

LIQUID MANURE SPREADERS AND TOOL BARS



HOULE

To spread all types
of liquid manure

EL48 SPREADERS WITH POWER STEERING AND HYDRAULIC SUSPENSION

Power Steering

The Houle Power Steering System is unique and the only one that matches the turning angle of the tractor.



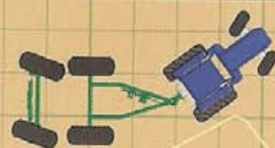
This patented system reduces damage to vegetation and eliminates strain on spreader hubs, axles and chassis.

Improved Safety. The power steering system of the EL48 spreaders ensures a safer operation.

The operator can disengage the power steering system in order to improve stability while traveling on the road.

When disengaged, the wheels are maintained parallel to the reservoir by heavy duty compression springs.

EL48-4D SPREADER



EL48-6D SPREADER



EL48-8D SPREADER



Clevis and Pintle Hitches



The power steering system is protected by a spring-loaded mechanism.

EL48 SPREADERS WITH POWER STEERING AND HYDRAULIC SUSPENSION

Hydraulic Suspension


The 12" Stroke Hydraulic Suspension allows for smoother travel over irregular terrain and reduces stress to the reservoir.





Suspension Design

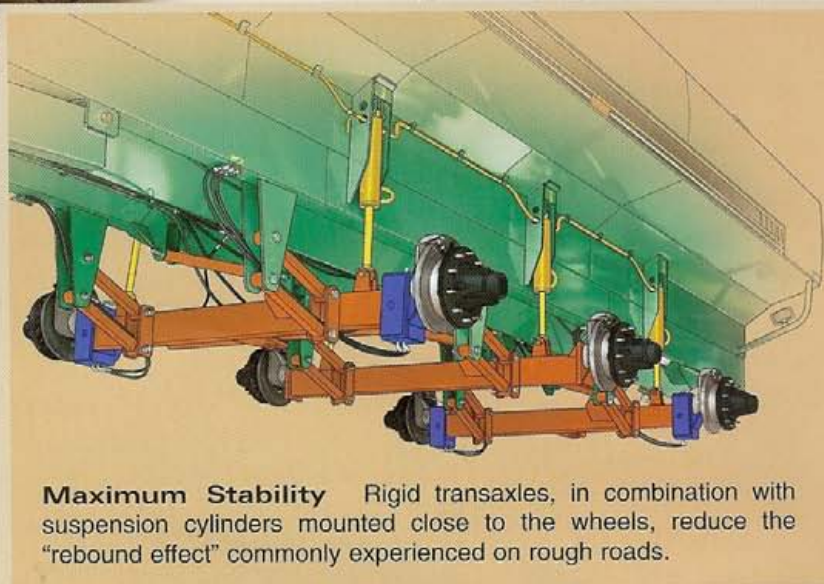
Suspension cylinders are located close to the center of gravity of the reservoir.

When the spreader is full, this unique design reduces excessive load variations on the draw bar and improves the traction of the tractor.

 Axles are attached under the tank by 4 sway bars and 1 cross member mounted on maintenance-free rubber bushings.

 Suspension cylinders provide equal weight distribution on each wheel.

 The steerable axle(s) chromed king pins are mounted with greaseable brass bushings. Bolted axles are easy to remove.



Maximum Stability Rigid transaxles, in combination with suspension cylinders mounted close to the wheels, reduce the "rebound effect" commonly experienced on rough roads.

Optional Weight Transfer System

The **Weight Transfer System** is operated on demand by the operator to increase the traction of the tractor as needed.

Note: The load transfer system is normally off and must be connected at all times to a tractor outlet set on float mode.

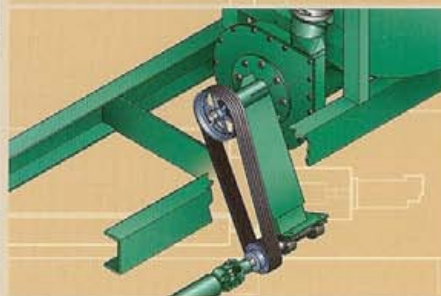


TRUCK MOUNT SPREADERS

Low profile tanks for maximum visibility and stability. Standard 1/4" steel. Available with optional bolted fenders for 2 or 3 axles.



Optional Mechanical Drive



Optional 40 gpm Hydraulic Motor Drive

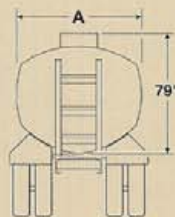
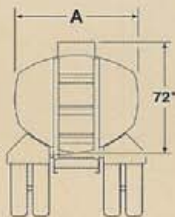
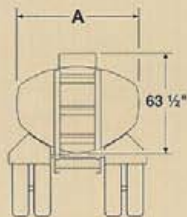


In-tank oil cooler available

Option for Storage
available with supports and jacks.



SPECIFICATIONS OF TRUCK MOUNT SPREADERS



Model capacity	Length (feet)	Width (inches) "A" tank	Model capacity	Length (feet)	Width (inches) "A" tank	Model capacity	Length (feet)	Width (inches) "A" tank
ELC-1900 2,280 US gal. 8625 liters	10	88	ELC-2650 3,150 US gal. 11 970 liters	12	88	ELC-3500 4,200 US gal. 15 890 liters	14	90
ELC-2250 2,700 US gal. 10 250 liters	12	88	ELC-3100 3,720 US gal. 14 075 liters	14	88	ELC-4000 4,800 US gal. 18 200 liters	16	90
ELC-2650 3,150 US gal. 11 970 liters	14	88	ELC-3550 4,250 US gal. 16 160 liters	16	90	ELC-4500 5,400 US gal. 20 430 liters	18	90
ELC-3000 3,600 US gal. 13 690 liters	16	88						

OPTIONS

Nursing Kit To Transfer Manure Into Another Spreader



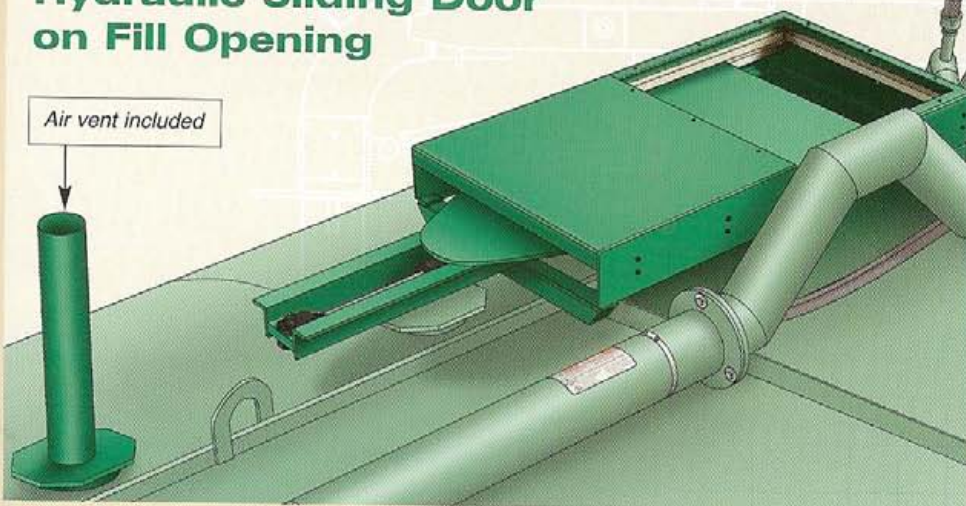
Hopper Over Fill Opening

The tapered hopper over the fill opening enables easier positioning under the loading pipe.

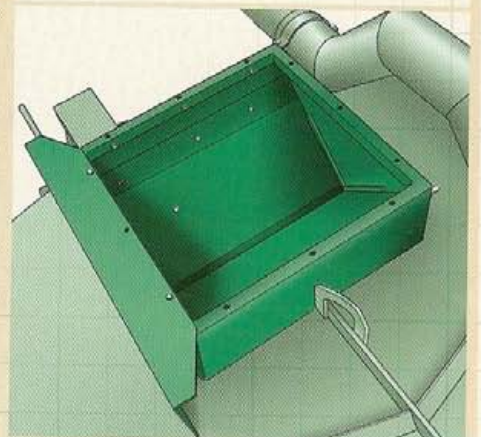


Hydraulic Sliding Door on Fill Opening

Air vent included



Flapper Door on Fill Opening



OPTIONS

Self-Loading

The **Self-Loading System with Primer Pump** is designed to siphon very liquid manure without long fibrous material.

The **Self-Loading System without Primer Pump** is designed to siphon liquid manure from another tank.



Hydraulic primer with piston pump



Inlet for 8" suction hose

In Tank Recirculation Kit

The **Recirculation Kit** uses the centrifugal pump to agitate manure inside the spreader. The recirculation kit maintains the consistency of liquid manure when traveling on long distances.

Note: Other options may be required to spread manure containing sand.



Signal Lights and Halogen Lights

Signal Lights are adjustable for width and height.



Halogen light

Adjustable signal lights



Halogen light on rear guard, illuminating the tool bar.



Halogen light atop the tank, illuminating the fill opening.

TIRES, WHEELS, HUBS AND BRAKES

Tires and Wheels

Tires on Houle Spreaders offer a good quality to price ratio while reducing soil compaction to a minimum. Tires available for each model of spreader are listed in the specifications.



Alliance 850/50-30.5
with 28 x 30.5 rim
10 - 3/4" bolts

Alliance 28L x 26
with 25 x 26 rim
10 - 3/4" bolts

Goodyear 28L x 26
with 25 x 26 rim
10 - 3/4" bolts

Firestone 28L x 26
with 25 x 26 rim
10 - 3/4" bolts

Goodyear 23.1L x 26
with 20 x 26 rim
10 - 3/4" bolts

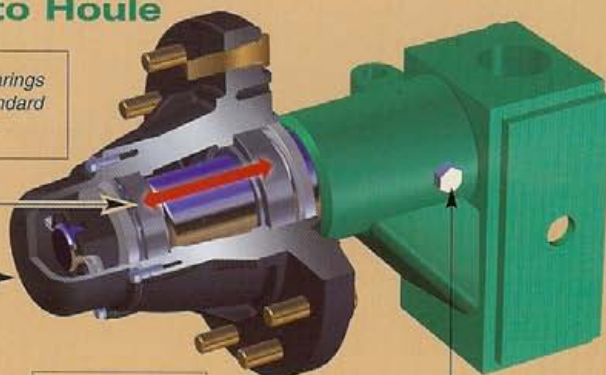
Goodyear 18.4L x 26
with 16 x 26 rim
10 - 3/4" bolts

18,000 lbs Heavy Duty Hub Exclusive to Houle

Distance between bearings is 50% wider than standard 16,000 lbs axle

Ductile cast iron hub

Bolted axle for easy servicing



Goodyear 21.5L x 16.1
with 18 x 16.1 rim
10 - 3/4" bolts

Goodyear 16.5L x 16.1
with 14 x 16.1 rim
8 - 5/8" bolts

Optional Disc Brakes

Disc Brakes ensure maximum braking capacity.



Disc brake with 2 calipers for intensive duty



Disc brake with 1 caliper



Master cylinder and pressure regulator of the disc brake system

THE ONLY TOOL BAR DESIGNED TO EVENLY SPREAD THICK LIQUID MANURE CONTAINING LONG FIBROUS MATERIAL



38 Foot Tool Bar With Three Deflectors

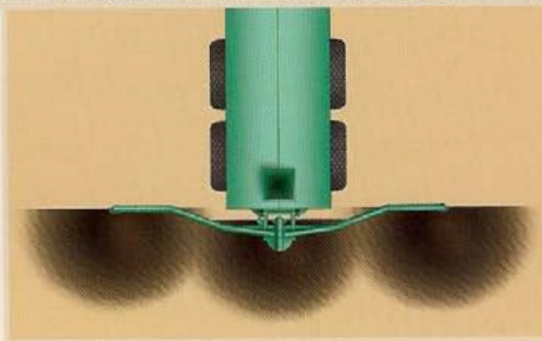


Mechanical Articulations without Flexible Hose



Deflector with Choice of Outlets

Depending on manure consistency, the width of spreading is set by sizing the deflectors outlet and adjusting the height of the tool bar.



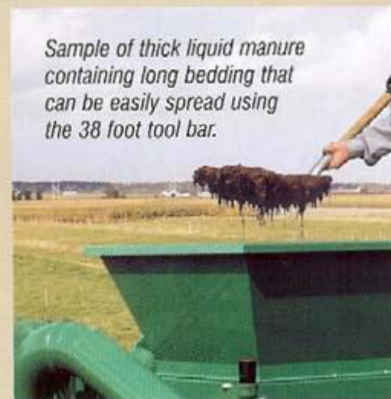
Manure flow is adjusted by means of a restrictor on the 8" line.

Fast Spreading The 38 foot tool bar allows to spread thick liquid manure containing long fibrous material at a rate up to 1,800 US gpm due to large 8" and 6" pipes.

Unfolding the Tool Bar and Height Adjustment is easily done from the tractor seat.

Less Odor The deflectors of the 38 foot tool bar are fed by gravity, reducing odor to a minimum.

Sample of thick liquid manure containing long bedding that can be easily spread using the 38 foot tool bar.



Note: The 38 foot tool bar is not compatible with spreaders EL66-1950, EL66-2250, EL66-2650, EL84-2650 and EL84-3000.

TOOL BARS FOR LIQUID MANURE WITHOUT FIBROUS MATERIAL

Tool Bar with Deflectors



Low Spreading Tool Bar to gravity-apply manure, reducing odor to a minimum. The narrow spreading width allows to increase the speed of the tractor in order to reduce soil compaction.



Available with 5 or 6 deflectors for a spreading width of 25 or 27 feet.



The tool bar folds up quickly for road travel.



Deflectors are designed to provide uniform spreading.

Note: The tool bar with deflectors is **not compatible** with spreaders EL48-6D-3600 and EL54-2800.

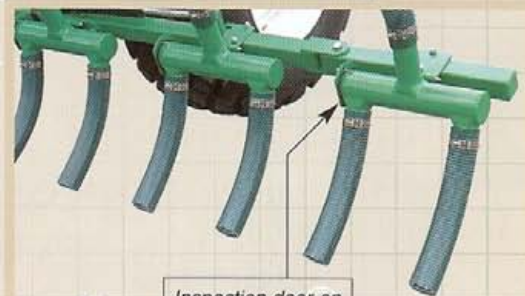
Tool Bar with Ground Surface Flex Drop Hoses



Low Spreading Tool Bar to gravity-apply manure directly on the ground, reducing odor to a minimum. Enables even spreading under windy conditions.



Tool bar is available with 12 or 16 hoses for spreading widths of 15 or 20 feet.



Inspection door on each set of hoses

Note: The tool bar with flex drop hoses is **not compatible** with spreaders EL48-6D-3600 and EL54-2800.

TOOL BARS FOR LIQUID MANURE

S-Tine Cultivator



To Apply Manure on Growing Corn Fields when the plant needs nutrients the most. Recommended for fields with minimum crop residue and free of rocks.



Tool bar with 4, 5 or 8 floating cultivators.
Gauge wheel and cultivating width adjustable.

Aerates and fertilizes the soil between rows.
Helps control weeds.

Note: The tool bar with s-tine cultivators is not compatible with spreaders EL48-4D-3200, EL48-6D-3600, EL48-6D-4000, EL48-6D-4350 and EL54-2800.

16" Disc Cultivator



To Apply Manure on Growing Corn Fields when the plant needs nutrients the most. Recommended for fields having crop residue.



Tool bar available with 4, 5, 6 or 8 sets of 16" discs.

Pressurized tool bar to maintain a constant load on discs to better follow the contour of the ground.



Discs lightly work the soil between rows of corn without disturbing the root system.

16" discs mounted on leaf spring.

Note: The tool bar with 16" disc cultivators is not compatible with spreaders EL48-4D-3200, EL48-6D-3600, EL48-6D-4000, EL48-6D-4350 and EL54-2800.

WITHOUT LONG FIBROUS MATERIAL

22" Concave Disc Incorporator



Enables **Fast Spreading** while using less tractor power than conventional injectors. Very efficient on harvested fields having a large quantity of crop residue (corn, beans, etc...).



Pressurized tool bar to maintain a constant load on discs to better follow the contour of the ground.



22" disc mounted on leaf spring.



Incorporates manure with the very top layer of soil in order to reduce odor and get the maximum fertilizing value of manure.

Note: The tool bar with 22" concave disc incorporator is **not compatible** with spreaders EL48-4D-3200, EL48-4D-3600, EL48-6D-3600, EL48-6D-4000, EL48-6D-4350, EL48-6D-4800 and EL54-2800.

Folding Ends Option

Folding Ends open automatically when operating the cylinders that pressurize the tool bar.

Note: Folding ends are not available for sweep injectors or 24" hydraulic disc injectors.



Sweep Injectors



Injects the Manure in a Wide Pattern close to the roots. Allows to apply manure with minimum odor while keeping the maximum concentration of nutrients.



Heavy duty pressurized tool bar with gauge wheel.
Individual adjustable spring on each injector.
Available with optional 20" coultter wheels.

Injectors available with 16" or 22-1/2" wide sweeps that gradually lift the ground allowing to make room for slurry.
Available with 4 or 5 injectors.



Note: The tool bar with sweep injectors is **not compatible** with spreaders EL48-4D-3200, EL48-6D-3600, EL48-6D-4000, EL48-6D-4350 and EL54-2800.

TOOL BARS FOR LIQUID MANURE WITHOUT FIBROUS MATERIAL

24" Hydraulic Disc Injectors



The Tool Bar with Hydraulic Disc injects liquid manure in all types of soil at a minimum speed of 5 mph (8 km/h) and a maximum depth of 6". The 12 foot wide tool bar allows a maximum spreading rate of:

5,000 u.s. gal. per acre with 6 discs mounted at 24" center to center;

6,700 u.s. gal. per acre with 8 discs mounted at 18" center to center.

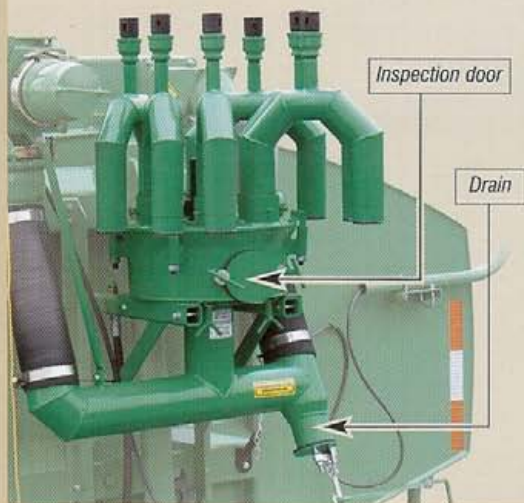


Operation Each disc injector is connected to a hydraulic cylinder in order to better follow the contour of the ground. This way, each injector adapts to uneven ground while maintaining its working depth with no effect to the other injectors working depth.

Note: The tool bar with 24" hydraulic disc injectors is **not compatible** with spreaders EL48-4D-3200, EL48-6D-3600, EL48-6D-4000, EL48-6D-4350 and EL54-2800.

MANURE DISTRIBUTOR

The Distributor with Atop Gravity Discharges ensures a uniform flow at each outlet.



Shredder Kit

The distributor is also available with optional hydraulic rotary knives to spread cow manure without fibrous material.



Flow Regulator

Adjustable flapper



J. Houle & Fils Inc. reserves the right to improve, change or modify the construction of any equipment and any parts thereof without incurring any obligation to make the same changes on existing Houle equipment.

HOULE

J. HOULE & FILS INC.

4591 Rte 143, C.P. 370
Drummondville (Qc) J2B 6W3 Canada
Phone: (819) 477-7444 / Fax: (819) 477-0486

Dealer:

Western Farm Sales
10864 88th St. SE
Oakes ND 58474
Phone: 1-800-635-3293