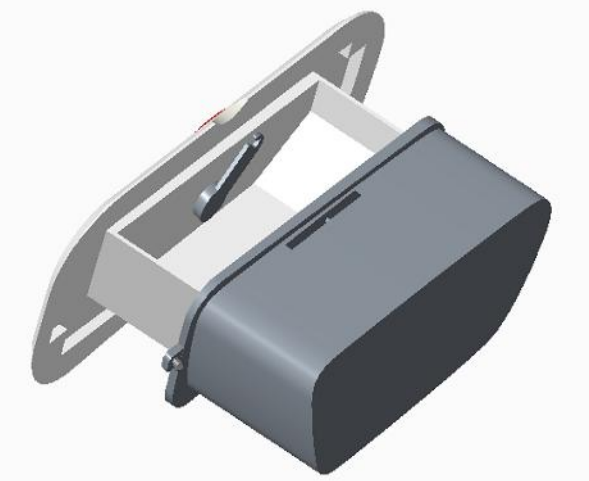


# METRIC

# ENGINEERING DESIGN

## LOCKING MECHANISM



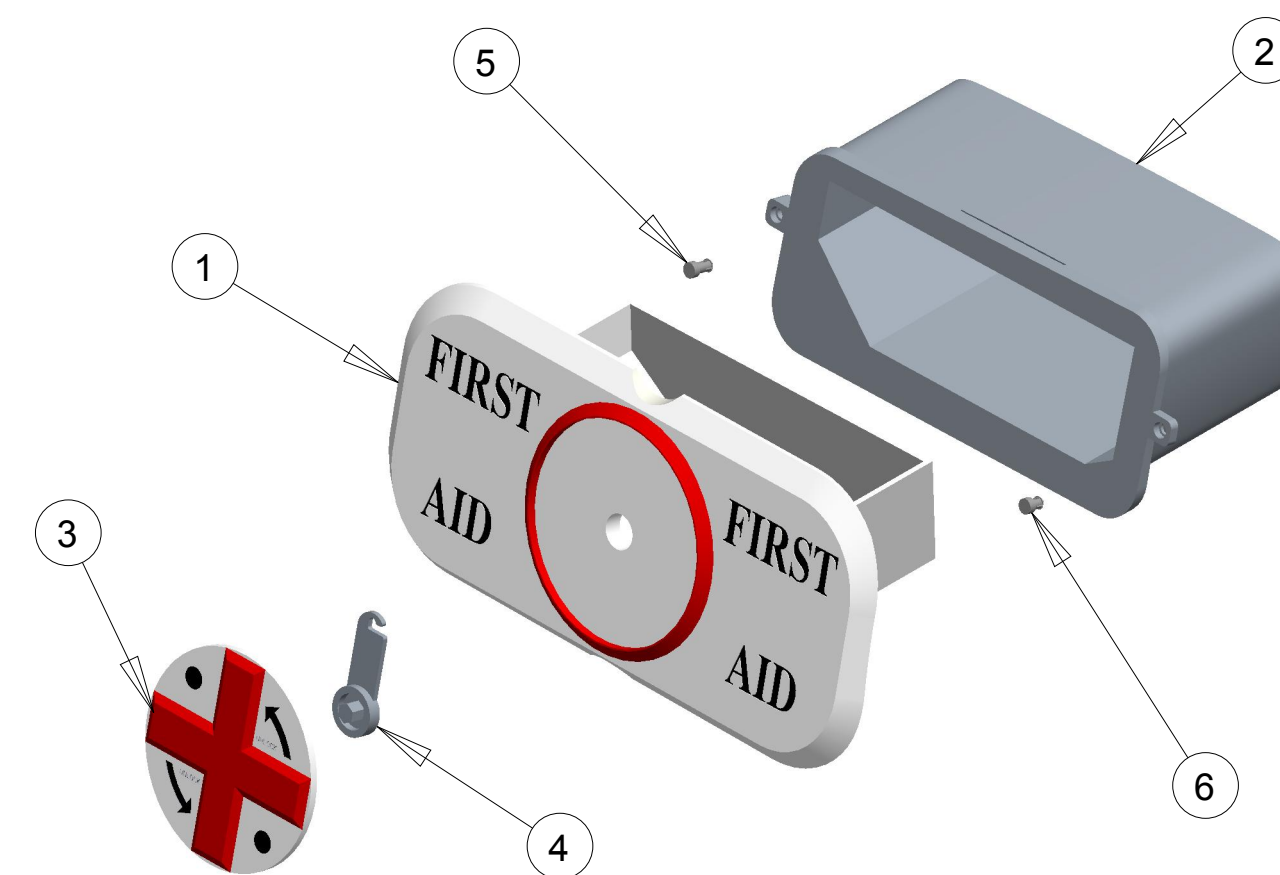
LOCKED FRONT VIEW

LOCKED BACK VIEW

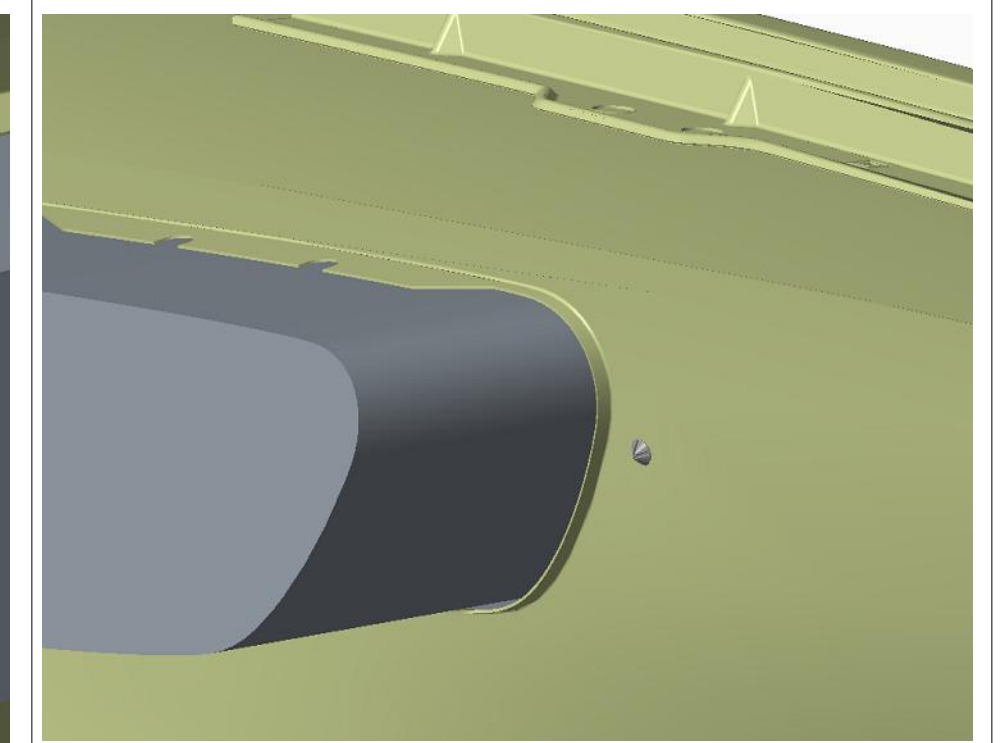
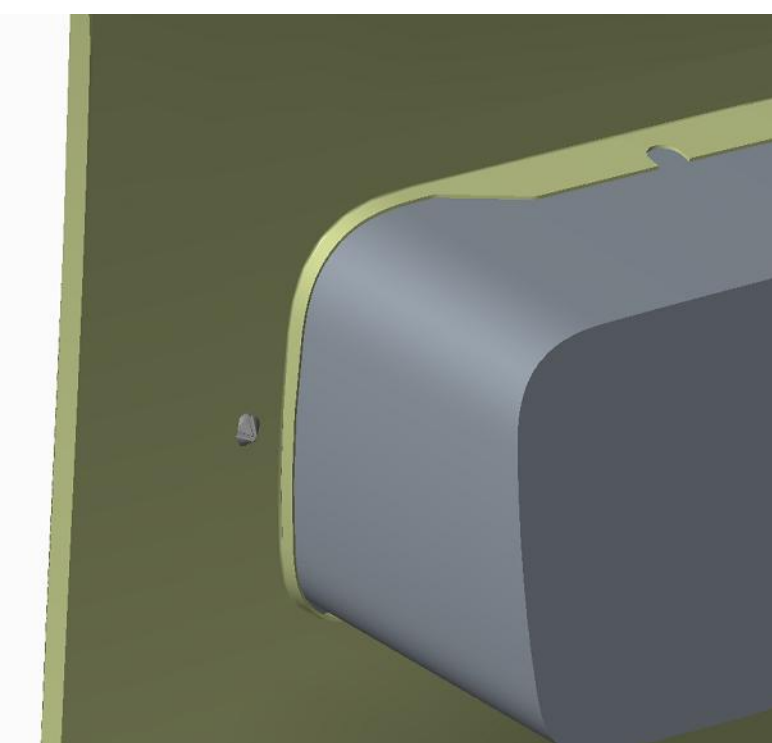
UNLOCKED FRONT VIEW

UNLOCKED BACK VIEW

## EXPLODED VIEW



## CONNECTION VIEWS



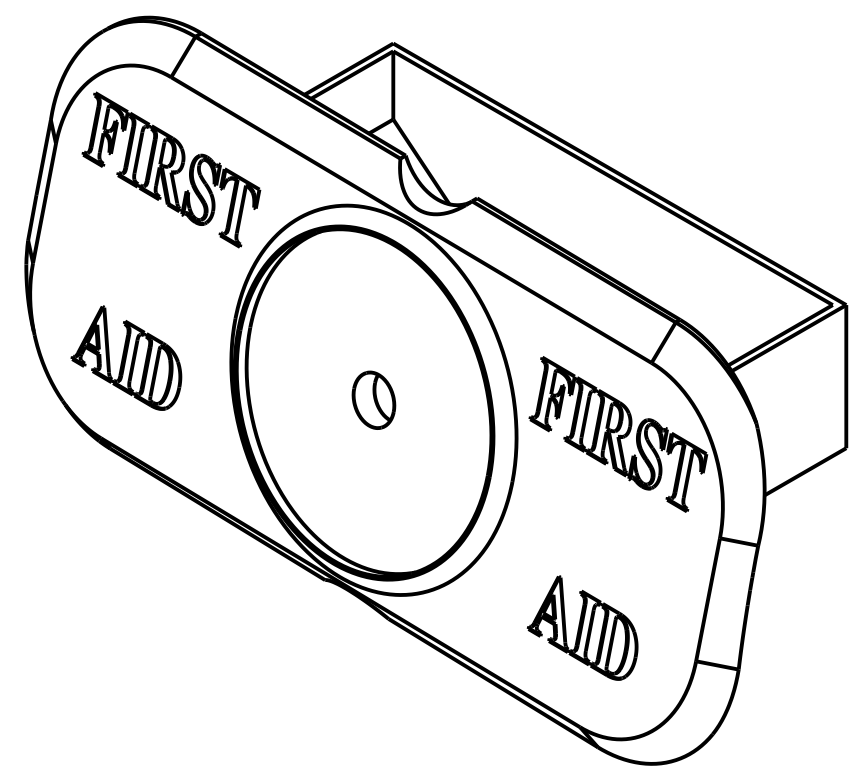
BACK LEFT

BACK RIGHT

## UNEXPLODED VIEW

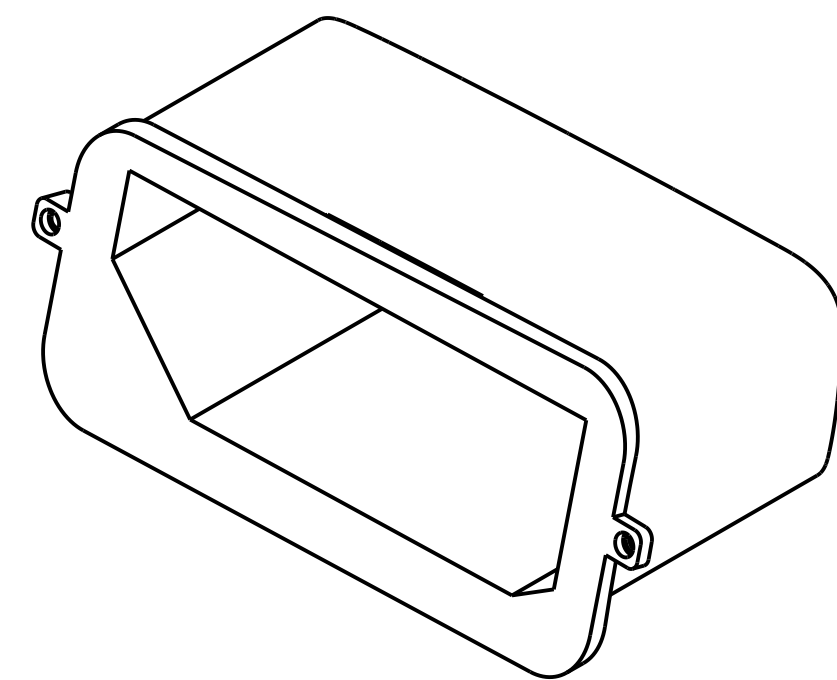


DRAWER ①



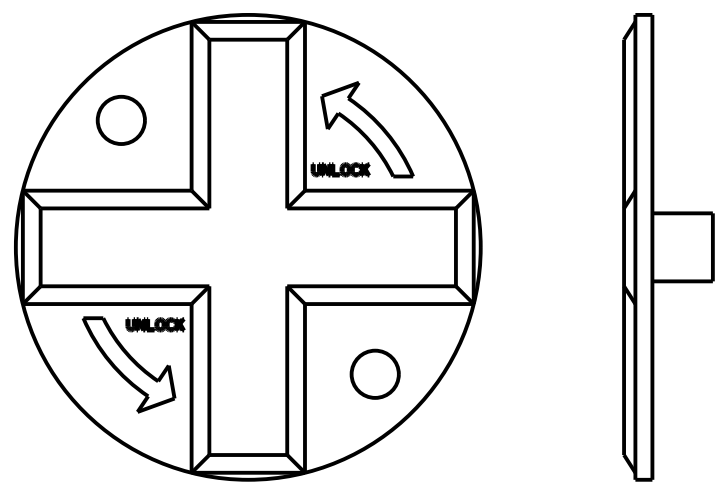
SCALE .375=1.00

INNER FRAME ②



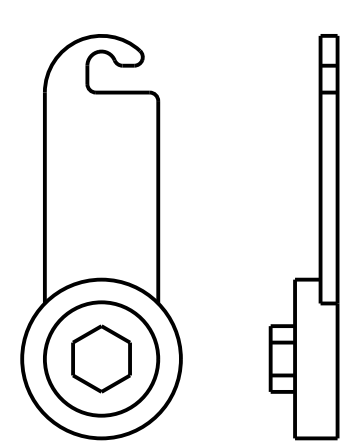
SCALE .375=1.00

SPINNING LOCK ③



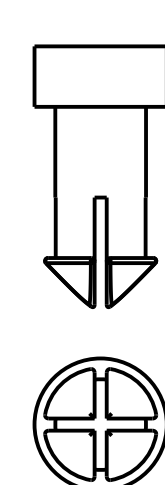
SCALE 0.50=1.00

LOCK PIN ④



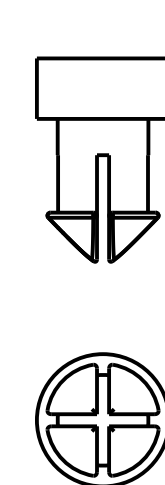
SCALE 0.75=1.00

PIN A ⑤



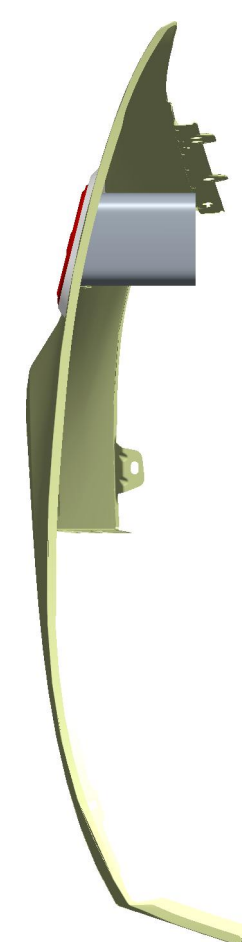
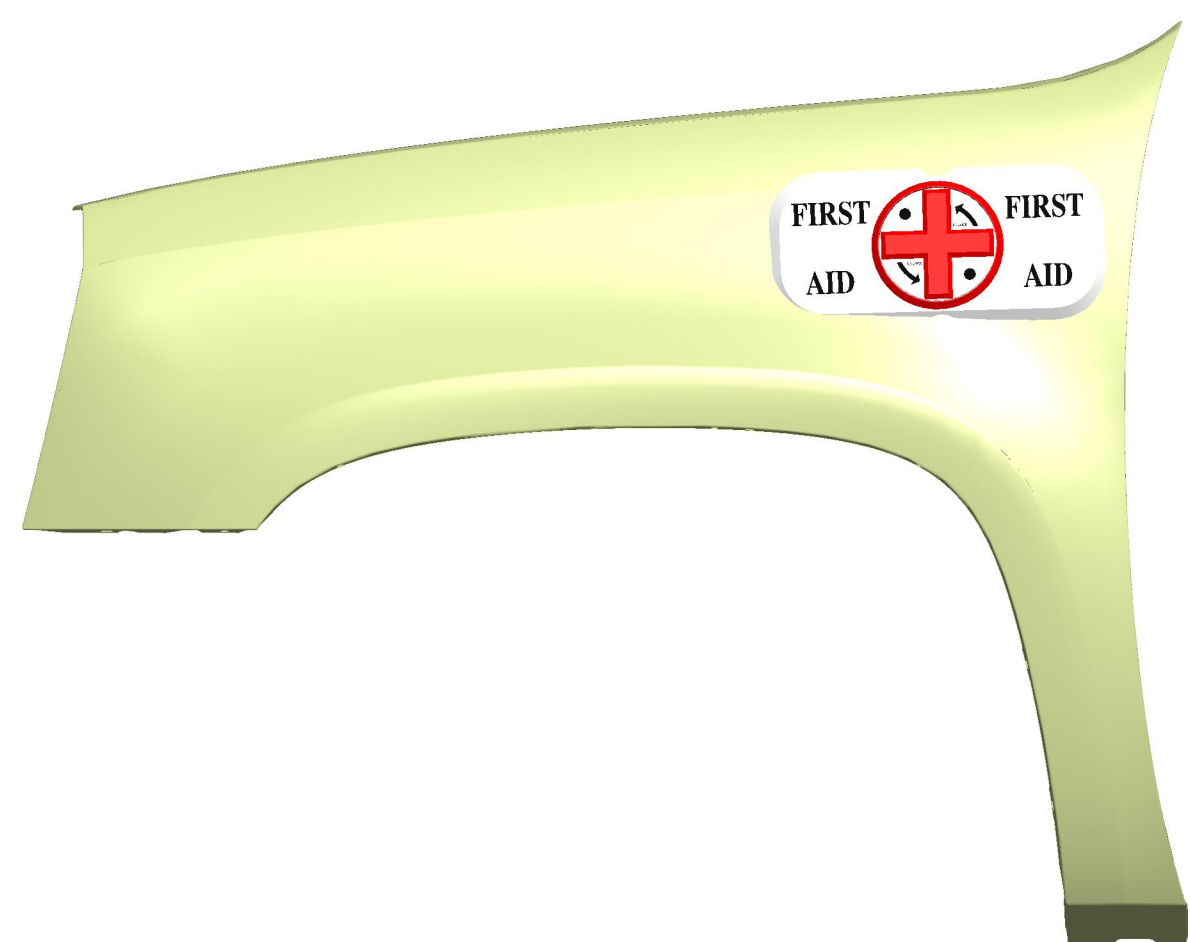
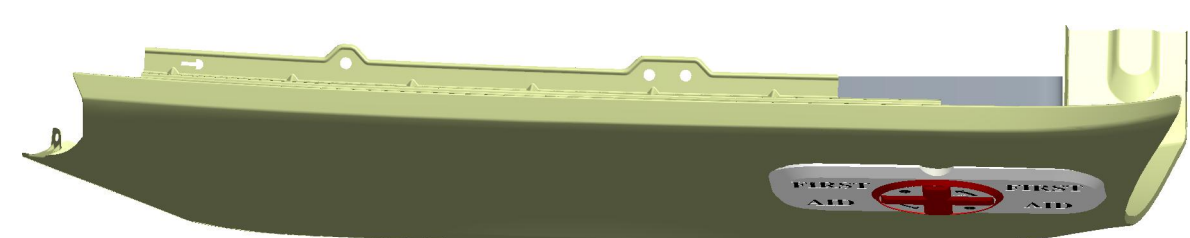
SCALE 2.00=1.00

PIN B ⑥



SCALE 2.00=1.00

## THREE VIEW ORTHOGRAPHIC



THE PURPOSE OF THIS PART IS TO HOLD FIRST AID SUPPLIES. IT USES A LOCKING SYSTEM TO KEEP THE DRAWER CLOSED WHEN DRIVING, BUT EASILY OPENS WHEN THE SPINNING LOCK IS TURNED 45 DEGREES COUNTERCLOCKWISE. IT ALSO IS DESIGNED SO THAT THE DRAWER CAN BE REMOVED FROM THE FENDER FOR OFF SITE MEDICAL ATTENTION. THE INNER FRAME IS ATTACHED TO THE FENDER WITH TWO SNAP PINS FROM THE OUTSIDE. THE SPINNING LOCK IS ATTACHED TO THE LOCK PIN WITH A SNAP FIT, THROUGH THE DRAWER. ALL COMPONENTS OF THE ASSEMBLY ARE MADE OF ABS PLASTIC, AND ARE COATED WITH PAINT FOR AESTHETIC PURPOSES AND TO ENSURE LONGEVITY.

BOM CHART		
PART #	PART NAME	QTY.
1	DRAWER	1
2	INNER FRAME	1
3	SPINNING LOCK	1
4	LOCK PIN	1
5	PIN A	1
6	PIN B	1

BRIGHTON HIGH SCHOOL  
BRIGHTON, MI

DIMENSIONAL TOLERANCE  
.x = ± .1  
.xx = ± .05  
.xxx = ± .005  
ANGLES = ± 1°

DWGASBE  
DWG BY: AARON KRUZEL  
DATE: 1/26/16  
HR: 3/5  
SCALE: NONE  
SH: 1-1