



P.O. BOX 20307 • PORTLAND, OREGON 97220 • U.S.A.

## SPECIFICATIONS FOR MODEL ST-2D

4-WHEEL DRIVE SCOOPTRAM®  
SPECIFICATION NO. 580657  
AUGUST, 1988

<b>CAPACITY:</b>	<b>lbs</b>	<b>(kg)</b>
Static Tipping Load		
Straight Ahead	21,750	(9,866)
Breakout Force	12,700	(5,761)
Hydraulic Breakout Force	20,530	(9,312)
Tramming Capacity	8,000	(3,629)

### BUCKET (STANDARD):

Capacity, S.A.E. Rating			
Nominal Heaped	2.5 cu. yds	(1.9 cu. m)	
Struck	2.1 cu. yds	(1.6 cu. m)	
Boom Raising Time	3.7 seconds		
Boom Lowering Time	3.0 seconds		
Bucket Dump Time	1.6 seconds		

### VEHICLE SPEEDS, LOADED:

Forward or Reverse				
Gear	<b>1st</b>	<b>2nd</b>	<b>3rd</b>	<b>4th</b>
Speed in mph	2.2	4.4	7.2	12.1
Speed in km/h	3.5	7.1	11.6	19.5

### GRADEABILITY: SEE PERFORMANCE CURVE

### ENGINE:

Deutz Diesel (4-Cycle),	Model: F6L-912W
MSHA Sch. 24 Power Rating @ 2300 rpm:	82 hp
Maximum Torque @ 1550 rpm:	203 ft-lb (275 N-m)
Number of Cylinders	6 in line
Displacement	345 cu. in. (5.6 L)
Cooling	Air
MSHA Ventilation	2750 cfm (212 cu. m/min)

### STARTING SYSTEM:

Electric	12 Volt
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### TORQUE CONVERTER:

Single Stage, Clark	C-270 Series
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### TRANSMISSION:

Full Power Shift, 4 Speeds Forward and 4 Speeds Reverse	
Clark	R-28,000 Series

### AXLES:

Hypoid Type Differential, Full-Floating Planetary Wheel End Drive	
Clark	19,000 Series

### STANDARD BRAKES:

Service: 4-Wheel, Hydraulically Applied,  
Fully Enclosed, Multiple Wet Disc Brakes.  
Parking: Spring Applied, Hydraulically Released,  
Multiple Wet Disc, Built into the Transmission

### TIRES:

Tube Type, Nylon, Smooth Tread Design,  
For Underground Mine Service, on Demountable Rims.  
Tire Size, Front & Rear: 12.00 x 24, 16 Ply, L-5S

### STEERING:

Articulated, Hydraulic Power Steering,  
Monostick Control.  
Turning Angle 81° (40 1/2° each way)  
System Pressure 1900 psi

### HYDRAULIC SYSTEM:

Cylinders, Double Acting with Chrome Plated Stems  
Steering Cylinder (1) Diameter: 5.0" (127 mm)  
Hoist Cylinder (1) Diameter: 7.0" (178 mm)  
Dump Cylinder (1) Diameter: 7.0" (178 mm)  
Pumps, Heavy Duty Gear Type  
Dump & Hoist 48 gpm (182 l/m) @ 2300 rpm  
Steering 24 gpm (91 l/m) @ 2300 rpm  
Filter: Suction Line 25 Micron

<b>TANK CAPACITIES:</b>	<b>U.S. Gal</b>	<b>(Liters)</b>
Fuel	39	(148)
Hydraulic Oil	38	(144)

### OSCILLATION:

Rear Axle, Trunion Mounted, Bronze Bushings  
Degree of Oscillation Total 16°

**EXHAUST CONDITIONER:** Catalytic Purifier

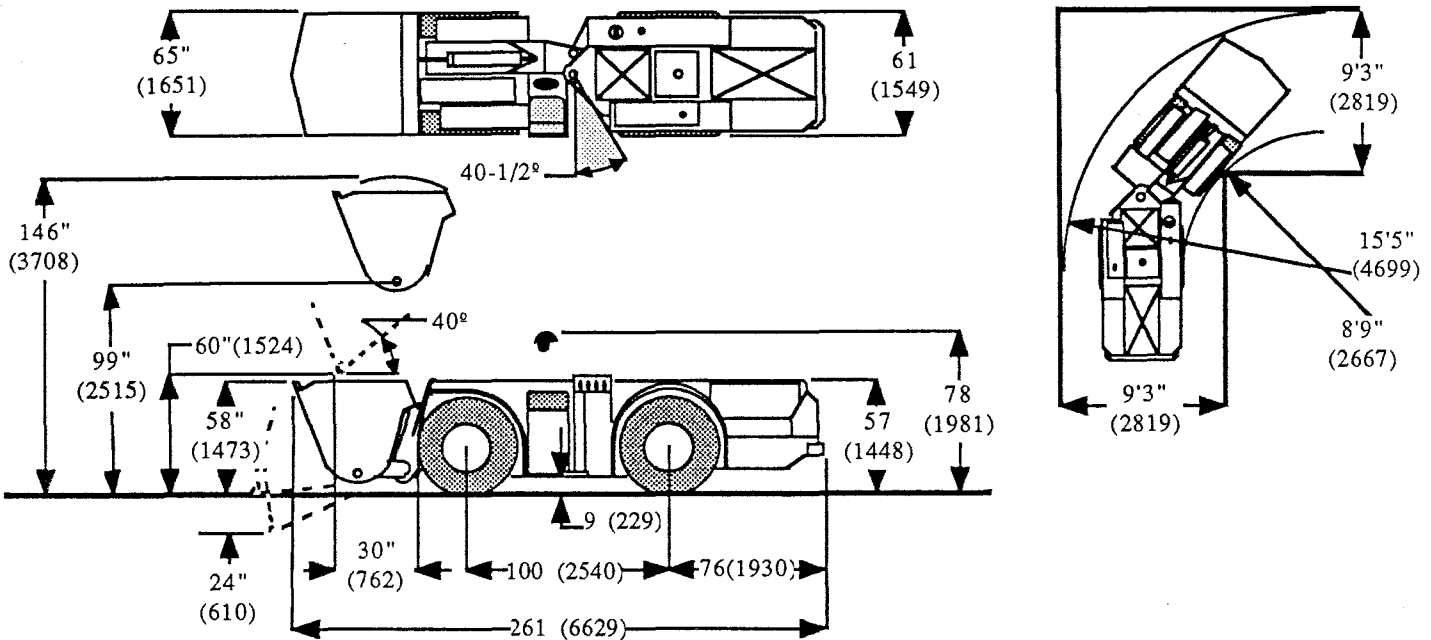
### OPERATOR'S ARRANGEMENT:

Side Seating For Bi-Directional Operation and  
Maximum Visibility.

<b>WEIGHT: (APPROXIMATE)</b>	<b>lbs</b>	<b>(kg)</b>
Operating (Empty Vehicle)	24,500	(11,113)

MANUFACTURED WITH AN MSHA TITLE 30, PART 32 (SCHEDULE 24) CERTIFIED ENGINE.

# MODEL ST-2D



- NOTES:
- DIMENSIONS INSIDE PARENTHESES ARE SHOWN IN MILLIMETERS.
  - HEIGHT OVER THE OPERATOR IS ADJUSTABLE DEPENDING ON APPLICATION.
  - ALL HEIGHT DIMENSIONS ARE BASED ON A TIRE RADIUS OF 24" (610 MM)

## STANDARD SPECIFICATION

Engine Hour/Service Meter  
 Engine Oil Pressure Gauge  
 Engine Temperature Gauge  
 Engine Low Oil Pressure/High Temperature Audio-Visual Alarm  
 Engine Fuel Filter  
 Engine Primary and Secondary Oil Filters  
 Oil Bath Aircleaner  
 Converter Oil Cooler  
 Converter Temperature Gauge  
 Fuel/Water Separator

Modulated Shift Transmission  
 Clutch Pressure Gauge  
 Transmission Oil Filter  
 NoSPIN® Differential in Front Axle  
 Dual Circuit Brake System  
 Articulation with Adjustable, Self-Aligning Thrust Bushings  
 Fully Stabilizing Bucket

One Battery of 170 Ah  
 Alternator, 60 AMP  
 Lights, Halogen (4 - 2 Front & 2 Rear)  
 Voltmeter

Battery Isolation Switch  
 Neutral Start Protection  
 Automatic Brake Application with Low Accumulator/Clutch Pressure  
 Fuel Shut-Off Valve  
 Swivel Hinge Lock Arm  
 Electric Horn

NOTE: The manufacturer reserves the right to change the specifications and/or design of this vehicle at any time without notice.