5140C
BOTTOM DUMP SALT HAULER

GROSS ENGINE HORSEPOWER
1050 hp - 783 kW

MAXIMUM GVW-APPROXIMATE
1,384,859 lb - 628,161 kg
Operators Station and Control
- Spacious Cab with Excellent Visibility
- Two Full Access Doors For Easy Entry
- Ergonomically Designed Cab
- Dual Digital Instrumentation Display
- Full-size Driver and Trainer Air Ride Seats
- Acoustically Engineered and Vibration Isolated
Structures
- Proven Durable Dart Box Beam Frame
- Integral Operator Diagonal Boarding Stair
- Decking and Railing for Operator Safety
- 775 Gal Fuel Tank Provides Hours of Operation
- Trailers with Large Access Covers for Service and Visible Checks
- Isolated Steering Tank Oil Reservoir
- Automatic Lubrication System

Power Train
- Optional Cummins QST30 Tier II Engine
- Optional MTU 2000 Tier 4i Engine
- Allison H9610 Six Speed Transmission
- Dart D300 Drive Axle Assembly
- Gear Ratio Matched to Mine Specific Application

Brakes and Pneumatics
- Dry Drum Friction Brakes
- Pneumatic Braking System
- Gear Engaged Parking Brake
- Easy to Service Air tanks
- Drive Axle and Trailer Axle Brakes
- Brake Fluid or Mineral Oil Braking fluid

Suspension
- Large Front Gas-oil Strut Suspension
- Drive Axle Rubber Column Suspension
- Five Rod Frame to Axle Connection System

Durable • Innovative

GROSS ENGINE HORSEPOWER
1050 hp - 783 kW

MAXIMUM GVW-APPROXIMATE
1,384,859 lb - 628,161 kg
**CUMMINS ENGINE**

- **Model:** Cummins QST30
- **Type:** Water-cooled 4-cycle
- **Aspiration:** Turbo-charged/charge air-cooled
- **Number of Cylinders:** 12
- **Bore and Stroke:** 5.51" x 6.50"/140mm x 165mm
- **Rated Horsepower:** SAE J1995 Gross 1050 HP/783 kW @ RPM 2,100
- **Fan Drive Type:** Thermostatic hydraulic—clutching
- **Maximum Torque:** 3414 lb. ft./4629 N-m
- **Fuel System:** Direct injection
- **Governor:** Electronic control
- **Lubrication System:** Gear pump, force-lubrication
- **Filter:** Full-flow type
- **Pre Lube System**
- **Air Cleaner:** Dry type / double elements pre-cleaned with dust indicators

*Optional 1,200 Horsepower engine available*

*Optional Tier 4 engine configuration available*

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**MTU ENGINE**

- **Model:** MTU 12V 2000 C66 Tier 4
- **Type:** 12V
- **Aspiration:** Two-stage turbocharge / air cooled
- **Number of Cylinders:** 12
- **Bore and Stroke:** 5.3" x 6.15"/135mm x 156mm
- **Rated Horsepower:** 12V–1050HP/783 kW @ RPM 2,100
- **Fan Drive Type:** Thermostatic hydraulic - clutching
- **Maximum Torque:** 3423 lb. ft./4640 N-m
- **Fuel System:** Electronically controlled common-rail injection system
- **Governor:** Electronic control
- **Lubrication System:** Forced feed lubricating system with piston cooling
- **Filter:** Multi-stage oil filter
- **Pre Lube System**
- **Air Cleaner:** Dry type / double elements pre-cleaned with dust indicators

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**SERVICE CAPACITIES**

- **Fuel Tank (standard):** 775 U.S. Gal. - 2,933 ltr.
- **Engine Oil:** 37.5 U.S. Gal. - 142 ltr.
- **Transmission:** 39 U.S. Gal. - 147 ltr.
- **Steer Wheels (each end):** 1.75 U.S. Gal. - 6.7 ltr.
- **Differential:** 43 U.S. Gal. - 162 ltr.
- **Planetaries (each end):** 17.5 U.S. Gal. - 66 ltr.
- **Steering Control:** 67 U.S. Gal. - 253 ltr.
- **Trailer Axle Wheels:** 3.5 U.S. Gal. - 13.2 ltr.
- **Engine Coolant:** 65 U.S. Gal. - 246 ltr.

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**DRIVE AXLE**

- **DA300 - Cast drive axle housing with bolt on stub ends.**
- **Double reduction gearing with two piece axle shafts and continuous pressure lubrication, filtration, and oil cooling.**

**GEAR RATIO:**

- **Differential:** 3.63:1
- **Planetary:** 7.85:1
- **Total:** 28.49:1
STEER AXLE / STEERING

Meets SAE J1511, ISO 5010

SA132 – Steer axle beam is rigid box construction with knuckle type spindles and king pins.

Hydrostatic power steering system using twin double acting hydraulic cylinders.

Independent 60 gallon oil reservoir with 6 micro filter.

Supplementary steering electrically driven hydraulic motor allowing three full 90° turns in the event of engine or pump failure

Maximum Steering Angle..................................................40°

Wall to Wall Turn Clearance.............................................82 ft - 25 m

MAIN FRAME

Type....................190° Wheel Base Box Section Structure

Strategically located castings for high stress areas with integral front bumper and operator staircase. Front tow hooks standard.

BRAKES

Drive Axle - Air over hydraulic dry drum braking system

Trailer Axle - Air over hydraulic dry drum braking system

Size: Rear/Trailer......36”X12” dual shoe, 2 wheel cylinders

Service Brake - Pedal operated and modulated up to 100 % of braking effort.

Park Brake - Drive axle locking, gear engagement lock.

Emergency Braking - All wheel brakes applied.

RIMS / TIRES TRACTOR

Standard Rim Assembly.................................................22 x 51

Standard Tire..................................................................30.00R51

RIMS / TIRES TRAILER & DOLLY

Standard Rim Assembly.................................................22 x 51

Standard Tire..................................................................30.00R51

TRANSMISSION

Model.................................Allison H9610 Remote Mounted

Torque Convertor.................3-Element,1-Stage, Polyphase

Transmission....................Constant Mesh Spur Type Planetary

Lockup Clutch..................Wet, Hydraulic Multi-Disc Clutch

Shift Control.....Fully Automatic CEC5 Electronic Controls

Gear Range.........................6 Forward Speeds, and Reverse

Ranges / Ratio:            1st -  4.24:1          4th - 1.67:1
                          2nd -  3.05:1          5th - 1.00:1
                          3rd -  2.32:1          6th - 0.72:1

Reverse:                  1st   -  5.75:1

SUSPENSION

Steer - Two low pressure nitrogen charged oil filled self contained hydraulic struts with five rod axle to frame connections.

Drive - Eight rubber column elements with frame mounted “J” bracket rebound mechanisms. Rebound brackets include rubber load pads.

Trailer - Direct axle to trailer frame mount.

Dolly - Eight rubber column elements with frame mounted “J” bracket rebound mechanisms.

SAFETY

- Ground Level Engine Shutdown
- Slip Resistant Foot Traffic Areas
- Lock Out / Tag Out Location
- Supplemental Steering
- Boarding and Decking Handrails/Toe Boards
- Mud Flaps
- 18 Nozzle Fire Suppression System
- 10 lb. Hand Held Fire Extinguisher
5140C BOTTOM DUMP SALT HAULER

SPECIFICATIONS

TRAILER BODY

Struck.................................................................122 yd\(^3\) - 93.3 m\(^3\)
Heaped (3:1 SAE).............................................137 yd\(^3\) - 124 m\(^3\)
Payload (per trailer)..............................140 tons - 127 Mt
Total Payload (combine).........................420 tons - 381 Mt

TRAILER HITCH

20" diameter universal ball hitch with bronze bushings in all tractor and trailer locations.

TRAILER PNEUMATICs

Each trailer has its own set of air components designated to work that respective trailer.

Air Components Include: Main Tank, Emergency Reserve Tanks, RE-6 Valves, High Quality Air Hoses, and Stainless Steel Tubes and Fitting to Resist Corrosion.

Door Cylinder Size..............................................16.0"

TRAILER AXLE

Model TA311 tubular axle with bolt on stub ends, oil lubricated wheel bearings and outboard bolt on brakes.

DOLLY AXLE

Model TA311 tubular axle with bolt on stub ends, oil lubricated wheel bearings, no brakes.

ELECTRICAL SYSTEM

Electrical System.....................................................24V
Alternator 100 Amp .............................................24V
Batteries 8D.........................................................2
Headlights–HID ....................................................4
Clearance/Parking Marker Lights - LED............4
Stop/Tail Lights - LED........................................2
Turn Indicators - LED............................................6
Reverse Lights - LED..........................................2
Reverse Alarm.....................................................1
Engine Compartment Lights - LED...................2
PowerPort - 12 VDC.............................................2
Ground Level Engine Shutdown.......................1
Master Battery Disconnect - Lock Out/Tag Out......1
Air Starter..........................................................2

CAB

• Two Full-Size Cab Access Doors
• Operator and Passenger Slide Windows
• Center Console Contains Transmission Gear Selector
• Tilt and Telescoping Steering Column with Integral Horn Button
• Pressurized, Filtered Heater, Air Conditioner, Defrost
• Air Suspension Severe Duty, Operator and Passenger Seats with Built in Air Compressor
• 3-Speed Windshield Wipers with 1 Gallon Wash Tank
• Operator Accessible Sealed Rocker Switches for Trouble Free Operation
• Engine and Transmission Diagnostic Ports
• AM/FM Radio with Auxiliary Input Jack.
• Easy Access Circuit Breaker Panel
• Turn Signal Switch and Headlight Dimmer
• Dual Cup Holders in Center Console
• Mounting and Pre-wired for Two-way Radio

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<table>
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<th>GVW</th>
<th>76,648 LB.</th>
<th>218,537 LB.</th>
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<tr>
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<td>133,490 LB.</td>
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<tr>
<td>EVW</td>
<td>60,000 LB.</td>
<td>85,047 LB.</td>
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IN DASH DISPLAY

- Twin Full Color Powerview LCD Displays That Monitor Vehicle Functions, J1939 Compliant
- Speedometer - Fuel Level - Differential Temperature
- Tachometer - Activation Indicators
- Gear Selected//Lock Up Indicator - Voltmeter
- Warning and Fault Indicators - Hour Meter
- Air Filter Restriction Indicator - Park Brake
- Engine Oil Pressure, Temperature
- Transmission Pressure, Temperature
- Coolant Temperature - Hydraulic Temperature

OPTIONS

Accessories
- Wheel Chocks
- Forward/Reverse Camera
- Front & Rear Detection Radar

Electrical System
- Fog Lights
- High Capacity Alternator
- Bluetooth Radio
- Extra Truck Lighting

Other
- Transmission P.T.Os and Pumps
- Ground Level Remote Jump Start Station
- Vehicle Safety Striping
- High Efficiency Fan

Cold Weather
- Fuel Heater
- Engine Pan Heater
- Transmission Pan Heater
- Engine Coolant Heater
- Heated Mirrors
DART 2085 - 85 TON (77.1t) PAYLOAD
DART 3100B - 100 TON (91t) PAYLOAD
DART 3120B - 120 TON (109t) PAYLOAD
DART 4120B - 120 TON (109t) PAYLOAD
DART 4160B - 160 TON (145t) PAYLOAD
DART 4175B - 175 TON (159t) PAYLOAD
DART 4180B - 180 TON (163t) PAYLOAD
DART 4220B - 220 TON (199t) PAYLOAD
DART 5140C - 420 TON (381t) PAYLOAD
DART 5225C - 450 TON (408t) PAYLOAD
PRIME MOVER CONVERSIONS 120 - 280 TON
WT20 - 20,000 GALLON (75,700 L) CAPACITY
WT30 - 30,000 GALLON (113,500 L) CAPACITY
RT20/30 - 10x10 - 20/30 TON (18/27t) PAYLOAD
RT50T - 14x14 - 50 TON (45t) PAYLOAD
RT80 - 10x10 - 80 TON (73t) PAYLOAD

Specification Number: (010-561) 8-18-2016

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