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2870 TRACTORS

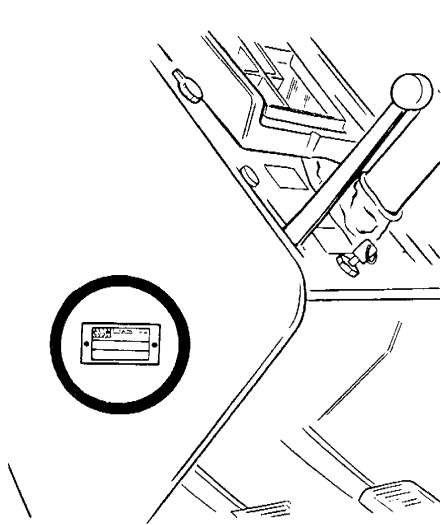
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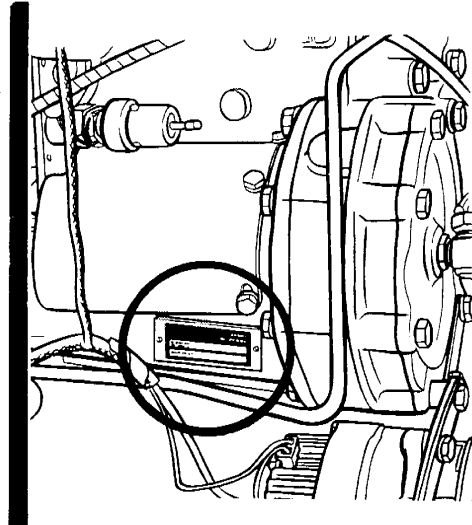
Section 1010

2870 TRACTOR GENERAL SPECIFICATIONS

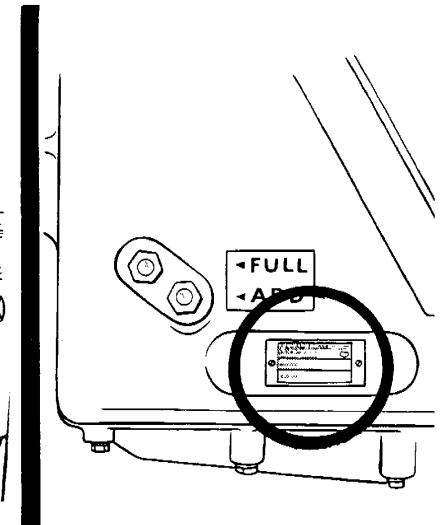
SERIAL NUMBERS



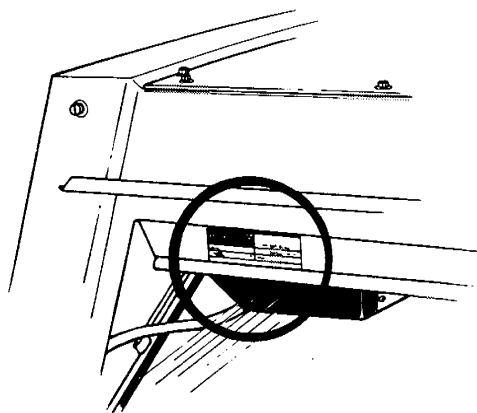
TRACTOR SERIAL NUMBER



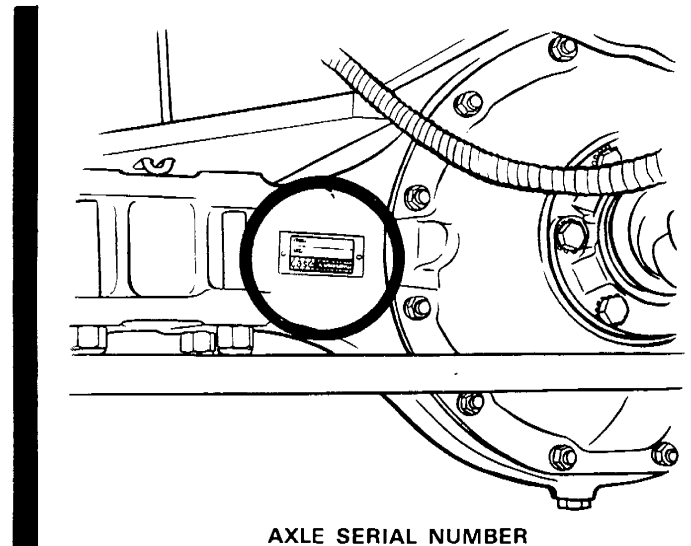
ENGINE SERIAL NUMBER



TRANSMISSION SERIAL NUMBER



CAB SERIAL NUMBER



AXLE SERIAL NUMBER

DIESEL ENGINE

General

Type	6 Cylinder, 4 Stroke Cycle, Valve-In-Head, Turbocharged Diesel Engine
Firing Order	1-5-3-6-2-4
Bore	5 Inches (127mm)
Stroke	5.71 Inches (145mm)
Piston Displacement	674 Cubic Inches (11 045 cm ³)
Compression Ratio	14.7 to 1
Cylinder Sleeves	Removable Wet Type
No Load Governed Speed	2330 to 2420 RPM
Rated Engine Speed	2200 RPM
Engine Idling Speed	750 to 800 RPM
*Valve Tappet Clearance (Exhaust)	(Cold) .031 Inch (0.80mm)
	(Intake) (Cold) .014 Inch (0.35mm)

Piston and Connecting Rod

Rings per Piston	4
Number of Compression Rings	3
Number of Oil Rings	1
Type Pins	Full Floating Type
Type Bearings	Replaceable Steel Back With Lead-Bronze Liners

Main Bearings

Number of Bearings	7
Type Bearings	Replaceable, Steel Back with Lead-Bronze Liners

Engine Lubrication System

Oil Pressure	65 to 87 PSI (448 to 600 kPa)
	Engine Warm and Operating at Rated Engine Speed
Type System	Pressure and Spray Circulation
Oil Pump	Gear Type
Oil Filtration	Oil Cleaned Continuously by Cyclonic Separation and Centrifugal Cleaner.
Oil Capacity	28.4 U.S. Qts. (26.9 litres)
Oil Cooling	Oil Cooler Flange Mounted to Oil Cleaner; Water Cooling.
Turbocharger Oil Filter	Full Flow Spin-On Type

Fuel System

Fuel Injection Pump	Robert Bosch, Multiple Plunger
Pump Timing	20 Degrees Before Top Dead Center
Fuel Injectors	Robert Bosch, 21mm Opening Pressure 2930 to 3045 PSI (20 202 to 20 995 kPa)
Fuel Transfer Pump	Plunger Type, Integral Part of Injection Pump
Governor	Variable Speed, Fly-Weight Centrifugal Type, Integral Parts of Injection Pump.
First Stage Filter	Full Flow Spin-On Type
Second Stage Filter	Full Flow Spin-On Type
Fuel Tank Water Trap and Drain (2)	Located in Base of Each Fuel Tank
Fuel Tank Capacity	75 U.S. Gallons (283.9 litres) Each Tank
Fuel Level Gauge	Electric, Located on Instrument Panel
Hand Primer Pump	Located on Top of the Fuel Transfer Pump
Preliminary Fuel Filter	Located at the Bottom of the Fuel Transfer Pump

TRACTOR SPECIFICATIONS

Air Intake System

Type Air Induction System - Aspirated - Strata Tube
With Dry Type Final and Safety Elements.

Cooling System

Capacity of System 44 U.S. Quarts (41.6 litres)
Type of System Pressurized, Thermostat Controlled By-Pass Type:
Forced Circulation, (Centrifugal Type Pump).
Radiator Heavy Duty Fin and Tube Type
Thermostat (2) Thermostats Start to Open
approximately 175°F (79°C) Fully
Open at 202°F. (94°C.)
Pressure Cap Required 14 PSI (96.5 kPa)

Hydraulic Brakes

Type Self-Adjusting Multiple Disc Dry Type Transmission Brakes.

Parking Brake

Type Cable Actuated by over center Type Handle -
Adjustable from Operator's Seat. Multiple Disc Type

Electrical System

Type of System 12 Volt Negative Ground
Batteries (2) 12 Volt Batteries Connected in parallel
Group Size 30H, Rated in 1.255 to 1.265
Specific Gravity. Discharge Rate 300 Amps
at 0°F. Voltage drops to 9.2 after 10 sec-
onds. Voltage drops 1.0 Volt per cell after
5 min.
Alternator 12 Volt 61 Amp Output, Negative Ground
Voltage Regulator 12 Volt, Solid State, Internal Component of Alternator.
Starter Motor 12 Volt with Solenoid Switch
Head Lights (2) 12 Volt, 40/60 Watt Sealed High-Low Beam
Front Flood Lights (2) (optional) 12 Volt, 35 Watt Sealed Beam
L.H. Rear Flood and Tail Light (1) 12 Volt, 60 Watt Sealed Beam
Combination Tail and Flood Lamp.
R.H. Rear Flood (optional) (1) 12 Volt, 60 Watt Sealed Beam
Circuit Breaker System over Load Check Two 40 Amp. 12 Volt
Circuit Breakers connected in parallel, 80 Amp rating,
60 Amp. Min. Continuous Capacity.
Lights Circuit Breaker 40 Amp., Located on Light Switch
Parking Brake Warning Buzzer 12 Volt
Flasher Lights (2) With Directional Turn Signals 12 Volt, Amber Lens

Electrical System

Bulb and Lamp Replacement:

Instrument Cluster Warning Bulbs	No. 194
Instrument Cluster Illumination Bulbs	No. 168
Pyrometer Illumination Bulb	No. 53
Dome Light Bulb	No. 93
Console Light Bulb	No. 168
Flasher Light Bulbs	No. 1156
Front Driving Lamps	No. 4652
Front Flood Lamps	No. 4406
Rear Flood Lamp	No. 4466
Rear Flood and Tail Lamp:	
Lamp	No. 4469
Bulb	No. 1003

Power Shift Transmission

Type	3 Speed Compound Planetary With Hydraulically Actuated Clutches and a 4 Speed Gear Range Section.
Gear Selection	12 Speeds Forward and 4 Speeds Reverse.
Shifting	Hydraulic Power Shifting Controlled By a Lever on Operator's Console. 4 Speed Range Controlled by a Mechanical Shifter From a Lever on Operator's Console.
Oil Type	Case TFD (Transmission - Final Drive)
Oil Capacity (Without PTO)	40 U.S. Quarts (37.9 litres)
(With PTO)	44 U.S. Quarts (41.6 litres)

Hydraulic Pump

Type	Direct Drive, Gear Type, Triple Hydraulic Pump
First Section	Charging Pump, Capacity at 2200 Engine RPM - 44 GPM (166.6 l/min.)
Intermediate Section	Supplies oil to the Transmission Hydraulics and PTO. Capacity at 2200 Engine RPM - 17 GPM (64.4 l/min.).
Third Section	Supplies oil to the Steering System. Capacity at 2200 Engine RPM 19 GPM (71.9 l/min.).
Front Steering	9.8 GPM (37.1 l/min.)
Rear Steering	4.2 GPM (15.9 l/min.)

Hydrostatic Front Power Steering

Oil Supply	Triple Hydraulic Pump
HGA Hydrostatic Type	Integral and Bi-Directional Gerotor Metering Section, Actuated By The Steering Wheel.
Front Steering Cylinders	Two Double Acting Cylinders

Rear Power Steering

Oil Supply	Triple Hydraulic Pump
Control Valve Type	4 Way, Three Position Spool Type.
Rear Steering Cylinders	Two Double Acting Cylinders
Controls	Hand Lever on Instrument Panel (Manual or Automatic)

Axle Differential and Planetaries

Front and Rear	Spiral Bevel with Planetary Reduction in Hub.
Differential Oil Cap (Front & Rear) Each	24 U.S. Quarts (22.7 litres)
Planetary Oil Cap. eac. (Front & Rear) Each	12 U.S. Quarts (11.4 litres)

3 Point Hitch System

Type Control	Hand Lever
Type Valve	3 Positions - Raise - Hold - Lower with Speed Control
Type Draft Arms	Rigid Swinging, with Manual Float Adjustment
Type Hitch	3 Point Category III
Hitch Coupler	Case Available - Category III

L.H. Dual Remote Hydraulic System

Type Remote Valve (L.H. Side)	Dual Valve w/Built-in Female ASAE R366 Standard Hydraulic Couplers. Individual Hand Lever Control.
Portable Cylinder Male Couplings Available	Quick Detachable Break-away Type
Oil Supply	Triple Hydraulic Pump
Relief Valve Pressure	2150 to 2250 PSI (14 824 to 15 514 kPa)
Portable Cylinders	Case Cylinders Available

R.H. Dual Remote Hydraulic System

Oil Supply	From L.H. Remote Valve (Connected in Series)
Type Remote Valve (R.H. Side)	Dual Valve W/Built-in Female ASAE R366 Standard Hydraulic Couplers. Individual Hand Lever Control.
Relief Valve Pressure	Dependent on L.H. Remote
Portable Cylinder Male Couplings	Available Quick Detachable Break-away Type.
Portable Cylinders	Case Cylinders Available

Power Take-Off

Type Clutch Hydraulically Operated

Rotation Clockwise

Spline Size 20 Splines 1-3/4 In. (44.5mm) Dia.
Adapter 1-3/4" to 1-3/8" Dia. Available

Engine Speed 2200 RPM 1000 RPM Shaft Speed

Drawbar

Yoke Type Full Swinging Roller Mounted,
Will Accommodate a 1-1/2 Inch (38.1mm), Dia. Pin.

Tire and Wheel Equipment – Front and Rear

TIRE SIZE	TIRE PLY & TREAD	RIM SIZE	TIRE ** PRESSURE (No Added Ballast)	TIRE PRESSURE (With Max. Ballast or Heavy Implement)
18.4-34*	6 R1 & R2	W16L-34	16 PSI (110 kPa)	16 PSI (110 kPa)
18.4-34	8 R1 & R2	W16L-34	16 PSI*** (110 kPa)	20 PSI (138 kPa)
20.8-34	6 R1	W18L-34	14 PSI*** (97 kPa)	14 PSI (97 kPa)
20.8-34	8 R1 & R2	W18L-34	16 PSI*** (110 kPa)	18 PSI (124 kPa)
23.1-30	8 R1 & R2	W20L-30	16 PSI (110 kPa)	16 PSI (110 kPa)
24.5-32	10 R1 & R2	DW27-32DC	18 PSI (124 kPa)	20 PSI (138 kPa)
30.5-32	10 R1 & R2	DW27-32DC	16 PSI (110 kPa)	16 PSI (110 kPa)

*18.4-34, 6 ply tires can only be used with duals and on outside tires only.

**Minimum inflation pressure for single tires.

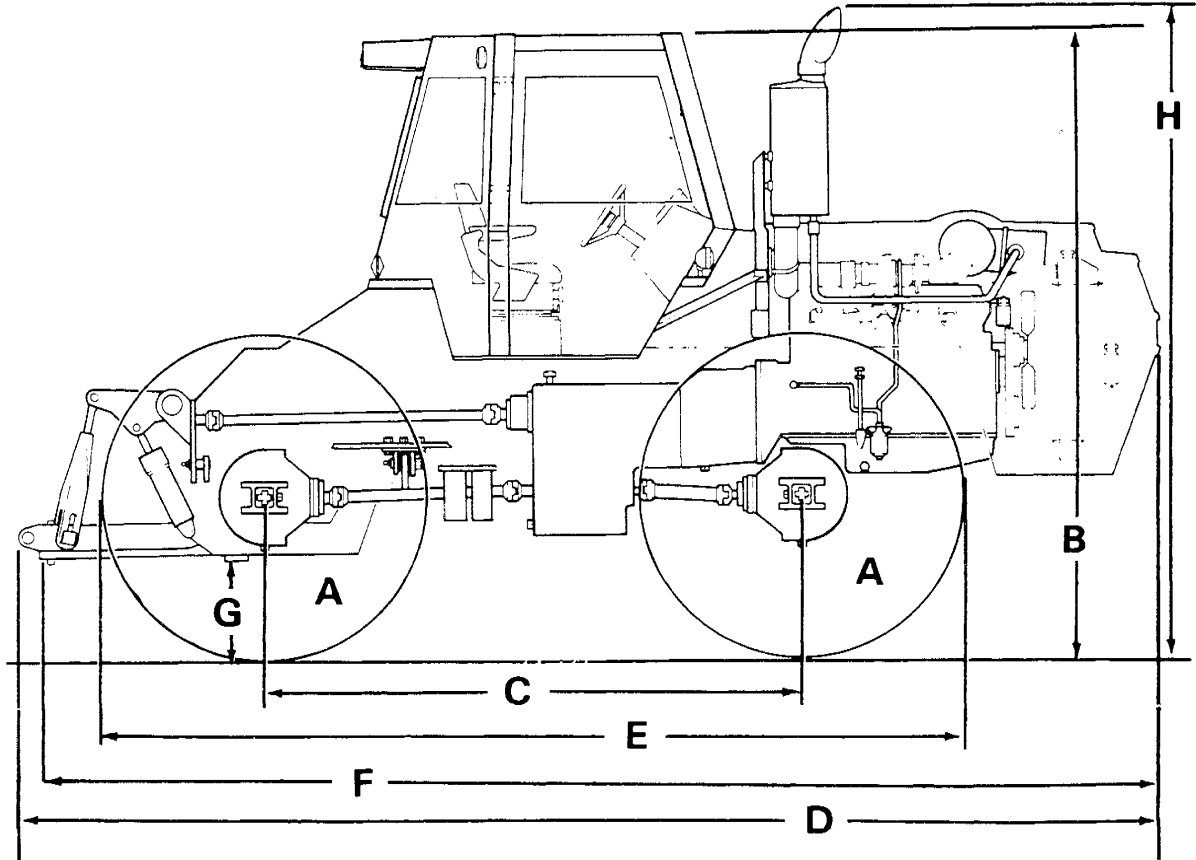
***Absolute minimum inflation pressure for tires used as duals is 12 PSI (82.7 kPa).

IMPORTANT: 18.4-34 and 20.8-34 singles are not suitable for use with ballast, either tire liquid or added weights, or with heavy mounted attachments.

**Approximate Travel Speeds in MPH and KM/H at
2200 RPM with 12 Speed Power Shift Transmission**

TRANSMISSION RANGE	POWER SHIFT			TIRE SIZE
	1	2	3 AND REVERSE	
1	2.0 mph (3.2 km/h)	2.7 mph (4.4 km/h)	3.4 mph (5.5 km/h)	23.1-30
2	3.1 mph (5.0 km/h)	4.1 mph (6.6 km/h)	5.1 mph (8.2 km/h)	
3	4.3 mph (6.9 km/h)	5.8 mph (9.3 km/h)	7.2 mph (11.6 km/h)	
4	7.9 mph (12.7 km/h)	10.7 mph (17.2 km/h)	14.7 mph (23.7 km/h)	
1	2.2 mph (3.5 km/h)	2.9 mph (4.7 km/h)	3.7 mph (6.0 km/h)	30.5-32
2	3.4 mph (5.5 km/h)	4.4 mph (7.1 km/h)	5.6 mph (9.0 km/h)	
3	4.6 mph (10.5 km/h)	6.2 mph (10.0 km/h)	7.7 mph (12.4 km/h)	
4	8.6 mph (13.8 km/h)	11.4 mph (18.3 km/h)	15.7 mph (25.3 km/h)	
1	2.0 mph (3.2 km/h)	2.7 mph (4.4 km/h)	3.3 mph (5.3 km/h)	18.4-34
2	3.0 mph (4.8 km/h)	4.1 mph (6.6 km/h)	5.1 mph (8.2 km/h)	
3	4.3 mph (6.9 km/h)	5.7 mph (9.2 km/h)	7.2 mph (11.6 km/h)	
4	7.9 mph (12.7 km/h)	10.6 mph (17.0 km/h)	14.5 mph (23.3 km/h)	
1	2.0 mph (3.2 km/h)	2.7 mph (4.3 km/h)	3.4 mph (5.5 km/h)	20.8-34
2	3.1 mph (5.0 km/h)	4.2 mph (6.8 km/h)	5.2 mph (8.4 km/h)	
3	4.4 mph (7.1 km/h)	5.9 mph (9.5 km/h)	7.4 mph (11.9 km/h)	
4	8.1 mph (13.0 km/h)	10.8 mph (17.4 km/h)	14.9 mph (24.0 km/h)	

Approximate Overall Measurements



A	TIRE	WHEEL RIM	F	228 Inches (5 791mm)	
	23.1-30 RI	W20L-30			
B	123 Inches (3 124mm)	D	237 Inches (6 020mm)	G	18 Inches (457mm)
C	110 Inches (2 794mm)	E	175 Inches (4 445mm)	H	131 Inches (3 327mm)

Overall Width (Minimum)	99 Inches (2 515mm)
Turning Radius (Minimum)	210 Inches (5 334mm)
Overall Length (W/Hitch Coupler)	243 Inches (6 172mm)
Rear Axle Oscillation	30°

Approximate Shipping Weight

4 Wheel Steering w/20.8 x 34 Tires 18,500 Pounds (8392 kg)

IMPORTANT: The total tractor weight with ballast and weights must not exceed 28,500 lbs. (12 930 kg).

Operator's Cab

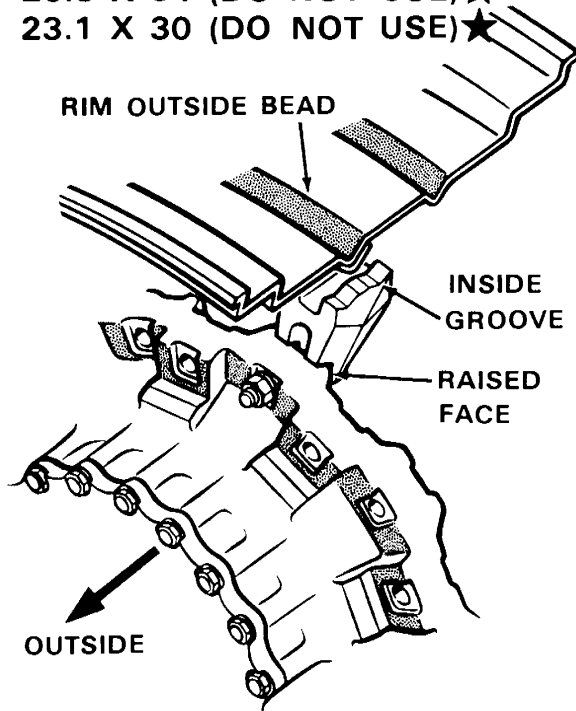
The Case Operators Cab is equipped with built-in roll over protection as specified in ASAE Standard S336.1, SAE Standard J168a, and OSHA Regulation 1928.53.

Wheel Tread Spacing

70 Inch (1 778mm)

TIRE SIZE

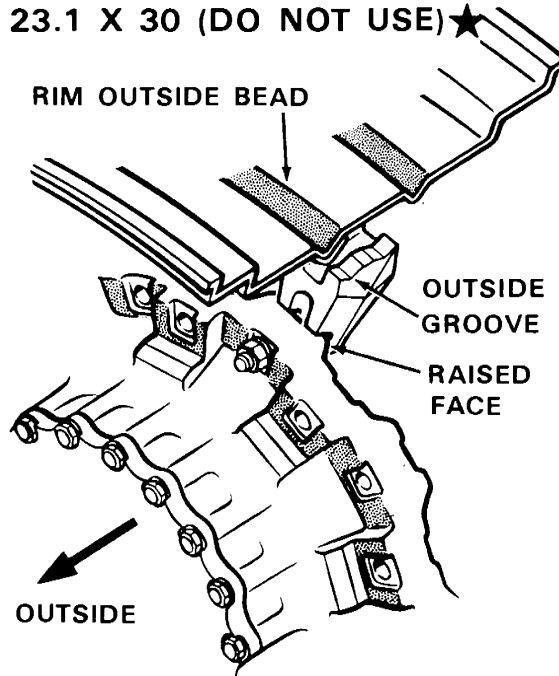
- 18.4 X 34 (DO NOT USE)★
- 20.8 X 34 (DO NOT USE)★
- 23.1 X 30 (DO NOT USE)★



74 Inch (1 880mm)

TIRE SIZE

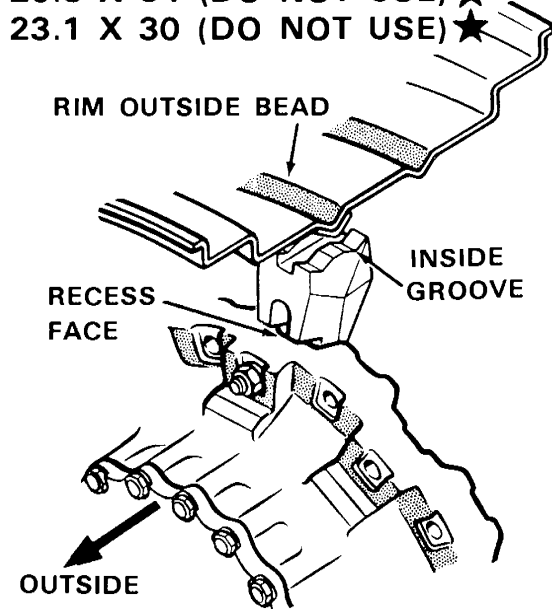
- 18.4 X 34
- 20.8 X 34 (DO NOT USE)★
- 23.1 X 30 (DO NOT USE)★



72 Inch (1 829mm)

TIRE SIZE

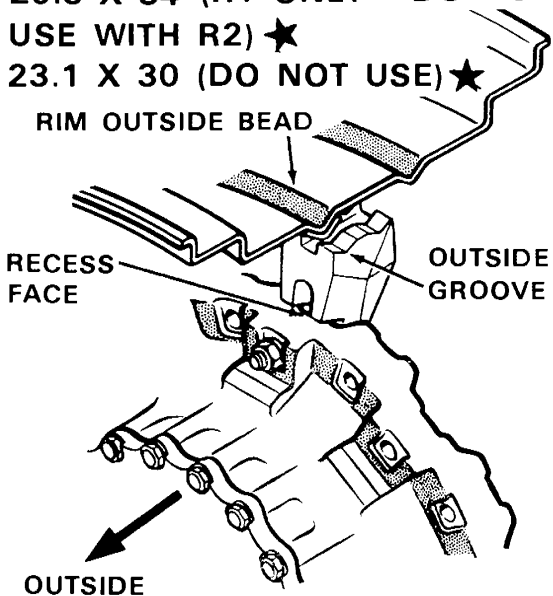
- 18.4 X 34 (DO NOT USE)★
- 20.8 X 34 (DO NOT USE)★
- 23.1 X 30 (DO NOT USE)★



76 Inch (1 930mm)

TIRE SIZE

- 18.4 X 34
- 20.8 X 34 (R1 ONLY - DO NOT USE WITH R2)★
- 23.1 X 30 (DO NOT USE)★



★ **IMPORTANT:** This location should not be used with designated tire because the steering will be reduced and damage to the tires could result.

Wheel Tread Spacing

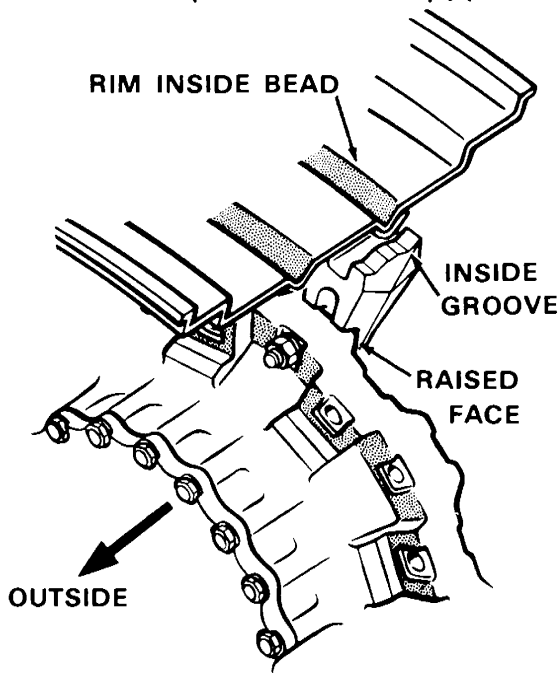
78 Inch (1 981mm)

TIRE SIZE

18.4 X 34

20.8 X 34

23.1 X 30 (DO NOT USE)★



80 Inch (2 032mm) B

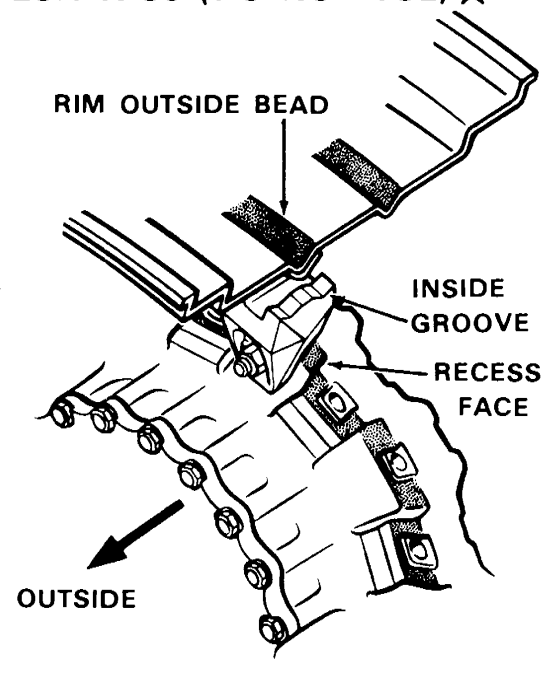
TIRE SIZE

18.4 X 34

20.8 X 34

23.1 X 30 (DO NOT USE)★

ALSO SEE POSITION "A"



80 Inch (2 032mm) A

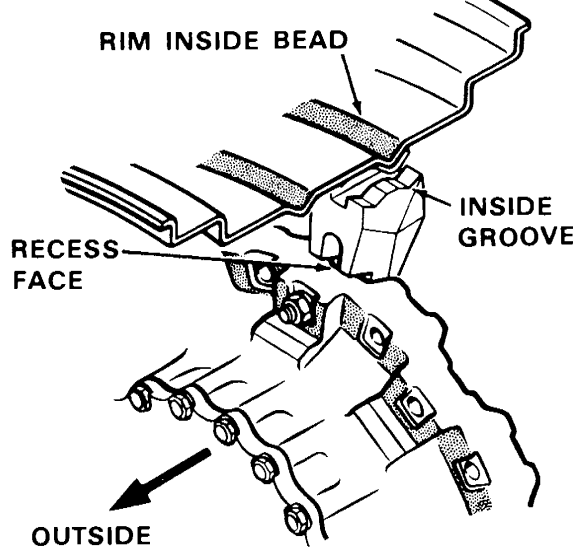
TIRE SIZE

18.4 X 34

20.8 X 34

23.1 X 30 (DO NOT USE)★

ALSO SEE POSITION "B"



82 Inch (2 083mm) A

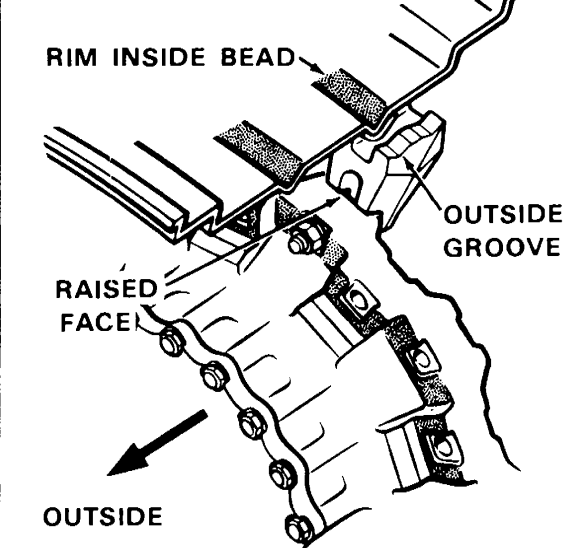
TIRE SIZE

18.4 X 34

20.8 X 34

23.1 X 30 (DO NOT USE)★

ALSO SEE POSITION "B"



IMPORTANT: This location should not be used with designated tire because the steering will be reduced and damage to the tires could result.

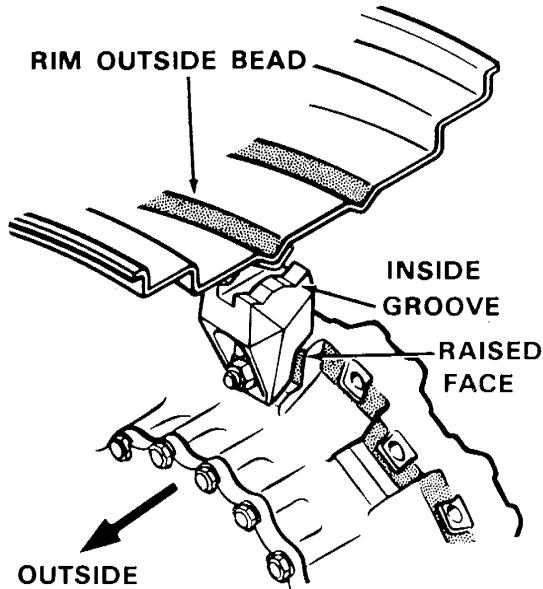
Wheel Tread Spacing

82 Inch (2 083mm) B

TIRE SIZE

- 18.4 X 34
- 20.8 X 34
- 23.1 X 30 (DO NOT USE) ★

ALSO SEE
POSITION "A"

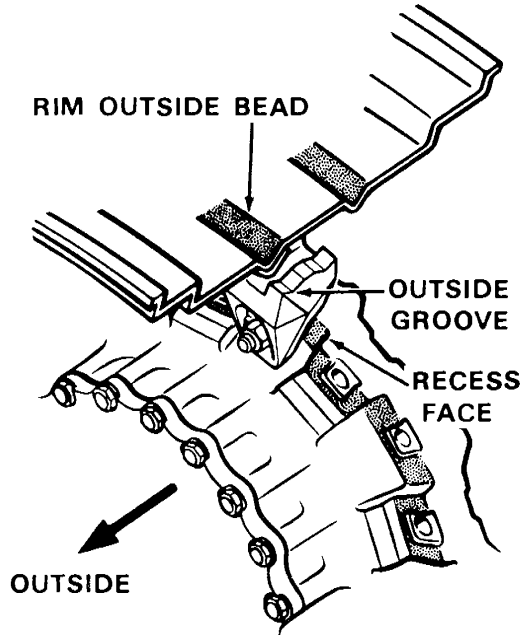


84 Inch (2 134mm) B

TIRE SIZE

- 18.4 X 34
- 20.8 X 34
- 23.1 X 30

ALSO SEE
POSITION "A"

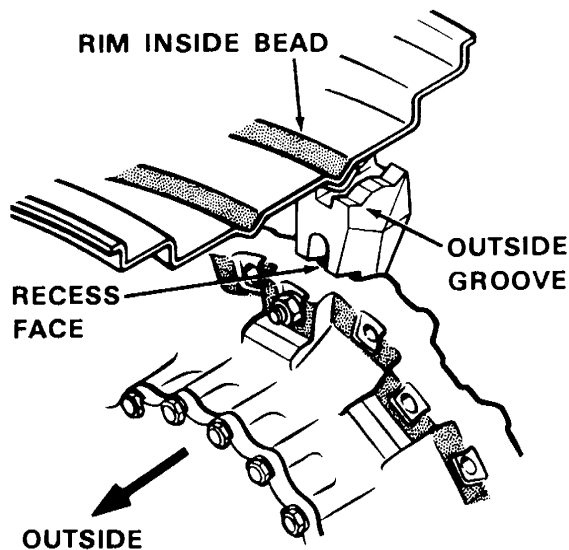


84 Inch (2 134mm) A

TIRE SIZE

- 18.4 X 34
- 20.8 X 34
- 23.1 X 30

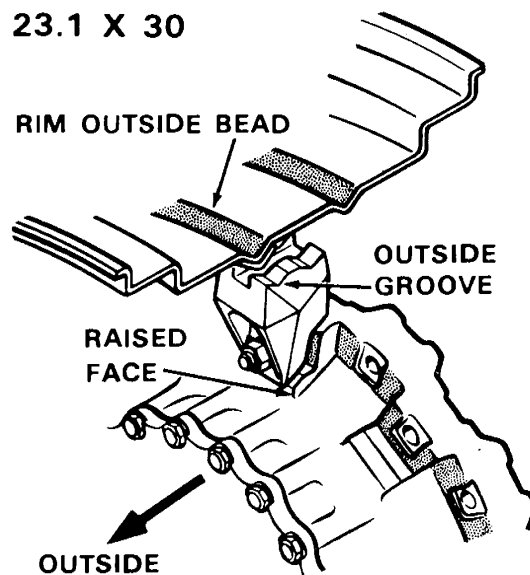
ALSO SEE
POSITION "B"



86 Inch (2 184mm)

TIRE SIZE

- 18.4 X 34
- 20.8 X 34
- 23.1 X 30



★ **IMPORTANT:** This location should not be used with designated tire because the steering will be reduced and damage to the tires could result.

Thanks for your reading.

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