SIGNTORCH GUN RACKS



Instructions and Guidelines



Bend Style

The bend style is designed to be 10 ga. steel, but it can really be any thickness that can be bent that is stiff enough to work.

The bend seam can be welded after bending to stiffen thinner material.

Some of the bend designs have offset hooks to hold guns more level.

Some bend designs alternate the gun direction between rows.



It may be helpful to craft a set of bending tools to facilitate the bending process.

Most bend style hooks are about 1-1/4" wide on the backside adjacent to the bend line.

Different bending tools may be required here and there.

You can use a thin cutoff wheel to make a shallow relief cut along the bend lines for easier bending.





Weld 1 Style

The weld 1 style typically has a back plate with slots to align and weld hooks for 1 to 3 guns.

You can choose any weld 1 hook design to go with any weld 1 rack design.

See "Slot Cutting and Welding" on page 6.

There's often room to cut custom art in the center if desired.

Slots are scaled for 10 ga. material, adjust the slot width for other materials.

Weld 1 Hooks

Weld 1 hooks are interchangeable.

Cut however many you need for the chosen back plate.





Weld 2 Style

The weld 2 style typically has a back plate with slots to align and weld a single pair of two-tier hooks for 2 guns.

You can choose any weld 2 hook design to go with any weld 2 rack design.

See "Slot Cutting and Welding" on page 6.

There's often room to cut custom art in the center if desired.

Slots are scaled for 10 ga. material, adjust the slot width for other materials.

Weld 2 Hooks

Weld 2 hooks are interchangeable.

The 2 Antler designs come in large and small size.





Weld 3 Style

The weld 3 style typically has 1 or 2 horizontal frame members.

Specific hooks connect 2 horizontal frame members for specific gun counts.

See "Slot Cutting and Welding" on page 6.

Slots are scaled for 10 ga. material, adjust the slot width for other materials.

Weld 3 Hooks

Weld 3 hooks are not interchangeable, choice is based on having 1 or 2 horizontal frame members, 1 to 4 guns, and vertical side accents or not.

For optional vertical side accents use the corresponding 3 or 4 hook part with a center lug to attach the vertical accents.





Weld 3v Style

The weld 3v style is same as weld 3 style except it uses specific 3 or 4 gun hooks with center lugs to attach 3 or 4 gun vertical side accents

Specific hooks connect 2 horizontal frame members for specific gun counts.

See "Slot Cutting and Welding" on page 6.

Slots are scaled for 10 ga. material, adjust the slot width for other materials.

Weld 3 Hooks and Side Accents

2 of the weld 3 hooks are for 3 or 4 gun racks with vertical side accents

Side accents are numbered to match each weld 3 horizontal frame design.



Slot Cutting and Welding

Each hook (green) has a tang to fit in each slot with room on each end to weld on the back of the plate (blue).

Cut test slots to calibrate kerf compensation to get the slot the right final width for the material. If the slot is too narrow the tang won't fit, it the slot is too big there will be a gap between the back plate and hook that is visible from the front.

Or you can just cut the slots however wide and then weld over the entire slot from the back to conceal any slot gaps.

The slots are typically .14" wide while 10 ga. steel is .1345" thick so there is only about .005" clearance. But the tang is typically .06" tall which is about half the material thickness, so interference with any cut edge taper should not be a problem. If it is you can just decrease your kerf compensation slightly to overcut the slot width slightly. That way you don't have to manually edit the parts to adjust the slot width.

