

off the top of the post on the upstroke. However, the longer barrel requires lifting the driver higher when removing it from the post after installation.

At first, we were unable to load a T-post into the Post Mate because a spacer block designed to help hold the post in place was $\frac{1}{8}$ inch too thick. After we ground a $\frac{1}{8}$ -inch groove in the block, the post fit fine. Locking the 10-foot post to the driver proved to be awkward and was almost a two-person job, because the post must be oriented correctly and installed at an angle. Once the driver is locked to the post, getting the post and driver into the vertical position is easy.

The stroke of the Post Mate is only 14 inches, which makes it hard to apply enough force to the post. The upper section of the driver weighs just 21 pounds, also reducing the impact force. It took nearly twice as many blows to drive the post into the ground with the Post Mate as with the one-piece models. The Post Mate's small-diameter handles were somewhat hard on the hands when driving posts. There is no chance of pulling the driver off the post while it is locked in place, an important safety feature. It also seemed easier to keep the post in a vertical position with the Post Mate because the point of impact is lower on the post.

The concept of pulling posts with the Post Mate sounds intriguing, but proved cumbersome. The short upward stroke and the weight of the handles made pulling the post difficult. Attaching the driver as low as possible and using leg muscles more than arm muscles helped.

Recommendations

All of the drivers can drive 10-foot-long T-posts. For driving many posts, the Standard-Signs Model NO4 with the modified, extended handles or the two MDTC drivers work well. The barrel of the NO4 driver could be lengthened 10 to 12 inches to increase the stroke length and to keep the driver from slipping off the top of the post. Doing so would increase the driver's weight to 38 pounds. The NO8 is not well suited for steel T-posts, but may work well for U-channel, small diameter wooden posts, or tube-type posts that require a larger diameter tube and more impact weight.

The MTDC drivers are lighter than the other models tested, but with the longer stroke, they still do as good a job. The MTDC PD-1 tends to drag on the T-post

studs, is more complicated to build, and offers no advantage over the MTDC PD-2. The MTDC PD-2 combines the best concepts of all the single-piece drivers tested, is inexpensive, and is easy to construct (see drawing on page 7).

The Post Mate is a compact driver that can be used to drive and pull T-posts. This works well for driving just a few posts or for driving posts longer than 12 feet. It takes up less space and is easier to pack than other drivers, making it an attractive alternative for packing into the backcountry on horses or mules.

Manufacturers/Vendors

Manual Drivers

Standard-Signs.com (Standard-Signs driver)
218 Rebecca Ln.
Normal, IL 61761
<http://www.standard-signs.com/standard-signs/sigposdriv.html>
Phone: 309-888-6677

Municipal Supply & Sign Co. (Standard-Signs driver listed as DH8 and DH4 manual post drivers)
1095 5th Ave. North
Naples, FL 34102
http://www.municipalsigns.com/post_d_p.html
Phone: 800-329-5366 or 941-262-4639

SCS Integrity & Service (Post Mate driver)
P.O. Box 913
1114 East Marion Ave.
Nashville, GA 31639
<http://www.scsincorporated.com/postmate.htm>
Phone: 800-524-7567

Kencove Fence Supplies (Post Mate driver)
344 Kendall Rd.
Blairsville, PA 15717-8707
<http://www.kencove.com/postdriver.htm>
Phone: 800-536-2683

Missoula Technology and Development Center (MTDC driver drawings)
5785 Hwy. 10 West
Missoula, MT 59808
<http://www.fs.fed.us/eng/t-d.php?link=dwf/nurseries>
Phone: 406-329-3900

Air-Powered Portable Drivers (Not evaluated, but included for information)

Rohrer Manufacturing
<http://www.fencepostdriver.com>
Phone: 800-438-7599, code 03, or 541-548-7746

Rhino Tool Co.
<http://www.rhinotool.com>
Phone: 866-707-1808

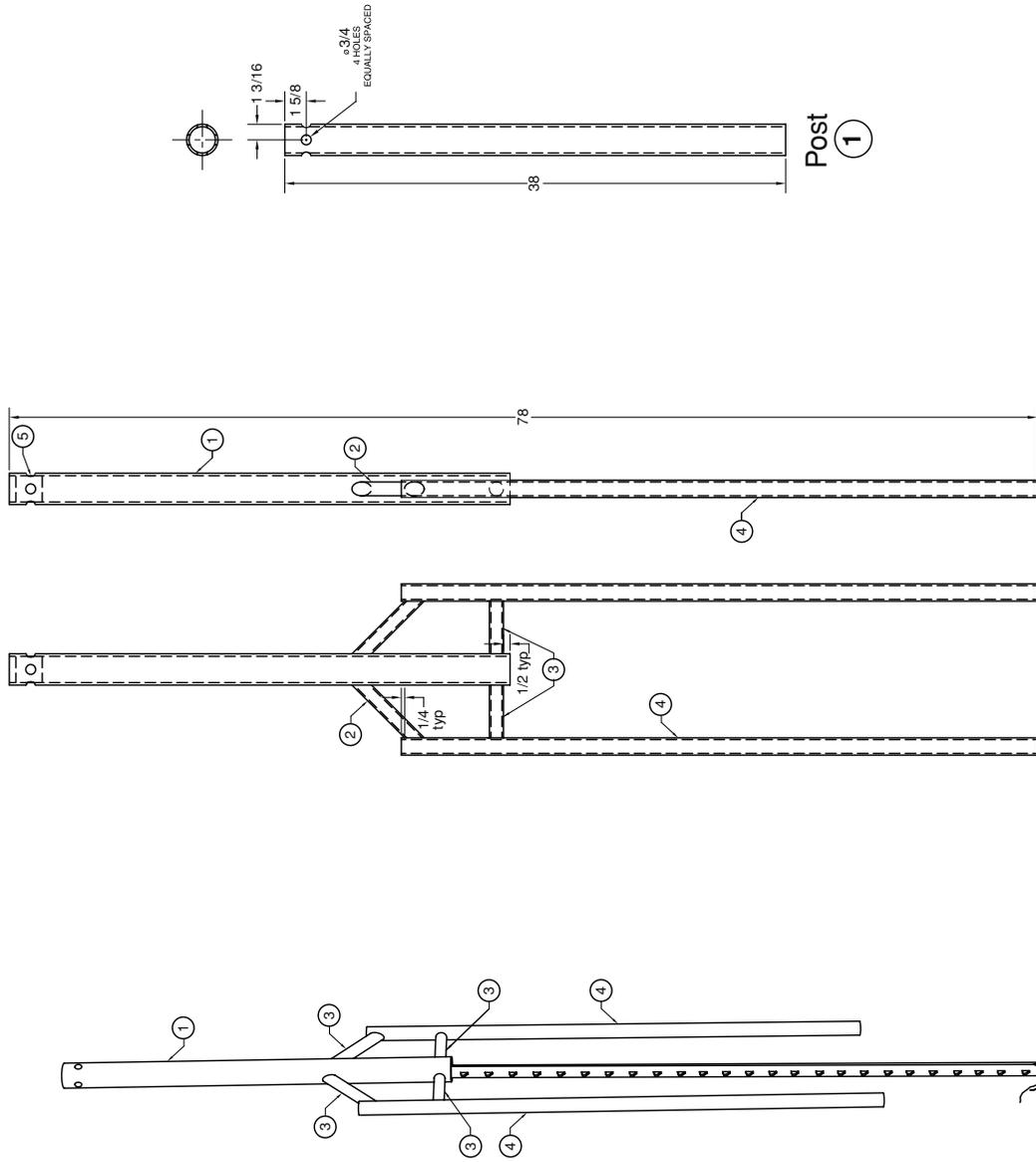
Ovis Ram
<http://www.ovisram.com>
Phone: 417-890-5761

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MATERIAL LIST

No.	Part name	Req'd	Material and description
1	Barrel	1	2-inch x 38 Lg schedule 40 pipe, steel
2	Brace	2	3/4-inch x 6-11/16 Lg schedule 40 pipe, steel
3	Cross brace	2	3/4-inch x 4 Lg schedule 40 pipe, steel
4	Handle	2	1-inch x 48-1/4 Lg schedule 40 pipe, steel
5	Plug	1	2-inch OD x 2 Lg round rod, mild carbon steel



Welded construction
(specific welds noted)

Post driver assembly

Post driver

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U.S. Department of Agriculture • Forest Service
Technology & Development Center
Missoula, Montana

TITLE
POST DRIVER (PD-2)
(Tall posts)

Drawn: D. Mucci
Designed: G. Kees
Checked: G. Kees
Approved: G. Kees
Scale: 1/4"
Date: Sep. 2003

SHEET 1 OF 1 MTDC-1026

Author

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University of Idaho. Before coming to MTDC in 2002, he worked for Monsanto in Soda Springs, ID, as a mechanical/structural engineer and project manager.

Library Card

Kees, Gary. 2003. Manual post drivers for 8- to 10-foot-tall metal T-posts. Tech Tip 0324–2340–MTDC. Missoula, MT: U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center. 8 p.

Evaluates five manual post drivers suited for driving metal T-posts that are 8 to 10 feet long. Standard drivers can't be used for such long posts unless the operator stands on a ladder or in the back of a truck, practices that aren't practical in remote areas and aren't safe on steep terrain. Drivers for longer posts

have long handles that allow the driver to be used by an operator standing on the ground. The drivers tested included the Standard-Signs Models NO4 and NO8, the Post Mate, and two drivers developed by the Missoula Technology and Development Center, the PD–1 and PD–2. The tech tip includes information on commercially available models and on two models designed by the Missoula center.

Keywords: design drawings, equipment, evaluation, fences, tools

Additional single copies of this document may be ordered from:

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