

-SPECIFICATION- TAILGATE REPLACEMENT SPREADER

TC-140

GENERAL

Tailgate replacement, all electric spreader that utilizes the standard dump body tailgate latches to mount directly to the dump box.

Unit shall have end handles to be utilized for easy lifting during installation/removal of the 185 lb tailgate unit.

Unit shall have a positive feed from the entire width of the dump box by means of a chain driven stainless steel feed auger.

Unit shall be designed to spread all free flowing granular materials, abrasives and chemicals of $\frac{3}{4}$ " diameter or less.

The unit shall be complete and assembled, ready for operation after initial 4-hour installation.

The unit shall be removable in less than 10 minutes by two persons.

AUGER HOUSING

Housing shall be all aluminum & stainless steel for long life.

Housing shall be made of minimum 1/8" formed aluminum sheet with T-6 extrusions incorporated into the design for rigidity and strength.

Housing shall have lift-up rear access with three hold-down knobs on lid for quick removal of objects from auger, and to allow quick dumping of unwanted load.

Housing shall be easily removable by using the existing dump bed hardware and disconnecting the power cable.

SPINNER

The spinner plate shall be 12" diameter and be constructed of 3/16" stainless steel plate with keyed hub.

Spinner motor shall be Frame 56, non-ventilated, with oversized bearings and Plasti-dip coating to completely protect the motor housing from salt environments.

The stainless steel spinner has four (4) stainless steel vanes that result in a flat trajectory and uniform spreading pattern.

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Spinner plate shall have a deflector shield on bottom to keep material from building up on top of motor, and incorporate a marine-type seal to prevent contaminants from following shaft to motor seals.

The spinner/spreader assembly shall be adjustable allowing for variable spreading patterns left, right and center.

The entire spinner assembly is easily removable by disconnecting one Packard-style connector, and removing unit from hanger bracket.

The spinner assembly remains horizontal to the road at all dump box angles.

AUGER FEED MECHANISM

Material is fed to the discharge port by means of a variable speed auger.

The dual diameter auger is constructed of 3/16" thick stainless steel flighting welded to a 2" Sched 40 stainless steel pipe.

The ends of the auger are supported by means of stainless steel stub shafts mounted to self-aligning steel ball bearings.

Self-aligning ball bearings shall be non-rusting food-grade industry type, sealed, and further protected from granules and liquids by means of a slinger and labyrinth chamber inboard of the bearings, so no material can follow the shaft out to the bearings. A cap shall be installed on the outside of the bearing to additionally seal out outside elements.

The auger shall be variable speed with built-in electrical overload protection.

The auger shall be driven by a 12 volt electric gear motor with a two-sprocket chain drive.

CONTROLS

In-cab controls shall be backlit and have lighted control buttons for easy night viewing.

The ECU shall be connected to vehicle battery with a factory made wiring harness employing a main fuse and automotive type solenoid that provides no positive voltage to the cab when ECU power switch is in "off" position.

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The rear wiring harness shall extend from the ECU to vehicle rear bumper, and provide Packard Style receptacles held in a stainless steel header.

When the D-ICER is installed, control of dump bed up/down functions including power-down shall be available on D-ICER control.

The ECU shall provide internal motor protection by providing factory-set current sensing settings, and shall display a red fault LED when motor current parameters have been exceeded for a pre-set period of time.

The ECU shall automatically reset the motor protection circuit(s) and light a green LED after a preset "cool down" period has elapsed. For safety reasons, after the motor protection circuit(s) have reset, no motor shall restart automatically, but shall require the motor control knob to be rotated to "0" and then to an operating number.

The D-ICER front panel shall have an oversize, lighted, "MOTORS" button to engage and disengage both motors simultaneously.

The D-ICER front panel shall have an oversize, lighted "OVERDRIVE" button to engage and disengage maximum auger power.

The D-ICER ECU shall have a lighted switch controlling a 30 amp internal relay for operating a work light or other accessory.

Knob with lighted dial will set variable auger power level.

Knob with lighted dial will set variable spinner power level.

All wiring harnesses and connectors to be provided to install unit.

MOTORS

Auger gearmotor shall be Frame 56, non ventilated, with high efficiency type gear reduction (over 98% efficient) so single battery systems with heavy-duty alternator can be used.

Spinner motor shall be Frame 56, non-ventilated, with oversized bearings and Plasti-dip coating to completely protect the motor housing from salt spray.