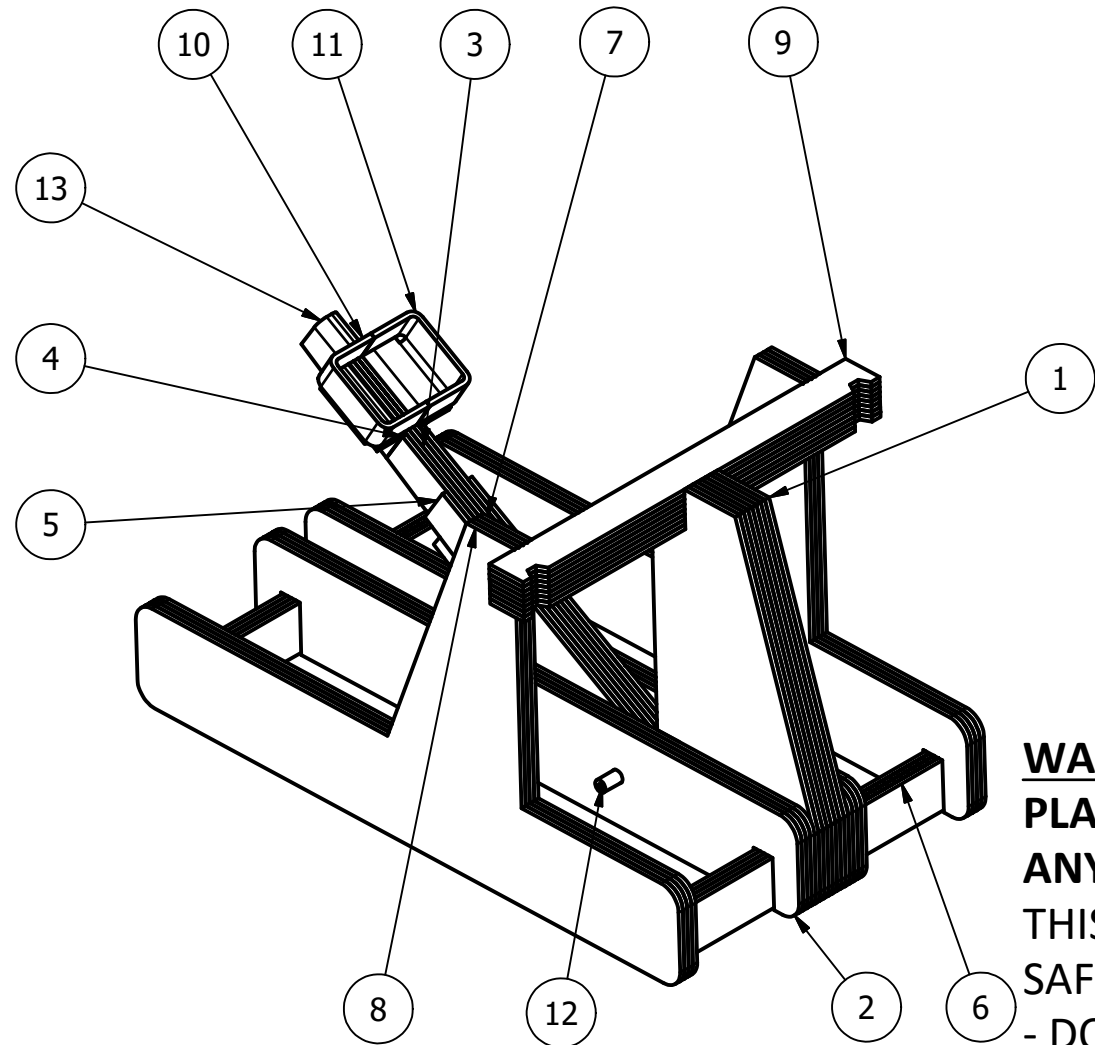
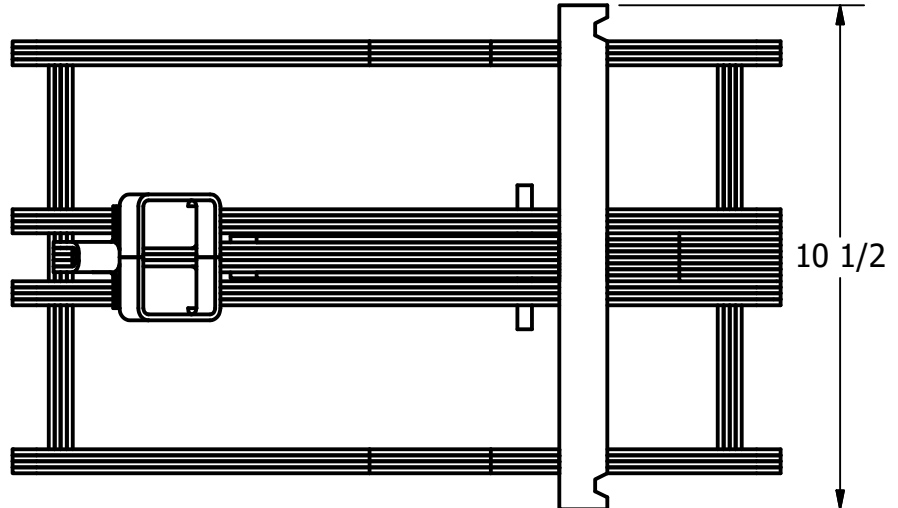


TITLE CAD-A-PULT®		
SHT SIZE	SHEET	DESIGNED BY:
B	1 OF 7	KDJAMES 2/25/2009
KJAMESDRAFTING@GMAIL.COM		



PARTS LIST		
ITEM	QTY	PART NUMBER
1	8	MIDDLE STOP
2	8	CENTER
3	3	THROWING ARM
4	2	3/4 ARM
5	2	1/2 ARM
6	8	FRONT AND REAR CROSS PIECE
7	6	OUTSIDE SUPPORT
8	2	OUTSIDE SUPPORT-NO SLOT
9	8	TOP BAR
10	1	LEFT BALL HOLDER
11	1	RIGHT BALL-HOLDER
12	1	PIVOT-ROUND PENCIL
13	1	THUMB PLATE

WARNING - SAFETY FIRST!!!
PLAY SAFE AND HAVE FUN AND DON'T HURT ANYTHING OR ANYONE!!

THIS TOY IS DESIGNED TO THROW OBJECTS. FOR YOUR SAFETY AND THE SAFETY OF OTHERS:

- DO NOT THROW OBJECTS AT OTHER PEOPLE, ANIMALS, OR ANYTHING BREAKABLE.
- ALWAYS USE EYE PROTECTION IN CASE OF A MISFIRE.
- USER ASSUMES ALL LIABILITY

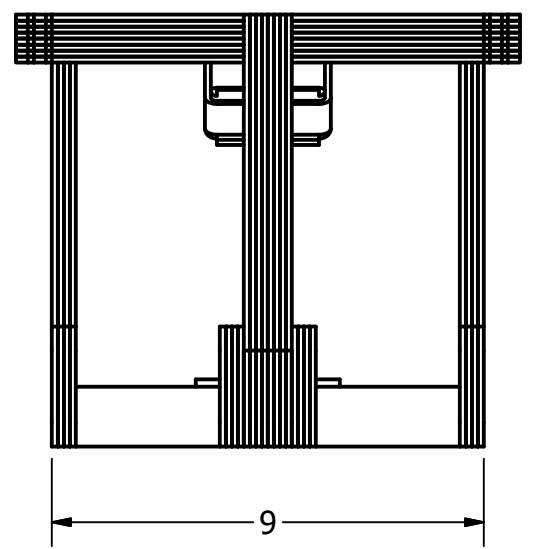
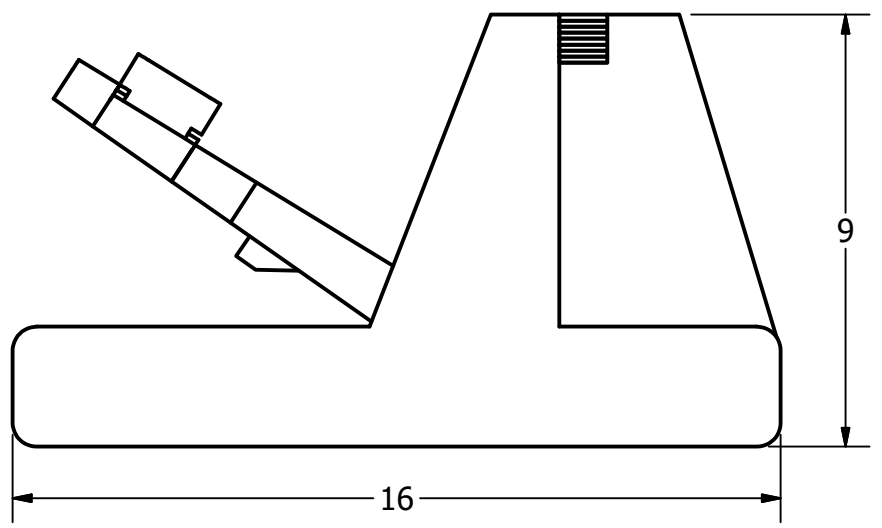
READ ALL INSTRUCTIONS BEFORE STARTING!!

NOTE: CORRUGATED FIBERBOARD (COMMONLY CALLED "CARDBOARD") HAS A GRAIN. THE GRAIN IS THE INTERIOR "S" SHAPE LAYER OF CARDBOARD THAT HELPS GIVE THE CARDBOARD DIRECTIONAL STRENGTH. THE PLAN WILL MARK THE GRAIN AS THE LETTER "V" FOR VERTICAL AND THE LETTER "H" FOR HORIZONTAL.

WHEN GLUEING PIECES TOGETHER, APPLY THE GLUE AROUND THE INSIDE APPROXIMATELY 1/8" FROM THE EDGE. WIPE ANY EXCESS GLUE OFF WITH A DAMP RAG.

THE PIVOT IS COMPRISED OF A ROUND PENCIL (DO NOT USE A STANDARD #2 PENCIL) CUT TO A LENGTH OF 3". THE PIVOT HOLES ARE .3125 (5/16"). BE SURE THE PIVOT WILL FIT LOOSELY INTO THE PIVOT HOLE. ONLY GLUE THE PIVOT AT THE OUTSIDE OF CENTER SUPPORTS.

LET ALL PIECES DRY OVERNIGHT BEFORE USING.




TITLE		
CAD-A-PULT[©]		
SHT SIZE	SHEET	DESIGNED BY:
B	2 OF 7	KDJAMES 2/20/2009
KJAMESDRAFTING@GMAIL.COM		


CUT OUT ALL PIECES AND TRACE OUT LINE ON CARDBOARD.

COPY AND CUT OUT **8** FRONT AND REAR CROSS PIECES
 - 4 PIECES WITH HORIZONTAL GRAIN
 - 4 PIECES WITH VERTICAL GRAIN


1/2 ARM PIECES
 COPY AND CUT OUT **2** WITH HORIZONTAL GRAIN
 DO NOT DRILL HOLE UNTIL THE THROWING ARM IS GLUED TOGETHER
 USE .3125 ($\frac{5}{16}$ ") DRILL AFTER THE GLUE HAS COMPLETELY DRIED



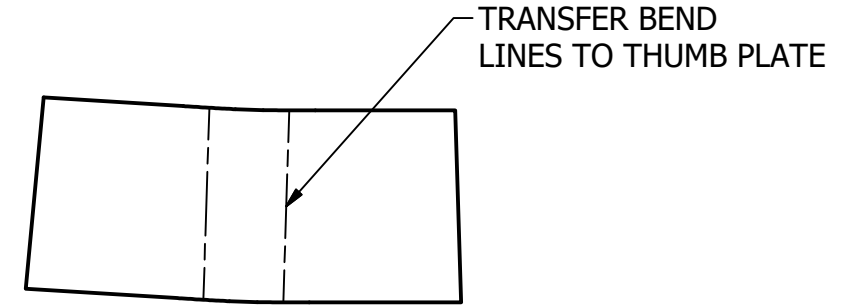
3/4 ARM PIECES
 COPY AND CUT OUT **2** WITH HORIZONTAL GRAIN
 DO NOT DRILL HOLE UNTIL THE THROWING ARM IS GLUED TOGETHER
 USE .3125 ($\frac{5}{16}$ ") DRILL AFTER THE GLUE HAS COMPLETELY DRIED



THROWING ARM PIECES
 COPY AND CUT OUT **3** PIECES
 - **1** WITH HORIZONTAL GRAIN
 - **2** WITH VERTICAL GRAIN
 DO NOT DRILL HOLE UNTILL THE THROWING ARM IS GLUED TOGETHER USE .3125 ($\frac{5}{16}$ ") DRILL AFTER THE GLUE HAS COMPLETELY DRIED




COPY AND CUT OUT 1 THUMB PIECE WITH VERTICAL GRAIN



COPY AND CUT OUT **8** CENTER PIECES
 - 4 PIECES WITH HORIZONTAL GRAIN
 - 4 PIECES WITH VERTICAL GRAIN

USE .3125 - $\frac{5}{16}$ " DRILL AFTER THE TWO SETS OF CENTERS ARE GLUED TOGETHER AND THE GLUE HAS COMPLETELY DRIED. TEMOPARY TAPE BOTH SETS OF CENTER SUPPORTS TOGETHER THEN DRILL ONE HOLE SO THAT ALL HOLES LINE UP

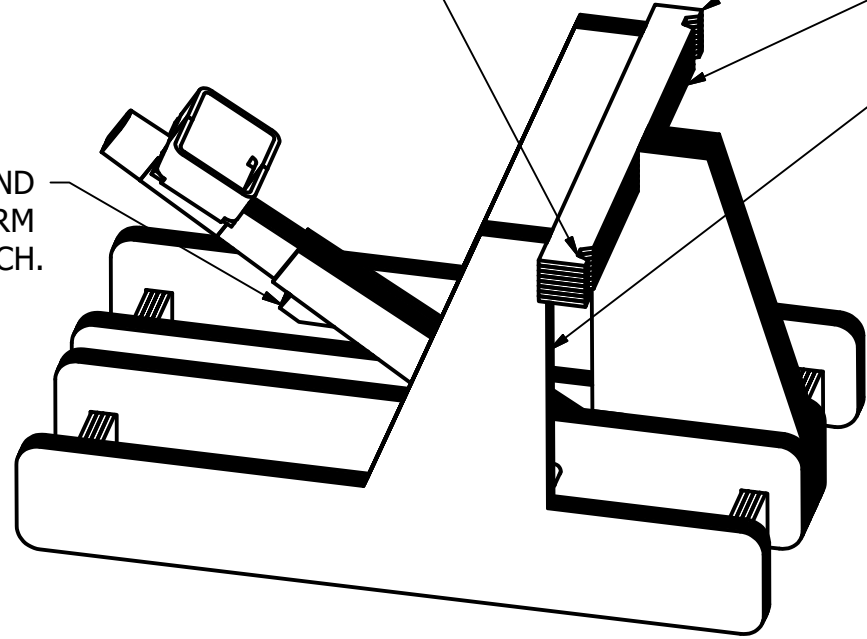


TITLE		
CAD-A-PULT[©]		
SHT SIZE	SHEET	DESIGNED BY:
B	3 OF 7	KDJAMES 2/21/2009
KJAMESDRAFTING@GMAIL.COM		

CUT OUT PIECE AND TRACE OUT LINE ON CARDBOARD.

1. LOOP RUBBER BAND AROUND END NOTCH.

3. RUN RUBBER BAND UNDER THROWING ARM AND ABOVE THE NOTCH.



RUBBER BAND ROUTING DIAGRAM

5. LOOP END OF RUBBER BAND AROUND END NOTCH.

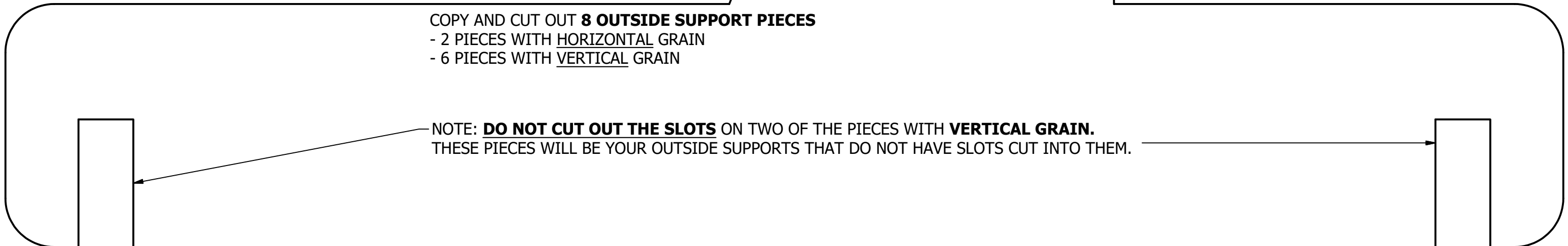
4. BRING RUBBER BAND BACK UNDER THE TOP CROSS BAR

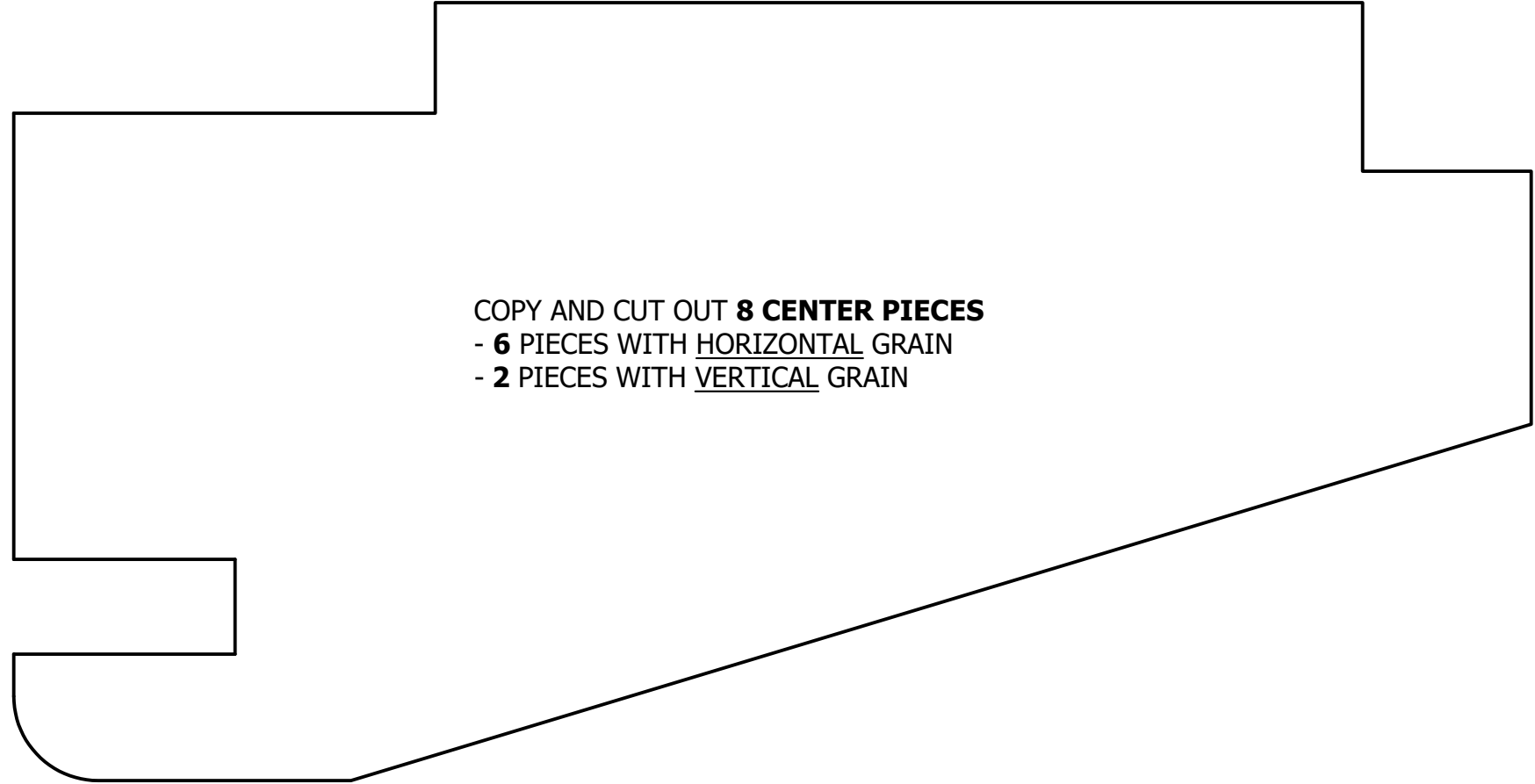
2. PASS RUBBER BAND UNDER THE TOP CROSS BAR.

COPY AND CUT OUT **8 OUTSIDE SUPPORT PIECES**

- 2 PIECES WITH HORIZONTAL GRAIN
- 6 PIECES WITH VERTICAL GRAIN

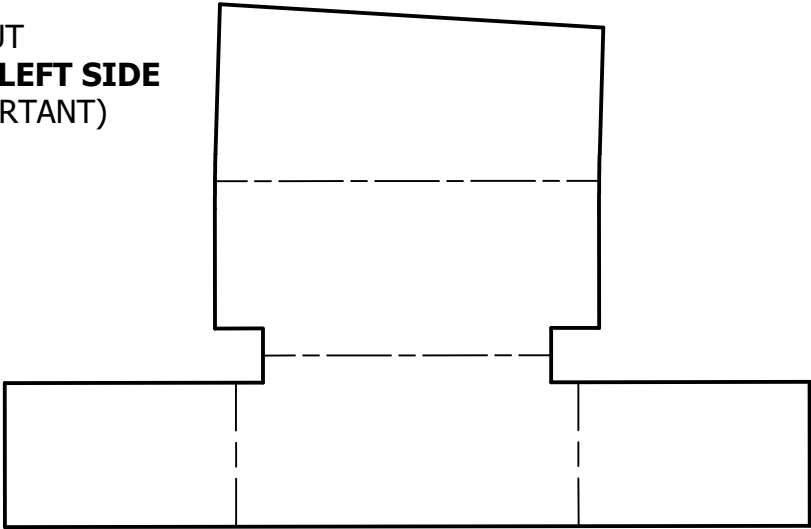
NOTE: **DO NOT CUT OUT THE SLOTS** ON TWO OF THE PIECES WITH **VERTICAL GRAIN**. THESE PIECES WILL BE YOUR OUTSIDE SUPPORTS THAT DO NOT HAVE SLOTS CUT INTO THEM.



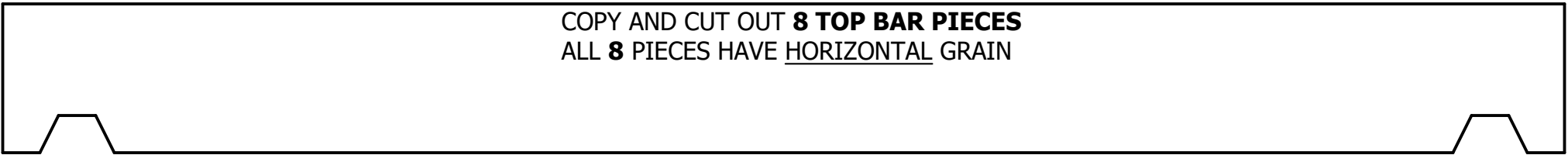
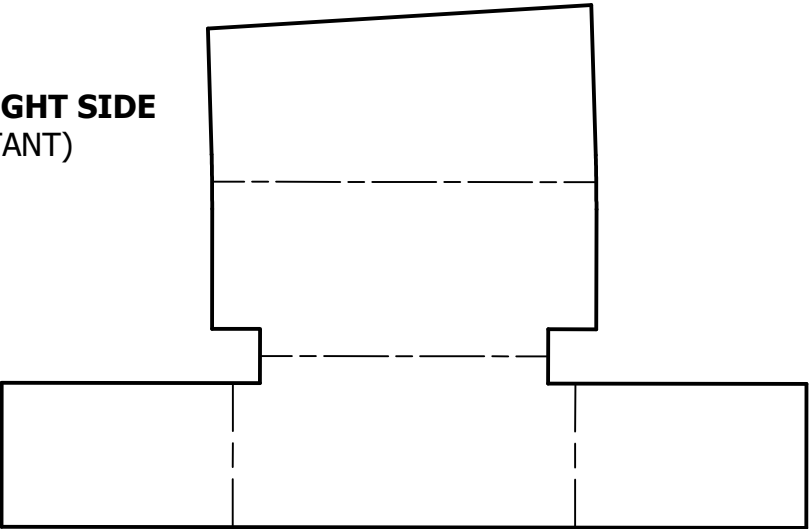


COPY AND CUT OUT **8 CENTER PIECES**
- **6** PIECES WITH HORIZONTAL GRAIN
- **2** PIECES WITH VERTICAL GRAIN

COPY AND CUT OUT
1 BALL HOLDER LEFT SIDE
(GRAIN NOT IMPORTANT)



COPY AND CUT OUT
1 BALL HOLDER RIGHT SIDE
(GRAIN NOT IMPORTANT)

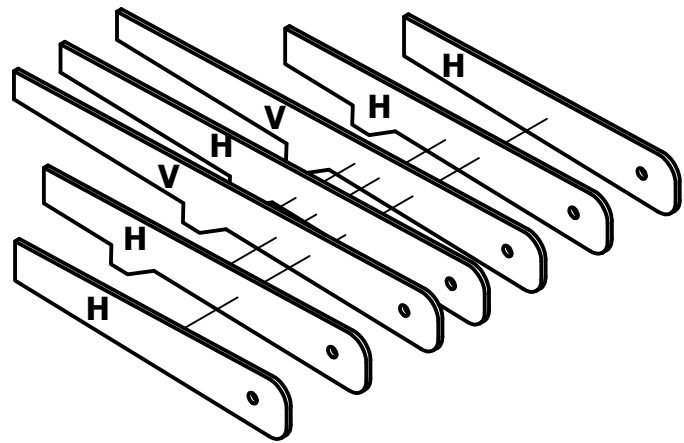


COPY AND CUT OUT **8 TOP BAR PIECES**
ALL **8** PIECES HAVE HORIZONTAL GRAIN

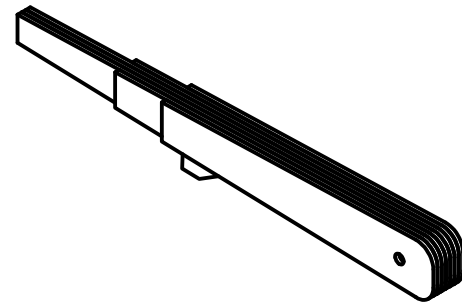
TRACE OUTLINE ON CARDBOARD AND CUT OUT ALL PIECES

TITLE			<i>CAD-A-PULT</i> ©
SHT SIZE	SHEET	DESIGNED BY:	
B	4 of 7	KDJAMES 2/21/2009	
KJAMESDRAFTING@GMAIL.COM			

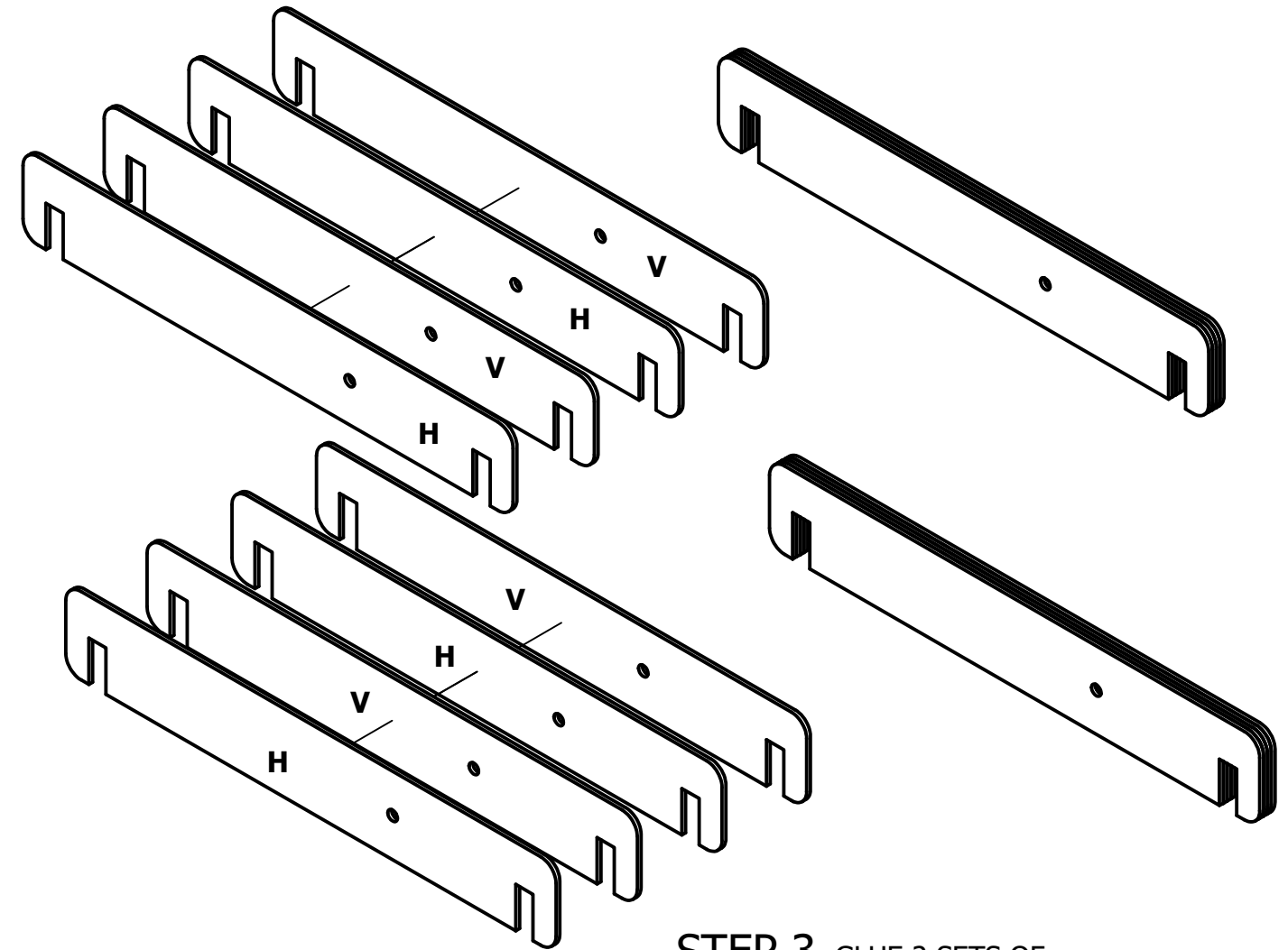
H = HORIZONTAL GRAIN
V = VERTICAL GRAIN



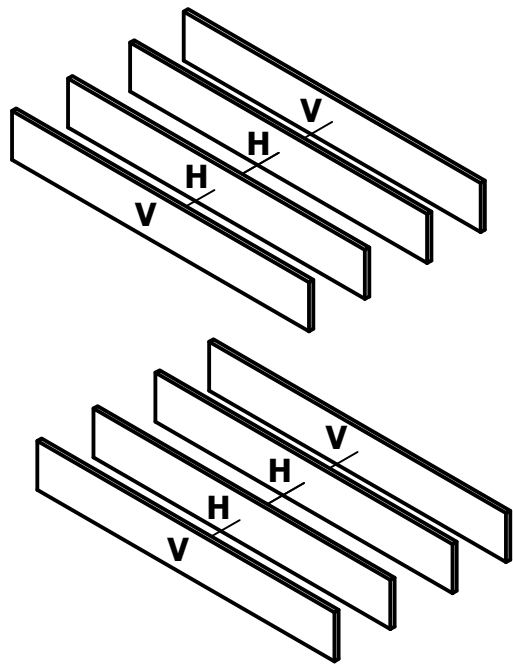
STEP 1: CUT OUT 2 1/2 ARMS, 2 3/4 ARMS, AND 3 THROWING ARMS



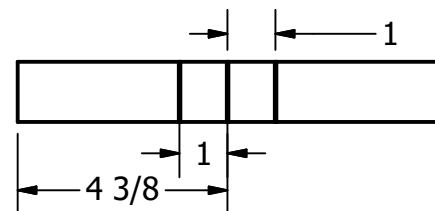
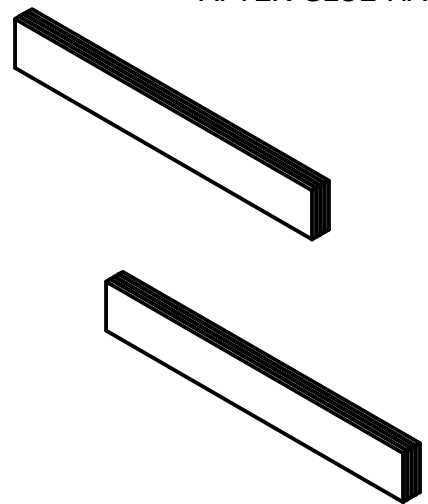
STEP 2: GLUE THROWING ARM TOGETHER AS SHOWN. USE TAPE TO HOLD ARM TOGETHER UNTIL GLUE IS FULLY DRIED.
DRILL $.3125$ ($\frac{5}{16}$ ") HOLE IN ARM AFTER GLUE HAS FULLY DRIED



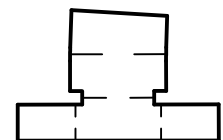
STEP 3: GLUE 2 SETS OF CENTERS TOGETHER AS SHOWN. USE TAPE TO HOLD CENTERS TOGETHER UNTIL GLUE IS FULLY DRIED.



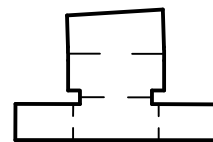
STEP 5: GLUE 2 SETS OF FRONT AND REAR CROSS PIECES TOGETHER AS SHOWN. USE TAPE TO HOLD FRONT AND REAR CROSS PIECES TOGETHER UNTIL GLUE IS FULLY DRIED.



STEP 6: FIND AND MARK THE CENTER OF THE FRONT AND REAR SET. MEASURE 1" TO THE LEFT AND RIGHT OF CENTER AND DRAW A VERTICAL LINE. THIS LINE WILL HELP YOU ALIGN THE CENTER SECTION PROPERLY.

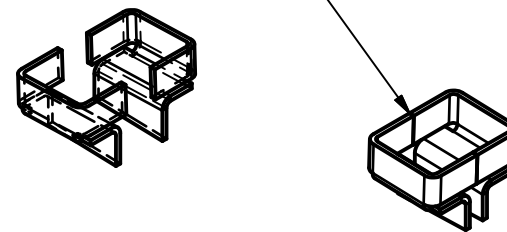


LEFTSIDE



RIGHT SIDE

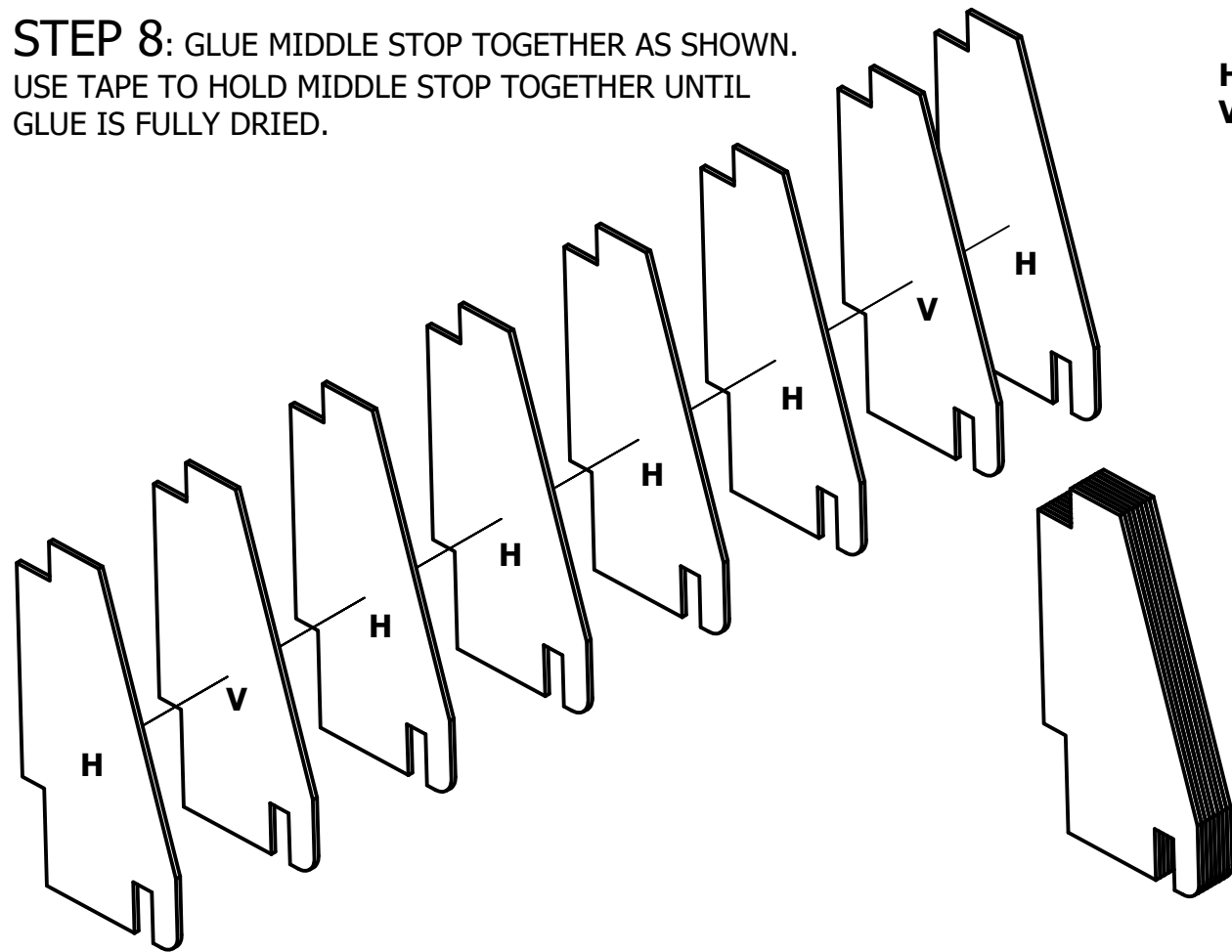
FOLD AND TAPE



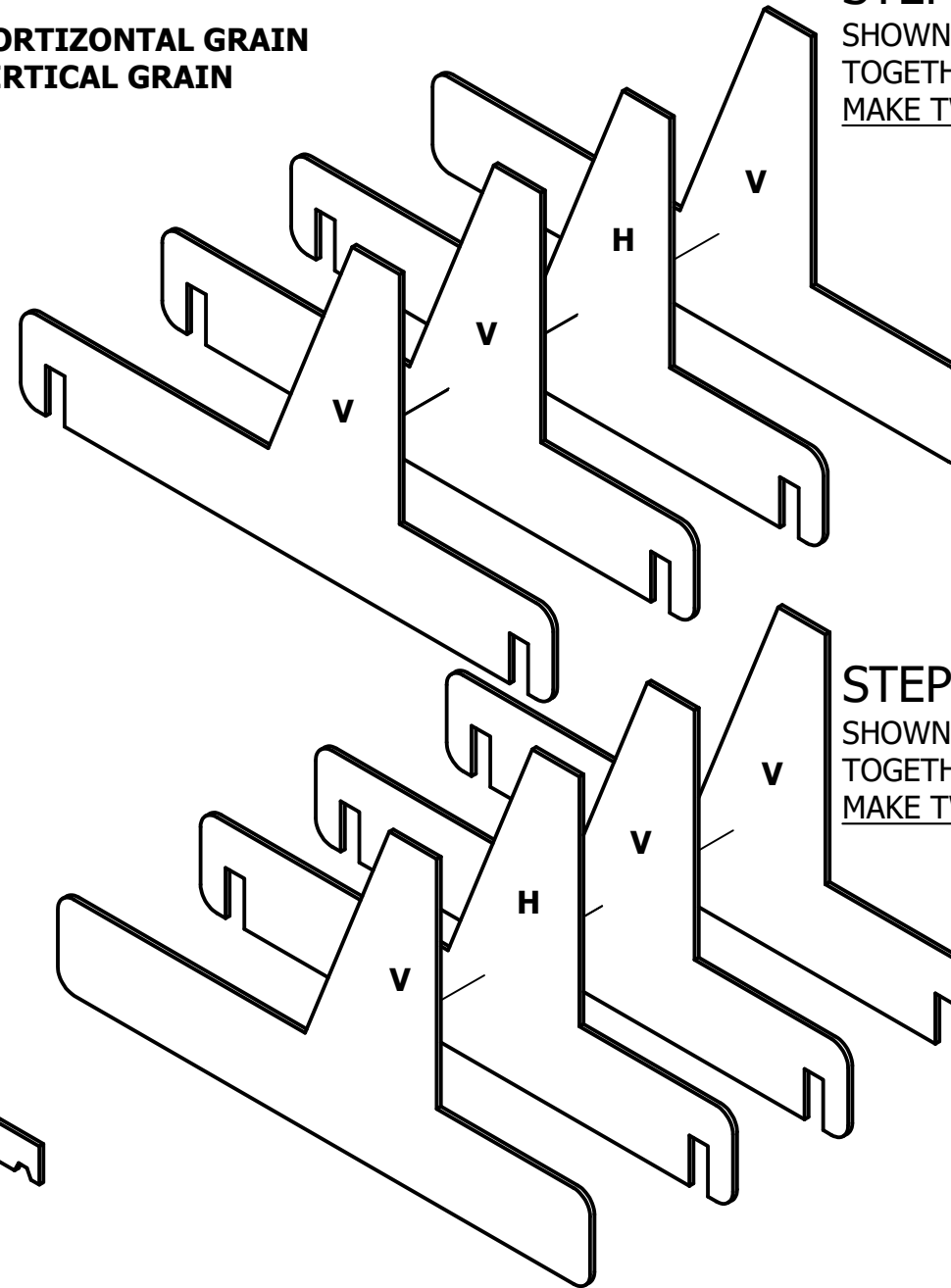
STEP 7: CUT OUT A LEFT AND RIGHT SIDE BALL HOLDER. WAIT UNTIL THE THROWING ARM IS GLUED AND DRILLED BEFORE FOLDING THE HOLDER AS SHOWN. GLUE EACH SIDE AND TAPE FLAPS UP AS SHOWN. WAIT UNTIL GLUE FULLY DRIES BEFORE USING.

TITLE			CAD-A-PULT ®		
SHT SIZE	SHEET	DESIGNED BY:			
B	5 of 7	KDJAMES 2/20/2009			
KJAMESDRAFTING@GMAIL.COM					

STEP 8: GLUE MIDDLE STOP TOGETHER AS SHOWN. USE TAPE TO HOLD MIDDLE STOP TOGETHER UNTIL GLUE IS FULLY DRIED.

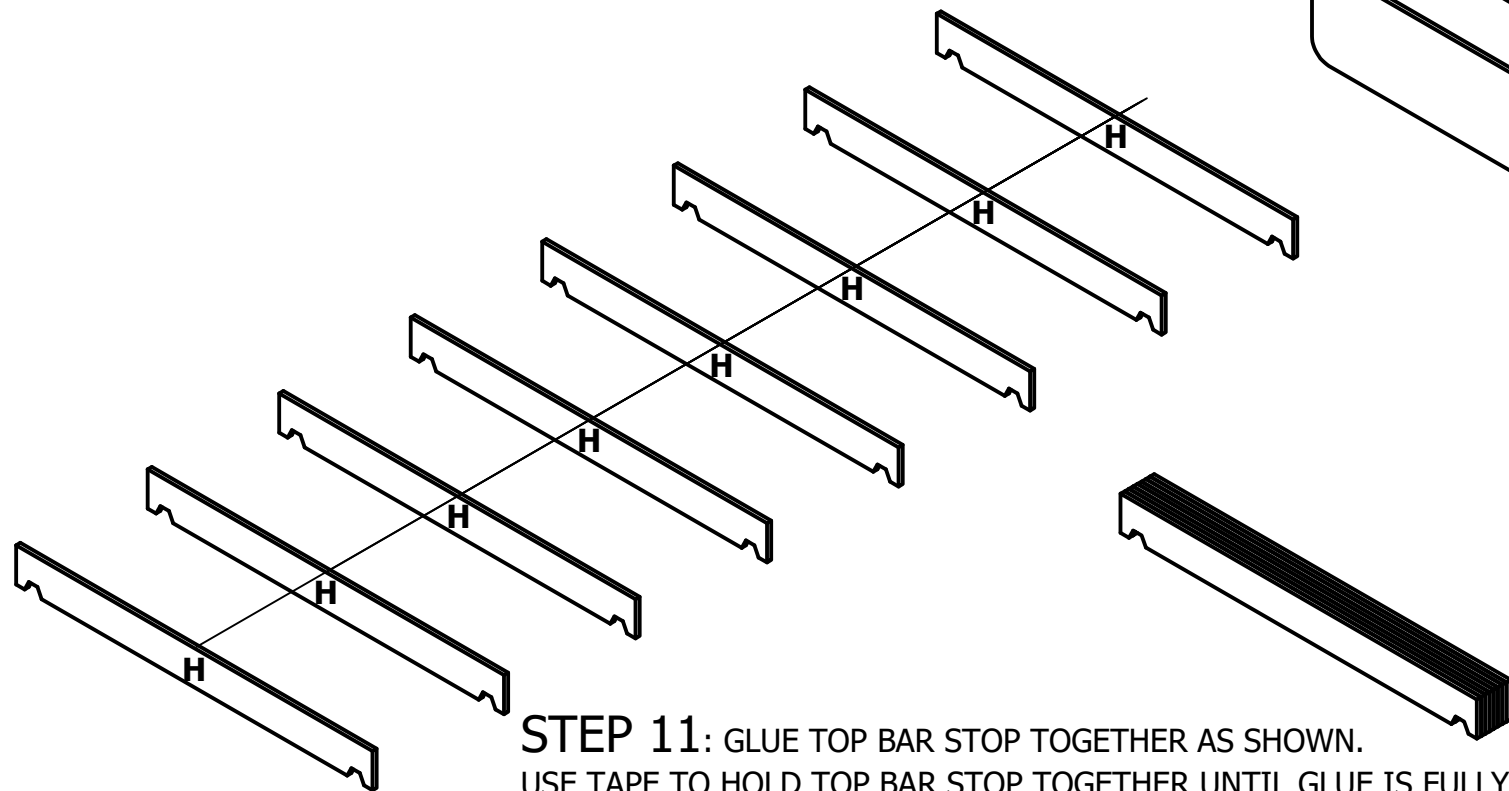
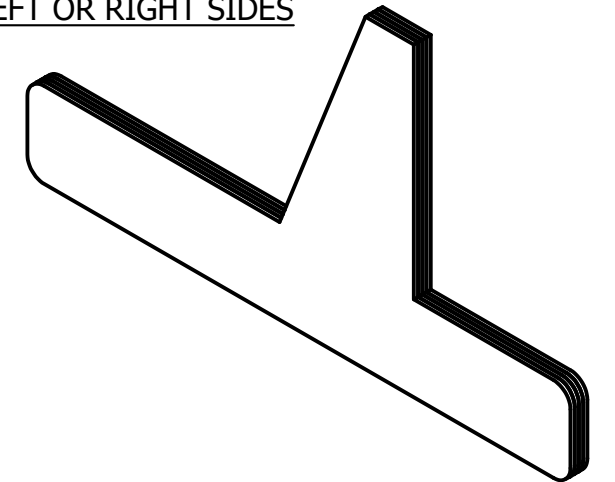


H = HORIZONTAL GRAIN
V = VERTICAL GRAIN



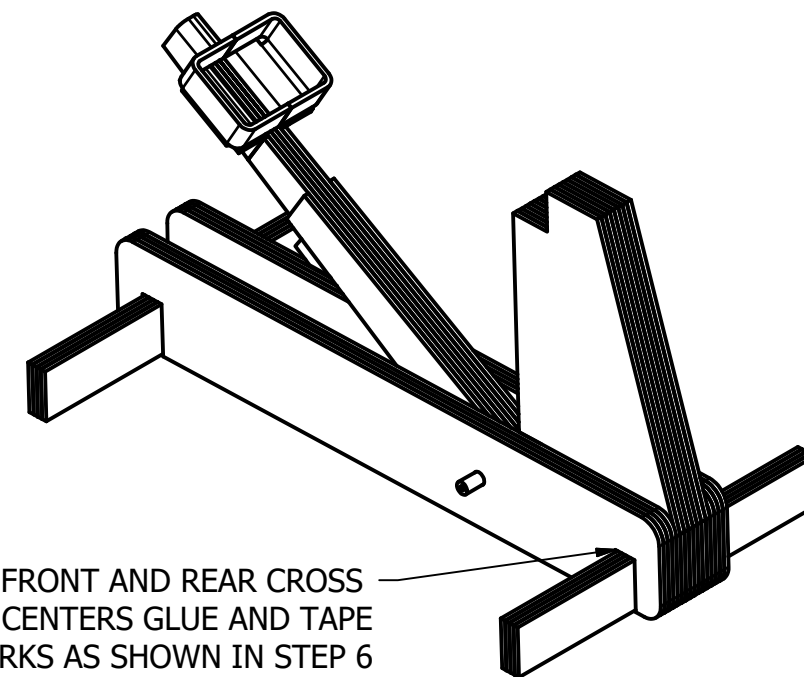
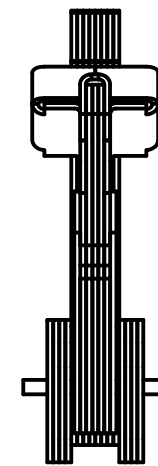
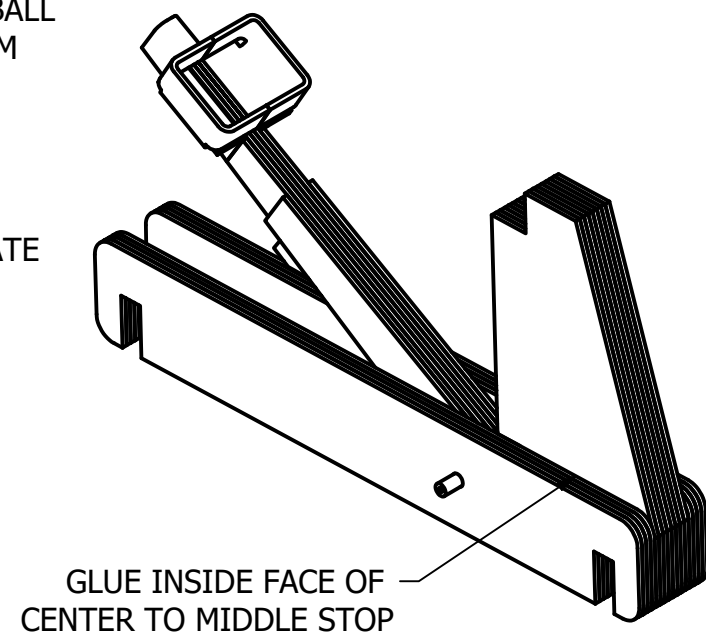
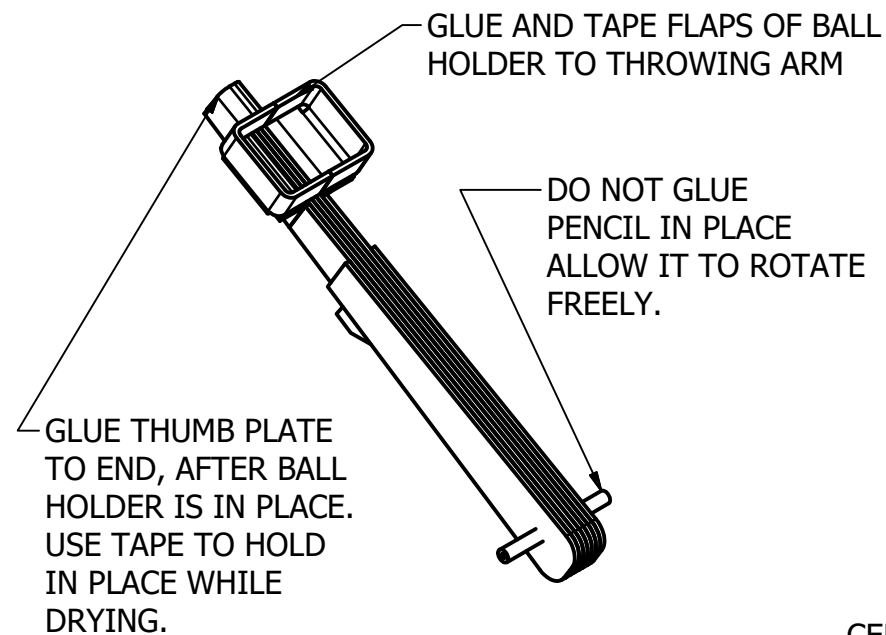
STEP 9: GLUE RIGHT OUTSIDE SUPPORT TOGETHER AS SHOWN. USE TAPE TO HOLD RIGHT OUTSIDE SUPPORT TOGETHER UNTIL GLUE IS FULLY DRIED. BE CAREFUL NOT TO MAKE TWO LEFT OR RIGHT SIDES

STEP 10: GLUE LEFT OUTSIDE SUPPORT TOGETHER AS SHOWN. USE TAPE TO HOLD LEFT OUTSIDE SUPPORT TOGETHER UNTIL GLUE IS FULLY DRIED. BE CAREFUL NOT TO MAKE TWO LEFT OR RIGHT SIDES



STEP 11: GLUE TOP BAR STOP TOGETHER AS SHOWN. USE TAPE TO HOLD TOP BAR STOP TOGETHER UNTIL GLUE IS FULLY DRIED.

TITLE			CAD-A-PULT ®
SHT SIZE	SHEET	DESIGNED BY:	
B	6 of 7	KDJAMES 2/25/2009	
KJAMESDRAFTING@GMAIL.COM			

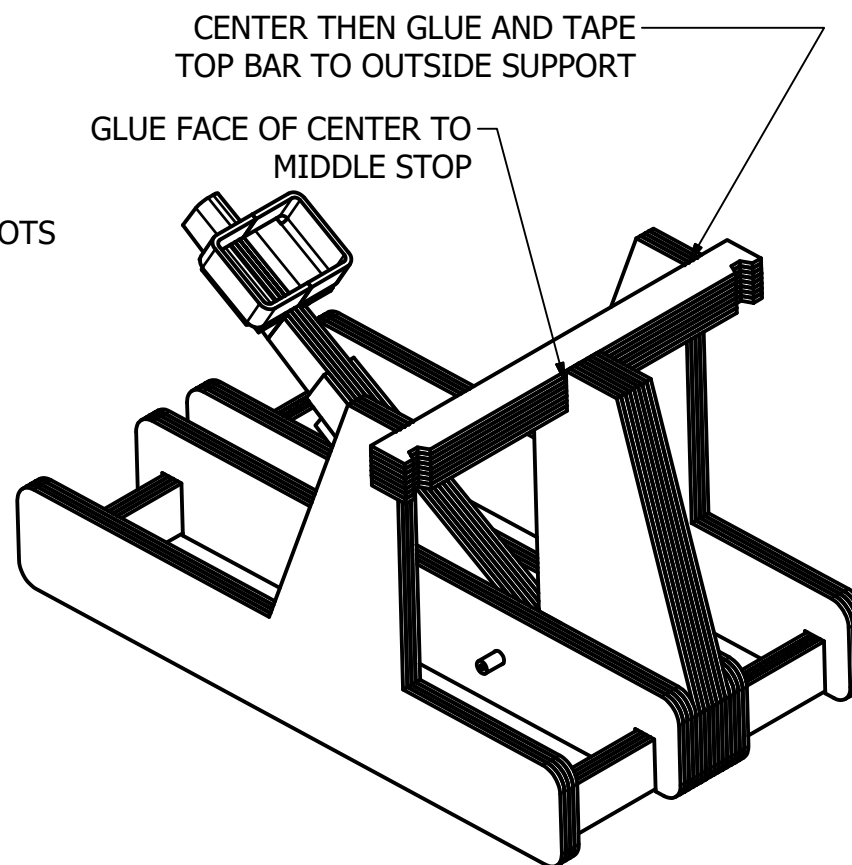
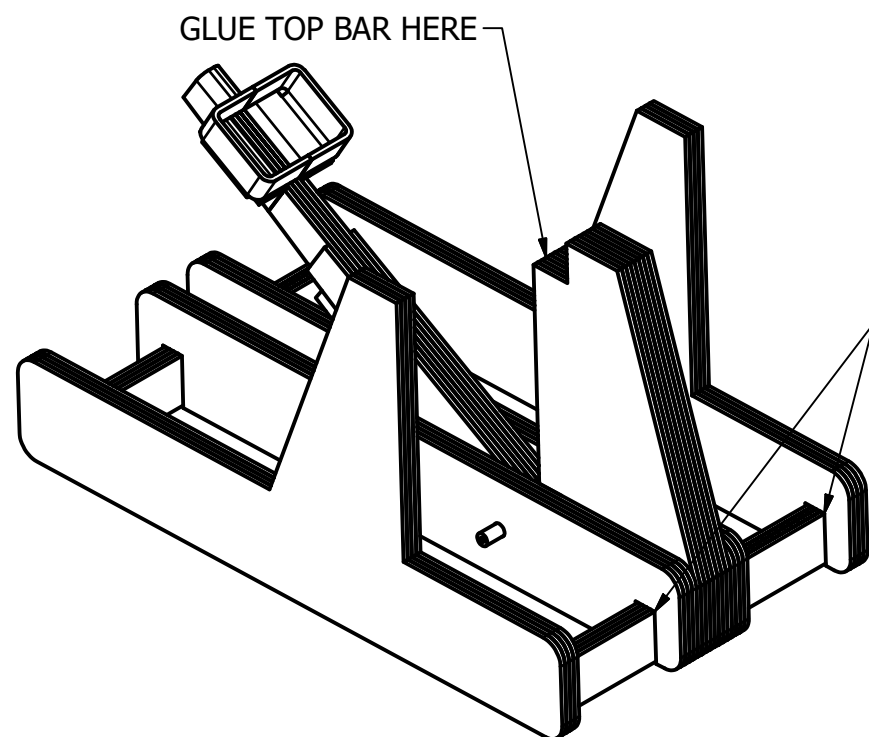


STEP 12: IF YOU HAVEN'T DRILLED THE THROWING ARM HOLE YET, DO SO NOW. GLUE AND TAPE RIGHT AND LEFT BALL HOLDER TO THE THROWING ARM.

STEP 13: GLUE THE TWO CENTERS TO THE OUTSIDE OF THE MIDDLE STOP USING THE SLOT TO ALIGN THE CENTERS. THE THROWING ARM SHOULD MOVE FREELY AND HAVE ABOUT $\frac{1}{16}$ " SPACE BETWEEN THE ARM AND THE TWO CENTER SECTIONS.

STEP 14: **BEFORE** THE GLUE DRIES FROM THE LAST STEP, GLUE AND TAPE THE FRONT AND REAR CROSS PIECES. MAKE SURE THE CENTER PIECES DO NOT PINCH THE THROWING ARM.

AT THIS POINT IT IS VERY IMPORTANT TO KEEP THE ASSEMBLY SQUARE. USE THE CENTER MARK THAT YOU MADE IN STEP 6 TO HELP KEEP THE ALIGNMENT.



STEP 16: GLUE AND TAPE THE TOP BAR IN PLACE **BEFORE THE GLUE DRIES** FROM THE LAST STEP.

****THIS IS YOUR LAST CHANCE TO MAKE SURE TO KEEP THE ASSEMBLY SQUARE. ADD TAPE AS NEEDED TO KEEP THE CATAPULT SQUARE****

MAKE SURE THE THROWING ARM FREELY MOVES BEFORE LETTING THE ASSEMBLY DRY OVERNIGHT.

NOW GO AWAY AND PLAY OUTSIDE. DON'T MESS WITH IT!

LET THE ASSEMBLY DRY OVERNIGHT.

STEP 15: **BEFORE** THE GLUE DRIES FROM THE LAST STEP GLUE AND TAPE THE OUTSIDE SUPPORTS IN PLACE. MAKE SURE THE CENTER PIECES DO NOT MOVE IN AND PINCH THE THROWING ARM.

AT THIS POINT IT IS VERY IMPORTANT TO KEEP THE ASSEMBLY SQUARE.

TITLE		CAD-A-PULT ®	
SHT SIZE	SHEET	DESIGNED BY:	
B	7 OF 7	KDJAMES 2/25/2009	
KJAMESDRAFTING@GMAIL.COM			

