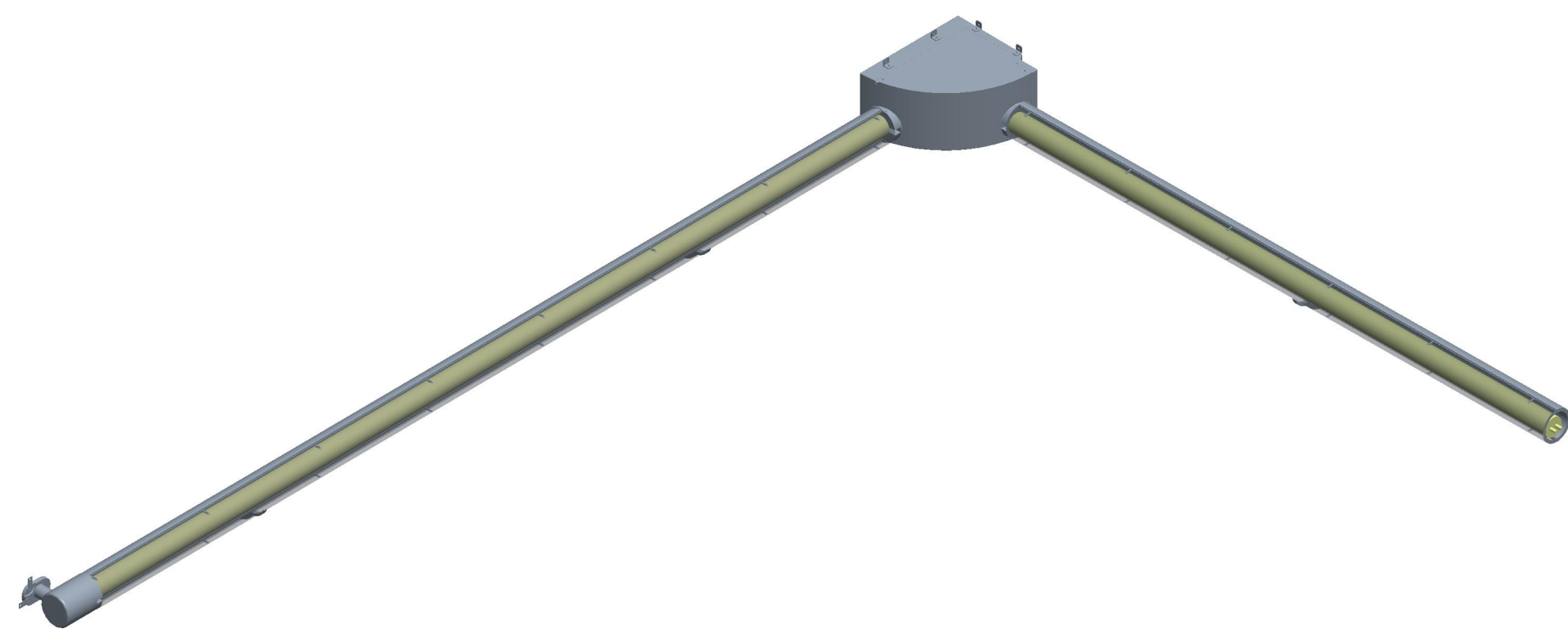
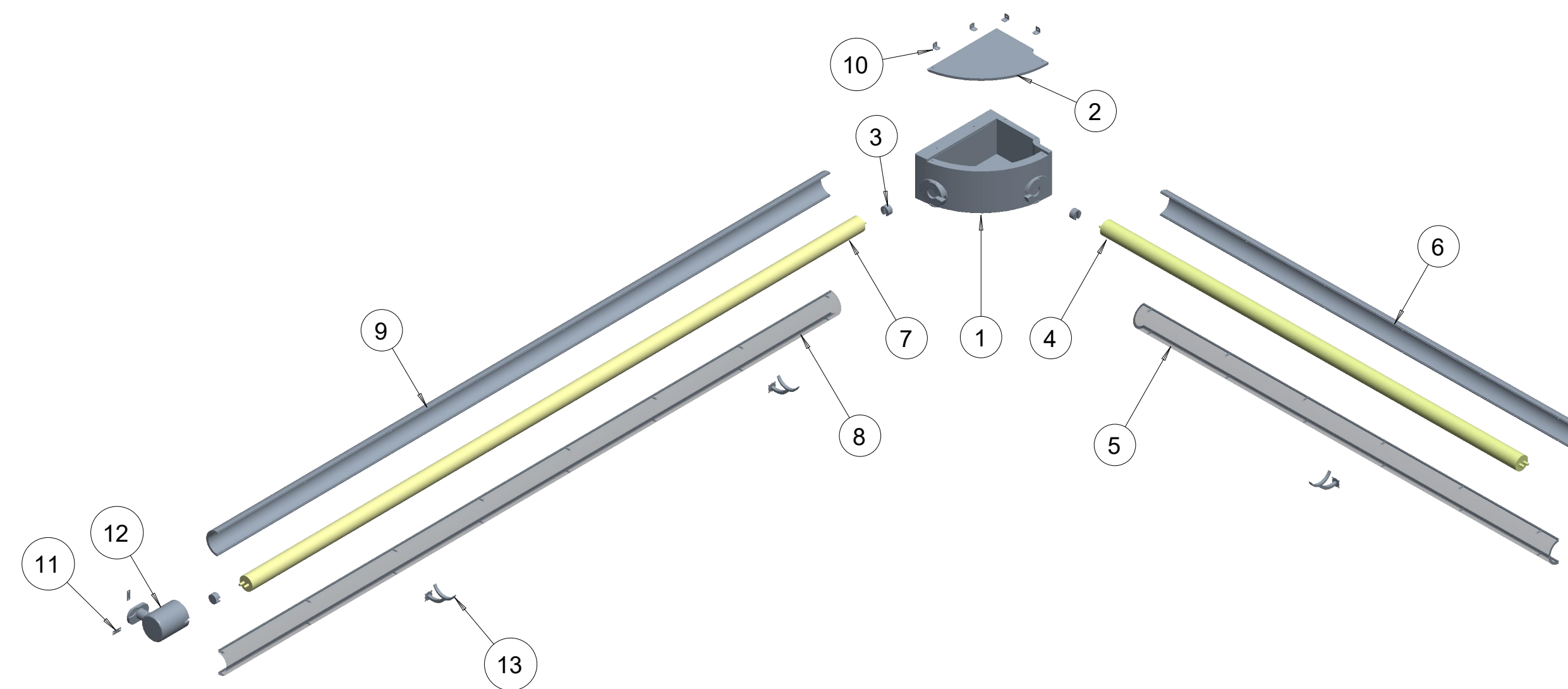


## ASSEMBLED: LIGHT BAR ASSEMBLY

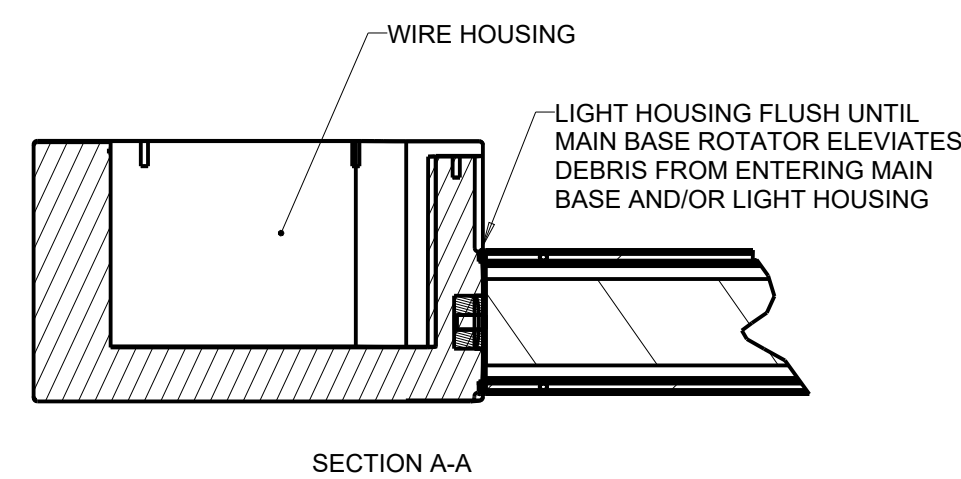


## EXPLODE: LIGHT BAR ASSEMBLY



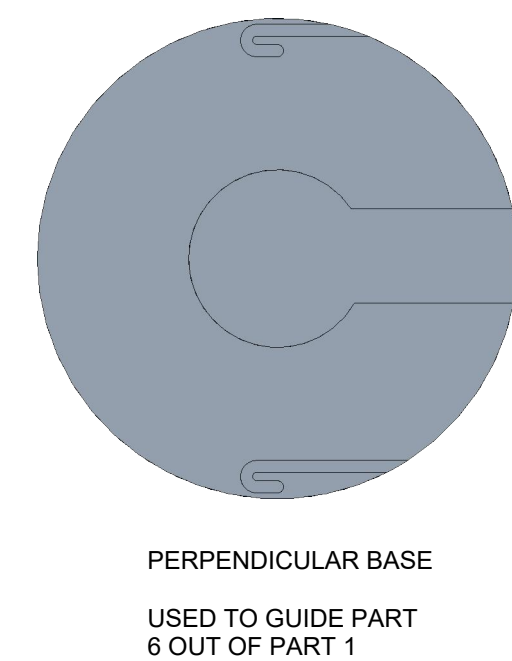
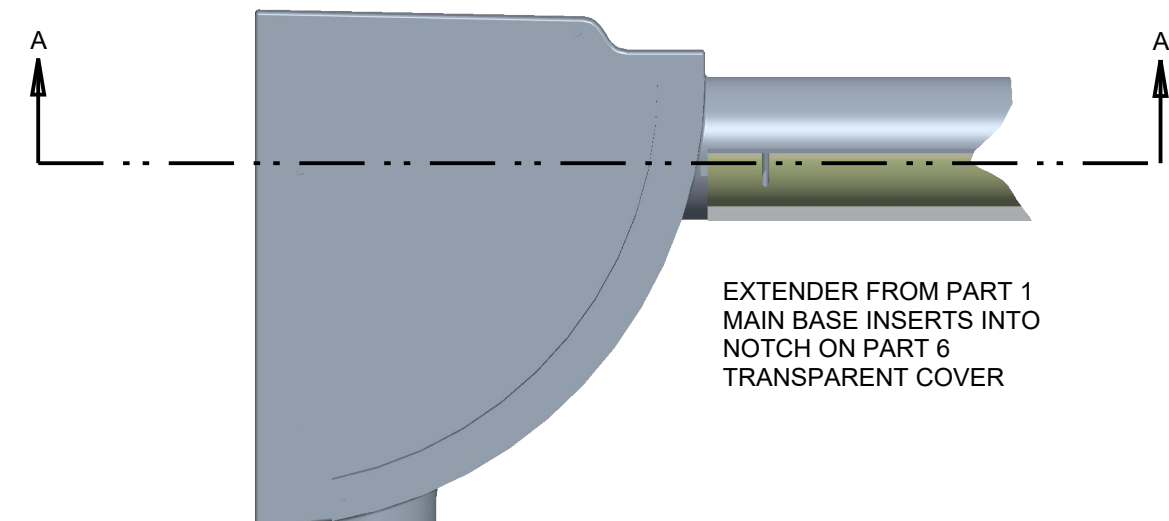
PARTS LIST		
PART #	PART NAME	QTY
1	MAIN BASE	1
2	TOP	1
3	ROTATOR	3
4	4 FT LED LIGHT ROD	1
5	4 FT TRANSPARENT COVER	1
6	4 FT OPAQUE COVER	1
7	6 FT LED LIGHT ROD	1
8	6 FT TRANSPARENT COVER	1
9	6 FT OPAQUE COVER	1
10	ANGLE BACKET	4
11	STRAIGHT BRACKET	2
12	SIDE BASE	1
13	SUPPORTING COMPONET	3

## MAIN BASE AND LIGHT FIXTURES

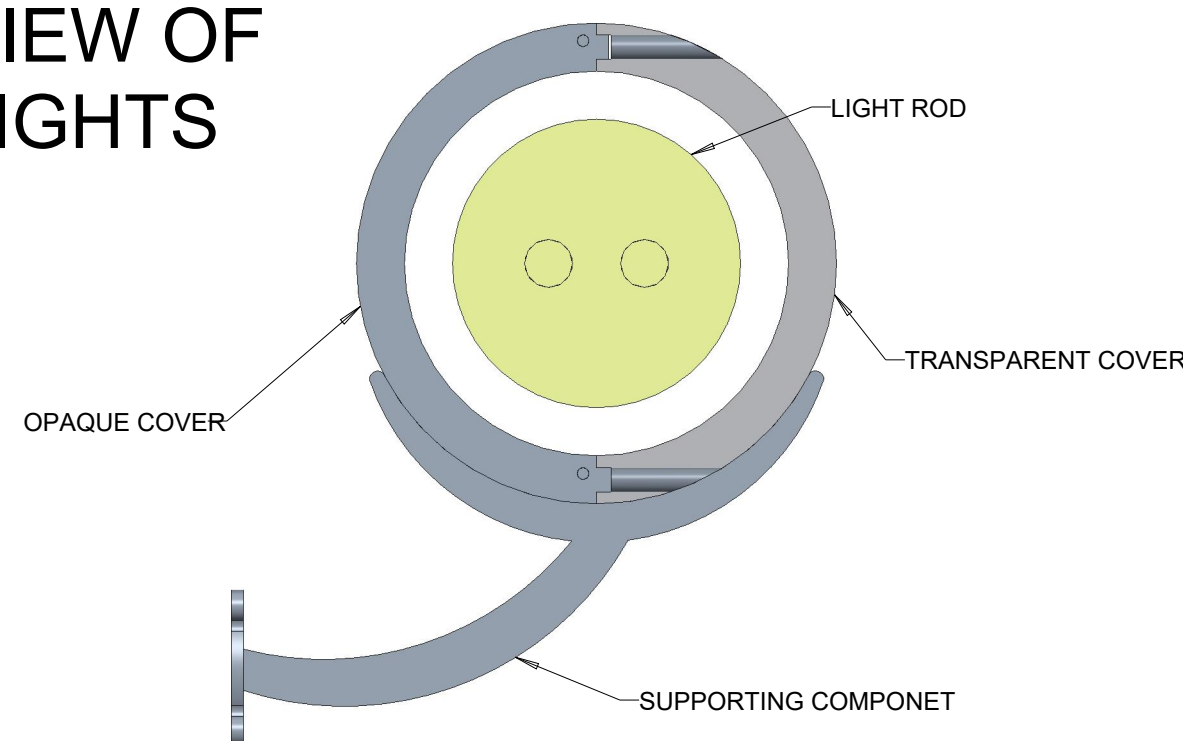


LED LIGHTS TO BE USED BECAUSE OF LONGER LIFE SPAN AND DURABILITY COMPARED TO OTHER TYPES OF LAMPS. LED LIGHTS WILL BE MOUNTED IN A LIGHT ROD. THIS DESIGN ALLOWS FOR FASTER AND EASIER LIGHT REPLACEMENT. (NOTE: CHANGING OF LIGHT ROD IS SIMILIAR TO CHANGING A FLUORASCENT LIGHT.)

LIGHT ON/OFF IS CONTROLLED BY MENU IN THE CAB OF THE VEHICLE ON THE DASH HMI. LIGHT PROGRAM WOULD INCLUDE AN ON/OFF AND OPTION FOR USER TIMER.



## VIEW OF LIGHTS

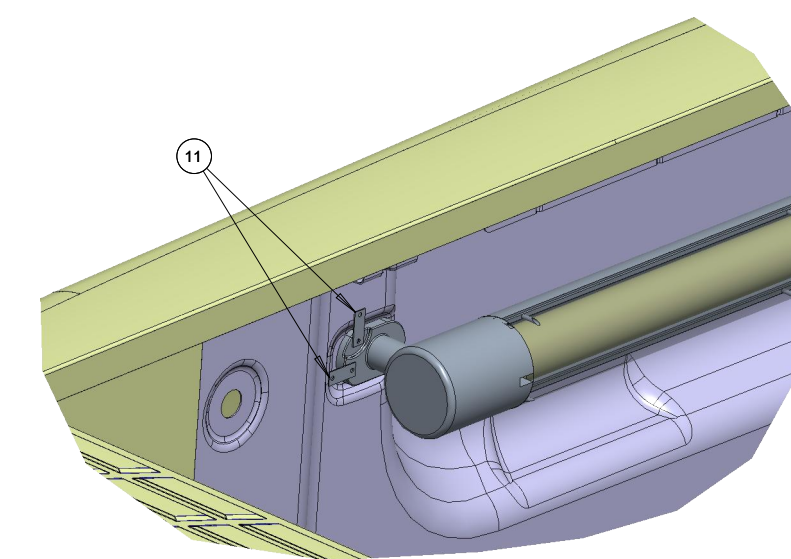
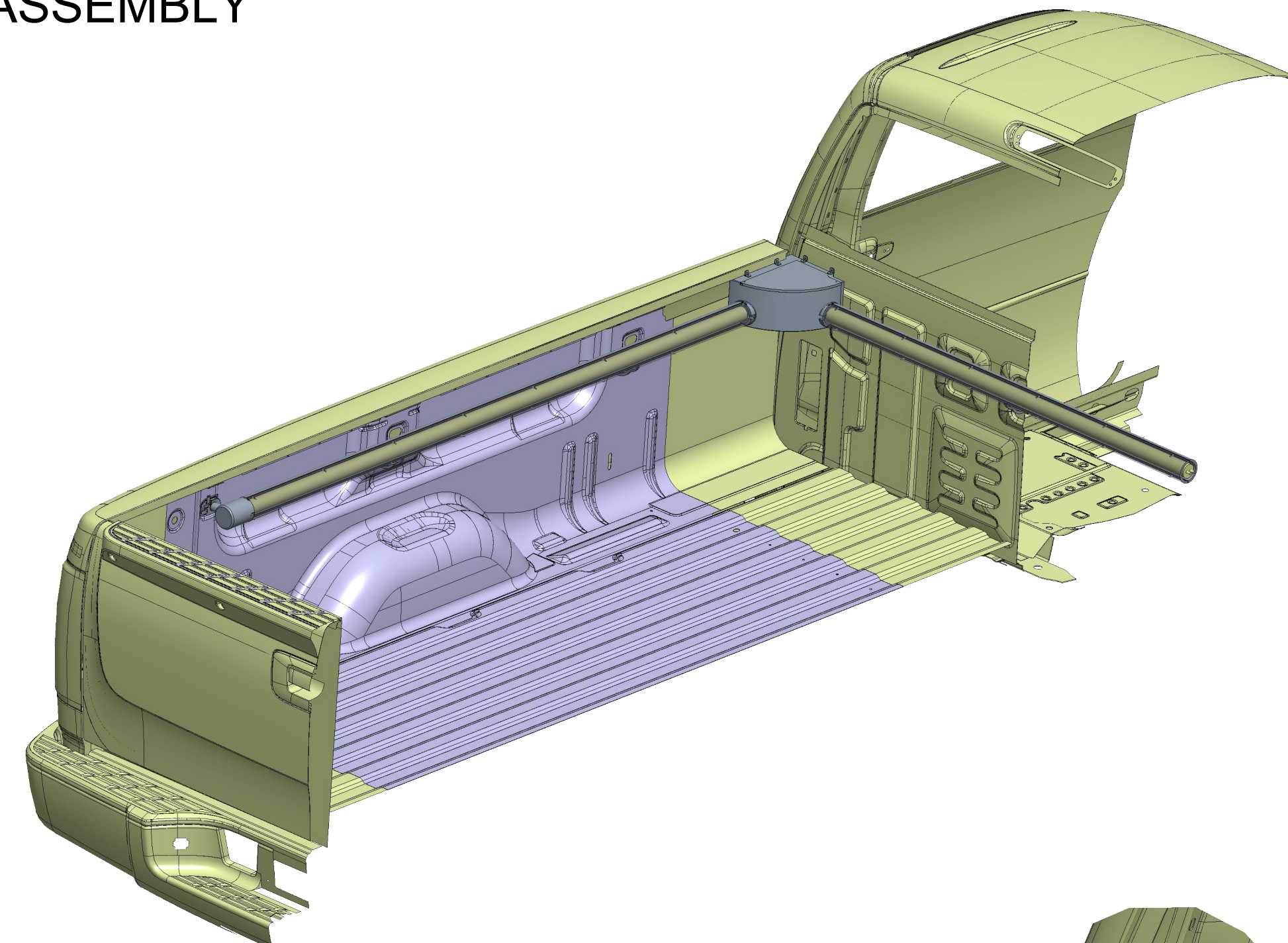


THE CENTER OF THE ASSEMBLY HOUSES THE LED LIGHT ROD WITH AN OUTER CASING DESIGNED TO PROTECT FROM DEBRIS AND VARIOUS IMPACTS. (SUPPORTING COMPONENT DOES NOT COVER THREADS)

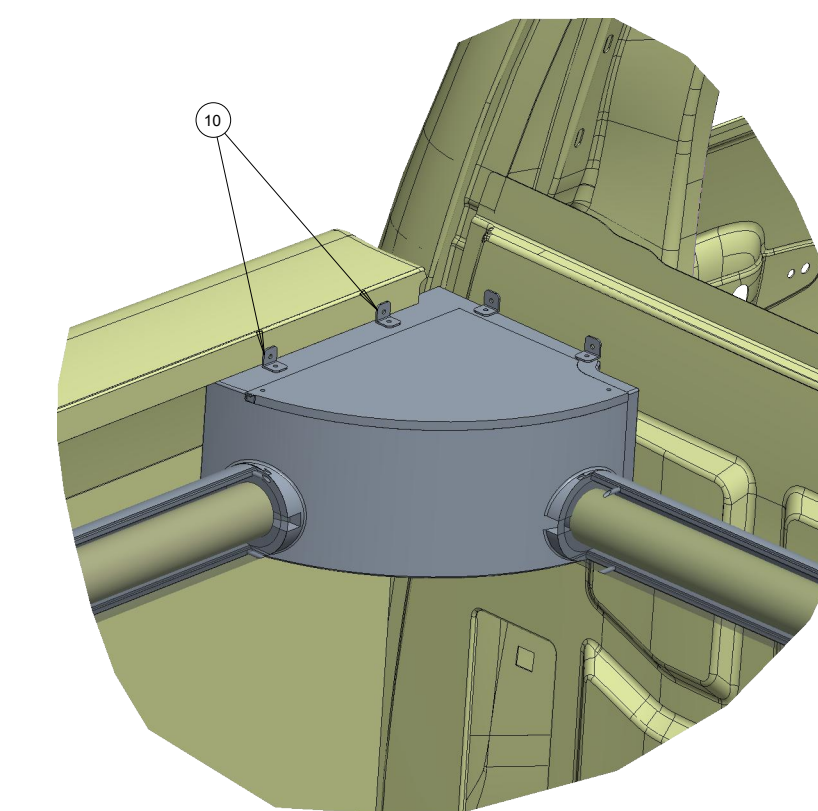
### INSTRUCTIONS: LIGHT ROD ASSEMBLY

1. UNDO SCREWS FROM PART 6 TRANSPARENT COVER AND PART 13 SUPPORTING COMPONET. (SEE VIEW TRUCK ASSEMBLY FOR BRACKET LOCATIONS).
2. PULL PART 5 TOWARDS TRUCK BED TO REMOVE.
3. REMOVE LIGHT ROD, DESIGNED BASED ON CELILING.
4. VERTICALLY LIFT PART 6 SLIGHTLY. SLIGHTLY MOVE PART 6 TOWARDS SIDE OF TRUCK. VERTICALLY LIFT PART 6 SLIGHTLY. PULL PART 6 TOWARDS TRUCK BED TO FULLY REMOVE (SEE PERPENDICULAR). TO ASSEMBLE, REPEAT STEPS BACKWARDS.

## TRUCK ASSEMBLY

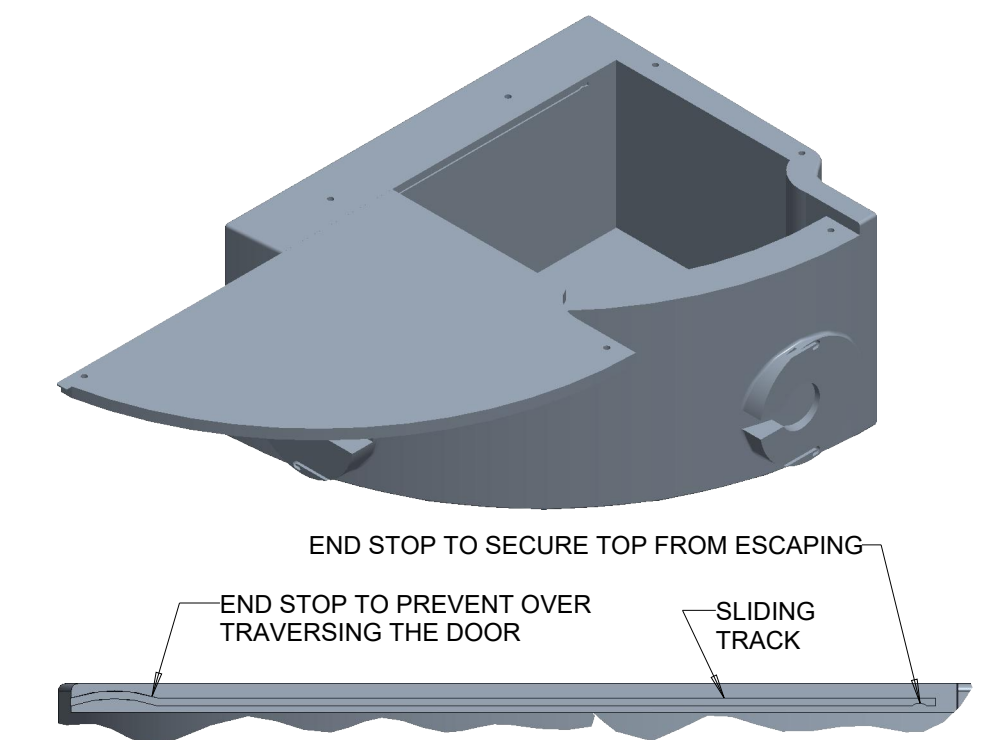


LIGHT ROD ATTACHED TO ASSEMBLY BZPB37DC8E3RFFG USING A 1/8" RIVET CONNECTED PART 11 STRAIGHT BRACKET FOR EXTRA SUPPORT



LIGHT BAR ATTACHED TO PART WZ5B1E5CDOF3ZMJM USING 1/8" RIVETS CONNECTED WITH PART 10 ANGLE BRACKET FOR EXTRA SUPPORT

## MAIN BASE AND TOP



THE WIRES ARE STORED IN THE SHELL OF THE MAIN BASE. TOP OF MAIN BASE HAS A GASKET SEAL TO PROVIDE A TIGHT FIT TO PREVENT WATER DAMAGE. THE DOOR SLIDES IN AND OUT VIA SLIDING PIN.

INDENTATIONS ARE SET IN THE TRACK TO PREVENT THE SLIDING PIN FROM OVER TRAVERSING THE TRACK  
PART 1 MAIN BASE IS RIVETED TO THE VEHICLE PART WZ5B1E5CDOF3ZMJM AND ASSEMBLY BZPB37DC8E3RFFG USING PART 10 ANGLE BRACKETS BY A SCREW.

STUDENT NAME:  
COLIN ADAM

SCHOOL:  
BRIGHTON HIGH SCHOOL

GRADE LEVEL: 12  
CATEGORY: ENGINEERING DESIGN

EMAIL ADDRESS:  
COLINADAM00@GMAIL.COM

TEACHER NAME:  
MR. JOURDEN