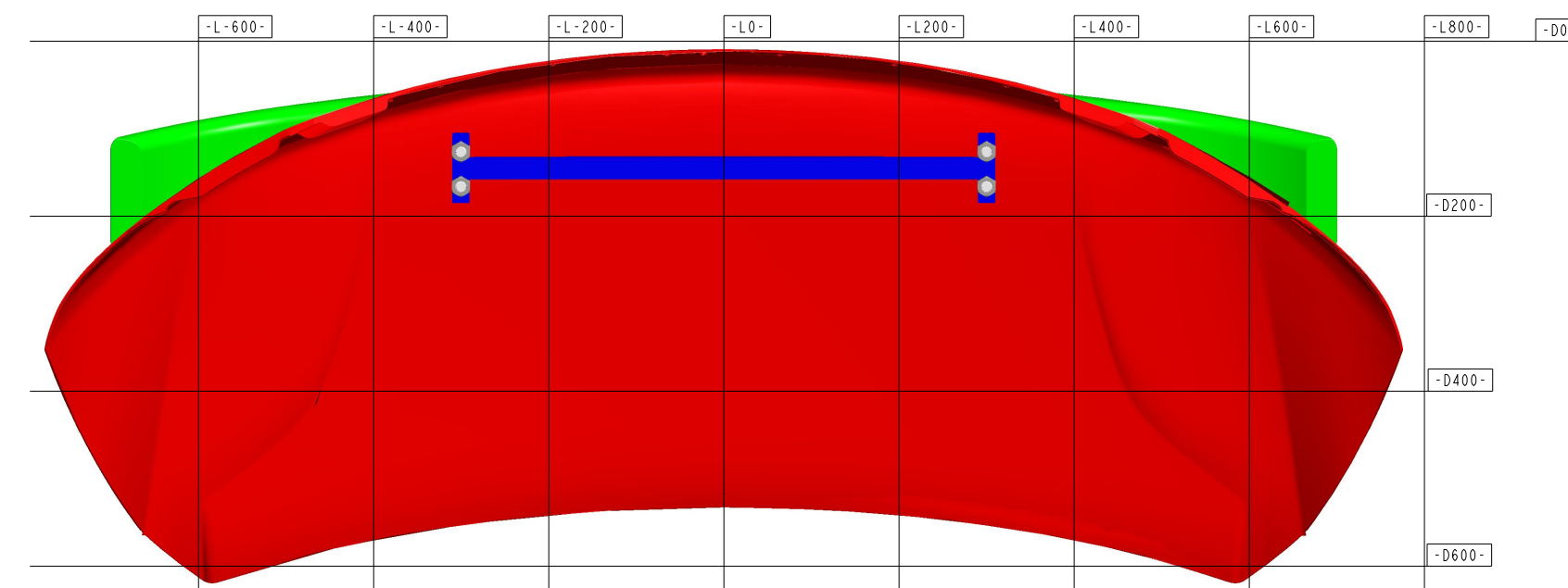
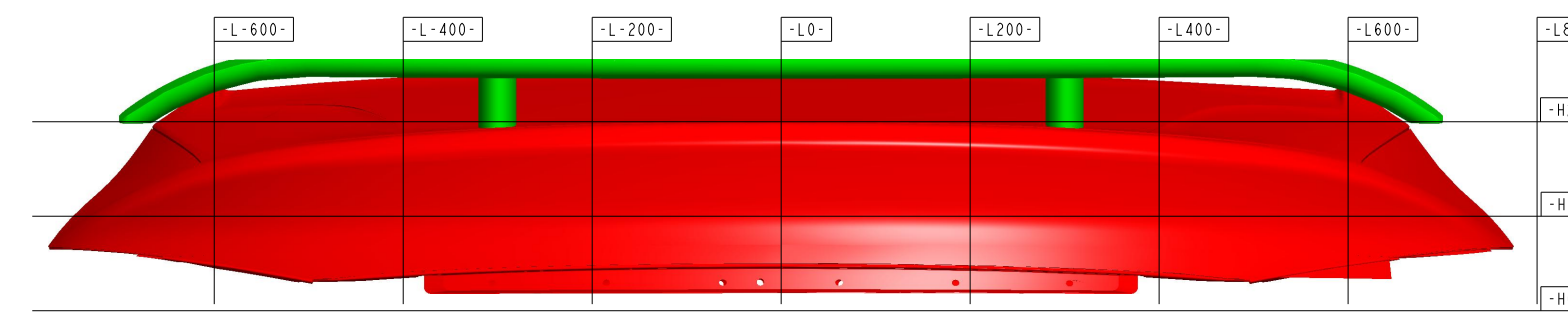
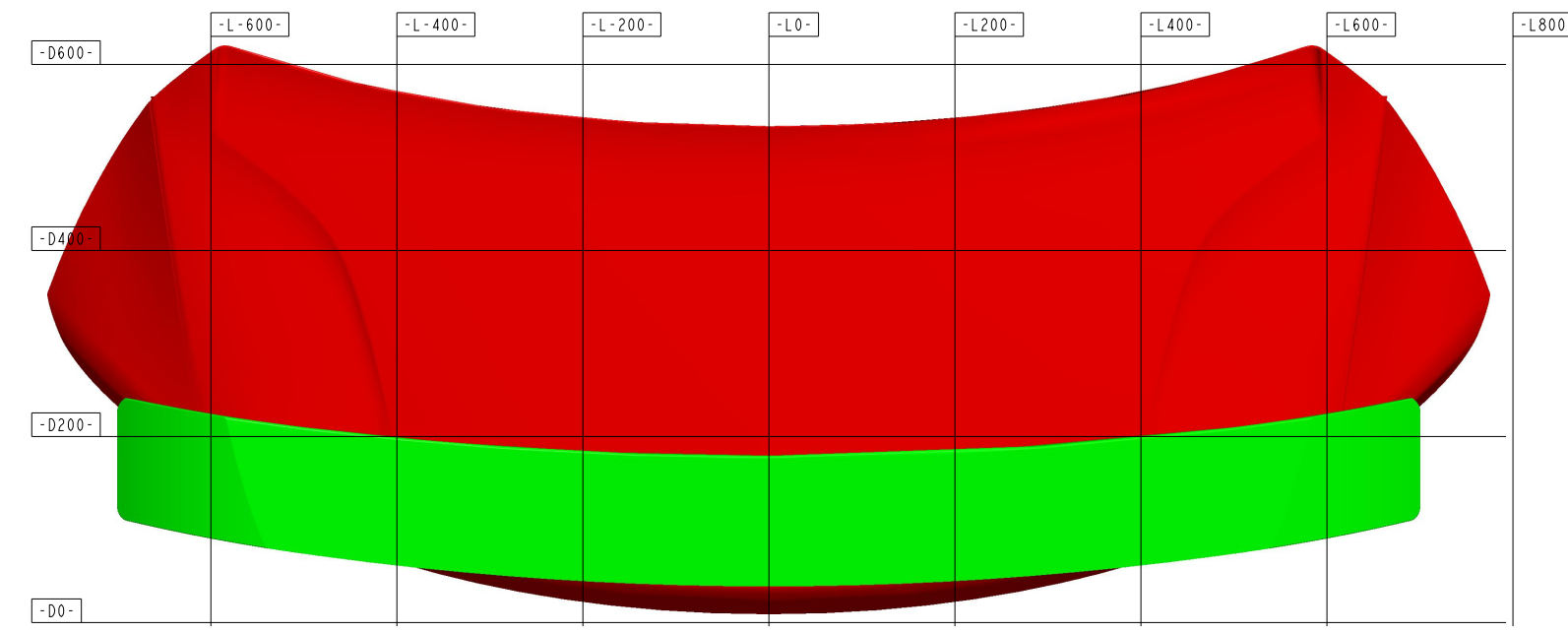
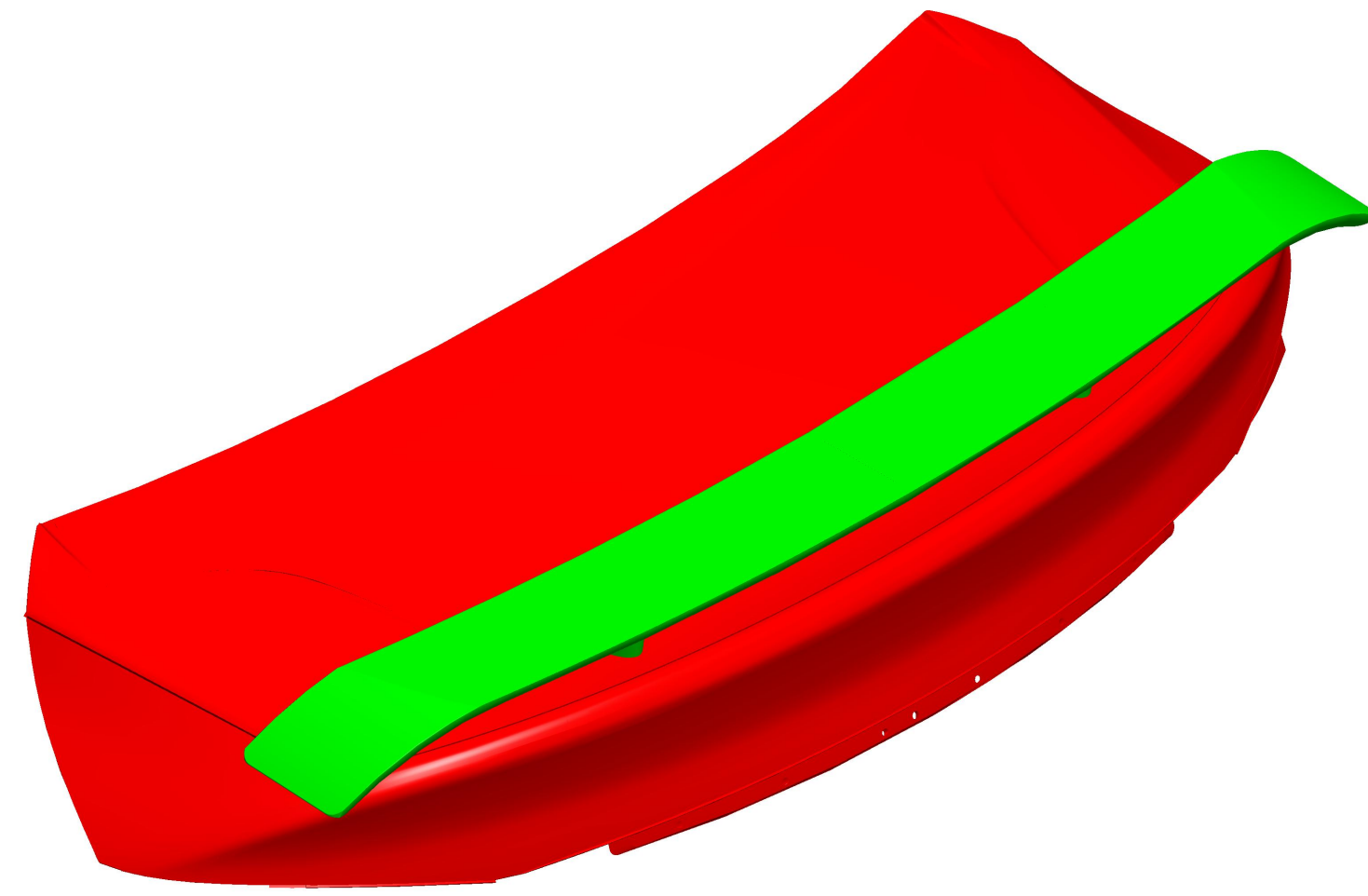


SPOILER ASSEMBLY



DESCRIPTION

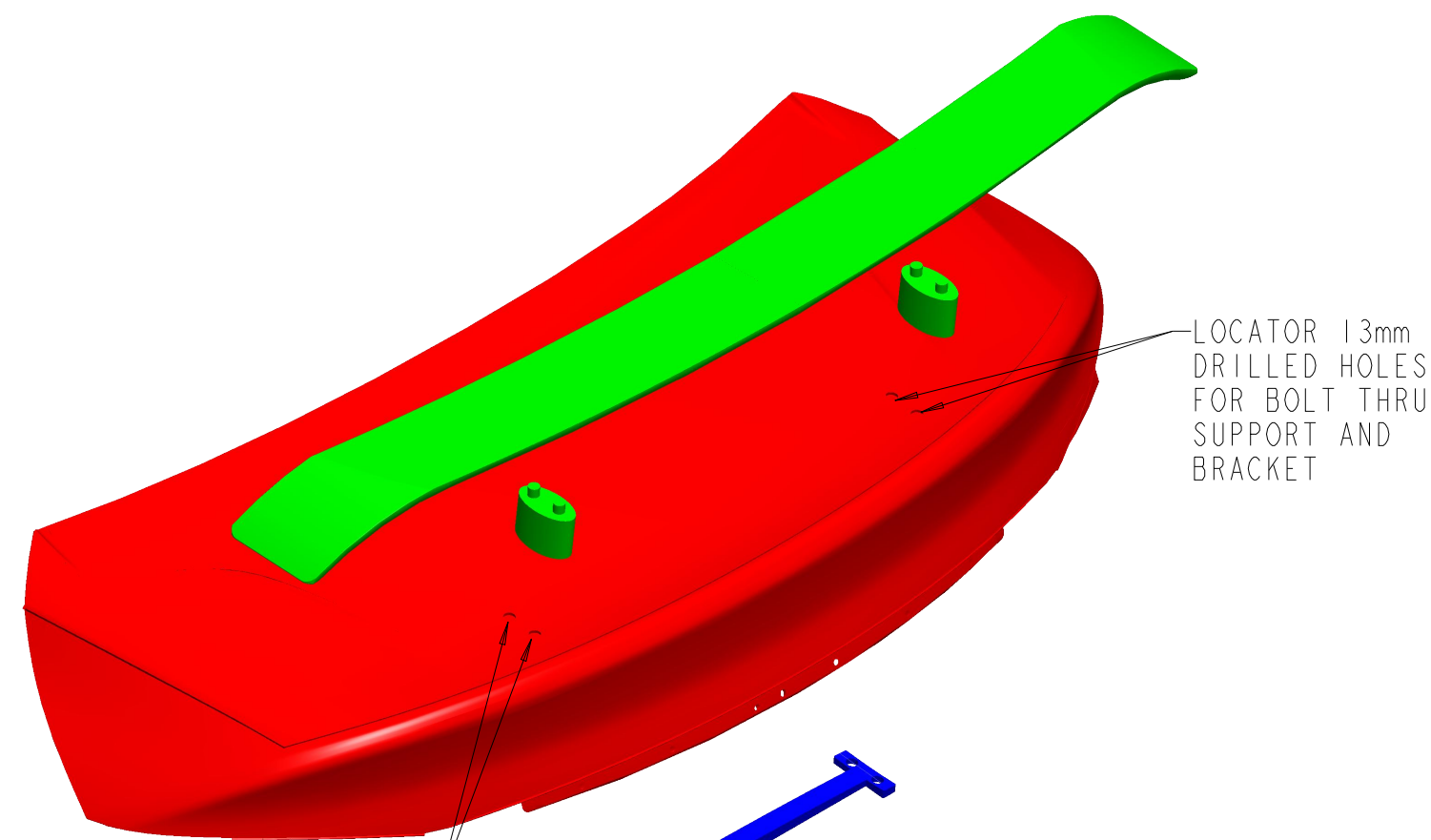
THE DESIGN FOR THE SPOILER WAS BASED AROUND STREAMLINED, AESTHETICALLY PLEASING SPOILERS. INSTEAD OF A BOXIER OR AERODYNAMICALLY-WISE OPTIMAL BUILD, THE SPOILER IS MEANT TO BE SMOOTH AND SIMPLISTIC WHILE NOT REDUCING PERFORMANCE OF THE VEHICLE. THE SPOILER IS A SLOPED, WEDGE-LIKE SHAPE THAT HELPS REDUCE DRAG AND CUT THROUGH THE AIR. FROM ABOVE, YOU CAN SEE A SLIGHT CURVE TO THE SHAPE OF THE SPOILER, PROVIDE IMPROVED AERODYNAMICS. ROUNDS COVER THE SURFACE OF THE SPOILER, MAKING THE ONLY FLAT PARTS THE VERY TOP AND BOTTOM.

FROM THE BOTTOM, A BRACKET WITH TWO SCREW HOLES ON EITHER SIDE HOLDS THE SPOILER IN PLACE. A BRACKET IS NECESSARY AS OPPOSED TO SIMPLY ADDING HOLES UNDERNEATH WHERE THE SPOILER SUPPORTS WILL BE AS THEY KEEP THE SPOILER STRAIGHT IN ANY ENVIRONMENT. 52MM LENGTH AND 13MM DIAMETER SCREWS WITH A 1.75 PITCH INSERT IN FROM THE BOTTOM, THROUGH THE FRAME INTO THE SPOILERS SUPPORTS. FOUR NUTS THREAD INTO EACH OF THE SCREWS, SECURING THE SPOILER IN PLACE

ASSEMBLY INSTRUCTIONS

1. DRILL FOUR 13MM HOLES INTO THE REAR HOOD OF THE VEHICLE. 2 HOLES MUST BE 600MM BOTH WAYS FROM THE DESIRED CENTER. THE UPPER HOLES ARE 40MM ABOVE THE LOWER HOLES (SEE ISOMETRIC EXPLODED VIEW)
2. FASTEN SUPPORTS TO THE BOTTOM OF THE ALUMINUM SPOILER
3. INSERT/FASTEN THREADED ROD INTO THE BOTTOM THREADED HOLES OF BRACKET
4. ALIGN SPOILER-SUPPORT-THREADED ROD ASSEMBLY TO PREDRILLED HOLES ON THE REAR HOOD OF THE VEHICLE.
5. PLACE SECURING BRACKET ON THE UNDERSIDE OF THE VEHICLE FRAME, ALIGNING HOLES OF SECURING BRACKET TO THREADED RODS.
6. FASTEN NUTS ONTO EACH THREADED ROD TO SECURE SPOILER ASSEMBLY .

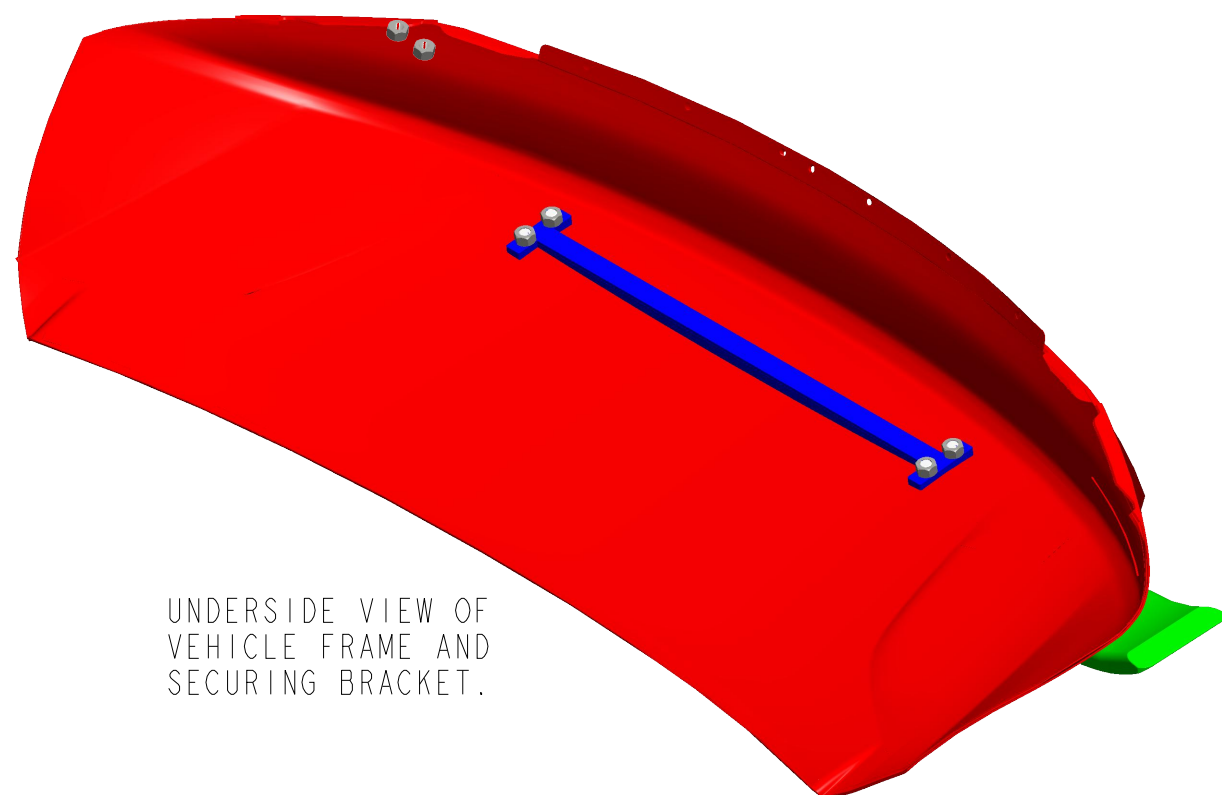
EXPLODE AND UNDERSIDE



LOCATOR 13mm DRILLED HOLES FOR BOLT THRU SUPPORT AND BRACKET

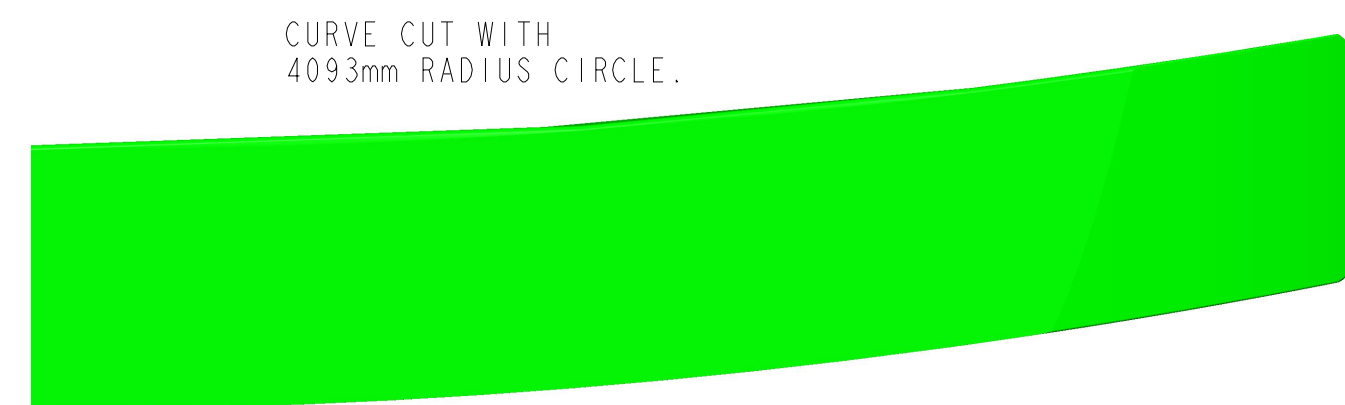
LOCATOR 13mm DRILLED HOLES FOR BOLT THRU SUPPORT AND BRACKET

SCREW AND NUT THREAD INTO SUPPORTS AND SECURING BRACKET.



UNDERSIDE VIEW OF VEHICLE FRAME AND SECURING BRACKET.

WING



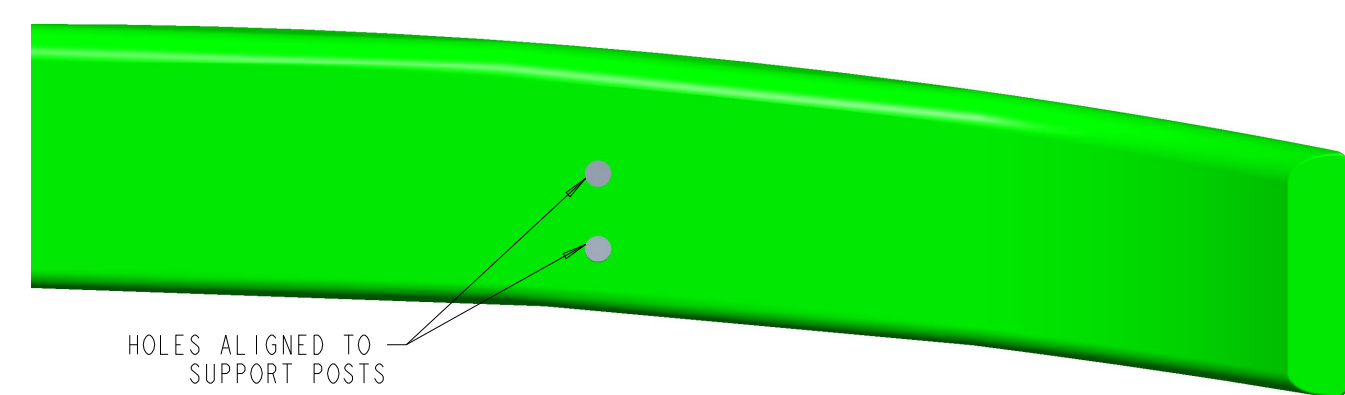
CURVE CUT WITH 4093mm RADIUS CIRCLE.

CURVE CUT WITH 3586mm RADIUS CIRCLE.

PART MUST BE MIRRORED FOR FULL WING PART.



WING CURVES FOR 200mm BY A DISTANCE DOWNWARD OF 50mm.



HOLES ALIGNED TO SUPPORT POSTS

TAPERED SHAPE REDUCES AIR DRAG.

BRACKET

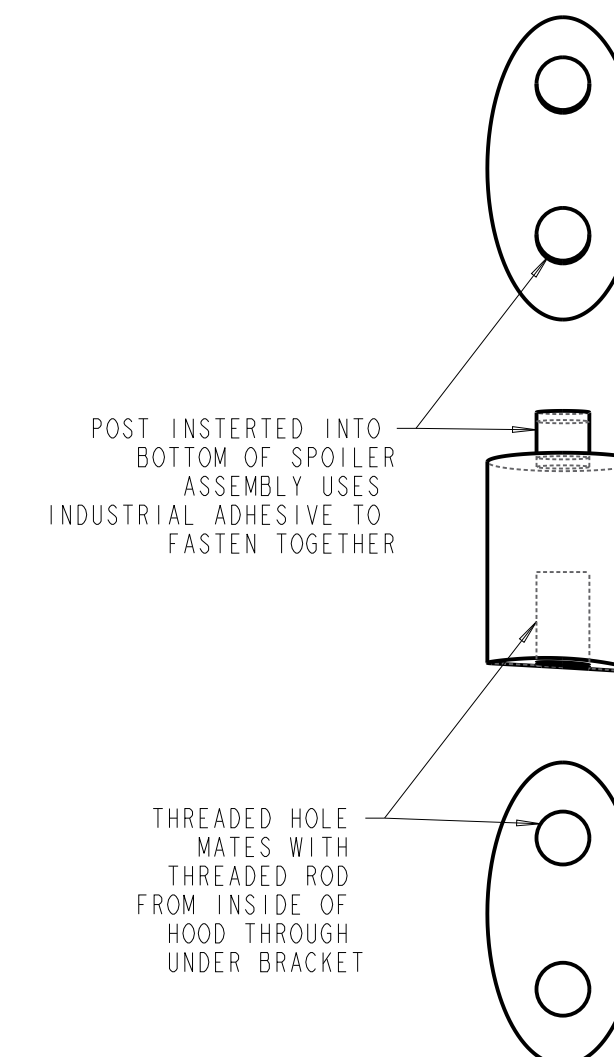


TOP SURFACE OF BRACKET SEAMLESS TO INTERIOR FACE OF VEHICLE FRAME.

METRIC

PART IS MIRRORED FOR FULL BRACKET PART.

SUPPORT



POST INSERTED INTO BOTTOM OF SPOILER ASSEMBLY USES INDUSTRIAL ADHESIVE TO FASTEN TOGETHER

THREADED HOLE MATES WITH THREADED ROD FROM INSIDE OF HOOD THROUGH UNDER BRACKET

B.O.M. CHART

PART NAME	PART #	QUANTITY	MATERIAL
WING	1	1	ALUMINUM
BRACKET	2	1	CARBON FIBER
SUPPORT	3	2	ALUMINUM
SCREW	4	4	STEEL
NUT	5	4	STEEL

STUDENT NAME: Quintin Garvis

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