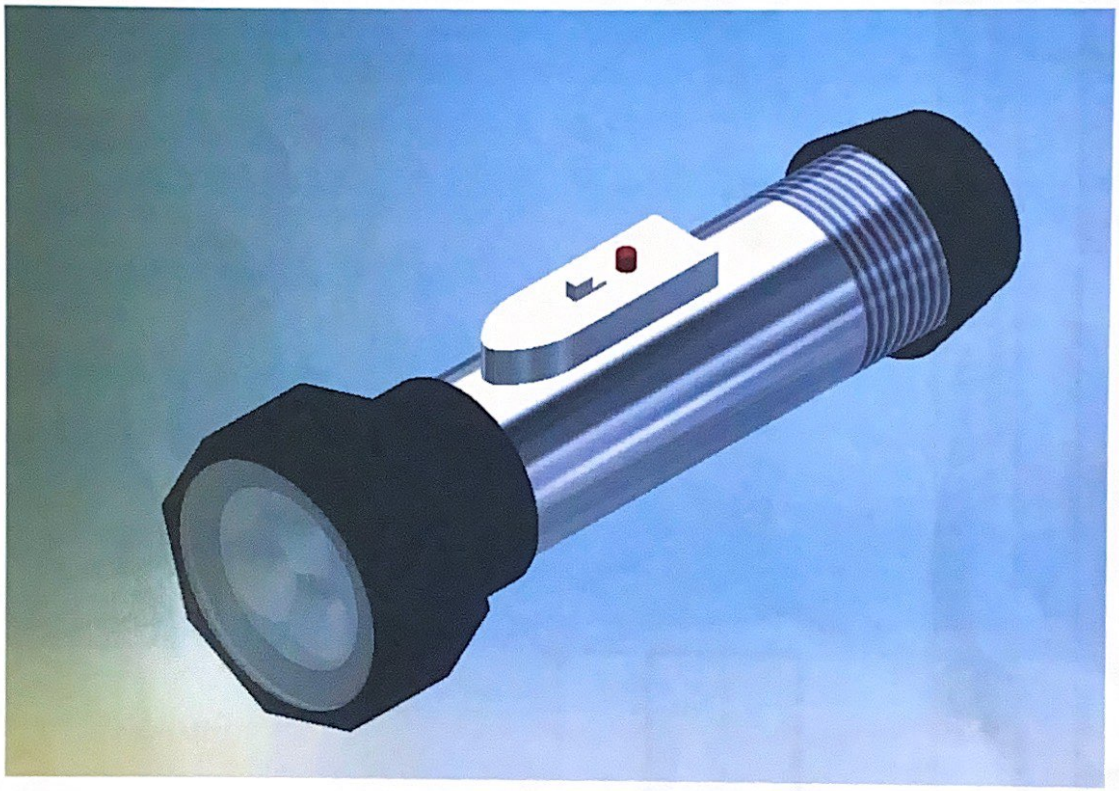
REVERSE ENGINEERING PROJECT

BY: Keyur Rana and Brandon Mercado

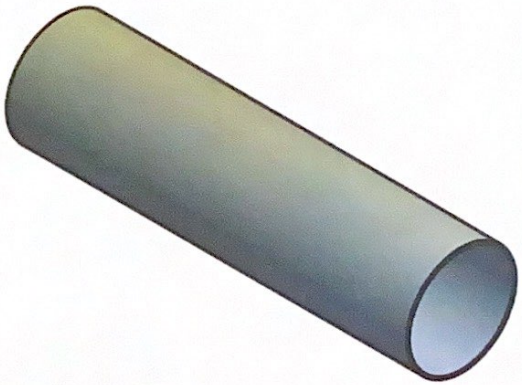


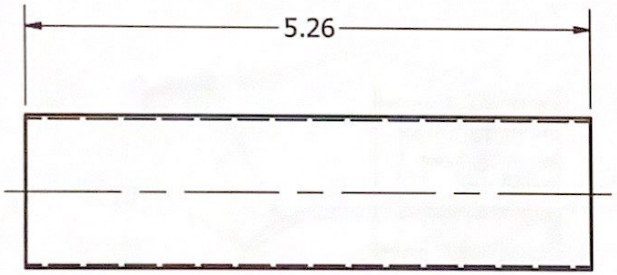
Keyur Rana and Brandon Mercado

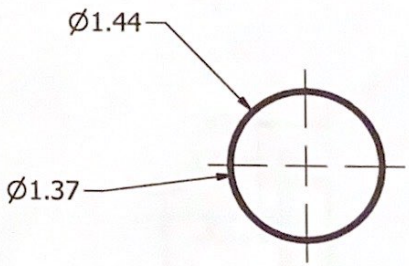
Introduction to Engineering Design

Passaic County Technical Institute

April 5, 2017







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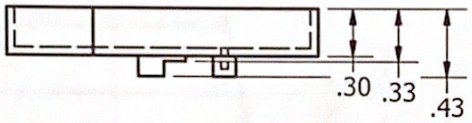

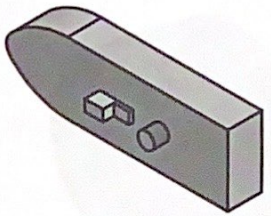

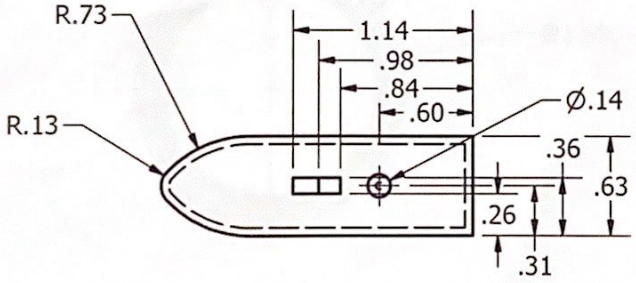

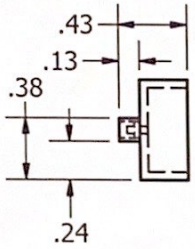

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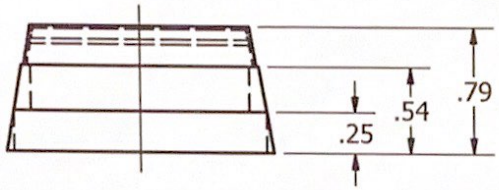

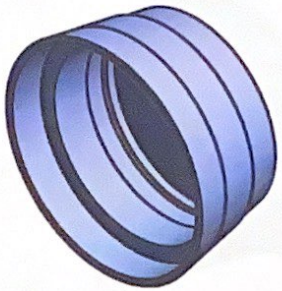

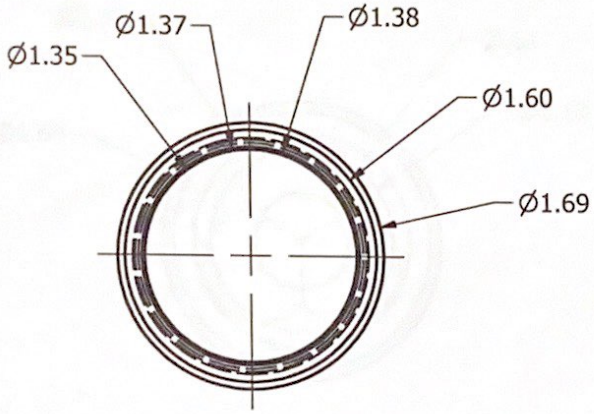

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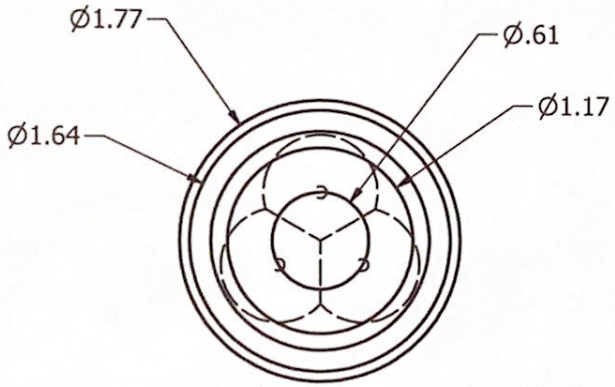

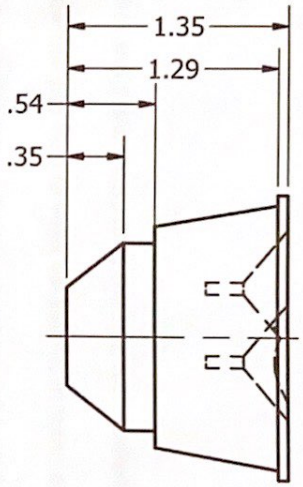

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DRAWING TITLE: LENS HOLDER			DRAWING NO: IED-KJR-64PT-06	
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	CHECKED BY:	DATE:	SCALE:	SHEET NO:

Keyur Rana

Conclusion:

This project was pretty fun and it was interesting working with someone you don't talk to normally on a regular bases. It teaches you how to work backwards in terms of Reverse Engineering. Identifying parts, disassembling it and telling how it works is was very fun and interesting things to do. Reverse Engineering jus basically teaches us how Engineers find out how something works by working backwards. It gives you a point of view of what you will be doing in future if you are going to Engineering Field. If we were to do this project in future again then I would do it.

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Activity 6.4 Product Disassembly Chart

Product Name: Flashlight
Date: 3/29/17
Time:

Group members: Keyur Rana
Brandon Mercado

	Part #	Part Name	Qty	Dimensions	Function	Material	Density	Mass or Weight	Texture and Finish	Interaction with Other Parts	General Notes (i.e.; wear, stress indicators)
1	①	Connector piece	①	H-1.645" D-1.426"S D-1.693"B	Covers and protects Glass and Bulbs	ABS Plastic	1.000 g/cm³	12.9g	Black Rough	TOP Connect	
2	②	TOP Connector	1	D-1.556" H-2.049" O-1.879"	↑	ABS Plastic	1.000 g/cm³	9.6g	Black Rough	Connecto Piece	
3	③	Body	1	H-5.255" D-1.374"	Holds everything	Tin Plate	1.000 g/cm³	27g	Silver Smooth	Connector Piece	
	~~④~~	~~Switch~~	~~1~~	H-0.771" W-0.320 W-0.379	H-0.139"						
	~~⑤~~	~~Switch Button~~	~~1~~	H-0.212" D-0.157" OD-0.231" OD a B.279							
4 *	⑥	Switch Button ~~Spring~~ Plate	1	W-2.010" L-0.655" H. 0.291"	Turs on and off the light	Aluminum	1.000 g/cm³	2.1g	Silver Smooth	Body	
5	⑦	Base	1	H-0.793" BD-1.418" SD-1.383"	Holds battery	ABS Plastic	1.000 g/cm³	9g	Black Rough	Body	

	Part #	Part Name	Qty	Dimensions	Function	Material	Density	Mass or Weight	Texture and Finish	Interaction with Other Parts	General Notes (i.e.; where stress indicators)
6	8	LEDs Holder	1	H-1.285" D-1.765" D-1.1375" D-1.1465"	Helps increase holes light Brightness	Polycarbon	1.000 g/cm³	8.7g	Silver Steel	connetor Piece	
7	9	Lens	1	H-0.055" D-1.788"	Improves light	Glass	1.000 g/cm³	5g	Glass Transparent	Top connetor	
~~10~~	~~Plate~~	X									
~~11~~	~~Board~~	X									
~~12~~	~~LED Base Holder~~	X									
8	1	Spring	1	H-0.735" D-1.465" D-0.525"	Connects it to negative Terminal	stainless Steel	1.000 g/cm³	2.3 g	Steel	Base	
										D:	