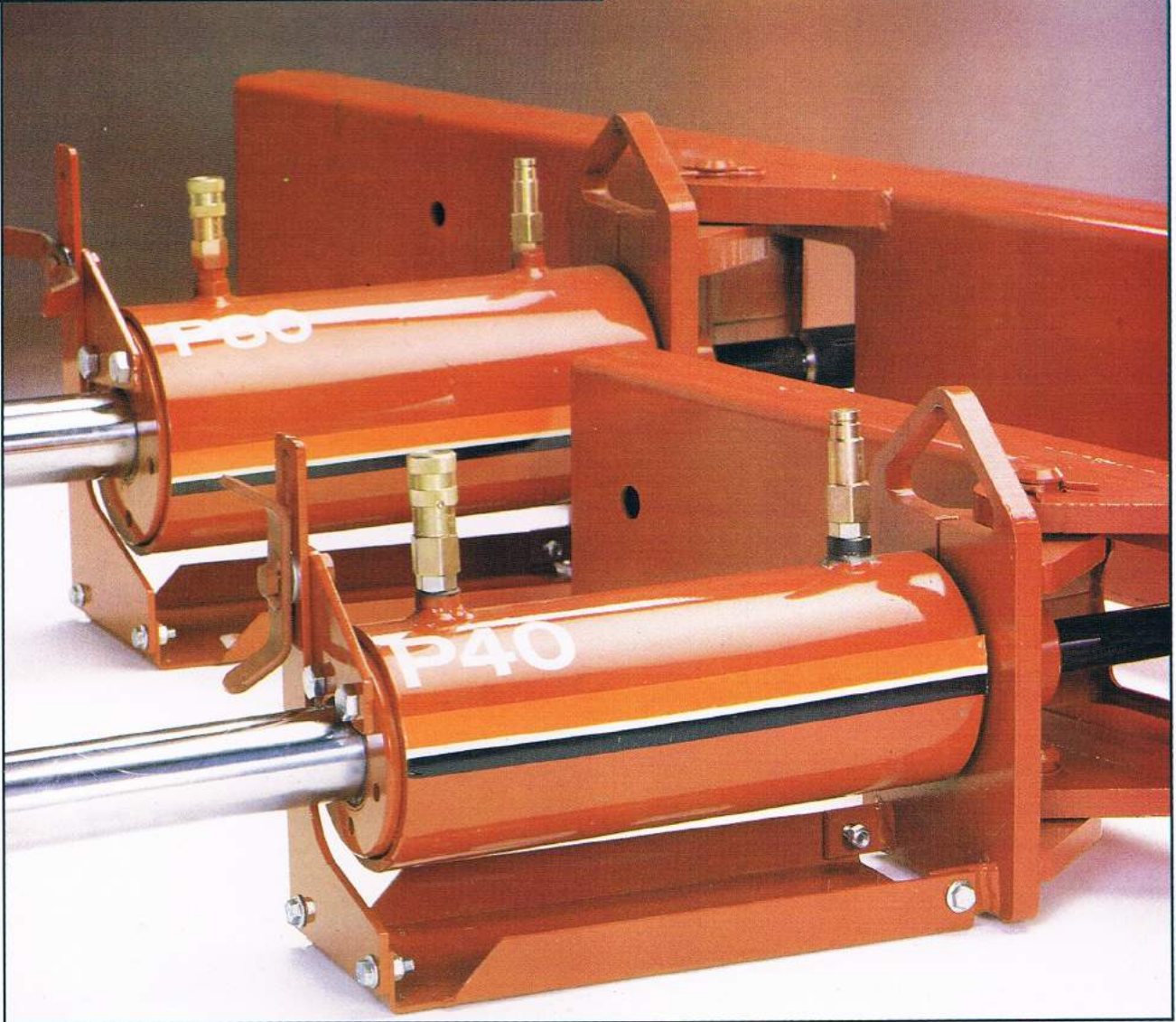


DITCH WITCH®

P40/P80

LONG-RANGE DIRECTIONAL ROD PUSHERS



The
Underground
Authority.
WORLDWIDE



P40 and P80. Long-range, directional rod pushers.

Ditch Witch P40 and P80 rod pushers are simple, compact devices that thrust a string of push rods through the ground from a small, subsurface starting pit. These rod pushers are a proven way to achieve economical, long-distance guided bores for pipe and cable installations. A P40 or P80 rod pusher offers you the advantage of directional boring in an affordable and easily transportable package.



Unique hydraulic cylinder and rod rotating mechanism (not shown) rotates while pushing for more stable, accurate directional control.

- **P40:** 39,000 lbs. of pulling/pushing force; bores distances of 200 ft. or more.
- **P80:** 80,000 lbs. of pulling/pushing force; bores distances of 500 ft. or more.

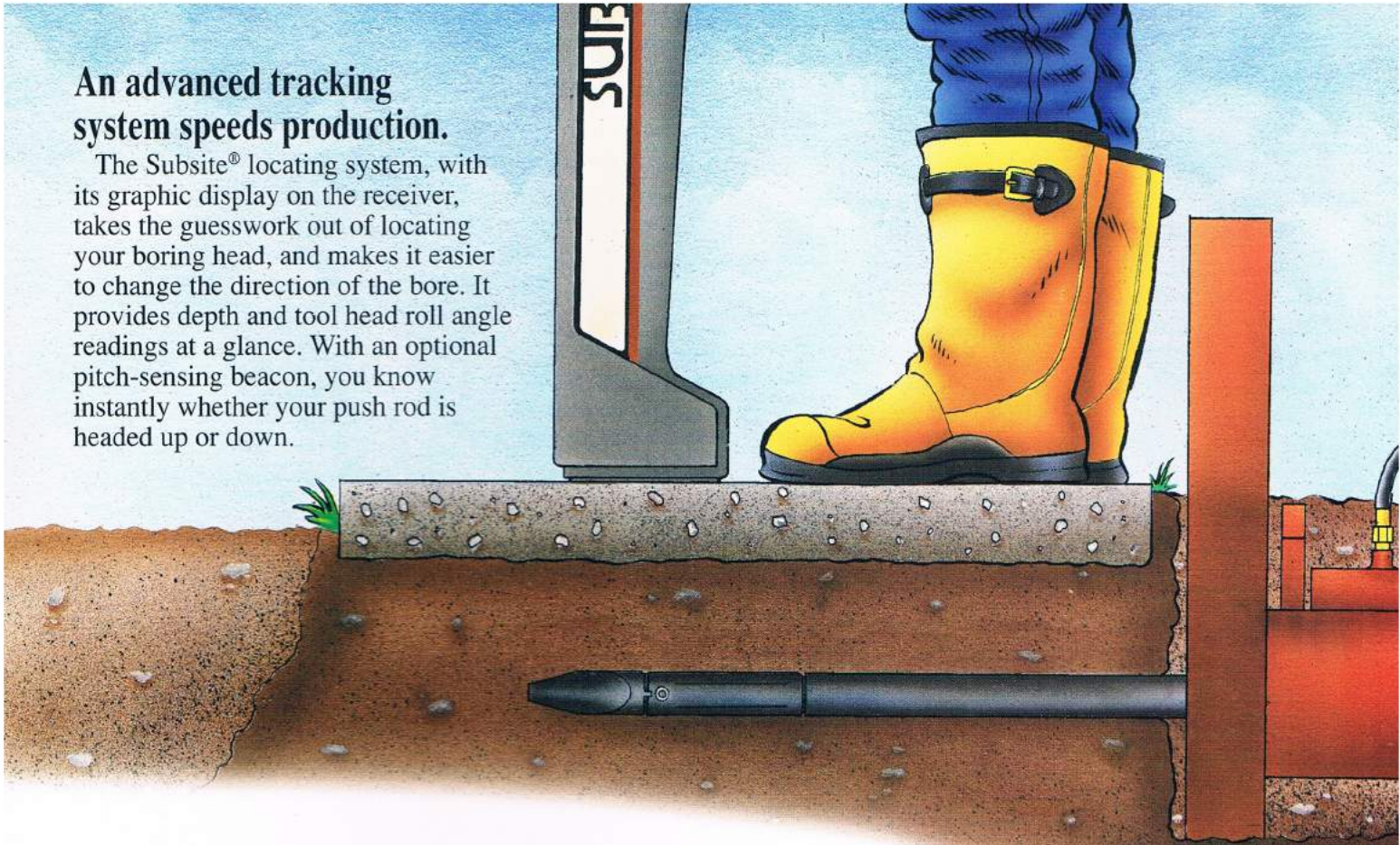
Stay the course.

Ditch Witch rod pushers feature a unique hydraulic cylinder and rod rotating mechanism that continuously rotates the rod while pushing or pulling. This guidance method permits correcting the bore if the boring head is deflected off course by subsurface obstruction.

Rotating while advancing the rod makes the rod head proceed straight ahead. To change direction, the directional head is positioned in the desired direction of travel. Then, the rod is pushed forward. The rod head deflects along a new bore path. Continued rod rotation stabilizes the new bore direction.

An advanced tracking system speeds production.

The Subsite[®] locating system, with its graphic display on the receiver, takes the guesswork out of locating your boring head, and makes it easier to change the direction of the bore. It provides depth and tool head roll angle readings at a glance. With an optional pitch-sensing beacon, you know instantly whether your push rod is headed up or down.



Boring/shoring platform.

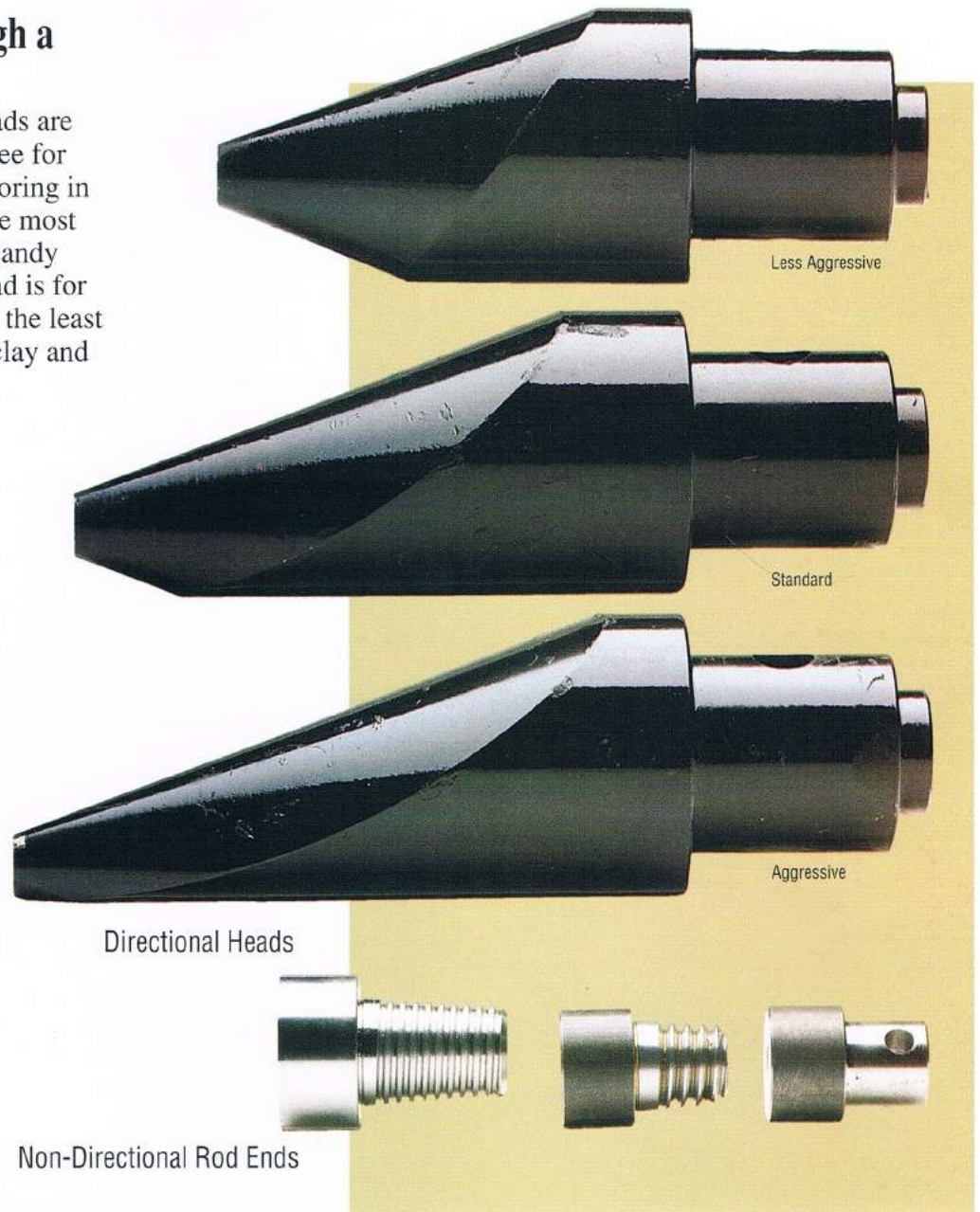
The optional Ditch Witch rod pusher trench box serves as both a shoring and a pushing platform. A rod pusher cylinder truss frame provides strong, fixed support and permits boring in either direction from the same bore pit. The open bottom box design makes line connections easy. The trench box lifts up and around a completed connection.

The trench box measures 4 feet high; with extensions it can be placed 18 feet below ground level in Type A soil. Storage racks on the inside walls of the box keep rods conveniently at hand. A complete electrical strike system is an available option with the trench box.



Bore effectively through a variety of soils.

Two directional boring heads are available for the P40 and three for the P80, each designed for boring in different soil conditions. The most aggressive slant head is for sandy soils. The standard slant head is for normal soil conditions. And the least aggressive slant head is for clay and other hard soils.



Directional Heads

Non-Directional Rod Ends

Monitor bore progress continuously.

P40 and P80 rod pushers use a Subsite transmitter beacon in the push rod's boring head to send location, head roll angle and pitch data to a Subsite receiver at the surface.

For depths to 22 feet, the 85BRP beacon works with the model 80RP or 66TKR receivers. For complete tracking information at depths to 35 feet, or location and depth information only at depths to 50 feet, choose the 85BRPH beacon and 66TKR receiver.

The Subsite locating system permits continuous display of the boring head data regardless of its rotation angle. There's no need to have the boring head at the 12 o'clock position to obtain a rotation reading.



Beacon Housings

83BR Directional Beacon

Choose from two rod pushers, three setup options.

The T-Bar rod pusher is a quick, economical way to set up in narrow trenches for pushes and utility pullbacks.

The backbrace rod pusher sets up easily in a narrow pit, while offering the support to do long-range directional boring.

The trench box rod pusher provides the ultimate in anchoring stability for long-range directional bores and/or large diameter pullbacks, while meeting shoring requirements for less stable soils or deep bore pits.

P40: A big push in a small package.

The P40 pushes and pulls rod with 39,000 pounds of force. In normal conditions, it is capable of bore lengths of 200 feet or more through compactible soils. As little as 6.5 feet of working area is needed to operate the P40, making it ideal for urban installations.

P80: Power and guidability for the biggest jobs.

The P80 can apply 80,000 pounds of force to pushing or pulling tasks. It can bore distances of 500 feet or more and expand the borehole diameter to more than 12 inches in some conditions. Paired with a Subsite locator and transmitter tracking system, the P80 is an economical directional boring system with a range more than adequate for virtually any rod pushing job.

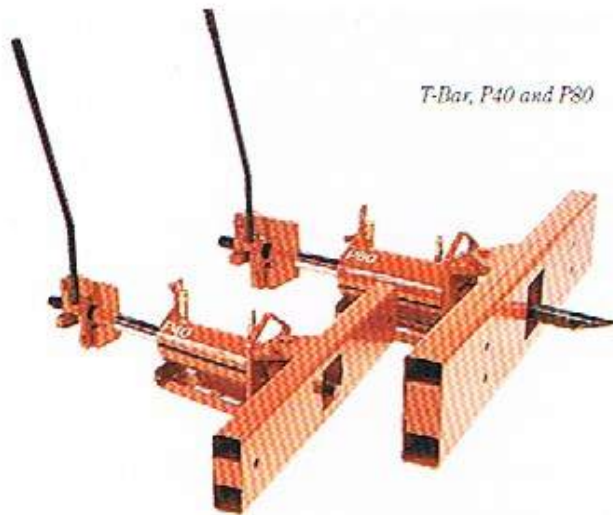
Setup is quick and simple.

A trencher or backhoe can dig the starting pit for the rod pushers in just a few minutes. A backhoe can lift and place either rod pusher into and out of the starting pit and back onto the trailer.

A Ditch Witch TransPac trailer package completes the system, making rod pushing jobs organized, efficient and easier to set up.

The rod pusher can be powered by a Ditch Witch Power Pac 16 or Power Pac 25. You can also use any Ditch Witch trencher having a hydraulic manifold, or a hydraulic power source not exceeding 2,500 psi.

T-Bar, P40 and P80

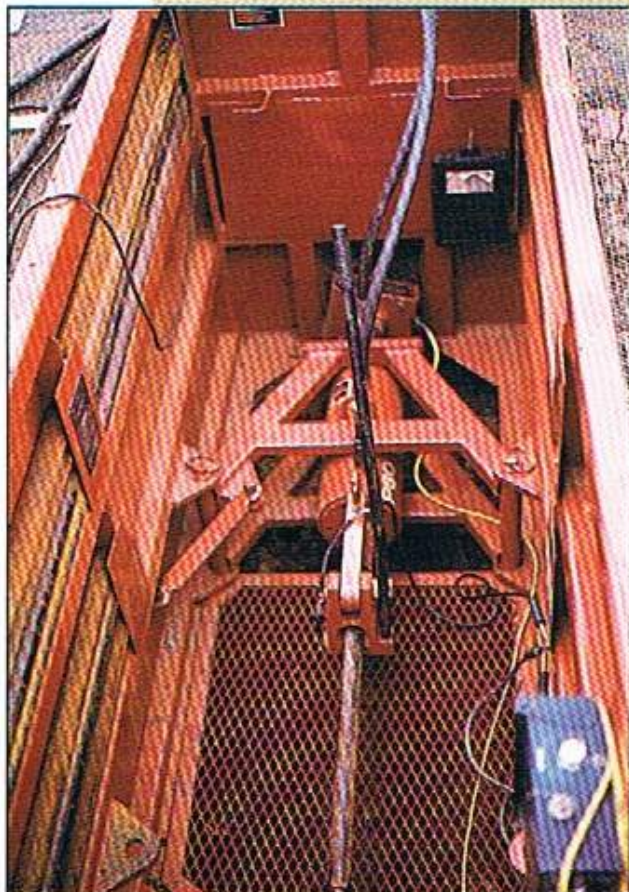


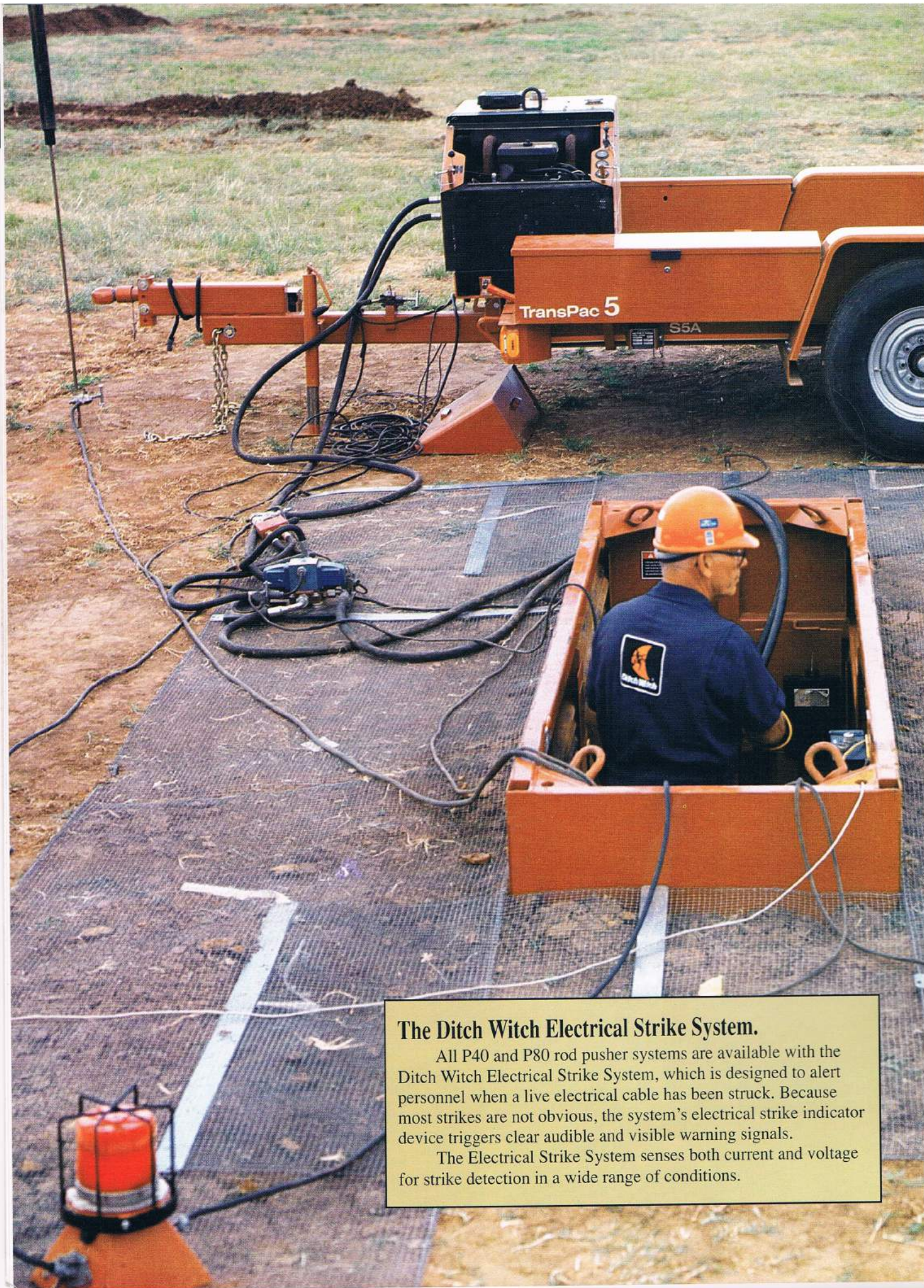
Back Brace Support



Back Brace P40

Trench Box





The Ditch Witch Electrical Strike System.

All P40 and P80 rod pusher systems are available with the Ditch Witch Electrical Strike System, which is designed to alert personnel when a live electrical cable has been struck. Because most strikes are not obvious, the system's electrical strike indicator device triggers clear audible and visible warning signals.

The Electrical Strike System senses both current and voltage for strike detection in a wide range of conditions.

ROD PUSHER BORING/SHORING PLATFORM OPTION

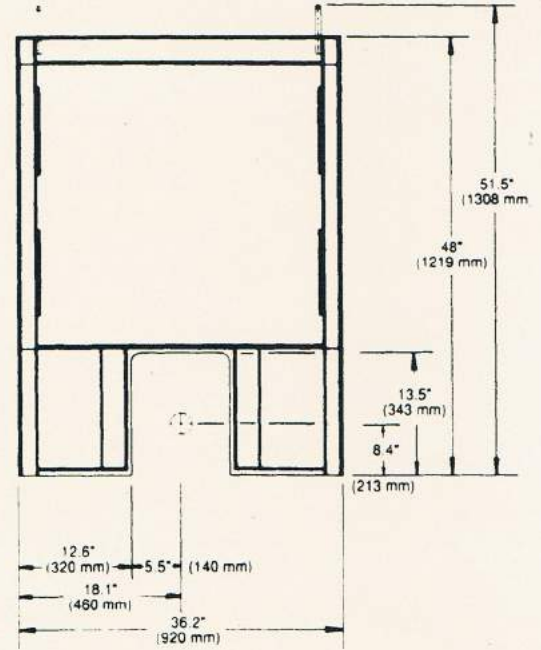
DIMENSIONAL:	U.S.	METRIC
Length	108 in	2.7 m
Width	36 in	920 mm
Height	48 in	1.2 m
Weight (basic trench box)	925 lb	420 kg
Weight (box w/P40 installed)	1130 lb	510 kg
Weight (box w/P80 installed)	1240 lb	560 kg
Weight (box w/P80 and 42 4-ft. rods)	2700 lb	1225 kg
Weight (4-ft. extension pkg.)	800 lb	360 kg

Maximum soil pressure on trench box or extension is 525 lbf/ft².

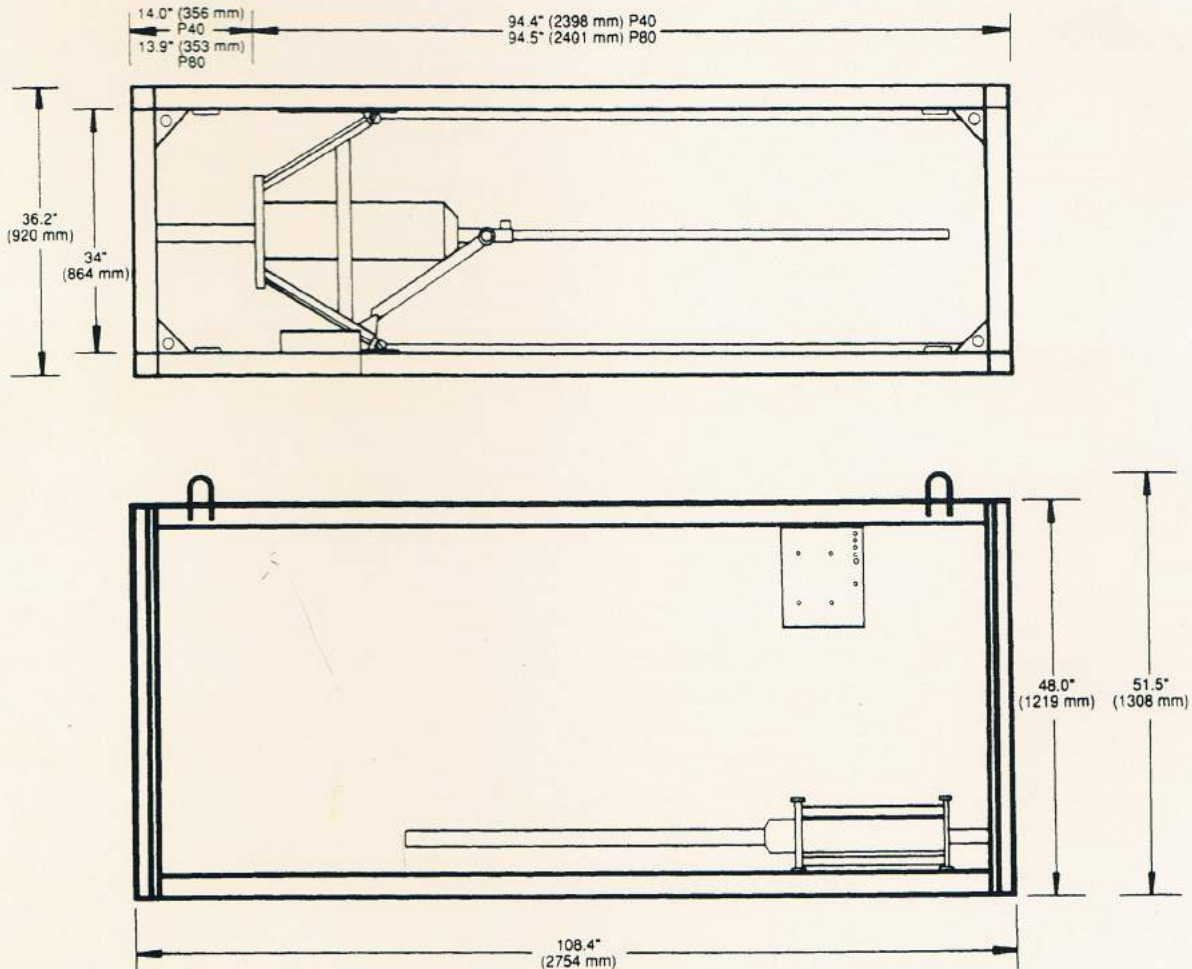
FOR SOIL TYPE:	MAX. BURIAL DEPTH:	
A	18 ft	5.5 m
B	10 ft	3.0 m
C	5 ft	1.7 m

Maximum burial depths are measured from surface of the ground to bottom of trench box, and assume maximum spoil surcharge of 2 ft (0.6 m).

Specifications are called out according to SAE recommended practices. Specifications are general and subject to change without notice. If exact measurements are required, equipment should be weighed and measured. Due to selected options, delivered equipment may not necessarily match that shown.

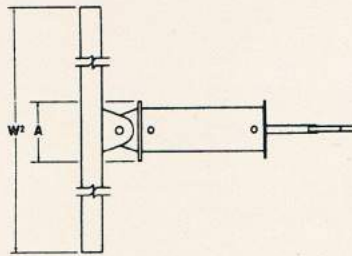
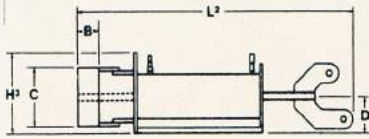


BORING/SHORING PLATFORM

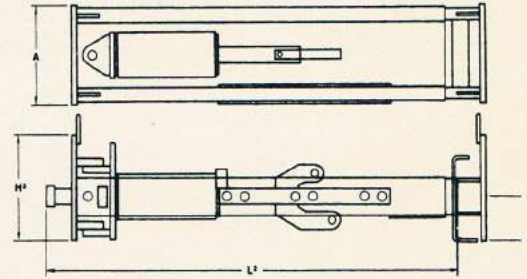


S P E C S

P40/P80



T-BAR OPTION



BACKBRACE OPTION

P40 ROD PUSHER

OPERATIONAL:	U.S.	METRIC
Stroke, each cycle	9 in	230 mm
Tunnel diameter, max.	13 in	325 mm
Hydraulic flow, min. to max.	5-16 gpm	20-60 L/min
Hydraulic pressure max.	2500 psi	170 bar
Cylinder force at 2500 psi (push and pull)	39,000 lb	17 800 kg

P40 T-BAR OPTION

DIMENSIONAL:		
A.	Cylinder width	6.0 in / 150 mm
B.	T-Bar width	3.0 in / 80 mm
C.	T-Bar height	8.0 in / 200 mm
D.	Base to cylinder centerline	5.5 in / 140 mm
H ²	Height, w/o handle	13 in / 320 mm
L ²	Length, T-Bar installed w/ cylinder retracted	36 in / 990 mm
W ²	Width, T-Bar	48 in / 1.2 m
	Push rod diameter	1.375 in / 35 mm
	Weight, basic unit	143 lb / 65 kg
	T-Bar, weight	66 lb / 30 kg
	Operating weight	209 lb / 95 kg

P40 BACKBRACE OPTION

DIMENSIONAL:		
L ²	Length, min. to max.	67-94 in / 1.7 - 2.4 m
A.	Width	17 in / 430 mm
H ²	Height	14 in / 350 mm
	Height from base to centerline of bore	6 in / 150 mm
	Level adjustment height	3 in / 75 mm
	Weight	297 lb / 135 kg
	Operating weight with basic unit	440 lb / 200 kg

P80 ROD PUSHER

OPERATIONAL:	U.S.	METRIC
Stroke, each cycle	9 in	230 mm
Tunnel diameter, max.	13 in	325 mm
Hydraulic flow, min. to max.	5-20 gpm	20-75 L/min
Hydraulic pressure, max.	2500 psi	170 bar
Cylinder force at 2500 psi (push and pull)	80,000 lb	36 800 kg

P80 T-BAR OPTION

DIMENSIONAL:		
A.	Cylinder width	8 in / 200 mm
B.	T-Bar width	6 in / 145 mm
C.	T-Bar height	12 in / 300 mm
D.	Base to cylinder centerline	7.2 in / 180 mm
H ²	Height, w/o handle	16 in / 400 mm
L ²	Length, T-Bar installed with cylinder retracted	42 in / 1 m
W ²	Width, T-Bar	72 in / 1.8 m
	Push rod diameter	1.75 in / 44 mm
	Weight, basic unit	253 lb / 115 kg
	T-Bar, weight	204 lb / 93 kg
	Operating weight	462 lb / 210 kg

P80 BACKBRACE OPTION

DIMENSIONAL:		
L ²	Length: min. to max.	72-100 in / 1.8 - 2.5 m
A.	Width	17 in / 430 mm
H ²	Height	18 in / 450 mm
	Height from base to centerline of bore	7.6 in / 190 mm
	Level adjustment height	6 in / 150 mm
	Weight	440 lb / 200 kg
	Operating weight with basic unit	704 lb / 320 kg

Specifications are called out according to SAE recommended practices. Specifications are general and subject to change without notice. If exact measurements are required, equipment should be weighed and measured. Due to selected options, delivered equipment may not necessarily match that shown.

AUTHORIZED DEALER:



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