WS-008 Measured drill-bit index block

Store individually capped small drill bits in numbered blind sockets of one measured block.

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

US inches; feet where appropriate. Metric values are rounded references. Written inch values control.

3/4 in means measured 0.750 in actual thickness wherever used. Recalculate mating lengths for other sheet thicknesses; do not substitute nominal stock blindly.

Use limits

For the bounded stated manual task. Do not install it on a powered machine or use it to replace a guard.

No load, measurement-certification or protective-equipment claim.

Materials and finished cuts

Part	Qty	Size to cut	Material and detail
A Reference board	1	10 × 3 × 3/4 in 254 × 76.2 × 19.05 mm	Sanded birch plywood with sound, void-free receiving edges. Measured actual thickness 3/4 in.
B Index block	1	9 × 2 × 1 1/2 in 228.6 × 50.8 × 38.1 mm	Clear solid hard maple, straight grain along the listed length. Measured actual thickness 1 1/2 in.

Hardware and consumables

2 × Compatible wood screws. Selected length, pilots and locations are stated in the instructions; test on actual scrap.

Tools

Rule with fractional inches; Pencil or appropriate material marker; Reliable square; Saw suited to the specified stock; Clamps; Abrasive and dust-removal brush; Drill with the specified bit and depth stop where needed; Driver matching selected fasteners

Primary context and design record

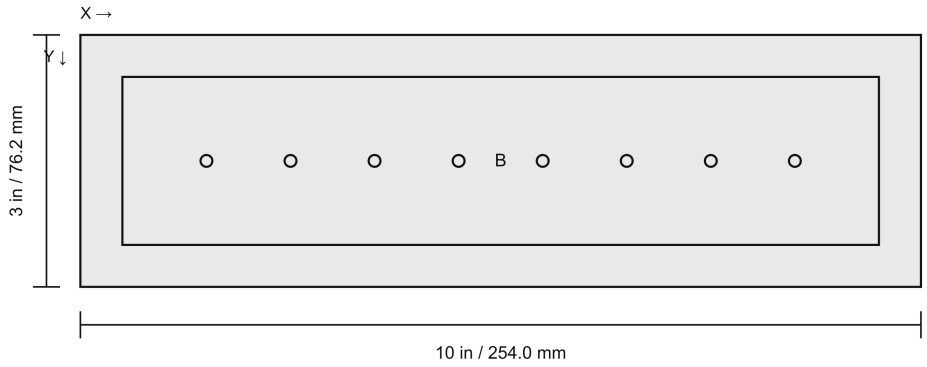
Context references; not design endorsements or certifications.

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Assembly and first checks

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PLAN / reference origin at front-left; not to scale. Inch values control.



Part letters identify the cut-list pieces. Dashed outline = underside part.
Coordinates in the method use the same X/Y reference.
Do not drill from the graphic: transfer the written center coordinates.
Original editorial design; no physical construction trial or certified load rating.

01 Use purchased protective caps on cutting ends and plan one socket per bit. This example indexes eight straight 1/8 in shanks; larger or different shanks need their own measured socket plan.

02 Cut A to 10 in / 254.0 mm by 3 in / 76.2 mm from flat measured 3/4 in stock. Mark one face UP and mark front-left X0 Y0; remove only the splinters, not the reference edges.

03 Draw the centerline and attachment footprints from the part positions below. Measure from the reference faces each time; do not add a chain of rounded conversions.

04 Cut B from straight dry hardwood to 9 × 2 × 1 1/2 in actual. Mark its top face and X0 at its left end.

05 Mark eight socket centers on B at local X = 1,2,3,4,5,6,7,8 in, local Y = 1 in. Label these as reference numbers rather than claiming eight different bit diameters.

06 Dry-fit and clamp the assembly on a stable surface. Check the intended article against the clearances before drilling or gluing; correct the layout on paper if it does not fit.

Complete the assembly

WS-008 Component dimensions

Orthographic component reference. Quantities shown; not a sheet nesting plan or full-size template.



10 × 3 in

A Reference board QTY 1

10 in / 254.0 mm × 3 in / 76.2 mm

thickness 3/4 in / 19.0 mm



9 × 2 in

B Index block QTY 1

9 in / 228.6 mm × 2 in / 50.8 mm

thickness 1 1/2 in / 38.1 mm

Measured actual stock controls. Read the written assembly sequence before cutting or fastening.

07 Test a 9/64 in bit and a sample 1/8 in shank on scrap. Drill the eight blind sockets 3/4 in deep with a positive stop; clamp B and keep it away from a moving bit.

08 Ease exposed corners and all edges that the operator will touch. Remove dust and any projecting point; countersink only to a flush head.

09 Clamp B on A at X = 1/2–9 1/2, Y = 1/2–2 1/2 in. From beneath A fit two #8 × 1 1/4 in screws at (1,1 1/2),(9,1 1/2) in. Avoid the socket centers and drill pilots first.

10 Vacuum or brush chips from the sockets. Do not blow debris toward a face, and do not push a finger into a socket to clear it.

11 Insert only the unsharpened shank into each socket. Fit a protective cap over every cutting end; unsuitable or unprotected bits stay in their manufacturer case.

12 Write the actual bit size and application beside each number. Check that each bit lifts out without twisting the whole board.

Acceptance and intermediate checks

Socket depth 3/4 in in a 1 1/2 in block; at least 3/4 in of wood remains below sockets.

All stored cutting ends have their own protective caps; mounting screws do not intersect sockets.

Assembly is flat and free of splinters, exposed tips and loose parts.

A second operator can repeat the intended light-duty operation without being coached.

Cleaning and maintenance

Brush or wipe the unloaded assembly clean after use.

Inspect attachment fit and fasteners before each new task.

Replace a damaged contact surface; recheck the reference dimensions after repair.