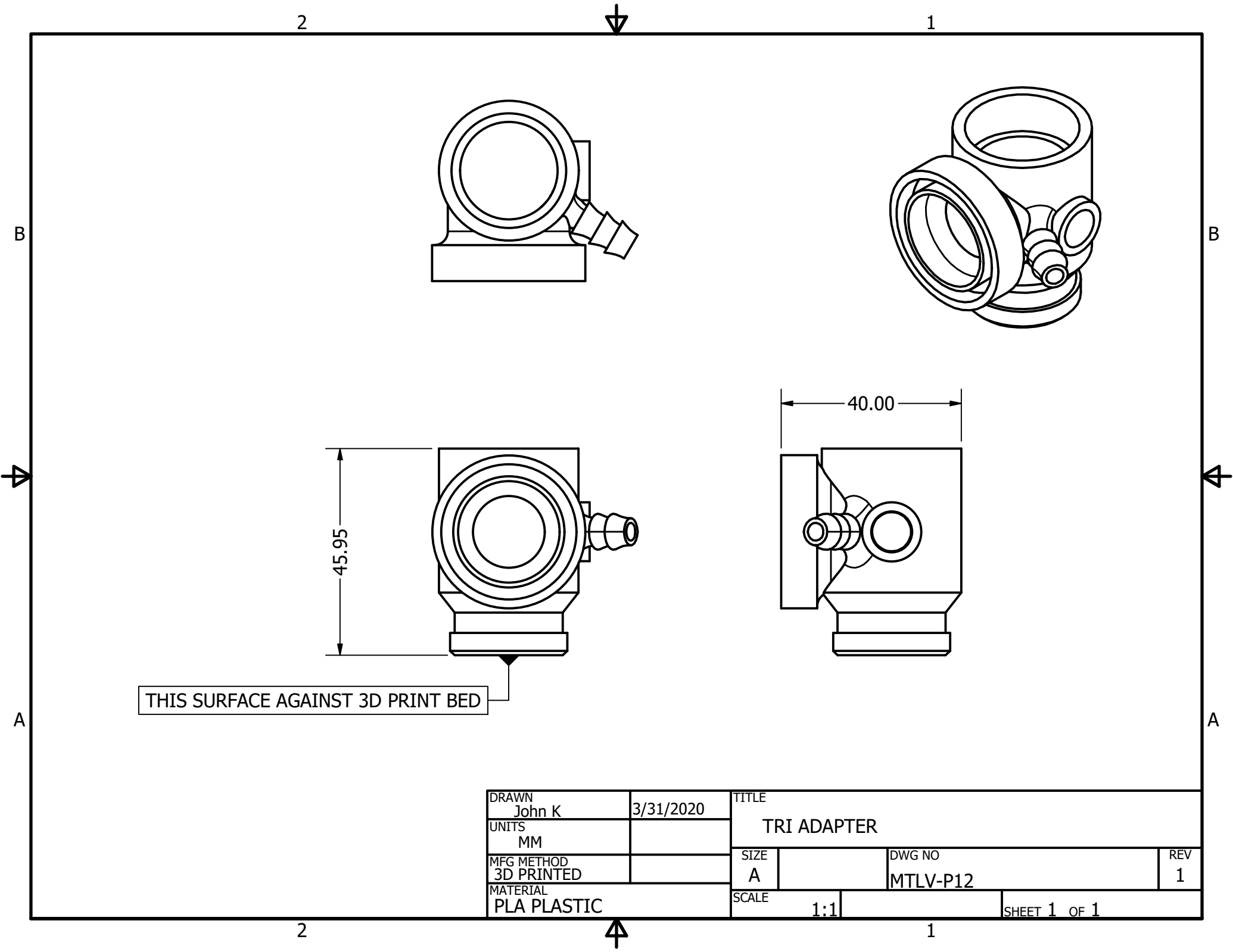
DRAWN John K	3/31/2020	CHECK VALVE		
UNITS MM				
MFG METHOD 3D PRINTED		SIZE A	DWG NO MTLV-P09	REV 1
MATERIAL PLA PLASTIC		SCALE 1:1	SHEET 1 OF 1	



DRAWN John K	3/31/2020	TITLE BUTTERFLY VALVE		
UNITS MM		SIZE A	DWG NO MTLV-P10	REV 1
MFG METHOD 3D PRINTED		SCALE 1:1	SHEET 1 OF 1	
MATERIAL PLA PLASTIC				

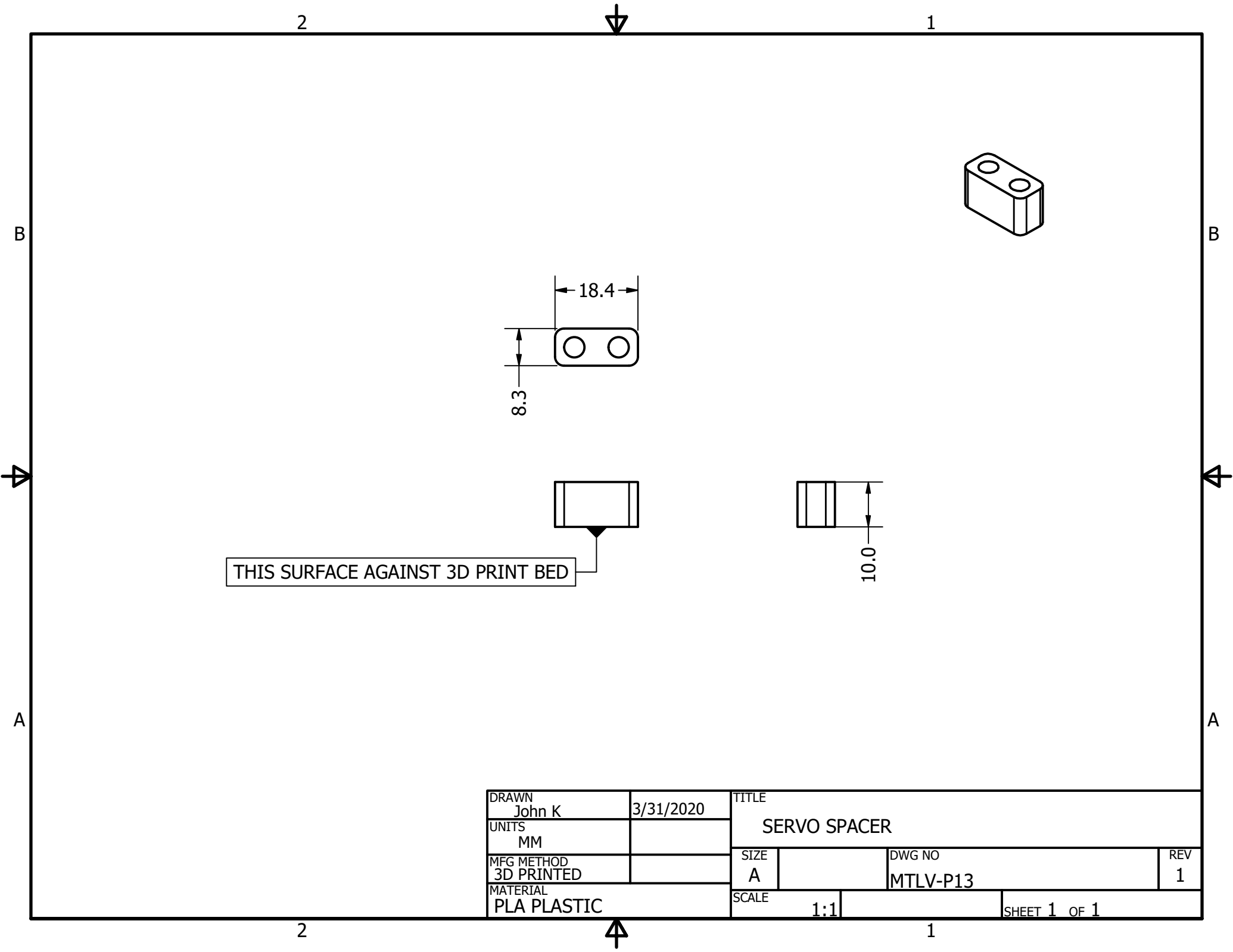


DRAWN John K	3/31/2020	TITLE SERVO HUB ADAPTER		
UNITS MM		SIZE A	DWG NO MTLV-P11	REV 1
MFG METHOD 3D PRINTED		SCALE 1:1	SHEET 1 OF 1	
MATERIAL PLA PLASTIC				



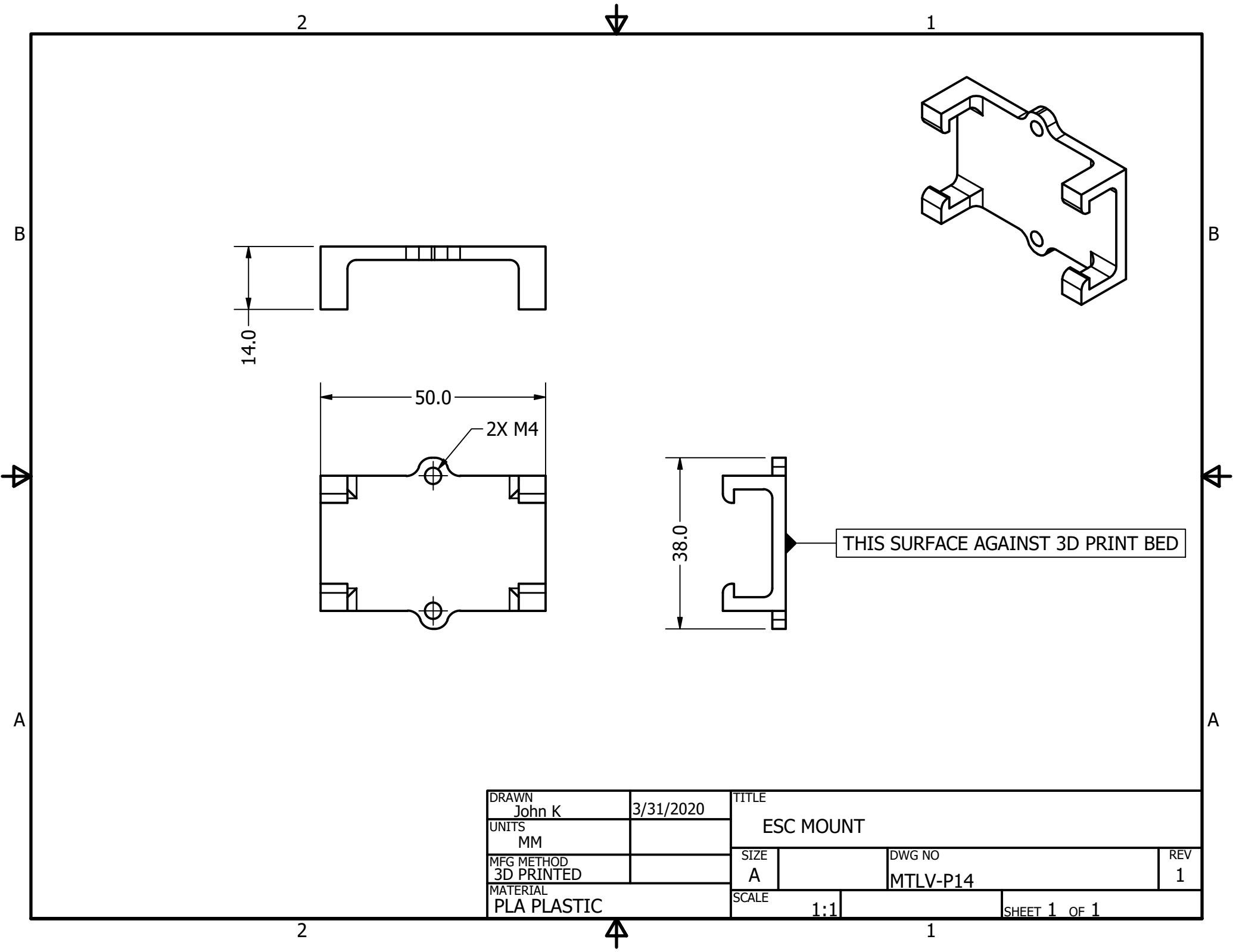
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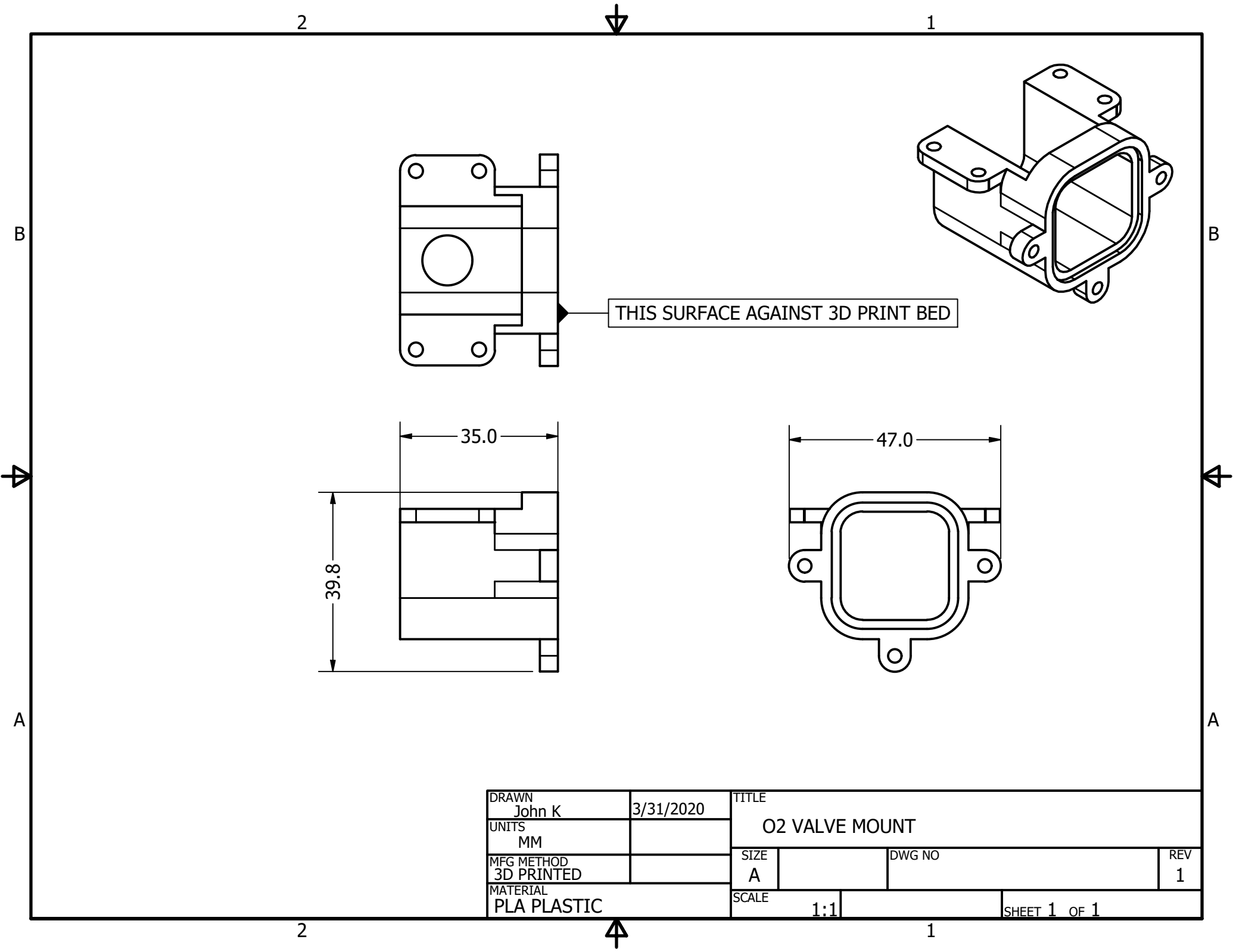
DRAWN John K	3/31/2020	TITLE TRI ADAPTER		
UNITS MM				
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MATERIAL PLA PLASTIC		SCALE 1:1	SHEET 1 OF 1	



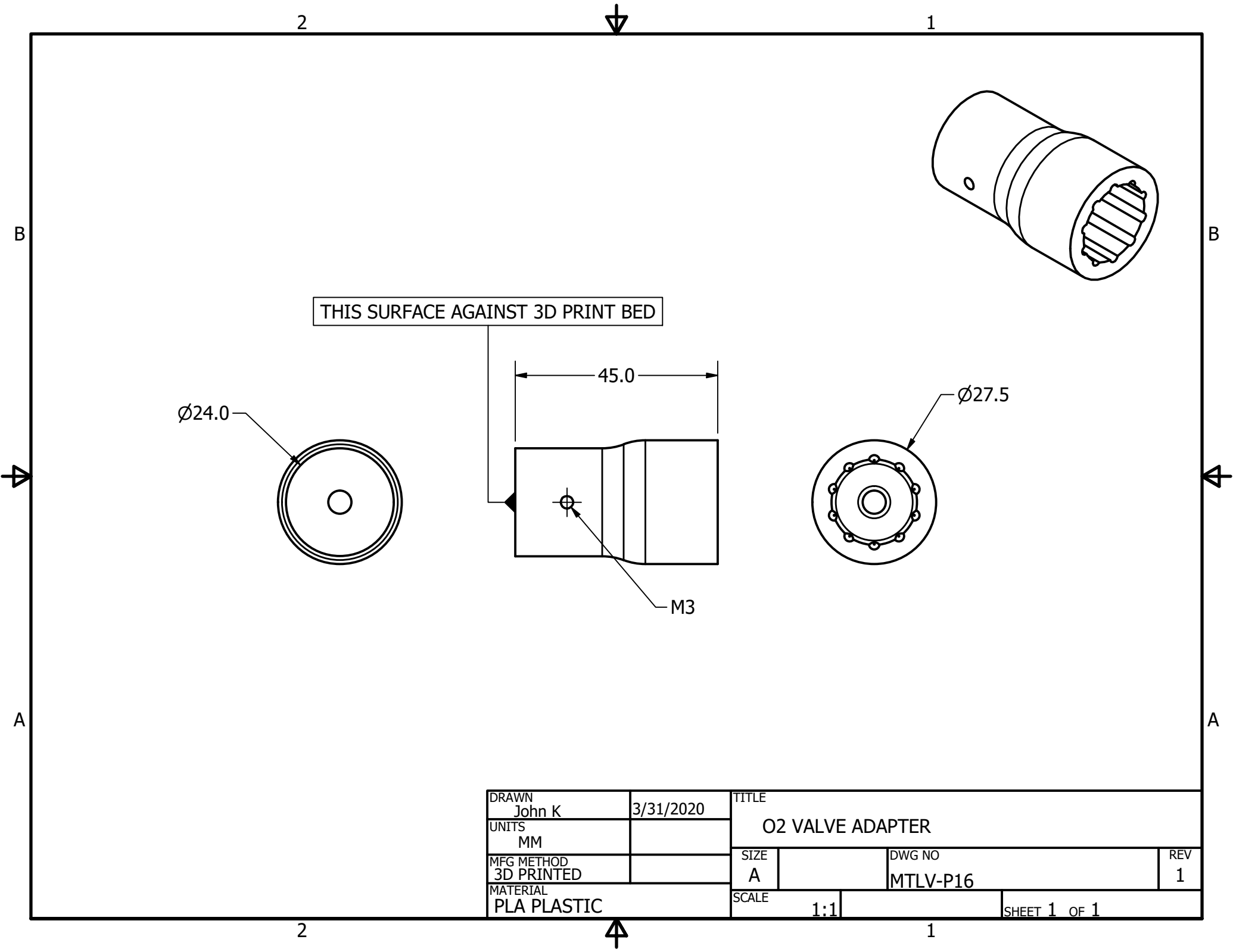
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DRAWN John K		3/31/2020		TITLE SERVO SPACER			
UNITS MM							
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MATERIAL PLA PLASTIC				SCALE 1:1		SHEET 1 OF 1	

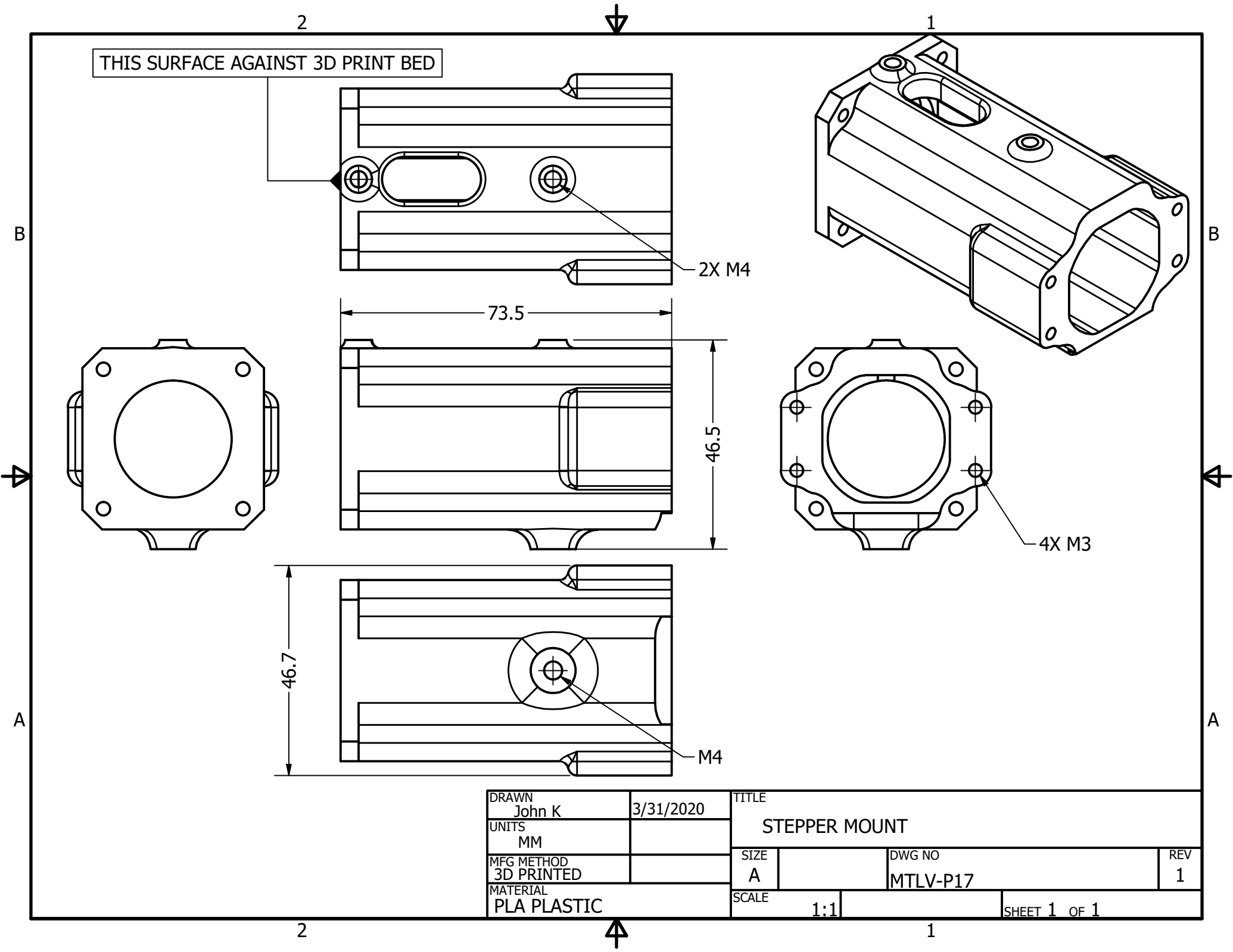




DRAWN John K	3/31/2020	TITLE O2 VALVE MOUNT		
UNITS MM				
MFG METHOD 3D PRINTED		SIZE A	DWG NO	REV 1
MATERIAL PLA PLASTIC		SCALE 1:1	SHEET 1 OF 1	

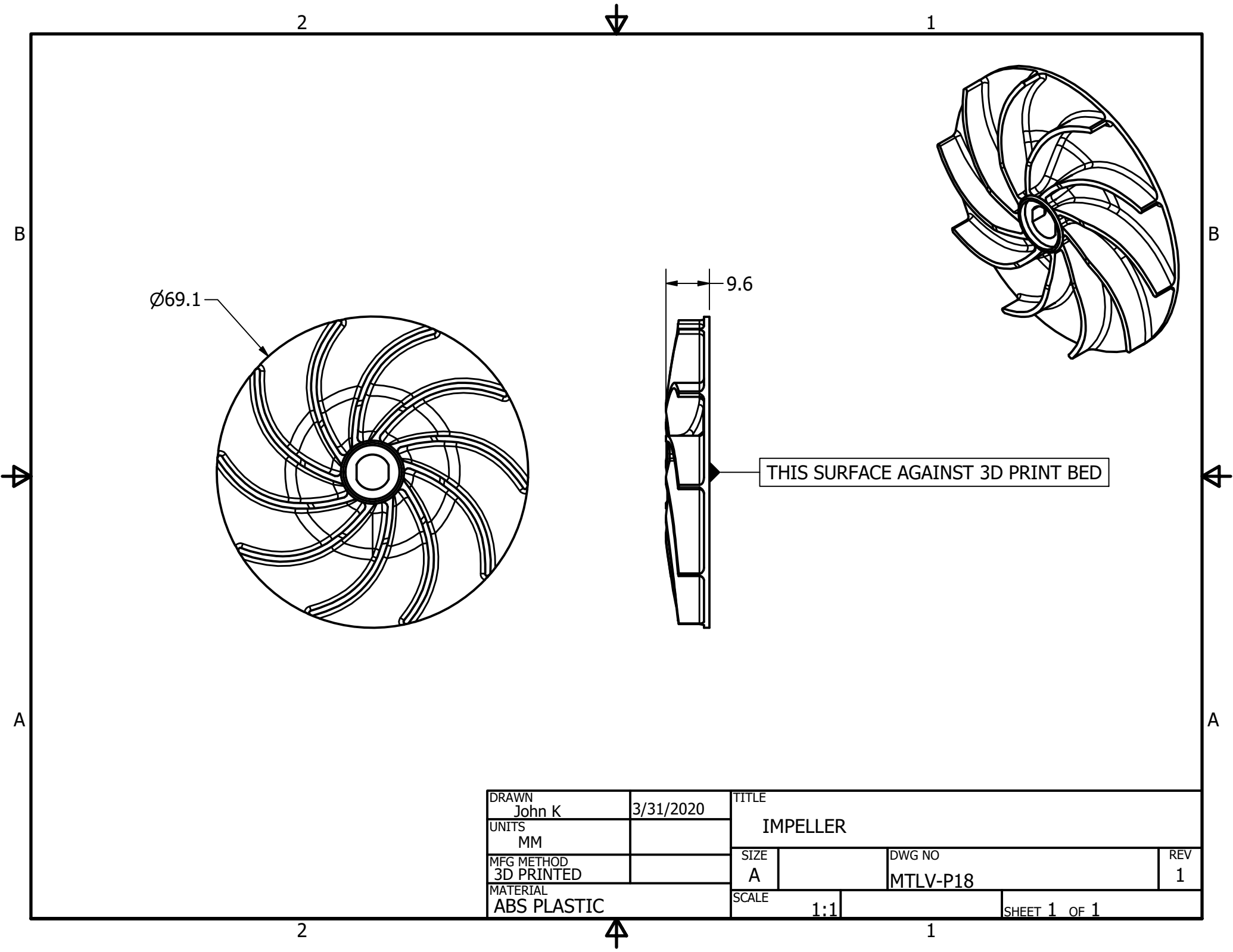


DRAWN John K	3/31/2020	TITLE O2 VALVE ADAPTER		
UNITS MM				
MFG METHOD 3D PRINTED		SIZE A	DWG NO MTLV-P16	REV 1
MATERIAL PLA PLASTIC		SCALE 1:1	SHEET 1 OF 1	

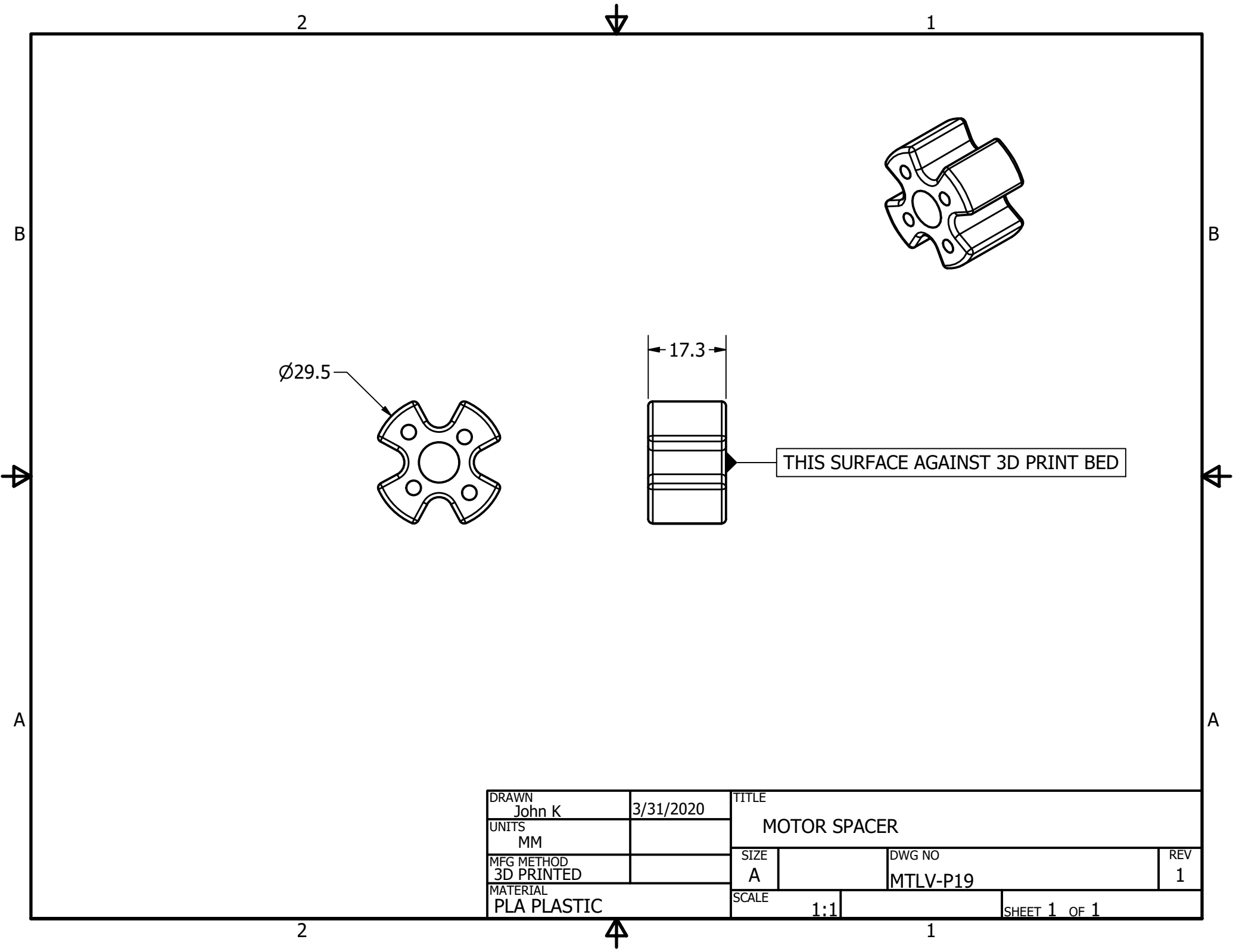


DRAWN John K	3/31/2020
UNITS MM	
MFG METHOD 3D PRINTED	
MATERIAL PLA PLASTIC	

TITLE			
STEPPER MOUNT			
SIZE		DWG NO	REV
A		MTLV-P17	1
SCALE	1:1	SHEET 1 OF 1	



DRAWN John K	3/31/2020	TITLE IMPELLER		
UNITS MM				
MFG METHOD 3D PRINTED		SIZE A	DWG NO MTLV-P18	REV 1
MATERIAL ABS PLASTIC		SCALE 1:1	SHEET 1 OF 1	



DRAWN John K		3/31/2020		TITLE MOTOR SPACER			
UNITS MM							
MFG METHOD 3D PRINTED				SIZE A		DWG NO MTLV-P19	REV 1
MATERIAL PLA PLASTIC				SCALE 1:1		SHEET 1 OF 1	