

# DownEaster

WWW.DOWNEASTERMFG.COM



## DDS DROP SPREADER SERIES



### Materials Recommended

Materials	(# per cubic yard)
Sand - Dry	2,750
Sand - Wet	3,300
Salt - Bulk	2,160
Sand/Salt mix	2,320
50 / 50	

### ⚠ CAUTION

Do not overload vehicle beyond the vehicle's Gross Vehicle Weight Rating (GVWR) or Gross Axle Weight Ratings (GAWR). Check the vehicle's load rating certification sticker for maximum vehicle capacity.

### Owner's Information:

Owner's Name : \_\_\_\_\_

Dealer : \_\_\_\_\_

Purchase Date : \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Phone : ( \_\_\_\_ ) \_\_\_\_ - \_\_\_\_

Spreader Part # : \_\_\_\_\_ Serial # \_\_\_\_\_

Weight # empty: \_\_\_\_\_

Other \_\_\_\_\_

Weight # loaded: \_\_\_\_\_

## OWNER'S MANUAL 2015

Contact your local dealer or distributor for replacement parts and technical support or visit

[www.downeastermfg.com](http://www.downeastermfg.com)

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## Introduction

Thank you for purchasing a DownEaster salt and sand spreader. This Owners Manual provides easy to follow instructions for installing, operating, and servicing the spreader. Read the entire manual carefully to learn the proper procedures for each operation. Follow all of the instructions described to keep the sander in top condition and it will provide years of trouble-free performance. In the event that a problem should arise or if you have any questions about the spreader please contact your DownEaster dealer.

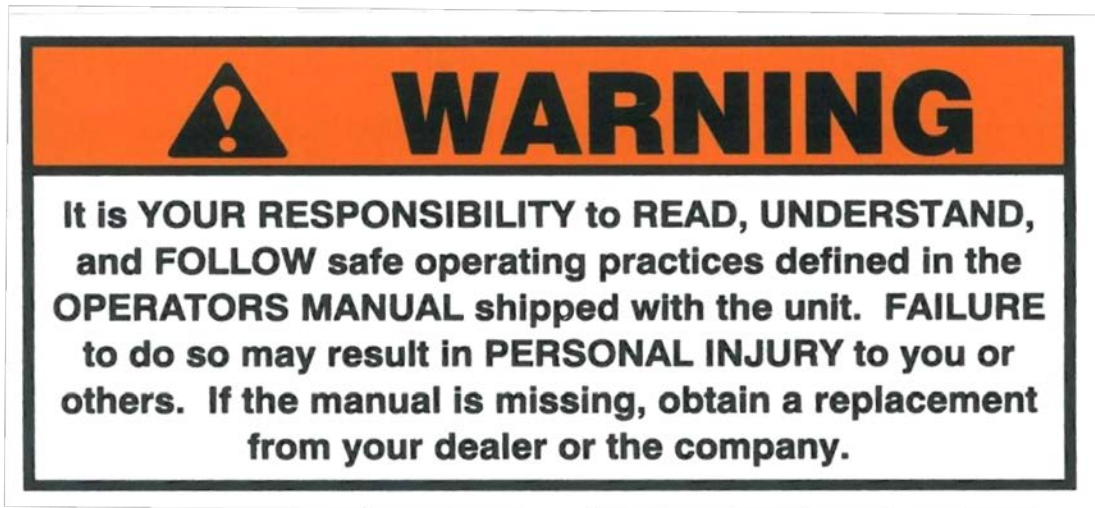
All information, illustrations, and specifications in this manual are based on the latest DownEaster salt- and sand spreader information available at the time of publication. The manufacturer reserves the right to make changes and improvements without notice.

**\*\*\* NOTE: Read this manual and fully understand the information presented before starting or operating the equipment.**

\*\*\* NOTE: The DownEaster salt and sand spreader may be installed onto a 3 point hitch apparatus of many tractor and vehicle brands, with proper adaptors. It is the responsibility of the owner to determine the suitability of any installation configuration. This includes determining the load carrying capacity of a particular vehicle.

The unit shipped will be equipped to directly mount to most "Holder" brand tractor units, with supplied 3rd upper link.

It is the responsibility of the installer or end user to out fit the proper hydraulic end fittings compatible with the vehicle or tractor.



# SAFETY



THIS SIGN SHOULD ALERT YOU:

The Society of Automotive Engineers has adopted this SAFETY ALERT SYMBOL to pinpoint characteristics that, if NOT carefully followed, can create a safety hazard. When you see this symbol in this manual or on the machine itself, BE ALERT! Your personal safety and the safety of others is involved.



**DANGER**

Identifies the most serious hazards



**WARNING**

Failure to obey a safety warning can result in injury to yourself and others



**CAUTION**

Indicate[s] a hazardous situation which, if not avoided, could result in minor or moderate injury.

**\* NOTE - Advises of general information or instructions important to the operation or maintenance**

Carefully read this manual. Learn how to safely operate the DownEaster Spreader and how to use the controls properly. Do not allow anyone to operate the DownEaster spreader without proper training and instruction. Unauthorized modification to the DownEaster Spreader may impair the function and/or safety of the machine.

**Follow safety instructions**

Read all safety messages in the manual and on the DownEaster spreader safety labels. Follow recommended precautions and safe operating practice. Maintain all safety labels on the DownEaster spreader in good condition. Replace missing or damaged safety labels, with new labels, available through your DownEaster dealer.

**Pre Operation**

Thoroughly inspect the DownEaster Spreader, for loose or damaged parts, before each use. Do not use until adjustments or repairs are made.

Keep all bystanders, especially children and pets, well away from the area, where the machine will be operated.

**Keep all bystanders, a minimum or 40 feet away when unit is operational.**



# WARNINGS



*Before attempting any procedure in this book, these safety instructions must be read and understood by all workers who have any part in the preparation or use of this equipment.*



*For your safety, warning and information decals have been placed on this product to remind the operator of safety precautions. If anything happens to mark or destroy the decals, please request new ones from DownEaster.*



*Unit must be pinned and locked into position before operating tractor.*



*Never exceed the Gross Vehicle Weight Rating of tractor. Failure to do so may limit a tractor's handling characteristics.*



*Never attempt to take a spreader off a tractor with material in it.*



*Always inspect spreader for defects: broken, worn, or bent parts, weakened areas on spreader or*



*Always shut tractor and power source before attempting to attach or detach or service spreader unit. Be sure tractor/power source is properly braked or chocked.*



*Always keep hands, feet, and clothing away from power-driven parts. Remember it is the owner's responsibility to communicate information on safe usage and proper maintenance of all equipment.*



*Always make sure personnel are clear of areas of danger when using equipment. Maintain 20' distance from all bystanders when operating the spreader.*



*Inspect the unit periodically for defects. Parts that are broken, missing, or worn out must be replaced immediately. The unit, or any part of it can not be altered without prior written permission from the manufacturer.*



*Never use with foreign debris in the spreader. These units are designed to handle clean, flowing material.*



*Always inspect pins and latches whenever attaching or detaching spreader, and before traveling.*



*Never leave material in hopper for long periods of time. Be aware that all ice melters are hygroscopic and will attract atmospheric moisture and harden up.*



*Remember, most accidents are preventable and caused by human error. Exercising of care and precautions must be observed to prevent the possibility of injury to operator or others!*



*Never operate equipment when under the influence of alcohol, drugs, or medication that might alter your judgment and /or reaction time.*



*Before working with the spreader, secure all loose clothing and unrestrained hair.*



*Always wear safety glasses with side shields when servicing spreader. Failure to do this could result in serious injury to the eyes.*

## MOUNTING

3/4" pins are provided with the drop spreader. If unit requires a length other than provide, Grade 5 or above must be used. Ensure pins are fully seated with retaining spring pins in place.



Ensure proper operation of dump components and/or body, if equipped, to clear all hoses, wiring harnesses, and other obstructions.

# PRE CHECKS & OPERATIONS

## Operation

Wear safety glasses or goggles at all times when operating the spreader. Keep hands, face, and feet away from all moving parts. Do not attempt to stop the machinery when it is moving or rotating.

Do not wear loose fitting articles of clothing such as scarves, strings, chains, ties, etc. because they could get drawn into moving machinery associated with this equipment. Long hair should be tied back or protected from entanglement.

Always remain alert. To prevent serious injury to yourself and to others, do not operate this equipment if you are fatigued.

## Lubrication

1. Use Cold Weather Multipurpose Grease to lubricate grease fittings at the idler bearing (1), the upper mixing tine shaft bearings (2), the conveyor chain. Lubricate grease fittings after each increment of 25 hours of use, monthly or according to the maintenance schedule.

## Pre Starting Checks

2. Check tension adjustments on drive chains, adjust accordingly.

3. Visually inspect the complete spreader for damage or loose fastenings.

4. Set hopper feed gate flap to desired tension & feed rate.

5. Make sure screen is in place and no foreign objects are in hopper that will damage components. Screen must be in secured position, indicated by the the arrows.

6. Plug in lights and check operation.

7. Inspect hydraulic coupling/fittings for proper engagement to tractor, and visually inspect for leaks, cracks, or other signs of damage.

8. Inspect neoprene(rubber) flap and spring rake on bottom for cracks or damage.

9. Keep side cover closed when in operation.

10. check dump body operation, if equipped, to make sure body clears sides of hopper when dumping, and that the rubber flap guard is bolted to rear of body.



**WARNING! NEVER PLACE ARMS, HANDS, OR OTHER BODY PARTS INSIDE THE HOPPER WHILE RUNNING, OR WITH HYDRAULIC LINES CONNECTED TO VEHICLE OR TRACTOR. DISCONNECT LINES WHEN ATTEMPTING TO DISLodge ANY FOREIGN OBJECTS FROM HOPPER.**

# OPERATION

## Adjusting Feed

The 5 position adjustment lever on the right side of the hopper controls the spread amount by the drop drum by putting more or less tension on the rubber flap, by means of a spring bar. Lever all the way left for barely no feed or all the way right for emptying the hopper without a spread pattern.

***NEVER adjust feed while machine is running!***



## Adjusting Chain

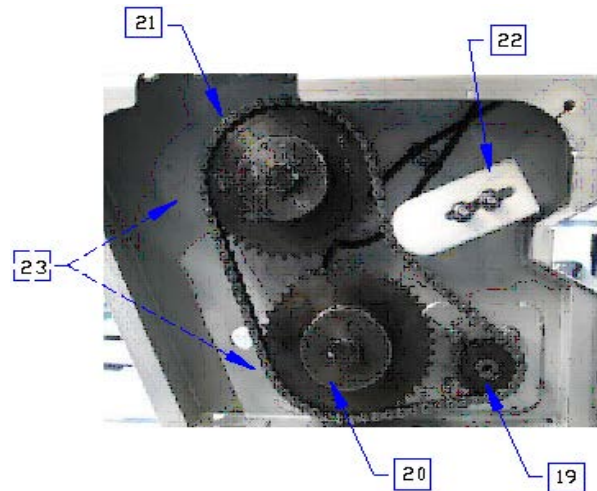
Remove side cover for chain case via 2 - 3/8" hex head bolts.

Item # 22 in pic shown, is a poly chain tensioner  
The chain is adjustable by loosening 2 - 3/8" nuts and sliding tensioner along slotted hole.  
Leave slight slack in chain(21), approximately 1/8".  
Retighten bolts.

***DO NOT*** store tools, or any other objects inside chain case compartment!

Inspect items 23 & 19, chain sprockets for damaged or missing teeth.

Use only chain lube for the #40 roller chain.  
Do not use gear lube or any other automotive oils



## Lighting Cord

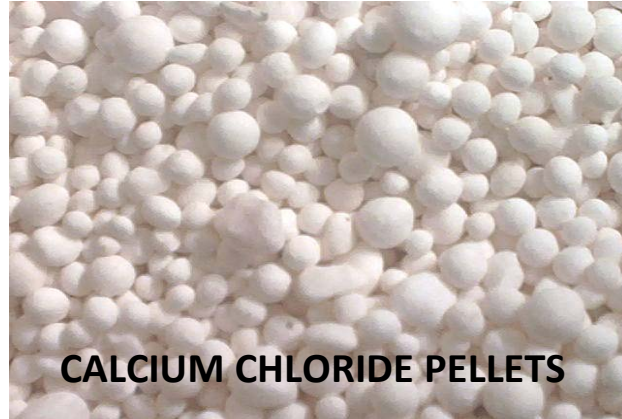
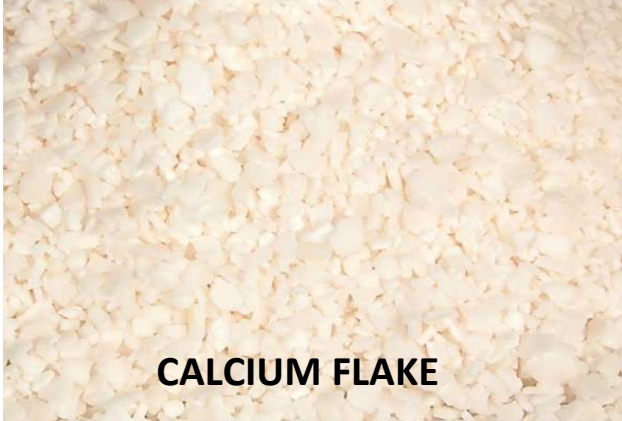
***! WARNING*** Keep the electrical wires away from hot exhaust parts and any moving drive components.

### **DROP SPREADER WIRING HARNESS CODE:**

White = Ground      Blue = Aux      Green = Right turn  
Yellow = Left turn      Red = Brake      Brown = Reverse



**MATERIAL CHART**





# MOTOR FEED RATES

**DO NOT replace or exchange hydraulic motor with any other motor designed to have a different PSI rating or GPM flow than the one supplied by the manufacturer.**

**Failure to do so may result in equipment damage, and/or improper operation speeds of the unit.**

<b>Displacement (ml/r)</b>		<b>160</b>
<b>(in<sup>3</sup>/r)</b>		<b>9.76</b>
<b>Flow (gal./min)</b>	<b>Rated</b>	<b>15.1</b>
	<b>Cont,</b>	<b>14.5</b>
	<b>Int.</b>	<b>17.2</b>
<b>Speed (RPM)</b>	<b>Rated</b>	<b>353</b>
	<b>Cont,</b>	<b>320</b>
	<b>Int.</b>	<b>378</b>
<b>Pressure</b>	<b>Rated</b>	<b>1668</b>
	<b>Cont,</b>	<b>2195</b>
	<b>Int.</b>	<b>2602</b>
<b>Weight</b>	<b>lb</b>	<b>13.6</b>
	<b>kg</b>	<b>6.2</b>
Convert: 1 cubic inch = 16.39 ml; 1 PSI= 145.07 MPa,		



**5 to 8 GPM for optimum performance  
14 GPM MAX**

**Note:**

1. Continuous: The max. value of operating motor continuously.
2. Intermittent: The max value of operating in 6 seconds per minute.
3. A simultaneous max speed and max. pressure is not recommended.
4. The optimum operation should be at the 1/3 – 2/3 of the continuous operation.
5. The motor should be filled oil and run at free loading at start, then loading

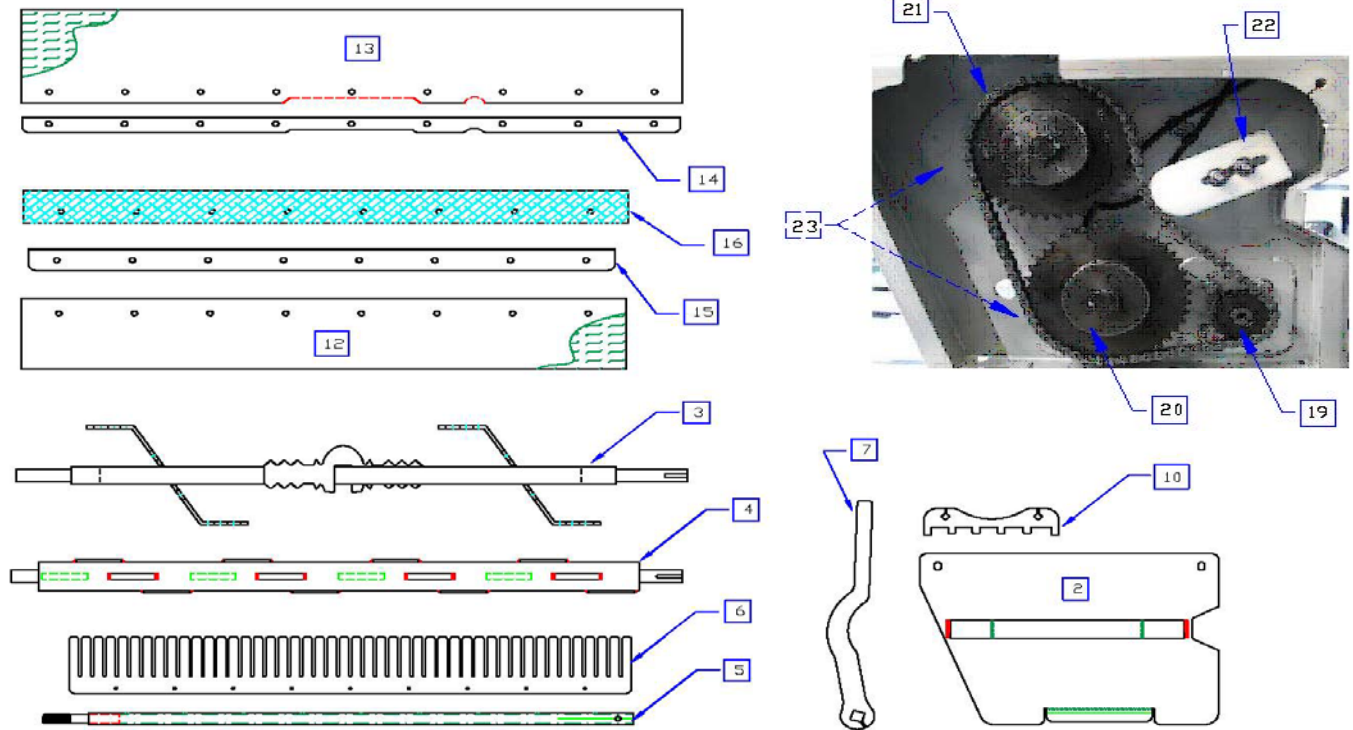
**Hoses**

Use only approved hoses, manufactured for the proper PSI rating.

Hose size: 3/8 (.375)      Rated @: 4300 PSI      Fittings: JIC, 37-degree flare seating surface



# REPLACEMENT PARTS



KEY	PART #	DESCRIPTION
1	DDS44S	Hopper assembly, 44" , Stainless, shell only.
2	DDS120	Side door, for gear case
3	DDS100	Mixing tine assembly, keyed shaft, one end only,
4	DDS104	Drop drum assembly, keyed shaft, one end only,
5	DDS108	Tension rake shaft, Drop spreader,
6	DDS109	Tension rake spring only, w/ self tapping screws
7	DDS110	Tension rake shaft handle, w/ welded shaft.
8	DDS112	3rd link assembly, Drop spreader, with hardware
9	CALL	Center link only ( NOT SHOWN )
10	DDS118	Shifter gate, 1/4" thick S.S.
11	DDS115	Top screen ( NOT SHOWN )
12	SPHL143	Neoprene rubber 6" X 40" X 1/4" delivery drum gasket
13	SPHL144	Neoprene rubber 8" X 44" X 1/4" dump gasket
14	DDS113	Gasket backing bar top,
15	DDS114	Gasket backing bar lower,

KEY	PART #	DESCRIPTION
16	DFH-5	40" x 2 3/4" 120 FS x FS Black PVC with 8 7/16" holes
17	TPH167	Hydraulic motor
18	TPH195	Hydraulic hose assembly 1/4"
19	SPV123A	40B-16 x 1 Sprocket
20	SPV138	40B42 sprocket, 1-1/8" bore & 1/4" keyway
21	SPN112A	79P Roller chain w/ master link
22	SPN114C	Chain tensioner, Poly
		below parts not in illustration
23	SPV132	Shaft bearing, for 1.125" ( NOT SHOWN )
24	TPL121	Rubber bumper, round, (2 1/2" diameter)
25	SPE157	Wiring harness, complete (w/o 7 way pole plug.)
26	TPE104	LED Tail light, 6" oval s/t/t grommet..mount..
27	DEDP290	LED back up / utility light, 6" oval
28	TPE111	LED 2" Amber clearance light
29	TPE173A	Grommet , for oval taillight
30	TPE161	Grommet, for 2" marker lights

## Coastal Metal Fab, Inc. Warranty

2016

General Provisions: Coastal Metal Fab, Inc. warrants its products to be free from manufacturing defects under normal use and service conditions and will repair or replace, at its option, any products or components thereof that are proven to be defective during the warranty period as specified below. This warranty extends to the original retail purchaser only and commences on the date of original purchase. Coastal Metal Fab's maximum liability under this warranty is limited to the cost of the repair or replacement of any defective products or components, and excludes any incidental or consequential damages. The warranty period is as follows:

**DownEaster** brand Dump Trailers and Dump Inserts -- 2 years from date of purchase

**DownEaster** brand Salt and Sand spreaders -- 1 year from date of purchase

**DownEaster** brand Dump Bodies -- 2 year from date of purchase or 24,000 miles

Items Warranted Separately: This warranty does not apply to certain components that are warranted separately by the original equipment manufacturers including, but not limited to, electric or gasoline motors, hydraulic pumps, hydraulic cylinders, tires, wheels, and axles.

Items not Covered: Coastal Metal Fab, Inc. is not responsible for the following:

- Premiums charged for overtime labor requested by the purchaser.
- Transportation to and from the dealership or service calls made by the dealer.
- Products purchased used.
- Products that have been altered or modified in ways not approved by Coastal Metal Fab.
- Depreciation or damage caused by normal wear and tear, lack of reasonable and proper maintenance, failure to follow operating or installation instructions, misuse, lack of proper protection during storage or accidents.
- Normal maintenance costs.

Parts Replaced under Warranty: If Coastal Metal Fab, Inc. elects to repair a defective product or component thereof, Coastal metal Fab will, at its discretion, utilize either new or remanufactured parts or components. If any such part or component proves to be defective within 12 months of installation or before expiration of this warranty, whichever is later, Coastal Metal Fab, Inc. will repair or replace, as it elects, such defective part or component.

Securing Warranty Services: To obtain service under this warranty, the original retail purchaser must request warranty service during the applicable period of warranty from a dealer authorized to sell the product being serviced. When making such a request, the purchaser must present evidence of the product's original purchase date, and make the product available for service at the dealer's place of business.

Limitations: The selling dealer has no authority to make any representation or promise on behalf of Coastal Metal Fab or to modify the terms or limitations of this warranty in any way. Coastal Metal Fab shall have sole discretion to determine whether a product or component is defective. Coastal Metal Fab reserves the right to discontinue or modify any of its products and, if Coastal Metal Fab elects to replace a defective product under this warranty which has been discontinued or modified, it may do so with a product deemed by Coastal Metal Fab to be of comparable quality and function.

**THIS WARRANTY IS GRANTED IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCE SHALL COASTAL METAL FAB BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY NATURE RESULTING FROM ANY DEFECT IN THE PRODUCT OR ITS COMPONENT PARTS. SOME STATES DO NOT ALLOW LIMITATIONS ON OR EXCLUSION OF IMPLIED WARRANTIES OR INCIDENTAL AND CONSEQUENTIAL DAMAGES SO THE ABOVE EXCLUSIONS MAY NOT APPLY TO YOU.**

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