

GENERAL: B500

Type of vehicleTowing Tractor, Super Brute
Gross vehicle weight:
Class I38,000 lbs.
Class II44,000 lbs.
Class III50,000 lbs.
Class IV57,000 lbs.
Class V65,000 lbs.
Drawbar pull:
Class I.....30,000 lbs.
Class II.....35,000 lbs.
Class III.....40,000 lbs.
Class IV45,000 lbs.
Class V50,000 lbs.
Length less couplers190.00 in.
Wheelbase90.00 in.
Width96.00 in.
Height w/o cab78.00 in.
Height w/cab86.50 in.
Ground clearance12.00 in.
Turning radius300.00 in.
Top governed speed forward15 M.P.H.
Top governed speed reverse15 M.P.H.

ENGINE

MakeDetroit Diesel 8.2L Turbo Diesel
Bore and stroke4.25 in. X 4.41 in.
No. of cylinders8
Maximum brake hp160 BHP @ 2800 RPM
Maximum torque430 lb. ft. @ 1700 RPM
Displacement500 cu. in.
Firing order1-8-4-3-6-5-7-2
Oil Capacity10 quarts

FUEL SYSTEM

TypeDiesel
Fuel Tanks1
Fuel tank capacity33 gallons

COOLING SYSTEM

Capacity37 quarts
Radiator core:
MakeINHEXCO
TypeTube and fine

FIGURE 1-1. GENERAL CHARACTERISTICS (1 OF 3)

TRANSMISSION

MakeFunk
Model2263E1308
No. speeds6 forward, 3 reverse
Ratios:
Forward 1st8.20:1
Forward 2nd4.64:1
Forward 3rd3.53:1
Forward 4th2.00:1
Forward 5th1.41:1
Forward 6th0.80:1
Reverse 1st8.20:1
Reverse 2nd3.53:1
Reverse 3rd1.41:1
Oil Capacity27 quarts

TORQUE CONVERTER

MakeFunk
Model12.75 (4045770)
Ratio (stall)2.603:1

DRIVE LINES

MakeNorth American
TypeMechanics

STEERING SYSTEM

Type2 Wheel steer
Steering control unitCharlynn
Part no.212-1015
Steering cylindersRam
Part no.R3-30A0B

HYDRAULIC SYSTEM

TypeClosed Circuit
Hydraulic tanks1
Hydraulic fluids capacity33 gallons

FIGURE 1-1. GENERAL CHARACTERISTICS (2 OF 3)



FRONT AXLE

MakeRockwell International
TypeDriveSteer Axle
ModelPSOC-824-RSH

Ratio:

Differential5.833
Planetary4.235
Oil Capacity38 quarts

REAR AXLE

MakeRockwell International
TypeRigid Drive Axle
ModelPSC-673-RSH

Ratio:

Differential5.833
Planetary4.235
Oil Capacity26 quarts

WHEELS AND TIRES

WheelsEqui Tech
Part No.C100930
TiresGoodyear
Size14.00 X 24, 20 ply
Air Pressure (front and rear)90 psi

BRAKE SYSTEM

Brake ValveMico
AccumulatorGeer Hydraulics
Brake front and rearRockwell International
TypeDrum/Shoe

ELECTRICAL SYSTEM

BatteryWestern
Model4-D
No. required1
Voltage12V
GroundNegative
AlternatorDelco-Remy
Starter motorDelco-Remy
Fan belt tension1/2-3/4 in.

FIGURE 1-1. GENERAL CHARACTERISTICS (3 OF 3)