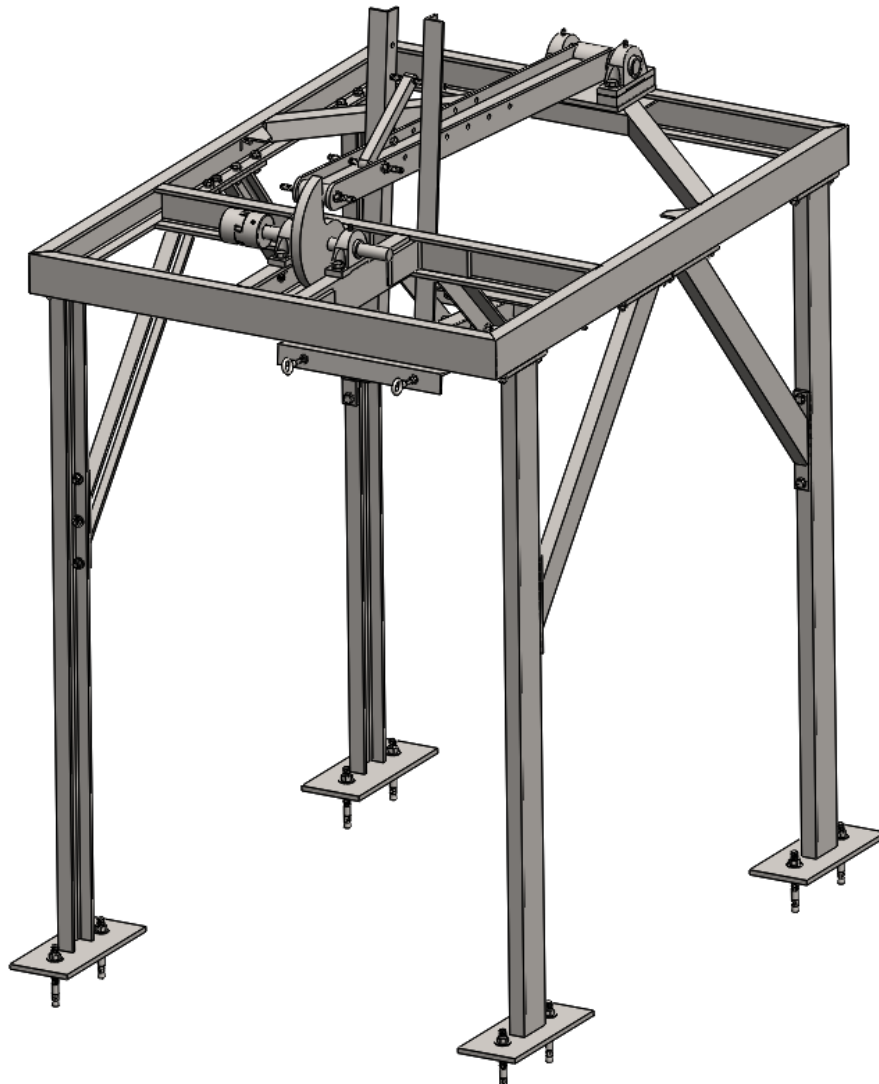


ISWP Wheelchair Curb Drop Test Version 1.3

Assembly Instructions



Curb Drop Test designed to meet RESNA WC-1/ISO 7176 Standards



Please read the following document in its entirety before purchasing materials and assembling.

Design of an ISWP Wheelchair Curb Drop Test

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University of Pittsburgh scientists are working with the U.S. Agency for International Development (USAID) under a multi-year sub-award to develop the International Society of Wheelchair Professionals, a global network to ensure a level of standardization, certification and oversight, to teach and professionalize wheelchair services, and to build affiliations to put better equipment in the right hands. Since 2002, USAID has granted more than \$45 million to improve wheelchairs and wheelchair services worldwide. This sub-award – Agreement No. APC-GM-0068 – was presented by Advancing Partners & Communities, a cooperative agreement funded through USAID under Agreement No. AIDOAA-A-12-00047, beginning Oct. 1, 2012.

For further information on use of the ISWP Wheelchair Curb Drop Test assembly instructions, contact the University of Pittsburgh’s Innovation Institute at 412-383-7670 or the International Society of Wheelchair Professionals at intlsocietywheelchairprof@gmail.com.



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A. Mechanical Assembly Instructions

1. Notes

Assembly instructions may only show or dictate about one item, but welding and placement directions apply to all parts of the same name unless specifically stated otherwise.

These instructions are to be paired with the dimensioned and assembly drawings for part names and details about each part or assembly.

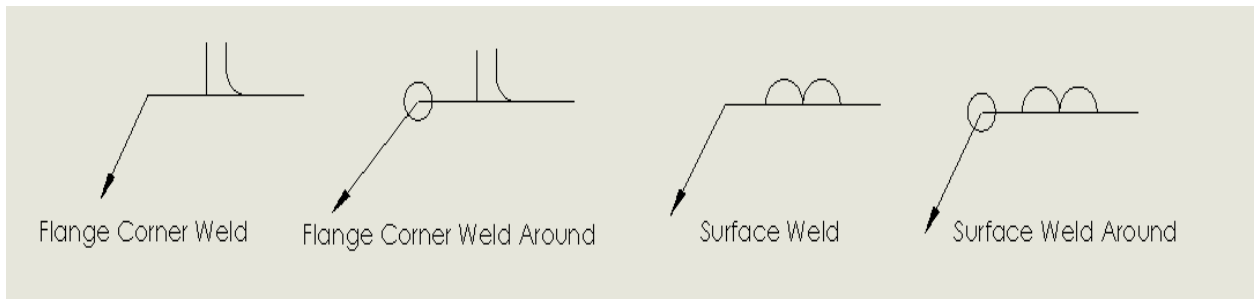
If a part has multiple versions it means that the part has holes drilled in different places from the parts of the same name.

1/2 -13 and 5/8 -11 hardware are used for the assembly, however, M12-1.75 and M16-1.50 are acceptable alternatives.

All dimensions within this set of instructions are given in units of inches and millimeters.

A parts guide has been included at the end of this document.

2. Legend



3. Tools Required

- Wrench Set
- Welder (ARC or MIG)
- Tape Measure
- Hammer Drill (For permanent assembly only)
- Metal Drill Press
- 3-axis mill (Highly recommended for drilling holes)
- Metal Saw

4. Building the Frame Assembly

Cutting Notes

All parts should be cut before assembly is started. Some parts may be able to be longer or shorter depending on the function. Please follow the tolerances listed on the dimensioned drawings. Furthermore, all holes should be drilled before assembly begins to ensure they are placed correctly.

Assembly Start

To begin the assembler should obtain all pieces required based on the bill of materials including the hardware.

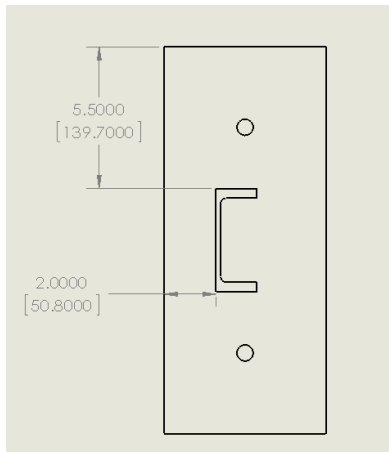


Figure 1

Start with creating the legs of the frame assembly. First, obtain four [4] anchor plates and two [2] of each version (versions 1 and 2) of Part 1 in order to make a total of four [4] legs. The parts should be orientated so that the holes in both versions of Part 1 are farthest from the end connected to the anchor plate. Part 1 should be orientated so that the outside edge is 2 inches (50.8 millimeters) from the outside edge of the anchor plate and the top edge is 5.5 inches (139.7 millimeters) from the top edge of the anchor plate as shown in Figure 1. For Part 1 version 1 the holes should be facing downwards in the orientation shown in Figure 1. For Part 1 version 2 the holes should be facing upwards.

Once the parts are orientated correctly, the connection between the anchor plate and Part 1 should be flange welded around according to Figure 2. Be sure that these welds are done correctly as the legs should support the rest of the frame. The next step involves Parts 1 and 15.

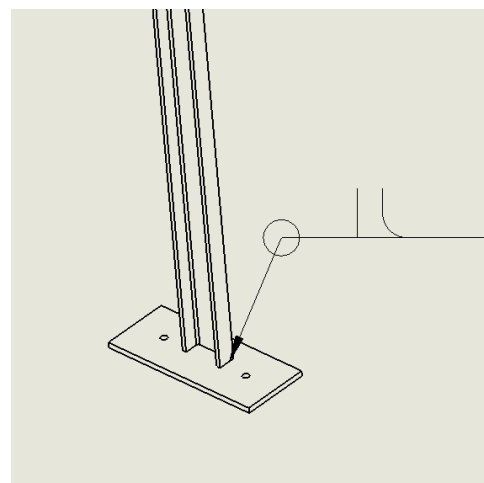


Figure 2

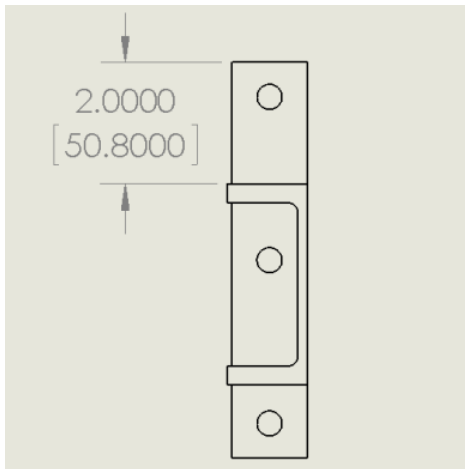


Figure 3

The builder should orient Part 15 to the non-welded edge of Part 1 with the outside edge of both flush with each other and the front edge of Part 15 approximately 2 inches (50.8 millimeters) from the front edge of Part 1 as shown in Figure 3. There should be a slight edge of Part 1 that is not attached to Part 15 which if done correctly should be on the open side of the channel.

The next step is to weld these pieces together. A surface weld is used to connect the two flush surfaces and an around flange weld is used to connect the rest of the two parts as shown in Figures 4 and 5. This should be done for all four of the legs of the frame assembly.

Note: Wedge anchors can be used to permanently fix the assembly to concrete.

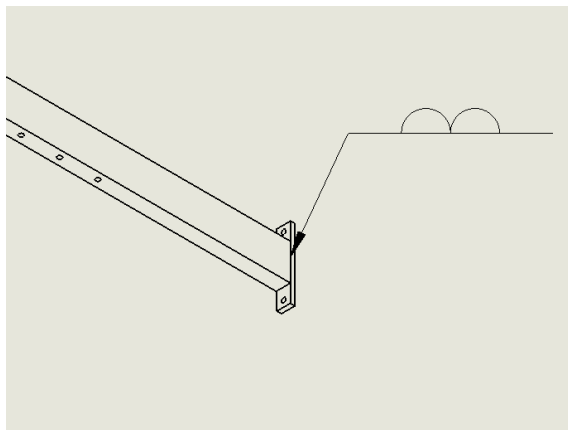


Figure 4

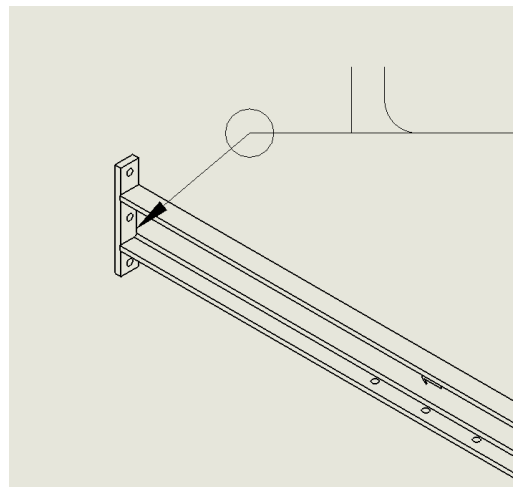


Figure 5

Top Frame Assembly

The next assembly is the top of the frame that is made up of Part 6 versions 2 and 3, Part 40 versions 1 and 2, Part 2, Part 14, Part 8, and Part 13 version 2. To begin, the builder should assemble the outside of the top frame with the supporting plates which include two (2) pieces of Part 2, Part 6 version 2, Part 6 version 3, two pieces of Part 40 version 1, and Part 40 version 2. Before assembling the frame structure, attach the supporting plates (Part 40 versions 1 and 2) to their corresponding outer edge channel. First orient one piece of Part 2 such that the angled edges are facing towards the right. Next, use a surface weld around to connect Part 40

version 1 to Part 2 such that the back of Part 40 is 1.25 inches (31.75 millimeters) from the outside face of the channel in Part 2, and the side face of Part 40 is 22 inches (558.8 millimeters) from the right outermost edge of Part 2. Repeat this using the second pieces of Part 40 version 2 and Part 2, this time however mirroring the orientation such that the angled edges of Part 2 are facing inwards towards the left. Attach Part 40 version 2 to Part 6 version 2 in a similar manner. Orient Part 6 version 2 with the angled edges facing front. Using a surface weld around, attach the longer edge of Part 40 version 2 along the inner side of the channel with the top face 1.25 inches (31.75 millimeters) from the innermost top face of Part 6 version 2 and the leftmost edge of Part 40 version 2 at a distance 20 inches (508 millimeters) from the outer left edge of Part 6 version 2. When arranging the parts be sure that both pieces of Part 2 have the holes facing down and that both versions of Part 6 have the holes facing up. Be very careful to place the supporting plates (Part 40 versions 1 and 2) at a distance that allows for the top faces of Parts 8 and 14 to be flush with Parts 2 and 6. Prevent welding all versions of Part 40 too close to the top inner edge of their corresponding channels. The surface welds are shown in Figure 6.

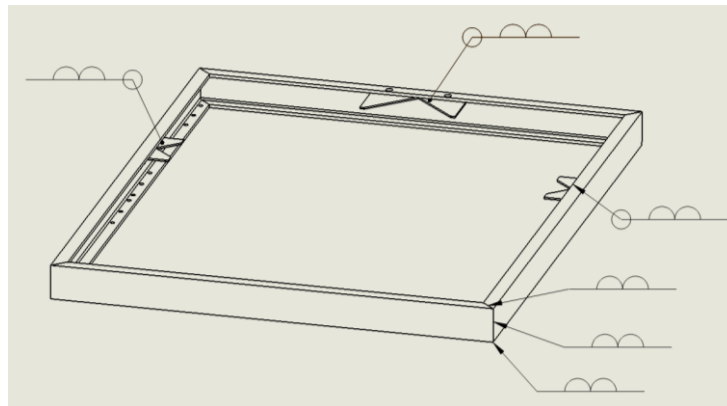


Figure 6

Next assemble the rest of the rectangular frame. The outside surfaces of the channel should all be surface welded where two parts come into contact as shown in Figure 7 for one corner of the assembly. The inside surfaces of the channel are flange welded around where two parts come into contact as shown in Figure 8 for one corner of the assembly. Surface welds should also be used to connect the bottom faces of Parts 8 and 14 to the top faces of the appropriate pieces of Part 40.

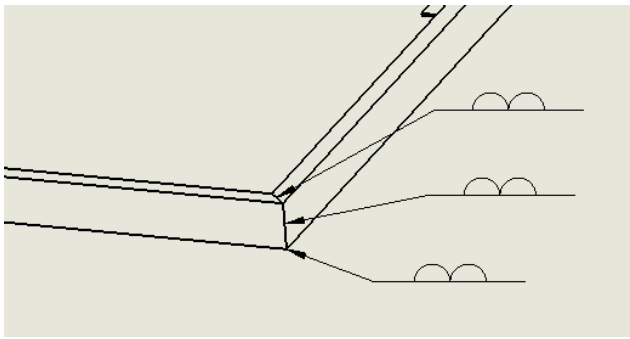


Figure 7

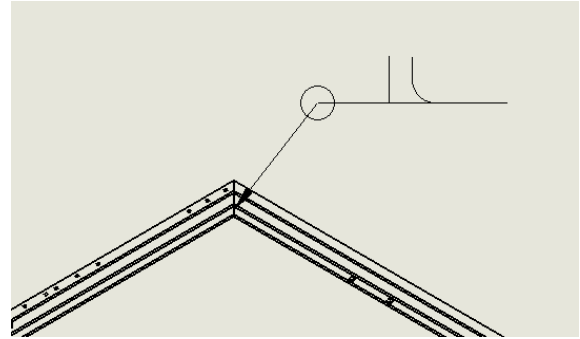


Figure 8

Further assembly involves adding in Parts 13 version 2, 14, and 8. This step should only be completed if the top frame outside has completely finished cooling as it is important for aligning the remaining pieces of the top frame. Parts 14 and 8 are connected to Part 2 and to Part 6 version 2 but not to Part 6 version 3. With the holes for Part 2 facing down align the face with angled edges of Part 14 upward and move it until one face contacts Part 2 and the other contacts Part 6 version 2. Repeat this same setup for Part 8 making sure that when aligned there should be a small space between where the two come into contact with Part 6 version 2. The final step is to do a surface weld around where the faces of both parts come into contact with Part 2 or Part 6 version 2. Figure 9 shows the proper orientation of the parts as well as the surfaces to be welded.

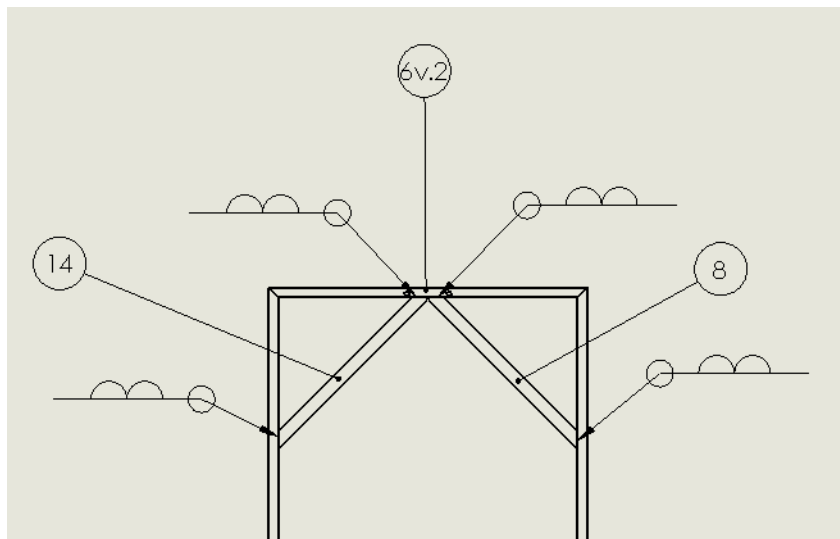


Figure 9

The final part of the top frame assembly is to add Part 13 version 2 into the space between Parts 14 and 8. The face with the angled edges should be facing up as previously done for Parts 8 and 14, this side should also have the holes facing up as well. Once both edges of Part 13 version 2 are in contact with Parts 8 and 14 then the builder should do a surface weld on the top face that is flush with those parts and a flange weld around for the rest of the part that is in contact with the other two parts as shown in Figure 10.

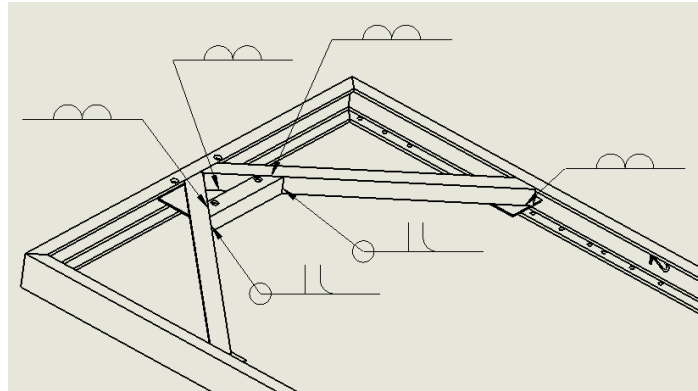


Figure 10

Frame Gussets

The assembler should now do something similar to the last step of creating the feet which involves Parts 3, 4, 18 and 19. Begin by aligning and attaching Part 18 to the edge of Part 3 that is cut at a 50° angle. The long edges of Part 18 should be flush with the long edges of Part 3. The middle hole of Part 18 should line up with the middle of the edge of Part 3. Repeat the

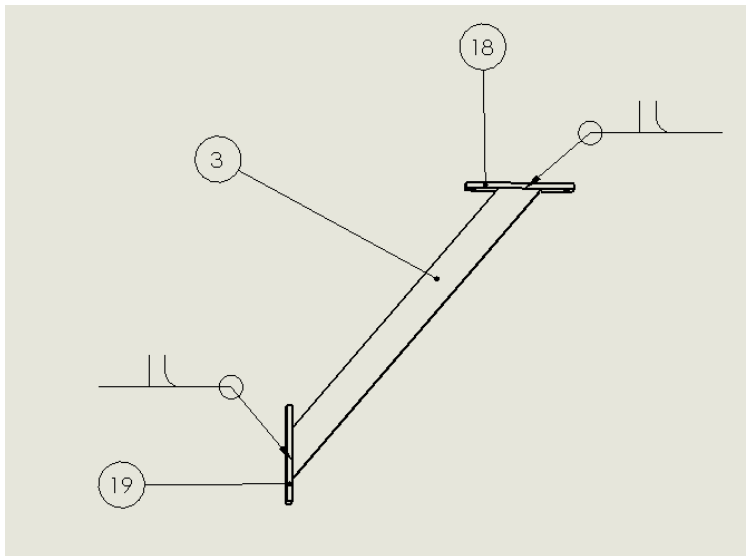


Figure 11

process with Part 19 and the edge of Part 3 with the 40° angle. The correct orientation of the piece in addition to the flange weld arounds are shown in Figure 11.

Repeat the instructions outlined in the previous paragraph to make both gussets assembled using Part 2. Repeat the procedure twice more replacing Part 4 with Part 3. Once done the assembler should have all four gussets needed for the frame assembly.

Connecting the Pieces and Adding Fasteners

All hex head screws used for this section are 1/2" -13 by 1-1/2 inches (38.1 millimeter) combined with a nut on the opposing side. This assembly includes a total of 8 steel stud anchors, 36 hex head screws, and 36 hex nuts. The heads of all the screws should appear on the outside of the frame assembly with the other end of the screw and the nut appearing on the inside of all the channels of the assembly. Part 18 connects to Part 2 and Part 19 connects to Part 1 for the stabilizer that includes Part 3 or Part 1 version 2 if the stabilizer includes Part 4. Part 15 connects to Part 2 on both sides so that all the legs have the inside of the channel pointing inward. Be sure to align all holes and add fasteners for correct assembly. The only holes that should not have a fastener yet are the ones in both versions of Part 6, the ones in Part 13 version 2, and the ones in all the bottom feet assemblies. The completed frame assembly should resemble Figure 12. In this figure, the proper orientation of the top frame, legs, feet, and gussets are shown.

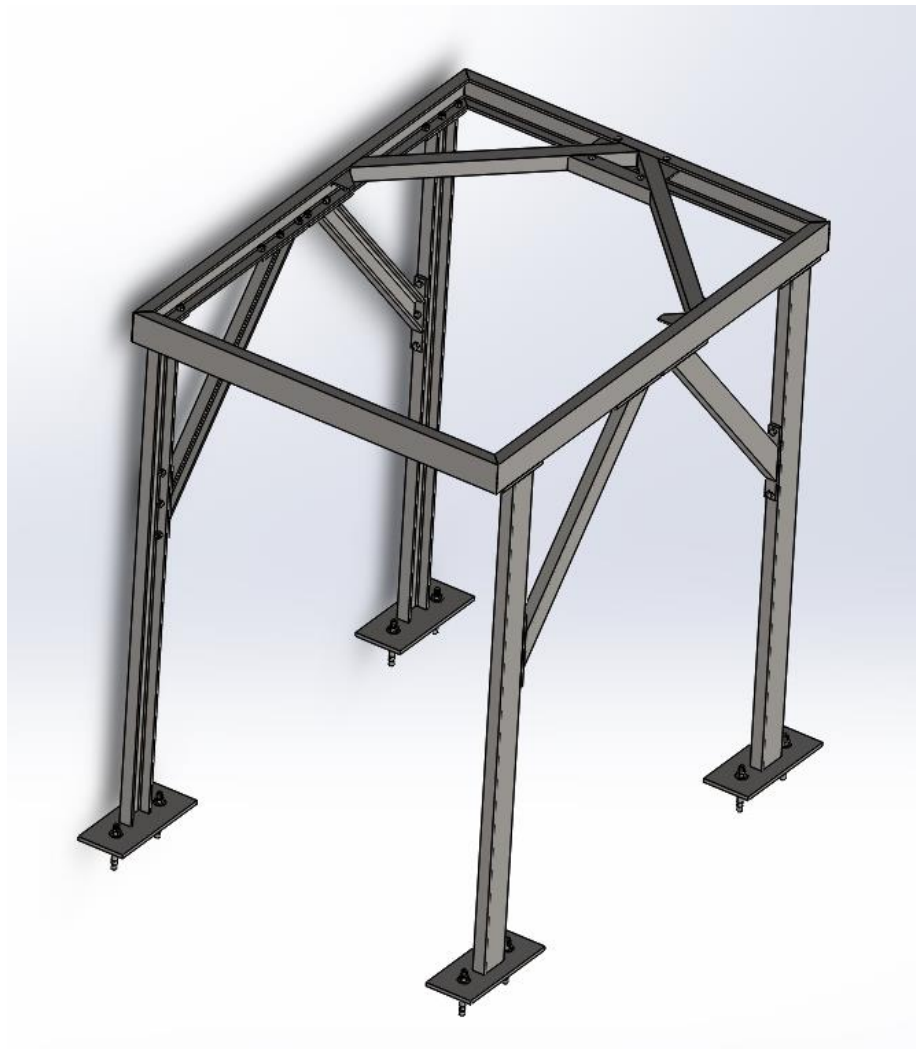


Figure 12



5. Building the CAM Lobe Assembly

Cutting notes:

All parts should be cut before assembly is started. Some parts may be able to be longer or shorter depending on the function. Please follow the tolerances listed on the dimensioned drawings. Furthermore, all holes should be drilled before assembly begins to ensure they are placed correctly.

Assembly Start

To begin the assembler should obtain all pieces required based on the bill of materials including the hardware. The first step in creating the CAM assembly is creating the part that attaches to the frame assembly. This involves using both pieces of Part 5, both of the smaller L-brackets, all four (4) of the larger L brackets, Part 7 version 2, and the pillow block bearings with their fasteners. To begin the assembler should orient Part 7 so that the channel is facing inward. Next surface weld both of the smaller L brackets 20 inches from the short edge of Part 7 so that one side of each L bracket is flush and centered with the inner side of Part 7's channel. The L brackets should be facing inwards such that the L shapes open toward each other. Next orient part 5 so that the side with the holes is facing upward, the inner side of the channel is flush with the back of the small L bracket, and the top end is touching the side of Part 7 with the open channel. The inside channels of both part 5 pieces should face inwards. Surface welds should then be applied to the top and bottom faces of both versions of Part 5 to connect them to Part 7 with flange corner welds applied to the right and left faces of Part 5. Both Part 5 pieces can be welded in this manner with the inside channels of both piece are facing each other.

After assembling parts 7, 5, and the smaller L brackets the two larger L brackets can also be surface welded. Two of the brackets should be placed inside opposite ends of Part 7, each oriented such that one outer face is flush and centered inside the channel of Part 7 and the other face is flush with the back side of Part 5. The remaining two L brackets should be surface welded mirrored to the first two, each having one outer face flush and centered on the opposite end of Part 5, and the other outer end placed 1.5 inches (38.1 mm) from the edge of part 5. Welds and proper orientation are shown in Figure 13 and Figure 14. Please note that there should be a total of 10 surface welds in Figure 13. Several of these have been omitted for ease of viewing.

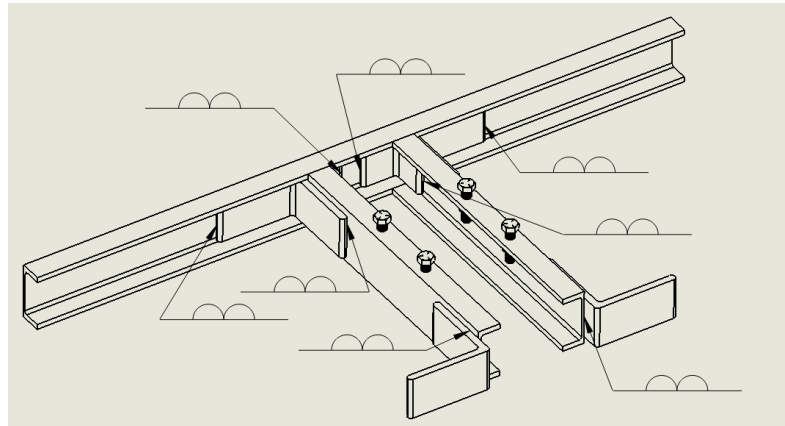


Figure 13

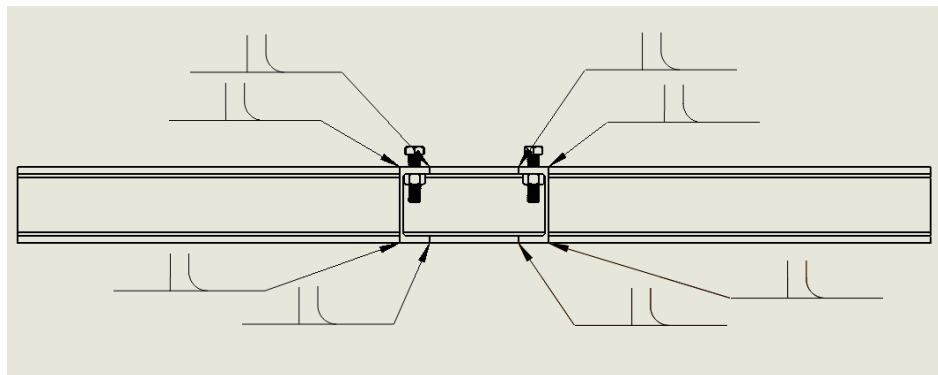


Figure 14

The next step is to add 2 pillow block bearings to the assembly by aligning the pre-drilled holes in the bearings with the pre-drilled holes in both pieces of Part 5. Four hex head screws are used with specifications 5/8" -11 by 2-1/2 inches (63.5 mm) that combine with a nut on the opposing side. The screw should be inserted so that the top is visible on the pillow block bearings.

Adding the Shaft and Lovejoy Couple to Complete the Assembly

Then the 1-1/2 inch (38.1 mm) diameter shaft should be fed through the pillow block bearings with it feeding through the hole in Part 30 between the two bearings and being capped with the larger gear of the motor on the end closest to the motor. These parts should then be flange welded in place so that they rotate with the motion of the shaft. A full assembly is shown in Figure 15 for reference.

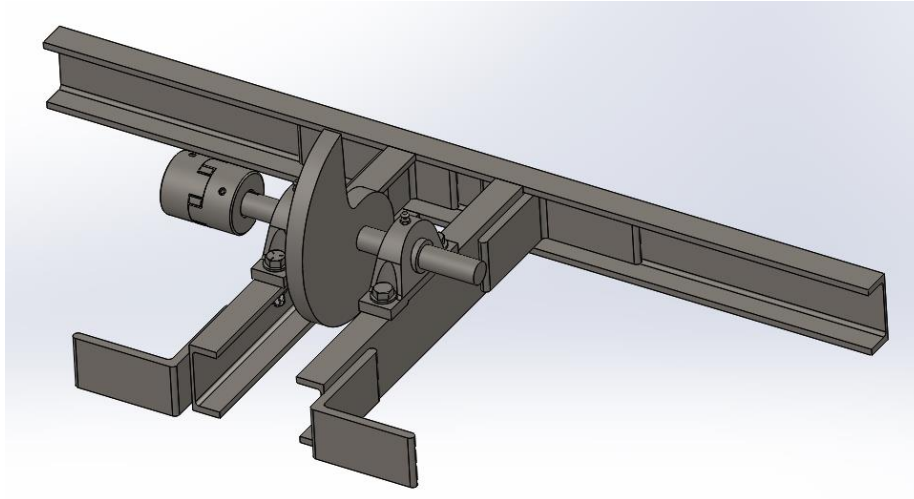


Figure 15

6. Building the Lever Assembly

Cutting notes:

All parts should be cut before assembly is started. Some parts may be able to be longer or shorter depending on the function. Please follow the tolerances listed on the dimensioned drawings. Furthermore, all holes should be drilled before assembly begins to ensure they are placed correctly.

Assembly Start

To begin the assembler should obtain all pieces required based on the bill of materials including the hardware.

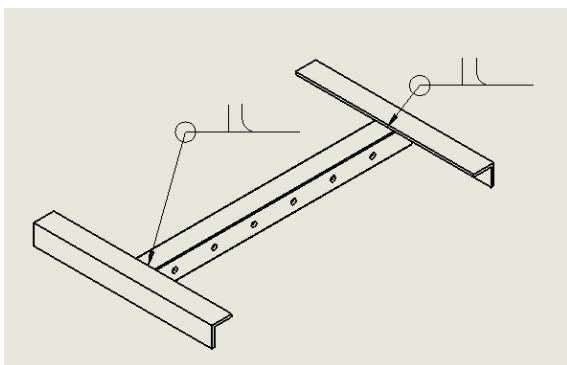


Figure 16

The first step is to create the mechanism that attaches to the wheelchair in order for it to be lifted by the curb drop testing cam. This begins by welding one piece of Part 12 to each end of Part 24. The parts should be welded so that the holes in Part 24 are not covered by the mounting of Part 12. Part 12 should be equally spaced on each end when mounted to allow for proper weight balance. See Figure 16 for proper welds and orientation.

The next step is to add in Parts 9 and 28 to this mechanism by aligning some of the pre drilled holes. The first step is to align the bottom face of Part 9 with face with the holes of Part 24. Then the builder should align the bottom hole that is farthest from the other holes of Part 9 with the second hole from the end of Part 24. Part 28 should then be placed between the two and held in place with a threaded rod. All threaded rods used for this section are 1/2" -13 by 8 inch (203.2 mm) that have nuts to hold them in place. Washers are used where the nut would come into contact with the parts. The threaded rod should then travel out the other side of Part 24 where it attaches to Part 28 and Part 10 in a similar way to how it was connected on the other side. The threaded rod is then held in place with another washer and nut as shown in Figure 17.

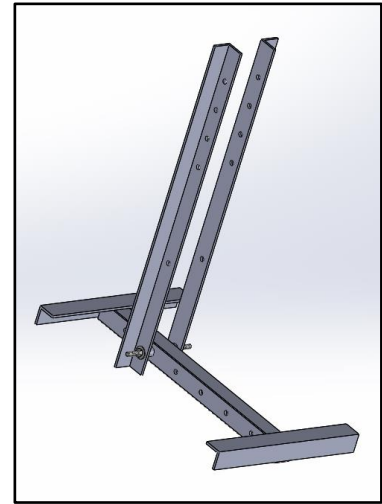


Figure 17

Part 11 should be connected in a similar way to Parts 9, 10 and 24 with the use of spacers, threaded rods, and hex screws. Each piece of Part 11 should be placed such that the uncut flat face is pointing at a 45° angle. One hole in Part 11 should then be lined up with the second hole from the end of Part 24 and connected with a 1-1/4 inch (31.75 mm) spacer between the two parts. A threaded rod should then be used to connect these parts in addition to the same parts on the other side. A hex screw with the same thread dimensions as the fully threaded rod and 1-1/2 inch (38.1 mm) length should be used to connect the other hole of Part 11 with the second hole from the bottom of Part 9 or Part 10 depending on which side the builder starts with. The head of the bolt should be on the outside of the assembly with the nut and washer being on the inside. The assembly up to this point is shown in Figure 18.



Figure 18

Lever Arm Assembly

The lever arm is the part of the tester that directly lifts the wheelchair and drops it from the height required by RESNA WC-1/ISO 7176 standards. Part 25 is the central piece of the assembly as this is where all the other parts of this assembly connect and where the lever assembly interacts with the motor and frame assemblies. To begin, the assembler should weld the end without holes to the pillow block connector with the welds shown in Figure 19.

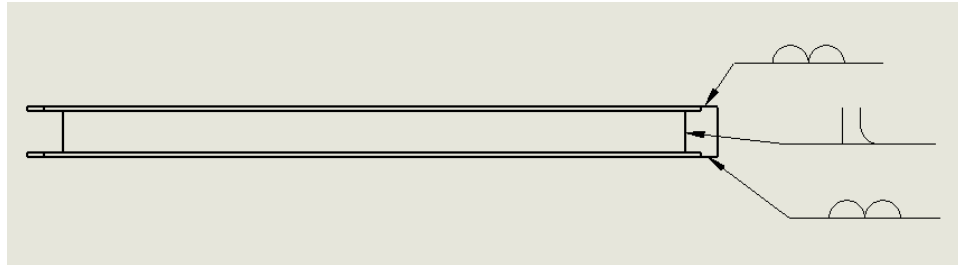


Figure 19

Then the assembler should place Part 23 at the other open end of Part 25 and hold it in place with the same threaded rod and nuts used previously. This is the part that contacts the motor assembly and causes the lever arm to rise up.

The next step involves starting with Part 17 and placing two pieces of Part 16 by aligning the two holes on each side of Part 17 with the holes in Part 16. The pillow block bearings should then be placed on top of each Part 16 by aligning the holes. These parts are not held together right now but should be fastened to the final assembly later. Place the pillow block connector in between the two pillow block bearings and feed the lever to bearing connector through the bearings and the connector. This should be done so that the holes of Part 25 appear upward as they do in Figure 20.

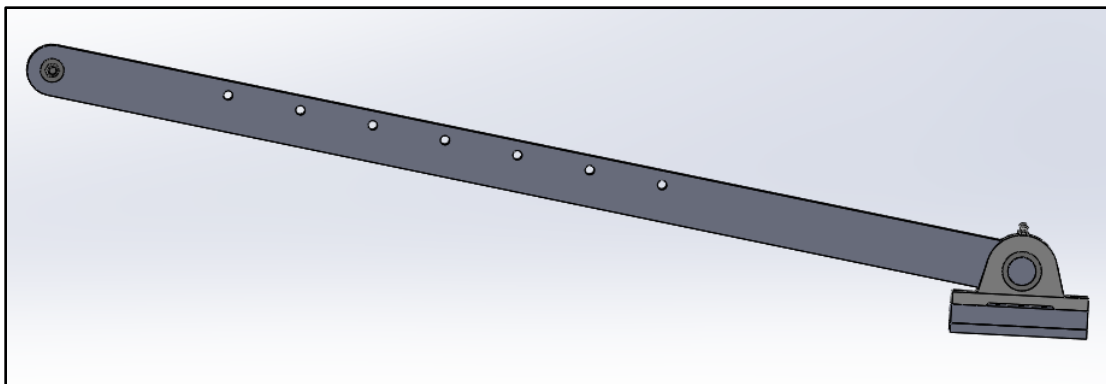


Figure 20

Completing the Assembly

To complete the assembly the builder should fasten the lever mechanism to the lever arm. This is done by aligning the fourth hole from the end of the lever mechanism that is not attached to anything and align it with the fifth hole from the end of Part 25 connected to the bearings.

Another threaded rod is used with the same hex head screw, nut, and washer from the rest of this assembly. The head of the screw should be on the inside channel of Part 25 with the washer and nut located on the outside of the lever mechanism. The stop rod should then be inserted by aligning the hole in the rounded side of the stop rod with the hole that is two above where it connects to the lever arm. Then align the hole in the cut side with the first hole after Part 23 to connect to Part 25. These parts are secured with threaded rods as done previously.

Lastly, the eyehooks that will be used to secure the wheelchair for testing should be placed into the holes found in both pieces of Part 12 (2 holes in each part). The 4 eyehooks will be secured using 8 3/8"-16 thread grade 8 Steel-Nylon Locknuts and 8 3/8" screw Washer. Each eyehook should be secured with 2 washers and 2 locknuts as shown in Figure 21 with one of each being placed on each side of Part 12. The final lever assembly is shown in Figure 22.

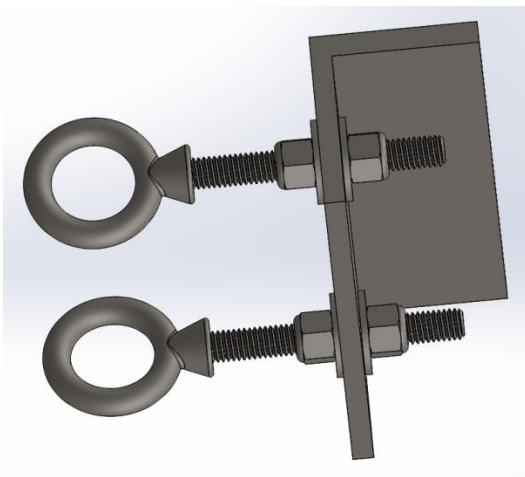


Figure 21



Figure 22

7. Building the Complete Assembly

Cutting notes:

All parts should be cut before assembly is started. Some parts may be able to be longer or shorter depending on the function. Please follow the tolerances listed on the dimensioned drawings. Furthermore, all holes should be drilled before assembly begins to ensure they are placed correctly.

Assembly Start

Welds should be done where Parts 5 and 7 come into contact with the frame assembly. These welds are shown in Figure 23.

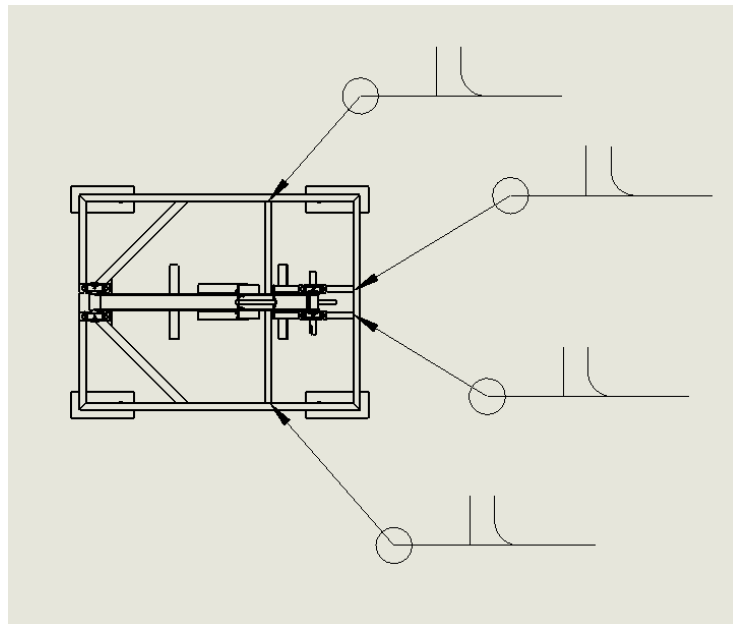


Figure 23

The CAM assembly is now fully connected to the frame assembly and the assembler can move onto adding the lever assembly. Begin by aligning the holes in the pillow block bearings with the holes in Part 13 version 2 and Part 6 version 2. Then use four hex head screws with the specifications 1/2" -13 by 3-1/2 inch (88.9 mm) that combine with a nut on the opposing side to fasten the pieces together. Part 23 of the lever assembly should be in contact with Part 30 of the motor assembly if done correctly. When running, Part 30 rotates and lifts Part 23 causing the wheelchair to lift and drop. Wedge anchors can be used to permanently fix the assembly in concrete if desired using the pre-drilled holes in the feet of the frame assembly. Figure 24 shows the final assembly that is made up of all the subassemblies (frame, CAM, and lever), with their corresponding hardware. The completed assembly should resemble Figure 24.

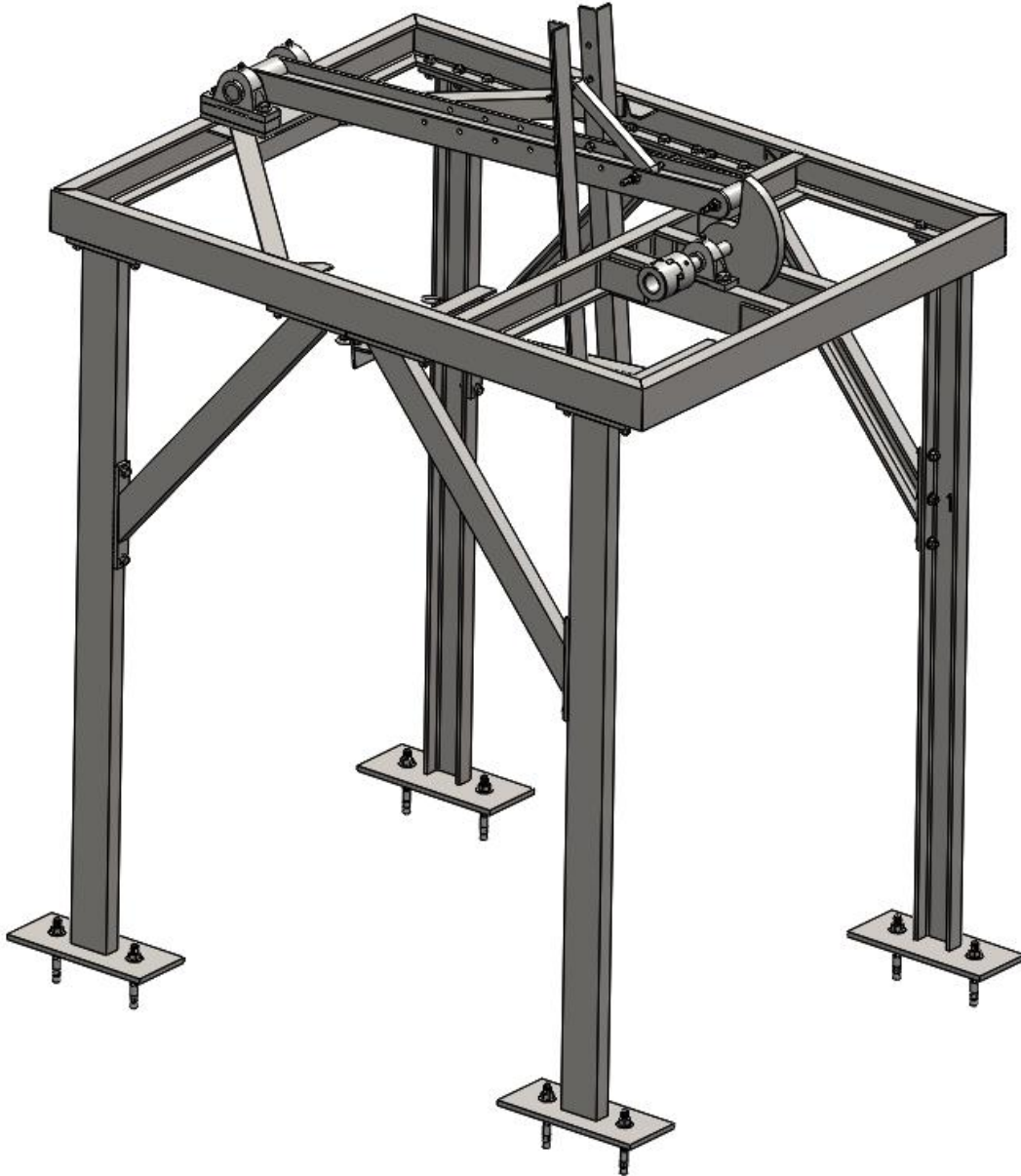


Figure 24

8. Adding the Motor

Please note that these motor mounting instructions are designed to account for several different motor gear box combinations. The spacing of the holes in the motor mounting plate should be adjusted to accommodate the motor specified by the assembler.

Building the Motor Mount

A 1 inch (25.4 mm) thick steel plate is used as the motor mounting plate. It is welded between Parts 7 version 2 and 6 version 3. The bottom of the plate rests on top of the inside channel of the two parts. It is flange around welded in place to prevent vibration during operation.

Adding the Motor

A 3 phase, 3 hp AC motor is used to complete the Curb Drop test required by RENSA standards. In addition to the motor, a gearbox will be necessary to reduce the speed and increase the torque. The motor is mounted by aligning it with the predrilled holes in the motor mount plate. Appropriate sized fasteners and locknuts should be used to secure the motor mount in place. Slotted channels are used to allow for adjustment of the motor to align the shafts. Lovejoy couplings should now be used to attach the shaft of the motor to the shaft of the CAM assembly. The coupling with the correct shaft diameter should be attached to each of the associated shafts and then fastened using the set screw in each of the couplings. A rubber spider should be used connect the two couplings. The Lovejoy couplings can also be adjusted to align the shafts. An image of these couplings is shown in Figure 26.

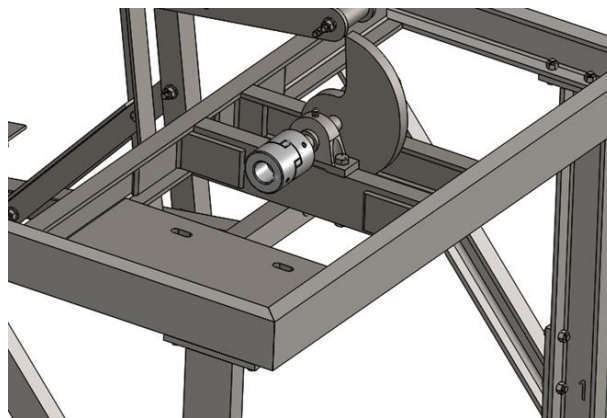


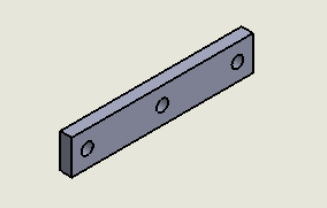

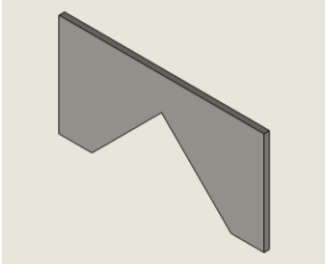
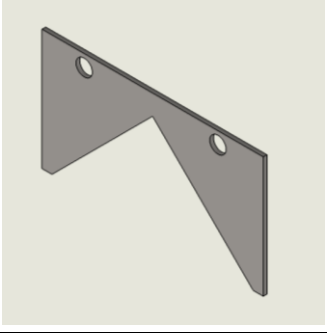
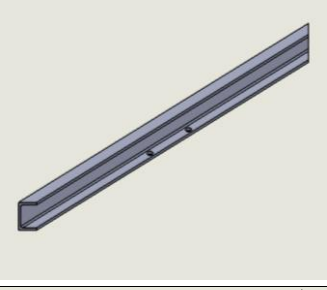
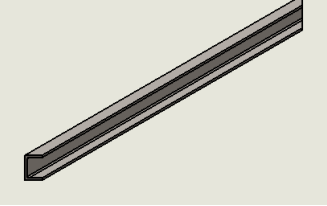
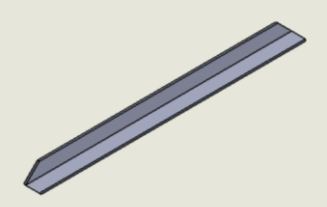
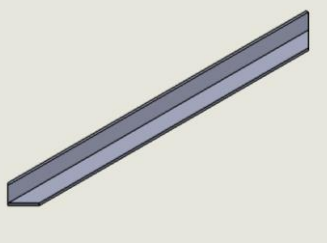
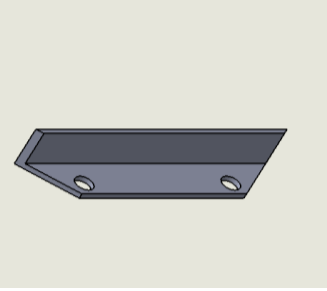


Figure 26

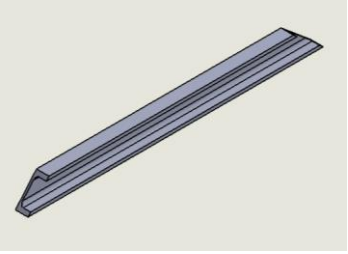
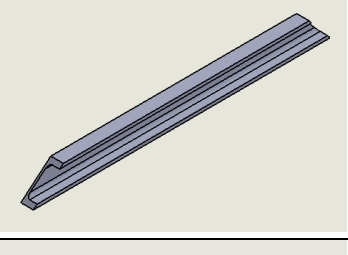
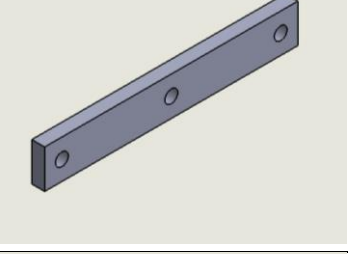
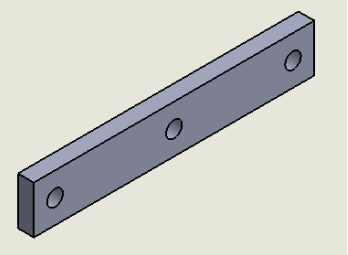
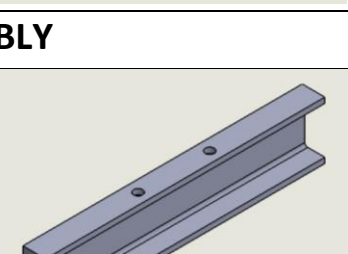
9. Reference Table of Parts

FRAME ASSEMBLY		
Part 1 –version 1		
Part 1 – version 2		
Part 15		
Part 2		
Part 40 – version1		

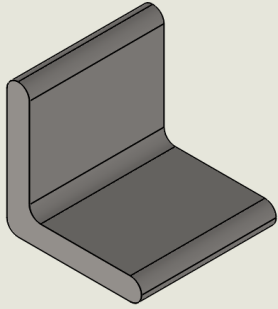
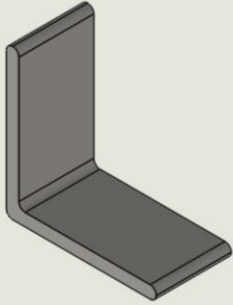
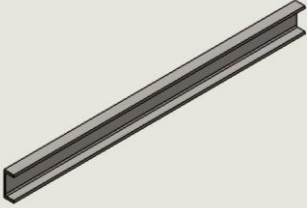
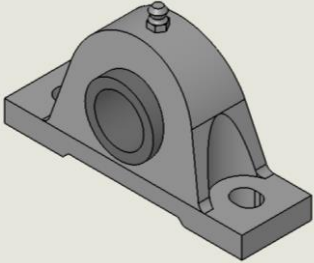
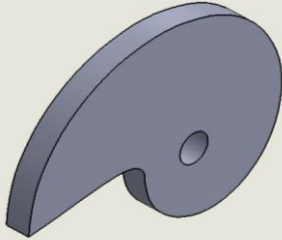


Part 40 – version 2	
Part 6 – version 2	
Part 6 – version 3	
Part 14	
Part 8	
Part 13 – version 2	

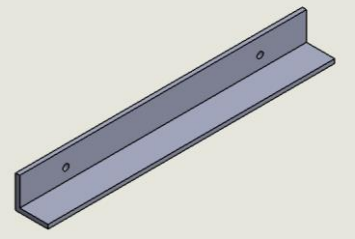

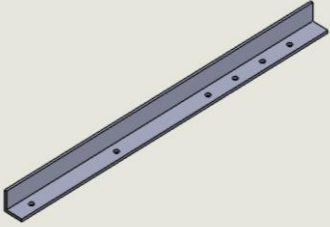
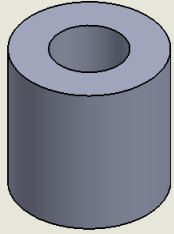


Part 3	
Part 4	
Part 18	
Part 19	
CAM LOBE ASSEMBLY	
Part 5	

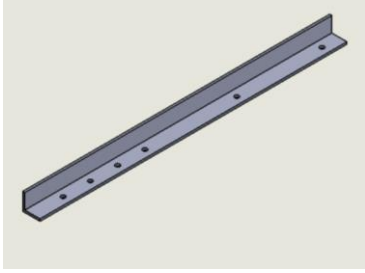
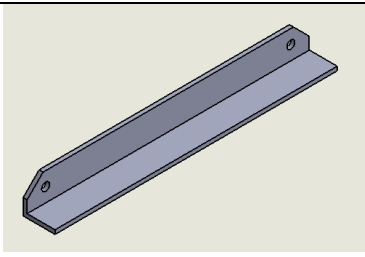
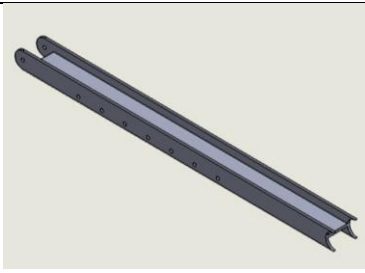
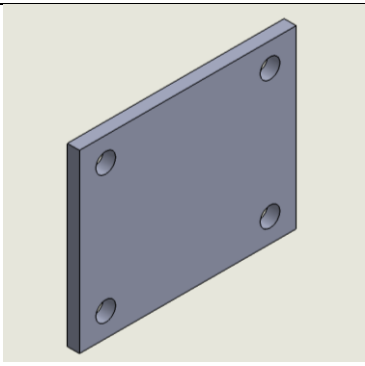
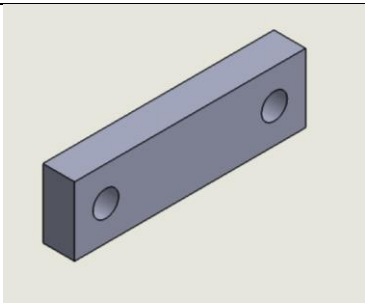


Small L brackets			
Large L brackets			
Part 7 – version 2			
1.5” Shaft Pillow Block Bearing			
Part 30			



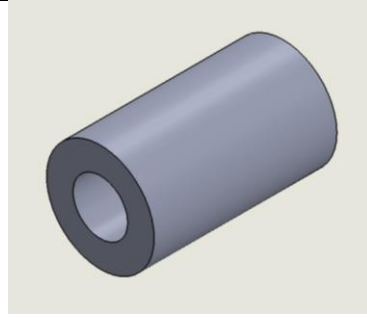
LEVER ASSEMBLY		
Part 12		
Part 24		
Part 9		
Part 28		



Part 10			
Part 11			
Part 25			
Part 17			
Part 16			



Part 23



B. Electrical Assembly and Operation Recommendations

1. Electrical Requirements and Recommendations

The following section outlines electrical requirements and recommendations for proper function of the Curb Drop Testing Machine. All operating instructions allow for successful completion of the curb drop test as required by RESNA WC-1/ISO 7176 standards.

The motor selected for this machine should have at least a 3 horsepower rating, 3 phases, and a 220 voltage rating. A programmable logic controller should be used in combination with proximity switches and a digital meter to display the number of cycles. A motor controller can be used to control the machine, regulating the actions of the motor using the commands from the programmed logic controller. A circuit breaker may be used to prevent power surges. Push buttons should be added as necessary to perform the commands that will dictate the motion of the motor including the starting and stopping of the motor to begin and finish the test. Additional push button functions may reverse the direction of the motor to pause the test and perform a jog which runs the motor at approximately 10% speed for adjustment and positioning of the wheelchair. The electrical components should be fit into an appropriate electrical enclosure, and the buttons should be mounted to the outside panel of the enclosure.

A 220V AC power supply is assumed to be accessible for the factory being set up, but if this is not true then a separate power supply must be obtained as it is required for operation of the equipment. If 3 phase power is not available, use a 220V single phase power supply and a motor controller that up-converts to 3 phase.

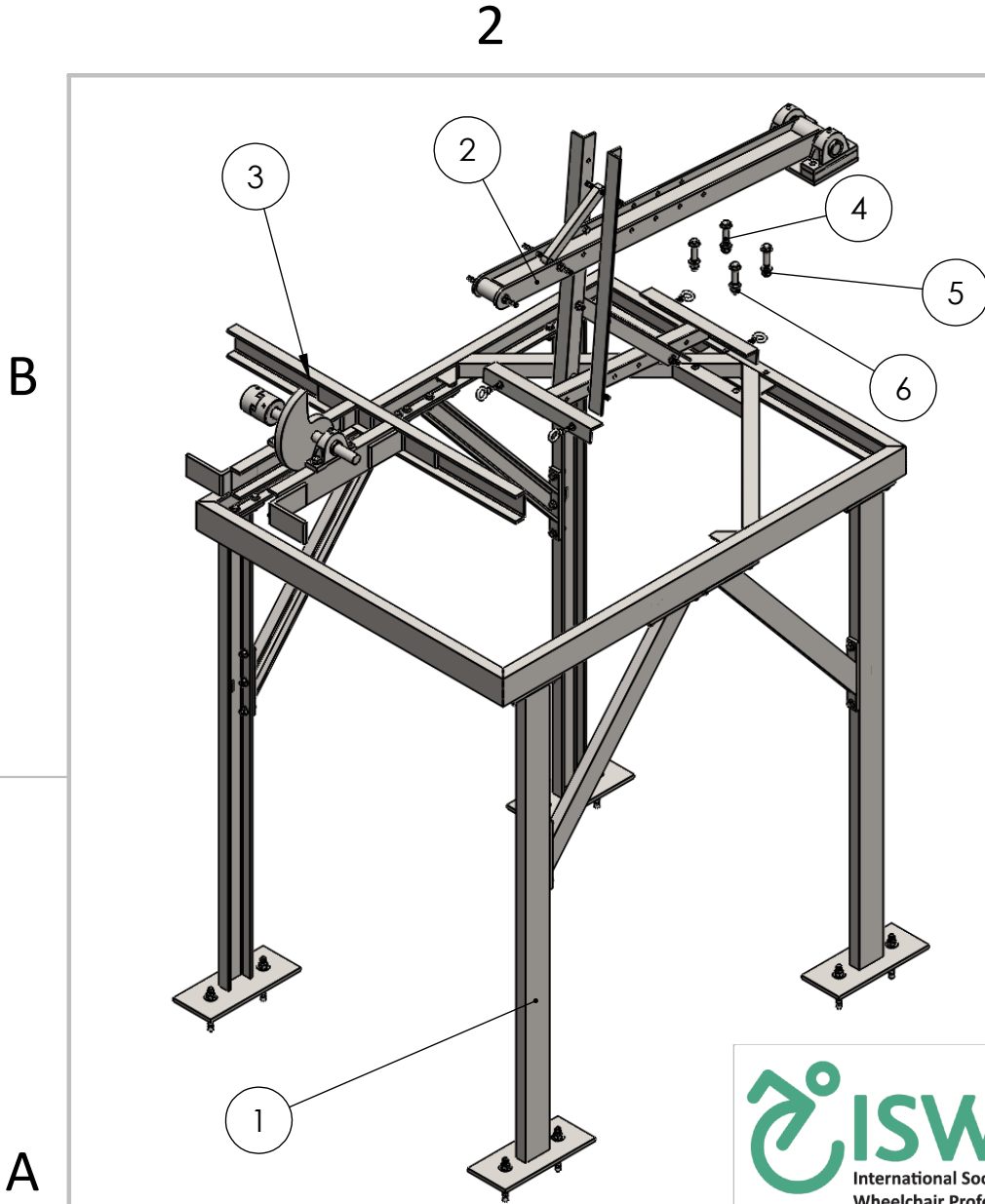
Organization of the wires within the control box is up to the user and can be done in any way they find the most effective.

2. Verifying RESNA Tests

For the proper completion of RESNA approved Curb Drop Testing the tester must meet certain specifications. This includes dropping the chair from a height of 50 mm for 6,666 cycles. In order to verify this certain equipment will be used to count the number of revolutions of the CAM. To count the drop cycles a metallic proximity sensor will be used. The proximity sensor will be placed a certain distance away to scan the object without affecting the test. The sensor's maximum sensing distance is 4 mm so it must be placed close to the metallic object. To count the rotations, the proximity sensor is wired directly into the logic controller.

Material	Amount Needed	Units	Source	Part Number	Size to Order	Qty to Order	Cost	Total Cost	Parts for which Material is used
2" x 2" x 1/4" A-36 Steel Angle	224	in	Metals Depot	A12214	20'	1	\$51.60	\$51.60	Part 8(34**1), Part 9(36**1), Part 10(36**1), Part 11(18**2), Part 12(18**2),Part 13(12"),Part 14 (34"),
2" x 2" x 1/4" wall A500 Square Steel Tube	28	in	Metals Depot	T122250	2' 4"	1	\$32.98	\$32.98	Part 24(28")
4" x 1.584" x .184" A-36 Steel Channel	595	in	Metals Depot	C2454	20'	3	\$93.20	\$279.60	Part 1(67**4), Part 2(67**2), Part 5(20**2), Part 6(52**2), Part 7(49**1)
3" x 1.498" x .258" A-36 Steel Channel	230	in	Metals Depot	C2350	20'	1	\$99.00	\$99.00	Part 3(36**2), Part 4(36**2), Part 22(10**4), Part 29(23**2)
1/2" x 1-1/2" Hot Rolled A-36 Steel Flat	126	in	Metals Depot	F212112	10' 6"	1	\$49.00	\$49.00	Part 15(8**4), Part 18(9**4), Part 19(9**4), Part 36(11**2)
1" x 3" Hot Rolled A-36 Steel Flat	15	in	Metals Depot	F213	1' 3"	1	\$29.13	\$29.13	Part 16(7.5**2),
1/2" x 8" Hot Rolled A-36 Steel Flat	9	in	Metals Depot	F2128	9"	1	\$25.30	\$25.30	Part 17(9")
1-1/2"OD x .250" wall x 1.00" ID 1020 DOM A513 Round Steel Tube	3.5	in	Metals Depot	T21121	3-1/2"	1	\$16.67	\$16.67	Part 23 (3.5")
4.00" x .193" x 2.663" A36/A572-50 Steel I Beam	56	in	Metals Depot	B1477	4' 8"	1	\$84.68	\$84.68	Part 25 (56")
1-1/2" Dia. Hot Rolled A-36 Steel Round	9	in	Metals Depot	R1112	9"	1	\$16.75	\$16.75	Lever to bearing connector (9")
1-1/4" Dia. Hot Rolled A-36 Steel Round	15	in	Metals Depot	R1114	1' 3"	1	\$18.60	\$18.60	Part 27 (15")
1" x 12" Hot Rolled A-36 Steel Flat	9	in	Metals Depot	F2112	9"	1	\$70.49	\$70.49	Part 30 (9")
1" x 1-1/2" Hot Rolled A-36 Steel Flat	12	in	Metals Depot	F21112	1'	1	\$16.47	\$16.47	Stop Rod (1')
3" Dia. Hot Rolled A-36 Steel Round	4	in	Metals Depot	R13	4"	1	\$28.75	\$28.75	Pillow block connector (4")
1/2" thick A36 Steel Plate	187.5	in^3	Metals Depot	P112	6-1/4"x15"	4	\$41.33	\$165.32	Anchor Plate
1" thick A36 Steel Plate	252	in^2	Metals Depot	P11	12" x 21"	1	\$137.21	\$137.21	motor mount plate
Oversized Steel Machine Key Stock, Zinc-Plated, 12" long	2	in	McMaster-Carr	98491A136	1/4" x 1/4"	1	\$1.44	\$1.44	final assembly with motor
3" x 3" x 1/2" A-36 Steel Angle	6	in	Metals Depot	A23212	3"	2	\$5.63	\$11.26	CAM lobe assembly
6" x 6" x 1/2" A-36 Steel Angle	12	in	Metals Depot	A26612	1'	1	\$29.50	\$29.50	CAM lobe assembly
4.5" x 4.5" x 3/16" thick A-36 Steel Plate	20.25	in^2	Metals Depot	P1316	4.5" x 4.5"	2	\$11.83	\$23.66	Part 40 version 1
9" x 6" x 3/16" thick A-36 Steel Plate	54	in^2	Metals Depot	P1316	9" x 6"	1	\$15.03	\$15.03	Part 40 version 2
							Shipping	unknown	
							Parts	\$1,202.44	
						Metals Depot	Total	\$1,202.44	
Hardware	Qty Needed	Units	Source	Part Number	Package Size	ackages to Ord	Cost	Total Cost	Parts for which material is used
Ball Bearing with Nickel-Plated Cast Iron Housing 1-1/2" Shaft Dia	2		McMaster-Carr	6494K19	1	2	\$71.49	\$142.98	Pillow Block Bearing
Ball Bearing with Nickel-Plated Cast Iron Housing 1-1/4" Shaft Dia	2		McMaster-Carr	6494K16	1	2	\$61.83	\$123.66	Pillow Block Bearing
1" OD x .505" ID Zinc-Plated Steel Unthread Spacers	2	in	McMaster-Carr	92415A153	1"	2	\$12.34	\$24.68	Part 28 (1**2)
Medium-Strength Grade 5 Steel Hex Nut 1/2" -13 thread size, zinc-plated	50		McMaster-Carr	95462A033	100	1	\$13.77	\$13.77	Frame Assembly, Motor Assembly, Final Assembly, Lever Assembly
Medium-Strength Grade 5 Steel Hex Nut 5/8" -11 thread size, zinc-plated	4		McMaster-Carr	95462A533	25	1	\$7.43	\$7.43	Motor Assembly, Final Assembly, motor mounting
Medium-Strength Grade 5 Steel Hex Head Screw, Zinc-Plated, 1/2" -13 thread size, 1- 1/2" long	4		McMaster-Carr	92865A716	25	1	\$11.40	\$11.40	Lever Assembly

Medium-Strength Grade 5 Steel Hex Head Screw Zinc-Plated, 1/2"-13 Thread Size, 1-3/4" Long	36	McMaster-Carr	92865A718	25	2	\$12.45	\$24.90	Frame Assembly
Zinc Yellow-Chromate Plated Grade 8 Steel Washer for 1/2" Screw Size, 0.531" ID, 1.062" OD	88	McMaster-Carr	98023A033	25	4	\$7.29	\$29.16	Frame Assembly , Lever Assembly
Zinc Yellow-Chromate Plated Grade 8 Steel Washer for 5/8" Screw Size, 0.656" ID, 1.312" OD	12	McMaster-Carr	98023A035	25	1	\$11.12	\$11.12	motor assembly (pillow block bearings), complete assembly
Medium-Strength Grade 5 Steel Hex Head Screw, Zinc-Plated, 5/8" -11 thread size, 2-1/2" long	4	McMaster-Carr	92865A804	5	1	\$6.27	\$6.27	Motor Assembly
Steel Stud Anchor for Concrete 5/8" Dia 6" long	8	McMaster-Carr	91578A209	10	1	\$25.70	\$25.70	Frame Assembly
Flexible Shaft Coupling Iron Hub with set screw, 4-7/32" length, 3-21/64" OD, 1-1/4" shaft dia	1	McMaster-Carr	6408K18 (6408K2	1	1	\$40.83	\$40.83	final assembly with motor
Flexible Shaft Coupling Iron Hub with set screw, 4-7/32" length, 3-21/64" OD, 1-5/8" shaft dia	1	McMaster-Carr	6408K18 (6408K297)	1	1	\$40.83	\$40.83	final assembly with motor
Buna-N Rubber Spider for 3-21/64" OD	1	McMaster-Carr	6408K79	1	1	\$18.67	\$18.67	final assembly with motor
Grade 8 Steel Washer Black Ultra-Corrosion-Resistant, 5/16" Screw Size, 0.875" OD	8	McMaster-Carr	98026A112	10	1	\$12.29	\$12.29	Lever Assembly
Steel Eyebolt with Shoulder - for Lifting 3/8" -16 Thread Size, 3" Thread Length	4	McMaster-Carr	3014T63	1	4	\$12.50	\$50.00	Lever Assembly
High-Strength Steel Nylon-Insert Locknut Grade 8, 3/8"-16 Thread Size	8	McMaster-Carr	90630A121	20	1	\$3.20	\$3.20	Lever Assembly
High-Strength Steel Nylon-Insert Locknut Grade 8, 5/8"-11 Thread Size	4	McMaster-Carr	90630A130	5	1	\$3.50	\$3.50	final assembly
Medium-Strength Grade 5 Steel Hex Head Screw Zinc-Plated, 5/8"-11 Thread Size, 3-3/4" Long	4	McMaster-Carr	91247A811	5	1	\$8.05	\$8.05	final assembly
Undersized Steel Machine Key Stock Zinc-Plated, 3/16" x 3/8", 12" Long	1 in	McMaster-Carr	98510A155	1	1	\$5.18	\$5.18	CAM lobe assembly
						Shipping	unknown	
						Parts	\$603.62	
						Total	\$603.62	
						Final Total	\$1,806.06	



ITEM NO.	PART NUMBER	exploded/QTY.
1	Frame Assembly	1
2	Lever Assembly	1
3	CAM Lobe Assembly	1
4	5/8" -11 thread 3-3/4" long hex head screw	4
5	5/8" 0.656"ID, 1.312" OD steel washer	8
6	5/8" - 11 steel nylon insert locknut	4



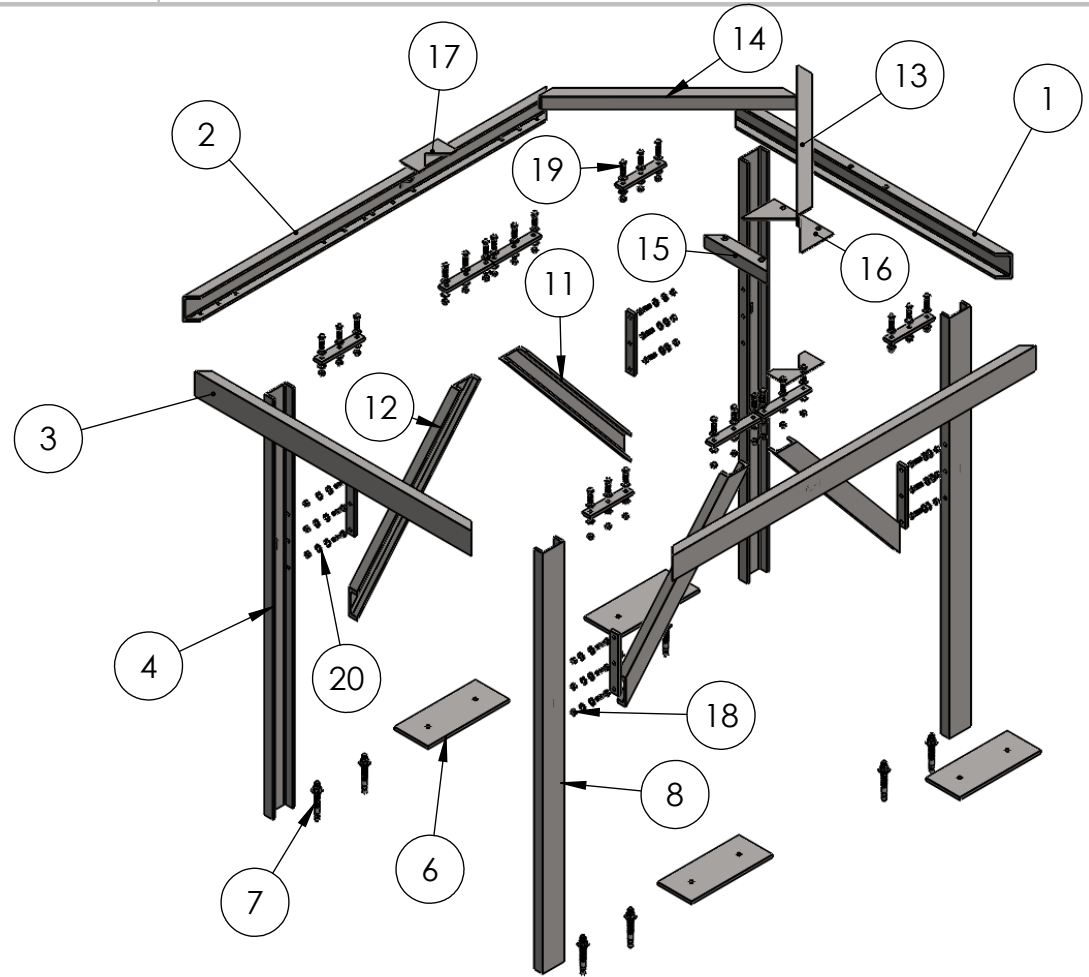
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TITLE:			
Curb Drop Assembly			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:			
SCALE:	SIZE:	DATE:	REV:
1:48	A	7/17/2018	1.3
DO NOT SCALE DRAWING		WEIGHT (LBS): 641.9686 lbs	SHEET 1 OF 1

2

1

ITEM NO.	PART NUMBER	Quantity
1	Part 6 Curb Drop Version 2	1
2	Part 2 Curb Drop	2
3	Part 6 Curb Drop Version 3	1
4	Part 1 Curb Drop Version 2	2
5	Part 15 Curb Drop	4
6	anchor plate	4
7	Steel Stud Anchor 5/8"dia 6"long	8
8	Part 1 Curb Drop Version 1	2
9	Part 18 Curb Drop	4
10	Part 19 Curb Drop	4
11	Part 3 Curb Drop	2
12	Part 4 Curb Drop	2
13	Part 14 Curb Drop	1
14	Part 8 Curb Drop	1
15	Part 13 Curb Drop version 2	1
16	Part 40 Curb Drop Version 2	1
17	Part 40 Curb Drop Version 1	2
18	1/2" - 13 thread Steel Hex Nut	36
19	1/2"-13 thread 1-3/4" long hex head screw	36
20	1/2" screw 0.531 ID 1.062" OD washer	72



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TITLE:

Frame Assembly Redone

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL:

Steel

FINISH:

Plain

TOLERANCES:

SCALE:

1:48

SIZE:

A

DATE:

7/17/2018

REV:

1.3

DO NOT SCALE DRAWING

WEIGHT (LBS): 427.6106

SHEET 1 OF 1

2

1

B

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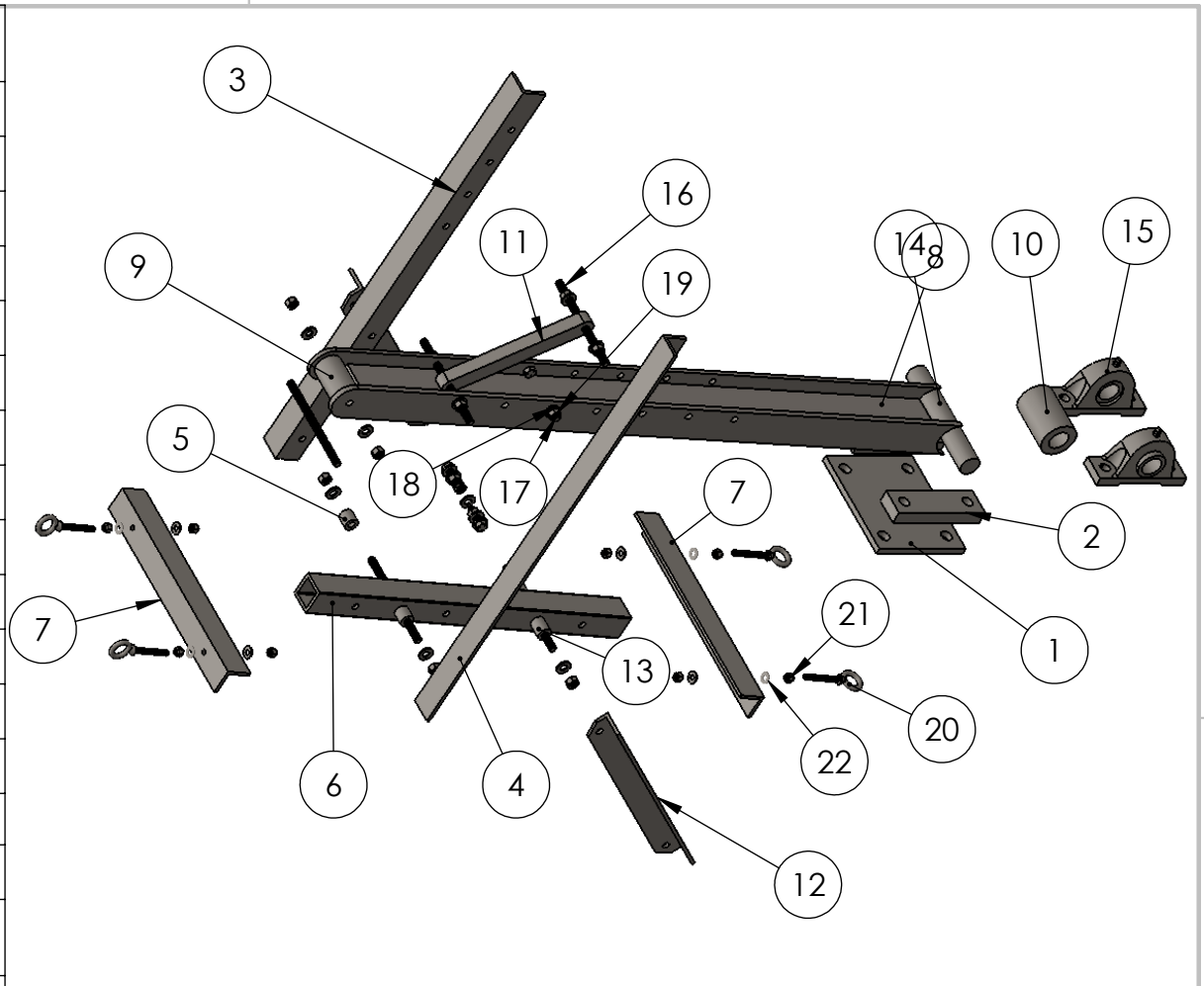
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2

1

ITEM NO.	PART NUMBER	Quantity
1	Part 17 Curb Drop	1
2	Part 16 Curb Drop	2
3	Part 10 Curb Drop	1
4	Part 9 Curb Drop	1
5	Part 28 Curb Drop	2
6	Part 24 Curb Drop	1
7	Part 12 Curb Drop	2
8	Part 25 Curb Drop	1
9	Part 23 Curb Drop	1
10	Pillow block connector R	1
11	Stop Rod	1
12	Part 11 Curb Drop	2
13	1.25 in spacer	2
14	lever to bearing connector	1
15	1-1/2"shaft dia. ball bearing	2
16	1/2"-13 thread steel rod 8"long	5
17	1/2"-13 thread Hex Head Screw	4
18	Steel Washer .531"ID 1.062"OD	16
19	1/2" - 13 thread Steel Hex Nut	14
20	3/8"-16 thread eyebolt with shoulder for lifting	4
21	3/8"-16 thread nylon locknut	8
22	5/16" screw 0.875" OD washer	8



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TITLE:

Curb Drop Lever Assembly

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL:

Steel

FINISH:

Plain

TOLERANCES:

SCALE:

1:32

SIZE:

A

DATE:

7/17/2018

REV:

1.3

DO NOT SCALE DRAWING

WEIGHT (LBS): 119.8596 lbs

SHEET 1 OF 1

2

1

B

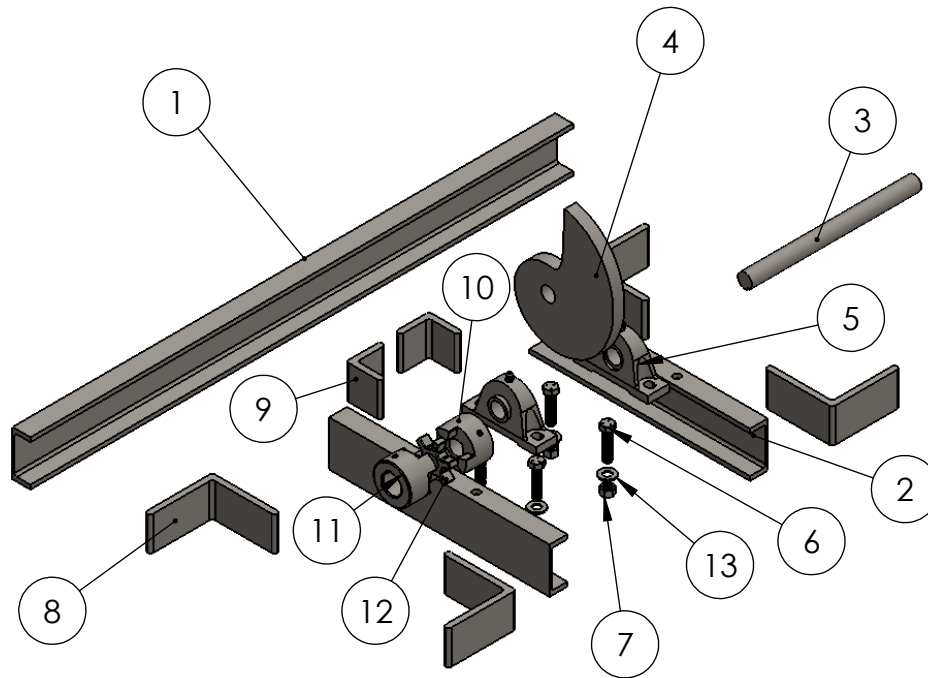
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1



ITEM NO.	PART NUMBER	Quantity
1	Part 7 Curb Drop Version 2	1
2	Part 5 Curb Drop	2
3	Part 27 Curb Drop	1
4	Part 30 Curb Drop	1
5	1-1/4" Shaft Dia. Ball Bearing	2
6	5/8" - 11thread Steel Hex Head Screw(2-1/2"long)	4
7	5/8" - 11 thread Steel Hex Nut	4
8	Large L bracket	4
9	Small L bracket	2
10	1.25" shaft dia lovejoy	1
11	1.625" shaft dia lovejoy	1
12	Rubber SpiderB2	1
13	5/8" screw 0.656" ID 1.312" OD washer	4



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TITLE:

CAM Lobe Assembly

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL:

Steel

FINISH:

Plain

TOLERANCES:

SCALE:

1:24

SIZE:

A

DATE:

7/17/2018

REV:

1.3

DO NOT SCALE DRAWING

WEIGHT (LBS): 94.2149 lbs

SHEET 1 OF 1

2

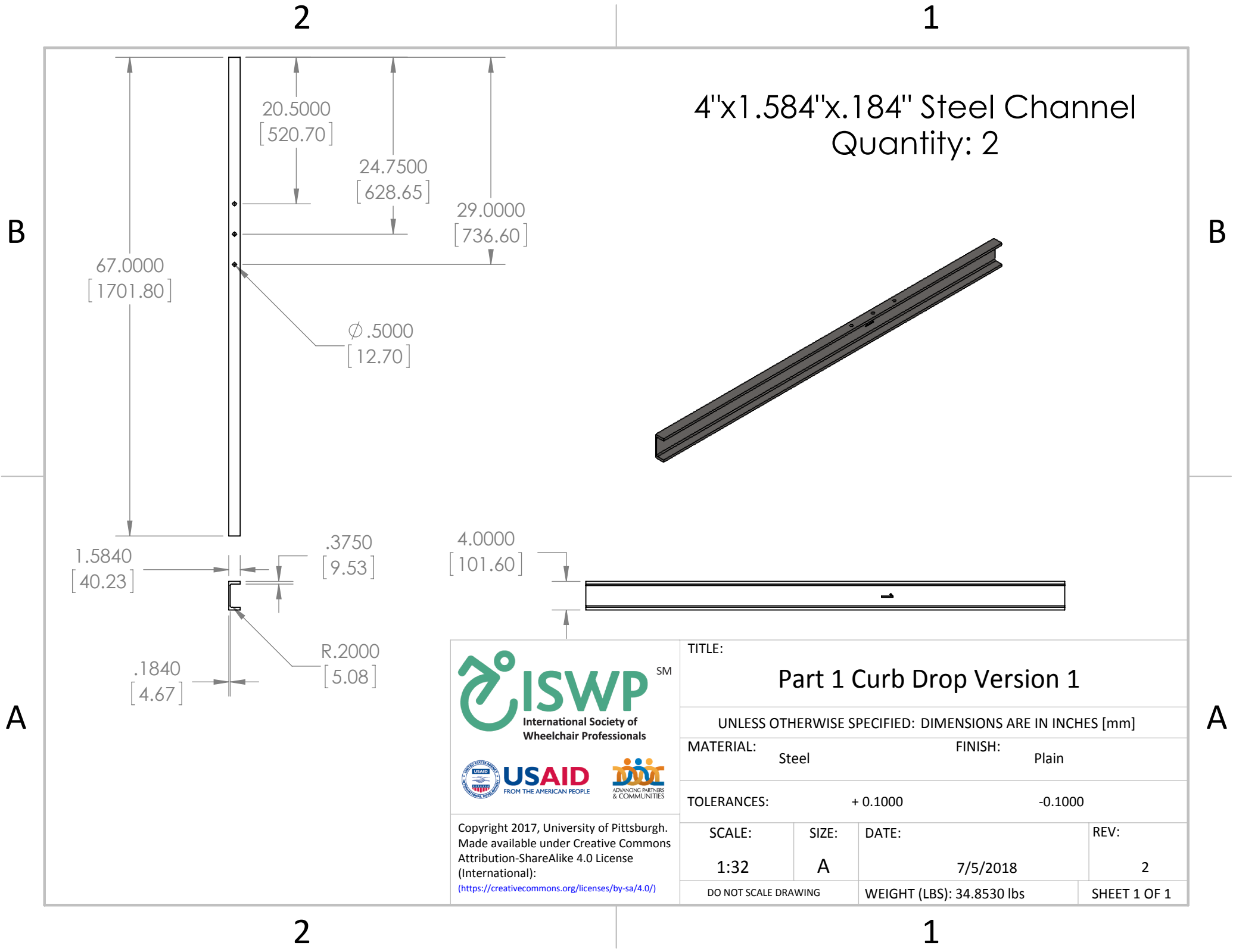
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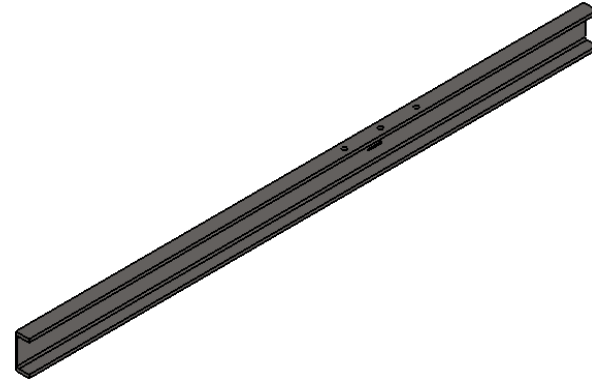
B

A

A



4"x1.584"x.184" Steel Channel
Quantity: 2



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TITLE:			
Part 1 Curb Drop Version 1			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:32	A	7/5/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 34.8530 lbs	SHEET 1 OF 1

2 1

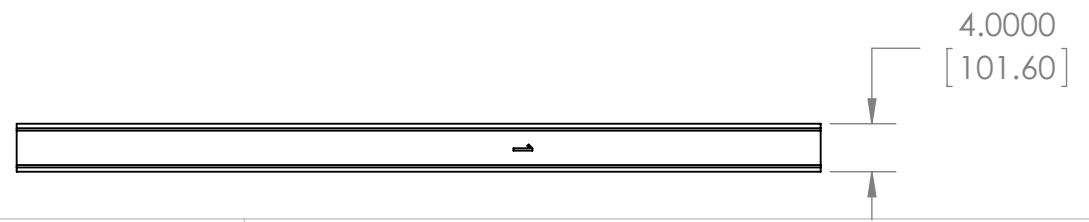
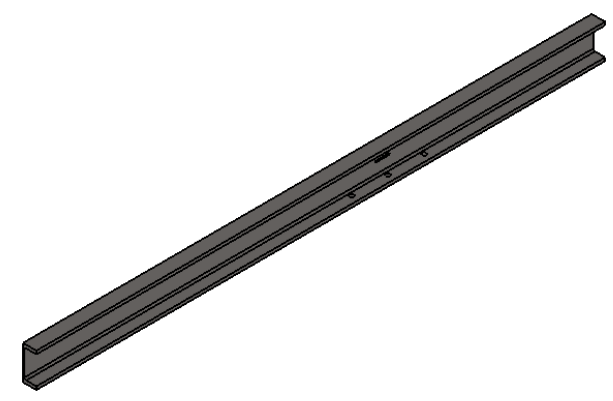
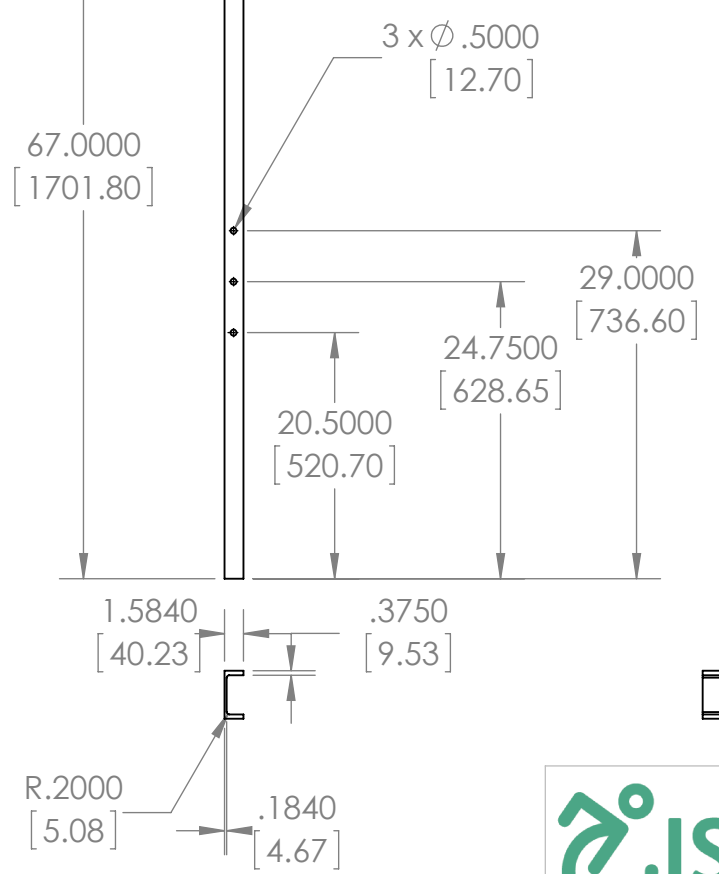
4"x1.584"x.184" Steel Channel
Quantity: 2

B

B

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A



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TITLE:			
Part 1 Curb Drop Version 2			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		-0.1000	
+0.1000			
SCALE:	SIZE:	DATE:	REV:
1:32	A	7/5/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS):	SHEET 1 OF 1
		4.3441 lbs	

2

1

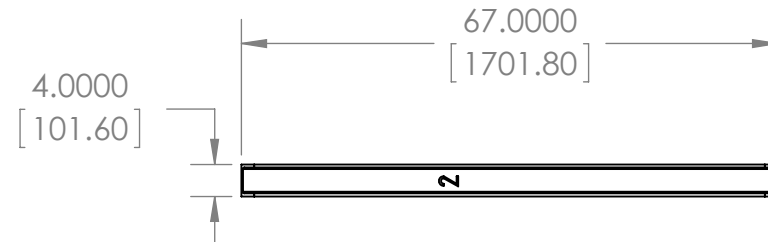
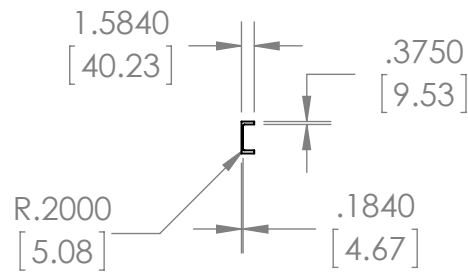
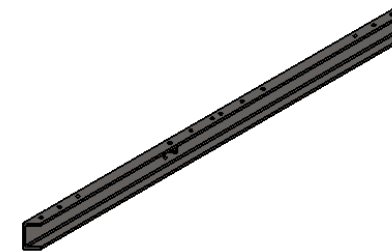
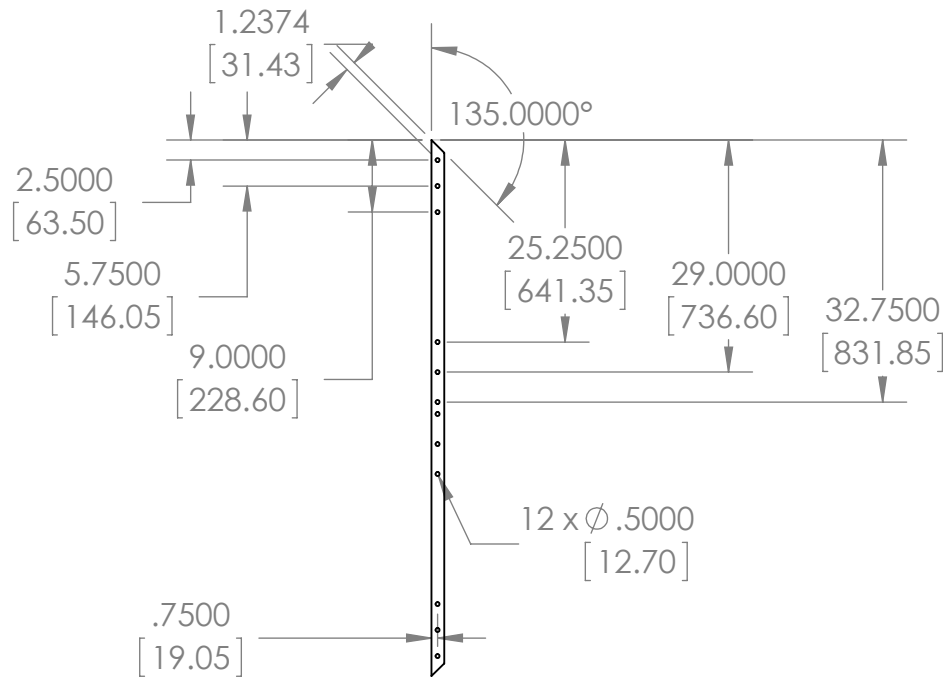
2

1

4"x1.584"x.184" Steel Channel
Quantity: 2

B

B



A

A



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TITLE:			
Part 2 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:32	A	7/6/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS):	SHEET 1 OF 1
		34.0822 lbs	

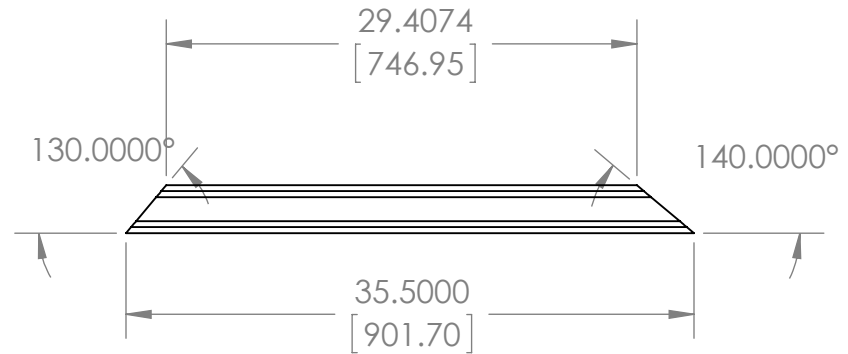
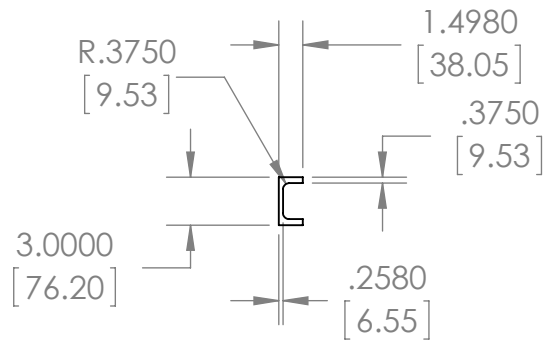
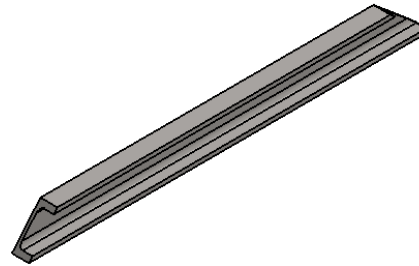
2

1

2

1

3"x1.498"x.258" Steel Channel
Quantity: 2



B

B

A

A



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TITLE:			
Part 3 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:16	A	7/16/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 16.5207 lbs	SHEET 1 OF 1

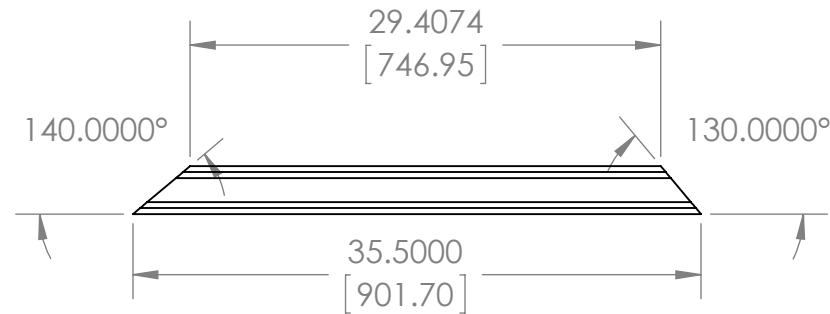
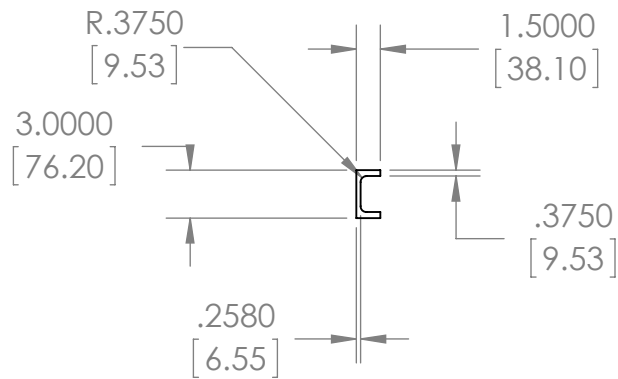
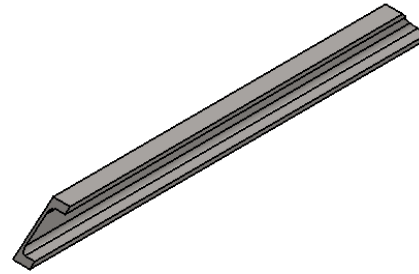
2

1

2

1

3"x1.498"x.258" Steel Channel
Quantity: 2



B

B

A

A



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TITLE:

Part 4 Curb Drop

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL:

Steel

FINISH:

Plain

TOLERANCES:

+0.1000

-0.1000

SCALE:

1:16

SIZE:

A

DATE:

7/16/2018

REV:

1

DO NOT SCALE DRAWING

WEIGHT (LBS): 16.5632 lbs

SHEET 1 OF 1

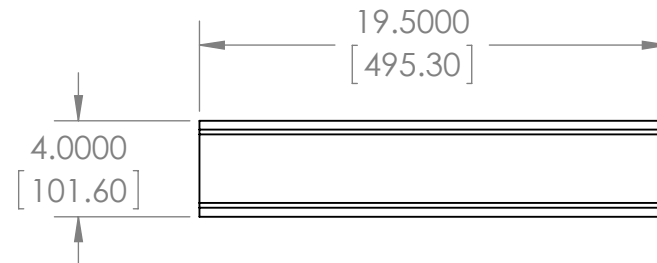
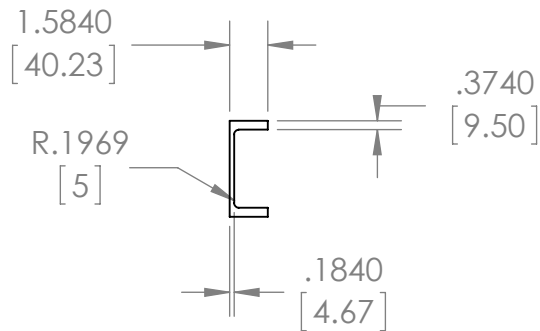
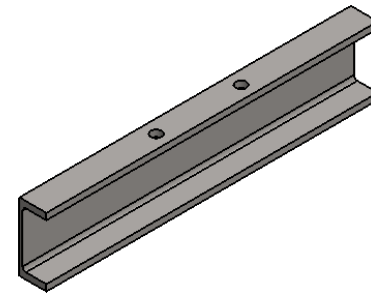
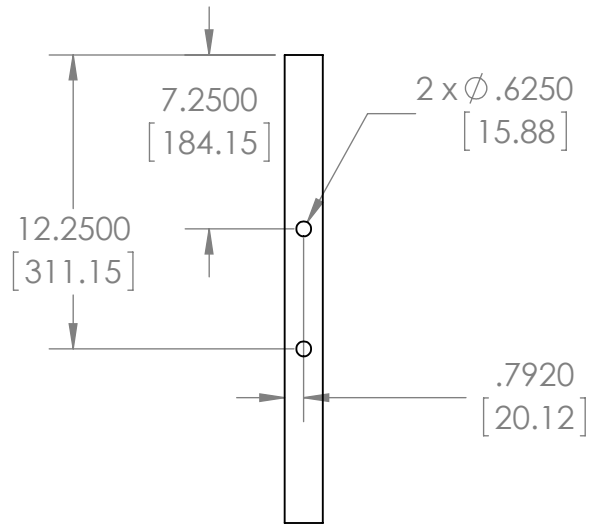
2

1

2

1

4"x1.584"x.184" Steel Channel
Quantity: 2



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TITLE:			
Part 5 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:8	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 10.0775 lbs	SHEET 1 OF 1

2

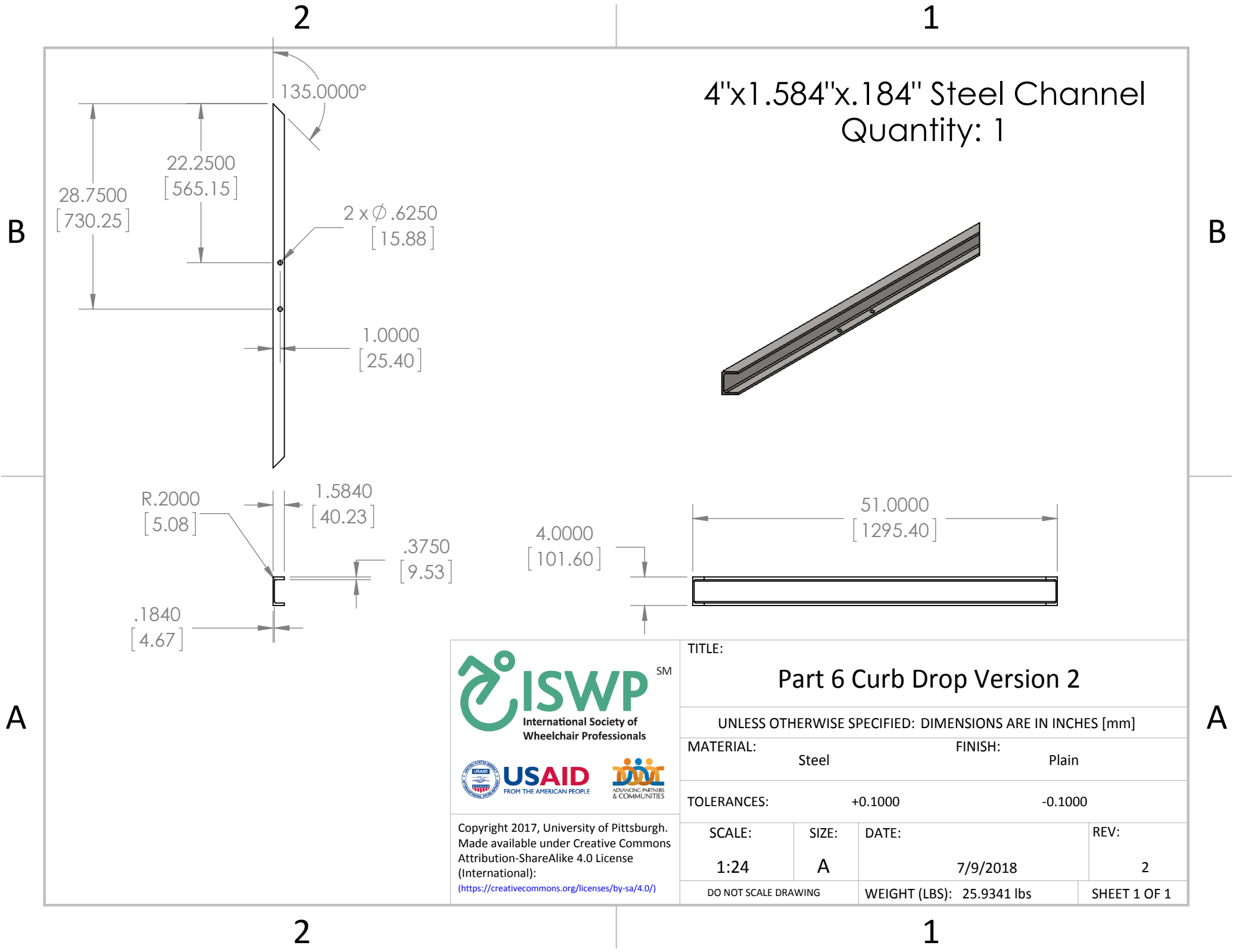
1

B

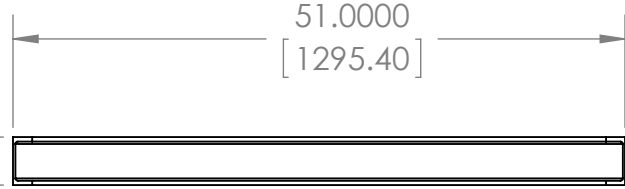
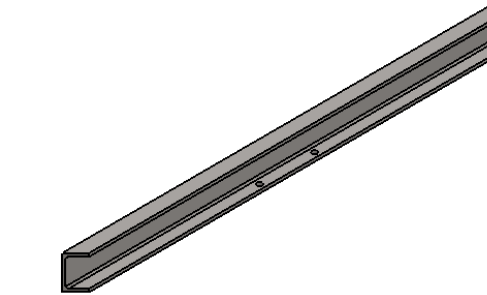
B

A

A

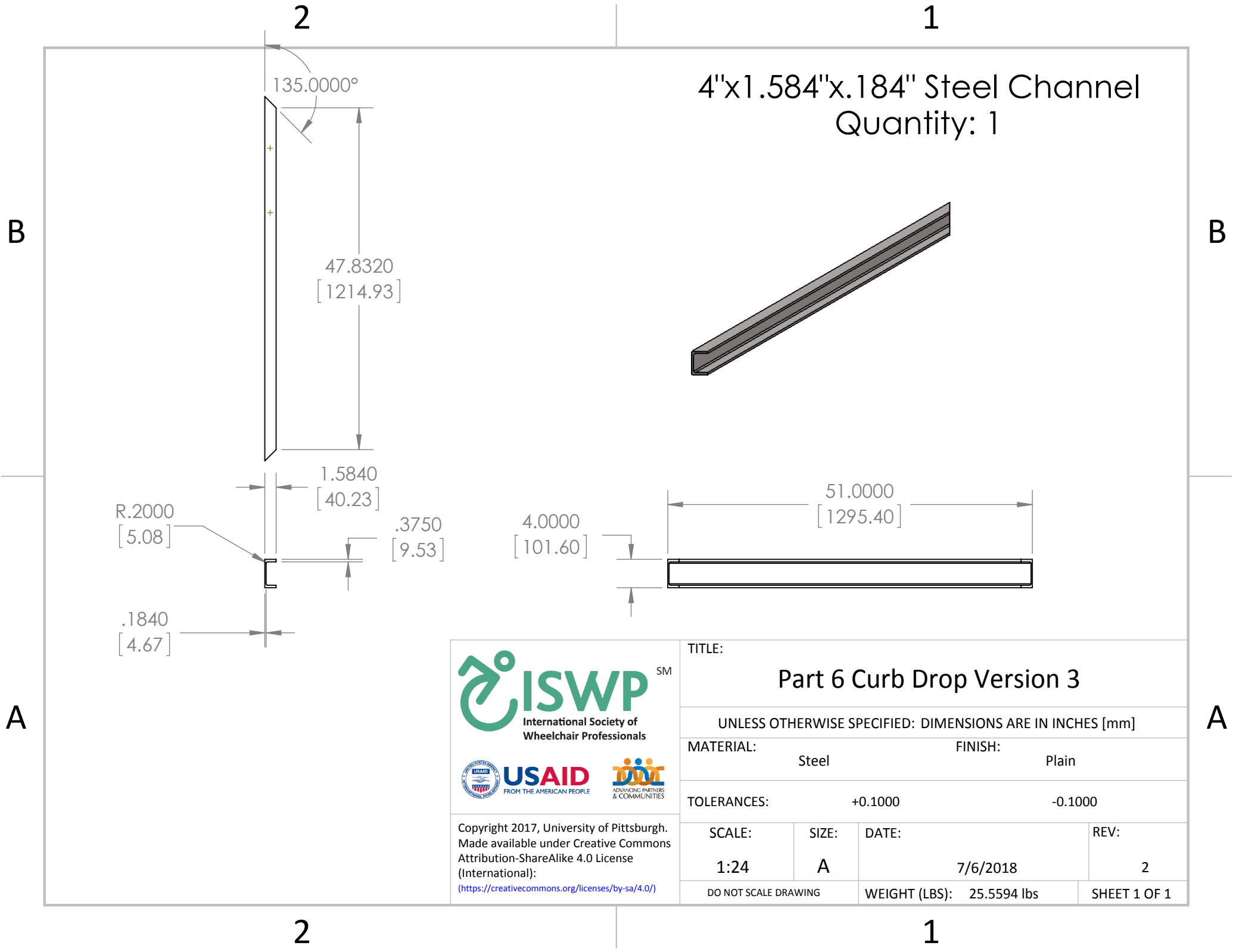


4"x1.584"x.184" Steel Channel
Quantity: 1



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TITLE:			
Part 6 Curb Drop Version 2			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:24	A	7/9/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 25.9341 lbs	SHEET 1 OF 1



4"x1.584"x.184" Steel Channel
Quantity: 1



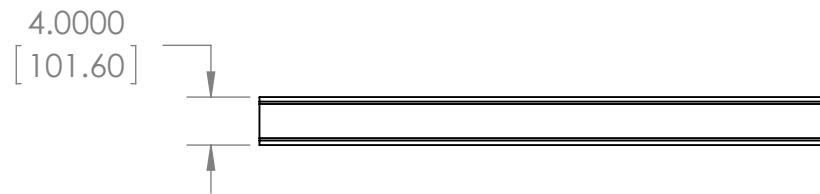
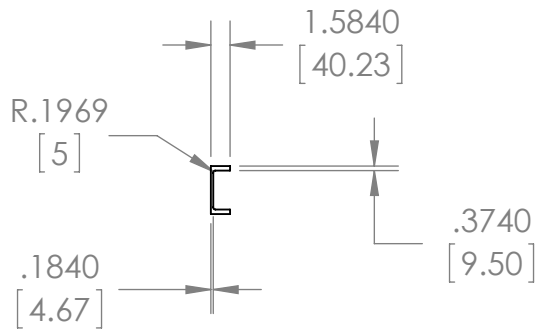
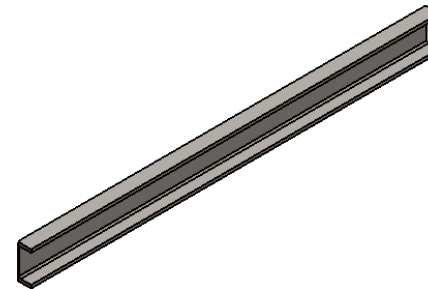
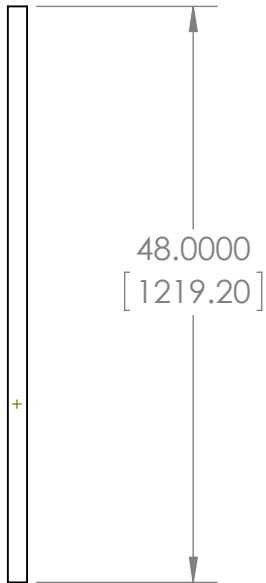
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TITLE:			
Part 6 Curb Drop Version 3			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:24	A	7/6/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 25.5594 lbs	SHEET 1 OF 1

2

1

4"x1.584"x.184" Steel Channel
Quantity: 1



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TITLE:			
Part 7 Curb Drop Version 2			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:24	A	7/6/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 24.5080 lbs	SHEET 1 OF 1

2

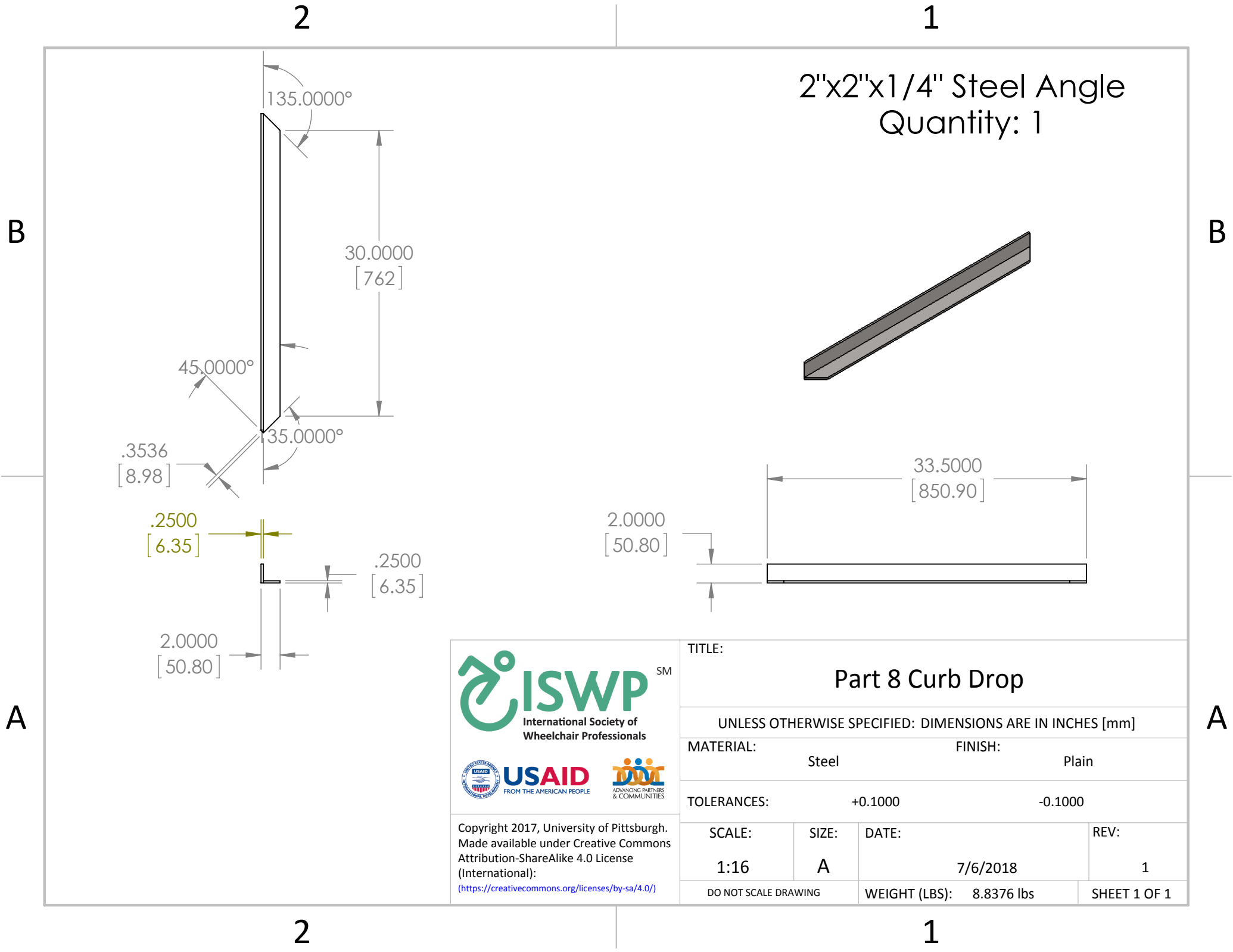
1

B

B

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A



2"x2"x1/4" Steel Angle
Quantity: 1

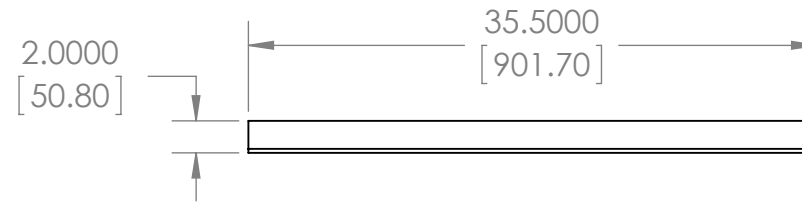
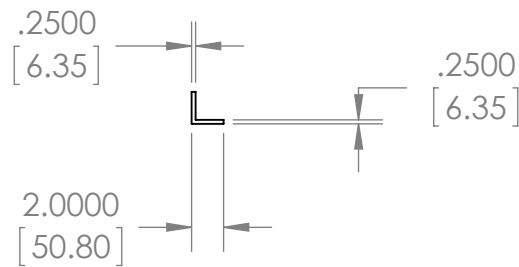
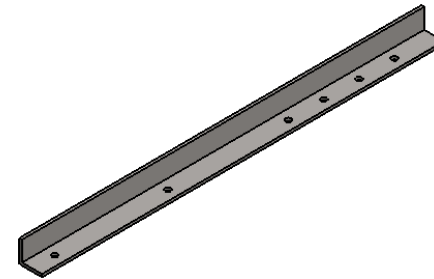
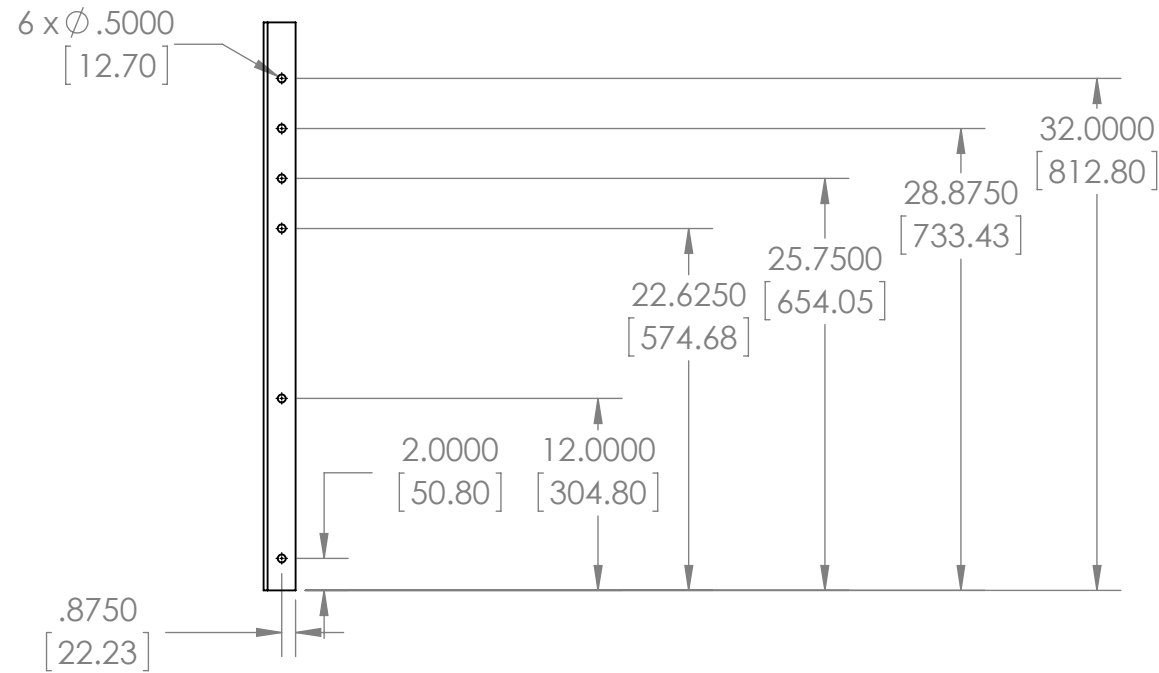
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TITLE:			
Part 8 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:16	A	7/6/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS):	SHEET 1 OF 1
		8.8376 lbs	

2

1

2"x2"x1/4" Steel Angle
Quantity: 1



B

B

A

A



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TITLE:			
Part 9 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		-0.1000	
+0.1000			
SCALE:	SIZE:	DATE:	REV:
1:16	A	7/6/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS):	SHEET 1 OF 1
		9.5338 lbs	

2

1

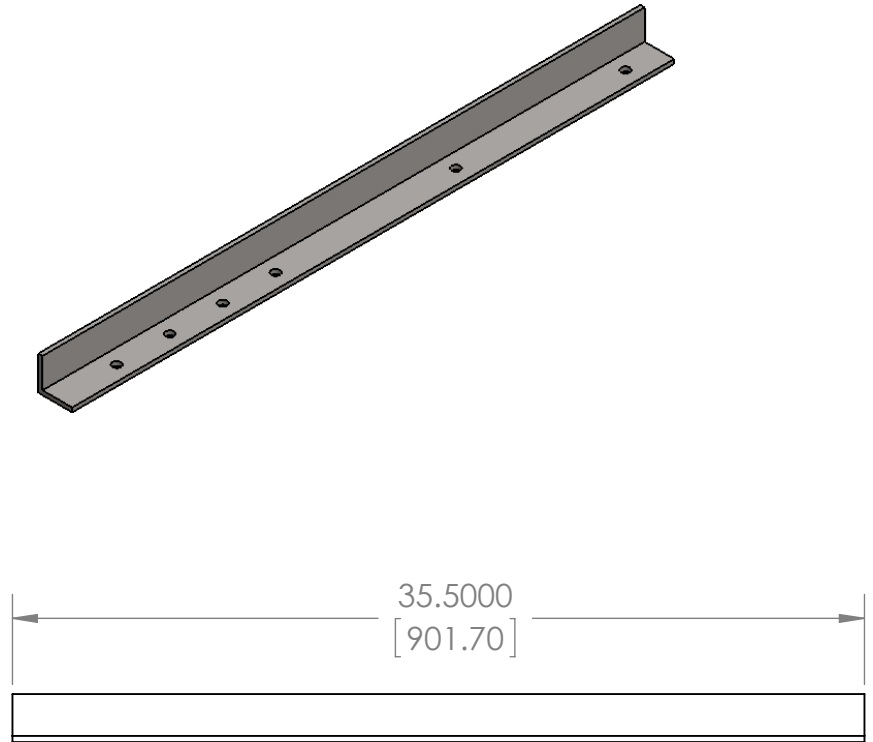
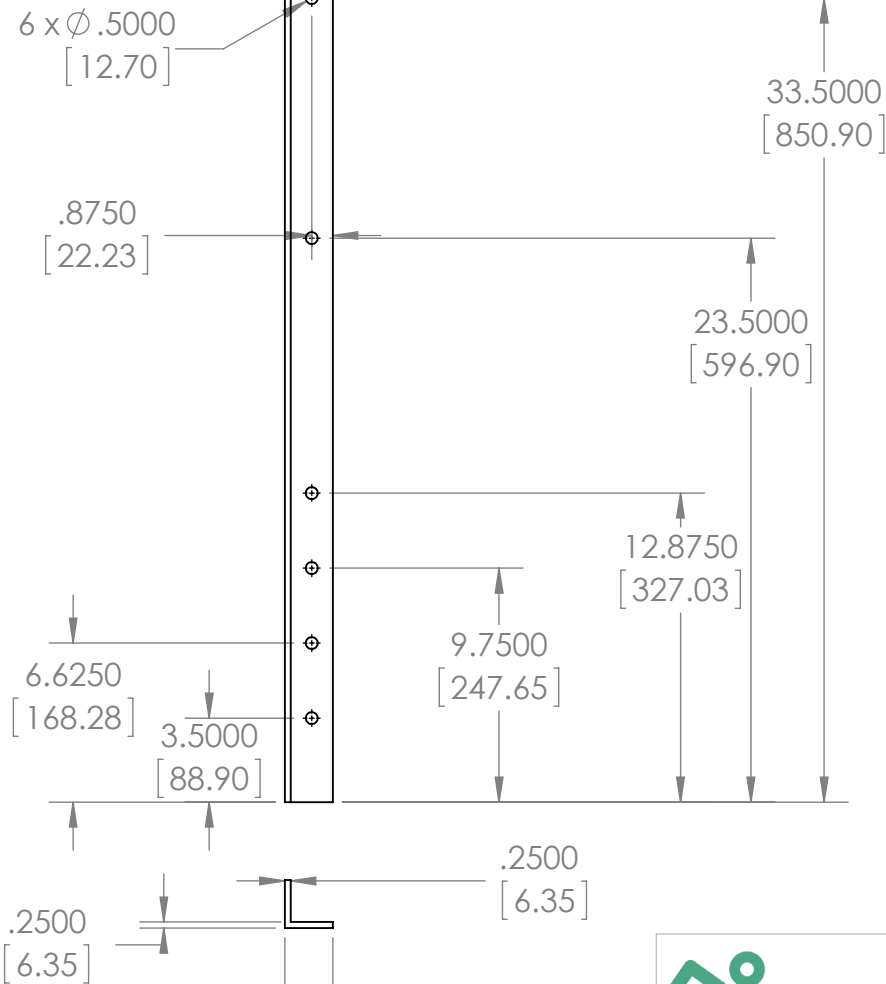
2

1

2"x2"x1/4" Steel Angle
Quantity: 1

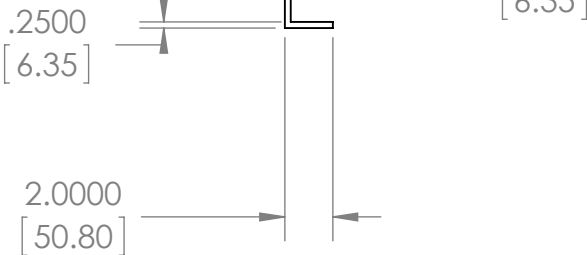
B

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TITLE:			
Part 10 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:16	A	7/6/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 9.5338 lbs	SHEET 1 OF 1

2

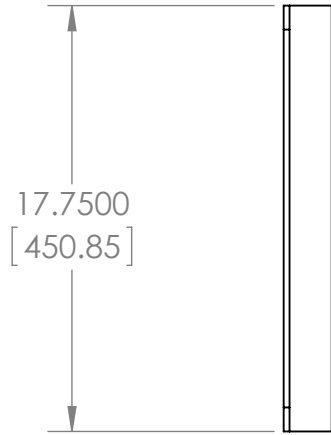
1

2

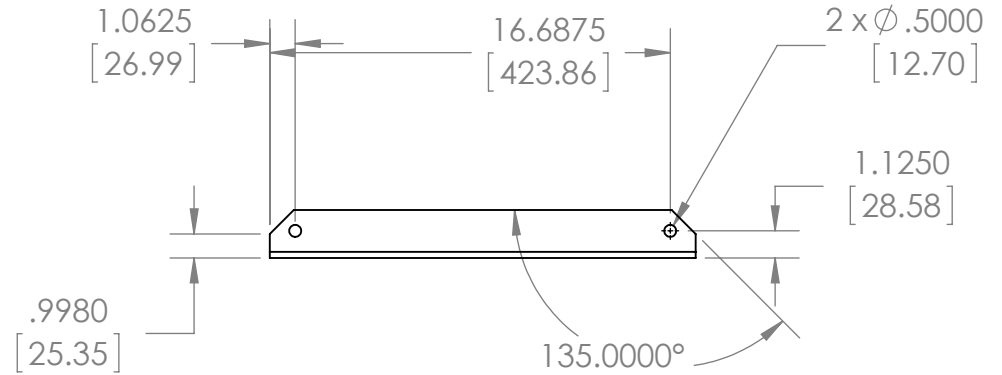
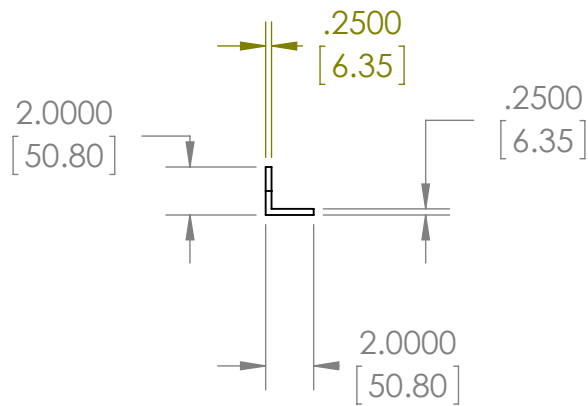
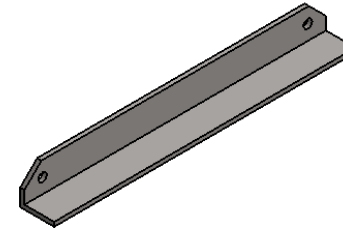
1

2"x2"x1/4" Steel Angle
Quantity: 2

B



B



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TITLE:			
Part 11 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:			
+0.1000		-0.1000	
SCALE:	SIZE:	DATE:	REV:
1:8	A	7/17/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS):	SHEET 1 OF 1
		4.7085 lbs	

2

1

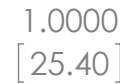
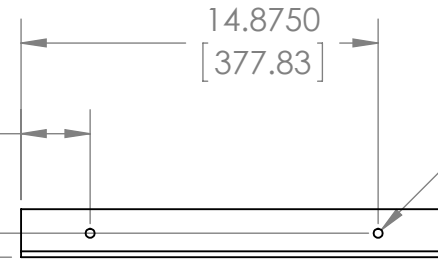
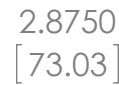
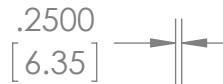
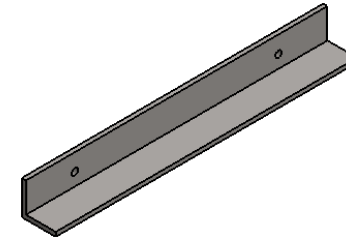
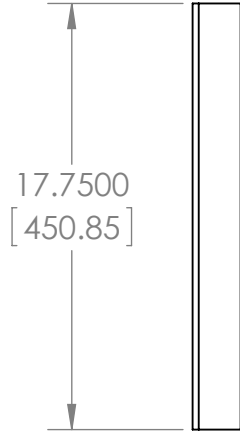
2

1

2"x2"x1/4" Steel Angle
Quantity 2

B

B



A

A



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TITLE:			
Part 12 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:8	A	7/6/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 4.7935 lbs	SHEET 1 OF 1

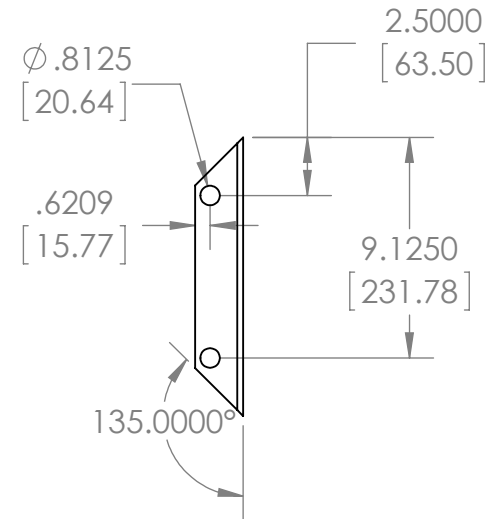
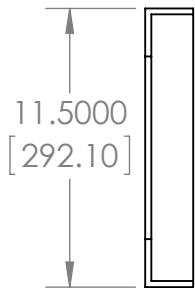
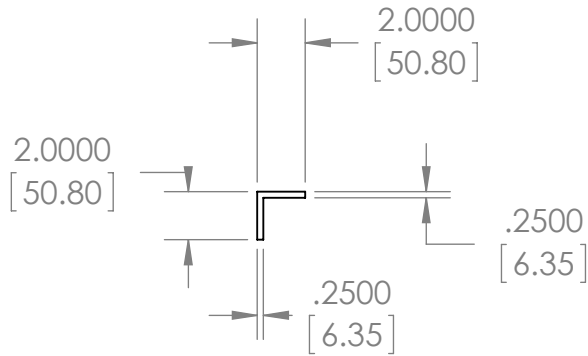
2

1

2

1

2"x2"x1/4" Steel Angle Quantity: 1



B

B

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A



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TITLE:			
Part 13 Curb Drop Version 2			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.0500	- 0.0500
SCALE:	SIZE:	DATE:	REV:
1:8	A	7/6/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 2.7517 lbs	SHEET 1 OF 1

2

1

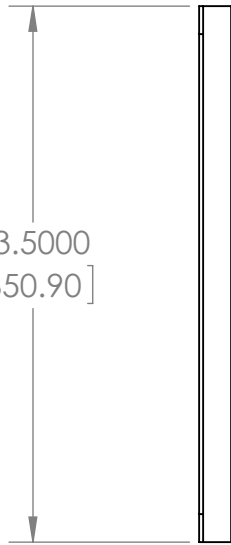
2

1

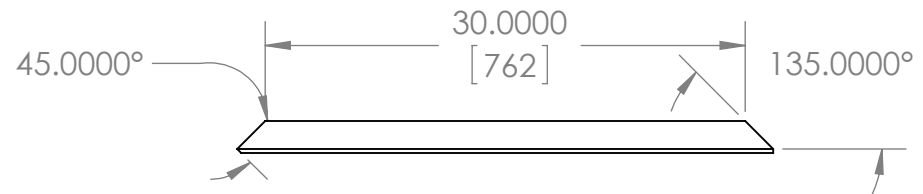
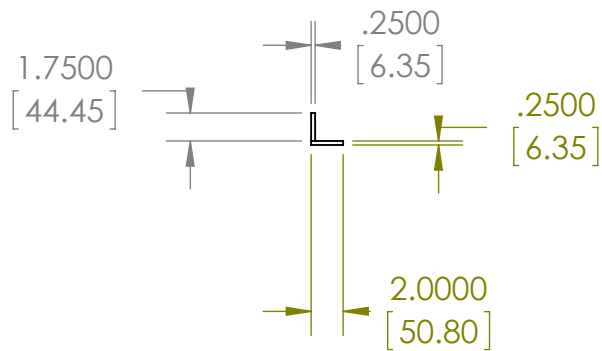
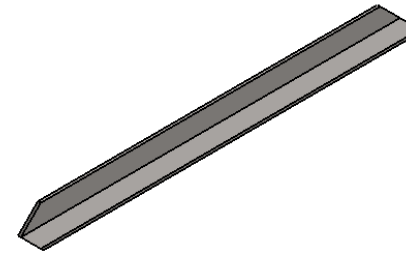
B

B

33.5000
[850.90]



2"x2"x1/4" Steel Angle
Quantity: 1



A

A



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TITLE:			
Part 14 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:			
+ 0.1000		-0.1000	
SCALE:	SIZE:	DATE:	REV:
1:16	A	7/6/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 8.8376 lbs	SHEET 1 OF 1

2

1

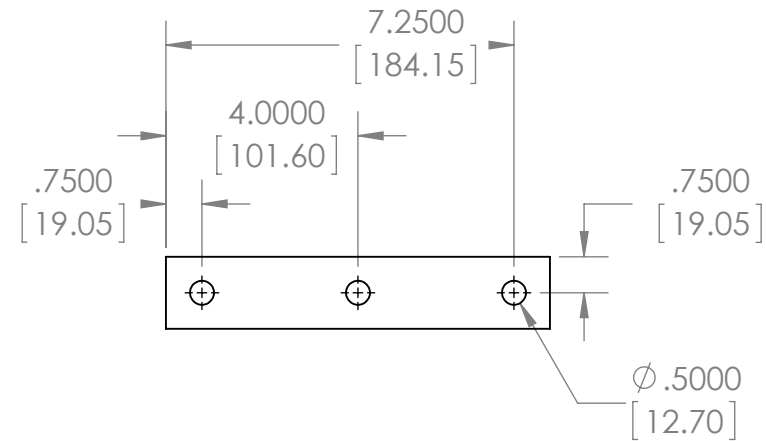
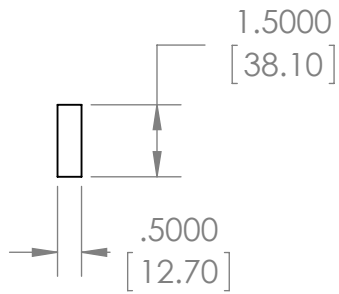
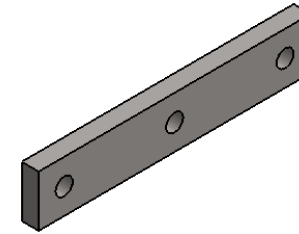
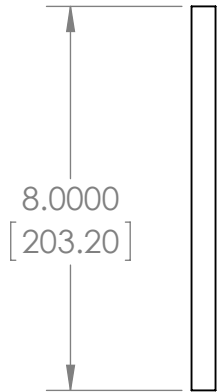
2

1

1/2"x1-1/2" Steel Flat
Quantity: 4

B

B



A

A



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TITLE:			
Part 15 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000 - 0.1000	
SCALE:	SIZE:	DATE:	REV:
1:4	A	7/6/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 1.6490 lbs	SHEET 1 OF 1

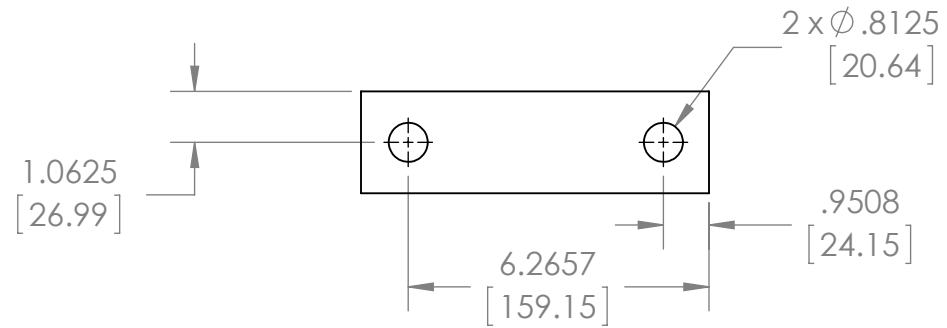
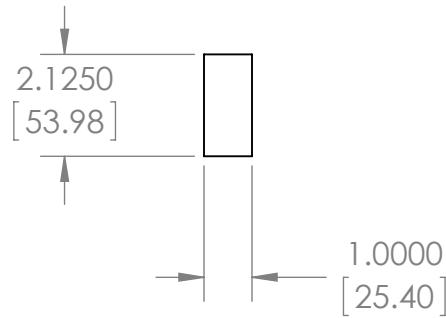
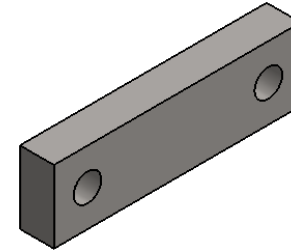
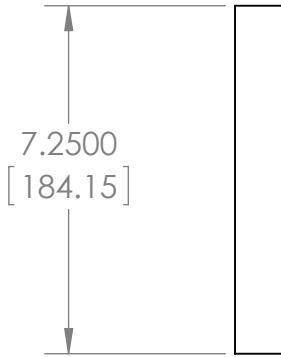
2

1

2

1

1"x3" Steel Flat
Quantity: 2



B

B

A

A



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TITLE:			
Part 16 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000 - 0.1000	
SCALE:	SIZE:	DATE:	REV:
1:4	A	7/6/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 4.1530 lbs	SHEET 1 OF 1

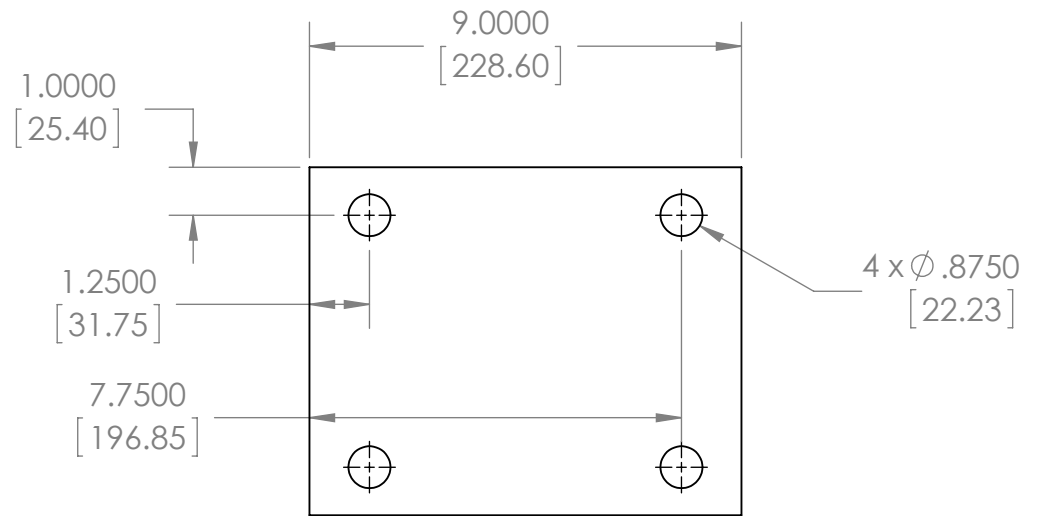
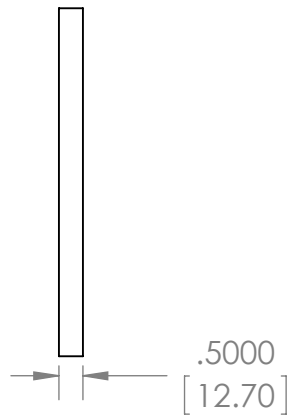
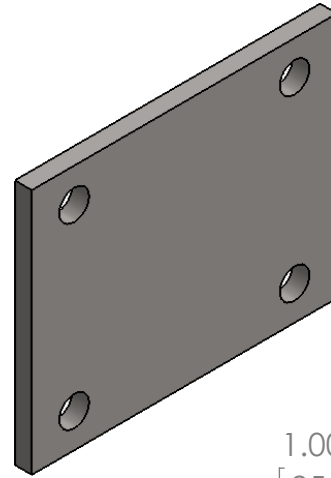
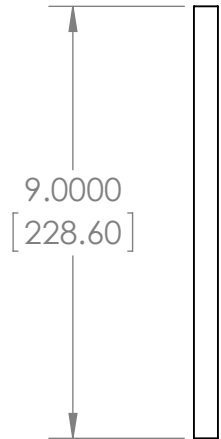
2

1

2

1

1/2"x8" Steel Flat
Quantity: 1



B

B

A

A



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TITLE:			
Part 17 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:			
+ 0.1000		- 0.1000	
SCALE:	SIZE:	DATE:	REV:
1:4	A	7/6/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 9.0816 lbs	SHEET 1 OF 1

2

1

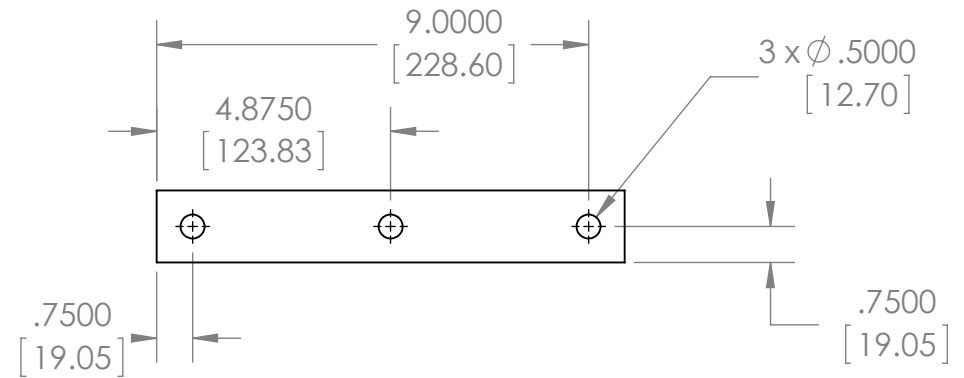
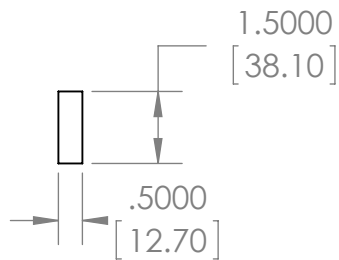
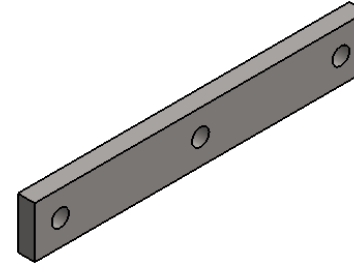
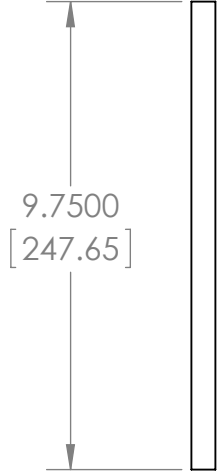
2

1

1/2"x1-1/2" Steel Flat
Quantity: 4

B

B



A

A



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TITLE:			
Part 18 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000	- 0.1000
SCALE:	SIZE:	DATE:	REV:
1:4	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 2.0280 lbs	SHEET 1 OF 1

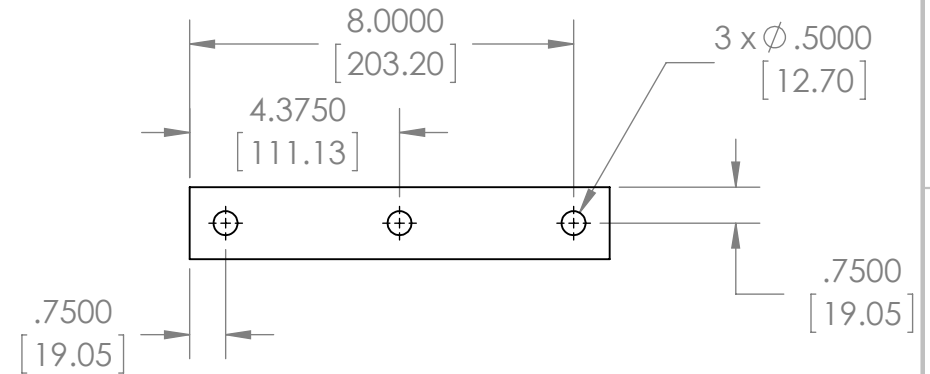
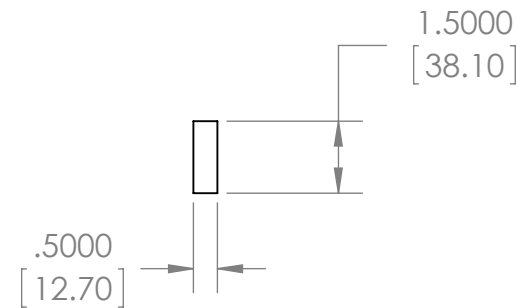
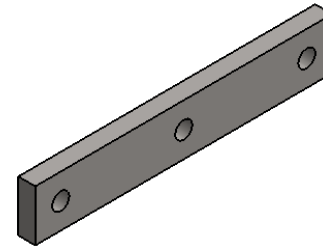
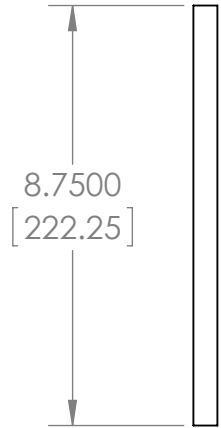
2

1

2

1

1/2"x1-1/2" Steel Flat
Quantity: 4



B

B

A

A



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TITLE:			
Part 19 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:			
+ 0.1000		- 0.1000	
SCALE:	SIZE:	DATE:	REV:
1:4	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 1.8116 lbs	SHEET 1 OF 1

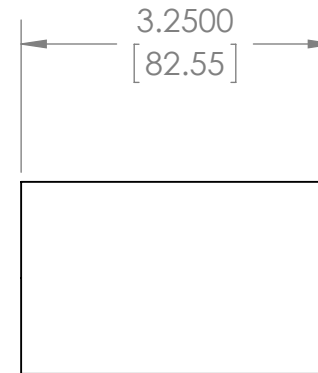
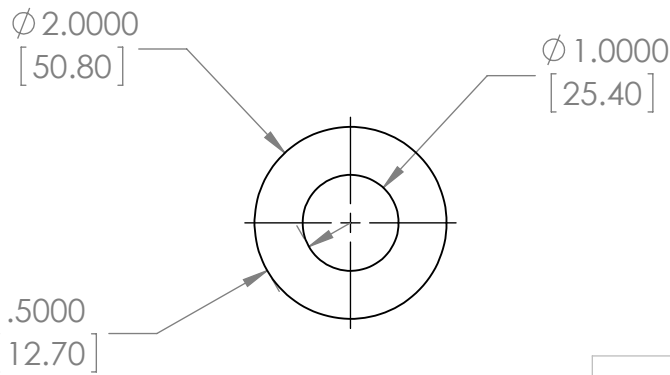
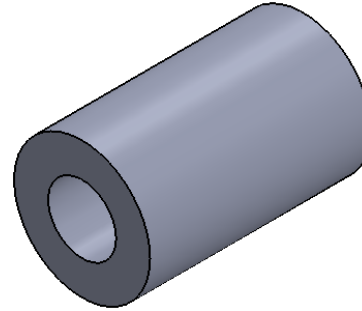
2

1

2

1

1-1/2" OD x 1" ID
Round Steel Tube
Quantity: 1



B

B

A

A



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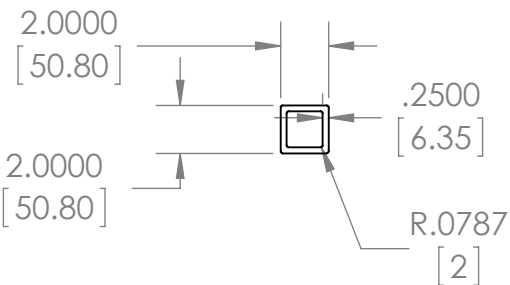
TITLE:			
Part 23 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.0500	- 0.0500
SCALE:	SIZE:	DATE:	REV:
1:2	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 2.2132 lbs	SHEET 1 OF 1

2

1

2

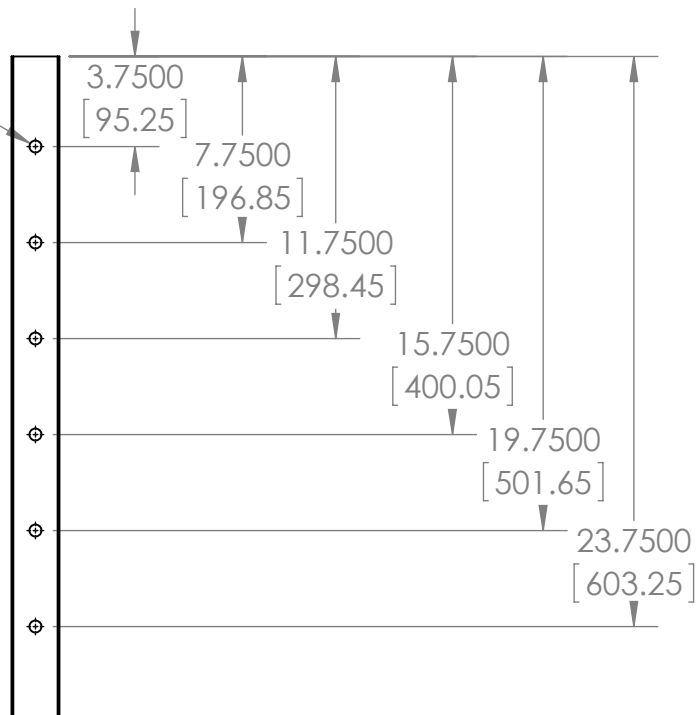
1



2"x2"x1/4" wall Square Steel Tube
 Quantity: 1



6 x ϕ .5000 [12.70]



27.5000 [698.50]

2.0000 [50.80]



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TITLE:

Part 24 Curb Drop

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL:

Steel

FINISH:

Plain

TOLERANCES:

+ 0.1000

- 0.1000

SCALE:

1:12

SIZE:

A

DATE:

7/9/2018

REV:

1

DO NOT SCALE DRAWING

WEIGHT (LBS): 13.7388 lbs

SHEET 1 OF 1

2

1

B

B

A

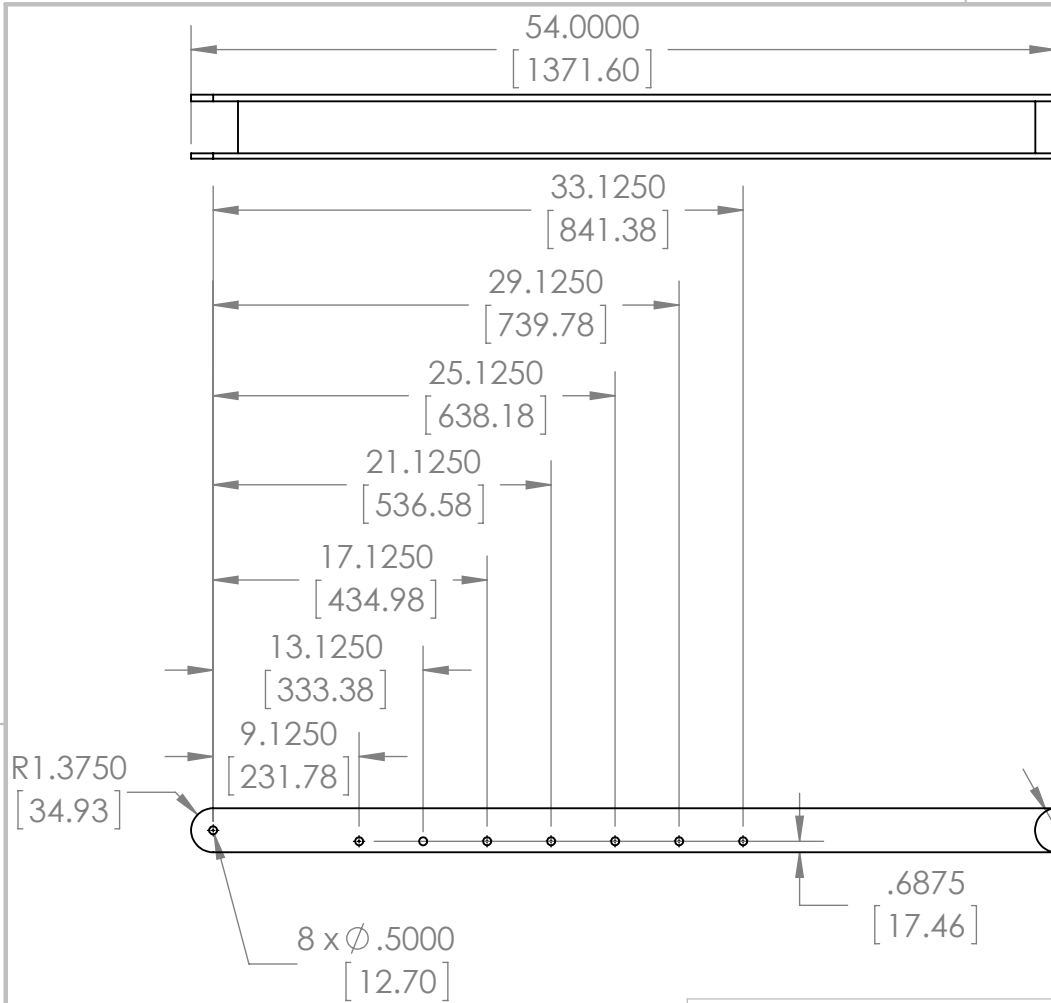
A

2

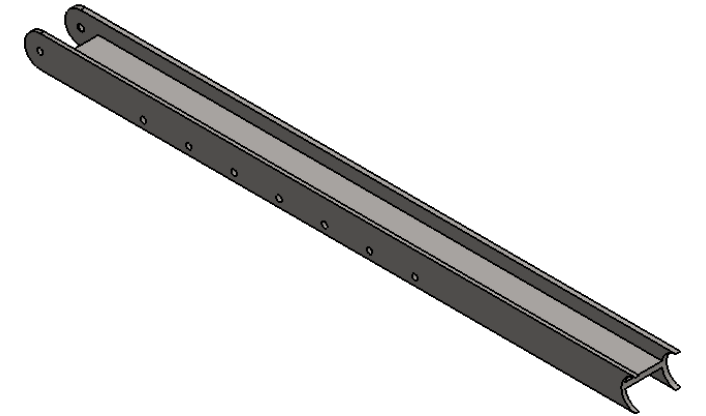
1

B

B



4"x.193"x2.663" Steel I Beam
Quantity: 1



A

A

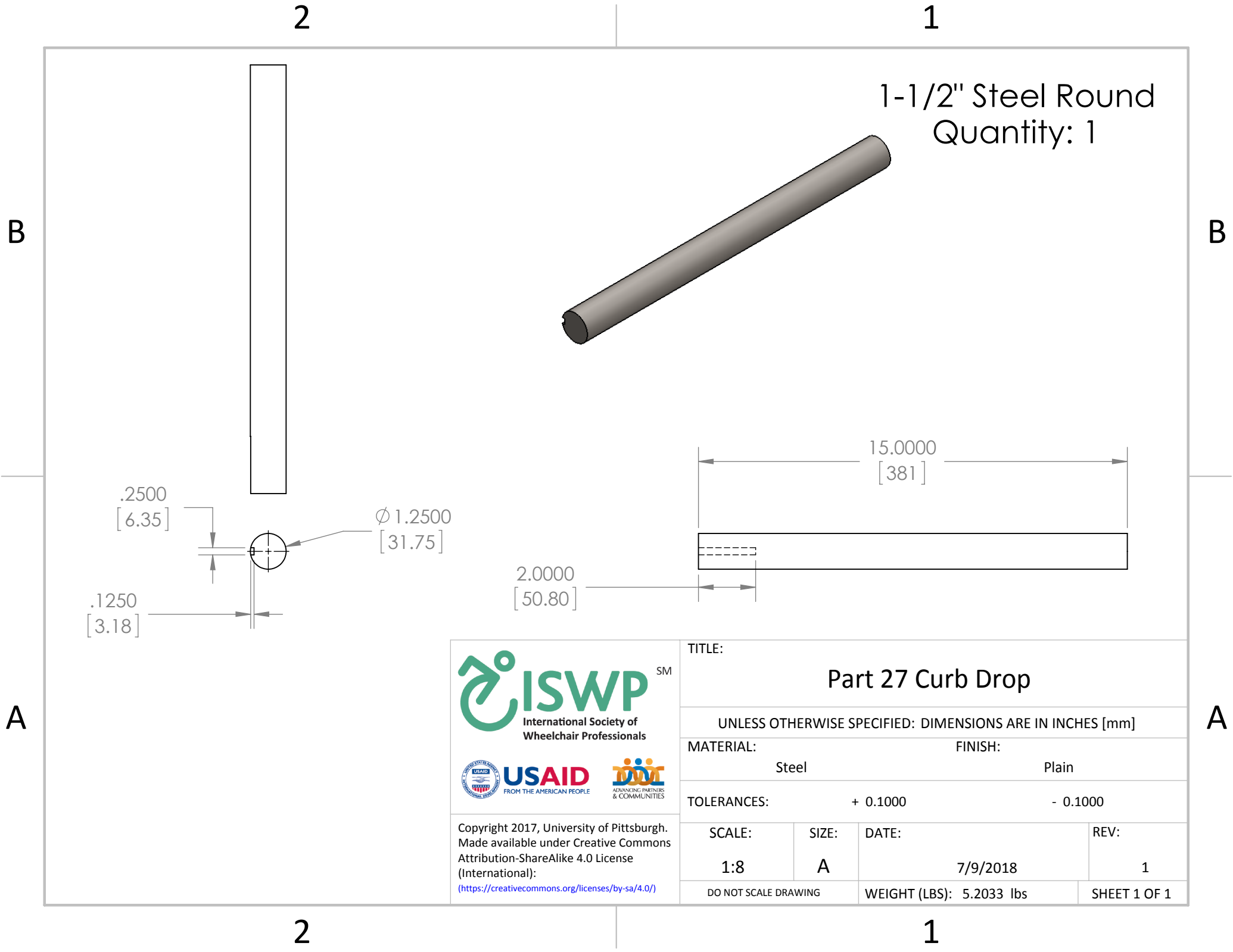


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TITLE:			
Part 25 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		- 0.0500	
+ 0.0500			
SCALE:	SIZE:	DATE:	REV:
1:24	A	7/9/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 54.4927 lbs	SHEET 1 OF 1

2

1



1-1/2" Steel Round
Quantity: 1

.2500
[6.35]

Ø 1.2500
[31.75]

.1250
[3.18]

15.0000
[381]

2.0000
[50.80]



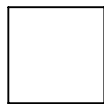
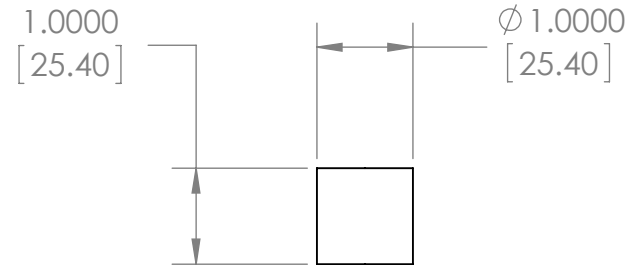
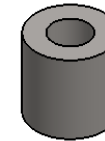
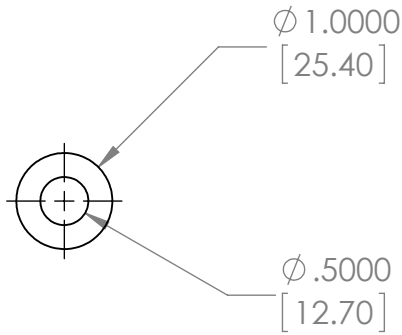
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TITLE:			
Part 27 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000	- 0.1000
SCALE:	SIZE:	DATE:	REV:
1:8	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 5.2033 lbs	SHEET 1 OF 1

2

1

1" OD x .505" ID
Steel Unthread Spacer
Quantity: 2



B

B

A

A



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TITLE:			
Part 28 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:2	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.1702 lbs	SHEET 1 OF 1

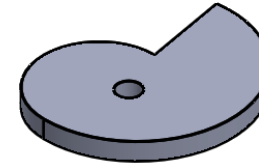
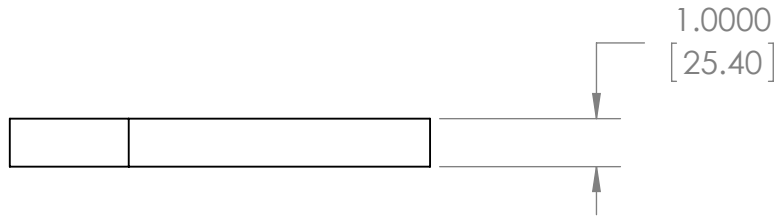
2

1

2

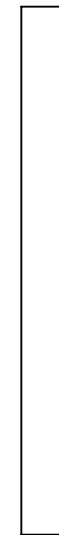
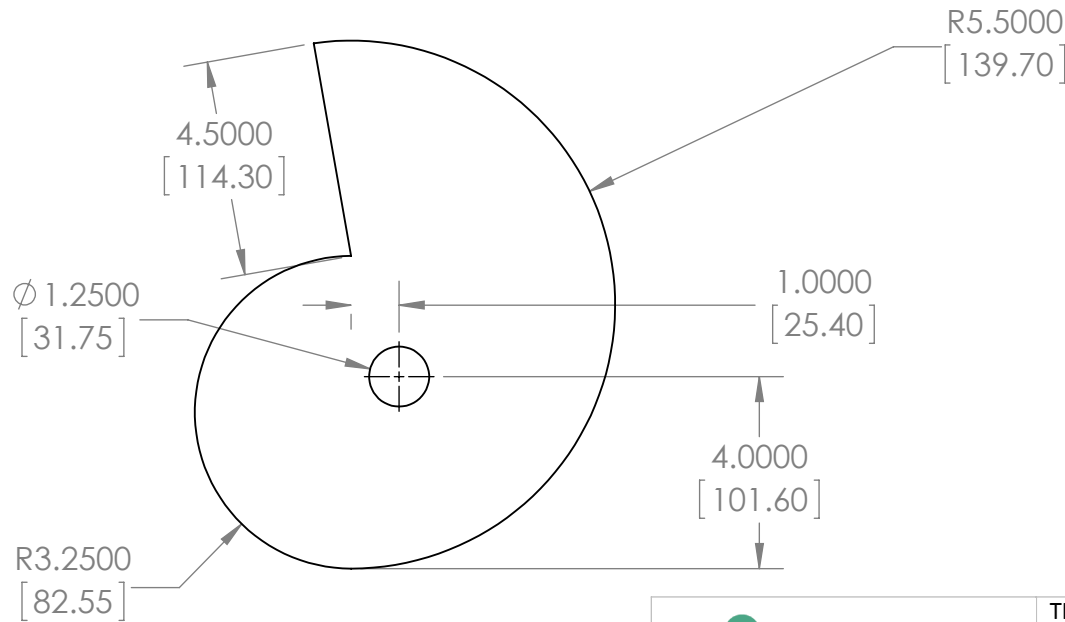
1

1"x12" Steel Flat
Quantity: 1



B

B



A

A



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TITLE:			
Part 30 Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000	- 0.1000
SCALE:	SIZE:	DATE:	REV:
1:8	A	7/20/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 17.2802 lbs	SHEET 1 OF 1

2

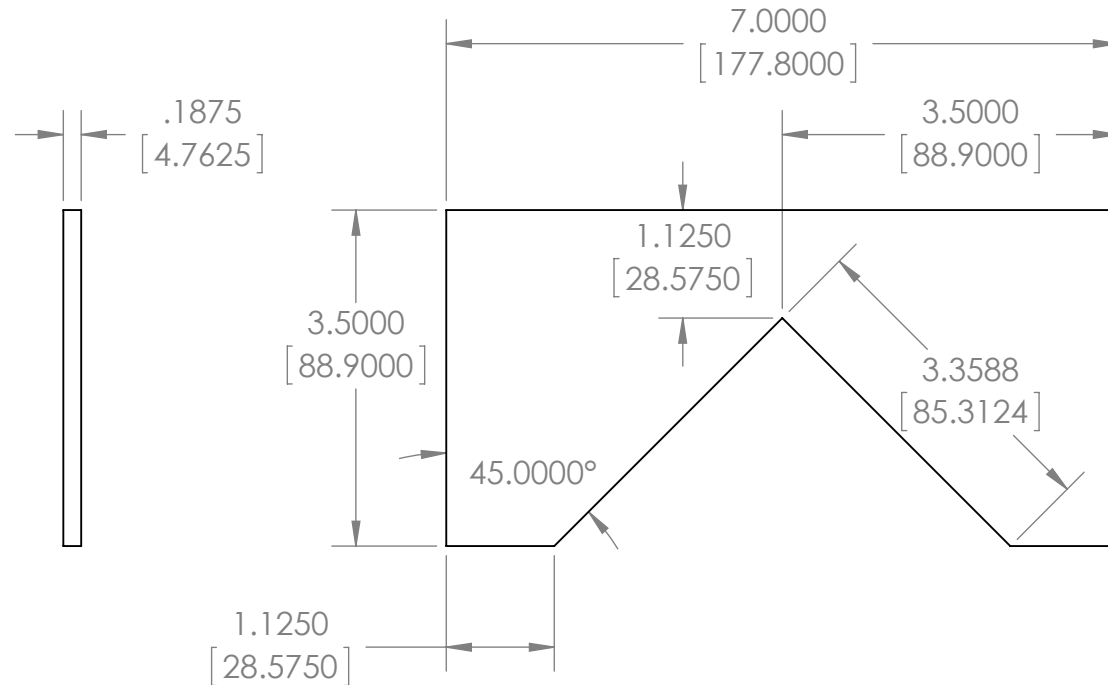
1

2

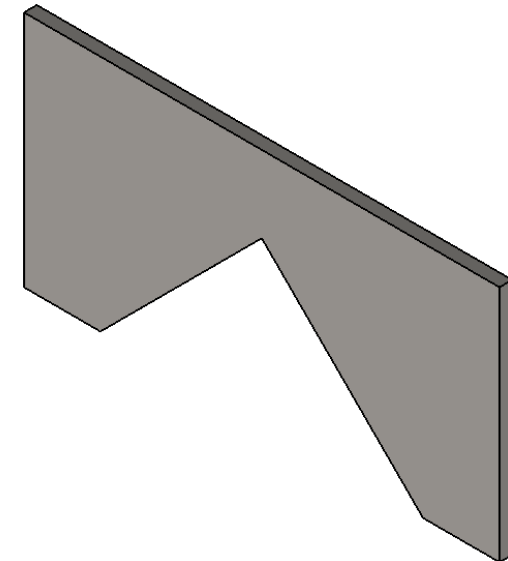
1

3/16" Thick Steel Plate
Quantity: 2

B



B



A



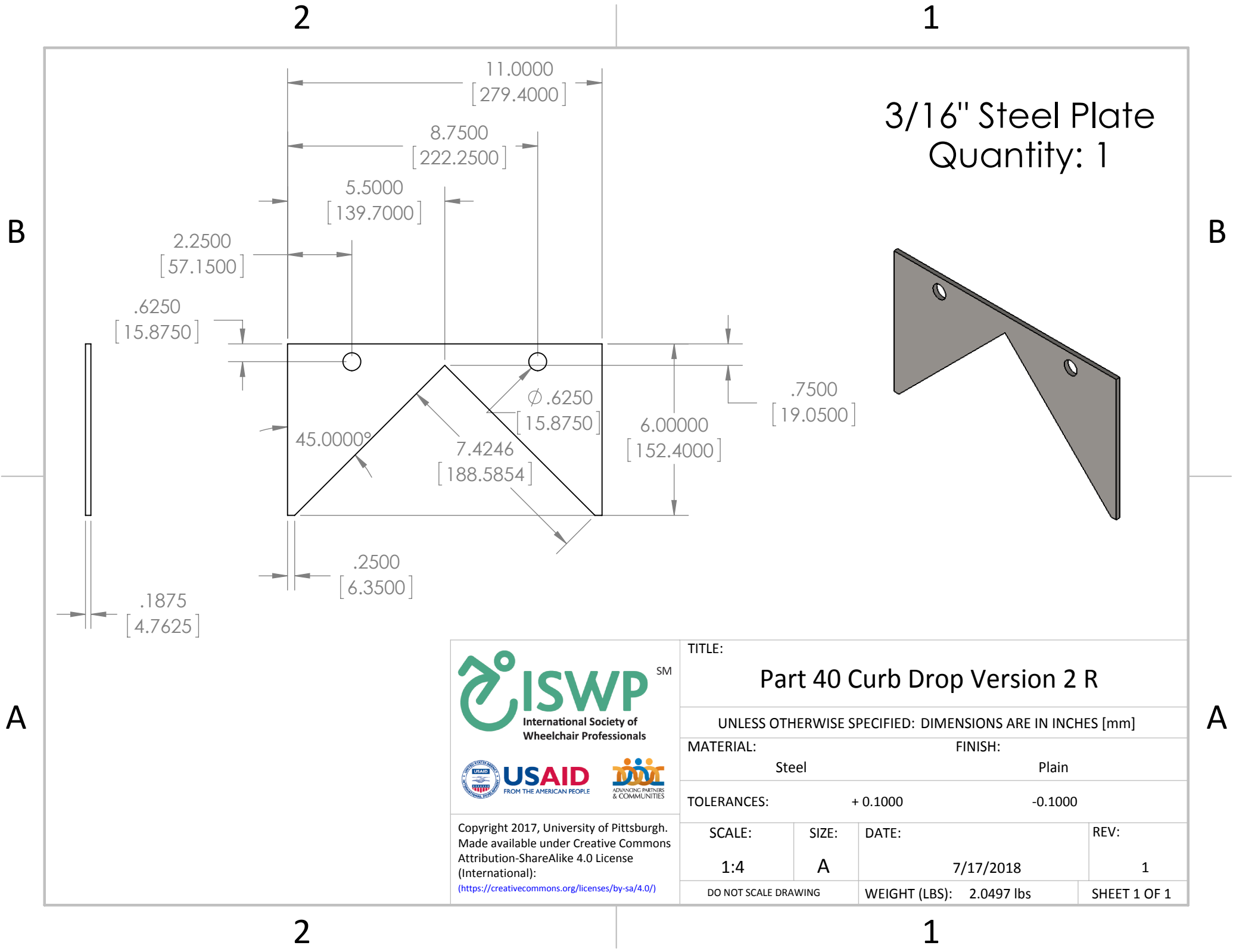
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TITLE:			
Part 40 Curb Drop Version 1 R			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:2	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 1.0220 lbs	SHEET 1 OF 1

A

2

1

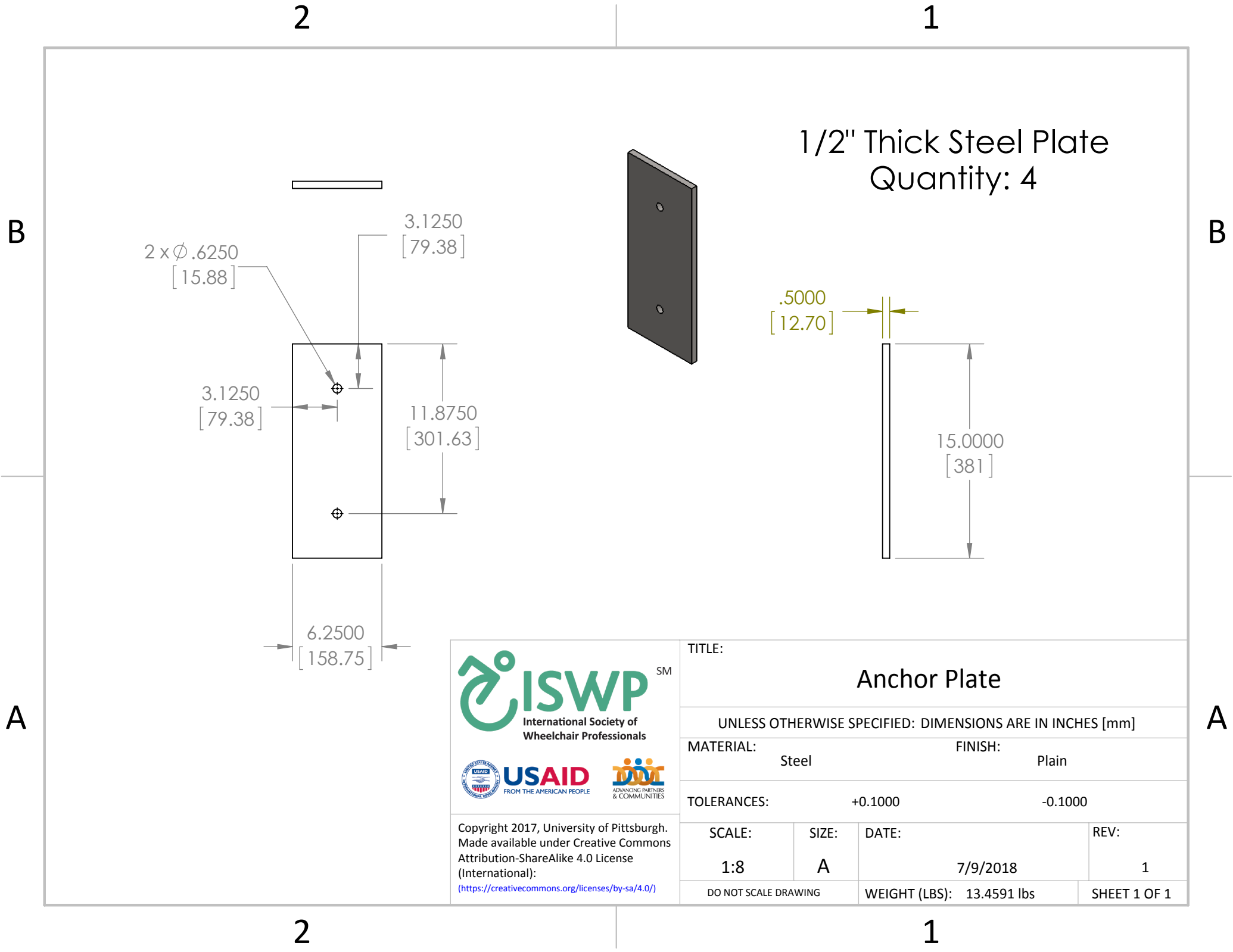


3/16" Steel Plate
Quantity: 1



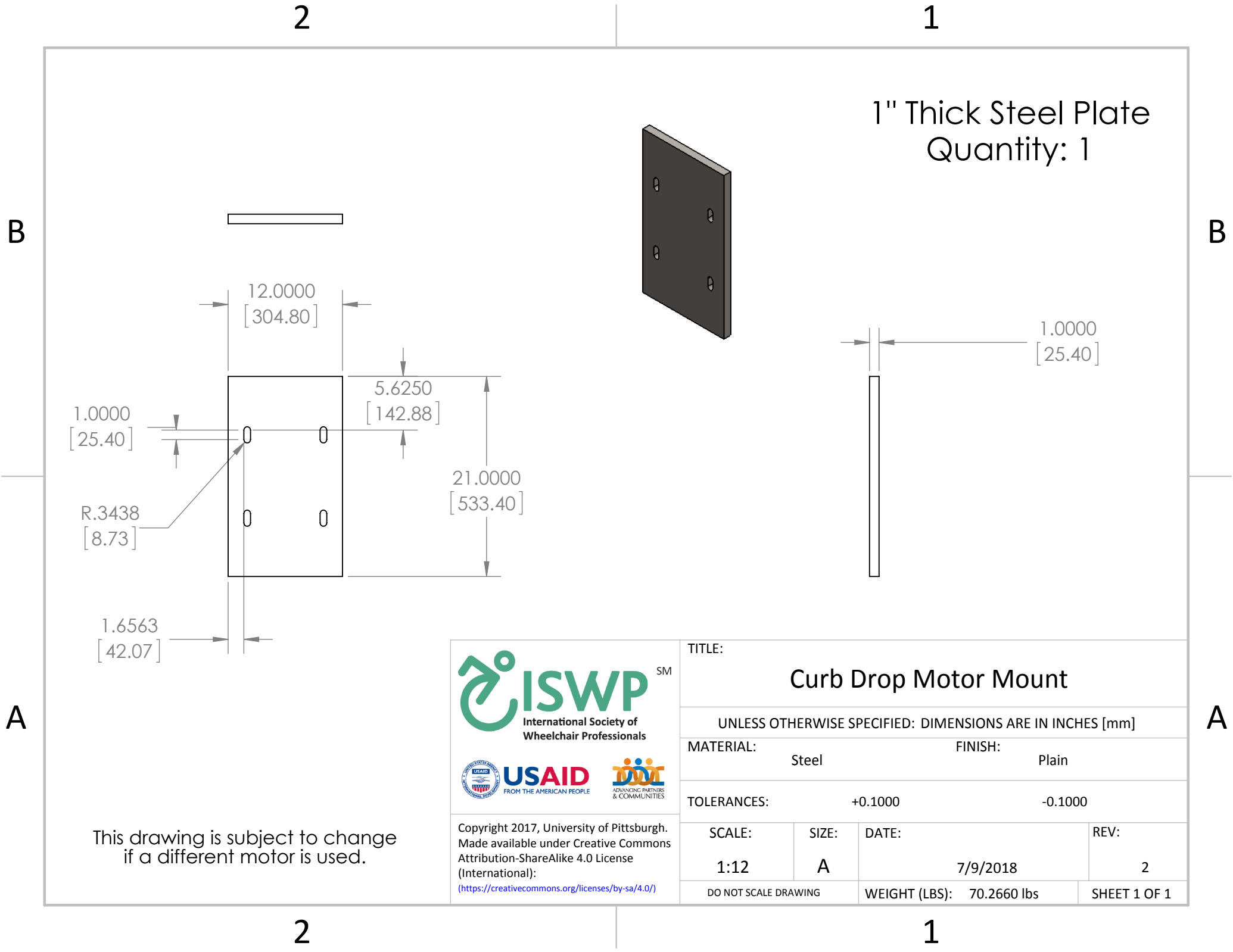
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TITLE:			
Part 40 Curb Drop Version 2 R			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:4	A	7/17/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 2.0497 lbs	SHEET 1 OF 1



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TITLE:			
Anchor Plate			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:8	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 13.4591 lbs	SHEET 1 OF 1



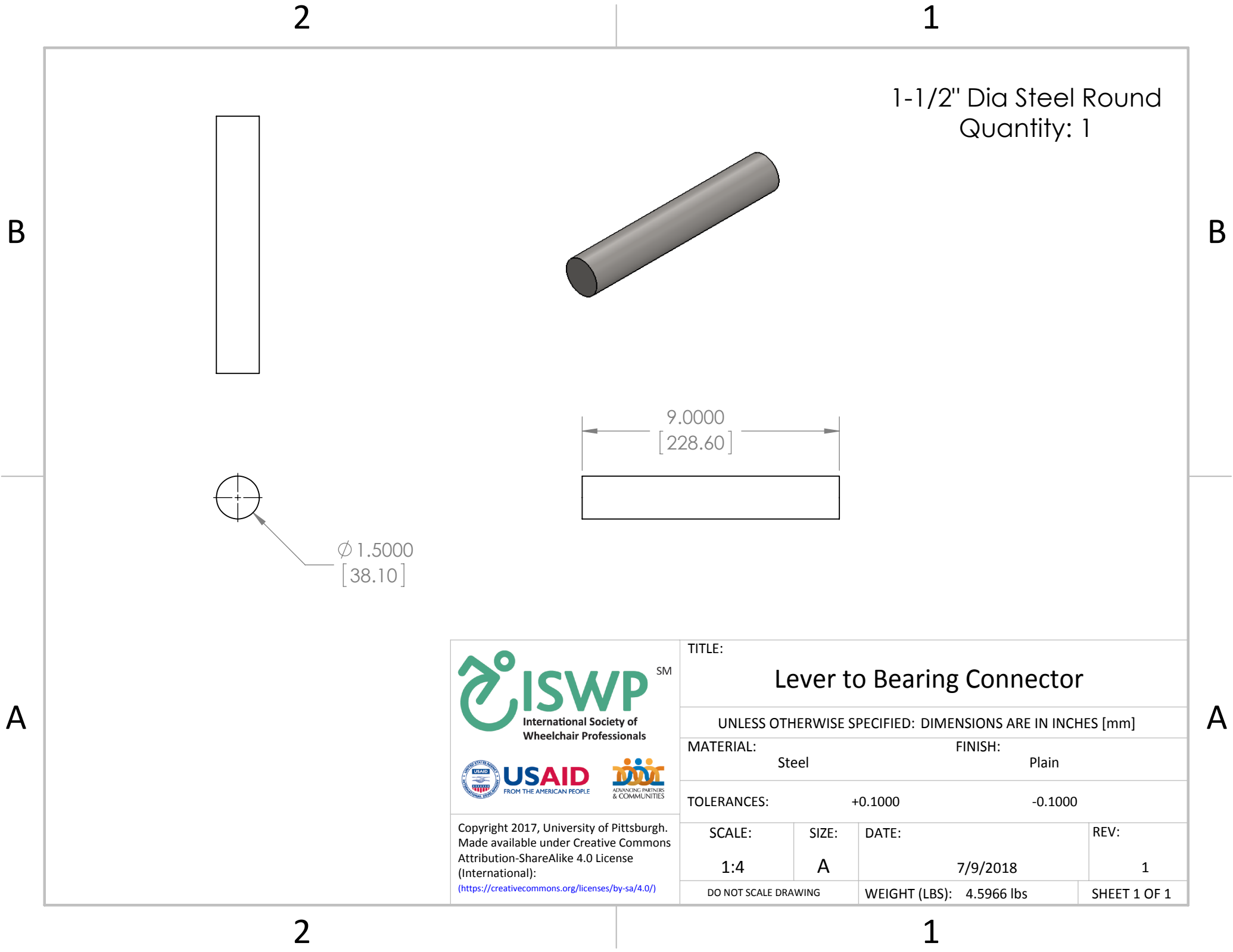
1" Thick Steel Plate
Quantity: 1



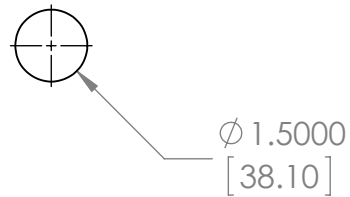
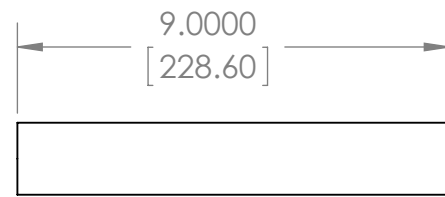
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TITLE:			
Curb Drop Motor Mount			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:12	A	7/9/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 70.2660 lbs	SHEET 1 OF 1

This drawing is subject to change if a different motor is used.



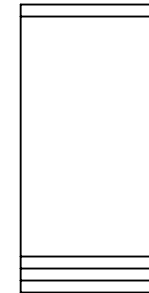
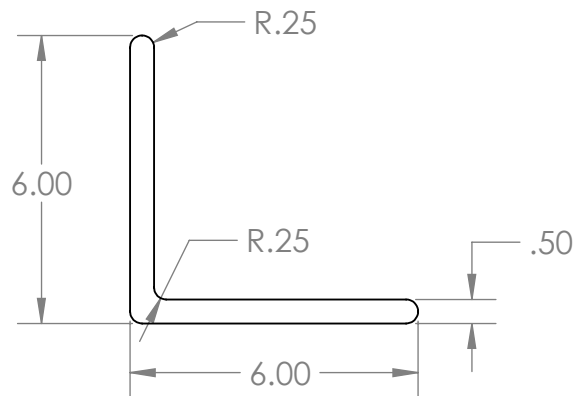
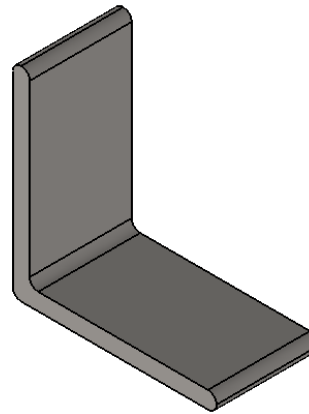
1-1/2" Dia Steel Round
Quantity: 1



 <p>ISWPSM International Society of Wheelchair Professionals</p>  <p>USAID FROM THE AMERICAN PEOPLE</p>  <p>DOT ADVANCING PARTNERS & COMMUNITIES</p> <p>Copyright 2017, University of Pittsburgh. Made available under Creative Commons Attribution-ShareAlike 4.0 License (International): https://creativecommons.org/licenses/by-sa/4.0/</p>	TITLE:			
	Lever to Bearing Connector			
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
	MATERIAL:		FINISH:	
	Steel		Plain	
TOLERANCES:		+0.1000	-0.1000	
SCALE:	SIZE:	DATE:	REV:	
1:4	A	7/9/2018	1	
DO NOT SCALE DRAWING		WEIGHT (LBS):	SHEET 1 OF 1	
		4.5966 lbs		



"6 x 6" x 0.5"
Steel Angle
Quantity : 4



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TITLE:

Large L Bracket Curb Drop

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL:

Steel

FINISH:

Plain

TOLERANCES:

+ 0.1000

-0.1000

SCALE:

1:2

SIZE:

A

DATE:

7/17/2018

REV:

1

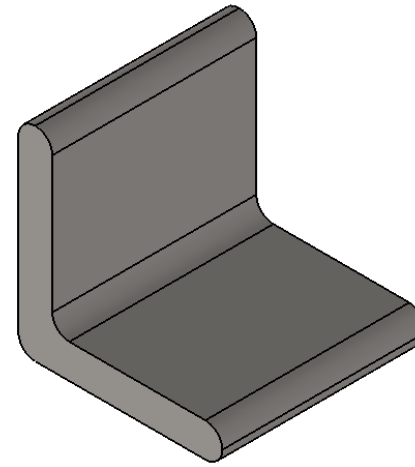
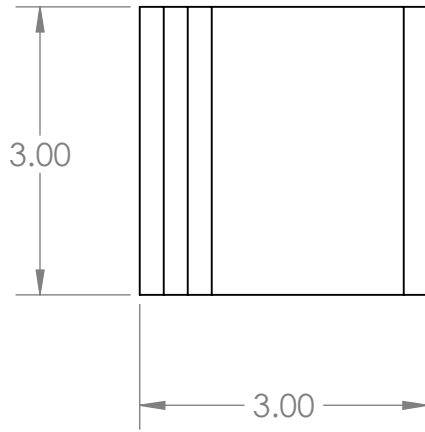
DO NOT SCALE DRAWING

WEIGHT (LBS): 4.9390 lbs

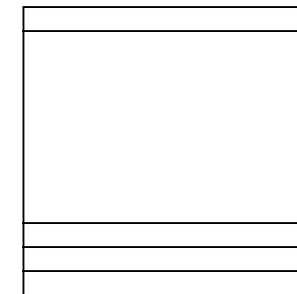
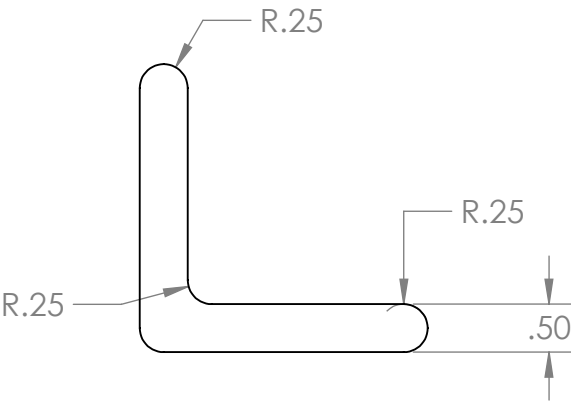
SHEET 1 OF 1

2

1



"3 x 3" x 0.5"
Steel Angle
Quantity : 2



B

B

A

A

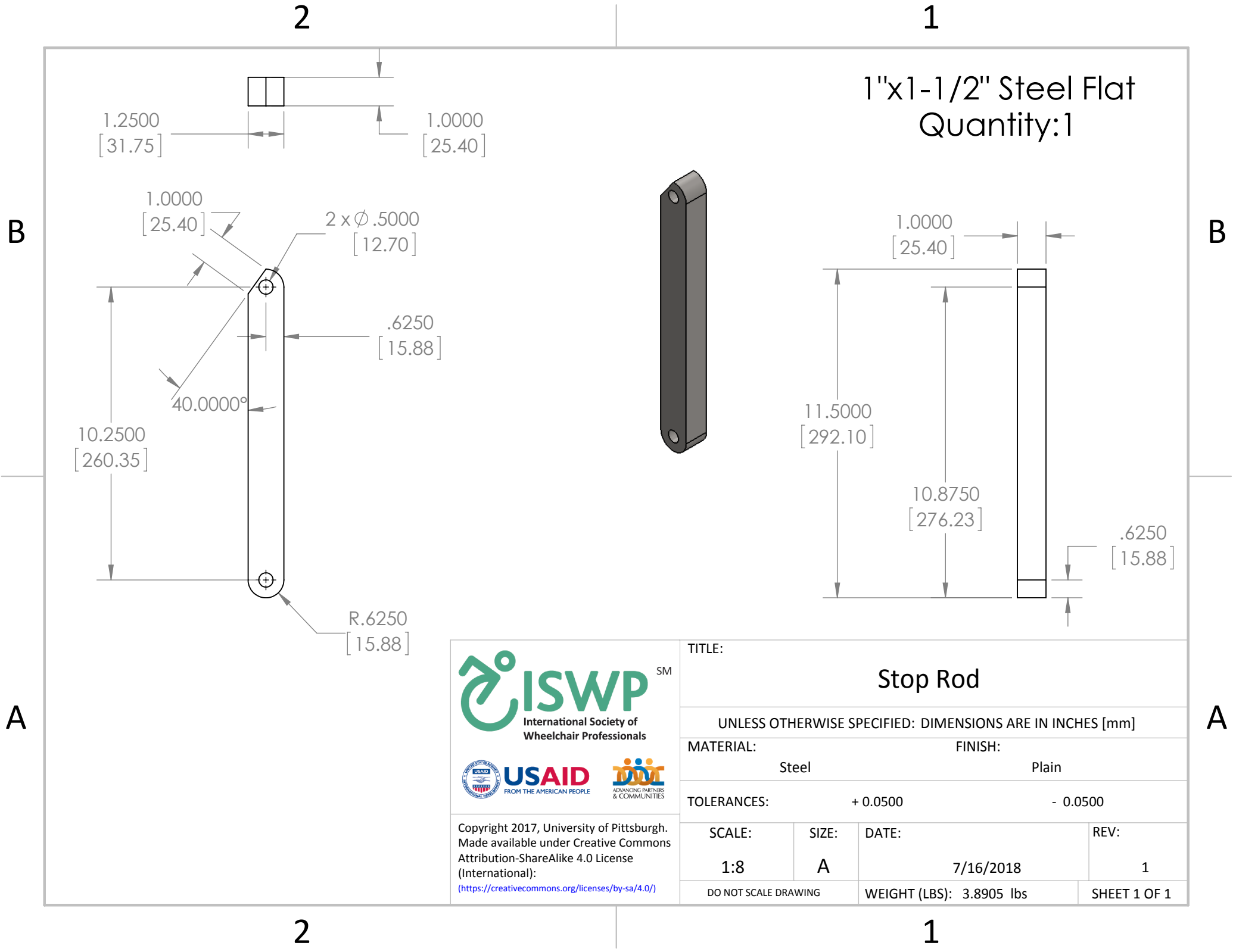


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TITLE:			
Small L Bracket Curb Drop			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+0.1000	-0.1000
SCALE:	SIZE:	DATE:	REV:
1:2	A	7/17/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 2.3379 lbs	SHEET 1 OF 1

2

1



1"x1-1/2" Steel Flat
Quantity:1



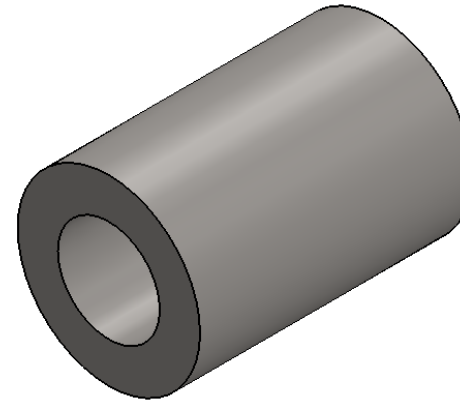
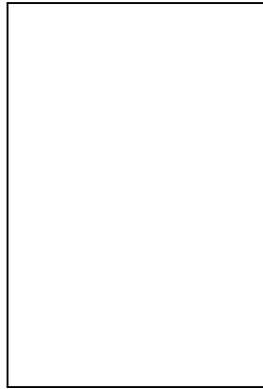
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TITLE:			
Stop Rod			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.0500	- 0.0500
SCALE:	SIZE:	DATE:	REV:
1:8	A	7/16/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 3.8905 lbs	SHEET 1 OF 1

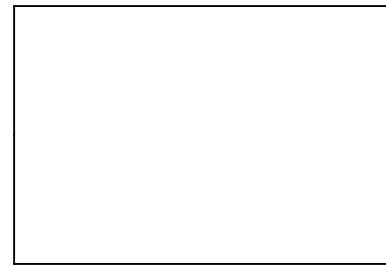
2

1

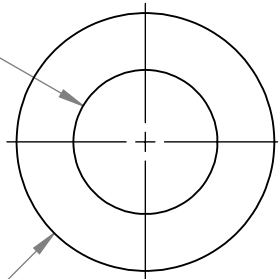
3" Dia Steel Round
Quantity: 1



4.0000
[101.60]



∅ 1.5000
[38.10]



∅ 2.6850
[68.20]

B

B

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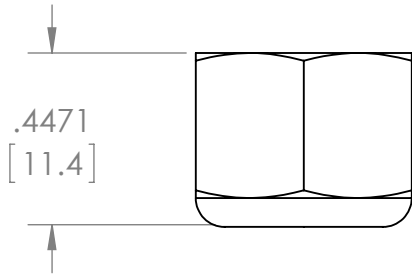
TITLE:			
Pillow Block Connector			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		+ 0.0500	- 0.0500
SCALE:	SIZE:	DATE:	REV:
1:2	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 4.5031 lbs	SHEET 1 OF 1

2

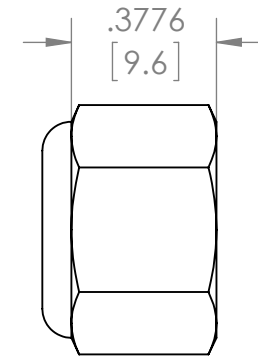
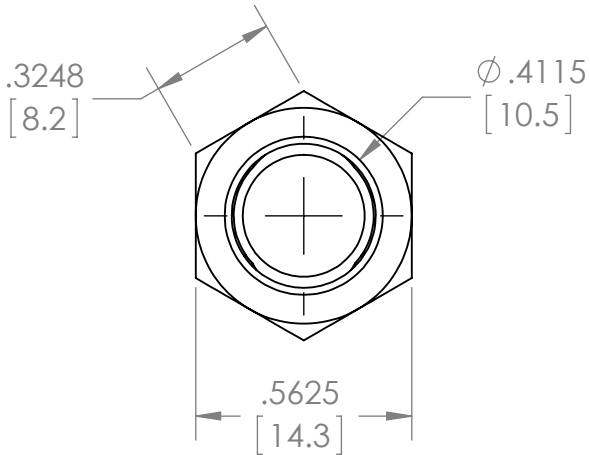
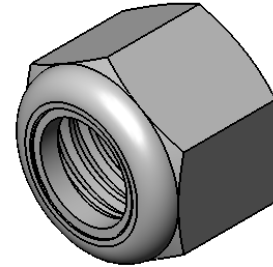
1

2

1



3/8" - 16 Nylon Locknut
Quantity: 8



B

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TITLE:			
0.375 - 16 hex nut (90630A121)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Plain Carbon Steel		Plain	
TOLERANCES:		See Manufacturer Specifications	
SCALE:	SIZE:	DATE:	REV:
4:1	A	7/10/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0030 lbs	SHEET 1 OF 1

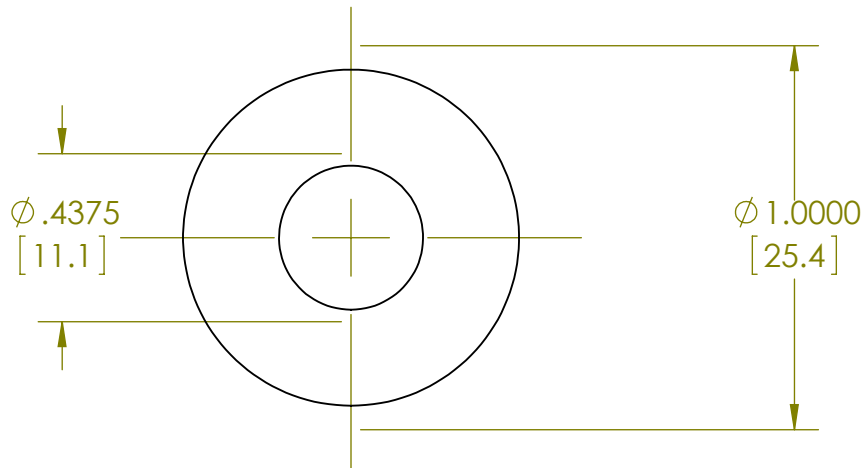
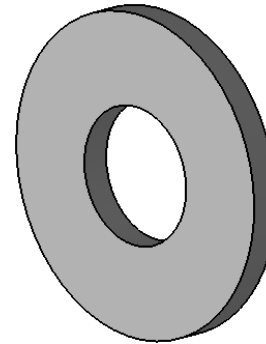
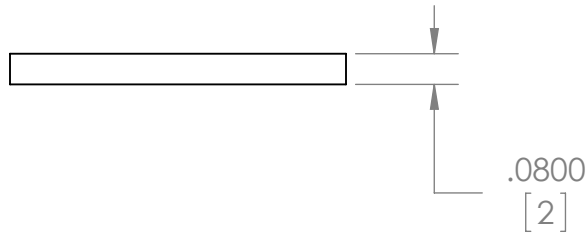
2

1

2

1

Steel Flat Washer
Quantity: 8



B

B

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TITLE:			
.375 in washer (98026A112)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Stainless Steel		Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE:	SIZE:	DATE:	REV:
4:1	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0385 lb	SHEET 1 OF 1

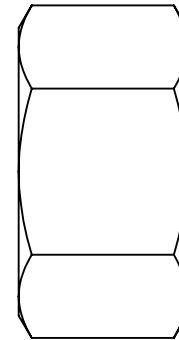
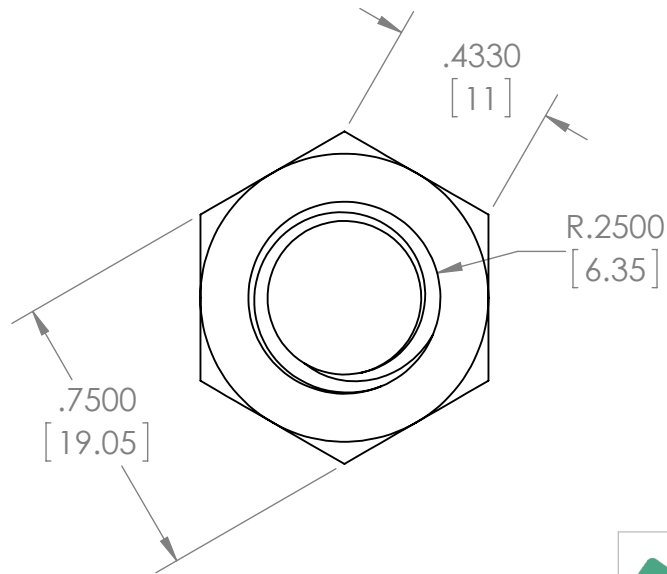
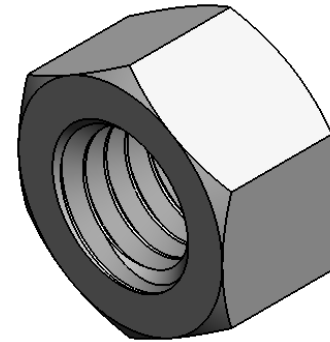
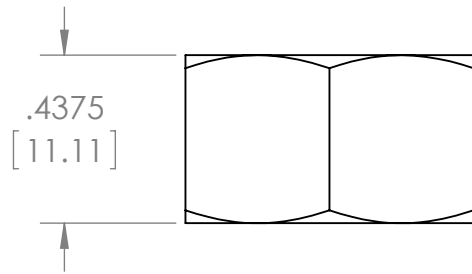
2

1

2

1

1/2" Hex Nut
Quantity: 50



B

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TITLE:			
0.5 - 13 hex nut (95462A033)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Plain Carbon Steel		Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE:	SIZE:	DATE:	REV:
2:1	A	7/10/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0050 lbs	SHEET 1 OF 1

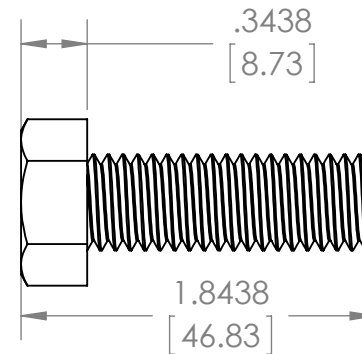
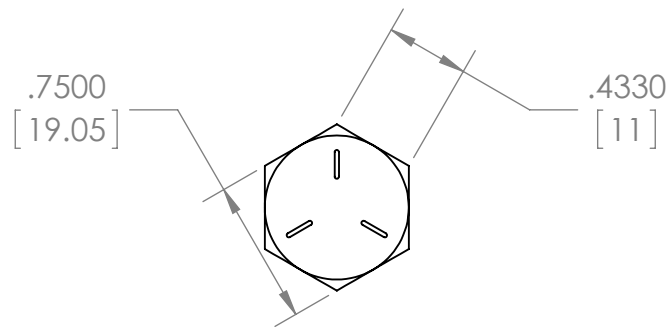
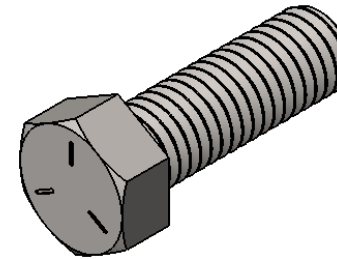
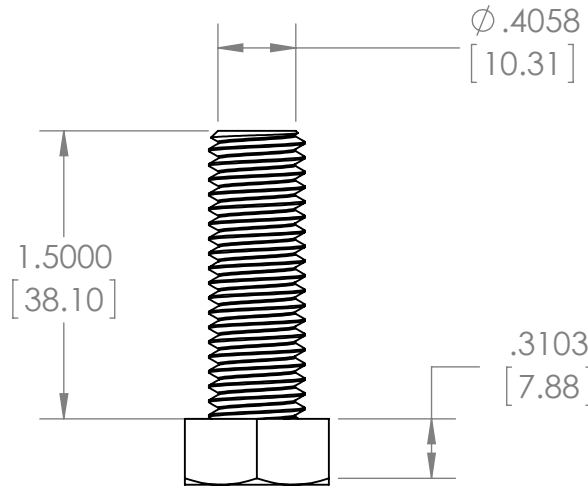
2

1

2

1

1/2" Hex Head Screw Quantity: 4



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TITLE:			
0.5 - 13 x 1.5 in hex head screw (92865A716)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Plain Carbon Steel		Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE:	SIZE:	DATE:	REV:
1:1	A	7/10/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.1243 lbs	SHEET 1 OF 1

2

1

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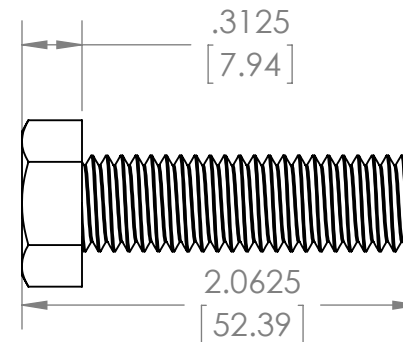
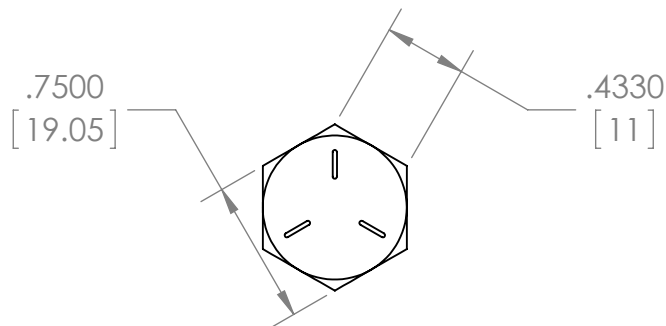
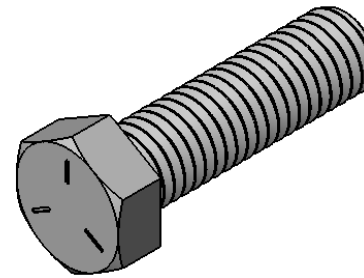
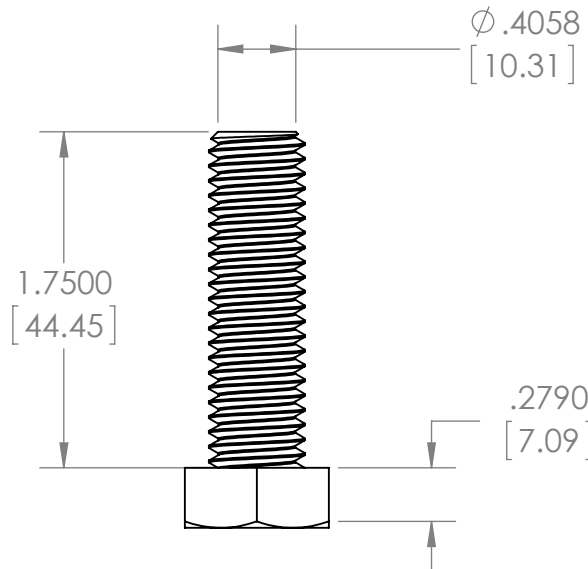
A

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1

1/2" Hex Head Screw Quantity: 36



B

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TITLE: 0.5 - 13 x 1.75 in hex head screw
(92865a718)

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL: Plain Carbon Steel FINISH: Plain

TOLERANCES: See Manufacturer Specifications

SCALE: 1:1	SIZE: A	DATE: 7/10/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0100 lbs	SHEET 1 OF 1

2

1

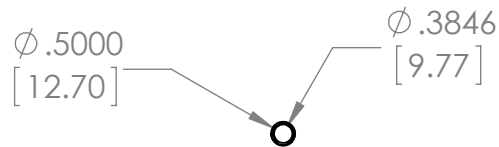
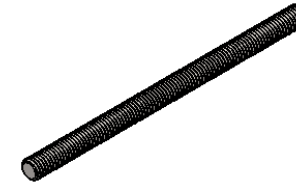
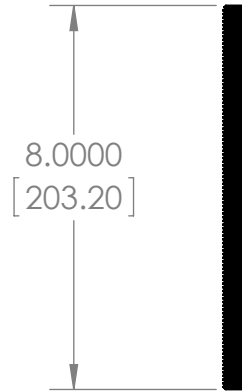
2

1

1/2" Threaded Rod
Quantity: 5

B

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TITLE:			
0.5 - 13 x 8 in threaded rod (98750A477)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Plain Carbon Steel		Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE:	SIZE:	DATE:	REV:
1:4	A	7/9/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.3778 lbs	SHEET 1 OF 1

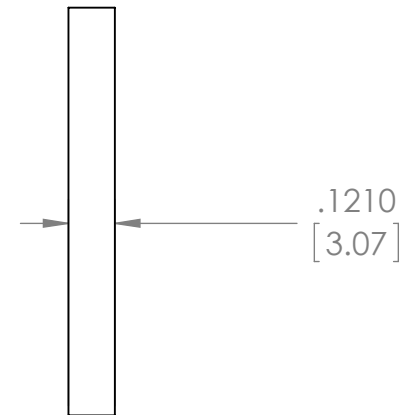
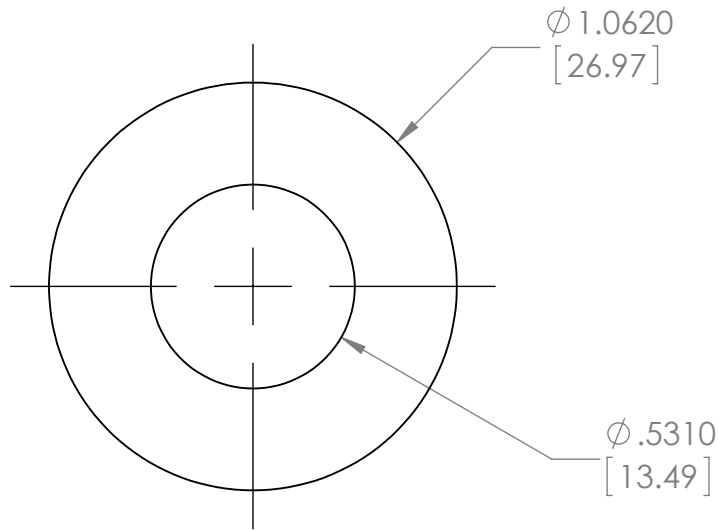
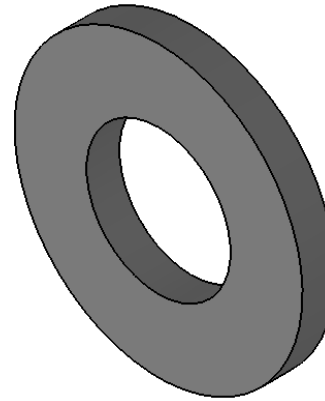
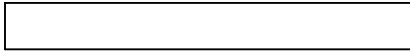
2

1

2

1

Steel Flat Washer
Quantity: 88



B

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TITLE:			
0.5 in washer (98023A033)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Plain Carbon Steel		Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE:	SIZE:	DATE:	REV:
2:1	A	7/10/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0029 lbs	SHEET 1 OF 1

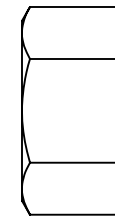
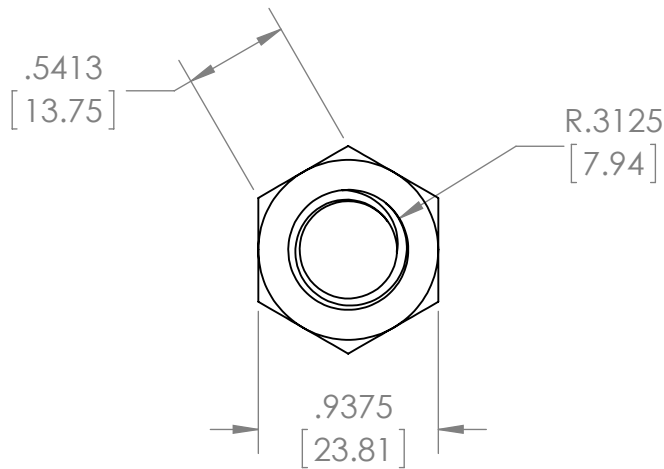
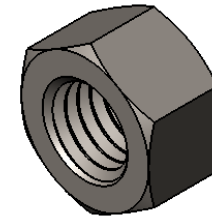
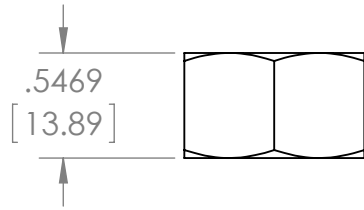
2

1

2

1

5/8" Hex Nut
Quantity: 4



B

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TITLE:			
0.625 - 11 hex nut (95462A533)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Plain Carbon Steel		Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE:	SIZE:	DATE:	REV:
2:1	A	7/10/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0777 lbs	SHEET 1 OF 1

2

1

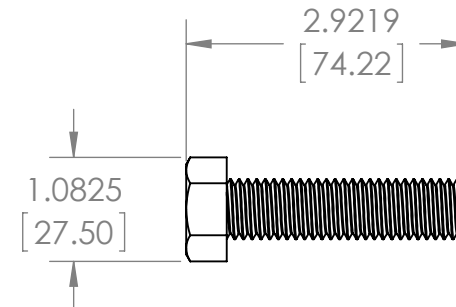
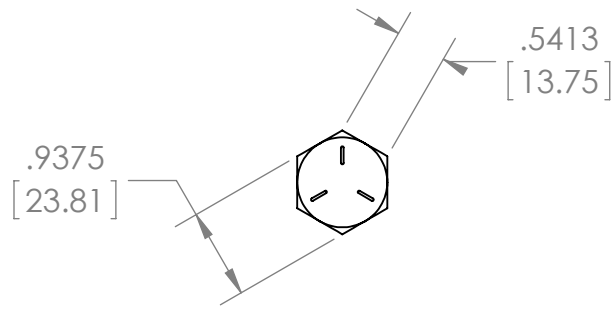
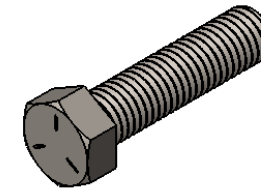
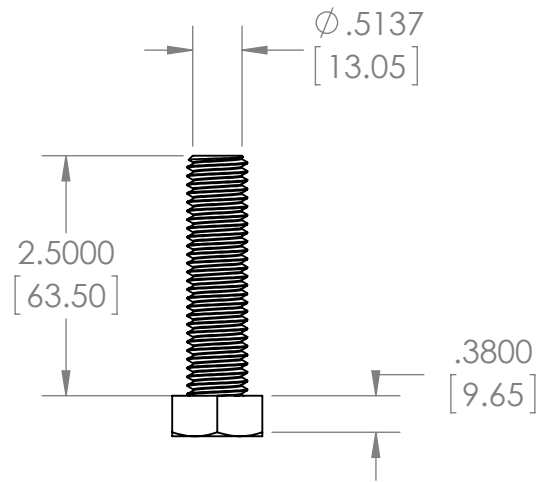
2

1

5/8" Steel Hex Head Screw Quantity: 4

B

B



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TITLE: 0.625 - 11 x 2.5 in hex head screw (92865A804)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL: Plain Carbon Steel		FINISH: Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE: 1:2	SIZE: A	DATE: 7/9/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.2689 lbs	SHEET 1 OF 1

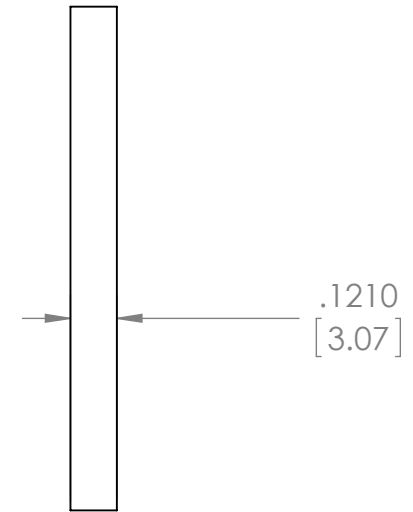
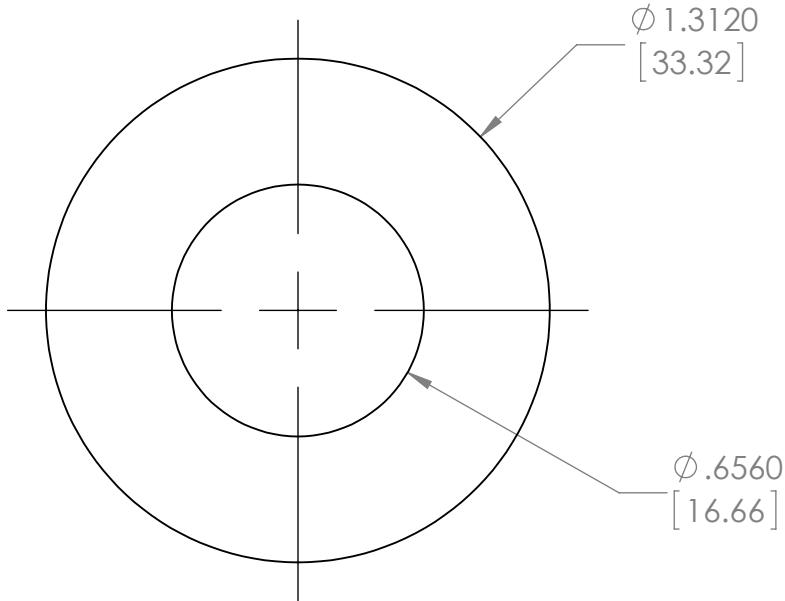
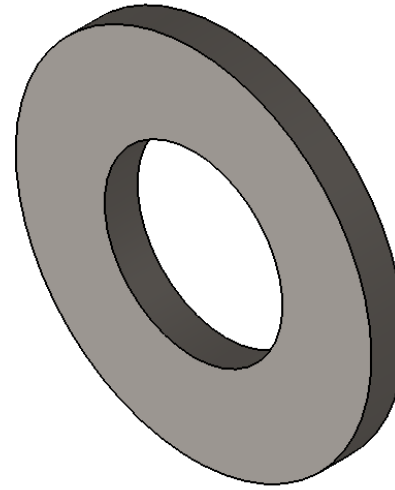
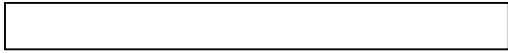
2

1

2

1

Steel Flat Washer Quantity: 12



B

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TITLE:			
0.625 in washer (98023A035)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Plain Carbon Steel		Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE:	SIZE:	DATE:	REV:
2:1	A	7/10/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0348 lbs	SHEET 1 OF 1

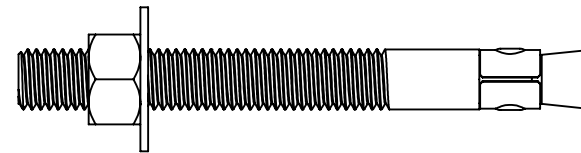
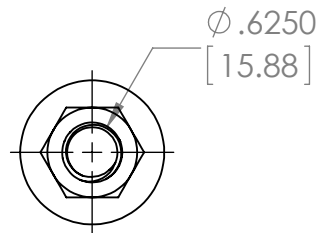
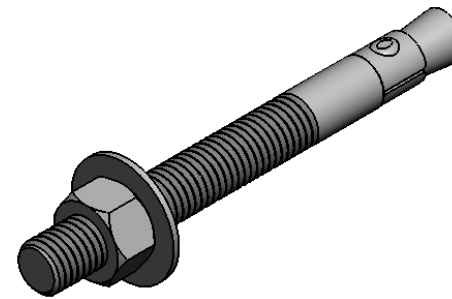
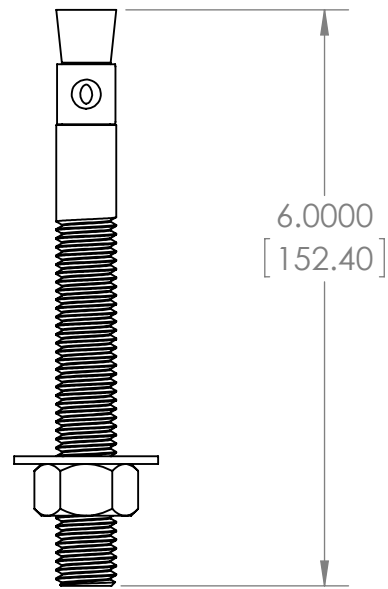
2

1

2

1

Concrete Anchor
Quantity: 8



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TITLE:
0.625 x 6 in Concrete Anchor (91578A209)

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL: Plain Carbon Steel FINISH: Plain

TOLERANCES: See Manufacturer Specifications

SCALE: 1:2	SIZE: A	DATE: 7/9/2018	REV: 1
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DO NOT SCALE DRAWING WEIGHT (LBS): 0.0700 lbs SHEET 1 OF 1

2

1

B

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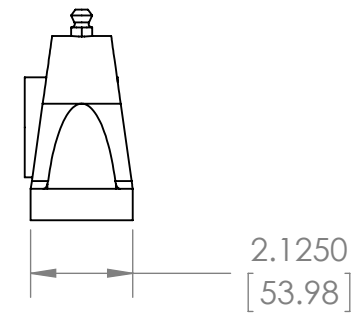
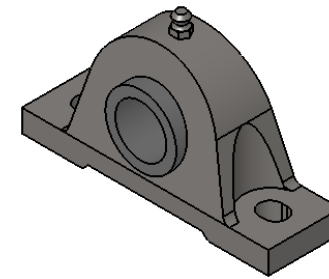
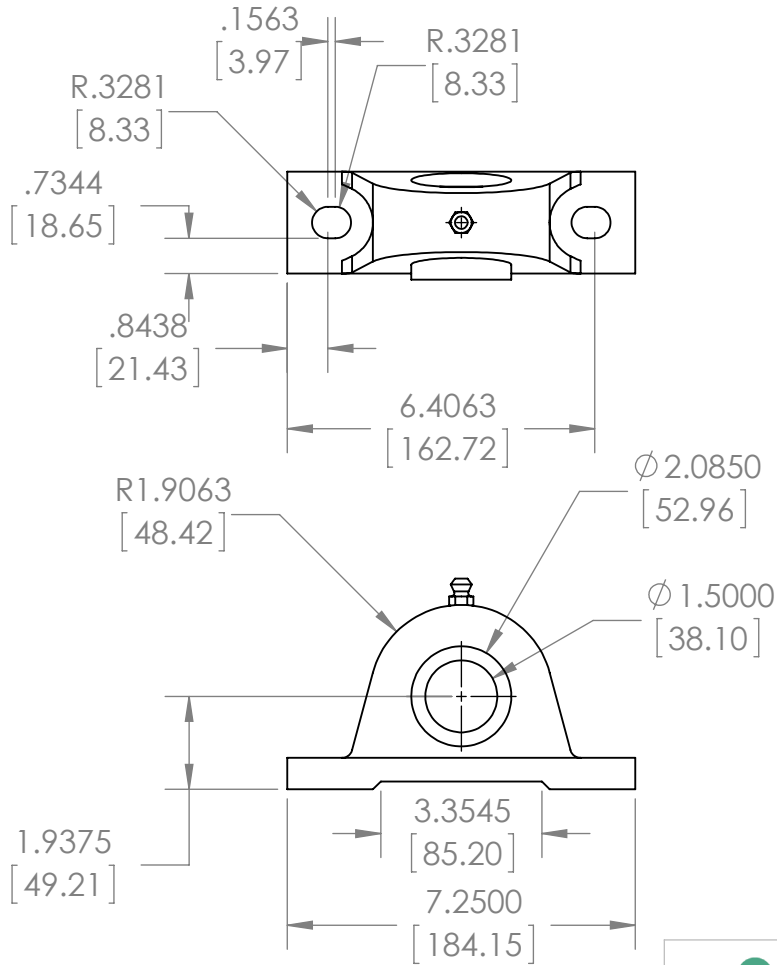
A

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2

1

Pillow Block Bearing Quantity: 2



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TITLE: **1.5 in shaft dia pillow block bearing
(6494K19)**

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL: Plain Carbon Steel FINISH: Plain

TOLERANCES: See Manufacturer Specifications

SCALE: 1:2	SIZE: A	DATE: 7/17/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 7.0380 lbs	SHEET 1 OF 1

2

1

B

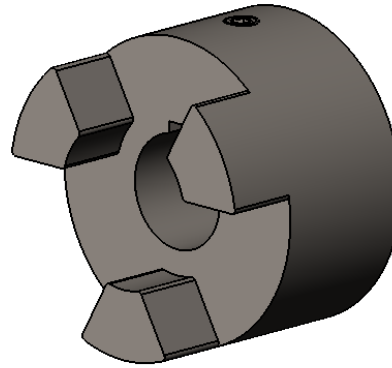
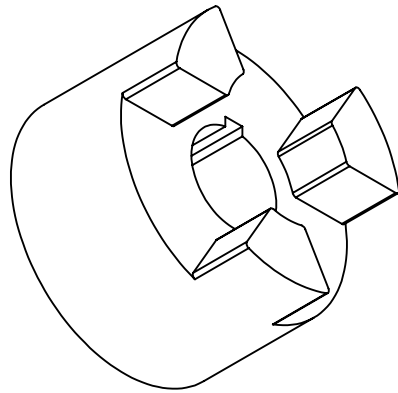
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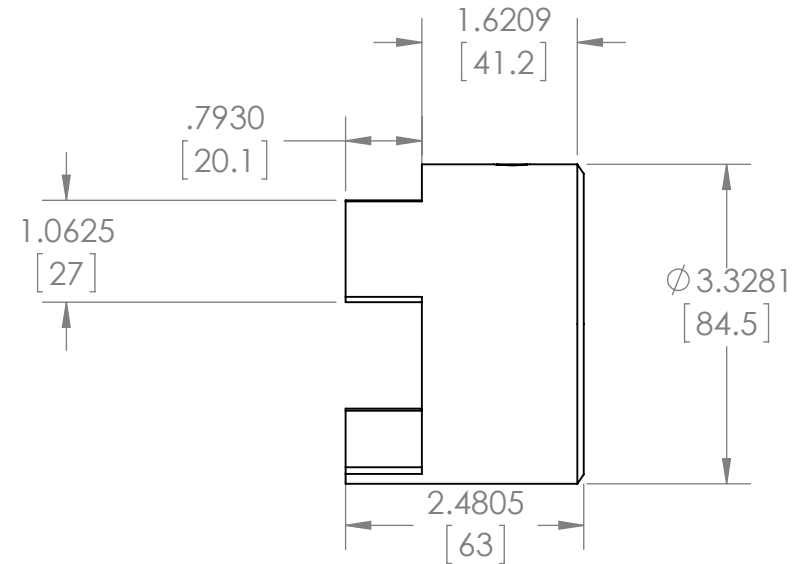
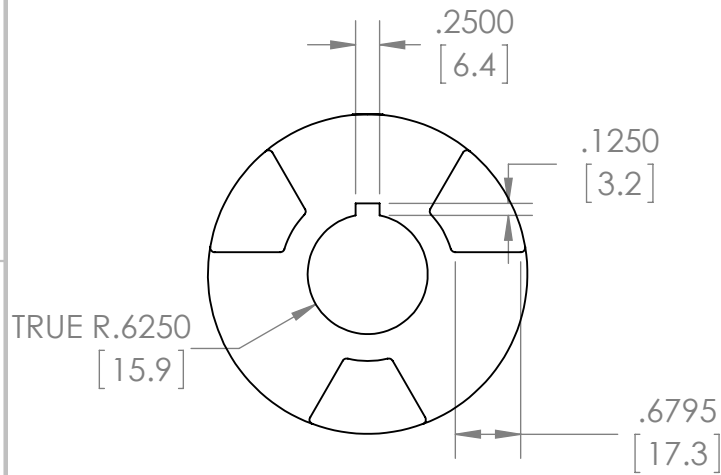


1.25 in Lovejoy Couple
Quantity: 1

Note: This drawing is subject to change depending on the motor used.

B

B



A

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TITLE: 1.25 in shaft dia lovejoy coupling (6408K18 - 6408K291)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL: Steel		FINISH: Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE: 1:2	SIZE: A	DATE: 7/16/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 3.9876 lbs	SHEET 1 OF 1

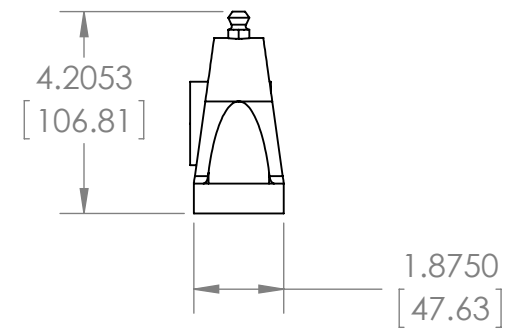
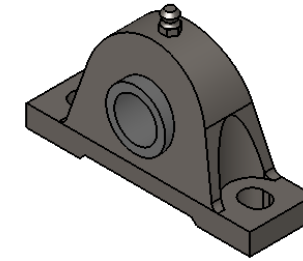
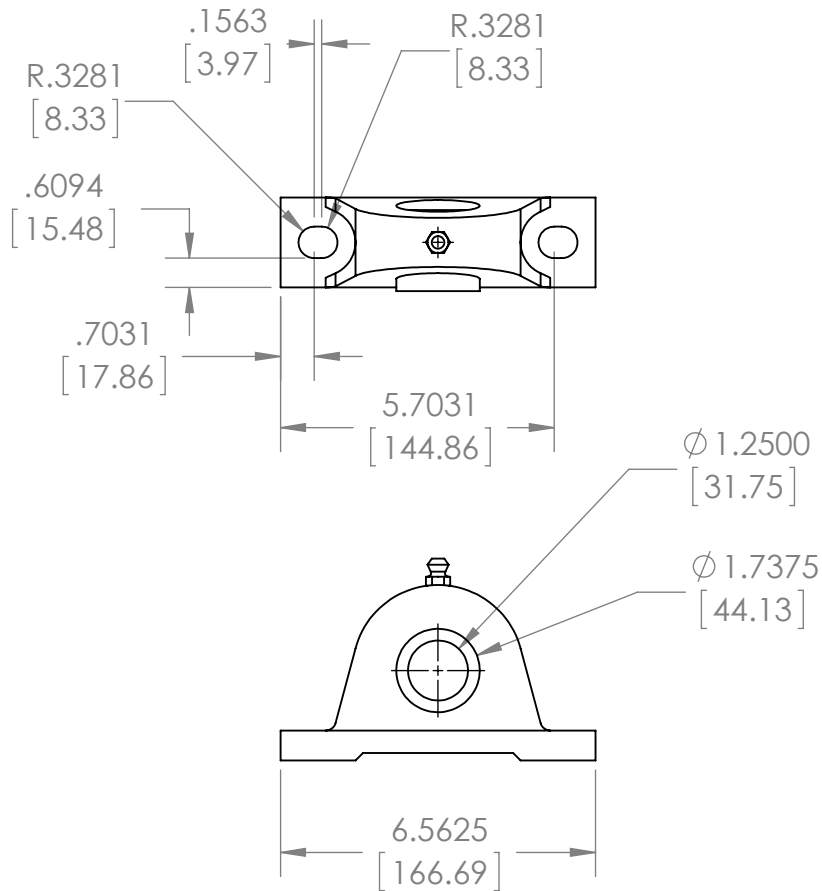
2

1

2

1

Pillow Block Bearing Quantity: 2



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TITLE: **1.25 in shaft dia pillow block bearing
(6494K16)**

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL: Plain Carbon Steel FINISH: Plain

TOLERANCES: See Manufacturer Specifications

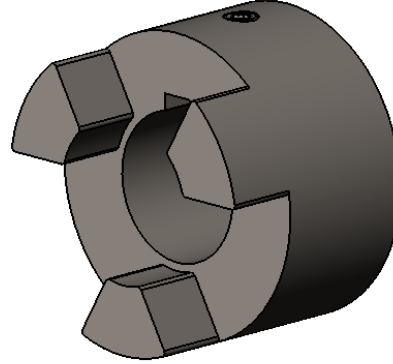
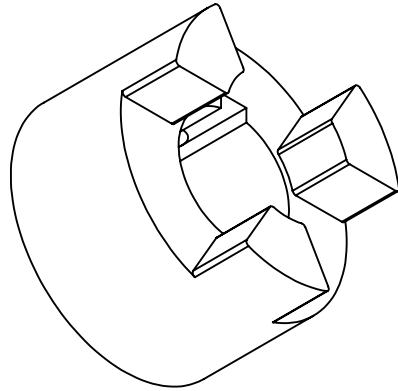
SCALE: 1:4	SIZE: A	DATE: 7/17/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 5.4105 lbs	SHEET 1 OF 1

2

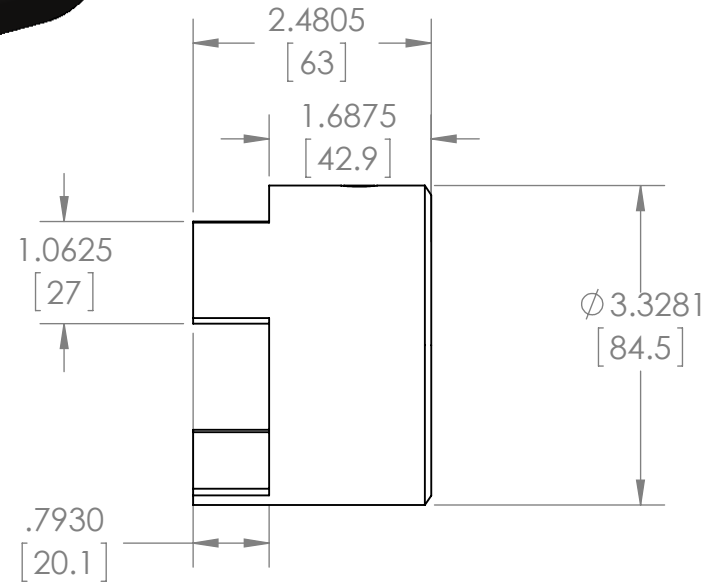
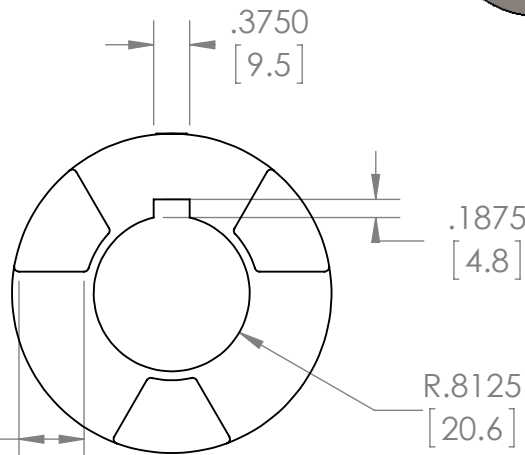
1

2

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1.625" Lovejoy Coupling
 Quantity: 1
 Note: This drawing is subject to change depending on the motor used.



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TITLE: 1.625 in shaft dia lovejoy coupling (6408K18 - 6408K297)

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL: Steel FINISH: Plain

TOLERANCES: See Manufacturer Specifications

SCALE:	SIZE:	DATE:	REV:
1:2	A	7/16/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): 3.5719 lbs	SHEET 1 OF 1

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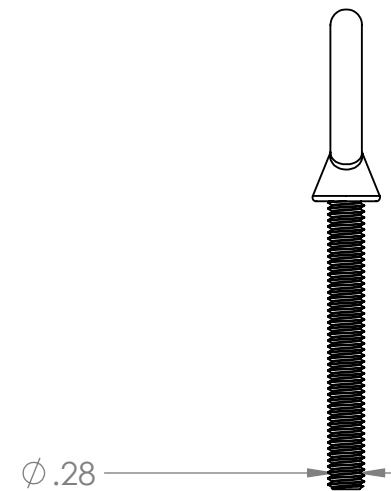
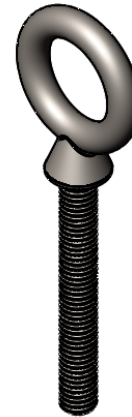
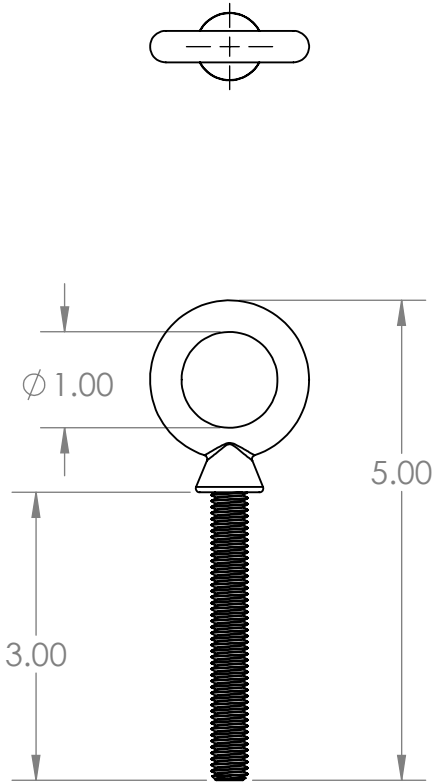
2

1

Steel Eyebolt for Lifting Quantity: 4

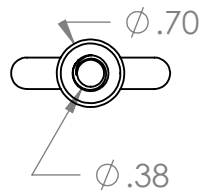
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TITLE: **3014T630_STEEL EYEBOLT WITH
SHOULDER - FOR LIFTING R**

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]

MATERIAL: Plain Carbon Steel FINISH: Plain

TOLERANCES: See Manufacturer Specifications

SCALE: 1:2	SIZE: A	DATE: 7/9/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0261 lbs	SHEET 1 OF 1

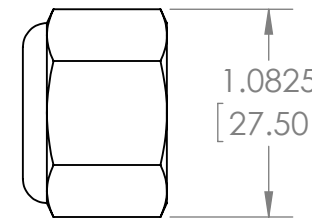
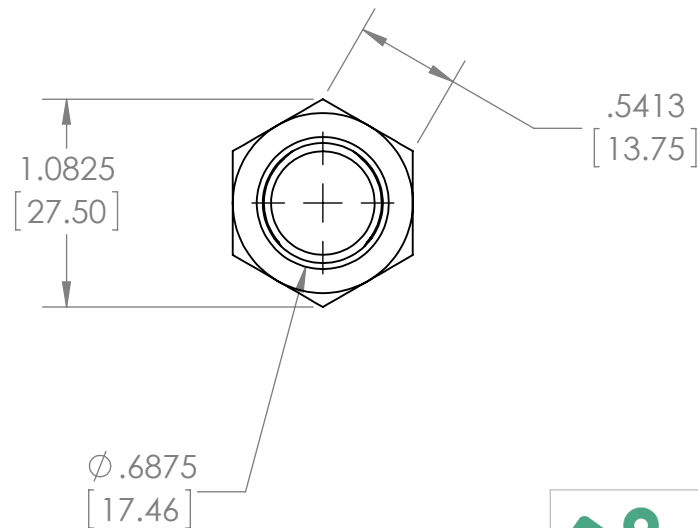
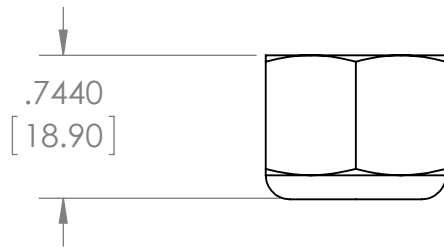
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0.625 - 11 Nylon Locknut Quantity: 4



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TITLE: 0.625 - 11 in nylon locknut (90630A130)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL: Steel		FINISH: Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE: 2:1	SIZE: A	DATE: 7/10/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 1.1014 lbs	SHEET 1 OF 1

2

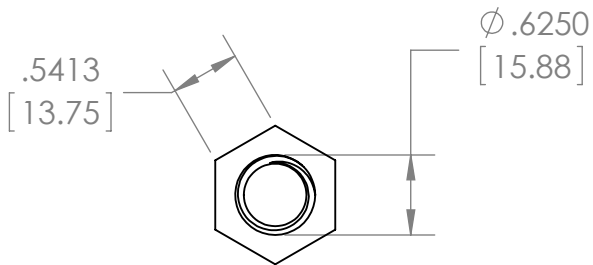
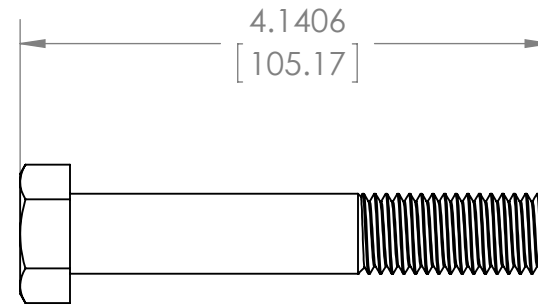
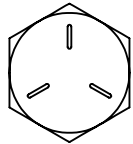
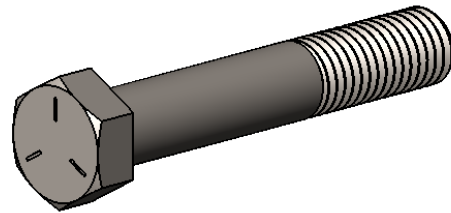
1

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0.625 - 11 x 3.75 in Hex Head Screw

Quantity: 4



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TITLE: 0.625 - 11 x 3.75 in hex head screw (91247A811)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL: Steel		FINISH: Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE: 1:2	SIZE: A	DATE: 7/17/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.3872 lbs	SHEET 1 OF 1

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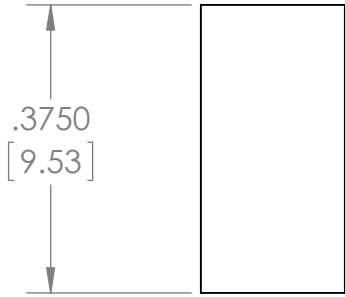
A

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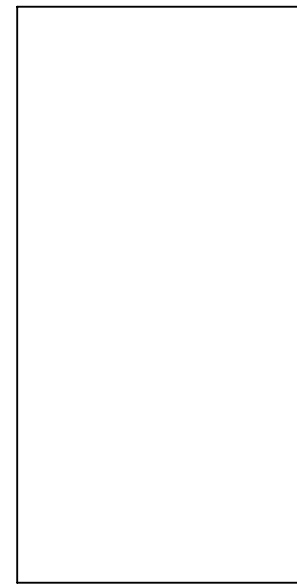
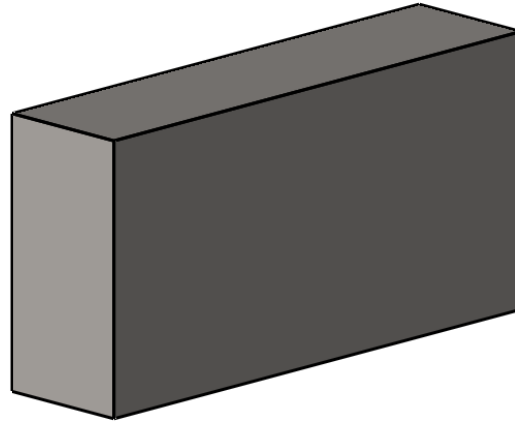
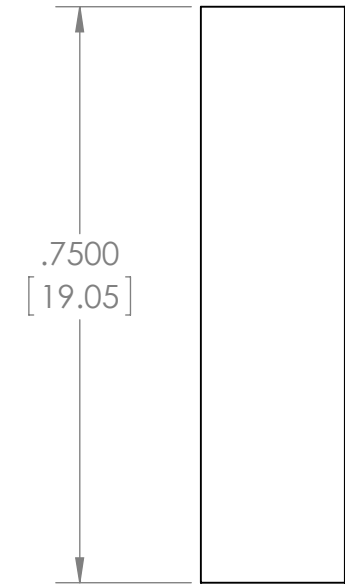


3/16" x 3/8" x 3/4" Undersized Key Stock
Quantity: 1

Note: This drawing is subject to
change depending on the
motor used.

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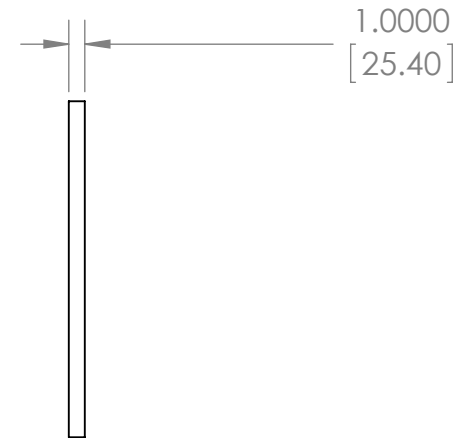
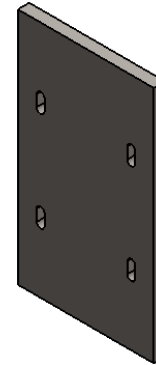
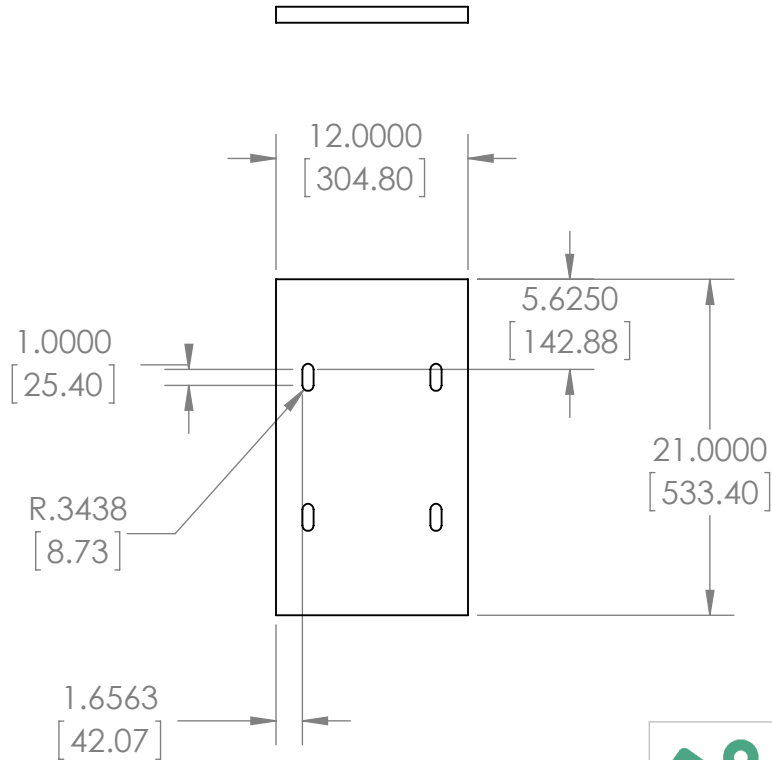
TITLE: 3/16" x 3/8" undersized key stock (98510A155)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL: Steel		FINISH: Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE: 4:1	SIZE: A	DATE: 7/16/2018	REV: 1
DO NOT SCALE DRAWING		WEIGHT (LBS): 0.0140	SHEET 1 OF 1

2

1

Note: This drawing is subject to change depending on the motor used.

1" Thick Steel Plate
Quantity: 1



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TITLE:			
Curb Drop Motor Mount			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Steel		Plain	
TOLERANCES:		-0.1000	
+0.1000			
SCALE:	SIZE:	DATE:	REV:
1:12	A	7/16/2018	2
DO NOT SCALE DRAWING		WEIGHT (LBS): 70.2660 lbs	SHEET 1 OF 1

2

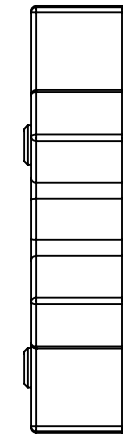
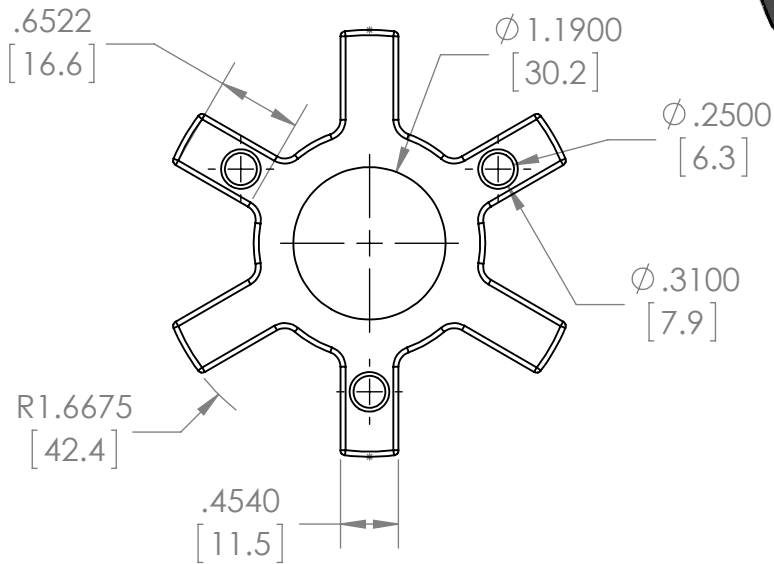
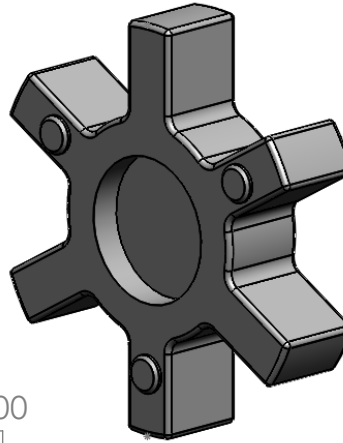
1

Rubber Spider (6408k79)
Quantity: 1

Note: This drawing is subject to change depending on the motor used.

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TITLE:			
rubber spider (6408K79)			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm]			
MATERIAL:		FINISH:	
Rubber		Plain	
TOLERANCES: See Manufacturer Specifications			
SCALE:	SIZE:	DATE:	REV:
2:3	A	7/20/2018	1
DO NOT SCALE DRAWING		WEIGHT (LBS): .0170 lbs	SHEET 1 OF 1

2

1