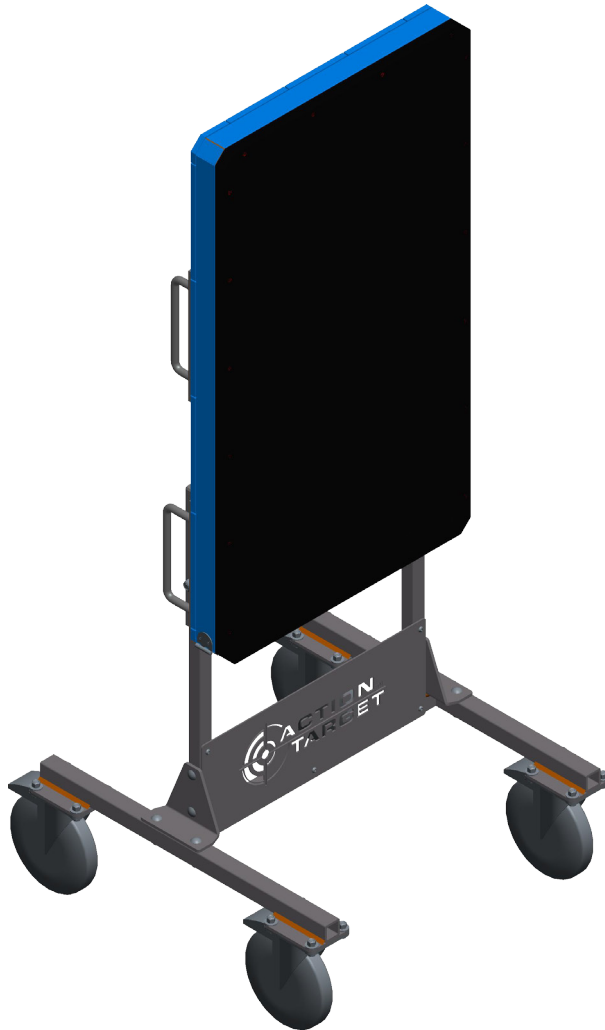


PORTABLE BULLET TRAP

ASSEMBLY & OPERATION/MAINTENANCE MANUAL
REVISION 2.0



ACTION TARGET
3411 Mountain Vista Pkwy
Provo, UT 84606, USA

PORTABLE BULLET TRAP

ASSEMBLY & OPERATION/MAINTENANCE MANUAL

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SECTION 1: GENERAL INSTRUCTIONS

1.1 GETTING HELP

If you have questions or need assistance with these instructions, please contact ATI at 877-852-2418 (technical support) or 888-377-8033 (toll-free).

1.2 MANUAL CONVENTIONS

You will find the following icons in this manual that highlight helpful/essential information:

-  This is a safety tip to help you maintain the safety of yourself and others.
-  This is a warning to indicate potential danger or damage to equipment.
-  This is a note to draw your attention to important and helpful information.

1.3 BEFORE YOU BEGIN

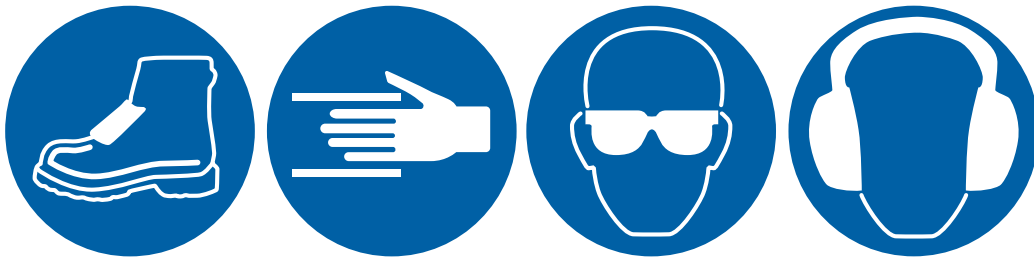
Read this manual BEFORE assembling the portable bullet trap.

SECTION 2: SAFETY PRECAUTIONS

2.1 PERSONAL PROTECTION EQUIPMENT

If assembling, repairing, or replacing components of the portable bullet trap, use personal protection equipment such as:

- **Lead protection:** Tyvek suit, respirator mask, and HEPA vacuum.
- **Metatarsal steel toe shoes:** The components of the MATCH are heavy. Protective footwear will help prevent against a foot injury if a component is dropped.
- **Gloves:** There is a risk of pinching your fingers when lifting and moving components of the portable bullet trap. Gloves will minimize injury associated with accidental pinching.
- **Eye protection:** Should be worn at all times.
- **Hearing protection:** Use when noise exposure exceeds 85 decibels.



2.2 HEAVY LIFTING

Heavy lifting is required when assembling the portable trap.

- ◆ Persons with back injuries or disorders should not lift heavy components of the trap.

2.2.1 PROPER LIFTING TECHNIQUE

When lifting components of the portable trap, practice proper lifting technique:

- **Your feet should be shoulder-width apart**, with one foot slightly in front of the other.
- **Squat down**, bending at the hips and knees only.
- **Maintain good posture** by looking straight ahead and keeping your back straight, your chest out and your shoulders back. This helps keep your upper back straight while having a slight arch in your lower back.
- **Slowly lift** by tightening your stomach and straightening your hips and knees (not your back). Keep your back straight and do not twist as you lift.
- **Hold the load as close to your body as possible.**
- **Use your feet to change direction**, taking small steps.
- **Lead with your hips** as you change direction. Keep shoulders in line with hips as you move.
- If you need to put down your load, squat with your knees and hips only.

2.2.2 WHAT TO AVOID WHEN LIFTING

- Bending forward to pick up heavy objects.
- Lifting a heavy object above shoulder level.
- Twisting or turning your body while lifting or holding a heavy object.



FURTHER INFORMATION

For more information on proper lifting technique of heavy materials, visit the following page of the Occupational Safety & Health Administration website:

<https://www.osha.gov/SLTC/etools/electricalcontractors/materials/heavy.html>

SECTION 3: PRODUCT ASSEMBLY

3.1 BEFORE YOU OPEN THE BOX

Open the box the portable bullet trap box on a height adjustable platform, such as a pallet and jack.

- ◆ Open the box the correct way up so that you may remove the hardware and parts for the stand. Leave the portable bullet trap plate in the box until further instruction.

3.2 PARTS AND EQUIPMENT

3.2.1 PARTS

- ◆ Items B, C, and D in Table 1 have two part numbers. The first is for traps situated on a concrete surface. The second is for traps situated on an “off-road” surface.
- ◆ The items in Table 1 (A through Q) correspond with the figure labels in this manual.

TABLE 1. PORTABLE BULLET TRAP PARTS

ITEM	DESCRIPTION	PART NO.	QTY.
A	Cross bar	20394	1
B	Wheel bar	concrete surface: 19933 “off-road”: 20395	2
C	Trap stand upright 1	concrete surface: 19936 “off-road”: 19157	1
D	Trap stand upright 2	concrete surface: 19937 “off-road”: 19158	1
E	Portable bullet trap plate	17731	1
F	Carriage bolt, grade 5, 5/8" x 2-1/4"	5505	4
G	Flat washer, 3/8"	1032	8
H	Stover nut, 3/8"	1057	8
I	Carriage bolt, grade 5, 3/8" x 2"	7828	4
J	Button-head socket cap screw, 1/4" x 1-3/4"	19320	2
K	Narrow flat washer, 1/4"	13714	2
L	Stover nut, 1/4"	1033	2
M	Stover nut, 1/2"	1035	2
N	Narrow flat washer, 1/2"	13712	4
O	Hex bolt, grade 5, 1/2" x 2-1/4"	1175	2
P	Button-head socket cap screw, zinc clear, grade 5, 1/4" x 5/8"	9508	2
Q	Split lock washer, 1/4"	4252	2

3.2.2 TOOLS

TABLE 2. REQUIRED TOOLS

▪ Impact wrench	▪ Wrench: 3/4"
▪ Sockets: 3/4", 7/16", 9/16"	▪ Hex (Allen) wrench: 5/32"

TABLE 3. RECOMMENDED EQUIPMENT

▪ Lifting device (e.g. forklift)	
----------------------------------	--

3.3 STAND ASSEMBLY INSTRUCTIONS

✔ Read the safety precautions in section 2 before assembling the stand.

1. To install the cross bar (A) to the wheel bars (B), line up the bolt holes of the cross bar's side brackets with the bolt holes of each wheel bar (see Fig. 1). Insert the 2- $\frac{1}{4}$ " carriage bolts (F) down through the bolt holes.

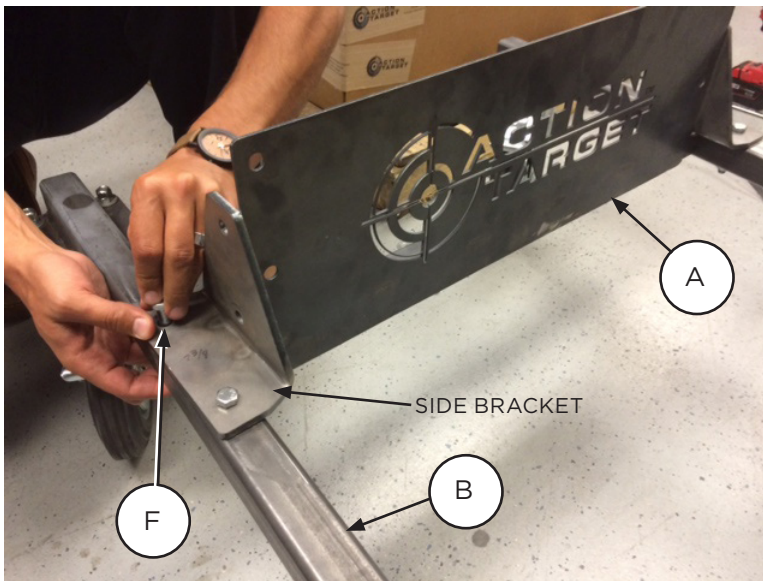


FIGURE 1. INSTALL CROSS BAR TO WHEEL BARS

⚠ The length of the wheel bar is not equal on both sides of the cross bar bracket. Ensure the longer side of the track is in front of the front side of the Action Target logo on the cross bar (see Fig. 2 and 3).

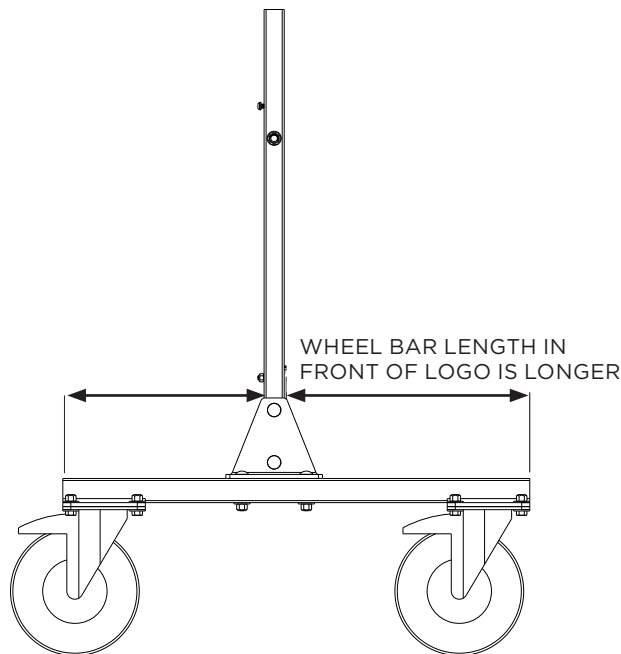


FIGURE 2. LONGER SECTION OF WHEEL BAR EXTENDS IN FRONT OF CROSS BAR

2. Install a $\frac{3}{8}$ " flat washer (G) and $\frac{3}{8}$ " Stover nut (H) to each of the carriage bolts. Tighten with an impact wrench and $\frac{9}{16}$ " socket, as seen in Fig. 2. (Note: the photographs depict hex bolts instead of carriage bolts.)

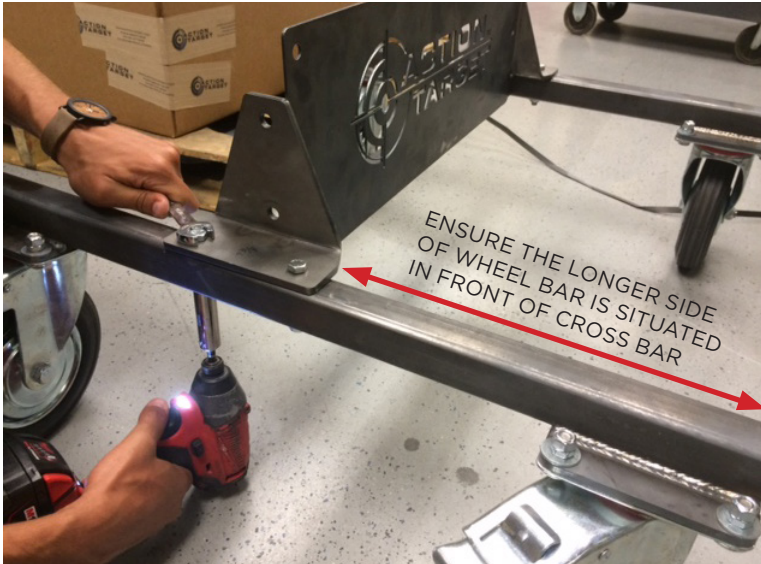


FIGURE 3. TIGHTEN FLAT WASHERS AND STOVERS ONTO WHEEL BAR CARRIAGE BOLTS

Before installing the trap stand uprights, note the following:

- Trap stand uprights 1 and 2 are not identical; the bolts holes are at different heights (see Fig. 4). Facing the correct side of the logo, ensure that trap stand upright 1 (C) is installed on the right and trap stand upright 2 (D) is installed on the left.
- Ensure the hole for the button head socket cap screw is facing the back (see Fig. 5).

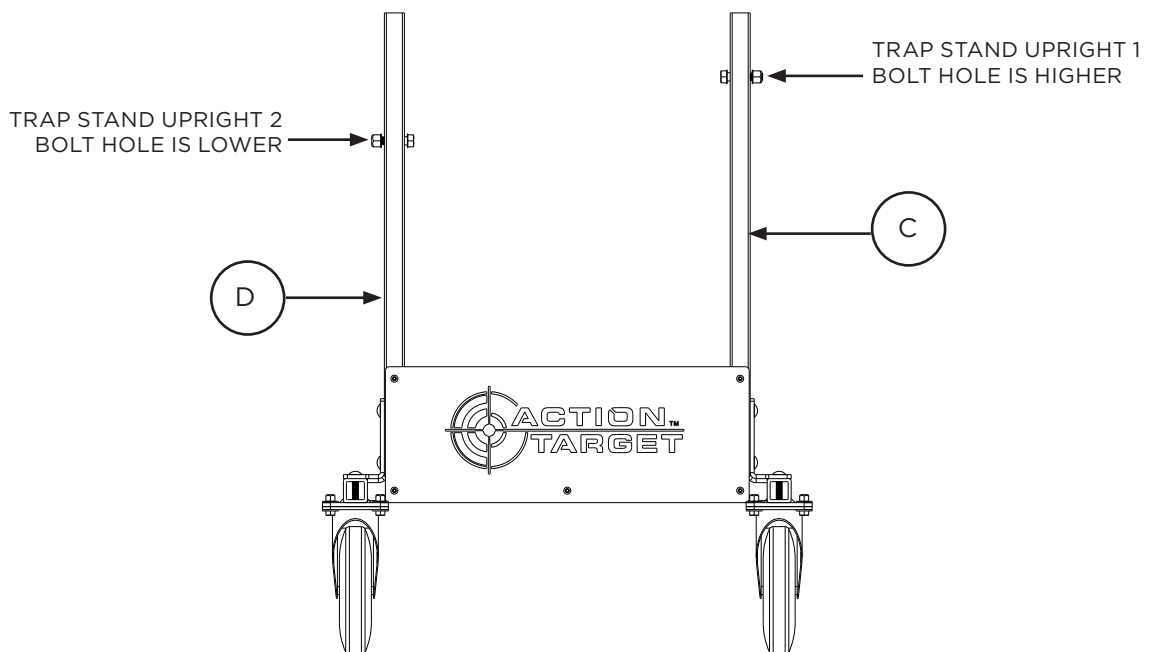


FIGURE 4. TRAP STAND UPRIGHTS 1 AND 2

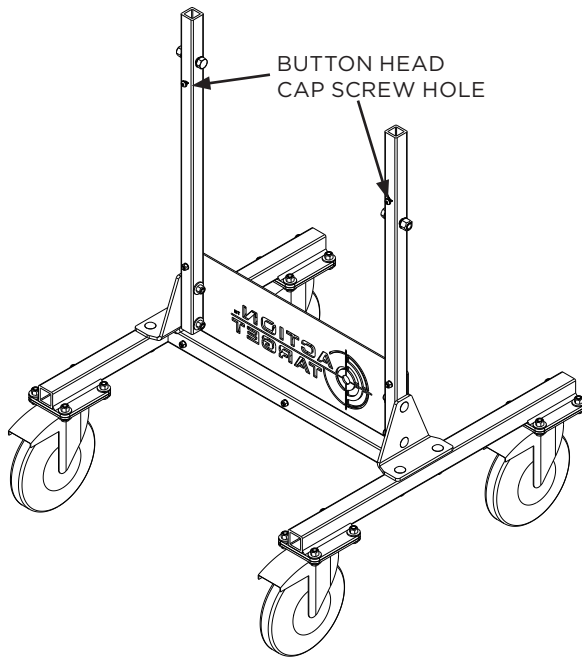


FIGURE 5. BUTTON-HEAD CAP SCREW HOLE FACES THE BACK

3. Insert the 2" carriage bolts (I) into the trap stand uprights, as seen in Fig. 6.
4. Install a $\frac{3}{8}$ " flat washer (G) and $\frac{3}{8}$ " Stover nut (H) to each carriage bolt. Tighten with an impact wrench and $\frac{9}{16}$ " socket, as seen Fig. 7. (Note: The photographs depict hex bolts.)

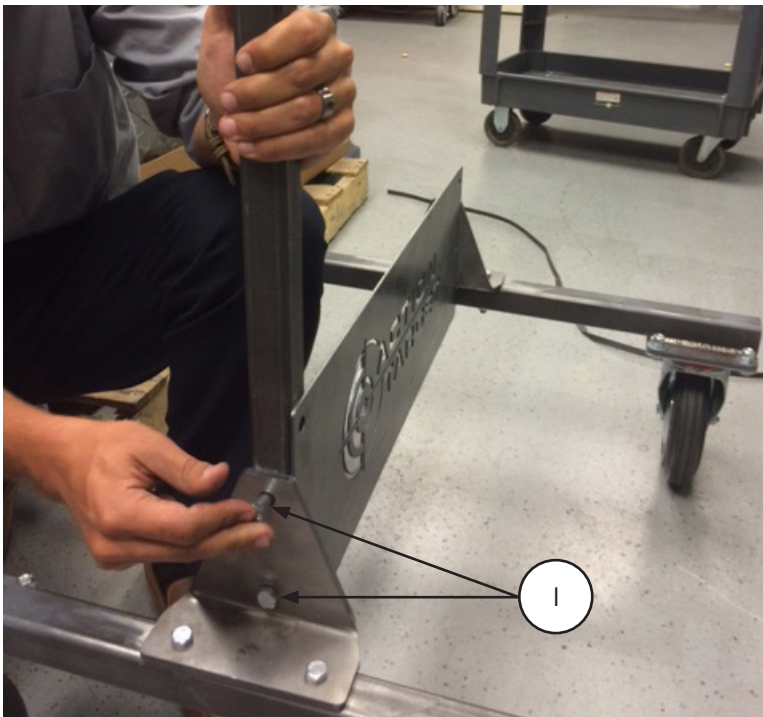


FIGURE 6. INSTALL CARRIAGE BOLTS INTO TRAP STAND UPRIGHT



FIGURE 7. TIGHTENING FLAT WASHERS AND STOVERS ONTO CARRIAGE BOLTS

5. Insert the 1- $\frac{3}{4}$ " button-head socket cap screws (J) through the top holes of the cross bar into the trap stand uprights as seen in Fig. 8.
6. Install $\frac{1}{4}$ " narrow flat washers (K) and $\frac{1}{4}$ " Stover nuts (L) to the button-head socket cap screws. Tighten with impact wrench and $\frac{7}{16}$ " socket + $\frac{5}{32}$ " hex (Allen) wrench.

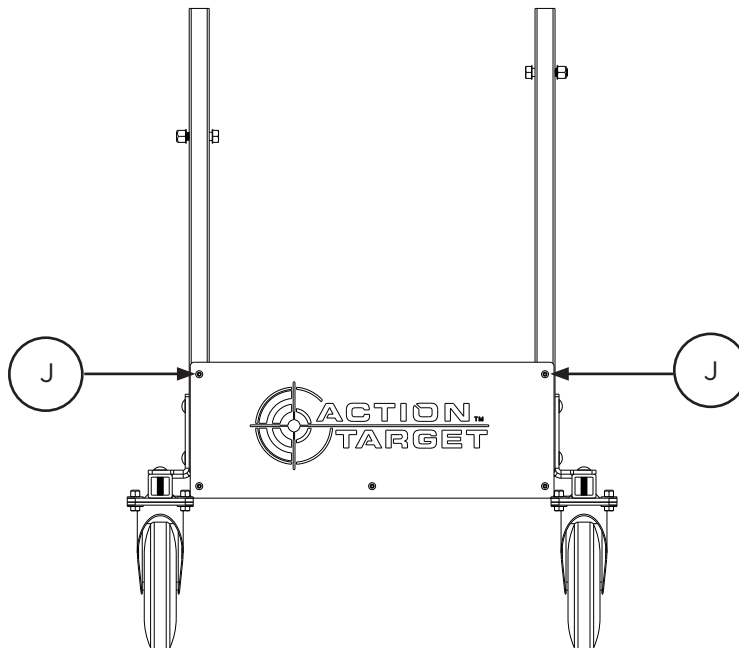


FIGURE 8. INSTALL BUTTON-HEAD SOCKET CAP SCREWS INTO TRAP STAND UPRIGHTS THROUGH THE CROSS BAR

3.4 BULLET TRAP PLATE ASSEMBLY

✔ Read the safety precautions in section 2 before assembling the bullet trap plate.

⚠ A lifting device is recommended. A team of at least three physically able people is required.

1. If the box containing the bullet trap plate (E) is not situated on a platform (see section 3.1) and if a lifting device is not available, it is advised that users place the box on a 15" high platform before proceeding.
2. Collapse the sides of the box. Place the stand up in front of the bullet trap plate and lock the wheels of the stand.
3. Tip the stand forward and slide the trap stand uprights into the brackets of the bullet trap plate, as seen in Fig. 9.

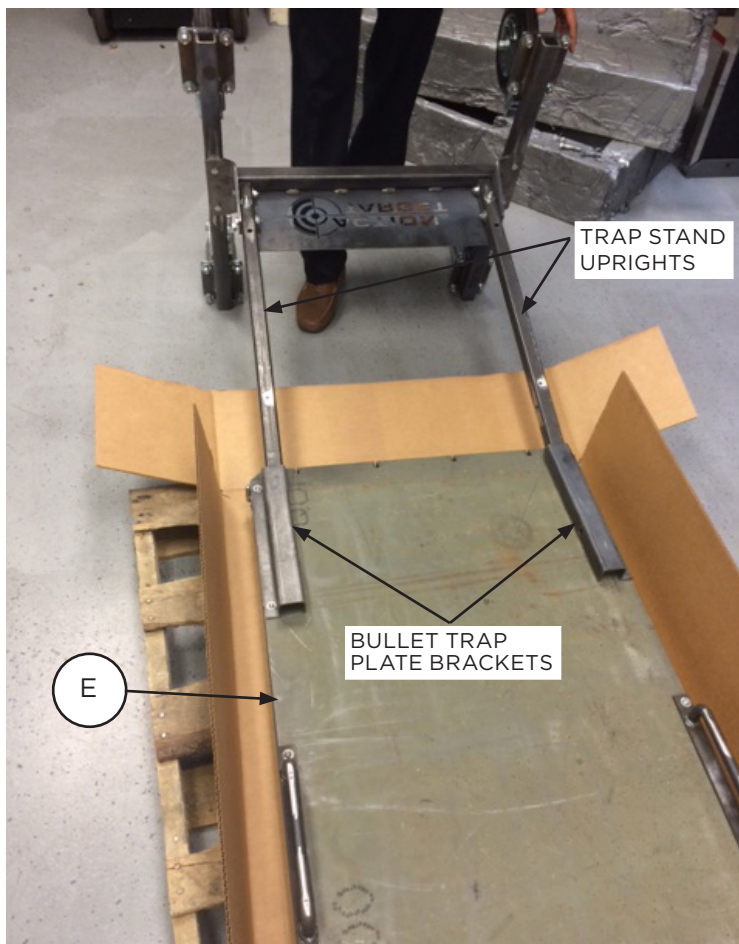


FIGURE 9. SLIDE THE TRAP STAND UPRIGHTS INTO THE BULLET TRAP PLATE BRACKETS

4. Insert the 2-1/4" hex head bolts (O) through the bullet trap plate brackets into the trap stand uprights, as seen in Fig.



FIGURE 10. INSERT HEX BOLTS INTO BULLET TRAP PLATE BRACKETS

5. Install a 1/2" washer (N) and 1/2" nut (M) to each hex bolt (see Fig. 11). Tighten with an impact wrench and 3/4" socket + 3/4" wrench.



FIGURE 11. INSTALLING WASHERS AND NUTS TO HEX BOLTS

- ◆ Before continuing, note that the bullet trap plate weighs approximately 300 lbs. If a lifting device is not available, four people should assist in lifting the plate, as described in step 6. Follow the heavy lifting guidelines in section 2.

6. To carefully lift the bullet trap plate without the assistance of a lifting device, ensure there is:
- One person securing the stand.
 - One person holding the left handle.
 - One person holding the right handle.
 - One person supporting the top of the plate (see Fig. 12 and 13).



FIGURE 12. POSITIONS OF PERSONS LIFTING THE BULLET TRAP PLATE

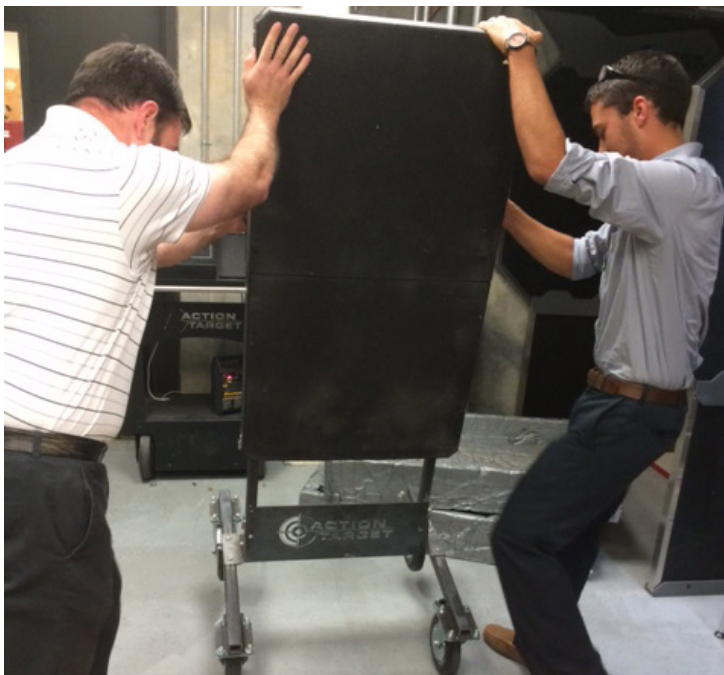


FIGURE 13. LIFT PLATE TO STANDING POSITION (TWO PERSONS SHOWN FOR IMAGE CLARITY)

- Using a $\frac{5}{32}$ " hex wrench, install the $\frac{5}{8}$ " button-head cap screws (P) and $\frac{1}{4}$ " split lock washers (Q) through the bullet trap plate brackets. These secure the bullet trap plate to the trap stand uprights situated within the bullet trap plate brackets. (see Fig. 14).

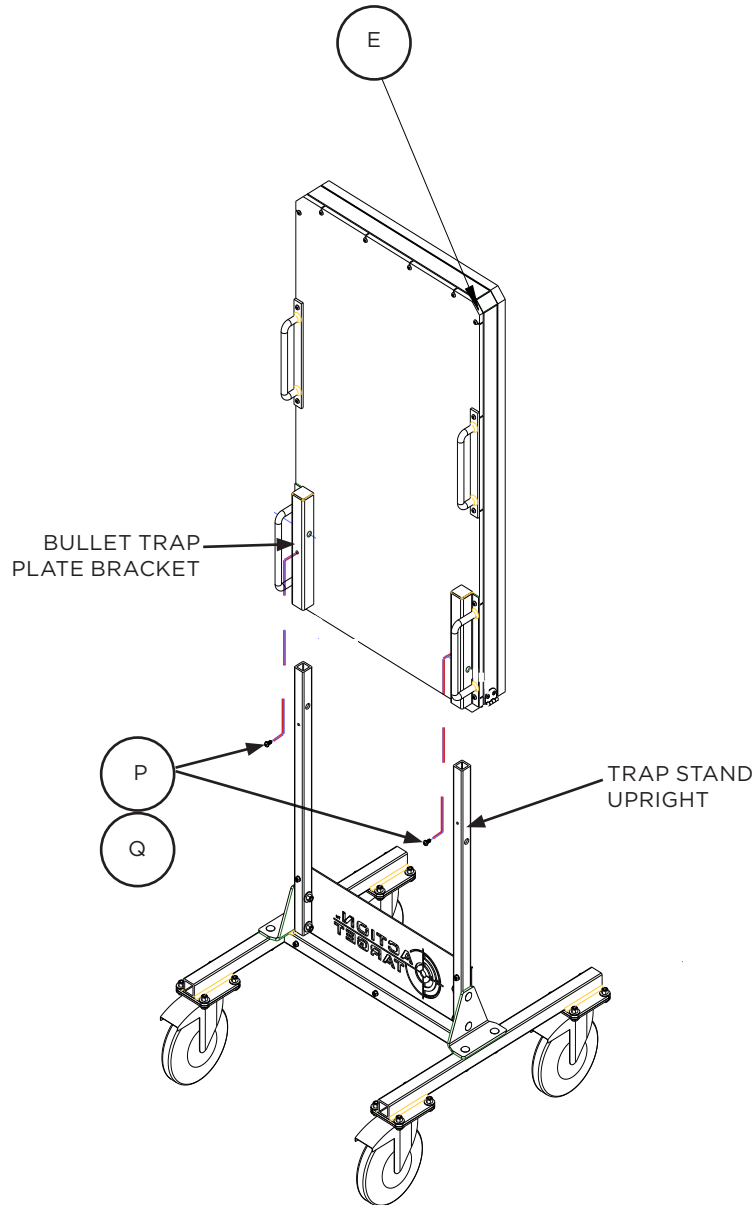



FIGURE 14. INSTALL BUTTON-HEAD CAP SCREWS AND SPLIT LOCK WASHERS

SECTION 4: OPERATION

4.1 RULES

 Portable bullet traps are not designed to perform as a backdrop or shield to protect vital equipment or human life. Portable bullet traps should never be placed in a location where it would be hazardous if a bullet were to pass by or through the trap.

- Do not use armor piercing and incendiary rounds on the portable trap.
- Never place a portable bullet trap in front of a doorway or window.
- Never lift the portable bullet trap without assistance.
- Lock at least two wheels before shooting at the portable bullet trap.
- Rounds may be fired at angles up to 20 degrees (see Fig. 16).



FIGURE 15. ANGLE OF ATTACK

SECTION 5: MAINTENANCE

- ◆ To order replacement parts included in this section, contact Action Target Customer Service at **(888) 377-8033**.
- ◆ Read the safety precautions in section 2 before inspecting/replacing components of the portable bullet trap.

5.1 INSPECTION & CLEANING

After each day's use of the portable bullet trap(s):

- Visually inspect the front and back side of all portable bullet traps.
- Empty the bullet fragment tray as shown in Fig. 16 - 18.



FIGURE 16. UNDO LATCH ON SIDE OF BULLET FRAGMENT TRAY



FIGURE 17. HOLD BUCKET BENEATH TRAY AS IT IS LOWERED



FIGURE 18. EMPTIED TRAY

5.2 REPLACEMENT CRITERIA

5.2.1 PORTABLE BULLET TRAP PLATE

- Stop using bullet trap and replace bullet trap plate if a crack, breach, or through hole is identified. To order a bullet trap plate, contact Action Target Customer Service and place an order for **Portable Bullet Trap Top Assembly, part #17731**.

5.2.2 RUBBER PANEL

- Rubber panels generally need to be replaced according to the number of rounds within a shot grouping area (see Table 4 and Fig. 19 - 22). To order a new rubber panel, contact Action Target Customer Service and place an order for **Portable Bullet Trap Rubber Panel, part #19155**.
- Replace the rubber panel if there is a visible hole in the rubber, or if steel is exposed.
- Replace the rubber panel if there are reports of bullet fragments resurfacing after entering the rubber or if a shooter is hit with splatter.

TABLE 4. LIFE EXPECTANCY OF RUBBER BASED ON NUMBER OF ROUNDS IN SHOT GROUPING AREA

SHOT GROUPING AREA	ROUNDS RECORDED
12" x 12"	1200 rounds
8" x 8"	600 rounds
3" x 3"	200 rounds

- ◆ Contact Action Target Customer Service if there are any other irregularities that cause concern, such as damage to the stand/wheels or excessive rubber degradation.

5.3 REPLACEMENT INSTRUCTIONS

5.3.1 REQUIRED TOOLS

- Drill and #2 Phillips bit

5.3.2 DIRECTIONS

- ⚠ The dimensions (depth x height x length) of the rubber panel are 2"x45"x25". The rubber panel weighs 75 lbs (34 kg). Rubber panels should be removed by a minimum of two people or a material lift.

1. Remove self-drilling screws to pull rubber off portable bullet trap steel plate.
2. Reuse the self-drilling screws to attach new sheet of rubber to the the steel plate. It is **not** necessary to insert the screws through the original holes.

- ◆ If more screws are required, contact Action Target Customer Service and place an order **self-drilling screw, part #8387**. Provide quantity required.



FIGURE 19. FRONT SIDE OF RUBBER PANEL NEEDS TO BE REPLACED



FIGURE 20. BACK SIDE OF RUBBER PANEL NEEDS TO BE REPLACED



FIGURE 21. FRONT SIDE OF RUBBER PANEL DOES NOT NEED TO BE REPLACED



FIGURE 22. BACK SIDE OF RUBBER PANEL DOES NOT NEED TO BE REPLACED