.22 CAL. BULLET TRAP

MATERIALS LIST:

PART	DESCRIPTION	QTY	LENGTH	WIDTH	DEPTH	*
A	BACK	1	65 ¼"	32 ¾"	¾"	PLY
B	INSERT	1	64 ½"	31 ¼"	¾"	PLY
C	SIDE	2	31 ¼"	11 ¼"	¾"	PLY
D	TOE BOARD	1	31 ¼"	6 ¾"	¾"	PLY
E	SPACER	1	31 ¼"	3 ½"	1 ½"	YP
F	BASE	2	24"	3 ½"	1 ½"	YP
G	WHEEL SUPPORT	1	24"	3 ½"	1 ½"	YP
H	SUPPORT	2	10 ½"	1 ½"	1 ½"	YP
I	SIDE NAILER	2	63"	¾"	¾"	YP
J	BOTTOM NAILER	1	28 ¼"	¾"	¾"	YP
K	INSERT SLIDE	4	63"	¾"	¾"	YP
L	TARGET SLIDE	4	57"	¾"	¾"	YP
M	STOP	2	1 ¾"	¾"	¾"	YP
N	TOP	1	32 ¾"	12"	¾"	PLY
O	BOTTOM	1	32 ¾"	11 ¼"	¾"	PLY

* PLY – Plywood
* YP – Yellow Pine

Also needed:

2 – hinges for top
2 – screen door latches for securing the top
4 – ¼" x 2 ½" bolts
4 – ¼" x 4" bolts
8 – ¼" nuts
16 – ¼" washers
Large box of 1 5/8" deck screws
Small box 3" deck screws
Brad gun with 1 ¾" brads
2 – caster wheels (optional)
Plastic beads – 10 gal. per trap. (the beads we use are resin based used in injection mold processes)

Construction Steps:

1. From a full sheet of ¾" plywood, cut out the BACK, Part A, to 65 ¼" x 32 ¾". Next, cut out one of the SIDES, Part C, to 31 ¼" x 11 ¼". Next, cut out the TOP, Part N, to 32 ¼" x 12". Next, cut out the BOTTOM, Part O, to 34 ¾" x 11 ¼". Then, cut out the TOE BOARD, Part D, to 31 ¼" x 6 ¾". From another full sheet of ¾" plywood, cut out the INSERT, Part B, to 64 ¼" x 31 ¼". Next, cut out the other SIDE, Part C to 31 ¼" x 11 ¼". The remaining scrap plywood will be used as necessary to patch or repair the insert as it is used. This will help extend the life of the insert.
2. From 8' – 2x4's, cut out the NAILERS, Parts I and J, SLIDES, Parts K and L, and STOP, Part M. Start by ripping the 2x4 to ¾" x ¾" strips and then cutting them to length.
3. From 1' – 2x4, cut out the SUPPORTS, Part H, to 10 ½" x 1 ½" x 1 ½".

4. Take one of the SIDES, Part C, and using 2 – ¼" x 2 ½"bolts, attach one of the supports flush and along the bottom and flush with the back. Bolt the support from the outside and countersink the head ¼" maximum. Next, attach using brads, one of the NAILERS, Part I, flush along the back edge of the SIDE. Next, attach the INSERT SLIDES, Part K, per the dimensions so that the front face of the insert will be 6" from the back face of the BACK. **This is important. The trap was tested to stop .22 cal. rounds at a thickness of 6" with the round passing through ¾" plywood then 4 ½" of the injection beads. The test piece never had a round hit the back plywood of the trap. To make the trap thickness less than 6" may result in failure of the trap.** Then attach the TARGET SLIDES, Part L, per the dimensions. Attach the STOP, Part M. This will prevent the cardboard targets from sliding out the bottom.
5. Once you have completed the SIDE, make the other side in the same manner. However, remember the two sides are mirrors of each other. Therefore, insure the pieces are attached to the opposite surface on the other SIDE.
6. Attach the BOTTOM, Part O, to the two sides using a couple of screws for each side.
7. Attach the BOTTOM NAILER, Part J, using brads, between the two supports and flush with the back edge of the BOTTOM.
8. Attach the BACK, Part A, to the two sides and bottom, using 1 5/8" screws spaced about 8" to 10" into the nailers. Then screw the sides into the nailers as well. (Nailers were only held in place by brads to this point).
9. Now attach the BASES, Part F, to the bottom, centered from front to back and flush with the sides. Use the ¼" x 4" bolts, two per side from the bottom, countersinking the heads.
10. Next, attach the TOE BOARD, Part D, using 1 5/8" screws. Then attach the SPACER, Part E, using 2-3" screws per in each end.
11. Cut 1 ½ x 1 ½" notches in the bottom corners of the insert. Next slide the insert into the trap to insure proper fit.
12. Attach the top with hinges. Attach screen door latches to the top to secure it in the closed position. **The top must be closed during shooting or the beads will be "splashed" out of the trap, resulting in a failure of the trap.**
13. The optional WHEEL SUPPORT, Part G, may be attached with 3" screws if wheels will be mounted to aid in moving the traps. They are quite heavy and large casters make moving a snap. Two caster wheels should be attached to the side and flush with the bottom of the BASE so the trap may be tipped over and moved.
14. Fill bin with approximately 10 gallons of beads. Make sure the bin is completely full.