PO-039 Removable pasture-root grazing frame

Place a low screen over established suitable pasture so birds can reach protruding growth while their scratching does not directly expose the whole root area.

Controlling dimensions: US inches and feet. Metric equivalents are references. Original editorial design; no physical build, animal trial or load certification is claimed.

Before marking and cutting

Read every step and identify the installed orientation. Make the component off-site with birds excluded.

Measure the actual receiving space, chosen commercial accessories and access route. Stop if the example does not fit; changing only one member can invalidate the assembly.

Reject split, warped, moldy or chemically contaminated stock. Keep exposed mesh cut ends and all sharp fasteners inaccessible to birds.

The drawing dimensions control; illustrations are not full-size templates. Allow a saw kerf between parts when laying out stock.

Use limits

No person may stand or sit on this component. No tested load rating is claimed.

A site-specific safe location and supervision are required; remove it if birds become trapped, peck damaged material, or cannot use their normal feed, water, shelter and escape routes.

Materials and finished cuts

Part	Qty	Size to cut	Material and detail
A Long ground runner	2	48 × 3 1/2 × 1 1/2 in 1219.2 × 88.9 × 38.1 mm	Untreated sound straight softwood. Square ends; remove splinters.
B Between-runner end	2	21 × 3 1/2 × 1 1/2 in 533.4 × 88.9 × 38.1 mm	Untreated sound straight softwood. Square ends; remove splinters.
C Middle support	1	21 × 1 1/2 × 1 1/2 in 533.4 × 38.1 × 38.1 mm	Untreated sound straight softwood. Square ends; remove splinters.
D Root-protection screen	1	47 × 23 × 1/25 in 1193.8 × 584.2 × 1.02 mm	Welded galvanized 1/2 in hardware cloth, 19-gauge product. Capture all cut ends under wooden battens. Schematic thickness is not a supplier measurement.
E Long screen clamp	2	48 × 1 1/2 × 3/4 in 1219.2 × 38.1 × 19.05 mm	Untreated sound straight softwood. Square ends; remove splinters.
F Between-clamp end	2	21 × 1 1/2 × 3/4 in 533.4 × 38.1 × 19.05 mm	Untreated sound straight softwood. Square ends; remove splinters.

Hardware and consumables

12 × #8 corrosion-resistant exterior wood screw 3 in (76.2 mm). Frame and middle support [N1]

24 × #8 corrosion-resistant exterior wood screw 1 3/4 in (44.45 mm). Perimeter clamps [N1]

3 × #8 corrosion-resistant exterior wood screw 1 in (25.4 mm). Mesh to C with wide washers [N1]

3 × Stainless wide washer, at least 3/4 in outside diameter. Retain mesh on C without pulling through an opening

N1 applies to every entry marked [N1]: Use compatible coatings/metals and the maker's pilot-hole guidance; do not substitute drywall screws.

Tools: Tape measure, square and pencil; Saw appropriate to material and work supports; Drill/driver, countersink and pilot bits selected for the screws; Clamps, sanding block and eye/hearing protection; dust control appropriate to the material

Primary context and design record

Context references; not design endorsements or certifications.

S2 · Build a Clean Routine · USDA APHIS Defend the Flock

S4 · Galvanized Hardware Cloth · Marco Specialty Steel

S6 · Backyard Flock Production · Oklahoma State University Extension

S7 · Raising Backyard Chickens for Eggs, AN239 · University of Florida IFAS Extension

Assembly and first checks

The large drawing plates follow the instructions in this same PDF. Read the cut list and match part IDs before cutting. Print with automatic page orientation; use written dimensions rather than measuring the printed drawing.

01 Choose an established suitable nonhuman-food forage patch within an already protected run. This frame does not make unknown weeds edible or provide a balanced ration.

02 Cut A 48 in and B 21 in long from actual 1 1/2 × 3 1/2 in stock. Stand boards on their 1 1/2 in edges for a 48 × 24 in outside rectangle.

03 Clamp B between A; compare diagonals. Fasten with two 3 in screws through each A/B corner, eight screws total.

04 Cut C to 21 in from actual 1 1/2 in square stock. Place across the center, x = 23 1/4–24 3/4 in, with its top flush at z = 3 1/2 in.

05 Attach C through A with two 3 in screws per end, four total. The middle support is part of the screen support, not a perch.

06 Cut D 47 × 23 in from the specified 1/2 in 19-gauge hardware cloth. Center it over the 45 × 21 in open ground area, overlapping each frame edge by 1 in.

07 Cut E 48 in and F 21 in long from 3/4 × 1 1/2 in stock. Clamp E along A, capturing wire ends completely.

08 Fasten E with eight 1 3/4 in screws each, then F with four 1 3/4 in screws each. Also tie the mesh to C using three stainless screw-and-wide-washer retainers with buried points.

09 Inspect the whole upper surface and cut perimeter with gloves. Replace broken welds and cover no wire point with temporary tape.

10 Set the frame flat on ground with no hole or void beneath its perimeter. Do not prop it up, use it as a bridge or place a waterer on the mesh.

11 Observe actual adult birds: stop if toes catch, birds press their heads into openings, or the frame rocks. Monitor the patch and move/remove the frame before it becomes wet, bare or heavily fouled.

12 Lift out for cleaning and ground recovery. Never treat vegetation growing through a poultry frame as ready-to-eat produce for people.

Acceptance and intermediate checks

Outside 48 × 24 in, clear ground opening 45 × 21 in; C top level with frame.

Mesh overlaps 1 in beyond every opening edge and is captured by all four battens.

Flat ground placement and no sharp wire, rocking, trapped toe or route obstruction.

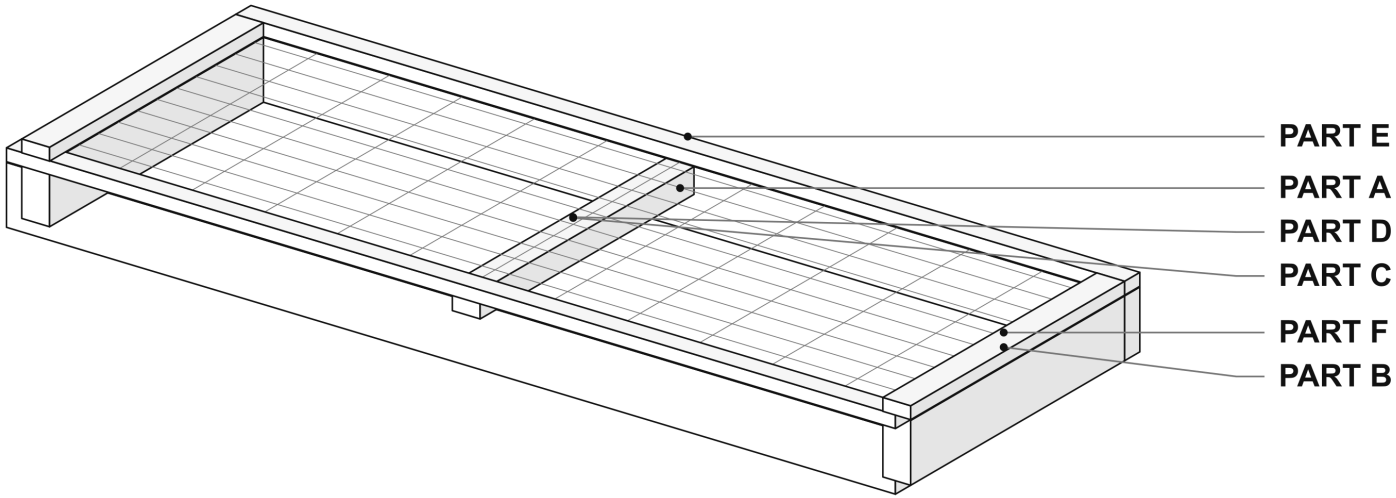
No human load, complete-ration, edible-weed, predator-proof or permanent pasture-protection claim.

Cleaning and maintenance

Inspect before each use for splits, loose joints, protruding points and trapped debris. Remove accumulated litter or manure promptly. When cleaning is needed, move birds away, remove debris first, wash and use only a suitable label-directed product if disinfection is indicated; let the item dry before return. Recheck the fit after seasonal wood movement. Replace cracked panels, rusted fasteners or frayed liners instead of concealing damage. Sand accessible edges to a small smooth radius. Use a removable washable contact liner where specified. Any optional coating must be suitable for the intended animal-equipment use and fully cured according to its label before installation. Porous wood is not represented as a disinfectable food-contact surface.

PO-039 | ASSEMBLY GEOMETRY

Removable pasture-root grazing frame



Displayed schematic envelope (x × y × z):

48 in × 24 in × 4.29 in / 1219.2 × 609.6 × 109.0 mm

Part letters refer to the cut list; standard hardware is specified in the assembly steps.

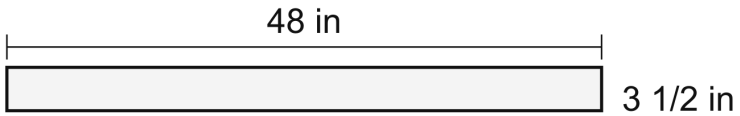
Original black/white vector schematic; dimensions control. Untested editorial draft.

x = left/right; y = front/rear; z = height. Purchased hardware is not falsely modeled as engineered parts.

PO-039 | DIMENSIONED PARTS 1 OF 2

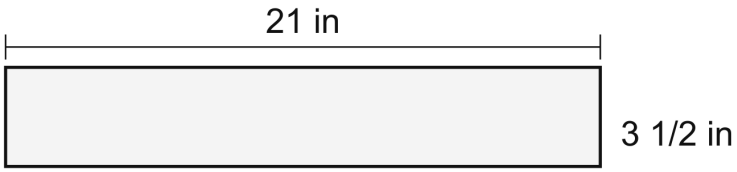
Finished sizes; allow for saw kerfs. Match part letters to the materials list.

A Long ground runner ×2



Metric face: 1219.2 × 88.9 mm
Thickness: 1 1/2 in / 38.10 mm
Stock and special cuts: materials list.

B Between-runner end ×2



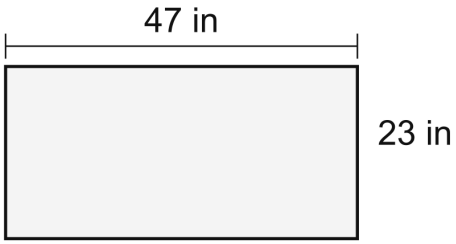
Metric face: 533.4 × 88.9 mm
Thickness: 1 1/2 in / 38.10 mm
Stock and special cuts: materials list.

C Middle support ×1



Metric face: 533.4 × 38.1 mm
Thickness: 1 1/2 in / 38.10 mm
Stock and special cuts: materials list.

D Root-protection screen ×1



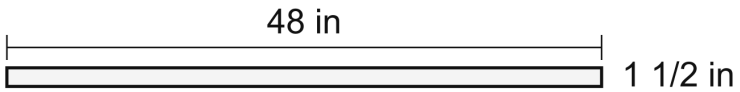
Metric face: 1193.8 × 584.2 mm
19-gauge mesh; thickness is schematic.
Stock and special cuts: materials list.

Original B/W vector drawing • US inches control • unbuilt / untested

PO-039 | DIMENSIONED PARTS 2 OF 2

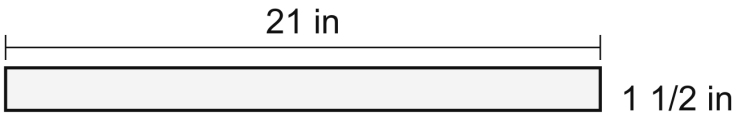
Finished sizes; allow for saw kerfs. Match part letters to the materials list.

E Long screen clamp ×2



Metric face: 1219.2 × 38.1 mm
Thickness: 3/4 in / 19.05 mm
Stock and special cuts: materials list.

F Between-clamp end ×2



Metric face: 533.4 × 38.1 mm
Thickness: 3/4 in / 19.05 mm
Stock and special cuts: materials list.

Original B/W vector drawing • US inches control • unbuilt / untested