



DITCH WITCH 410SX, 255SX, 100SX

# VIBRATORY PLOWS



FEEL THE EARTH MOVE. **DITCH WITCH.**





**Ditch  
Witch**<sup>®</sup>

PLOW SWING LOCK  
PUSH   
PULL 



# DITCH WITCH 410SX PLOW

Nothing gets down and dirty like the Ditch Witch® 410sx, the most outstanding articulated-steer vibratory drop plow in the 30-hp (22 kW) class. With dozens of innovative features, including a plow vibrator with automatic blade centering, the 410sx quickly and efficiently gets to the bottom of things, installing communication lines, natural gas and water services, or a complete underground sprinkler system without digging a trench. But if it's a trench you need, the 410sx can dig it.



## DETAILS

Easily accessible, easy-to-understand, color-coded controls; one lever controls ground speed, direction and steering.

When attachment or ground drive is engaged, operator-presence system stops the engine if operator releases the control.

Plow trolley automatically centers itself when the plow blade is raised from the ground while plowing or trenching; a manual lock secures the trolley during transport.

Optional front-mounted trencher attachment works as hard as many dedicated trenchers.

Centerline digging attachment features an auger for fast spoils removal.

Powerful four-cylinder, indirect-injection, liquid-cooled diesel engine.

Engine is enclosed for quiet operation, and vibration-isolated to reduce operator fatigue.

## KEY FEATURES

Articulated-frame steering enables the 410sx to maneuver around trees and other obstacles.

Oscillating rear axle allows four-wheel drive to provide excellent traction.

Direct hydrostatic ground, plow and trencher drives require no chain adjustments.

Pin joint bushings require no lubrication.

# DITCH WITCH 255SX/100SX PLOWS

The Ditch Witch 255sx and 100sx do more than stand their ground against the competition. With a powerful, durable frame, the 255sx was built, tested and proven to provide outstanding productivity, efficiency, and reliability. The 100sx features high-flotation tires that give you all the traction you need without manhandling the turf, and its Honda engine gives you the necessary power without assaulting your ears. Both units keep noise and vibration where they belong—below the surface.



## KEY FEATURES

Versatile plow blade can bury pipe and cable with cover of 6, 8, 10 or 12 inches (150, 200, 250 or 305 mm).

Compact size allows access through a standard yard gate.

## DETAILS

Designed to install power and communications lines up to one inch (25 mm) in diameter and natural gas, water service and sprinkler systems up to three inches (76 mm) in diameter (up to 0.75 inch/19 mm for the 100sx).

All controls are accessible from the operator's position for easy operation.

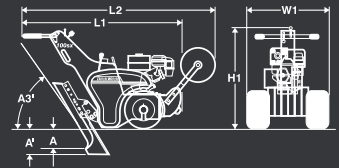
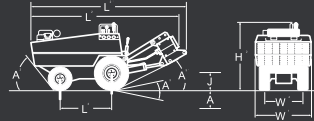
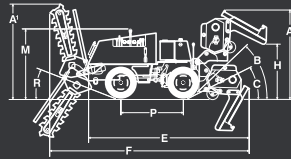
Self-propelled design for better maneuverability.

Feed and pull blades available for installing cable, pipe, and other material.

Hydrostatic ground drive provides greater traction, maneuverability, and durability.

Minimal maintenance requirements; easy access to service points.

The Ditch Witch organization supports all of its products with superior-quality parts, service and training, all available from a worldwide network of Ditch Witch dealers.



## SPECIFICATIONS

## 410SX

## 255SX

## 100SX

### DIMENSIONS

TRANSPORT HEIGHT  
 TOP OF RAISED PLOW  
 TOP OF 2' BOOM & CHAIN  
 ANGLE OF DEPARTURE,  
 W/O BLADE  
 W/18-IN (460 MM) BLADE  
 W/12-IN (305 MM) BLADE  
 MAXIMUM LENGTH PLOWING,  
 W/O TRENCHING ATTACHMENT  
 W/TRENCHING ATTACHMENT  
 W/O REEL CARRIER  
 TRANSPORT LENGTH  
 W/ TRENCHING ATTACHMENT,  
 36" BOOM, 18" BLADE  
 W/O REEL CARRIER  
 MAXIMUM LENGTH,  
 W/O REEL CARRIER  
 W/ REEL CARRIER  
 WIDTH, TRANSPORT  
 23 X 10.50-12 TIRES  
 26 X 12.00-12 TIRES  
 23 X 10.50-12 DUAL WHEELS  
 MAXIMUM COVER DEPTH\*  
 OPERATING HEIGHT  
 WHEELBASE  
 ANGLE OF APPROACH  
 W/TRENCHING ATTACHMENT  
 W/25-IN (635 MM) REEL

U.S.	METRIC
58 IN	1.47 M
62 IN	1.58 M
42°	42°
19°	19°
N/A	N/A
120 IN	3.05 M
160 IN	4.06 M
120 IN	3.05 M
183 IN	4.65 M
N/A	N/A
N/A	N/A
N/A	N/A
36 IN	910 MM
44.5 IN	1.13 M
56 IN	1.42 M
24 IN	610 MM
51 IN	1.30 M
46 IN	1.17 M
36°	36°
18°	18°
23°	23°

U.S.	METRIC
N/A	N/A
N/A	N/A
40°	40°
N/A	N/A
17°	17°
N/A	N/A
N/A	N/A
94 IN	2.39 M
N/A	N/A
N/A	N/A
N/A	N/A
95 IN	2.41 M
N/A	N/A
N/A	N/A
N/A	N/A
35.8 IN	910 MM
N/A	N/A
N/A	N/A
18 IN	340 MM
46 IN	1.17 M
34 IN	860 MM
53°	53°
N/A	N/A
28°	28°

U.S.	METRIC
N/A	N/A
N/A	N/A
50°	50°
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
67 IN	1.70 M
86.5 IN	2.20 M
35 IN	889 MM
N/A	N/A
N/A	N/A
12 IN	305 MM
40 IN	1.02 M
N/A	N/A
37°	37°
N/A	N/A
N/A	N/A

### OPERATION

MAXIMUM SPEED FORWARD  
 26 X 12.00-12 TIRES  
 23 X 10.50-12 TIRES  
 MAXIMUM SPEED REVERSE  
 26 X 12.00-12 TIRES  
 23 X 10.50-12 TIRES  
 MAXIMUM CROWD FORWARD  
 MAXIMUM CROWD REVERSE  
 MAXIMUM PIPE OR CABLE DIAMETER  
 PULL-TYPE PLOW BLADE  
 FEED-TYPE PLOW BLADE  
 VEHICLE CLEARANCE CIRCLE,  
 WALL-TO-WALL (SAE)  
 AXLE LOCKED, DRIVE  
 AXLE UNLOCKED, DRIVE  
 WITH TRENCHING ATTACHMENT  
 AND 18" PLOW BLADE  
 26 X 12.00-12 TIRES  
 23 X 10.50-12 TIRES  
 OPERATING WEIGHT,  
 BASIC UNIT W/O PLOW BLADE  
 H400 WEIGHT W/O BOOM,  
 CHAIN, OR RESTRAINT BAR  
 REEL CARRIER WEIGHT W/O REEL  
 HYDRAULIC MOTOR, DRILLING  
 MAX TORQUE  
 MAX SPEED

2.4 MPH	3.9 KM/H
2.2 MPH	3.5 KM/H
1.3 MPH	2.1 KM/H
1.0 MPH	1.6 KM/H
N/A	N/A
N/A	N/A
3 IN	75 MM
1 IN	25 MM
N/A	N/A
N/A	N/A
21 FT	6.40 M
20 FT	6.10 M
3310 LB	1501 KG
310 LB	141 KG
100 LB	45 KG
450 FT•LB	610 N•M
235 RPM	235 RPM

N/A	N/A
215 FPM	65.5 M/MIN
N/A	N/A
215 FPM	65.5 M/MIN
83 FPM	25.5 M/MIN
83 FPM	25.5 M/MIN
3 IN	75 MM
1 IN	25 MM
26 FT	7.93 M
16.5 FT	5.03 M
N/A	N/A
N/A	N/A
1650 LB	748 KG
N/A	N/A
28 LB	13 KG
421 FT•LB	571 N•M
139 RPM	139 RPM

N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
92 FPM	28.0 M/MIN
92 FPM	28.0 M/MIN
0.75 IN	19 MM
0.38 IN	9 MM
70 IN	1.79 M
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

DIMENSIONS ARE BASED ON UNIT EQUIPMENT WITH 26 X 12.00-12 TIRES UNLESS OTHERWISE SPECIFIED. DIMENSIONS ARE BASED ON UNIT EQUIPPED WITH 12-INCH PLOW BLADE. FOR EMPTY REEL CARRIER, ADD 12 INCHES TO OVERALL LENGTHS. \*SUGGESTED MAXIMUM DEPTH. ACTUAL DEPTH WILL DEPEND ON JOB REQUIREMENTS AND SOIL CONDITIONS.



# SPECIFICATIONS

# 410SX

# 255SX

# 100SX

**POWER**  
ENGINE  
FUEL  
COOLING MEDIUM  
INJECTION  
ASPIRATION  
NUMBER OF CYLINDERS  
DISPLACEMENT  
BORE  
STROKE  
MANUFACTURER'S GROSS POWER  
RATING (SAE J1995)  
RATED SPEED  
ESTIMATED NET POWER RATING (SAE J1349)

U.S.	METRIC
CATERPILLAR 3013C	
DIESEL	
LIQUID	
INDIRECT	
NATURAL	
3	
91.5 IN <sup>3</sup>	1.5 L
3.31 IN	84 MM
3.54 IN	90 MM
31.4 HP	23.4 KW
2600 RPM	2600 RPM
29 HP	22 KW

U.S.	METRIC
HONDA GX670	
GASOLINE	
AIR	
N/A	
NATURAL	
2	
40.9 IN <sup>3</sup>	670 CM <sup>3</sup>
3.03 IN	77 MM
2.83 IN	72 MM
24 HP	17.6 KW
3600 RPM	3600 RPM
N/A	N/A

U.S.	METRIC
HONDA GX340	
GASOLINE	
AIR	
N/A	
NATURAL	
1	
20.6 IN <sup>3</sup>	337 CM <sup>3</sup>
3.23 IN	82 MM
2.52 IN	64 MM
11 HP	8.2 KW
3600 RPM	3600 RPM
N/A	N/A

## POWER TRAIN

GROUND DRIVE TRANSMISSION

HYDROSTATIC DRIVE, INFINITELY VARIABLE FROM ZERO TO MAXIMUM, LEVER-OPERATED SPEED/DIRECTION CONTROL  
DANA 44, LIMITED SLIP

HYDROSTATIC DRIVE, INFINITELY VARIABLE FROM ZERO TO MAXIMUM, LEVER-OPERATED SPEED/DIRECTION CONTROL  
N/A

HYDROSTATIC, INFINITELY VARIABLE FORWARD AND REVERSE, 3:1 CHAIN DRIVE FROM MOTOR TO AXLE  
N/A

DIFFERENTIALS

BRAKE

SERVICE

GROUND DRIVE SPEED/DIRECTION CONTROL BRAKES MACHINE HYDRAULICALLY WHEN MOVED TO NEUTRAL POSITION  
DISC, HAND-OPERATED

GROUND DRIVE SPEED/DIRECTION CONTROL BRAKES MACHINE HYDRAULICALLY WHEN MOVED TO NEUTRAL POSITION  
DISC, HAND-OPERATED

N/A

N/A

PARKING

TIRES

23 X 10.50-12

26 X 12.00-12

16 X 6.50-8

18 X 11.00-8

20 PSI 138 KPA

20 PSI 138 KPA

N/A N/A

N/A N/A

20 PSI 138 KPA

N/A N/A

28 PSI 193 KPA

N/A N/A

N/A N/A

N/A N/A

28 PSI 193 KPA

7 PSI 48 KPA

## HYDRAULIC SYSTEM

GROUND DRIVE PUMP CAPACITY  
ATTACHMENT PUMP CAPACITY  
AUXILIARY PUMP CAPACITY  
AUXILIARY RELIEF VALVE  
GROUND DRIVE CAPACITY WHILE PLOWING  
GROUND DRIVE RELIEF VALVE  
ATTACHMENT RELIEF VALVE

17 GPM	64.4 L/MIN
19 GPM	71.9 L/MIN
8 GPM	30.3 L/MIN
2000 PSI	138 BAR
N/A	N/A
4000 PSI	276 BAR
3000 PSI	207 BAR

12.5 GPM	47.3 L/MIN
12.5 GPM	47.3 L/MIN
3.6 GPM	13.6 L/MIN
2000 PSI	138 BAR
6.7 GPM	25.4 L/MIN
2250 PSI	155 BAR
2000 PSI	138 BAR

2.2 GPM	8.3 L/MIN
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
2000 PSI	138 BAR
N/A	N/A

## FLUID CAPACITIES

FUEL TANK  
ENGINE OIL  
VIBRATOR OIL  
HYDRAULIC RESERVOIR

9 GAL	34 L
6.3 QT	6.0 L
38 OZ	1.1 L
14 GAL	53 L

9 GAL	34 L
2 QT	1.9 L
24 OZ	710 ML
11 GAL	N/A

1.7 GAL	6.5 L
2.3 PT	1.1 L
N/A	N/A
3.5 GAL	N/A

## BATTERY

GROUP  
SAE RESERVE CAPACITY RATING  
SAE COLD CRANK RATING @ 0° F (-18° C)

26/26R/70  
90 MIN  
720 AMPS

U1  
32 MIN  
200 AMPS

N/A  
N/A  
N/A

## OPTIONAL EQUIPMENT

H400 TRENCHER ATTACHMENT  
TRENCH DEPTH, MAXIMUM  
TRENCH WIDTH, MIN. TO MAX.  
BOOM TRAVEL UP  
BOOM TRAVEL DOWN  
CENTERLINE TRENCH TO OUTSIDE EDGE OF MACHINE, LEFT  
CENTERLINE TRENCH TO OUTSIDE EDGE OF MACHINE, RIGHT  
HEADSHAFT HEIGHT, DIGGING CHAIN UP  
DOWN  
HEADSHAFT SPEED  
DIGGING CHAIN SPEED  
REEL CARRIER  
MAXIMUM REEL DIAMETER  
MAXIMUM REEL WEIGHT  
DRILLING ATTACHMENT  
BORE DIAMETER

36 IN	910 MM
3.5 - 6 IN	90 - 150 MM
57°	57°
78°	78°
20 IN	510 MM
25 IN	630 MM
21 IN	535 MM
8 IN	200 MM
310 RPM	310 RPM
338 FPM	103 M/MIN
36 IN	914 MM
200 LB	91 KG
1.75 - 12 IN	45 - 305 MM

N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
25 IN	635 MM
100 LB	45.4 KG
1.75 - 8 IN	45 - 205 MM

N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A



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