

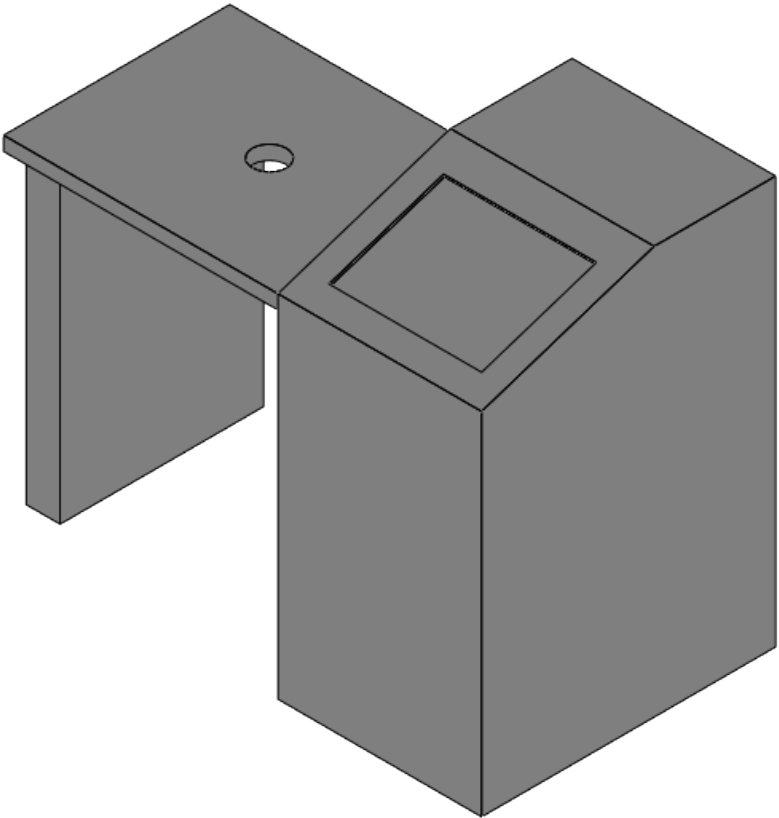
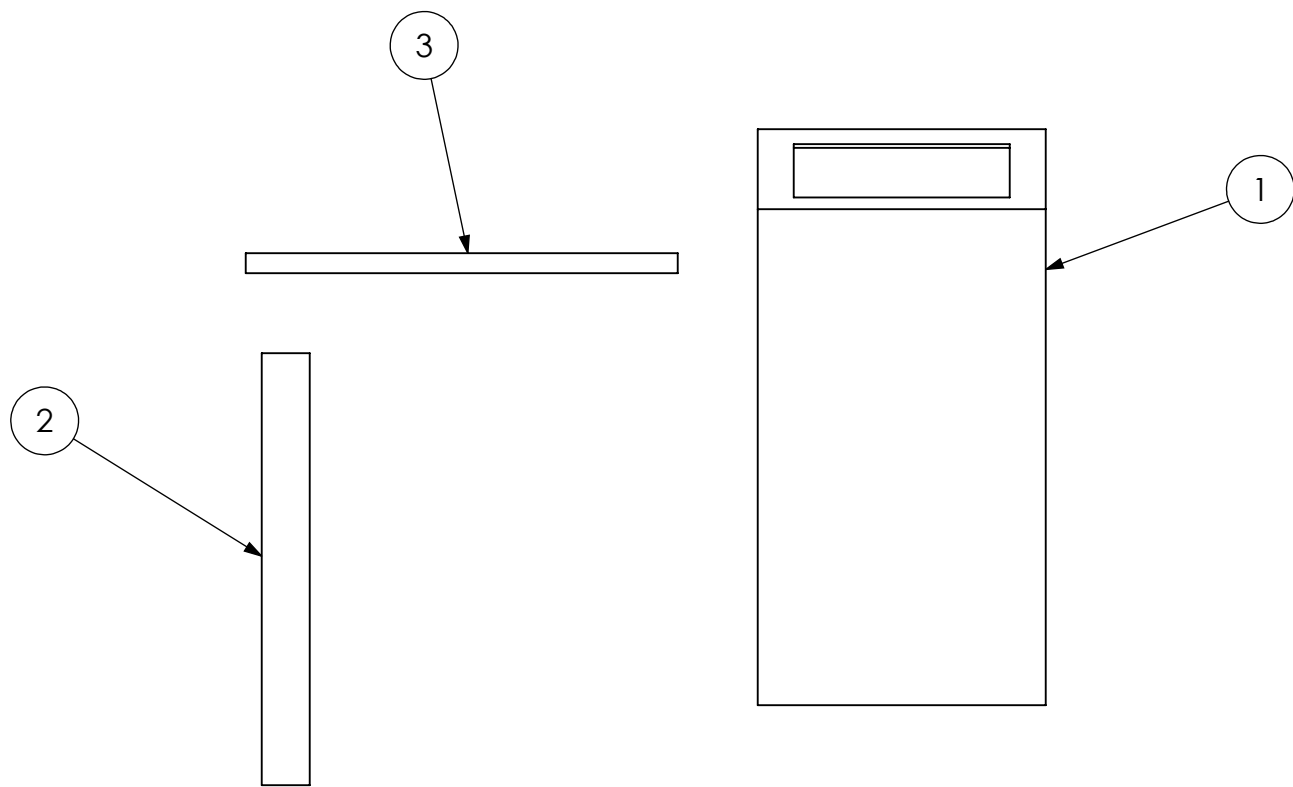


4				3				2				1			
ITEM NO.	BES No	Description	QTY.												
1	KIC Cabinet	KIC Scanner Cabinet	1												
2	KIC Leg	Leg for KIC scanner	1												
3	KIC Tabletop	Tabletop of KIC scanner	1												

A 3D perspective rendering of a dark gray scanner assembly. It consists of a rectangular cabinet with a circular cutout on its top surface, and a separate rectangular tabletop that fits onto the cabinet. The assembly is shown from a three-quarter view, highlighting its solid, industrial design.


B

B

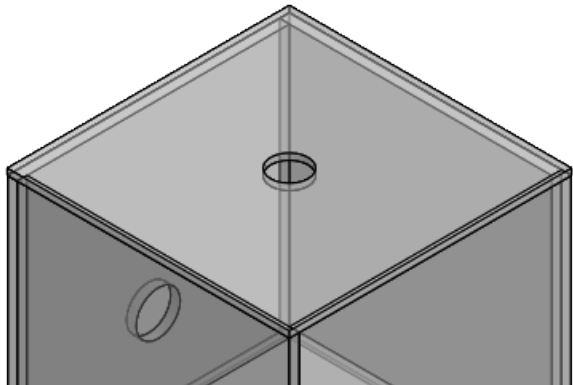


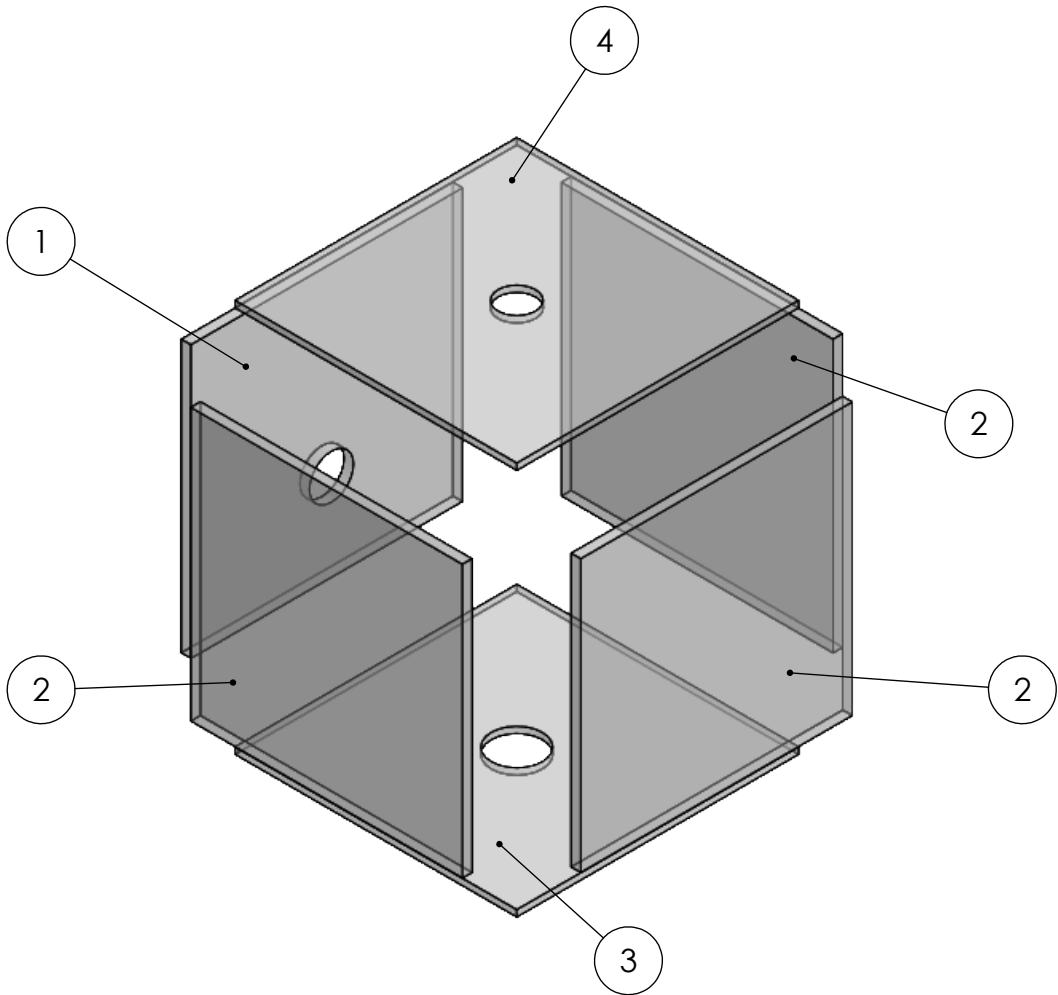
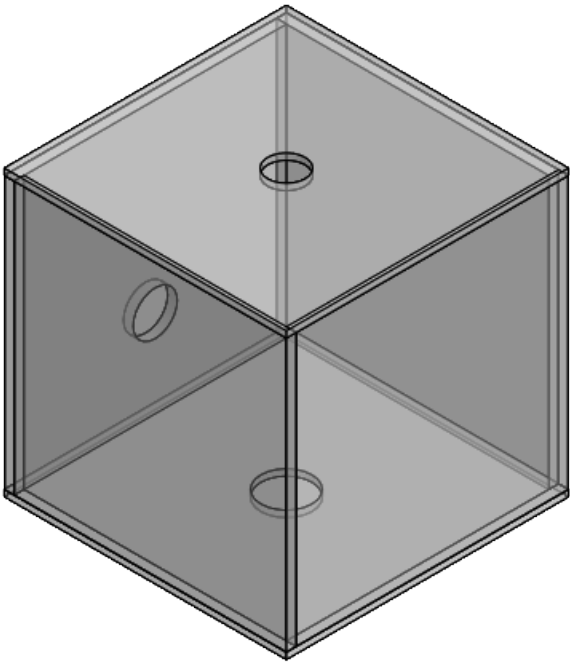
A

A

	Size: <b>B</b>	Owner: Robert Girdner	BES No: KIC Scanner
	Scale: 1:12	Description: Display Cabinet with Screen	Manufacturer No:
	Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:44:51 PM	

4				3				2				1			
ITEM NO.		BES No		Description				QTY.							
1		A-10x10-H		10in x 10in x 3/8in thick acrylic sheet with 1-5/8in hole				1							
2		A-10x10		10in x 10in x 3/8in thick acrylic sheet				3							
3		A-10.375x10.375in-1.875inH		10.375in x 10.375in x 1/4in thick acrylic sheet				1							
4		A-10.375X10.375-1.375inH		10.375in x 10.375in x 1/4in thick acrylic sheet				1							





Size:	Owner:	BES No:
Scale:	Description:	Manufacturer No:
Ver:	Date:	

**Z start:**

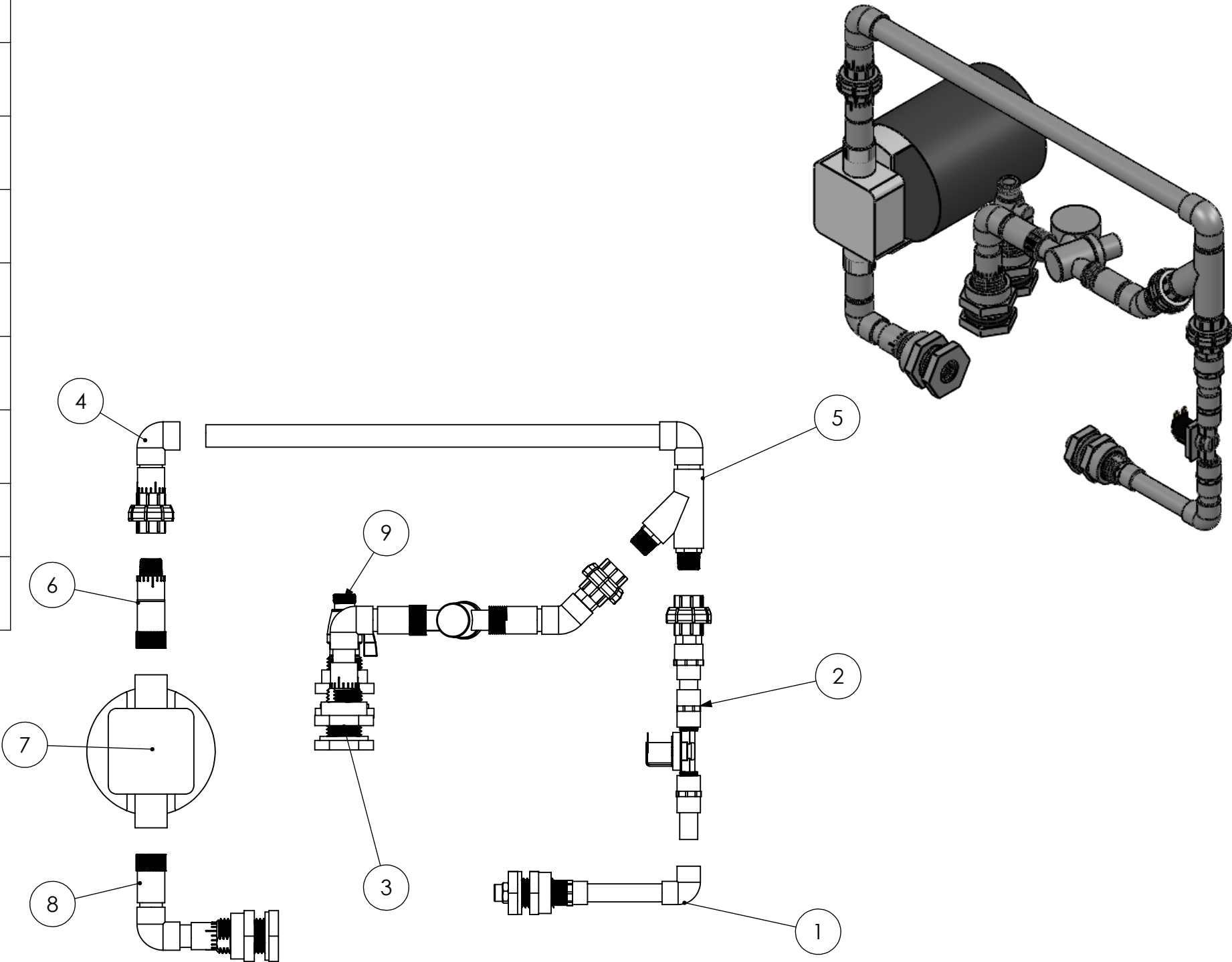
Robert Girdner


Acrylic Chamber

Acrylic Spray Chamber

Wednesday, March 6, 2019 7:50:01 PM

4				3				2				1			
ITEM NO.				BES No				Description				QTY.			
1				Routing Subassembly 1				Nozzle, Bulkhead, & 90Deg Threaded				1			
2				Routing Subassembly 2				Solenoid Valve & 3/4in to 1/2in reducer				1			
3				Routing Subassembly 3				Pressure regulator and return line to chamber				1			
4				Routing Subassembly 5				3/4in pipe with union fitting				1			
5				Routing Subassembly 4				Long pipe with wye connector				1			
6				Routing Subassembly 7				3/4in MNPT to 3/4in FGHT				1			
7				Pump				Pump (330GPH)				1			
8				Routing Subassembly 6				3/4in FNPT union to 3/4in FGHT				1			
9				Routing Subassembly 8				Bulkhead to ball valve fitting				1			



	Size: <b>B</b>	Owner: Robert Girdner	BES No: Routing Assembly
	Scale: 1:6	Description: Piping, pump, pressure regulator, and valve	Manufacturer No:
	Ver: <b>2</b>	Date: Wednesday, March 6, 2019 7:13:23 PM	

4

3

2

1

ITEM NO.	BES No	Manufacturer No	Description	QTY.
1	R-1,2FNPTx1,2FNPT-BH	McMaster 36895K161	Through-Wall Fitting	1
2	N-1,2MNPT	McMaster 32885K771	Spray Nozzle	1
3	R-1,2FSx1,2MNPT	McMaster 4880K61	Female x Male Adapter	1
4	R-1,2MSx1,2MS-5inP		Unthreaded Pipe	1
5	R-1,2FSx1,2FS-90DEG	McMaster 4880K21	Unthreaded 90° Elbow	1

5

4

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2

Size: **B**

Scale: 1:2

Ver: **2**

Owner: Robert Girdner

Description: Nozzle, Bulkhead, & 90Deg Threaded

Date: Wednesday, March 6, 2019 7:15:22 PM

BES No: Routing Subassembly 1

Manufacturer No:

4

3

2

1

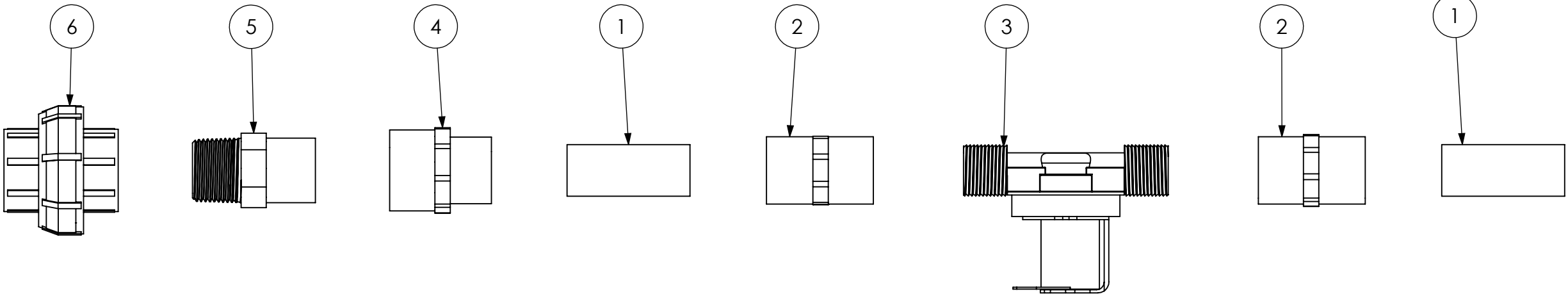
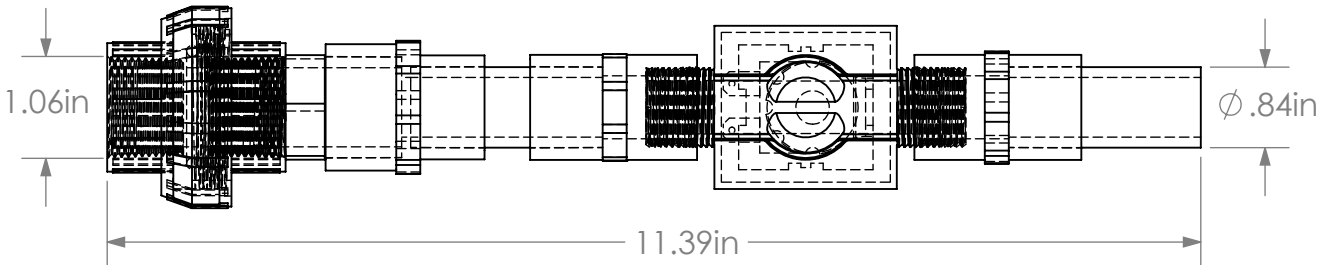
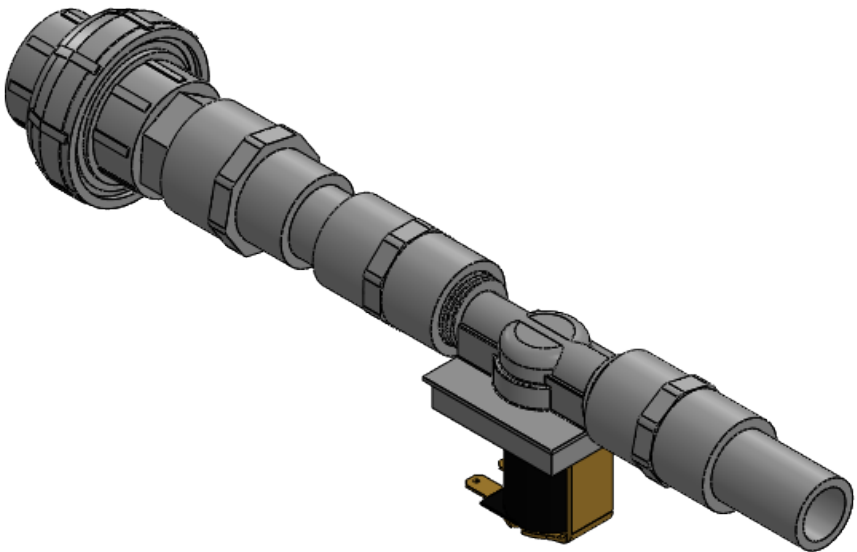
SOLIDWORKS Educational Product. For Instructional Use Only.

3

2

1

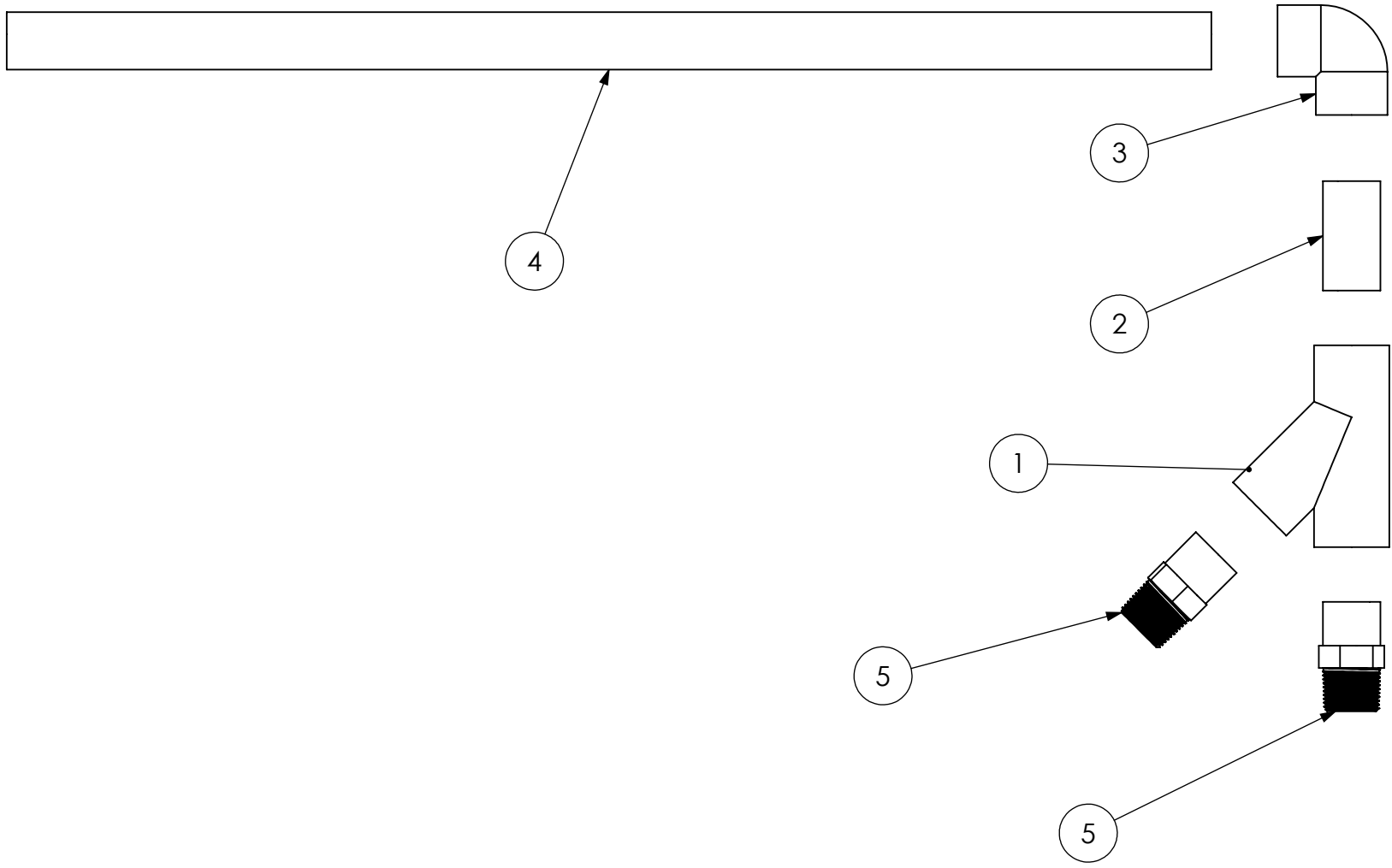
4		3			2		1
ITEM NO.	BES No	Manufacturer No	Description	QTY.			
1	R-1,2MSx1,2MS-2inP		Unthreaded Pipe	2			
2	R-1,2FSx1,2FNPT	McMaster 4880K81	Female Adapter	2			
3	V-1,2MNPTx1,2MNPT		Solenoid Valve	1			
4	R-3,4FSx1,2FS	McMaster 4880K681	Unthreaded Reducing Coupling	1			
5	R-3,4MSx3,4MNPT	McMaster 4880K652	Male x Threaded Male Adapter	1			
6	R-3,4FNPTx3,4FNPT-U	McMaster 4880K372	NPT Threaded Union	1			




Size: <b>B</b>	Owner: Robert Girdner	BES No: Routing Subassembly 2
Scale: 1:2	Description: Solenoid Valve & 3/4in to 1/2in reducer	Manufacturer No:
Ver: <b>2</b>	Date: Wednesday, March 6, 2019 7:16:38 PM	

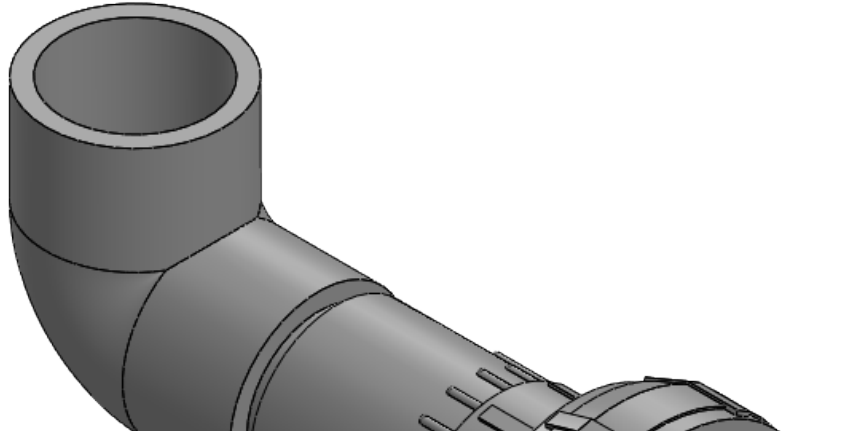


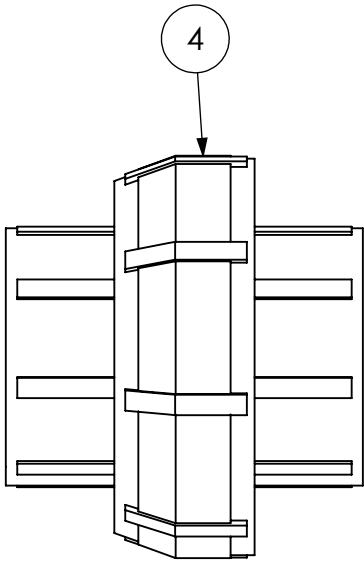
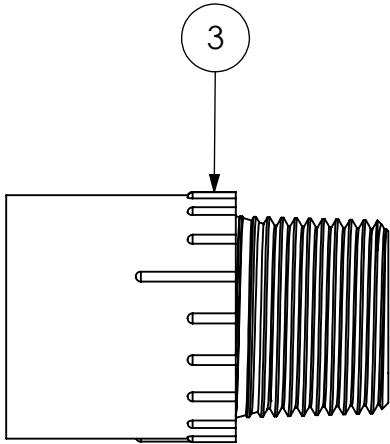
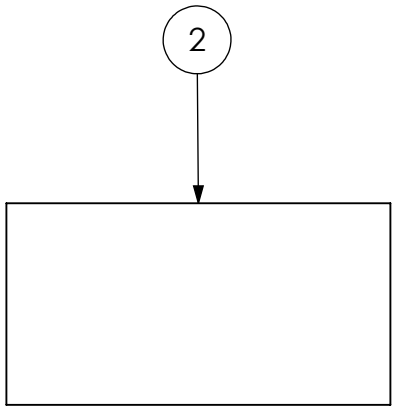
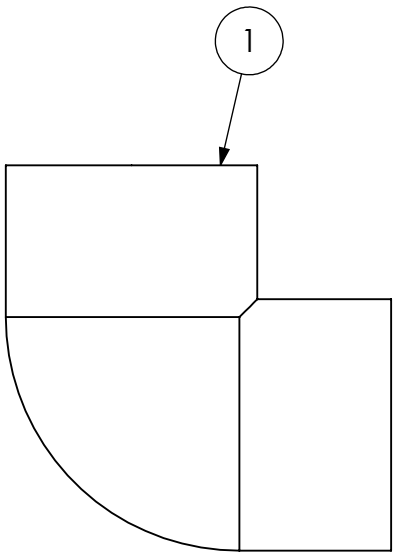
4		3		2	1
ITEM NO.	BES No	Manufacturer No	Desc2	QTY.	
1	R-3,4FS-WYE	McMaster 4880K637	Unthreaded Wye	1	
2	R-3,4MSx3,4MS-2inP		Unthreaded Pipe	1	
3	R-3,4FSx3,4FS-90DEG	McMaster 4880K22	Unthreaded 90° Elbow	1	
4	R-3,4MSx3,4MS-22inP		Unthreaded Pipe	1	
5	R-3,4MSx3,4MNPT	McMaster 4880K652	Male x Threaded Male Adapter	2	



	Size: <b>B</b>	Owner: Robert Girdner	BES No: Routing Subassembly 4
	Scale: 1:3	Description: Long pipe with wye connector	Manufacturer No:
	Ver: <b>2</b>	Date: Wednesday, March 6, 2019 7:19:50 PM	



4		3		2	1
ITEM NO.	BES No	Manufacturer No	Description	QTY.	
1	R-3,4FSx3,4FS-90DEG	McMaster 4880K22	Unthreaded 90° Elbow	1	
2	R-3,4MSx3,4MS-2inP		Unthreaded Pipe	1	
3	R-3,4FSx3,4MNPT	McMaster 4738T82	Threaded x Socket End Adapter	1	
4	R-3,4FNPTx3,4FNPT-U	McMaster 4880K372	NPT Threaded Union	1	



Size: <b>B</b>	Owner: Robert Girdner	BES No: Routing Subassembly 5
Scale: 1:1	Description: 3/4in pipe with union fitting	Manufacturer No:
Ver: <b>2</b>	Date: Wednesday, March 6, 2019 7:20:48 PM	

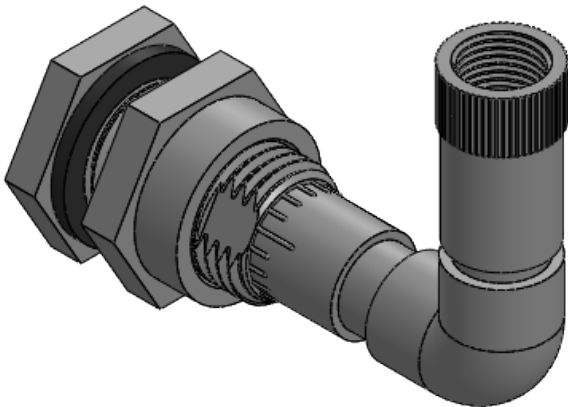
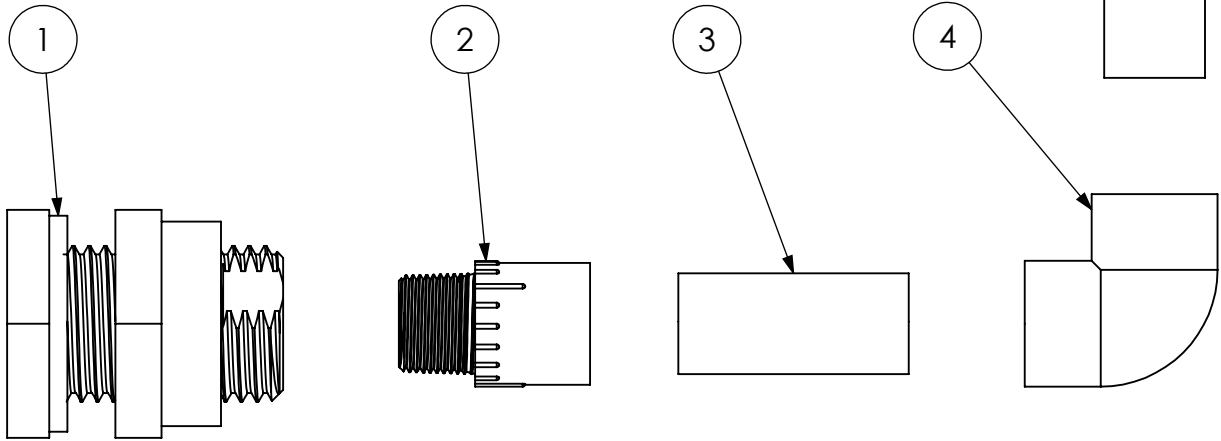
B

A

B

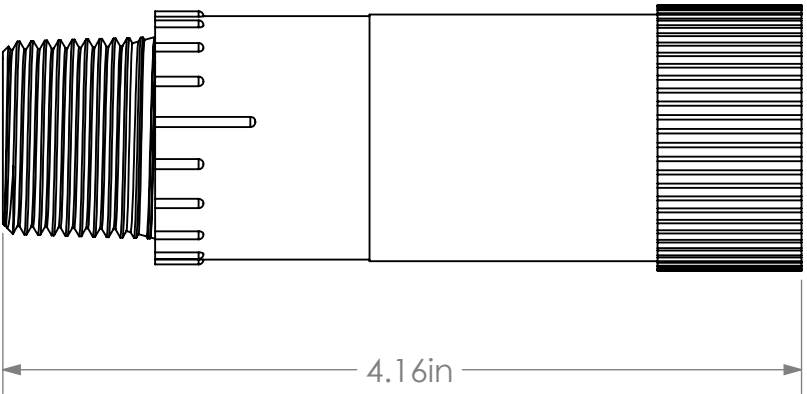
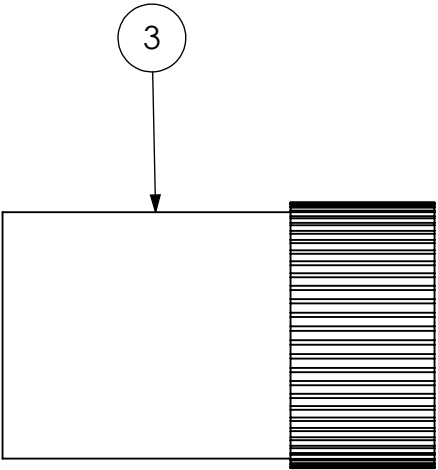
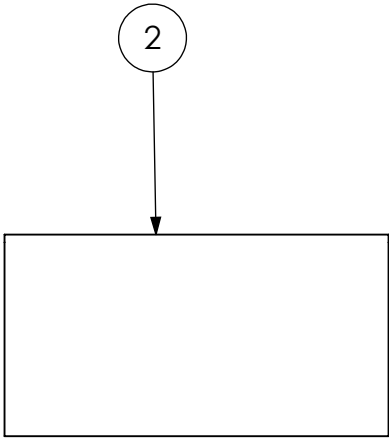
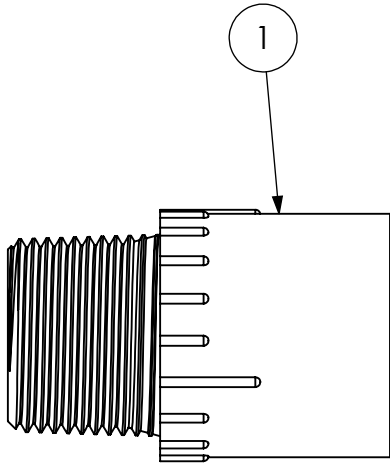
A

4		3			2		1
ITEM NO.	BES No	Manufacturer No	Description	QTY.			
1	R-3,4FNPTx3,4FNPT-BH	McMaster 36895K162	Through-Wall Fitting	1			
2	R-3,4FSx3,4MNPT	McMaster 4738T82	Threaded x Socket End Adapter	1			
3	R-3,4MSx3,4MS-2.4inP		Unthreaded Pipe	1			
4	R-3,4FSx3,4FS-90DEG	McMaster 4880K22	Unthreaded 90° Elbow	1			
5	R-3,4MSx3,4MS-2inP		Unthreaded Pipe	1			
6	R-3,4FSx3,4FGHT	55360	Female GHT Threaded Slip Fitting	1			



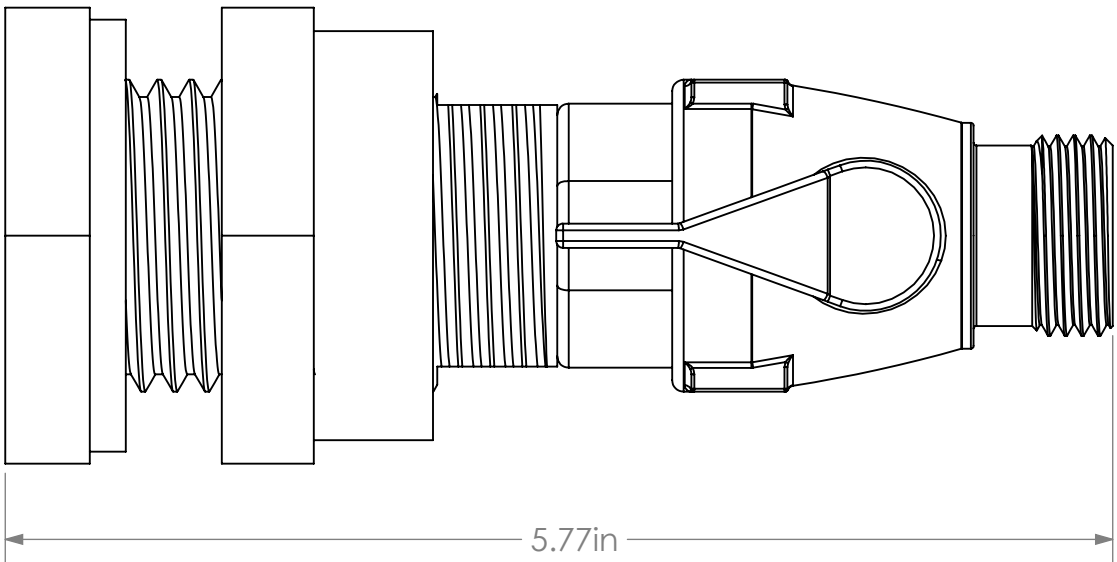
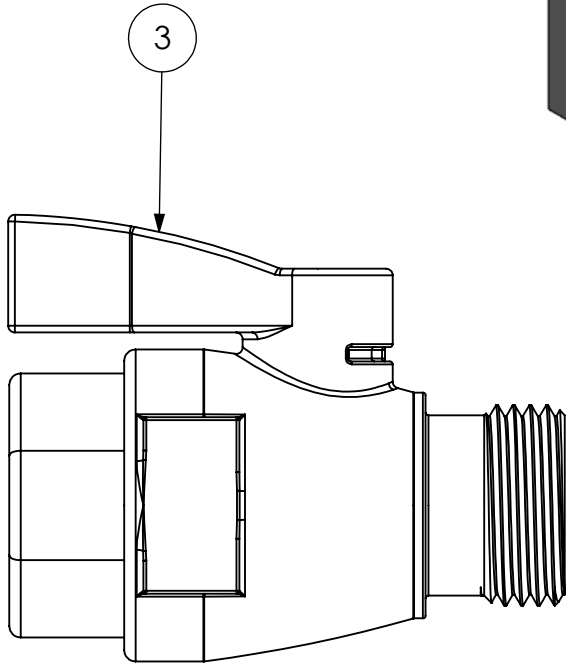
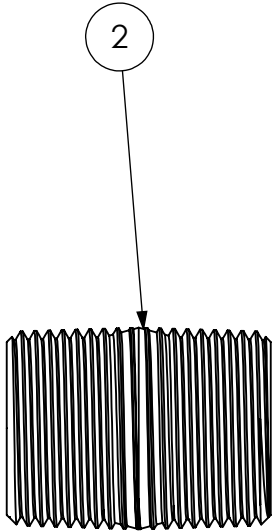
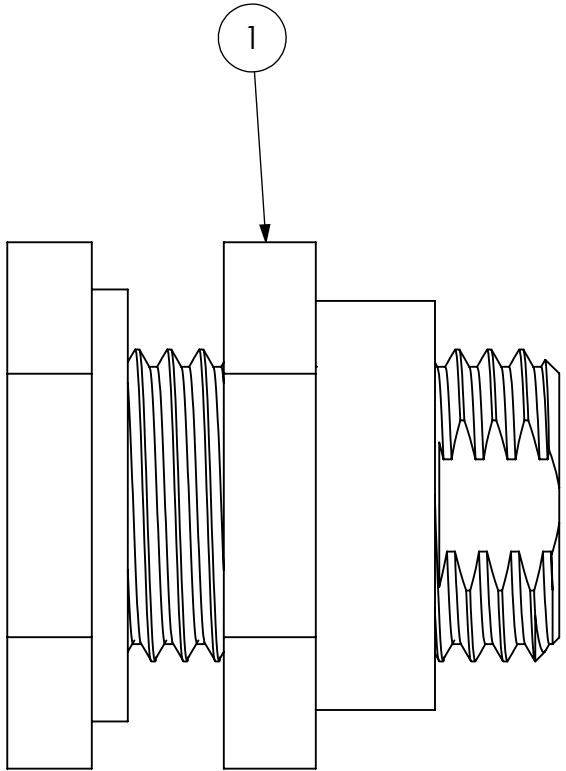
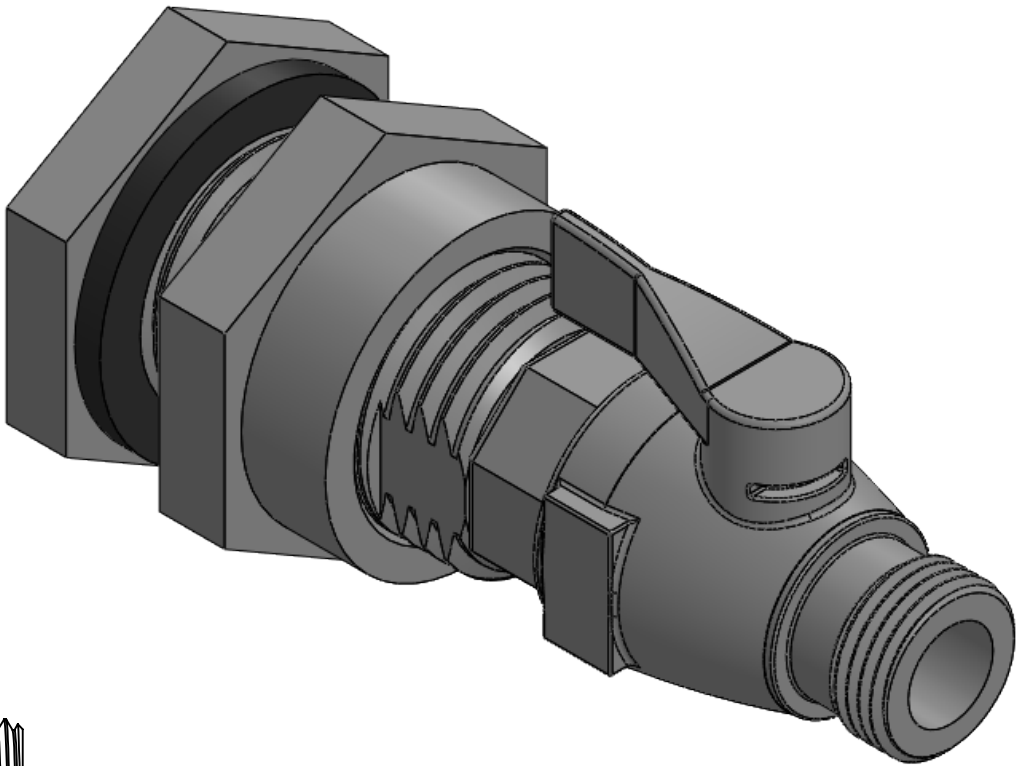
Size: <b>B</b>	Owner: Robert Girdner	BES No: Routing Subassembly 6
Scale: 1:2	Description: 3/4in FNPT union to 3/4in FGHT	Manufacturer No:
Ver: <b>2</b>	Date: Wednesday, March 6, 2019 7:21:57 PM	

4		3		2	1
ITEM NO.	BES No	Manufacturer No	Desc2	QTY.	
1	R-3,4FSx3,4MNPT	McMaster 4738T82	Threaded x Socket End Adapter	1	
2	R-3,4MSx3,4MS-2inP		Unthreaded Pipe	1	
3	R-3,4FSx3,4FGHT	55360	Female GHT Threaded Slip Fitting	1	

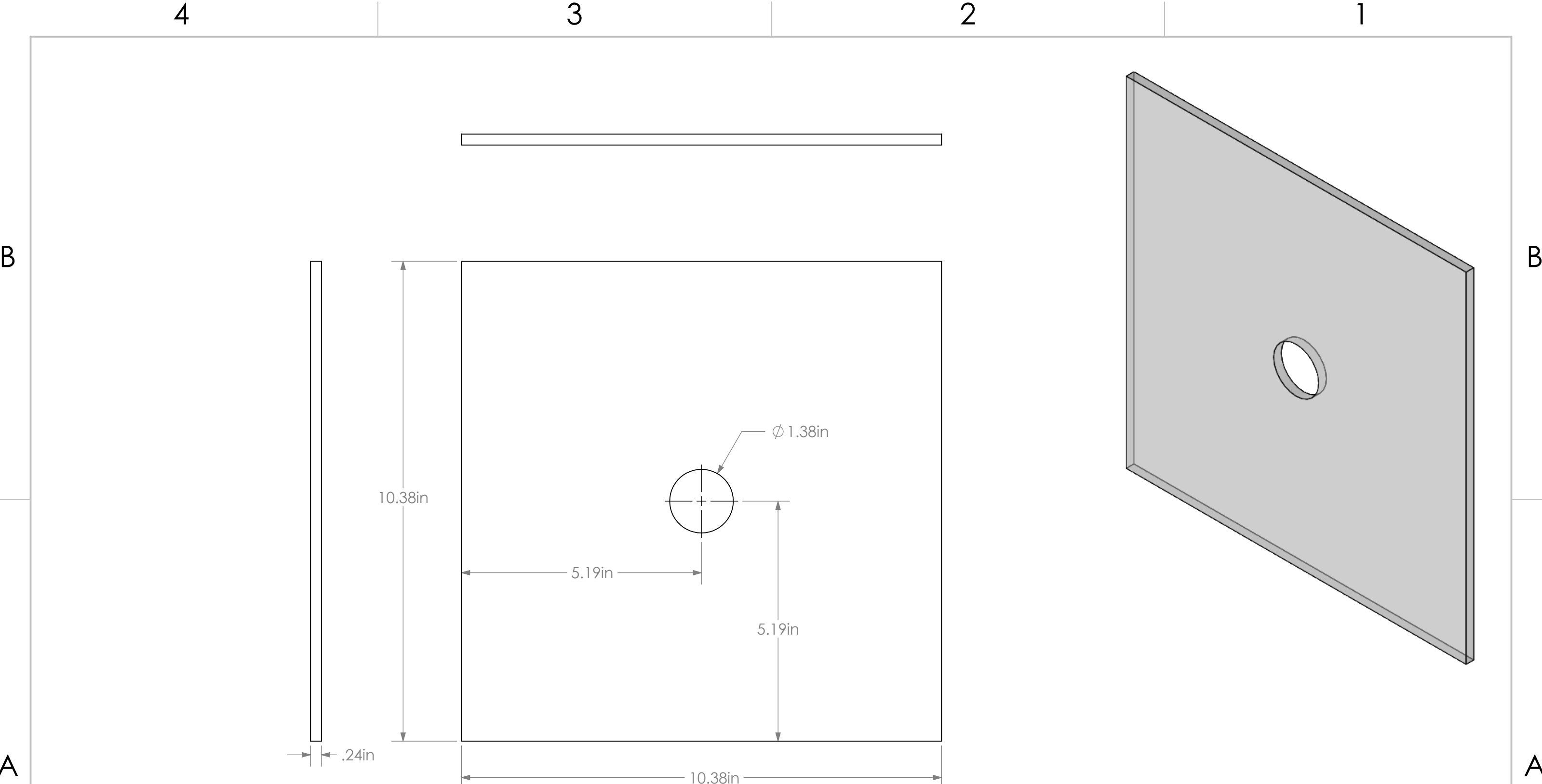


Size: <b>B</b>	Owner: Robert Girdner	BES No: Routing Subassembly 7
Scale: 1:1	Description: 3/4in MNPT to 3/4in FGHT	Manufacturer No:
Ver: <b>2</b>	Date: Wednesday, March 6, 2019 7:07:17 PM	

ITEM NO.	BES No	Manufacturer No	Description	QTY.
1	R-3,4FNPTx3,4FNPT-BH	McMaster 36895K162	Through-Wall Fitting	1
2	R-3,4MNPTx3,4MNPT	McMaster 4882K14	PVC Threaded Pipe Nipple	1
3	R-3,4FNPTx3,4MGHT-BV	McMaster 9848K24	Garden Hose Threads	1

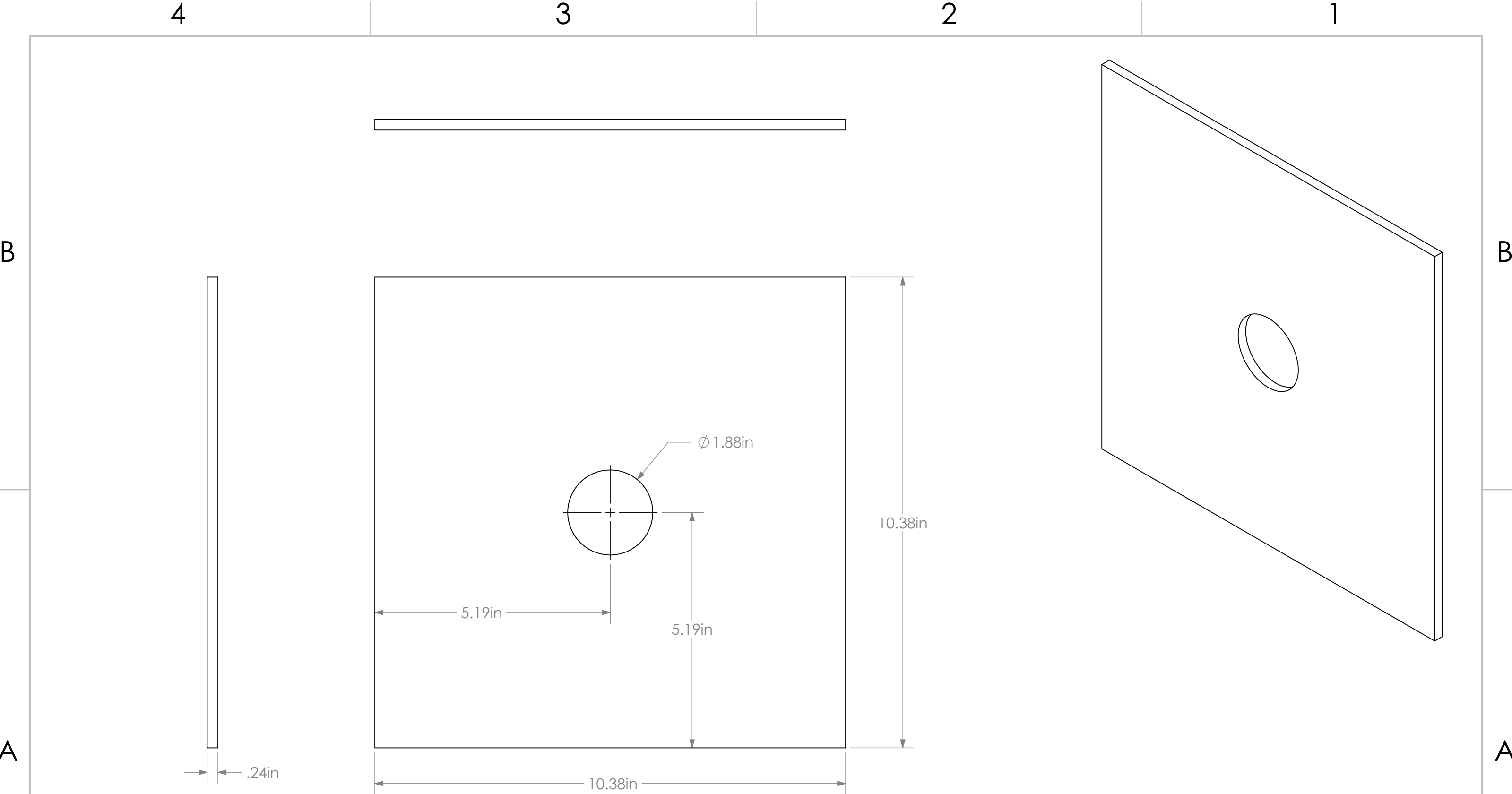


Size: <b>B</b>	Owner: Robert Girdner	BES No: Routing Subassembly 8
Scale: 1:1	Description: Bulkhead to ball valve fitting	Manufacturer No:
Ver: <b>2</b>	Date: Wednesday, March 6, 2019 7:11:00 PM	



Size:	Owner:	BES No:
Scale:	Description:	Manufacturer No:
Ver:	Date:	

**Z start:** Cooper Girdner  
10.375in x 10.375in x 1/4in thick acrylic  
Sheet  
Wednesday, March 6, 2019 5:08:24 PM



Size: <b>B</b>	Owner: Robert Girdner	BES No: A-10.375x10.375in-1.875inH
Scale: 1:2	Description: 10.375in x 10.375in x 1/4in thick acrylic	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:25 PM	

4

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2

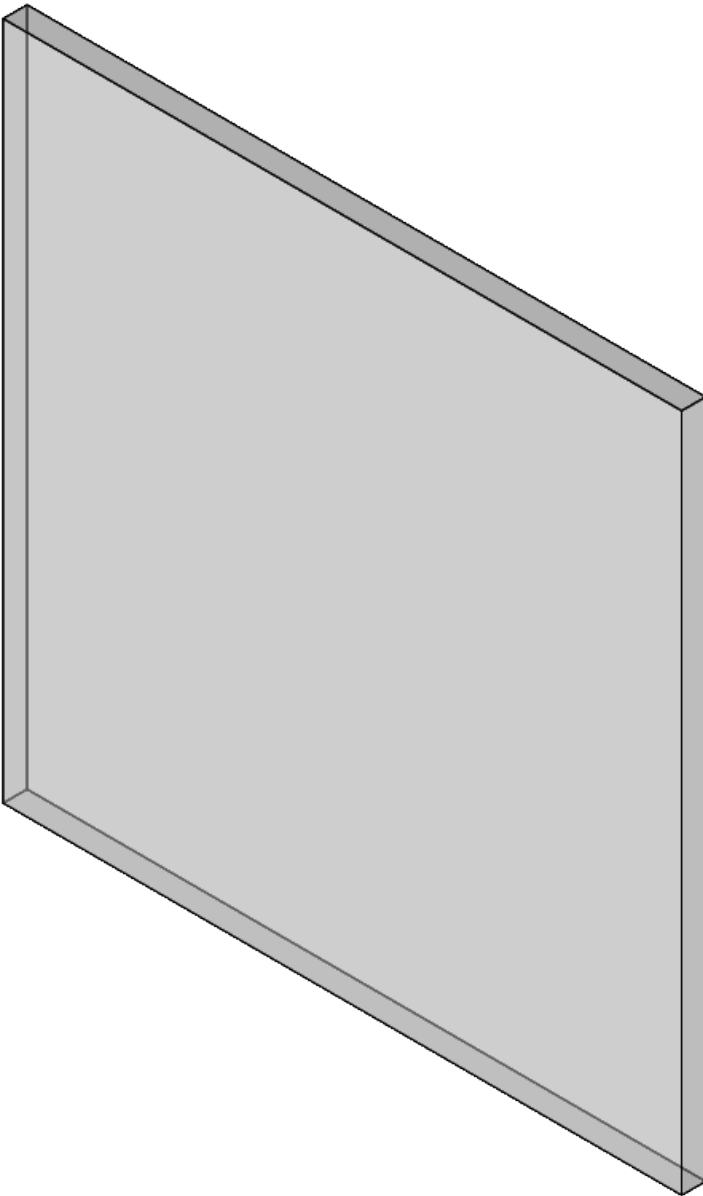
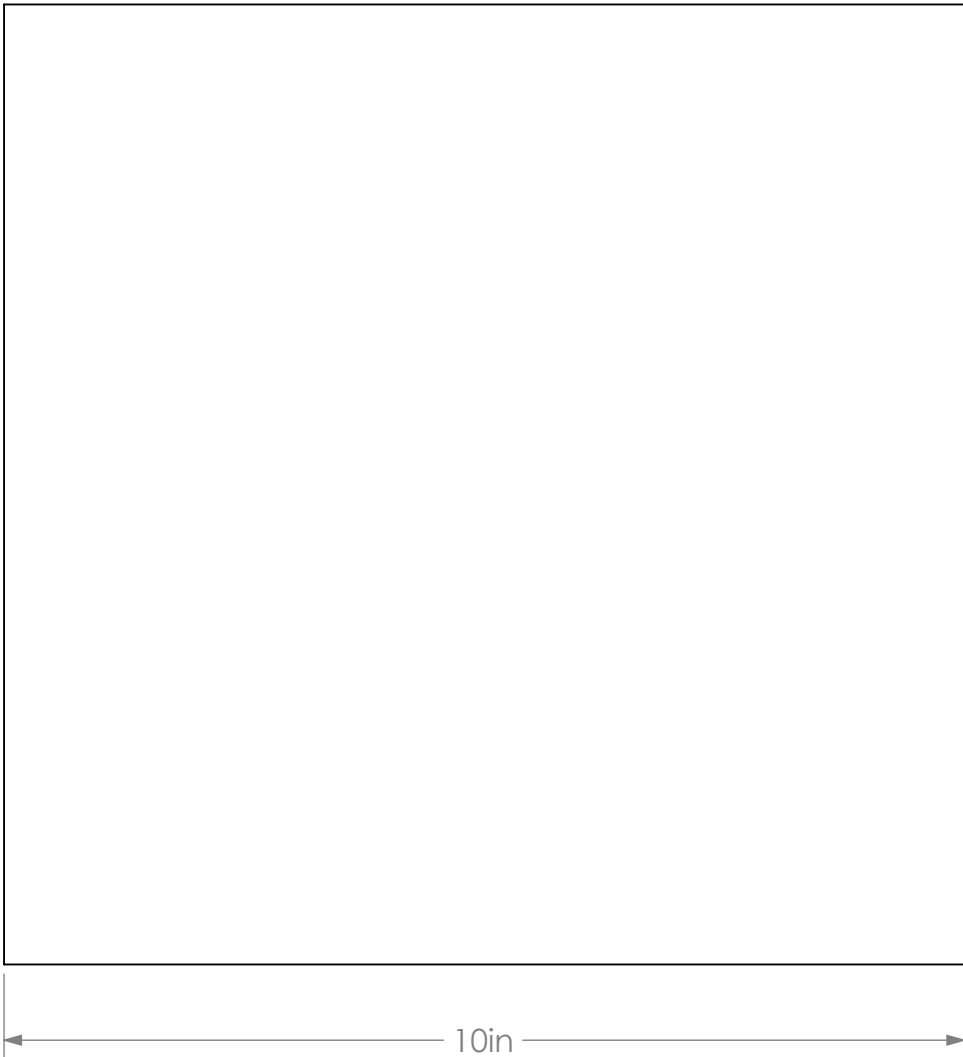
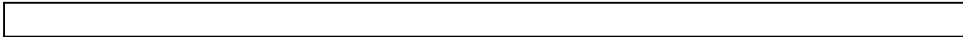
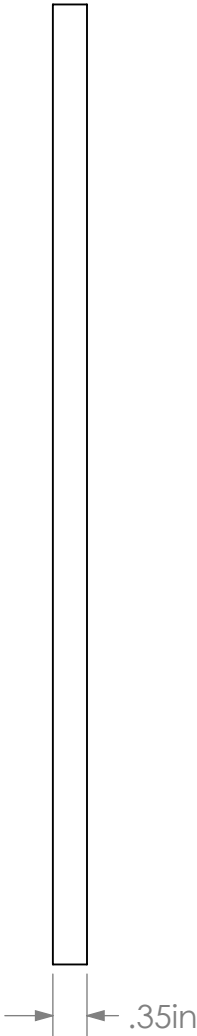
1

B

B

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A

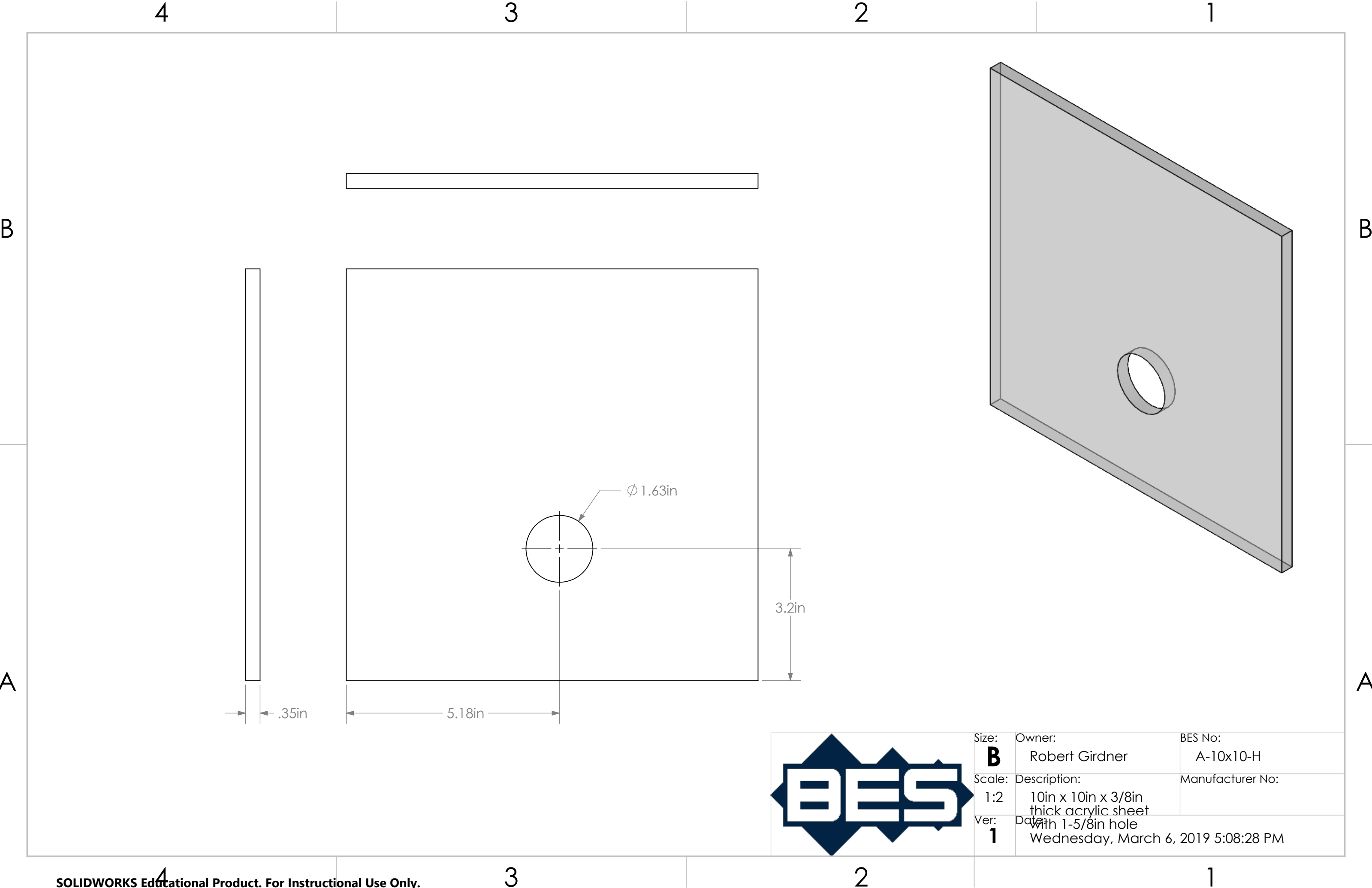


Size: <b>B</b>	Owner: Robert Girdner	BES No: A-10x10
Scale: 1:2	Description: 10in x 10in x 3/8in thick acrylic sheet	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:24 PM	

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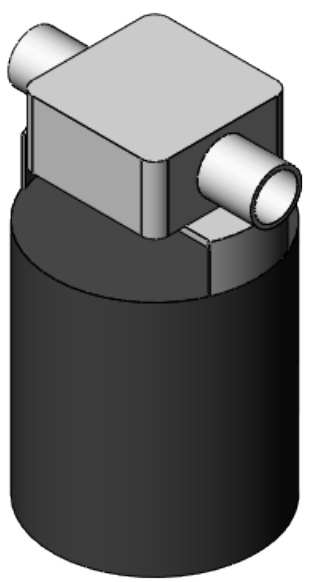




4 3 2 1

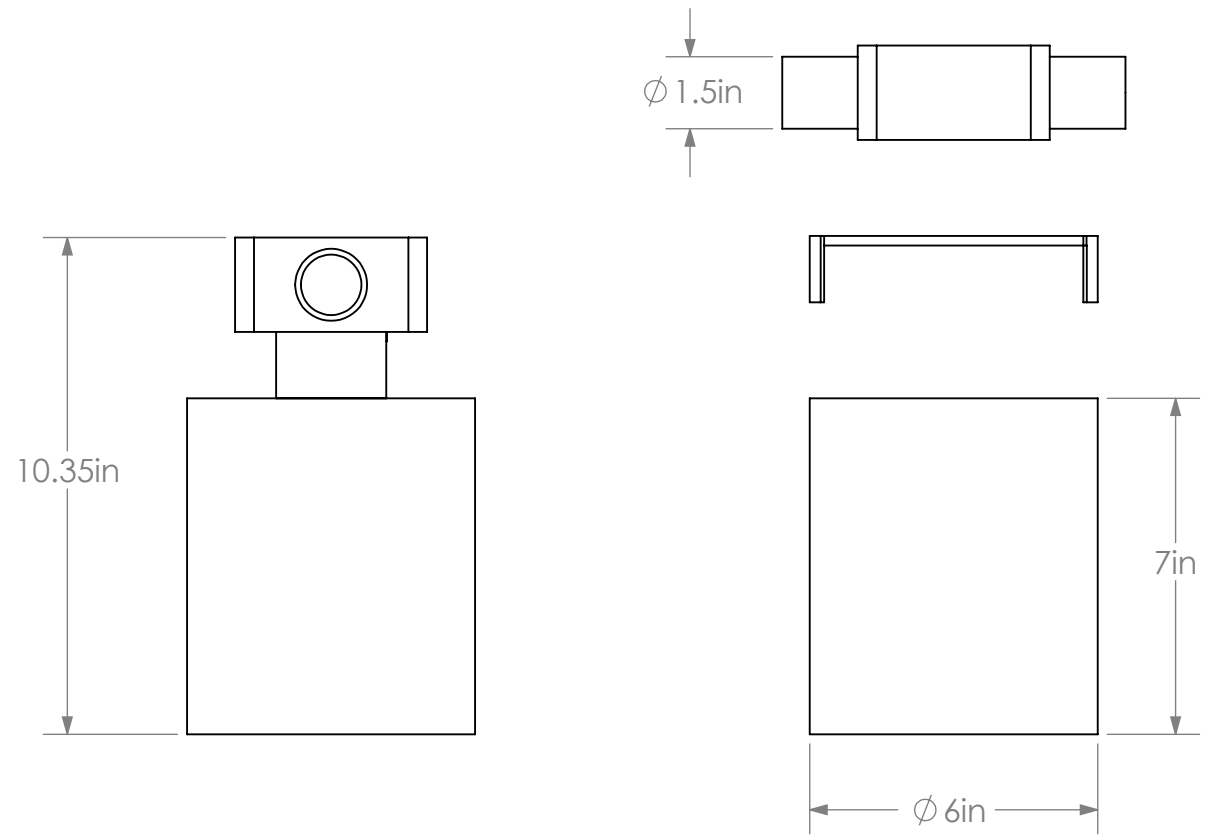
B

B



A

A



Size: <b>B</b>	Owner: Robert Girdner	BES No: Pump
Scale: 1:4	Description: Pump (330GPH)	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:45:21 PM	

4

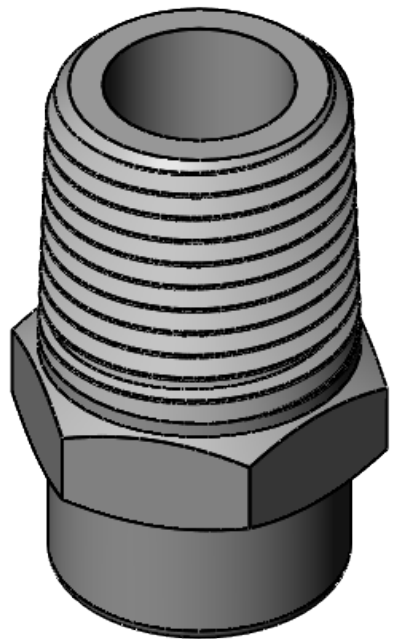
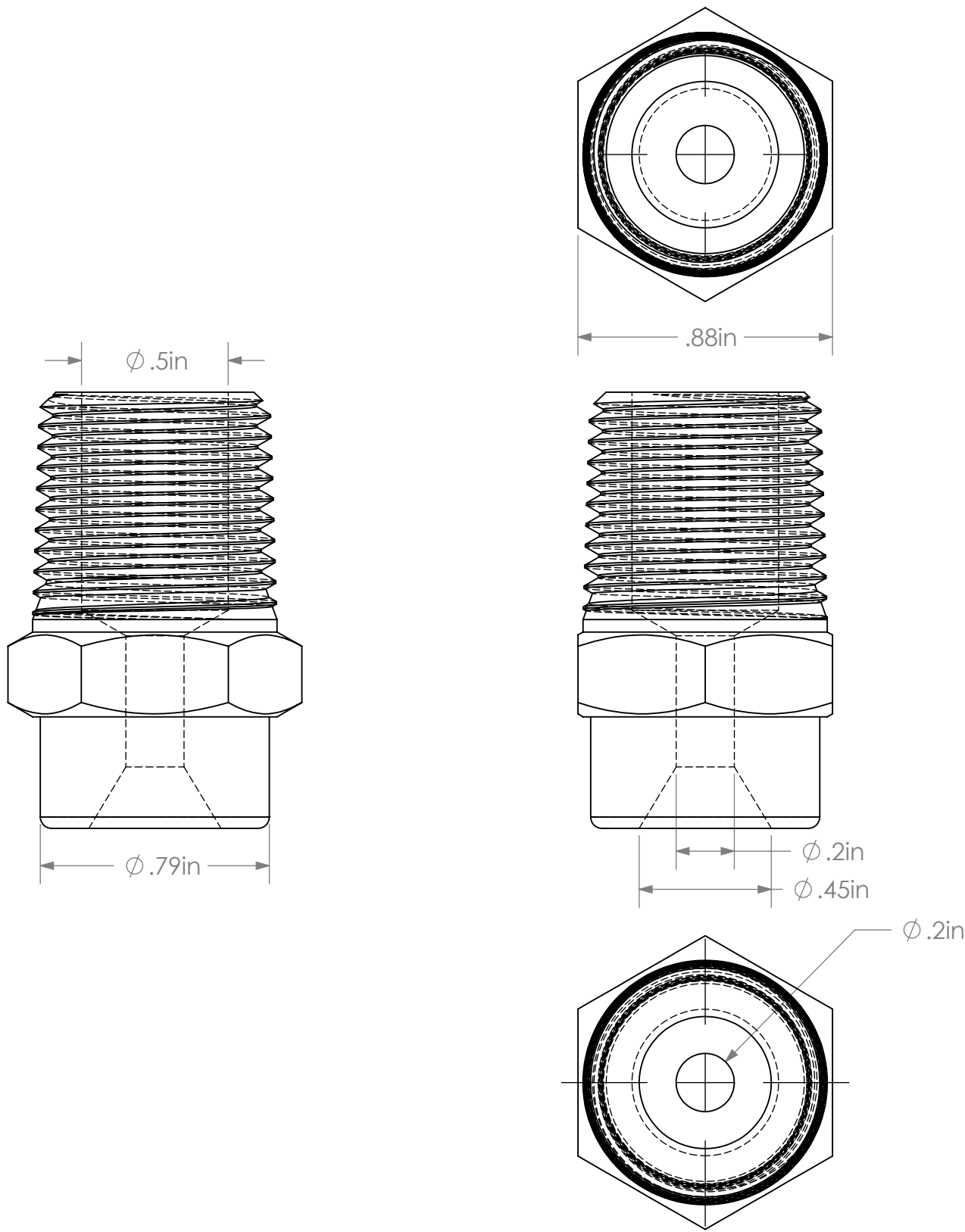
3

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B

B



A

A



Size: <b>B</b>	Owner: Robert Girdner	BES No: N-1,2MNPT
Scale: 2:1	Description: Spray Nozzle	Manufacturer No: McMaster 32885K771
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:28 PM	

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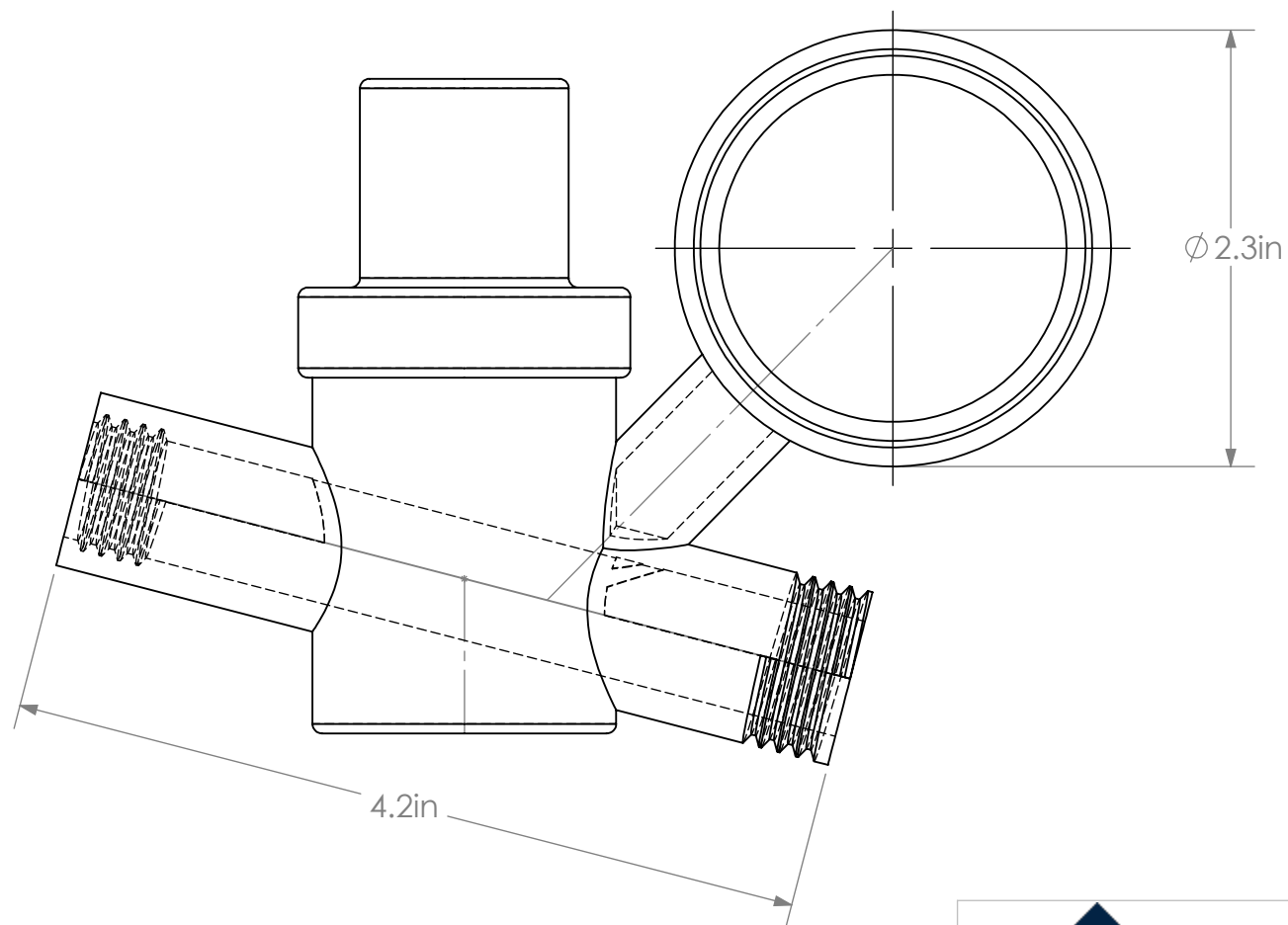
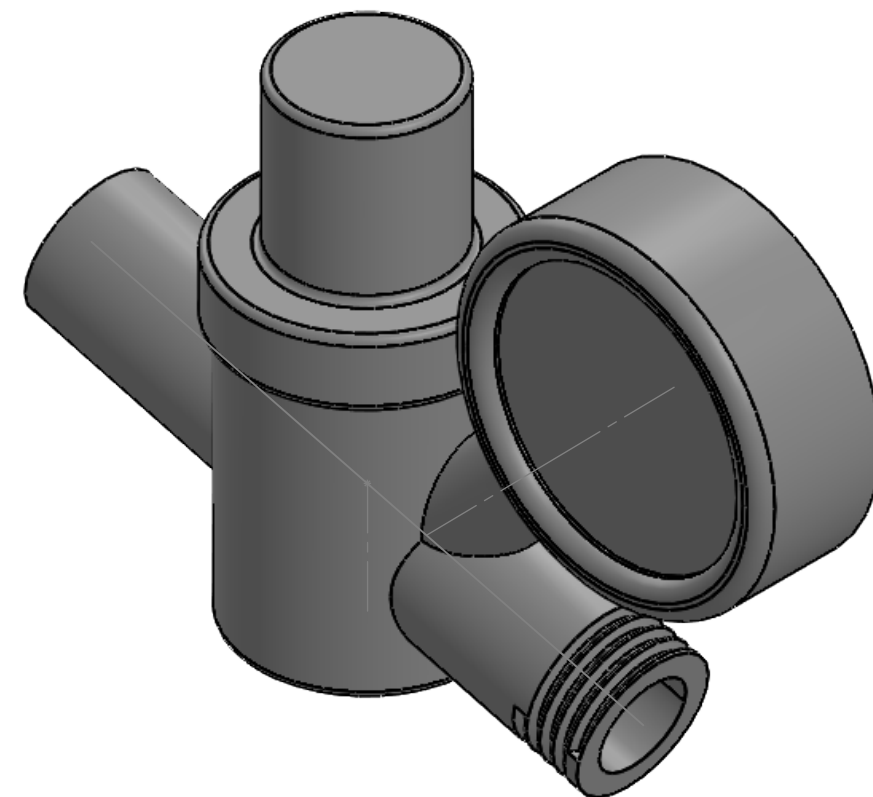
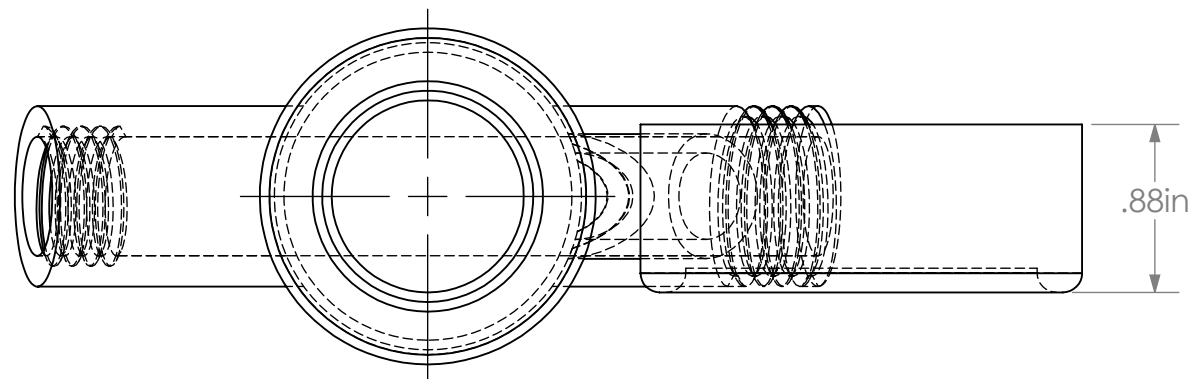
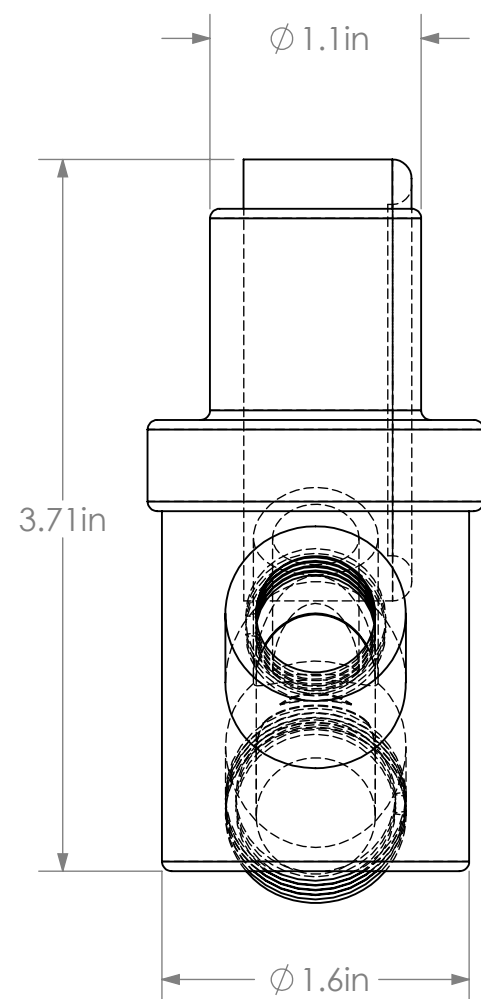
3

2

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B

B



A

A



Size: <b>B</b>	Owner: Robert Girdner	BES No: H-3,4FGHTx3,4MGHT-PR
Scale: 1:1	Description: Pressure Reglator w/ Dial Gauge	Manufacturer No: MIC-WPR-065
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:24 PM	

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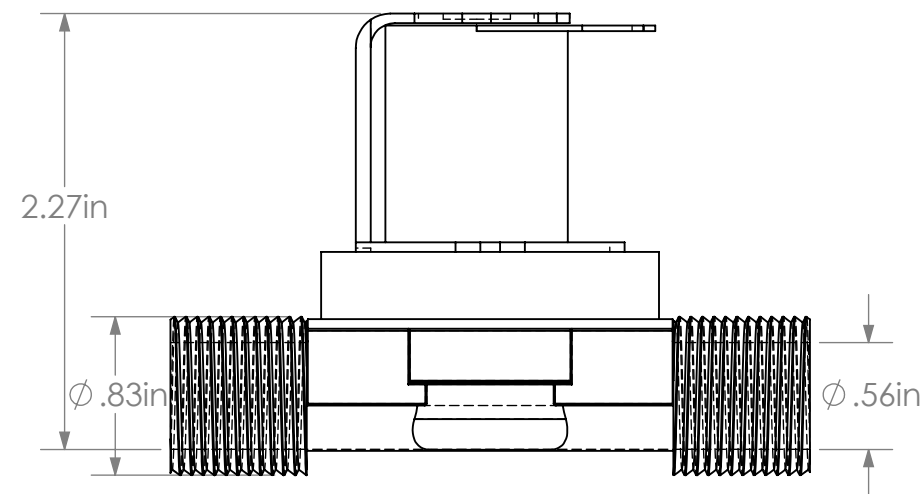
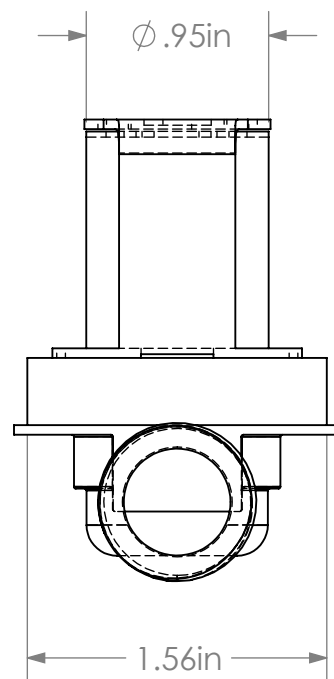
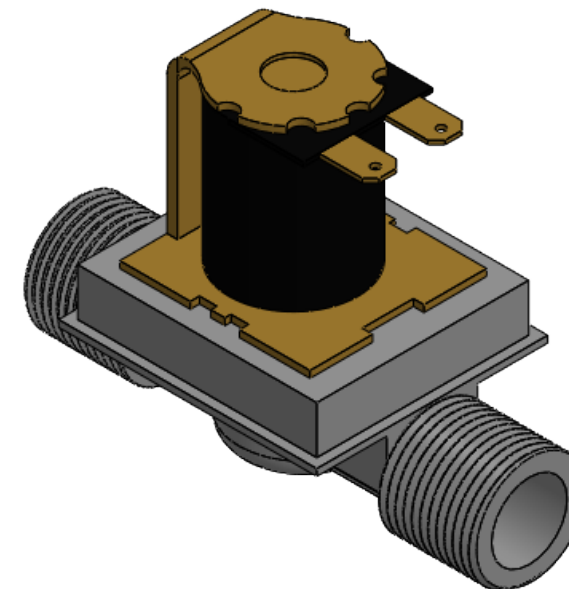
3

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B



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Size: <b>B</b>	Owner: Robert Girdner	BES No: V-1,2MNPTx1,2MNPT
Scale: 1:1	Description: Solenoid Valve	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:47:58 PM	

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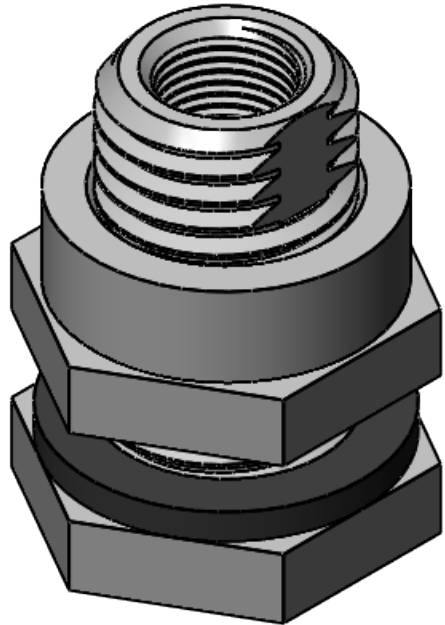
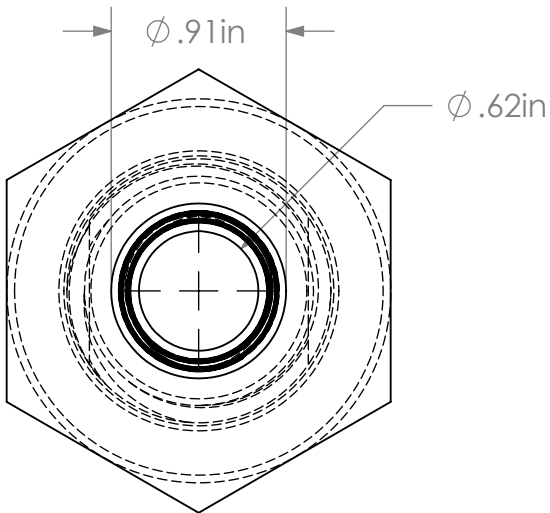
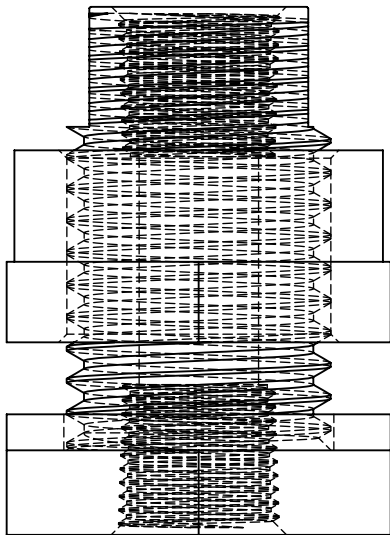
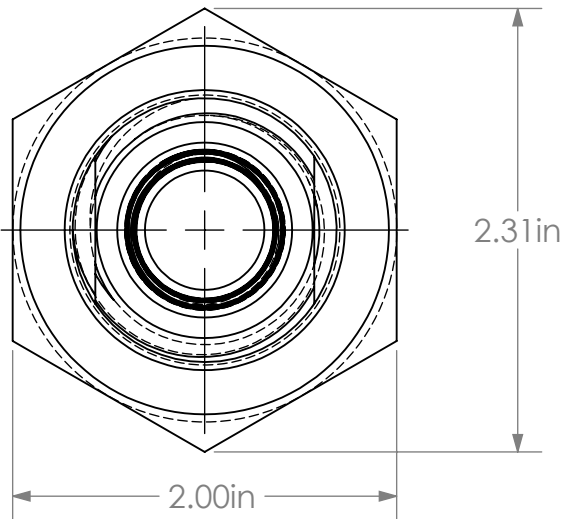
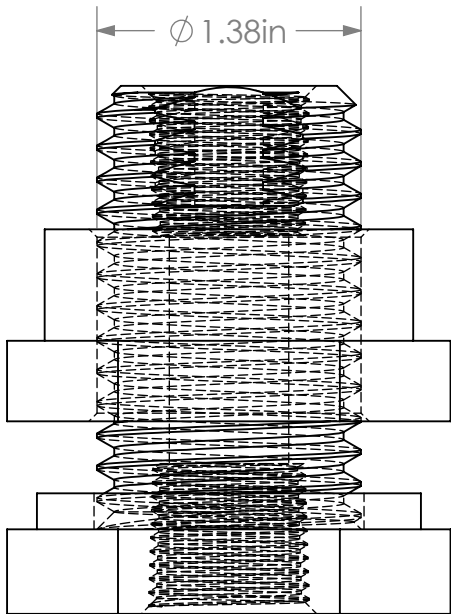
3

2

1

B

B



A

A



Size: <b>B</b>	Owner: Robert Girdner	BES No: R-1,2FNPTx1,2FNPT-BH
Scale: 1:1	Description: Through-Wall Fitting	Manufacturer No: McMaster 36895K161
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:23 PM	

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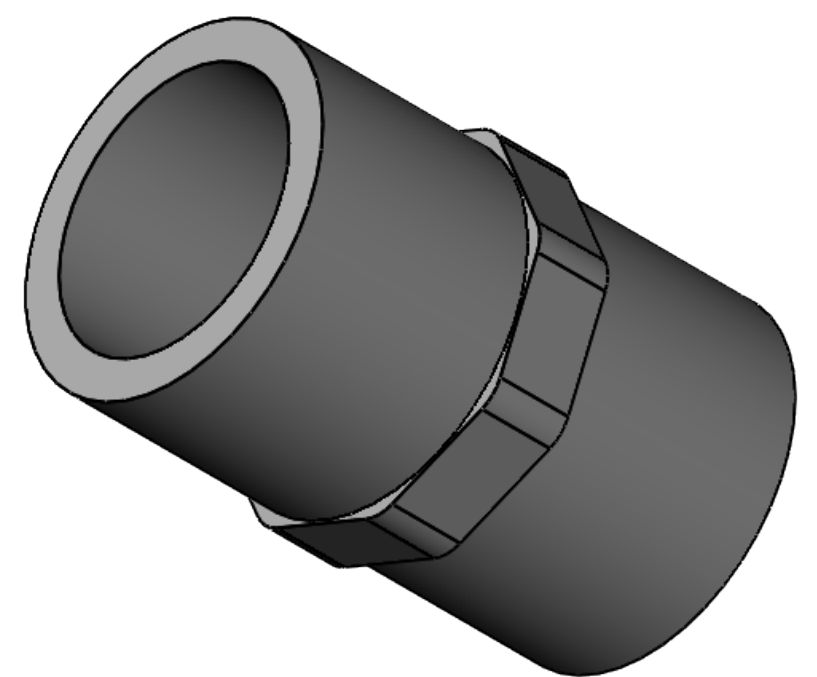
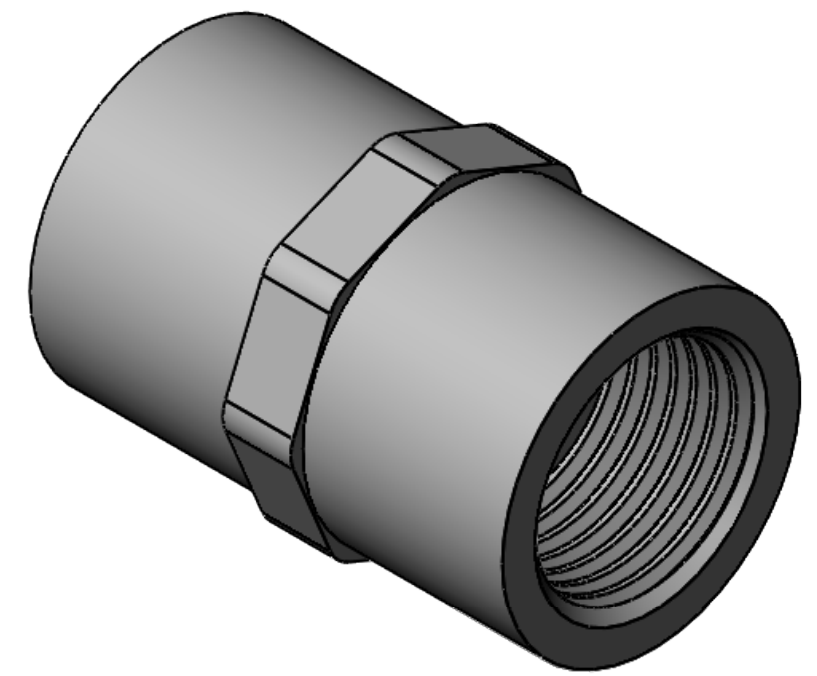
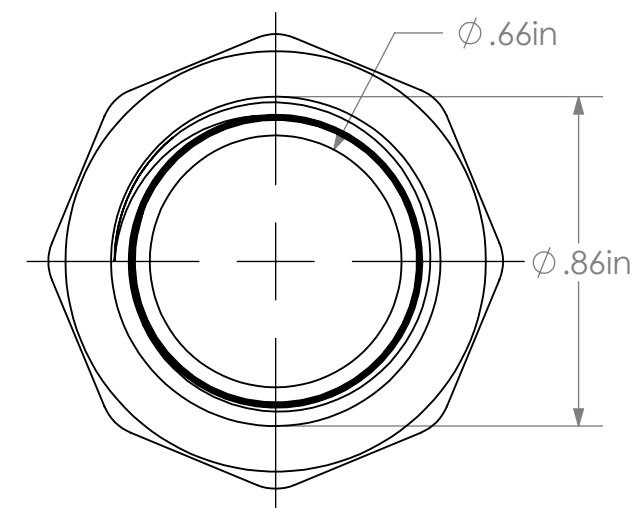
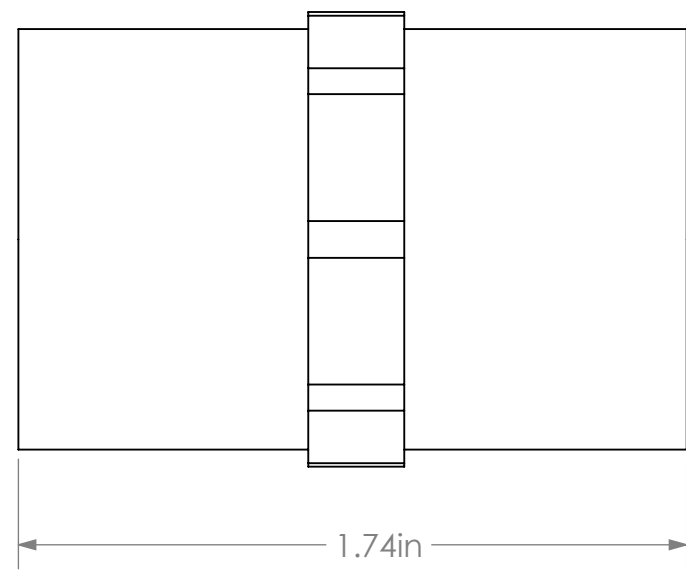
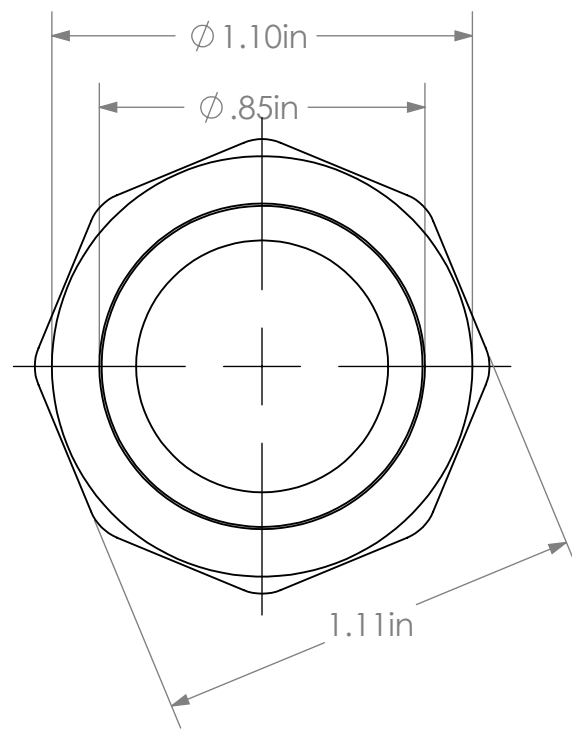
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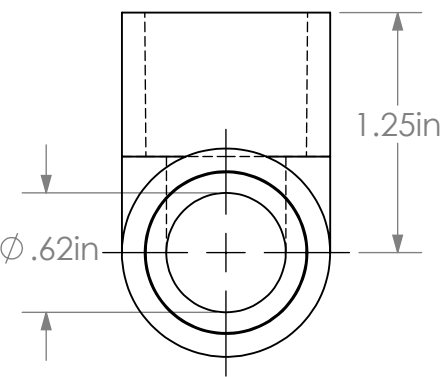
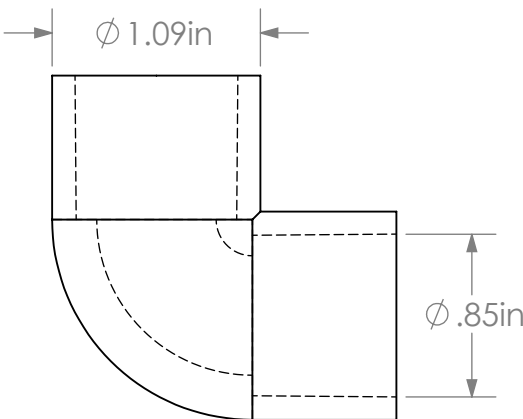
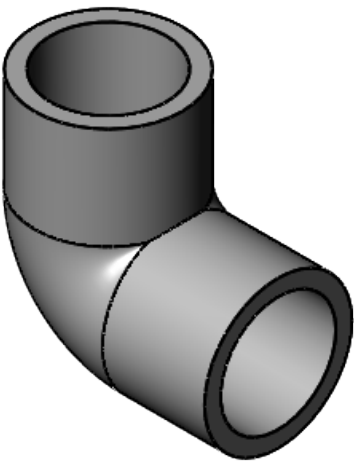


Size: <b>B</b>	Owner: Robert Girdner	BES No: R-1,2FSx1,2FNPT
Scale: 2:1	Description: Female Adapter	Manufacturer No: McMaster 4880K81
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:24 PM	

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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-1,2FSx1,2FS-90DEG
Scale: 1:1	Description: Unthreaded 90° Elbow	Manufacturer No: McMaster 4880K21
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:28 PM	



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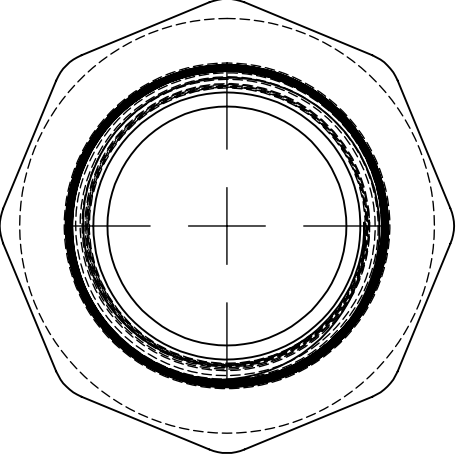
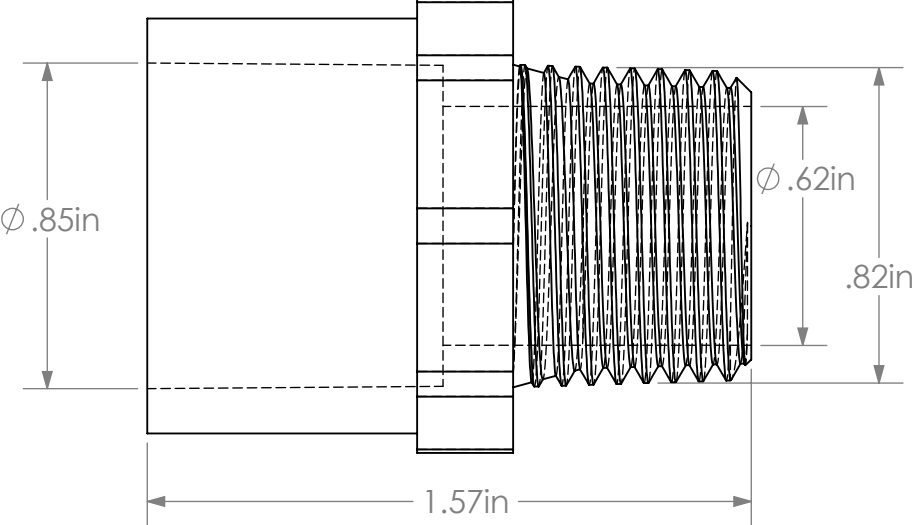
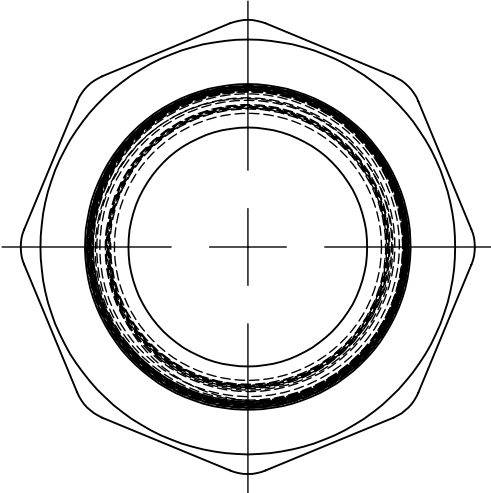
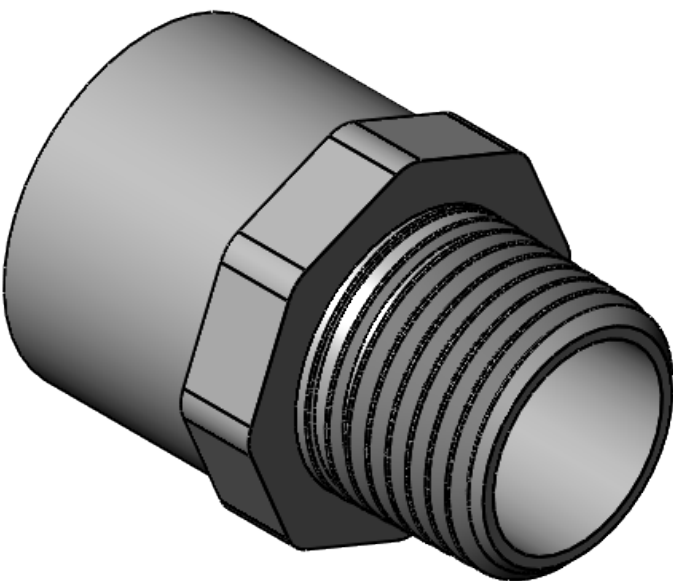
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-1,2FSx1,2MNPT
Scale: 2:1	Description: Female x Male Adapter	Manufacturer No: McMaster 4880K61
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:24 PM	

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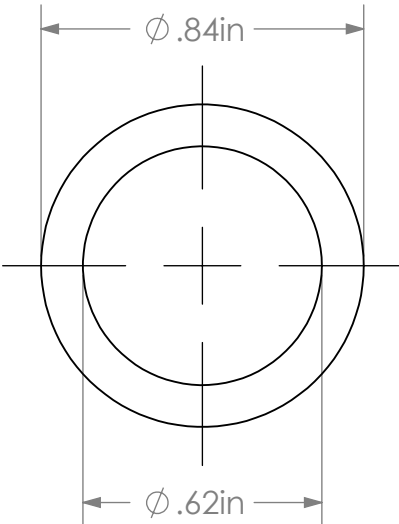
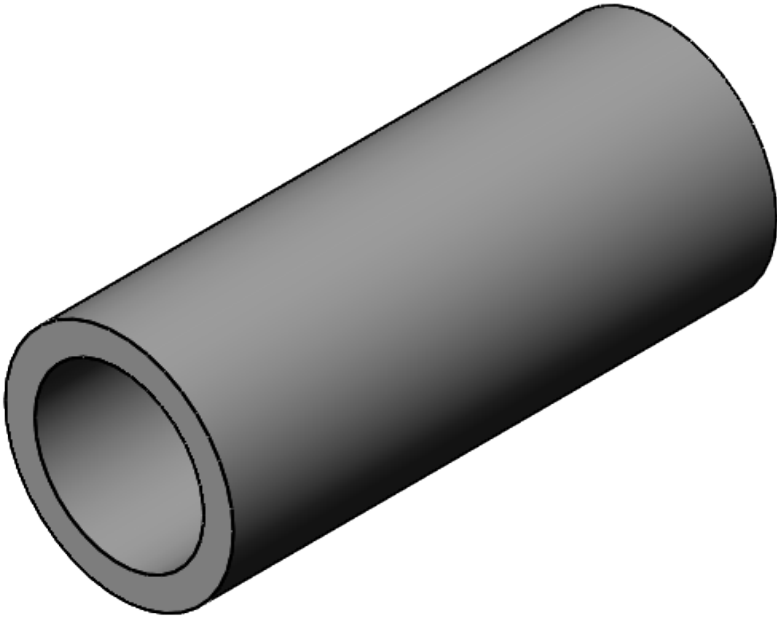
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B

B



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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-1,2MSx1,2MS-2inP
Scale: 2:1	Description: Unthreaded Pipe	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:25 PM	

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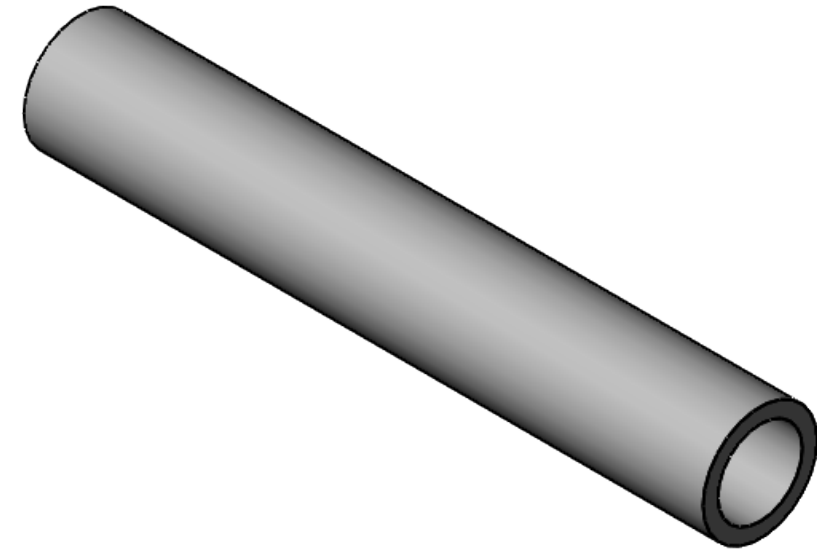
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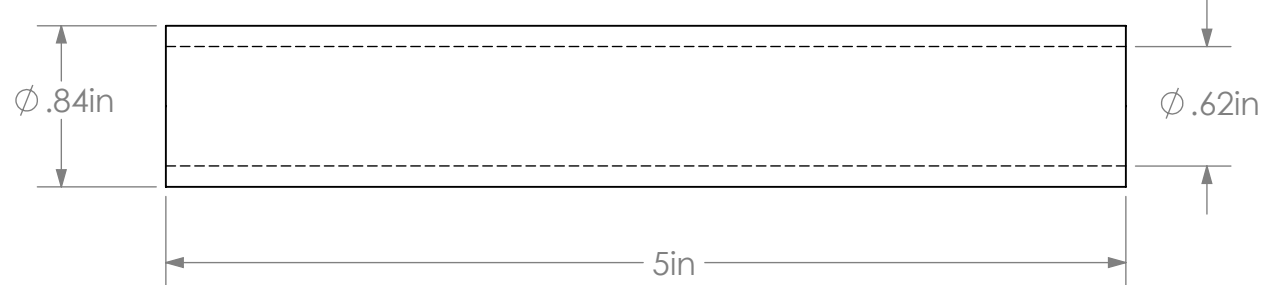
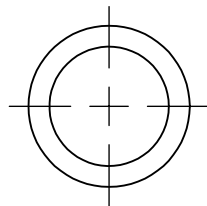
2

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B



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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-1,2MSx1,2MS-5inP
Scale: 1:1	Description: Unthreaded Pipe	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:25 PM	

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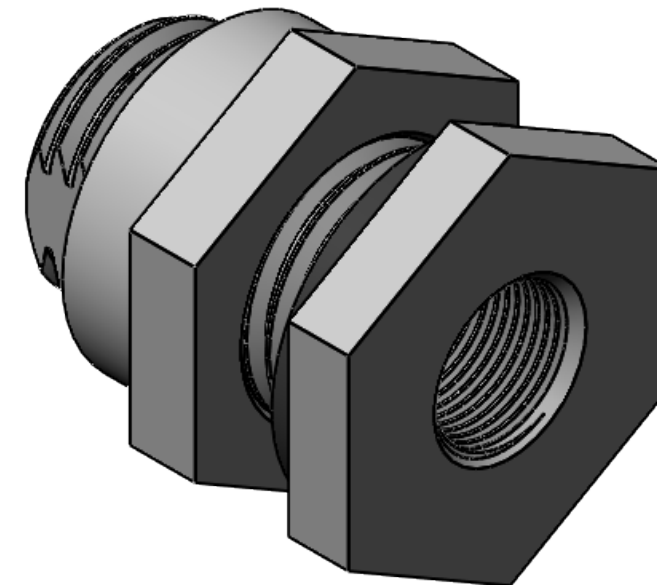
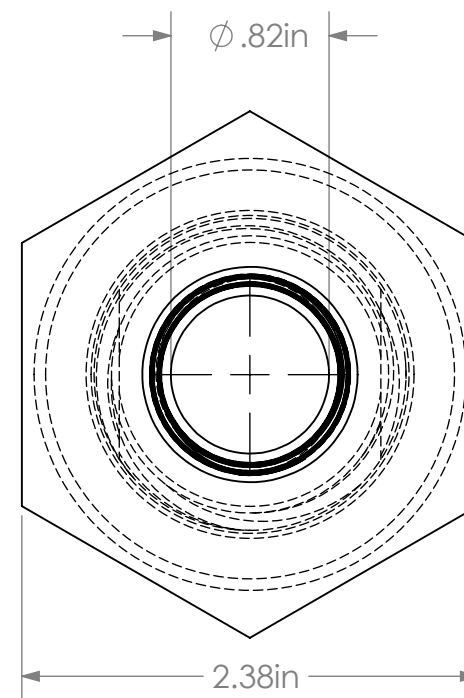
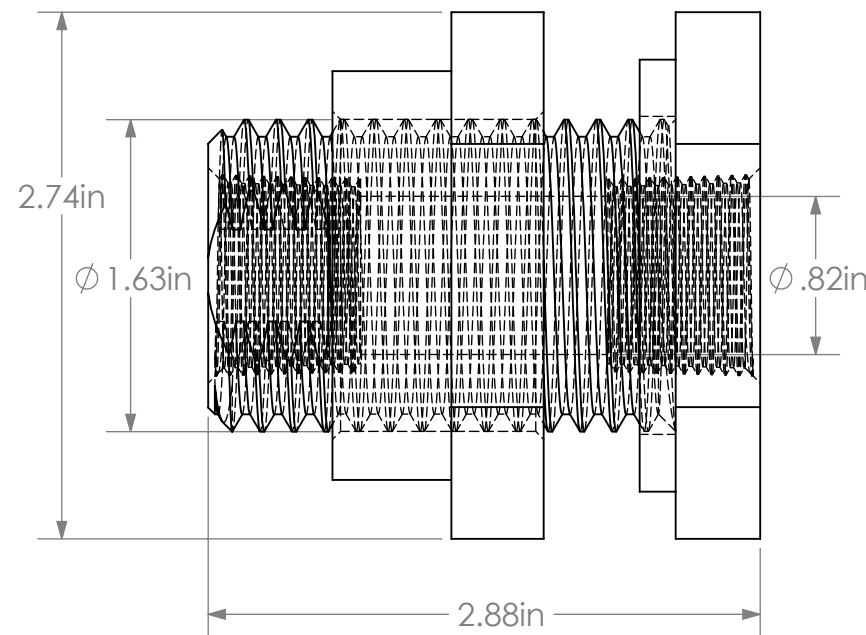
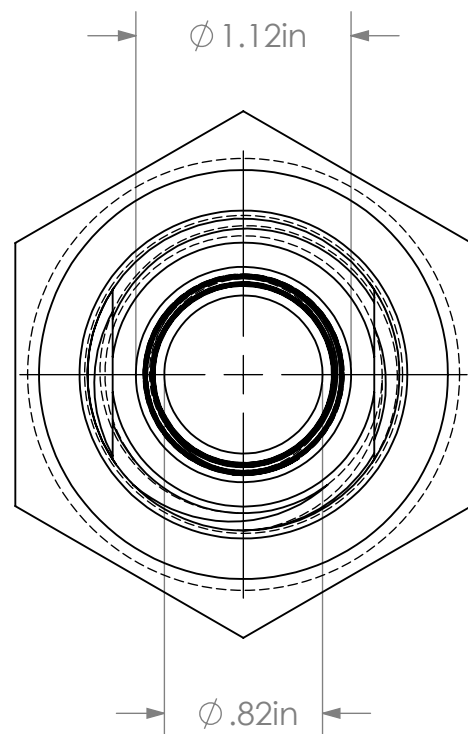
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FNPTx3,4FNPT-BH
Scale: 1:1	Description: Through-Wall Fitting	Manufacturer No: McMaster 36895K162
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:23 PM	

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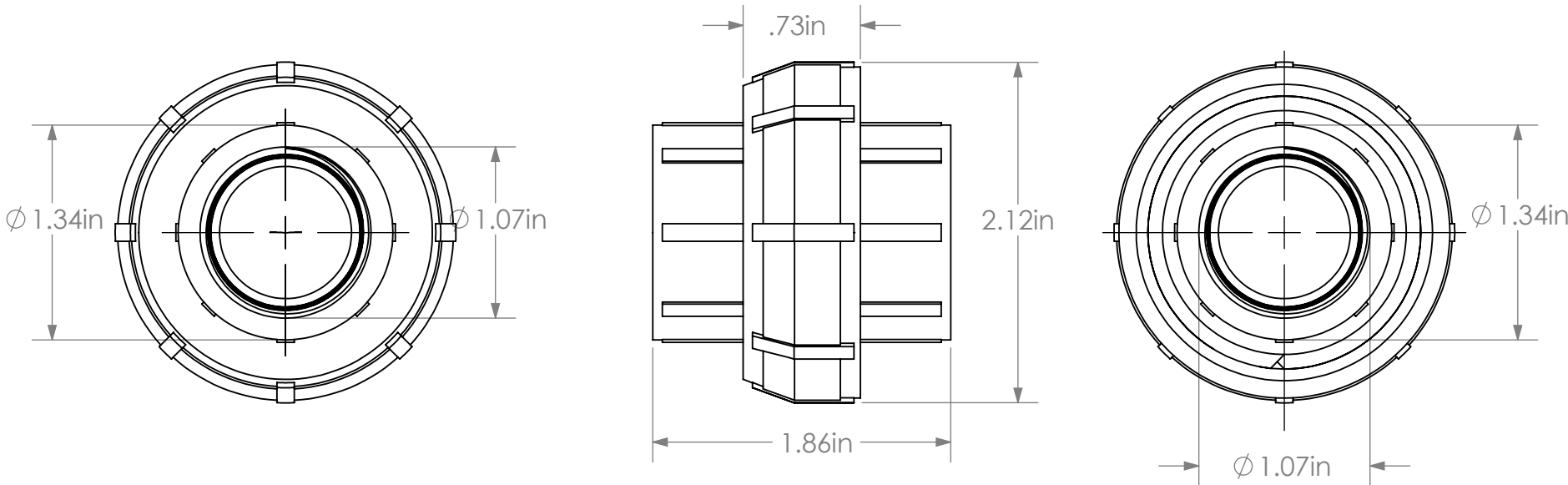
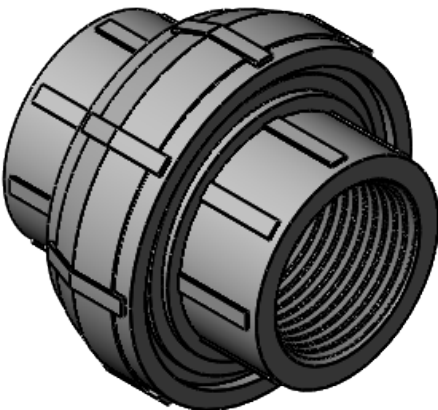
1

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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FNPTx3,4FNPT-U
Scale: 1:1	Description: NPT Threaded Union	Manufacturer No: McMaster 4880K372
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:25 PM	

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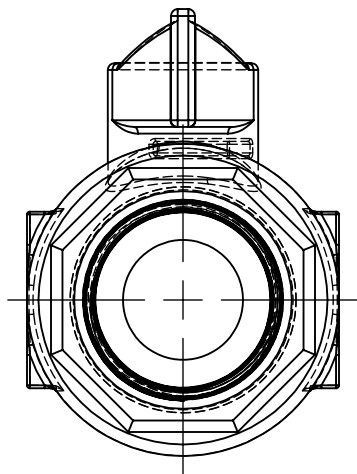
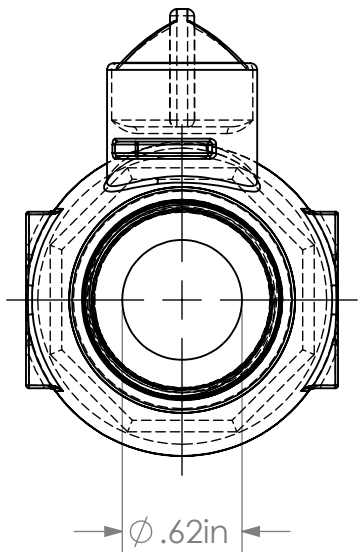
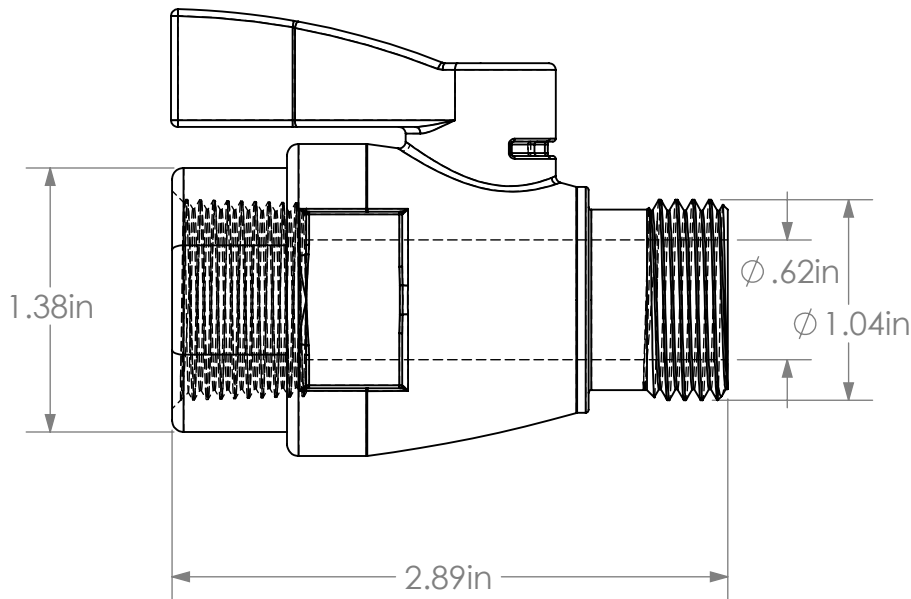
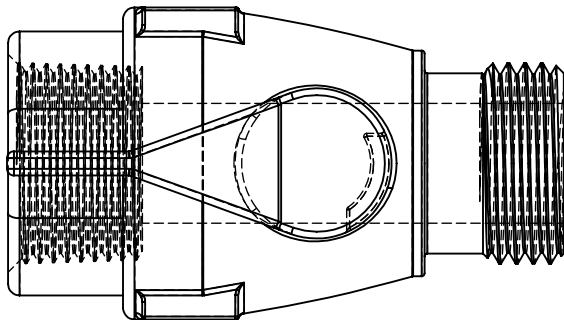
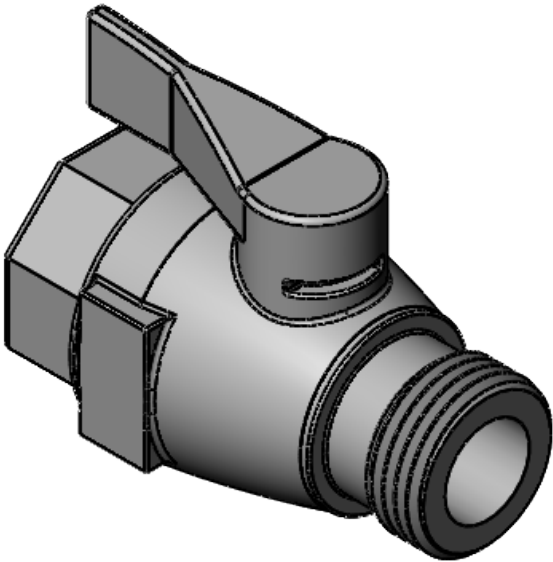
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FNPTx3,4MGHT-BV
Scale: 1:1	Description: Garden Hose Threads	Manufacturer No: McMaster 9848K24
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:23 PM	

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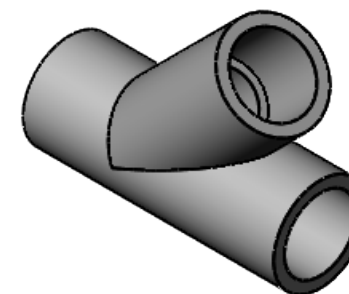
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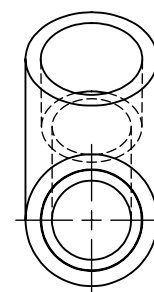
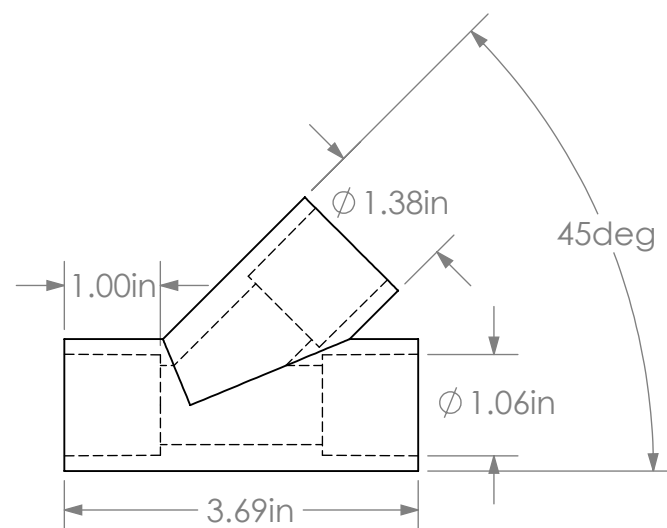
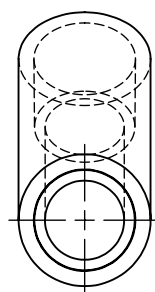
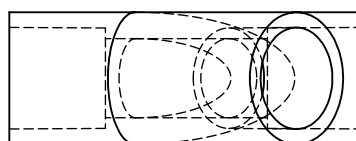
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FS-WYE
Scale: 1:2	Description: Unthreaded Wye	Manufacturer No: McMaster 4880K637
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:26 PM	

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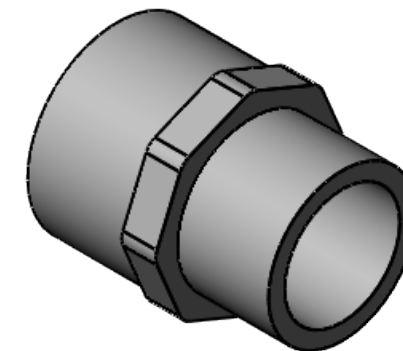
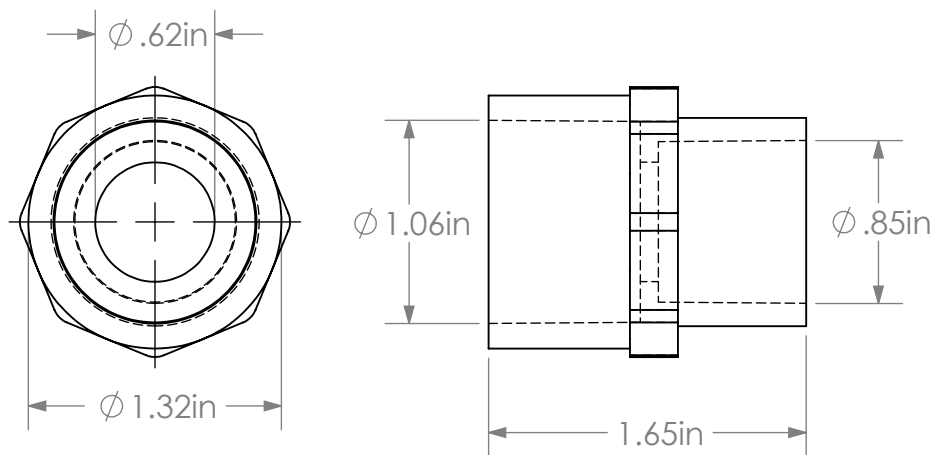
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B



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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FSx1,2FS
Scale: 1:1	Description: Unthreaded Reducing Coupling	Manufacturer No: McMaster 4880K681
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:26 PM	

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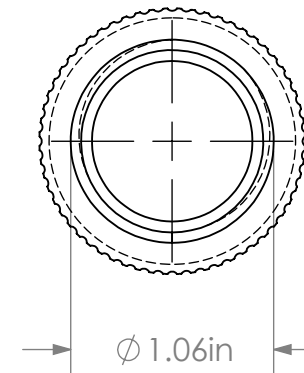
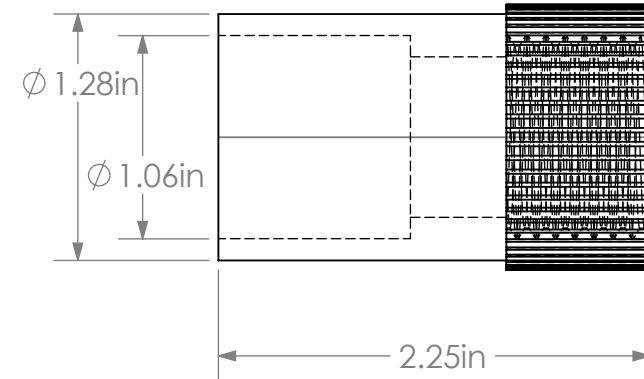
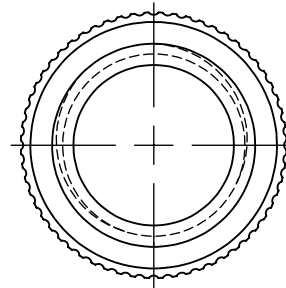
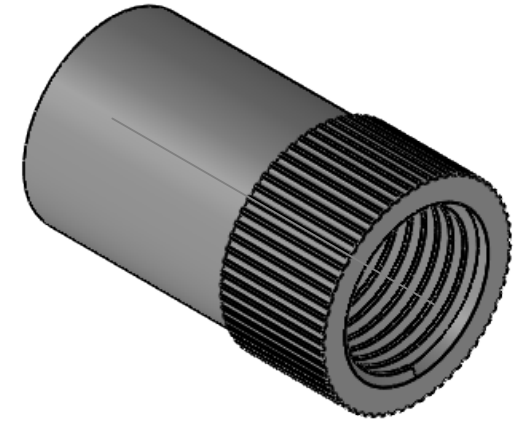
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FSx3,4FGHT
Scale: 1:1	Description: Female GHT Threaded Slip Fitting	Manufacturer No: 55360
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:26 PM	

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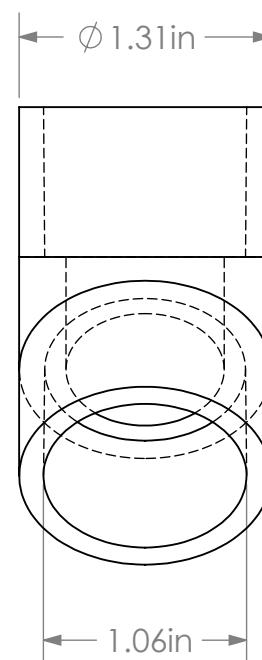
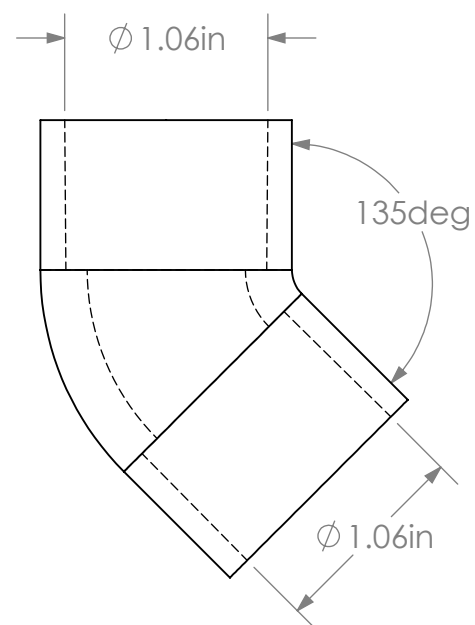
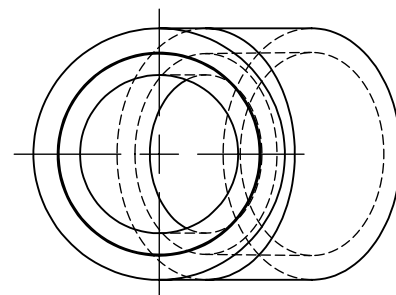
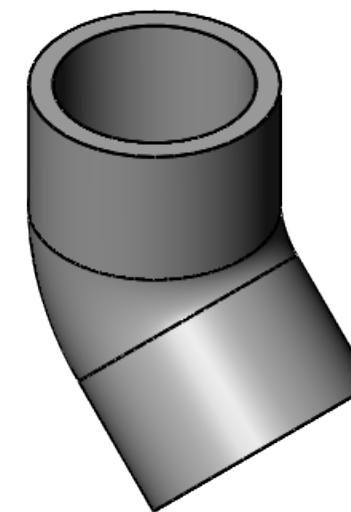
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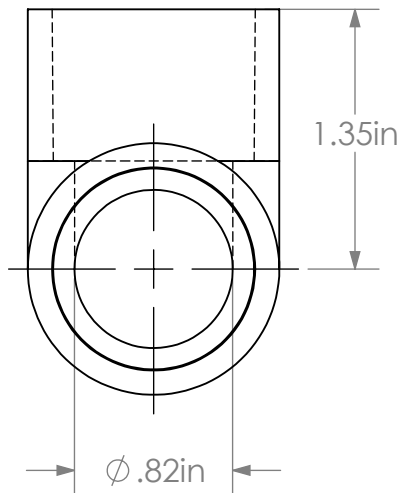
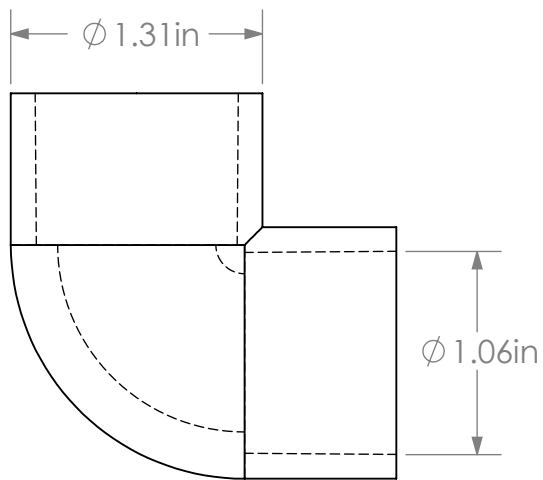
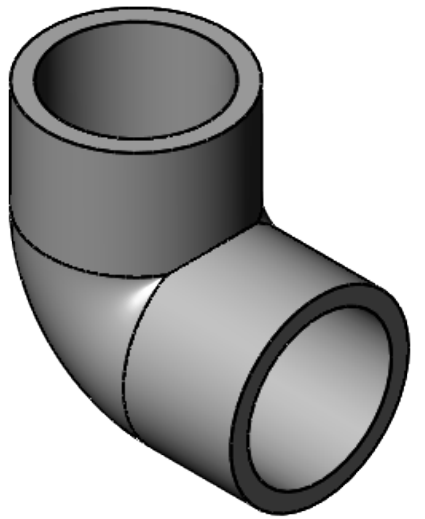
Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FSx3,4FS-45DEG
Scale: 1:1	Description: Unthreaded 45° Elbow	Manufacturer No: McMaster 4880K32
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:28 PM	

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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FSx3,4FS-90DEG
Scale: 1:1	Description: Unthreaded 90° Elbow	Manufacturer No: McMaster 4880K22
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:28 PM	

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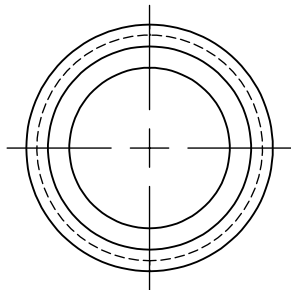
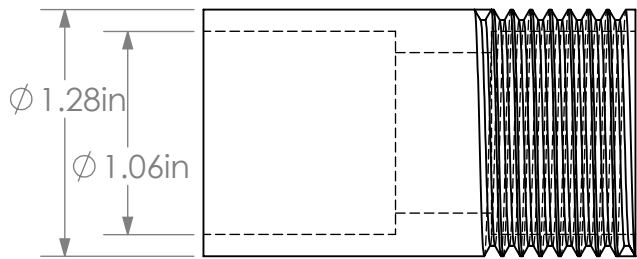
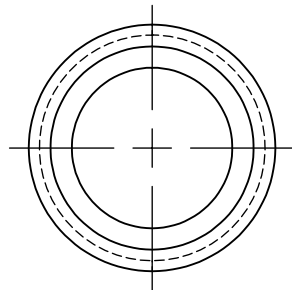
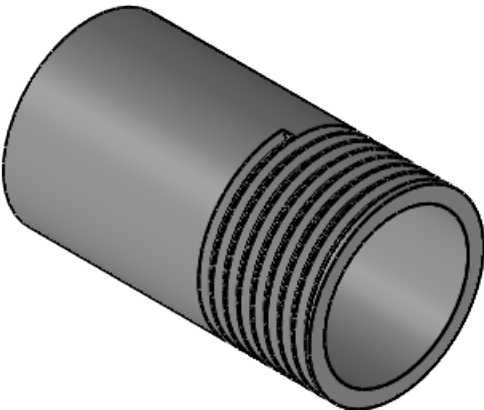
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FSx3,4MGHT
Scale: 1:1	Description: Male GHT Threaded Slip Fitting	Manufacturer No: 55361
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:26 PM	

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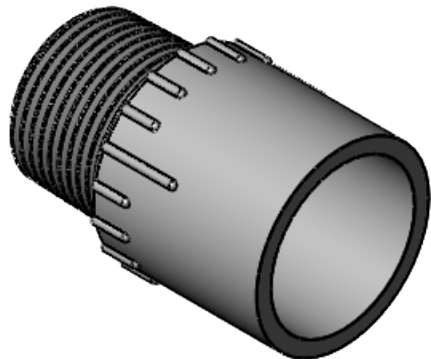
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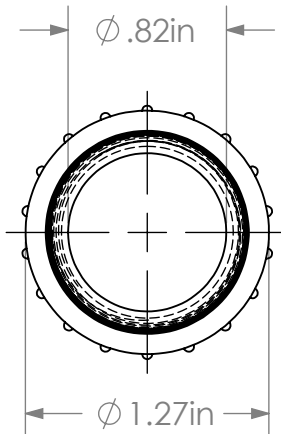
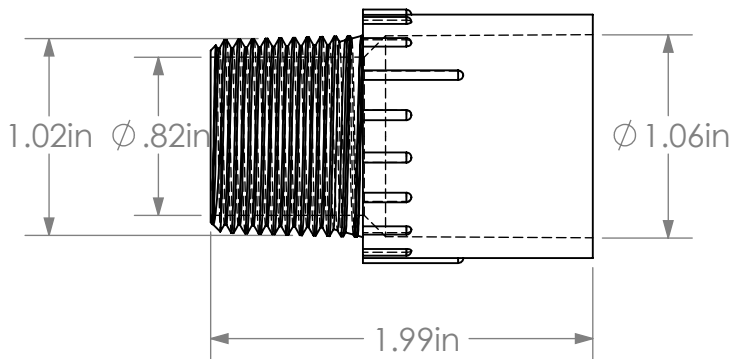
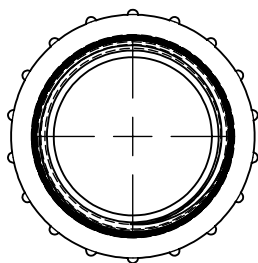
B

B



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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4FSx3,4MNPT
Scale: 1:1	Description: Threaded x Socket End Adapter	Manufacturer No: McMaster 4738T82
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:24 PM	

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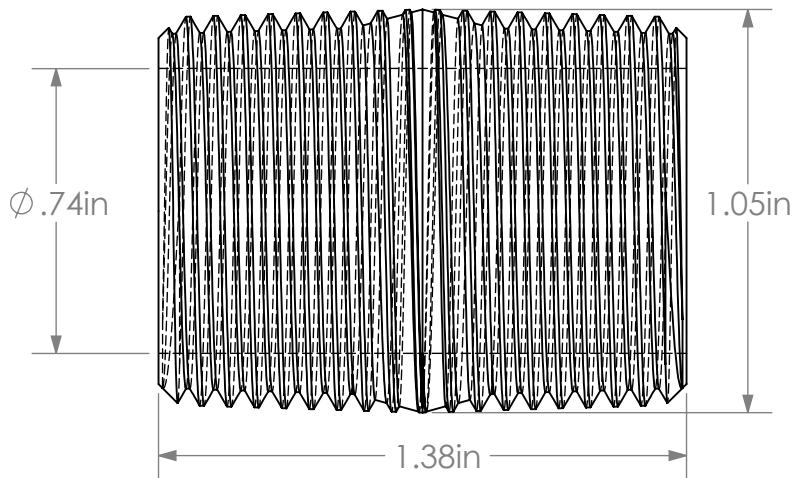
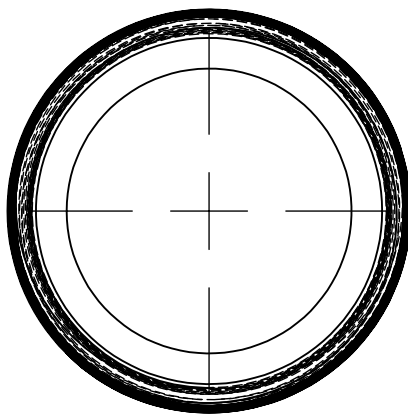
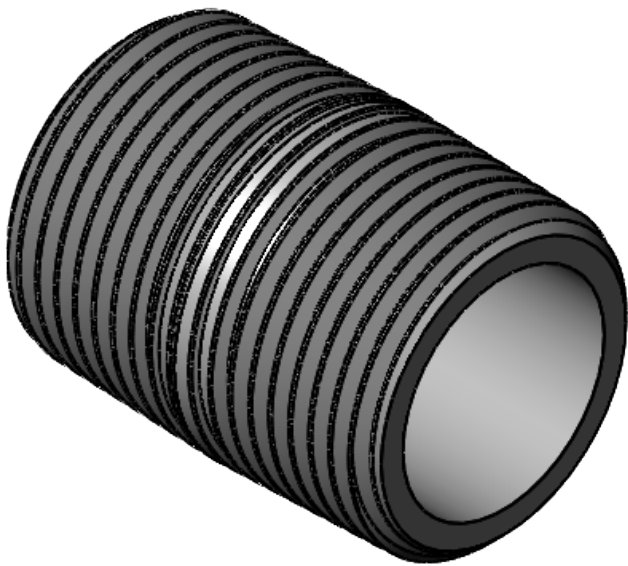
1

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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4MNPTx3,4MNPT
Scale: 2:1	Description: PVC Threaded Pipe Nipple	Manufacturer No: McMaster 4882K14
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:23 PM	

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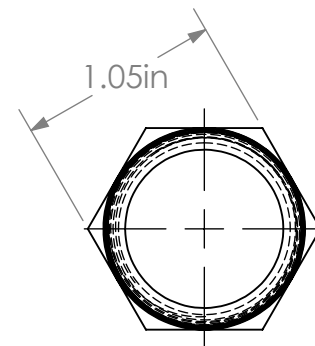
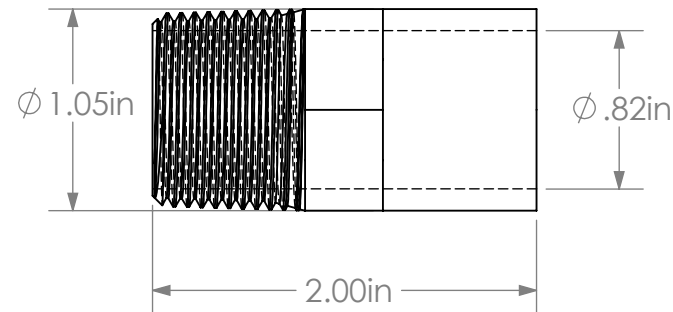
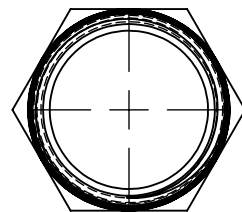
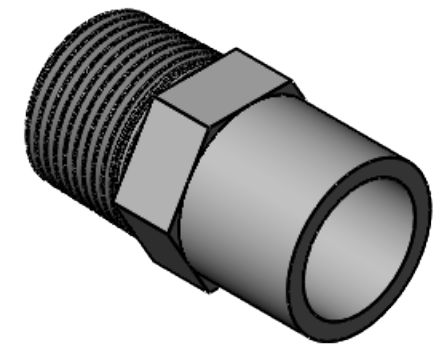
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4MSx3,4MNPT
Scale: 1:1	Description: Male x Threaded Male Adapter	Manufacturer No: McMaster 4880K652
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:24 PM	

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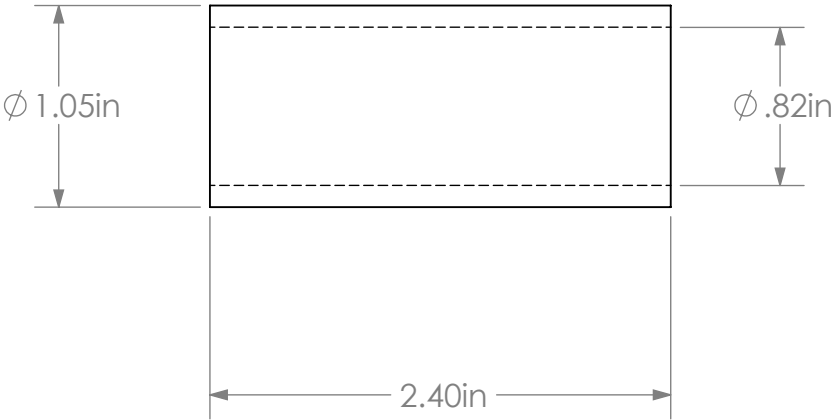
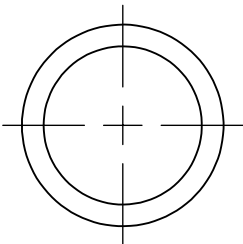
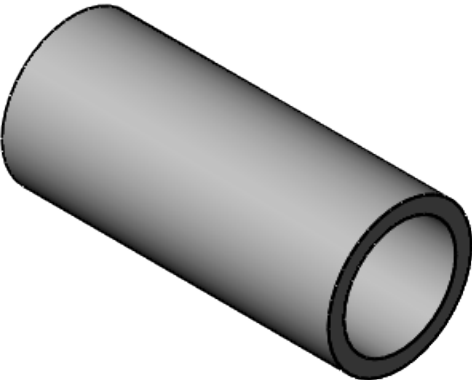
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4MSx3,4MS-2.4inP
Scale: 1:1	Description: Unthreaded Pipe	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:26 PM	

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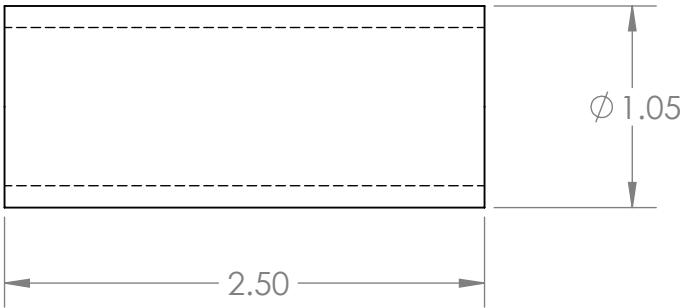
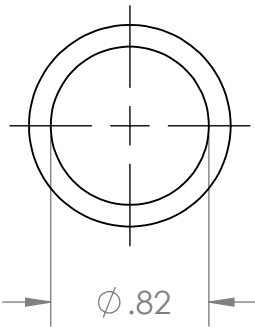
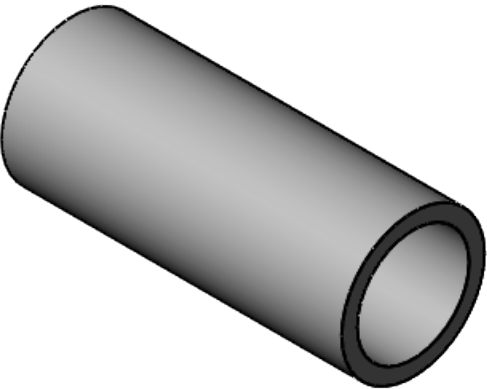
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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4MSx3,4MS-2.5inP
Scale: 1:1	Description: Unthreaded Pipe	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:26 PM	

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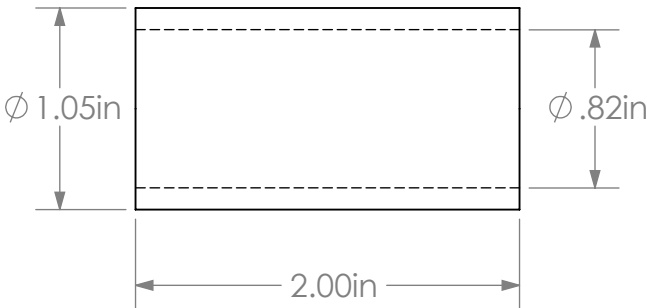
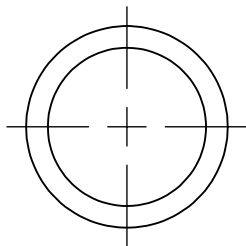
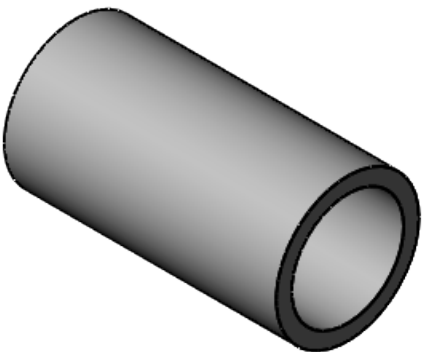
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B



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Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4MSx3,4MS-2inP
Scale: 1:1	Description: Unthreaded Pipe	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:25 PM	

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2

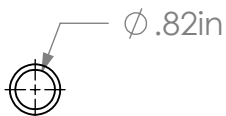
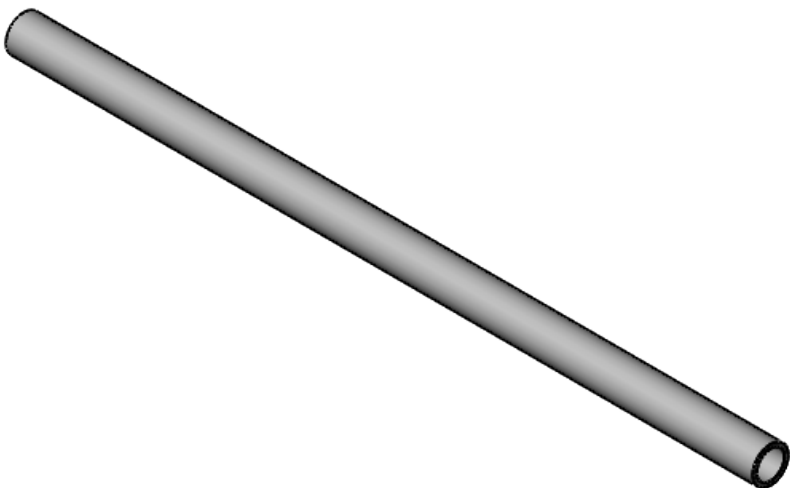
1

B

B

A

A



Size: <b>B</b>	Owner: Robert Girdner	BES No: R-3,4MSx3,4MS-22inP
Scale: 1:4	Description: Unthreaded Pipe	Manufacturer No:
Ver: <b>1</b>	Date: Wednesday, March 6, 2019 5:08:28 PM	

4

3

2

1