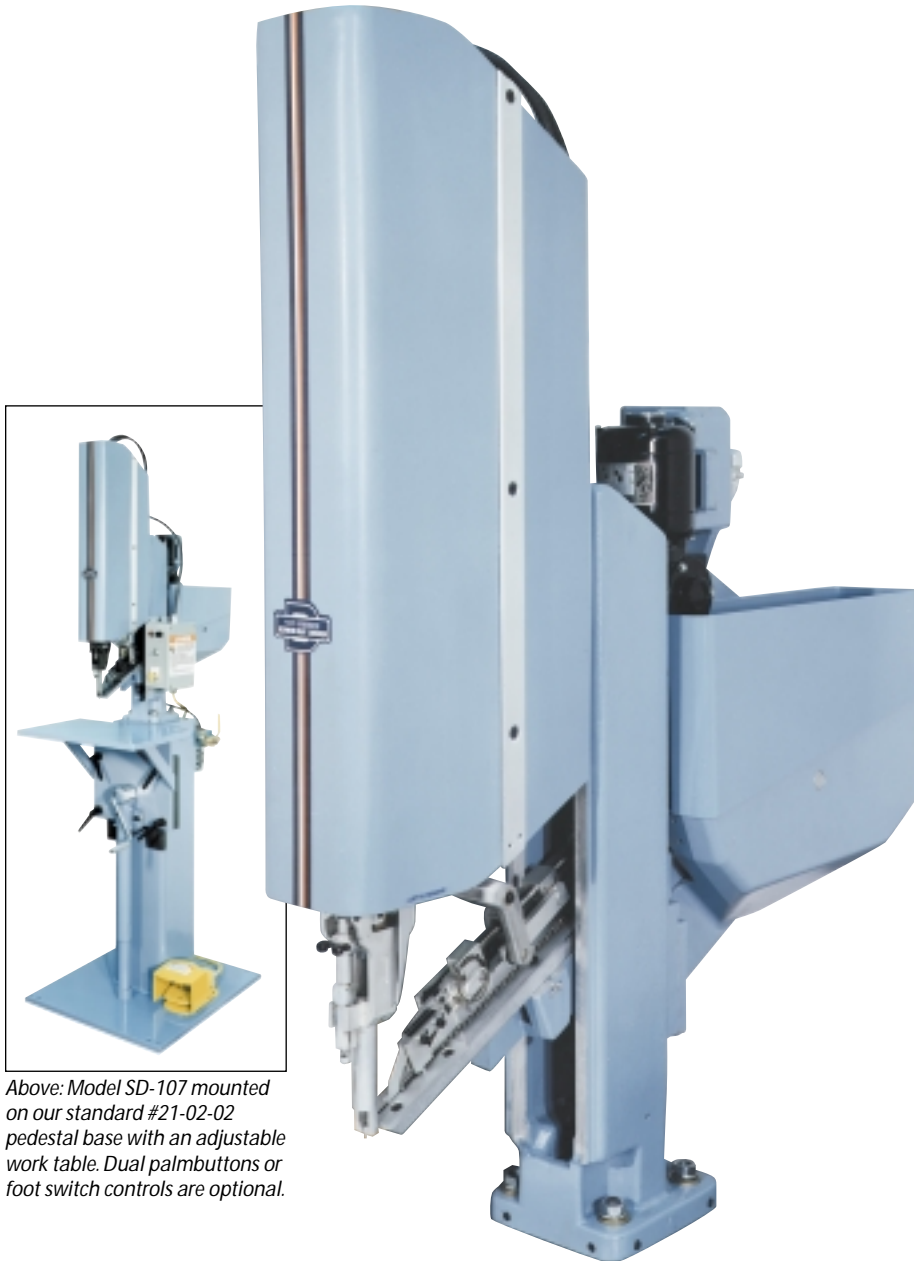




Model SD-107 Screwdrivers



Above: Model SD-107 mounted on our standard #21-02-02 pedestal base with an adjustable work table. Dual palmbuttons or foot switch controls are optional.

The Model SD-107 Screwdriver is available with 2 in. (51 mm), 3 in. (76mm), 4 in. (102mm), and 5 in. (127mm) head strokes. The Screwdriver can be furnished with a range of driving speeds and torque capacities using either DC electric or pneumatic motors. A torque and depth sensing control verifies when a fastener is properly driven into a workpiece during each driving cycle. Torque control settings range from 4 inch-lbs. (.5 Nm) to 120 inch-lbs. (13.5 Nm). A selection of mechanical and electrical clutches are used to achieve a wide range of torque requirements. Depth settings can be held to plus or minus two (2) turns with standard tooling. Closer depth tolerances can be achieved with optional controls.

The rotary hopper is driven by an electric motor. Screws are oriented and fed into an inclined adjustable hardened track. The escapement mechanism transfers and positions each screw into the placement jaws of the driving head. The jaws grip the screw shank during the initial driving cycle. The placement jaws are opened mechanically after the fastener has started into the workpiece for positive placement. Standard tooling handles screws with thread sizes from No. 4 (M3) to 1/4 inch (M6) and shank lengths up to 1.0 inch (25mm).

The Model SD-107 Screwdriver is ideally suited for operator based work stations where manually placed subassemblies are positioned under the driving head. Dixon also specializes in customized fixturing.



Left: Typical Screwdriving Applications

Model SD-107 Screwdriver

Driving Head Features:

Air Motor (Standard)

Reversible or nonreversible rotation with various torque ranges and speeds. Optional DC electric motors available.

MC-9 Control-Pac

Four-way valve and junction box with terminal strip. Other voltages and switch styles optional. Standard proximity switches are 24 VDC (PNP) pre-wired.

Sensing Control Assembly

Mechanism provides good-part sensing for both torque and depth applications.

Proximity Switch

Three (3) proximity switches provided: **returned** position, **intermediate** (usually made just prior to screw entering work, typically used for a reject timer), **goodpart** (forward).

Optional Blocking Air Motor Valve

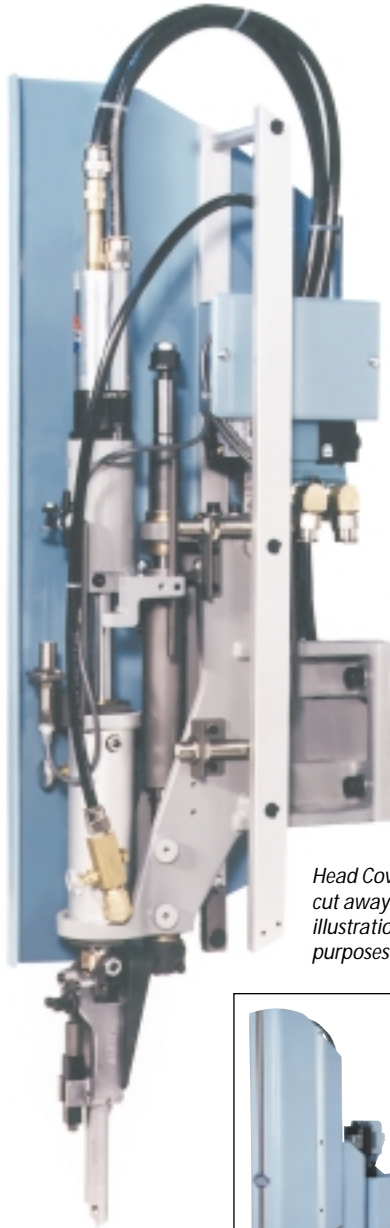
Optional valve package used to control depth of fastener engagement to plus or minus 1/2 turn.

Head Cover

(shown in small photo at right)
Slides upward for access to head.



Typical Fasteners

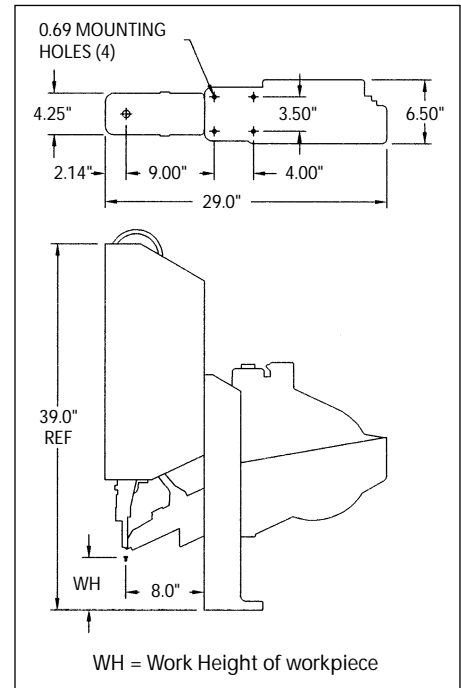


Head Cover cut away for illustration purposes



SD-107

Dimensional Data



NOTE: We reserve the right to make further technical changes without notice.
CAD Drawings are available



Rotary Hopper and Screw Orienting Wheel



Main office and factory

DIXON AUTOMATIC TOOL, INC.

2300 Twenty-Third Ave., Rockford, IL 61104 U.S.A

Phone: 815 / 226-3000 • FAX: 815 / 226-8613

E-mail: sales@dixonautomatic.com

www.dixonautomatic.com