

FAST-CAST 550 SERIES SPREADERS

Assembly and Owner's Manual - January 2011

Fast-Cast 1CS6E - Aluminum Hopper with Stainless Steel Body & Electric Motor Fast-Cast 1CS6H - Aluminum Hopper with Stainless Steel Body & Gas Motor Fast-Cast 1CS6CPH - Poly Hopper with Carbon Steel Body & Gas Motor



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Curtis Industries Inc. LLC, reserves the right to change product design or specifications without notice or liability.

IMPORTANT: Before you Start...

- ▶ Do not attempt to operate this Spreader until you have read and understand all warnings and instructions in the Owner's manual and on Spreader unit. Failure to read and follow all warnings and instructions may lead to serious injuries or death.
- ► For your safety, warning and information decals have been affixed to this product to remind all operators of safety precautions. If decals are marked, damaged or destroyed, replace with new decals ordered from Curtis Industries, LLC.



MOVING PART HAZARD

- NEVER enter Hopper Box while Conveyor Chain is moving.
- **⊘** DO NOT RIDE on any part of the Spreader while vehicle is in motion.
- **■** Disconnect & lock out Power source before adjusting or servicing.



TO AVOID INJURY

- 1. Most accidents are preventable and caused by human error.

 Exercise care and precautions to prevent the possibility of injury to operator or to others.
- **1** 2. Before working with the Spreader, secure all loose fitting clothing and unrestrained hair.
- 3. Always wear safety glasses with side shields when working metal against metal. Failure to do so could result in serious injury to the eyes.
- 4. Never allow children to operate or climb on equipment.
- ▲ 5. Never attempt to adjust or service Spreader while engine is running.
- **A** 6. Never attempt to un-jam Conveyor Chain while engine is running.
- 7. Do not stand behind Material Chute while Spreader is discharging.
- ⊗ 8. Do not refuel a hot engine. Allow time to cool before refueling.
- **A** 9. Never weld or grind on equipment without having a fire extinguisher available.
- ⇒ 10. Always inspect unit for defects: Broken, worn or bent parts, weakened areas on Spreader or Mount.
- 11. Always shut off vehicle and power source before attempting to attach or detach or service Spreader unit. Be sure vehicle/power source is properly braked or chocked.
- 12. Always make sure personnel are clear of areas of danger when using equipment.
- 13. Always keep hands, feet, and clothing away from power-driven parts.
- 14. Remember, it is the owner's responsibility to communicate information on safe usage and proper maintenance of all equipment.

IMPORTANT

- Always check areas to be spread to be sure no hazardous conditions or substances are in the area.
- Never operate equipment when under the influence of alcohol, drugs or medication that might alter your judgement and / or reaction time.
- Do not overfill Spreader. (See decal on Spreader for fill capacities)
- Failure to keep Conveyor Chain Links lubricated and free running can damage the Conveyor Chain, Drive Shafts and body structure.
- Failure to maintain Conveyor Chain or other components can void warranty.

Complete this Check List Prior to Initial Start-Up & Operation
Read and understand Curtis Owner's & Operator's Manual.
Read and understand Engine Manual.
Read and understand ALL Warning Decals.
Check Fuel Level.
Check Engine Oil Level.
Grease all Lubrication Points.
Oil Conveyor Chain.
Wire In-Cab Control Panel.
Coat Harness Connector Ends with Dielectric Grease.
Verify Spreader is secure in Vehicle using provided Ratchet Straps.
For Utility Vehicle applications (i.e. JD Gator, Kawasaki Mule, etc.) Dump Body Safety Chain must be attached to secure Dump Body & Prevent accidental release of Dump Body.
For Pickup Truck Applications make sure locking Bolts are in place before moving vehicle.

General Maintenance Requirements

- 1. Wash Unit thoroughly after each use.
- 2. Lubricate Bearings
- 3. Periodically Lubricate Conveyor Chain with new or used Engine Oil.
- 4. Check Engine Oil every 5 hours or daily before use.
- 5. Change Engine Oil every 50 hours of Operation or every season.
- 6. Service Engine Air Filter every 100 Hours of Operation or every season.

Section 1. Installation Instructions

1A. The Fast-Cast 550 Spreader is designed for mounting in the bed of most Utility Vehicles. Four Hold-Down Assemblies are provided for securing the Spreader to the Vehicle.



For Pickup Truck Installation See page 15.

1B. Remove the Tailgate completely from the Vehicle if possible. Center the Spreader in the bed of the UTV and shift the Spreader as far forward as possible, but leaving enough clearance for the Material Chute installation at the rear. Using four Hold Down Assemblies, secure the Spreader to the Vehicle.

1C. In-Cab Control Panel Installation

Connect the Wire Terminal End of the Harness Cable to the Control Panel. When connecting wires, be sure the ignition switch is in the 'OFF' position. Mount the Control Panel to the underside of the dashboard, making sure the Control Panel is grounded to the Vehicle.

IMPORTANT

When choosing a location for the Control Panel, do not position the Panel in line with the Driver's or Passenger's seat to ensure the Control Panel is not hit accidentally.

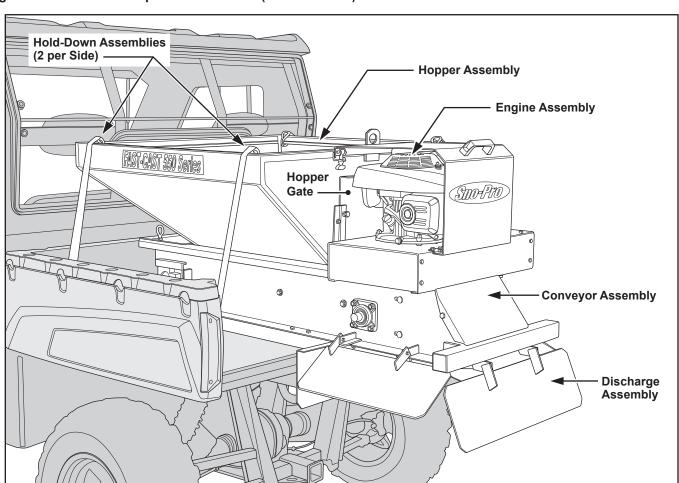
1D. Body Safety Chain Installation



For UTV applications: A Dump Body Safety Chain must be attached to secure the Dump Body and prevent the accidental release of the Dump Body.

Install Eyebolts to Vehicle Frame and Dump Body of the Utility Vehicle. Using a 32" Chain and a One Link Connector, attach Chain to the Eyebolts mounted to the Frame and Dump Body. Safety Chains are to be used in conjunction with the Hold Down Assemblies. Attaching a Chain will prevent an accidental release of the Dump Body. The Chain/Eyebolt setup is not required for Pickup truck applications.

Figure 1. Fast-Cast 550 Spreader Overview (UTV mounted)



1D. (continued)



Failure to attach this Chain may result in an accidental Body Dump, damaging the Spreader, the Utility Vehicle, persons seated in the Vehicle, or standing nearby.

Section 2. Operating Instructions

2A. Engine Starting and Cab Controls (Gas Motors)

- **Step 1.** Verify that the 'ON/OFF' Switch is in the 'ON/RUN' position on the Cab Control Panel.
- Step 2. Go to Engine at the rear of Spreader.

 Move the Throttle Control to the 'FAST'
 Position.

 Push Primer Bulb firmly 3-5 times.

 Grasp Rope Handle and pull cord rapidly to start Engine.

 (See Engine manual for details.)
- Step 3. From the Cab Control Panel, flip the Conveyor Switch to the 'ON' position. This will engage the Conveyor Chain and Spinner Disc.

Figure 3. 1CS6E-C Electric Spreader Cab Control



2B. Electric Spreader and Cab Controls

- Step 1. Verify that the 'ON/OFF' Switch is in the 'ON' position on the Cab Control Panel. This will engage the Conveyor Chain and Spinner Disc. The Green Indicator Light will come on.
- Step 2. Spin Speed Controller to desired speed setting.
- **Step 3.** An additional amount of material can be spread in spots by toggling the '**BLAST**' Switch. The Switch can also be held on for increased dispersal when needed.

The Yellow indicator light illuminates whenever the 'ON' switch is toggled to indicate a 3-Spin Burst spin is occuring to clear the Spinner/Conveyor System on the Spreader. The Spreader will then operate at the speed setting on the dial.

The Red Indicator Light illuminates when the is overloaded. Stop the Spreader functions and check the Spreader for material problems in the Spinner/Conveyor and the Gate area where it feeds from the Hopper before resuming.

2C. Gate Height Adjustment Steps

- Step 1. Loosen two Gate Screws.
- Step 2. Adjust Gate to desired height.
- Step 3. Tighten Gate Screws.

2D. Material Chute Deflectors

Adjust the Material Deflectors to fine tune the spread pattern. Keep all Material Deflectors at the same angle.

For a larger spread pattern: Raise Deflectors. For a smaller spread pattern: Lower Deflectors.



Never attempt to adjust Material Deflectors while Spreader is operating.

2E. Conveyor Chain Adjustment

Tighten **both** Take-Up Bolts **equally** until slack is gone in the Conveyor Chain.



After adjusting the Conveyor Chain, verify that the Take-Up Shaft is not at an angle.



Never attempt to adjust Conveyor Chain while Spreader Engine is running.

2F. Fast-Cast 550 Spreader Storage

- 1.) Wash Unit Thoroughly
- 2.) Oil Conveyor Chain
- 3.) Lubricate All Bearings

2G. Fast-Cast 550 Spreader Lubrication Requirements

Location	Lube Type
Engine Oil	SAE 30
Take-Up Bearings	Bearing Grease
4 Bolt Flange Bearings	Bearing Grease
Spinner Bearings	Bearing Grease
Conveyor Chain	Engine Oil

2H. Fast-Cast 550 Service Requirements

Location	Recommend	Interval
Engine Oil	Check	5 Hours or Daily
Engine Oil	Change	50 Hours or 1 Season
Engine Filter	Check or Change	100 Hours or 1 Season
Spark Plugs (.030 Gap)	Check or Change	100 Hours or 1 Season
Harness Connectors	Check Condition	50 Hours or Monthly
All Bearings	Lubricate	50 Hours or Monthly
Conveyor Chain	Lubricate	100 Hours or 1 Season

Section 3. Fast-Cast 550 Spreader Drawings

The following pages show the dimensions, parts and specifications of the Fast-Cast 550 Spreader.

Fast-Cast 550 Spreader Models



1CS6H

- 5.5 Hp Honda Vertical Shaft Engine
- 500 lbs. Capacity
- 4 to 24 ft. Spreading Width
- Stainless Steel Body
- In-Cab Contol Panel



1CS6CPH

- 5.5 Hp Honda Vertical Shaft Engine
- 500 lbs. Capacity
- 4 to 24 ft. Spreading Width
- Carbon Steel Body
- In-Cab Contol Panel



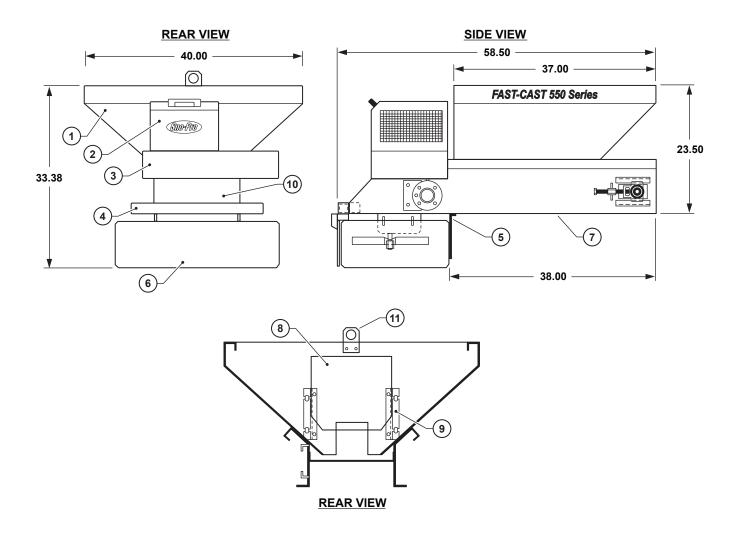
1CS6CE

- Electric Motor draws less than 20 amps
- 500 lbs. Capacity
- 4 to 24 ft. Spreading Width
- Stainless Steel Body
- In-Cab Contol Panel

Options available for all Fast-Cast 550 Spreaders

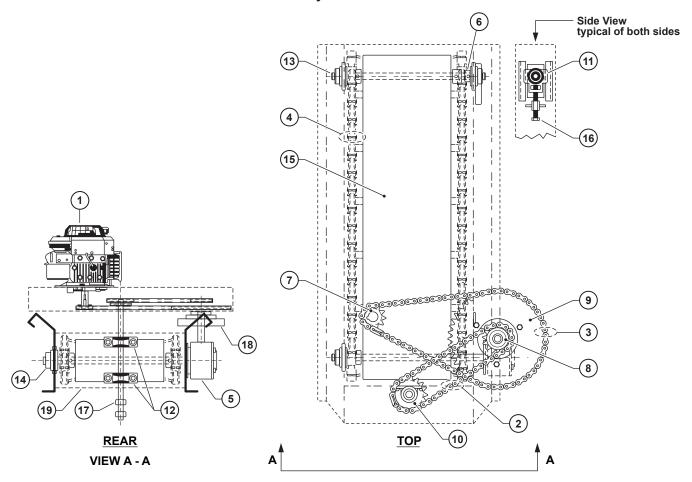
- 1WC2 Weather Cover • 1CS6-SCR - Top Screen
- 1SM6 Truck Bed Mount (trucks only)

1CS6 Fast-Cast 550 Spreader Assembly Overview - Illustrated Parts List



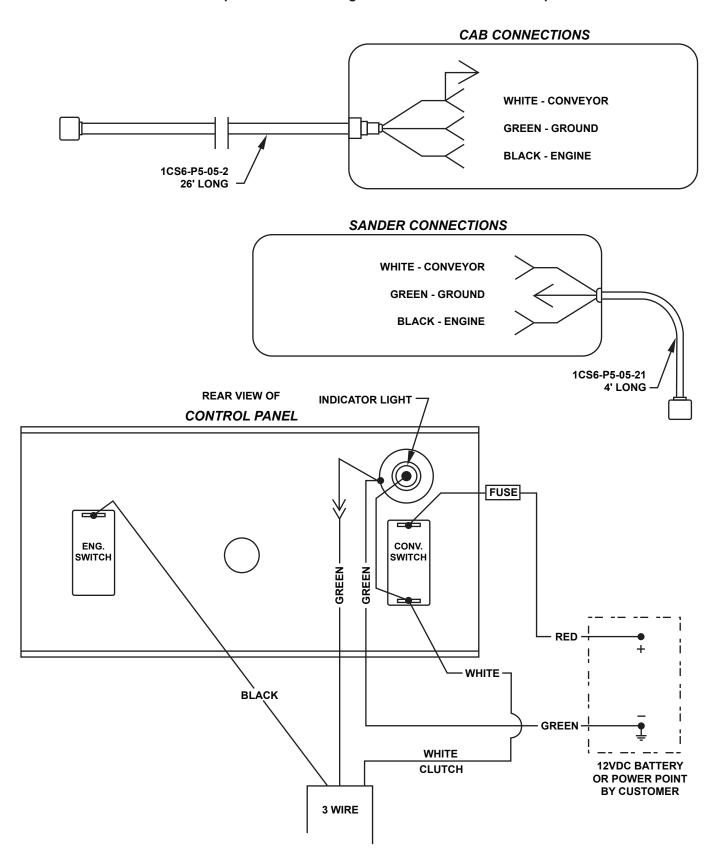
Item	Qty.	Description	Part Number		
No.	Qty.	Qty. Description	ALUM HOPPER/SS BASE	POLY HOPPER/SS BASE	POLY HOPPER/CARBON STEEL BASE
1	1	Hopper Assembly	1CS6-P1-00 1CS6P-P1-00		P-P1-00
2	1	Engine Cover	1CS6-P3-00		1CS6C-P3-00
3	1	Motorbed Plate	1CS6-F	23-01	1CS6C-P3-01
4	1	Bumper	1CS6-F	P2-03	1CS6C-P2-03
5	1	Deflector - Fixed	1CS6-P2-08		1CS6C-P2-08
6	3	Deflectors	1CS5-P2-09		1CS5C-P2-09
7	1	Conveyor Assembly	See Page 7		
8	1	Gate	1CS6-F	P1-11	1CS6C-P1-11
9	1	Gate Guide	1CS6-P1-12		
10	1	Spinner Cover	1CS6-F	P2-06	1CS6C-P2-06
11	1	Lifting Eye		1CS6	i-P1-14

1CS6 Drive Assembly - Illustrated Parts List

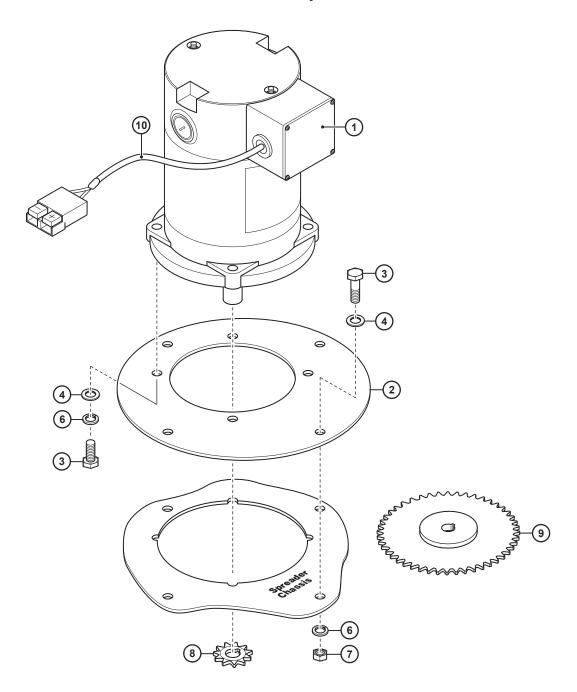


Item No.	Part No.	Description	Qty.
1	1CS6-P3-375	3.75 HP Engine	1
2	1CS6-P4-02	# 40 Spinner Drive Chain	1
3	1CS6-P4-03	# 40 Clutch Drive Chain	1
4	1CS6-P4-04	Conveyor Chain	1
5	1CS6-P4-05	Gear Box	1
6	1TS17-E11	8 T Sprocket 1" Bore	4
7	1CS6-P4-06	11 T Sprocket 7/8" Bore	1
8	1CS6-P4-07	16 T Sprocket 1" Bore	1
9	1CS6-P4-08	52 T Sprocket 3" Bore	1
10	1CS6-P4-09	24 T Sprocket 3/4" Bore	1
11	1TS17-E10	1" Take Up Bearing	2
12	1CS6-P4-11	3/4" Pillow Block Bearing	2
13	1CS6-P4-12	1" Take Up Shaft	1
14	1TS17-E13	4 Bolt Bearing	1
15	1CS6-P4-14	Conveyor Belt	1
16	1TS17-E104	5/8" Take Up Bolt	2
17	1CS6-P4-16	Spinner Shaft Nuts	2
18	1CS6-P5-03	Clutch	1
19	1CS6-P2-01	Pillow Block Bracket	1

1CS6 Fast-Cast 550 Spreader Control Diagram for Gas Motor Powered Spreaders

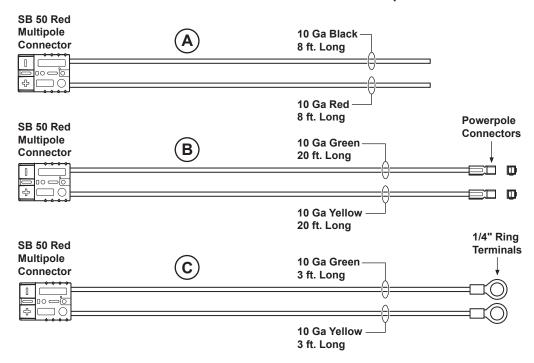


1CS6E Electric Drive Assembly - Illustrated Parts List

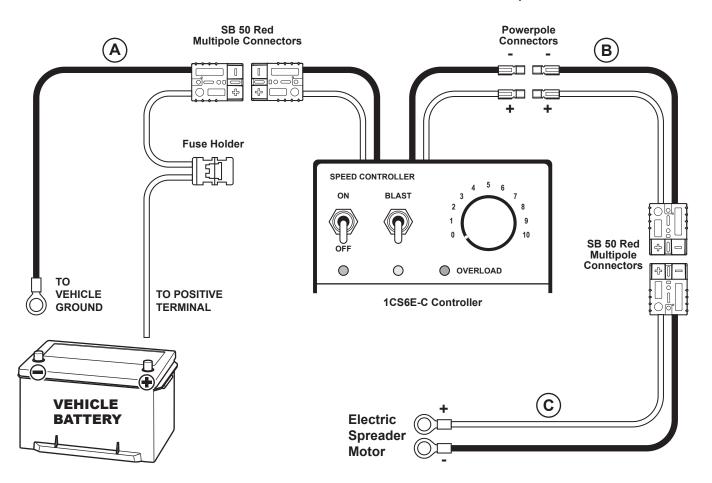


Item No.	Description	Part Number	Qty.
1	Electric Motor	1CS6E-M	1
2	Electric Motor Mounting Plate	1CS6E-MP	1
3	3/8"-16 x 3/4" Hex Bolt SS	1CS6E-HWK	8
4	3/8" Flat Washer SS	1CS6E-HWK	8
6	3/8" Split Lock Washer SS	1CS6E-HWK	8
7	3/8"-16 Hex Nut SS	1CS6E-HWK	1
8	11T Drive Sprocket	1CS6E-SB	1
9	54T Sprocket	1CS6E-SA	1
10	Electrical Harness	1CS6E-H	1

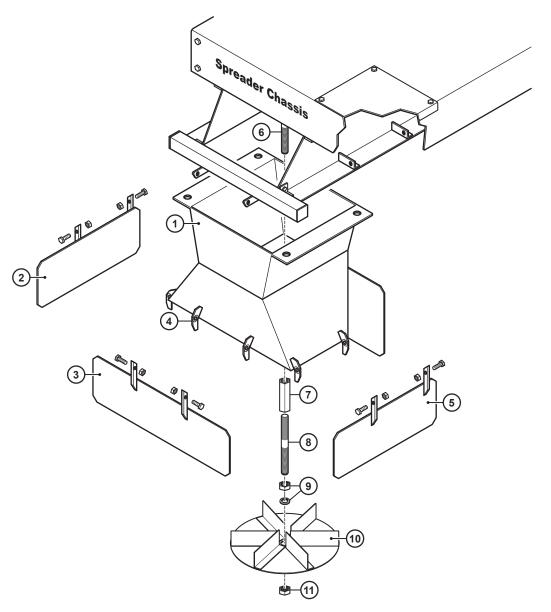
1CS6E-H Electrical Harness for Electric Motor Spreaders



1CS6E-H Electrical Harness Connections for Electric Motor Spreaders



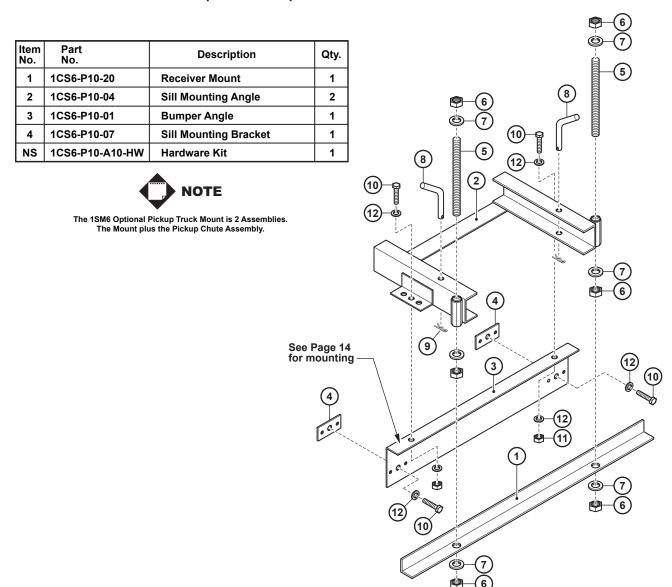
1CS6 Optional Pick Up Chute Assembly (includes 1SM6 Mount) - Illustrated Parts List



Item	Description Part Number			Qty.
No.	Description	STAINLESS STEEL CHUTE	CARBON STEEL CHUTE	Qty.
1	Material Chute Assembly	1CS6-P10-00	1CS6-P10-A00	1
2	Material Deflector - Hinged	1TS17A-E6	1CS6-P4-22	3
3	Material Deflector - Adjustable	1CS1P25	Material Deflector - Adjustable	1
4	Hinge	1CS6-P4-24	1CS6-P4-24	6
5	Material Deflector - Adjustable	Not Orderable	Material Deflector - Adjustable	1
6	Existing 17" Shaft	Not Orderable	1CS6-P4-22	1
7	Coupling Nut - 3/4"-10 x 2-3/4"	1CS6-P10-06	1CS6-P10-06	1
8	6" Extension Stud - 3/4"-10 x 6"	1CS6-P10-05	1CS6-P10-05	1
9	3/4" Nuts & Lock Washer	1CS6-P4-16	1CS6-P4-16	2
10	Existing 14" Spinner Disc	1CS6-P4-18	1CS6-P4-18	1
11	Existing 3/4" Nut	1CS6-P4-16	1CS6-P4-16	1

NOTE: Specify which Chute type during order

1SM6 Optional Pickup Truck Mount - Illustrated Parts List

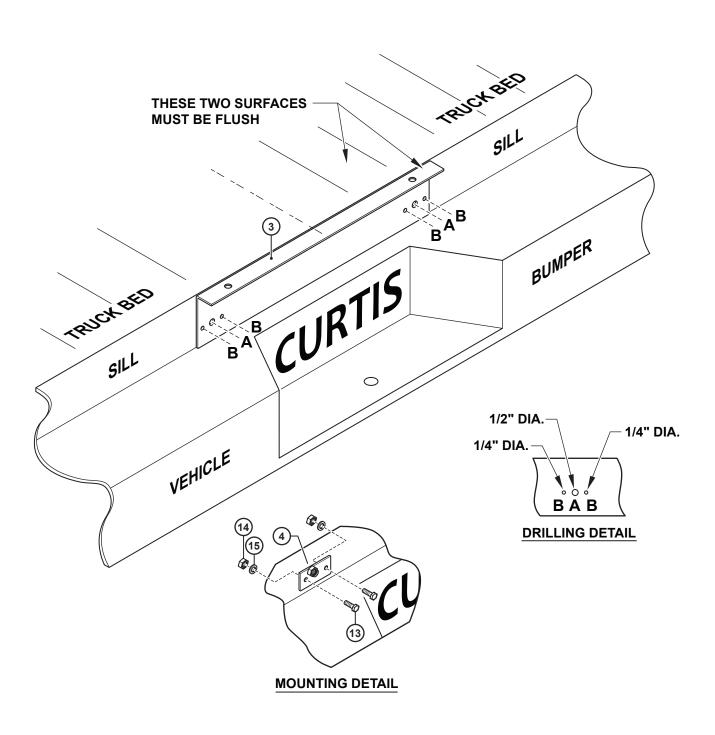


1SM6 Pickup Truck Mount - Illustrated Parts List The following is a HW Kit listing and are not sold separatley. Buy replacements locally.

Item No.	Part No.	Description	Qty.
5	1CS6-P10-22	1/2-13 x 10" Threaded Rod	2
6	1CS6-P10-09	1/2-13 UNC Hex Nut	8
7	1CS6-P10-10	1/2" Flat Washer	8
8	1CS6-P10-11	1/2" Hitch Pin x 3"	2
9	1CS6-P10-12	Hair Pin	2
10	1CS6-P10-13	3/8-16 x 1-1/4" Hex Bolt	4
11	1CS6-P10-14	3/8-16 UNC Hex Nut	2
12	1CS6-P10-15	3/8" Flat Washer	6
13	1CS6-P10-16	#10-24 x 3/4" Bolt	4
14	1CS6-P10-17	#10-24 Lock Nut	4
15	1CS6-P10-18	#10 Flat Washer	4

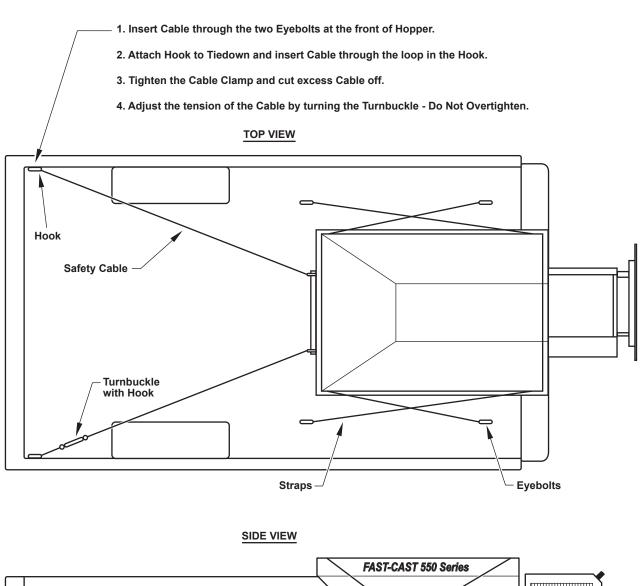


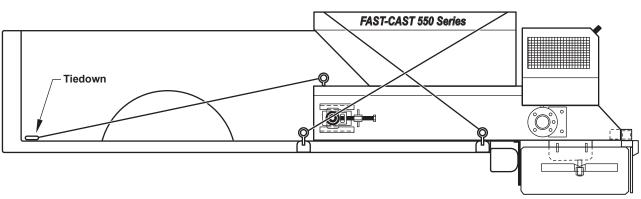
1SM6 - Sill Angle Mounting Diagram



NOTE See Parts listing on Page 13.

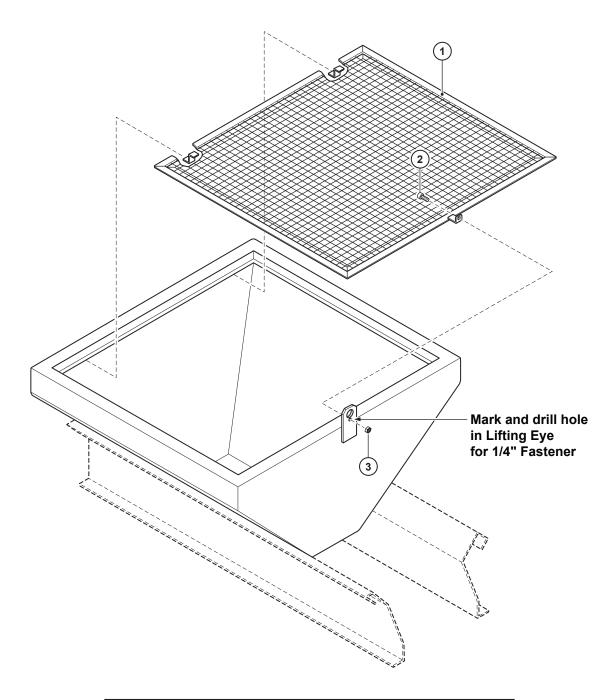
1CS6 Fast-Cast 550 Spreader - Recommended Installation For Pickup Truck Applications





NOTE Eyebolts may be mounted to Truck bed, or existing Bed Hooks may be used.

1CS6-SCR Fast-Cast 550 Spreader Screen Option - Illustrated Parts List



Item No.	Part No.	Description	Qty.
1	1CS6-P10-32	Screen - 550 Mini	1
2	1CS6-P10-33	1/4-20 x 3/4" HHCS	1
3	1CS6-P10-34	1/4-20 Hex Nut	1

Fast-Cast 550 Spreader Troubleshooting Chart

Engine/Electrical Symptom	Possible Problem	Solution
Engine will not start	On/Off Switch on Control Panel in off position	Put On/Off Switch in ON position
	Fuel Tank empty	Add fuel
	Water in fuel	Drain fuel tank, add fresh fuel
	Loose wiring connection	Visually inspect Harness connections
Engine will not shut off	Bad or missing ground at Control Panel	Ground Control Panel to vehicle
Engine smokes while running	Clogged Air Filter	Clean & replace Air Filter
	Overfilled oil level in engine	Check Engine oil level
General Engine questions		Refer to Engine Owners Manual
Conveyor Symptom	Possible Problem	Solution
Not enough material being spread	Gate not adjusted properly	Open Gate for desired amount of material
Too much material being spread	Gate not adjusted properly	Close Gate for desired amount of material
Conveyor chain has too much slack	Take-up Bearings out of adjustment	Adjust Take-up Bolts at front of Spreader. Tighten Bolts to reduce slack.
Take-up bolts have no adjustment left	Conveyor Chain has stretched	Loosen Take-up Bolts completely. Remove Links from Conveyor Chain. Re-adjust Take-up Bolts.
Conveyor Chain does not move	Debris or frozen material stuck in Conveyor Chain	Dislodge material from Conveyor Chain
	No power to Electrical Clutch	Verify Electric Switch is getting power
		Check and inspect Harness connections
		Verify connections at Electric Clutch.
Spinner Symptom	Possible Problem	Solution
Spinner Disc does not turn	Loose connection between Shaft & Disc	Tighten mounting Nuts on Shaft
Spinner Disc vanes wear early	Suspect material	Check material being spread for rocks

LIMITED WARRANTY

Curtis warrants that Products sold to Customer shall be free from defects in material and workmanship under normal use and service for one (1) year from the date of shipment.

IN NO EVENT SHALL CURTIS BE LIABLE FOR LOSS OF PROFITS OR INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER SIMILAR DAMAGES ARISING OUT OF ANY SALE OF PRODUCT OR FROM DEFECTIVE PRODUCT.

This limited warranty shall automatically terminate if any product has been improperly installed, maintained or operated or used for a purpose for which it was not designed. The limited warranty does not cover Product which has been altered or parts which are expendable by their nature (e.g. springs, nuts, bolts, pins, hoses, etc.).

In the event that a Product is defective, Curtis, at its option, will correct such defect at its expense upon delivery of the Product to Curtis FOB, its Worcester, Massachusetts facility, or refund that portion of the purchase price allocatable to the defective Product. The remedy contained in the preceding sentence will be the sole and exclusive remedy against Curtis.

EXCEPT AS SPECIFICALLY PROVIDED IN THIS DOCUMENT, THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.

Notes:	
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