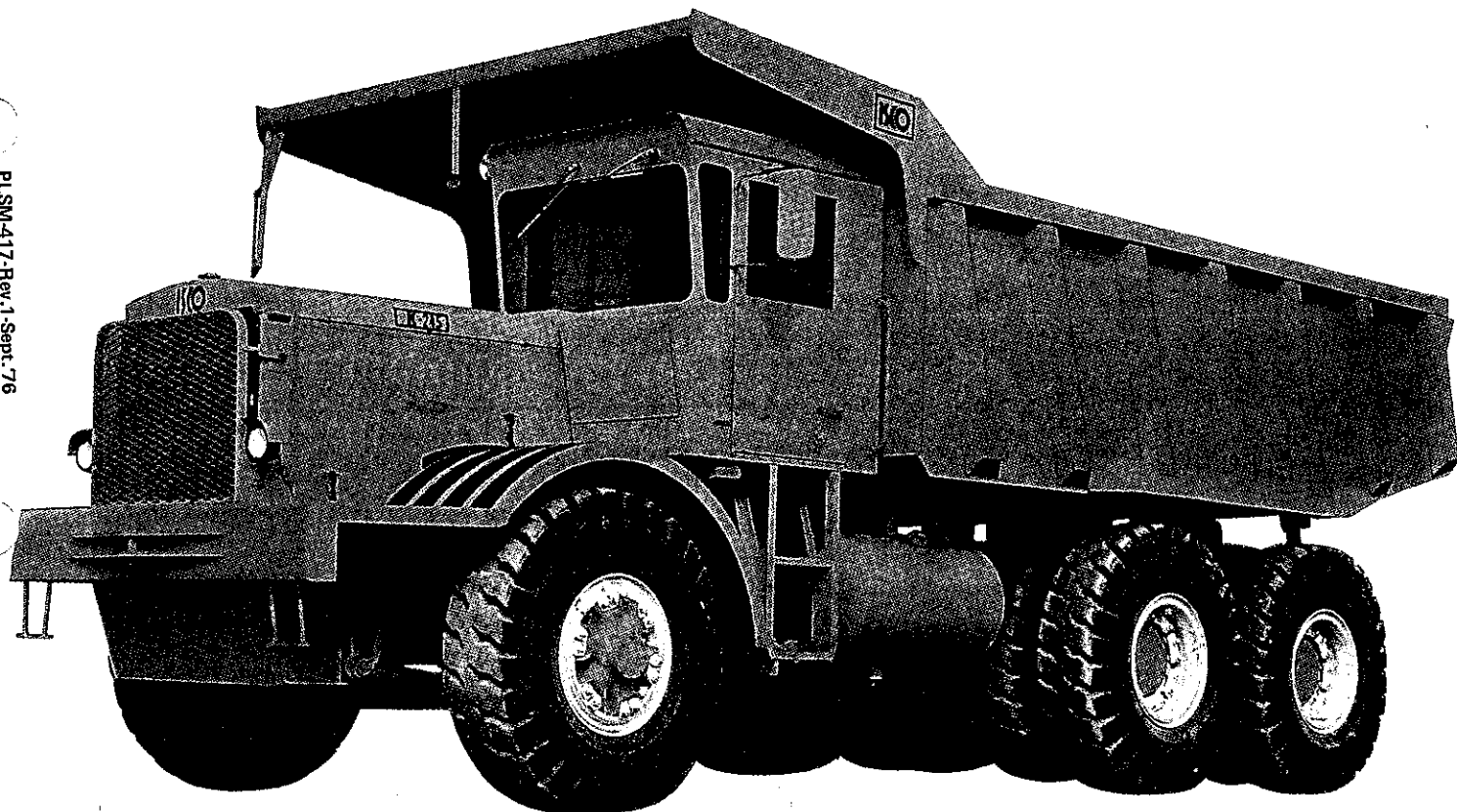


# IC-245R

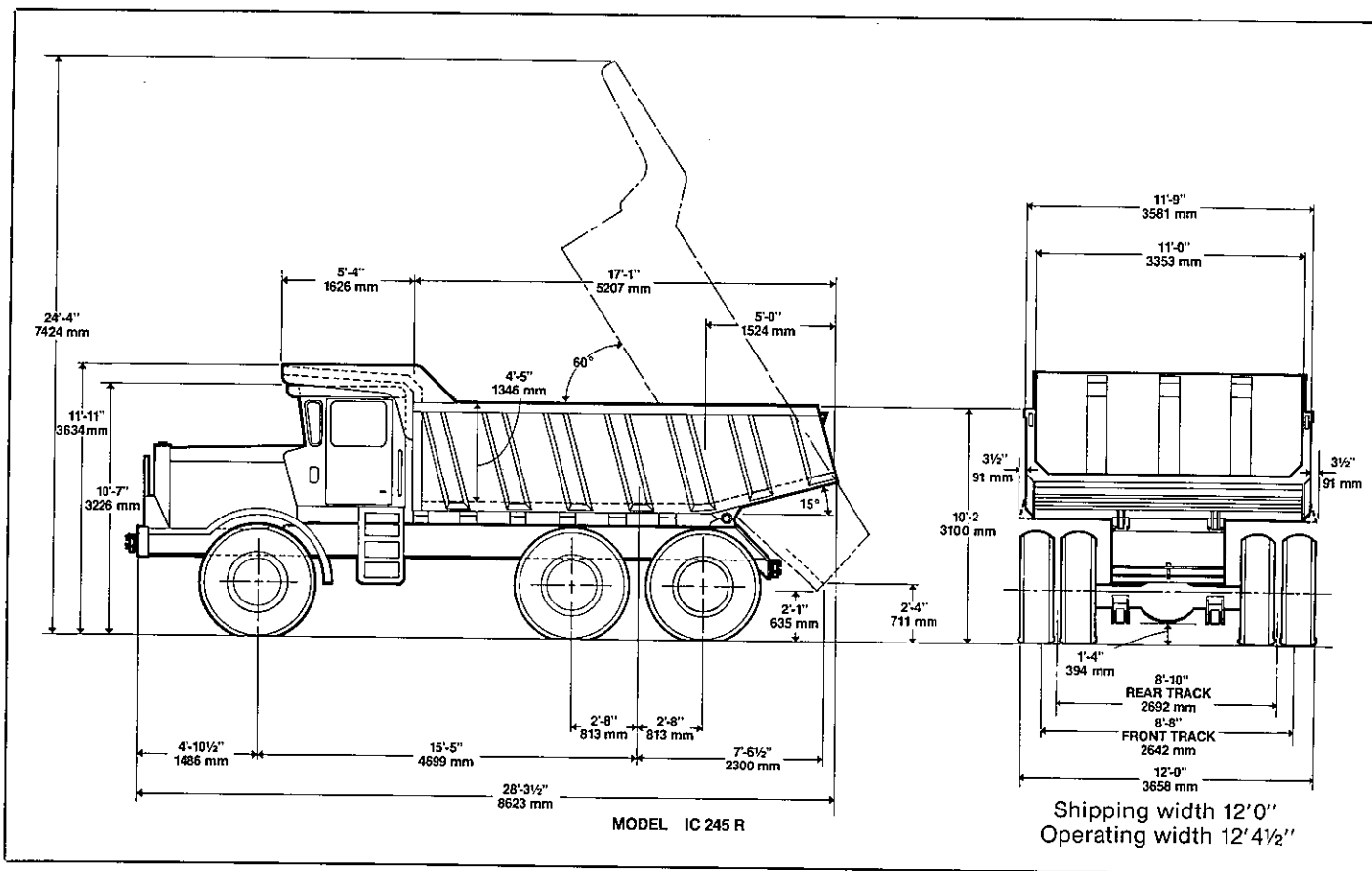
45-TON REAR DUMP ROCK HAULER



PLSM-417-Rev.1-Sept.76

# ISCO

OFF-HIGHWAY HAULERS



# SPECIFICATIONS

## ISCO IC-245 R 45-TON REAR DUMP ROCK HAULER

### ENGINE

Cummins NTA-855-C 4 cycle turbocharged and after-cooled diesel engine.  
 Gross Horsepower @ 2300 RPM ..... 420  
 Maximum Torque @ 1650 RPM ..... 1,060 ft. lbs.  
 Bore & Stroke ..... 5½" x 6"  
 Displacement ..... 855 cu. in.  
 No. of Cylinders ..... 6  
 Air Cleaner ..... Dry type, 3 stage, with replaceable element.

Detroit Deisel 12V-71-N60 2 cycle diesel engine.  
 Gross Horsepower @ 2100 RPM ..... 434  
 Maximum Torque @ 1200 RPM ..... 1,154 ft. lbs.  
 Bore & Stroke ..... 4¼" x 5"  
 Displacement ..... 852 cu. in.  
 No. of Cylinders ..... 12  
 Air Cleaner ..... Dry type, 3 stage, with replaceable element.

### TRANSMISSION AND TORQUE CONVERTER

Allison CLBT-5860 full powershift with integral torque converter, lockup and torqmatic brake. Six forward speeds, one reverse speed. Automatic lockup feature applies to all ranges. Stall ratio 2.90:1. Transmission is engine mounted.

#### Gear Ratios:

1st	2nd	3rd	4th	5th	6th	R
4:1	2.68:1	2.01:1	1.35:1	1:1	.67:1	5.12:1

**Max. Speed:** High Gear 30 MPH

**Retarding:** Continuous retarding capability 795 hp.

### DRIVE AXLE

Tandem drive. Planetary & hypoid gearing in center carriers. Planetary final drive in outer wheels.

#### Ratios:

Differential w/drop box	3.27:1
Planetary	5.20:1
Total Reduction	17.02:1

### FRONT AXLE

Reverse Elliott type with 7" diameter tubular center.

### SUSPENSION

#### Front:

Full floating semi-elliptic leaf springs. Torque rod drive with greaseless replaceable rubber bushings.

#### Rear:

Rubber load cushions (10). Rubber bushed equalizer beam ends. Center trunnion of equalizer beam has alloy bronze bushing. Torque rod drive with greaseless replaceable rubber bushings.

### STEERING

Full time hydrostatic power steering with dual steering cylinders, independent vane type pump. Supplemented by electric power steering for emergency use.

### BRAKES

**Service:** Internal-expanding, air operated, cam type brakes with air controls. 13.2 CFM air compressor, wet and dry reservoirs and emergency reservoir. Limit valve on front axle brakes.

Size Front — Two 20¼" x 5"

Size Rear — Four 20¼" x 7"

Total Lining Area — 1,786 sq. in.

**Parking:** Two spring actuated, air-release chambers on each rear axle, apply service brakes. Automatic spring application when air pressure is lost, or manually applied from cab. (OSHA approved).

### CAB

All-steel, 56 in. wide, rubber-mounted. Offset to left side of vehicle. Safety glass throughout, tinted reverse slope windshield and full-length window right door. Two windshield wipers. Fully adjustable Bostrom West Coaster driver's seat with belt. Heater and defroster, thermal and acoustical lining, insulated non-skid floor mat, forward extended cab roof. Left and right West Coast mirrors and air horn. Operator safety grab rails and ladders to cab and engine compartment. SAE instrument cluster.

### ELECTRICAL SYSTEM

Delco-Remy 24 volt starting and 12 volt lighting systems with circuit breaker protection. Two 12 volt, Group 8 diesel batteries, series parallel switch. 75 Amp alternator and voltage regulator.

**Lights:** Two rubber mounted headlights with dimmer switch, rear stop & tail light, two rear flood lights, cab dome light, illuminated instrument panel.

### FRAME

All welded construction of high strength 50,000 PSI steel. 16" @ 58 lb. wide beam siderails with 4" x 4" x ½" reinforcing angle fully welded the length of the lower outside flange. Full depth crossmembers and integral welded bumper. Front and rear tow clevises.

## HOIST

Dual 8" diameter x 105" stroke, three-stage telescoping single-acting cylinders provide 60° dump angle. Constant running 70 GPM gear type hoist pump.

## BODY

27.5 cu. yd. struck (SAE), 32.3 cu. yd. heaped (SAE), exhaust heated rock body with scoop end and full cab protector. Floor is 3/4" high strength 100,000 PSI steel. Sides, header plate and canopy are 3/8" high strength 50,000 PSI steel. All welded construction with box type reinforcing. Body is rubber cushioned on frame. Body raised position lock (OSHA).

## COOLING SYSTEM

Heavy duty flat tube and fin type radiator with bolted tank construction with de-aerated cast steel top tank, rubber mounted. Water to oil type heat exchanger for cooling torque converter and transmission oil. Automatic radiator shutters and rugged brush guard. Front core area 1658 sq. in.

## TIRES, RIMS, WHEELS

**Front:** Two 16.00 x 25, 24 ply rock rib tread, tubeless (E-1)

**Rear:** Eight 16.00 x 25, 24 ply rock service tread, tubeless (E-3)

**Rims:** Ten 25 x 11.25 demountable type. Single front, dual rear.

**Wheels:** Cast spoke type.

**Rock Ejectors:** Each dual tire is equipped with a positive ejector.

## GAUGES, INSTRUMENTS AND ALARMS

Engine oil pressure gauge, engine coolant temperature gauge, ammeter, transmission oil pressure and temperature gauges, air pressure gauge and alarm, fuel level, electric engine hourmeter, tachometer, automatic audible back-up alarm (OSHA).

## OPTIONS

Air/Hydraulic suspension seat. Spare tire & wheel. Body wear bars; body extensions. High-cube tailings body 38 cu. yd. heaped (SAE), with air latch tailgate. Hood sides, block heater (120V). Passenger seat with belt, cold weather starting aid (ether), low oil pressure and high water temperature alarm, automatic engine shutdown, alcohol evaporator, speedometer, body down indicator, windshield washer, sun visor, two extra headlights recessed in bumper, fire extinguisher. Optional paint (one color). Tires other than standard — consult factory.

## SERVICE DATA

### Capacities:

Cooling system	80 quarts
Crank case (w/ filters)	
Cummins	24 quarts
GMDD	23 quarts
Transmission (w/ filters)	
Allison	72 quarts
Differentials (Total 2)	33 quarts
Planetarys (Total 4)	30 quarts
Power steering	4 quarts
Fuel Tank	100 gallons
Hyd. Reservoir	60 gallons

## GENERAL DIMENSIONS

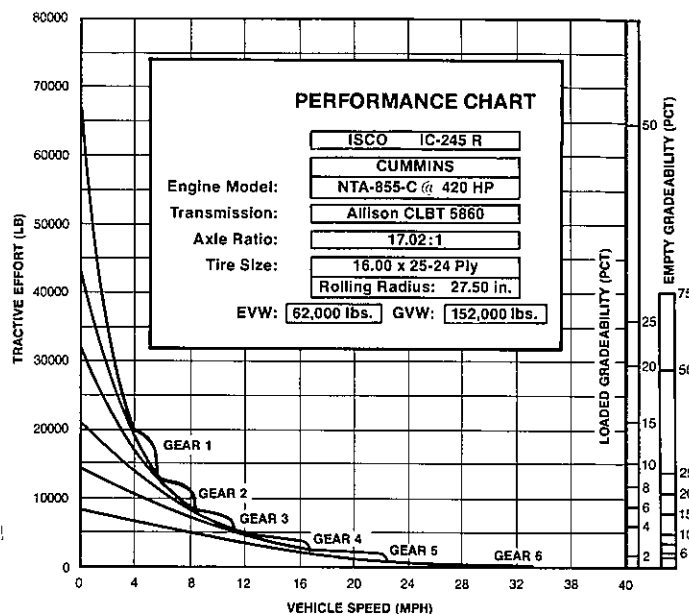
Wheelbase	15 ft. 5 in.
Canopy to ground	
(down)	11 ft. 11 in.
(raised)	24 ft. 4 in.
Overall length	28 ft. 3 1/2 in.
Overall width (Rock deflectors installed)	12 ft. 4 1/2 in.
Loading Height	10 ft. 2 in.
Front Axle Track	8 ft. 8 in.
Drive Axle Track	8 ft. 10 in.
Front Axle Clearance	1 ft. 3 in.
Inside body length	17 ft. 1 in.
Inside body width	11 ft. 0 in.
Inside body depth	4 ft. 5 in.
Dump angle	60 Degrees
Dump ground clearance	2 ft. 4 in.
Vehicle clearance circle (SAE)	71 ft. 8 in.
Turning circle on front wheel track	68 ft. 8 in.

(Continuing technological advancements and product improvements make dimensions and specifications subject to change without notice)

**Sold and Serviced by:**

## WEIGHTS AND DISTRIBUTION (Standard equipped vehicle)

	Front	%	Rear	%	Total
Chassis & hoist	24,200	49.0	25,200	51.0	49,400
Body	600	4.8	12,000	95.2	12,600
Net total (EVW)	24,800	40.0	37,200	60.0	62,000
Payload	7,200	8.0	82,800	92.0	90,000
Gross total (GVW)	32,000	21.0	120,000	79.0	152,000

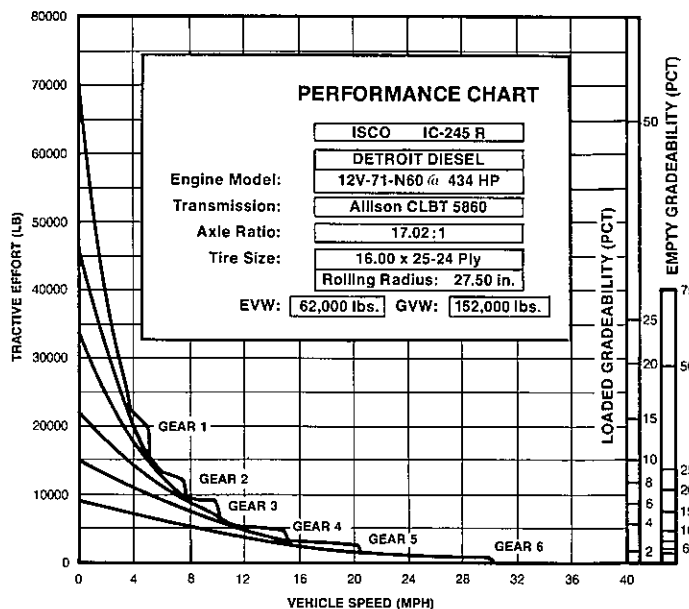


### TO DETERMINE VEHICLE PERFORMANCE:

**Empty:** Find percent of grade on the empty scale. Read horizontally to the intersection with the gear curve. Read down to determine maximum speed obtainable in that gear.

**Loaded:** Find percent of grade on the loaded scale. Read horizontally to the intersection with the gear curve. Read down to determine maximum speed obtainable in that gear.

**Note:** To the desired gradeability, add 1% for each 20 lb./ton of rolling resistance.



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