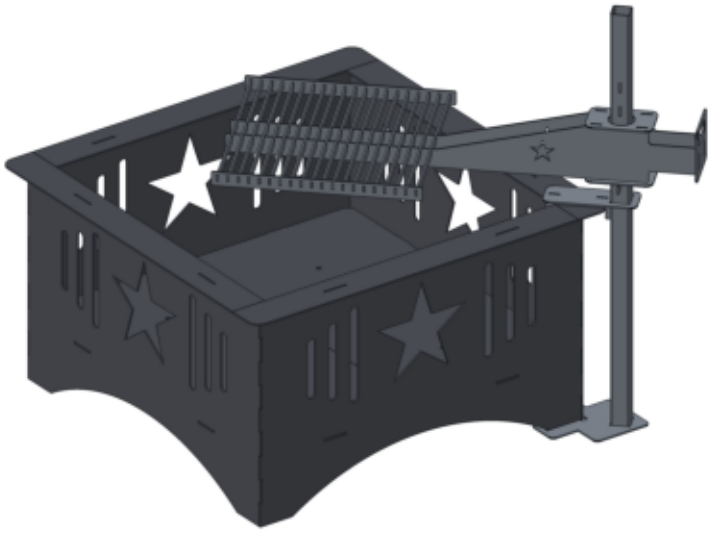
Lone Star Swing-Arm Grill for FP30



A 16" square cooking grate on an arm that swings over the FP30's fire and back out. It turns on a post at the pit's corner, and a steel key sets it at six heights, 2-1/2" to 12-1/2" above the rim. The pit holds the post at the ground and the rim: no clamps, bolts or stake. Holds 20 lb of food and cookware.

What's in the box

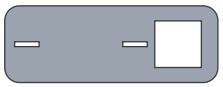
Post x1
Part SG30-01



Foot plate x1
Part SG30-02



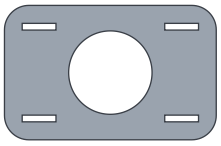
Saddle x1
Part SG30-03



Saddle plate x1
Part SG30-04



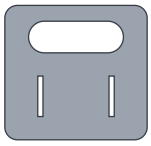
Height key x1
Part SG30-05



Hub collar x2
Part SG30-06



Arm plate x2
Part SG30-07



Tail handle x1
Part SG30-08

Grate bar x20
Part SG30-09

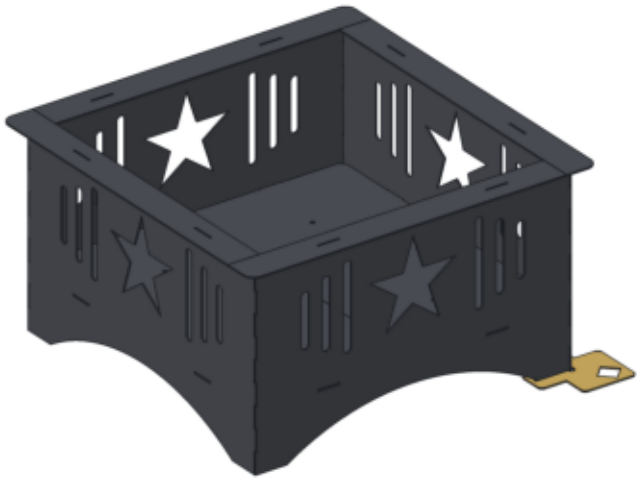
Side rail x2
Part SG30-10

What you'll need

- MIG or flux-core welder (a 120 V machine handles 10 ga)
- Angle grinder with a flap disc and a wire wheel
- A square, two clamps and a rubber mallet
- Chipping hammer for flux-core slag
- Welding helmet, gloves, jacket and safety glasses

Lone Star Swing-Arm Grill for FP30

1 Set the foot plate under the FP30's corner



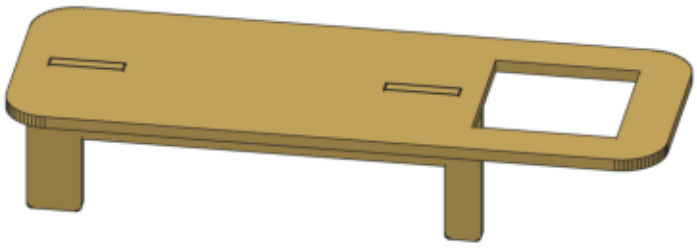
Start at the pit. Lift one corner of the FP30 about an inch (a pry bar on a block helps) and slide the foot plate under it, so the corner leg drops through the L-shaped slot. Set the pit down. The square hole sits outside the corner.

TIP

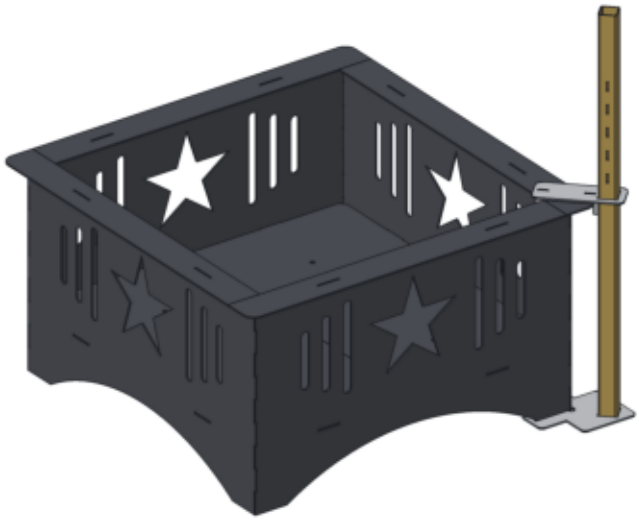
Pick the corner downwind of where people sit, so the arm swings the grate away from them.

2 Build the rim saddle

On the bench, push the saddle's two top tabs up through the saddle plate's slots, with the narrow lip toward the plate's far end and the wide leg toward the square hole. Check it's square and weld the tabs on top.



3 Stand the post and drop on the saddle

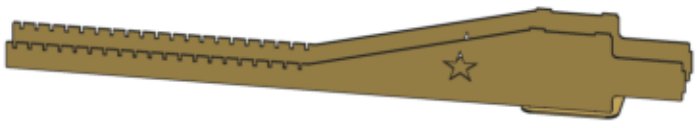


Stand the post in the foot plate's square hole, key slots facing across the corner. Slide the saddle down over the post until it straddles the rim's corner: the lip inside the opening, the leg outside the rim.

TIP

The post now stands straight on its own, held at the ground and at the rim.

4 Stand the arm plates in a hub collar



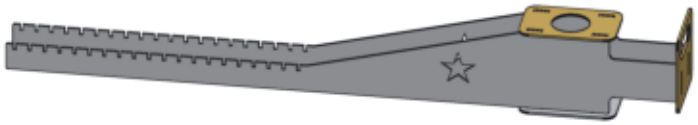
Back on the bench, lay one hub collar flat. Stand the two arm plates on edge, stars facing out, and drop their bottom tabs into the collar's slots: the tall ends over the collar, the tails out the back. They stand parallel, just far enough apart for the post to pass between them.

TIP

Clamp a square across the plates' grate ends to hold them upright.

Lone Star Swing-Arm Grill for FP30

5 Cap the hub and add the handle



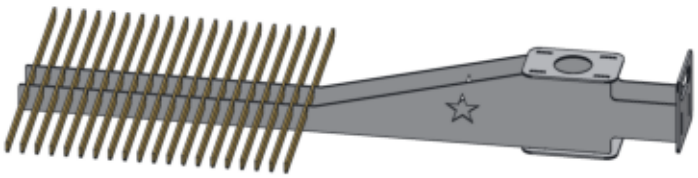
Drop the second hub collar over the four top tabs. Slide the tail handle onto the two tail tabs, hand hole up. Tack every tab.

TIP

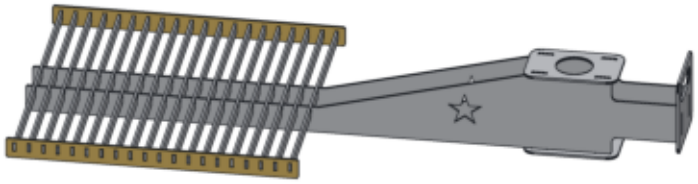
Look down through the two round holes: they line up when the plates are square.

6 Drop in the grate bars

Lower the 20 bars across the arm plates so their notches drop into the plates' notches. All the bars are identical. Their tops finish flush with the plates' tops.



7 Push on the side rails

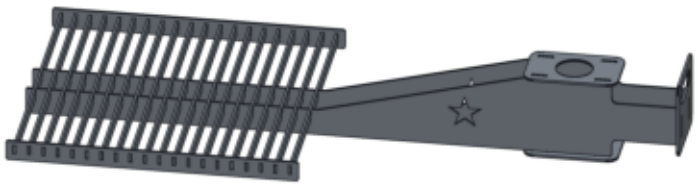


Slide a side rail onto each end of the bars, so its row of slots takes all 20 bar-end tabs. Tap it home with a mallet until the tabs are flush with its outside face.

TIP

If one tab won't start, nudge that bar sideways; the notches hold the rest in line.

8 Weld the arm

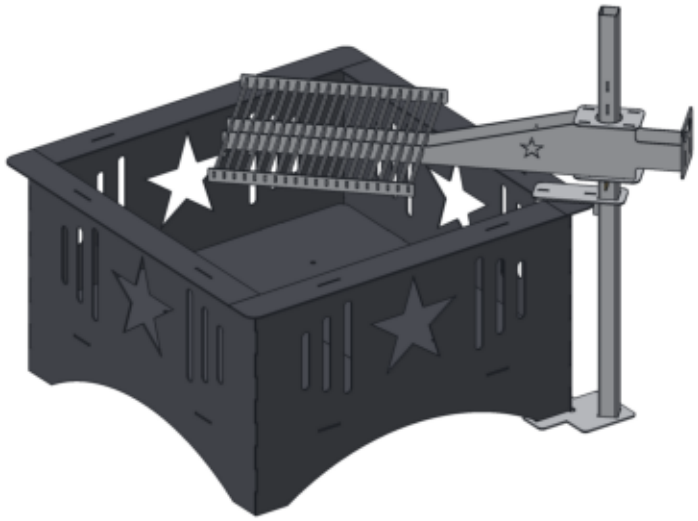


Weld the collar tabs on top and underneath, and the tail tabs on the handle's back face. Weld every bar tab on the side rails' outside faces, then tack each bar to each arm plate from underneath. Keep welds off the cooking surface and out of the collars' round holes.

TIP

Grind the collar tabs flush top and bottom: the collars turn on the post and on the key.

9 Set the height and hang the arm



Push the key through a pair of slots and let it drop onto the walls. Lift the arm by its handle and the grate, thread the hub over the top of the post, and lower it until it rests on the key. For the lowest setting, leave the key out: the hub rests on the saddle plate. Swing the grate over the fire by the tail handle.

TIP

Change heights only with the grate empty and cool enough to handle with gloves.

Finishing

- The parts ship bare with a light oil film. It's a rust preventive, not a cooking oil: degrease every part before welding and again before seasoning.
- Never paint the grate. The post, foot plate and saddle can take high-heat paint; keep paint off the hub collars and key, where steel turns on steel.
- Chip off all flux-core slag and wire-wheel the welds and bar tops to bright steel.
- Season the grate like cast iron: a thin coat of high-smoke-point oil, then 30 to 45 minutes over a hot fire. Repeat two or three times.
- A drop of high-temperature anti-seize on the post where the collars turn keeps the swing smooth.

Fire safety

- Made to fit the FP30. The corner leg must sit in the foot plate's slot, and the saddle must straddle the rim corner, before you hang the arm.
- Holds 20 lb of food and cookware on the grate, such as a 12 in cast iron skillet with food in it. It is not a seat, step or shelf; don't lean on the arm.
- The grate, arm and hub get as hot as the fire. Swing it by the tail handle with grill gloves, and change heights only when the grate is empty.
- Swing the grate out of the fire before you add wood, and keep kids clear of the arm's path.
- Outdoors only. Every safety rule for the fire pit applies.

This is a kit of raw steel parts. You build the finished product, and the quality of your welds and your judgment about where and how you use it are yours. Weld with proper ventilation and protective gear, and never leave a fire unattended.