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Reprinted

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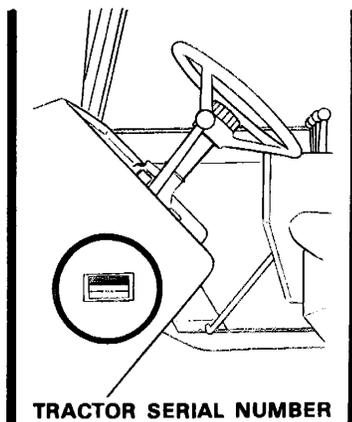
# Section 1010

## 2470 TRACTOR

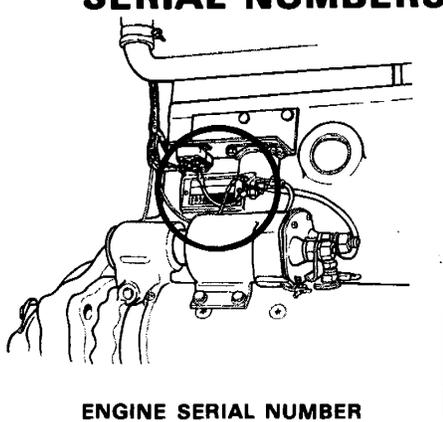
### GENERAL SPECIFICATIONS

(Starting with Tractor SN 8762940)

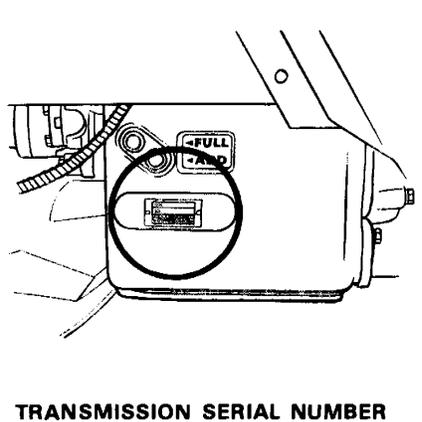
#### SERIAL NUMBERS



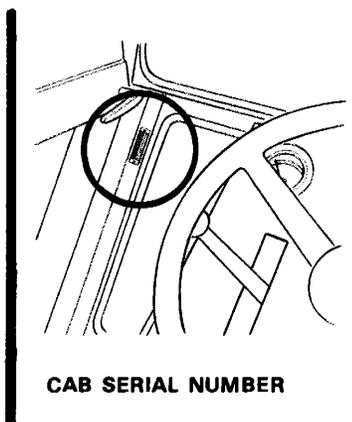
TRACTOR SERIAL NUMBER



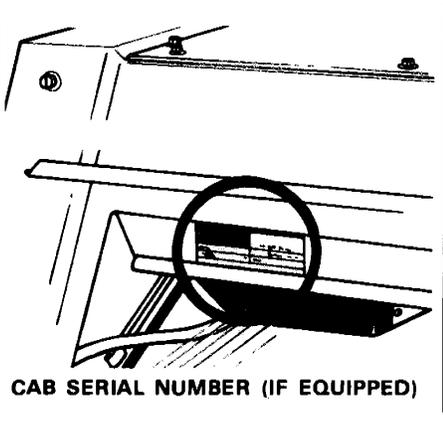
ENGINE SERIAL NUMBER



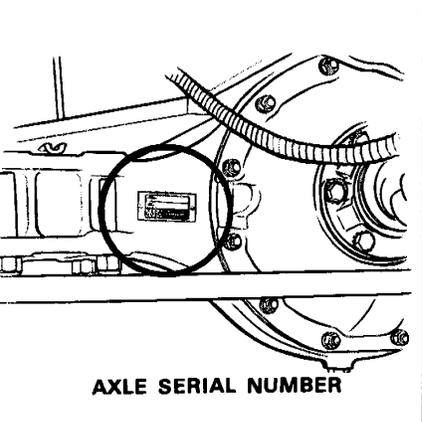
TRANSMISSION SERIAL NUMBER



CAB SERIAL NUMBER



CAB SERIAL NUMBER (IF EQUIPPED)



AXLE SERIAL NUMBER

Rac 9-78077

PRINTED IN U.S.A.

## DIESEL ENGINE

### General

Type .....	6 Cylinder, 4 Stroke Cycle, Valve-In-Head Turbocharged Diesel Engine
Firing Order .....	1-5-3-6-2-4
Bore .....	4-5/8 Inches (117.5mm)
Stroke .....	5 Inches (127mm)
Piston Displacement .....	504 Cubic Inches (8 257cm <sup>3</sup> )
Compression Ratio .....	15.8 to 1
Cylinder Sleeves .....	Removable Wet Type
No Load Governed Speed .....	2340-2380 RPM
Rated Engine Speed .....	2200 RPM
Engine Idling Speed .....	725-775 RPM
*Valve Tappet Clearance (Exhaust) .....	(Hot) .020 Inch (0.508mm) (Cold) .025 Inch (0.635mm)
(Intake) .....	(Hot and Cold) .015 Inch (0.381mm)

\*Hot Settings Are Made After The Engine Has Operated At Thermostat Controlled Temperature For At Least Fifteen Minutes.

### Piston and Connecting Rod

Rings per Piston .....	3
Number of Compression Rings .....	2
Number of Oil Rings .....	1
Type Pins .....	Full Floating Type
Type Bearings .....	Replaceable Precision, Steel Back with Aluminum or Copper-Lead Alloy Liners.

### Main Bearings

Number of Bearings .....	7
Type Bearings .....	Replaceable Precision, Steel Back with Aluminum or Copper-Lead Alloy Liners.

### Engine Lubrication System

Oil Pressure .....	45 to 60 PSI (310 to 414 kPa) with Engine Warm and Operating at Rated Engine Speed.
Type System .....	Pressure and Spray Circulation
Oil Pump .....	Gear Type
Oil Filter (2) .....	Full Flow Spin on Type
Oil Capacity .....	With Filters, 23 U.S. Qts. (21.8 litres) Without Filters, 19 U.S. Qts. (17.9 litres)
Piston Oil Cooling .....	Nozzle Pressure Spray (From Main Bearings)

## Fuel System

Fuel Injection Pump .....	Robert Bosch, Type PES (Multiple Plunger).
Pump Timing .....	30 Degree Before Top Dead Center (Port Closing).
Fuel Injectors .....	Pencil Type Opening Pressure 3200 PSI (22 063 kPa)
Fuel Transfer Pump .....	Plunger Type, Integral Part of Injection Pump.
Governor .....	Variable Speed, Fly-Weight Centrifugal Type; Integral Parts of Injection Pump.
1st Stage fuel filter .....	Full Flow Spin on Type
2nd Stage fuel filter .....	Full Flow Spin on Type
Fuel Tank Water Trap and Drain (2) .....	Located in Base of Each Fuel Tank.
Fuel Tank Capacity .....	55 U.S. Gallons (208.2 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.

## Cooling System

Capacity of System .....	44 U.S. Quarts (41.6 litres)
Type of System .....	Pressurized, Thermostat Controlled By-Pass Type: Forced Circulation, (Impeller Type Pump).
Radiator .....	Heavy Duty Fin and Tube Type
Thermostat (2) .....	Starts to Open at Approximately 175°F. (79°C), Fully Open at 202°F. (94°C.)
Pressure Cap Required .....	7 PSI Vented (48 kPa) or 10 PSI Non-Vented (69 kPa)

## Air Intake System

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

### 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 10sec- onds. Voltage drops 1.0 Volt per cell after 5 min.
Alternator .....	12 Volt 55 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, 40/40 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
Flasher Lights (2) With Directional Turn Signals .....	12 Volt, Amber Lens
Parking Brake Warning Buzzer .....	12 Volt

### Hydraulic Brakes

Type .....	Self-Adjusting Multiple Disc Wet Type Transmission Brakes.
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### Parking Brake

Type .....	Cable Actuated by over center Type Handle - Adjustable from Operator's Seat. Multiple Disc. Type.
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### 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) .....	56 U.S. Quarts (53 litres)
(With PTO) .....	60 U.S. Quarts (56.8 litres)

## Hydraulic Pump

Type .....	Direct Drive, Gear Type, Triple Hydraulic Pump
First Section .....	Charging Pump, Capacity at 2200 Engine RPM - 39 GPM (147.6 l/min.)
Intermediate Section .....	Supplies oil to the Transmission Hydraulic 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 17 GPM (64.4 l/min.)
Front Steering .....	7 GPM (26.5 l/min.)
Rear Steering .....	10 GPM (37.9 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)

## Differential and Planetaries

Front and Rear .....	Spiral Bevel with Planetary Reduction in Hub.
Differential Oil Cap. Ea. (Front & Rear) .....	19 U.S. Quarts (18 Litres)
Planetary Oil Cap. Ea. (Front & Rear) .....	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

## Operator's Cab

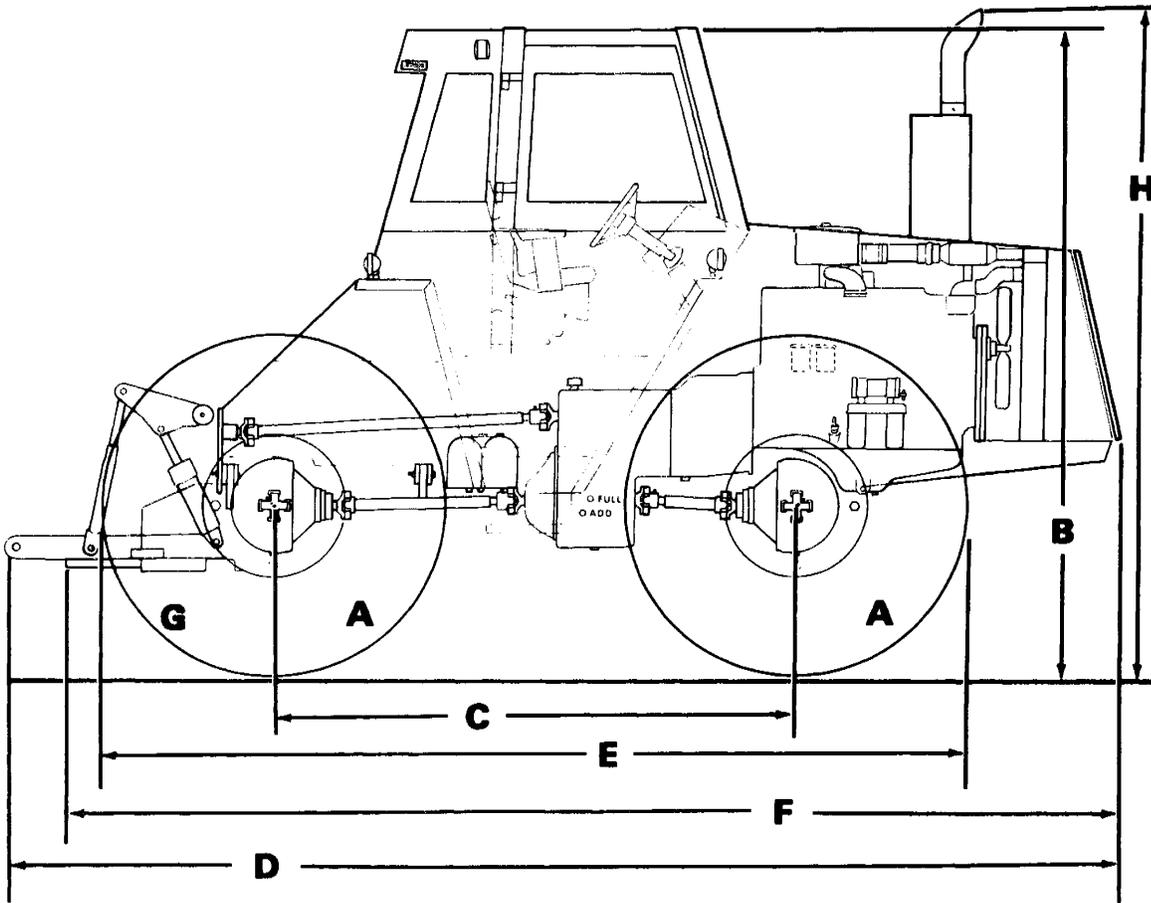
The Case Tractor Operator's Cabs are equipped with built-in rollover protection (ROPS) as specified in ASAE Standard S-336.1, SAE Standard J168a, and OSHA Regulation 1928.53, Approval Number CA R231.



**Approximate Travel Speeds in MPH  
and KM/H at 2200 Engine RPM  
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	8.0 mph (12.9 km/h)	10.6 mph (17.1 km/h)	14.5 mph (23.3 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)	7.1 mph (11.4 km/h)	
4	7.9 mph (12.7 km/h)	10.5 mph (16.9 km/h)	14.5 mph (23.3 km/h)	
1	2.1 mph (3.4 km/h)	2.8 mph (4.5 km/h)	3.5 mph (5.6 km/h)	20.8-34
2	3.2 mph (5.2 km/h)	4.2 mph (6.8 km/h)	5.3 mph (8.5 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	8.2 mph (13.2 km/h)	10.9 mph (17.5 km/h)	15 mph (24.1 km/h)	

### Approximate Overall Measurements



A	TIRE	WHEEL RIM
	23.1-30 R1	W20L-30

F	207 Inches (5 258mm)
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B	125 Inches (3 175mm)
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D	218 Inches (5 537mm)
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G	18 Inches (457mm)
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C	102 Inches (2 591mm)
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E	168 Inches (4 267mm)
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H	130 Inches (3 302mm)
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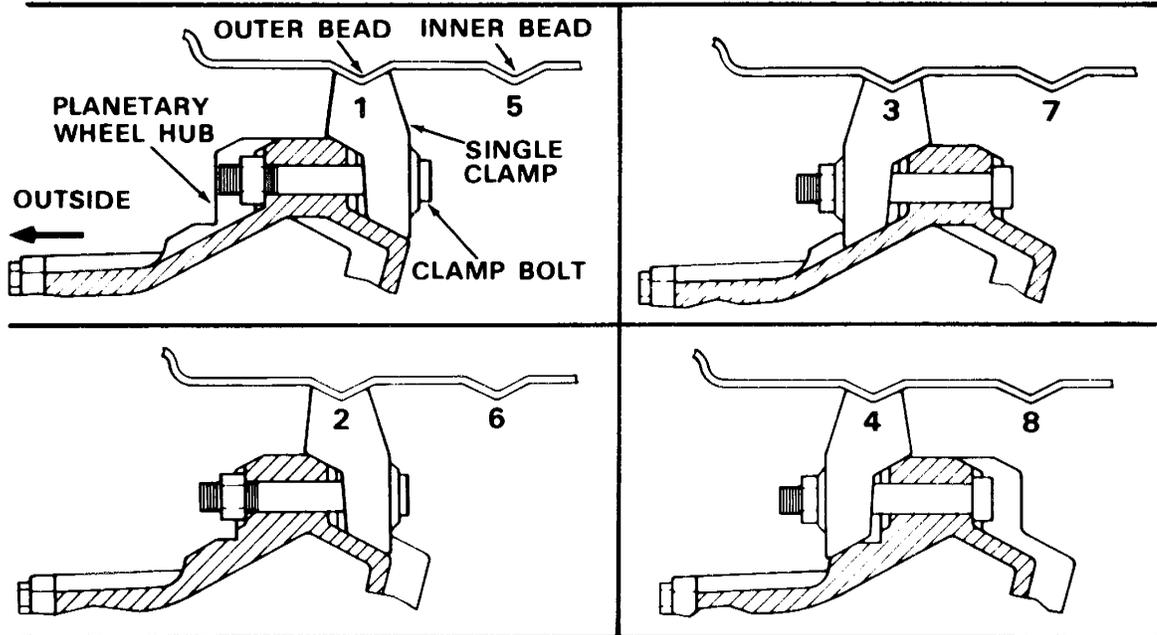
- Overall Width (Minimum) ..... 96 Inches (2 438mm)
- Turning Radius (Minimum) ..... 192 Inches (4 877mm)
- Overall Length with Hitch Coupler ..... 225 Inches (5 715mm)
- Rear Axle Oscillation ..... 30°

### Approximate Weight

4 Wheel Steering w/18.4 x 34 Tires ..... 15,550 Pounds (7 053 kg)

**IMPORTANT:** The total tractor weight with ballast and weights must not exceed 22500 lbs. (10 206 kg.)

### Wheel Tread Spacing with Single Clamp



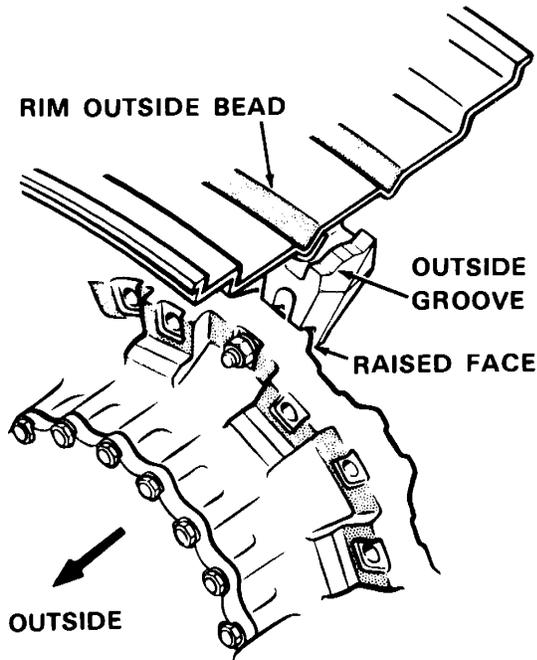
WHEEL TREAD SPACING	TIRE SIZE AND LOCATION	
	18.4 X 34	20.8 X 34
72 in. (1 829mm)	1	
74 in. (1 880mm)	2	2
78 in. (1 981mm)	3	3
80 in. (2 032mm)	4 or 5	4 or 5
82 in. (2 083mm)	6	6
86 in. (2 184mm)	7	7
88 in. (2 235mm)	8	8

**Wheel Tread Spacing with Double Clamp**

**72 Inch (1 829mm)**

**TIRE SIZE**

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



**76 Inch (1 930mm)**

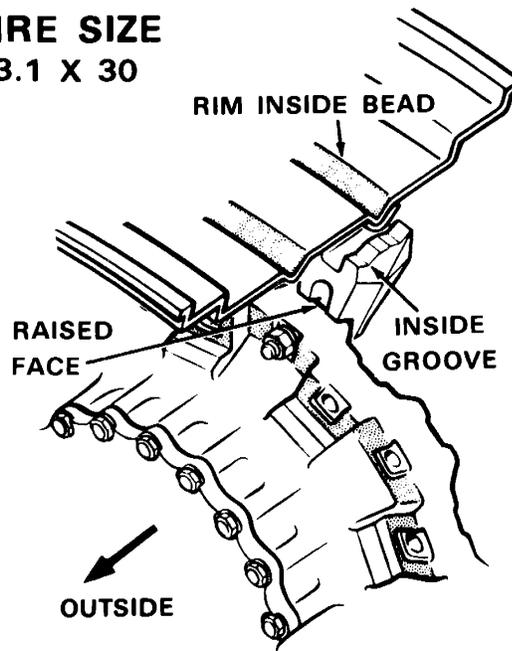
**TIRE SIZE**

- 18.4 X 34
- 20.8 X 34

**78 Inch (1 981mm)**

**TIRE SIZE**

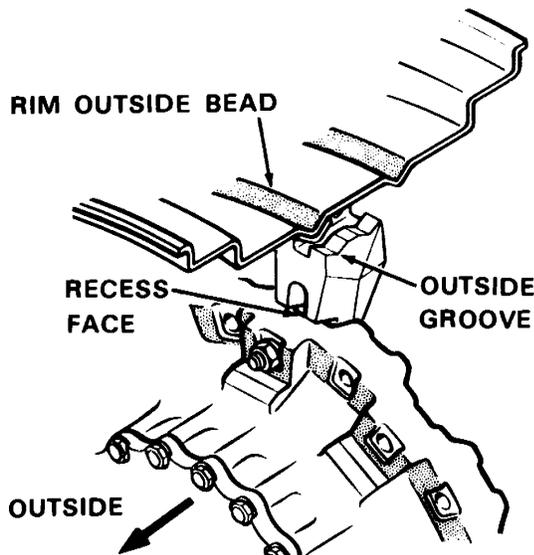
- 23.1 X 30



**74 Inch (1 880mm)**

**TIRE SIZE**

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

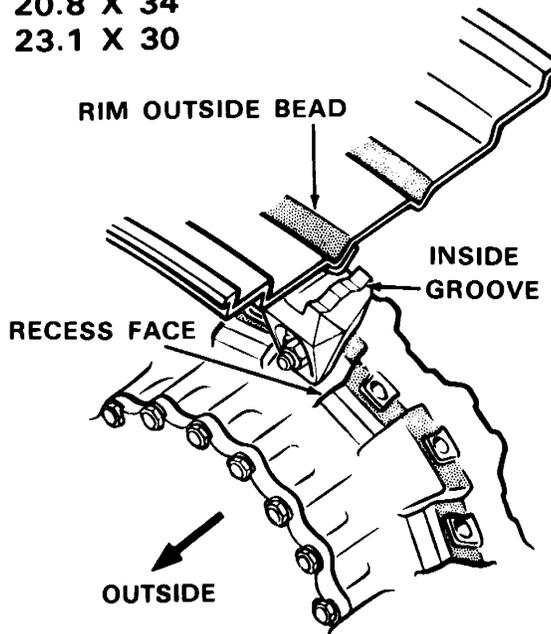


**78 Inch (1 981mm) A**

**TIRE SIZE**

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

**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.

**78 Inch (1 981mm) B**

**TIRE SIZE**

18.4 X 34

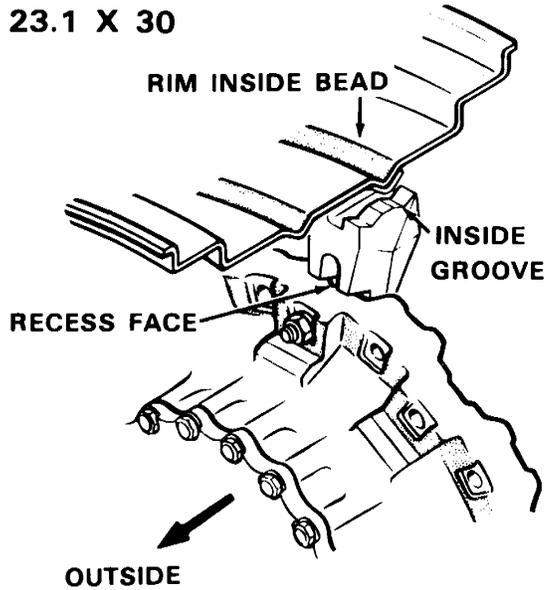
20.8 X 34

ALSO SEE  
POSITION "A"

**80 Inch (2 032mm)**

**TIRE SIZE**

23.1 X 30



**80 Inch (2 032mm) B**

**TIRE SIZE**

18.4 X 34

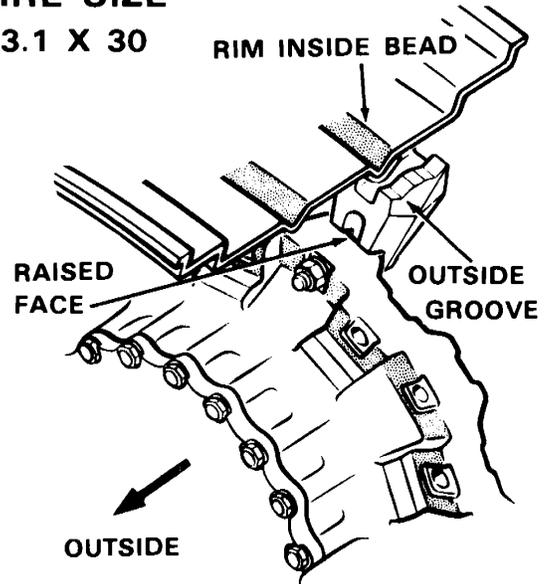
20.8 X 34

ALSO SEE  
POSITION "A"

**82 Inch ( 083mm)**

**TIRE SIZE**

23.1 X 30



**80 Inch (2 032mm) A**

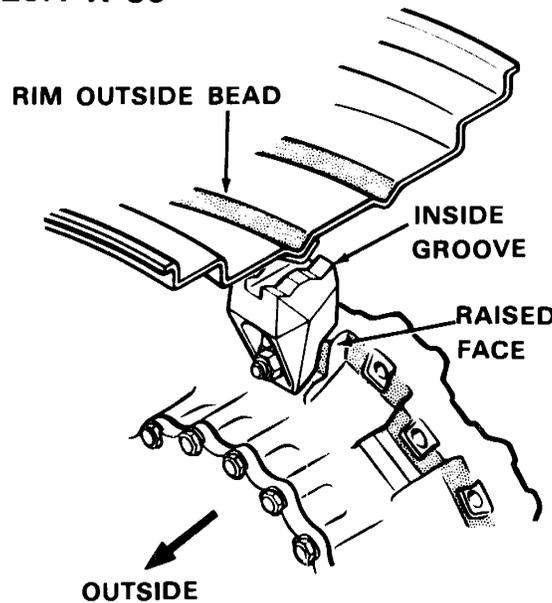
**TIRE SIZE**

18.4 X 34

20.8 X 34

23.1 X 30

ALSO SEE  
POSITION "B"



**82 Inch (2 083mm) A**

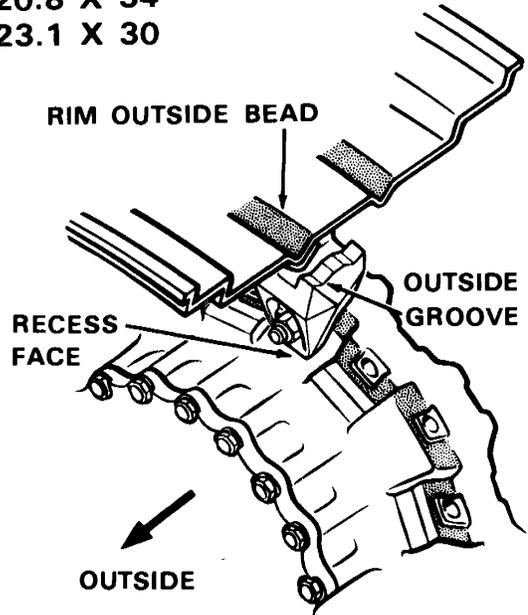
**TIRE SIZE**

18.4 X 34

20.8 X 34

23.1 X 30

ALSO SEE  
POSITION "B"



**82 Inch (2 083mm) B**

**TIRE SIZE**

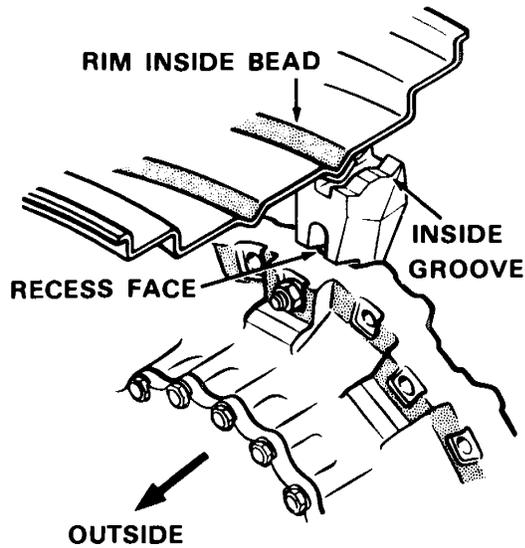
18.4 X 34  
20.8 X 34

ALSO SEE  
POSITION "A"

**84 Inch (2 134mm)**

**TIRE SIZE**

23.1 X 30



**86 Inch (2 184mm)**

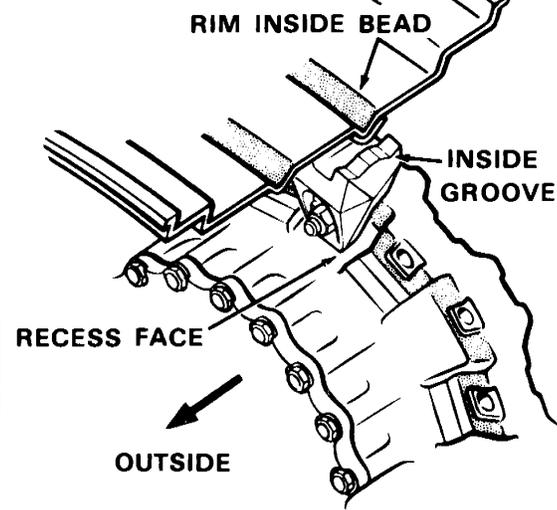
**TIRE SIZE**

18.4 X 34  
20.8 X 34

**88 Inch (2 235mm)**

**TIRE SIZE**

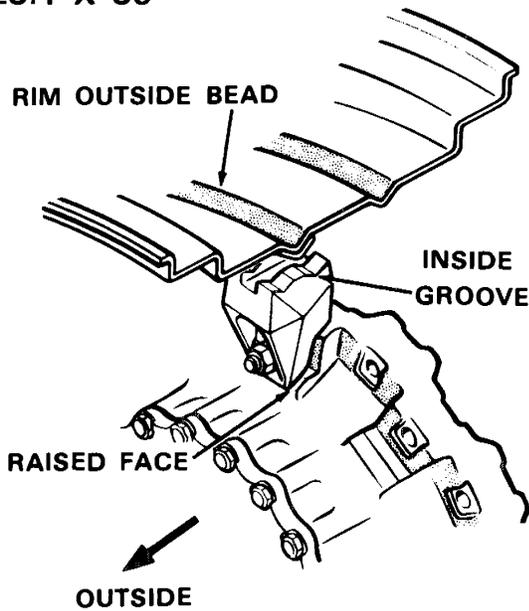
23.1 X 30



**84 Inch (2 134mm)**

**TIRE SIZE**

18.4 X 34  
20.8 X 34  
23.1 X 30



**88 Inch (2 235mm)**

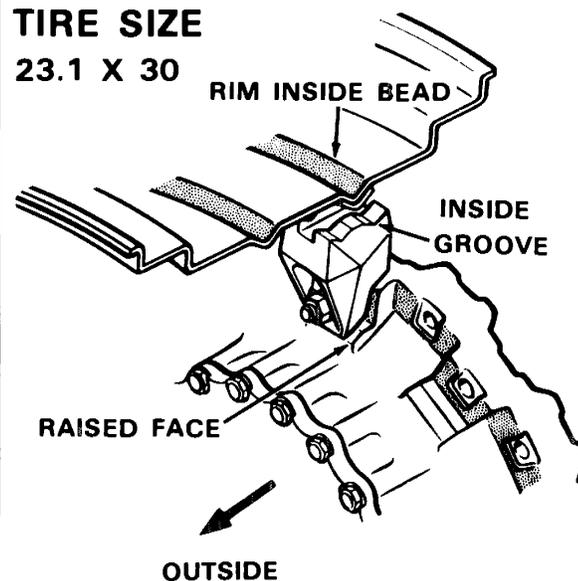
**TIRE SIZE**

18.4 X 34  
20.8 X 34

**90 Inch (2 286mm)**

**TIRE SIZE**

23.1 X 30



**90 Inch (2 286mm)**

**TIRE SIZE**

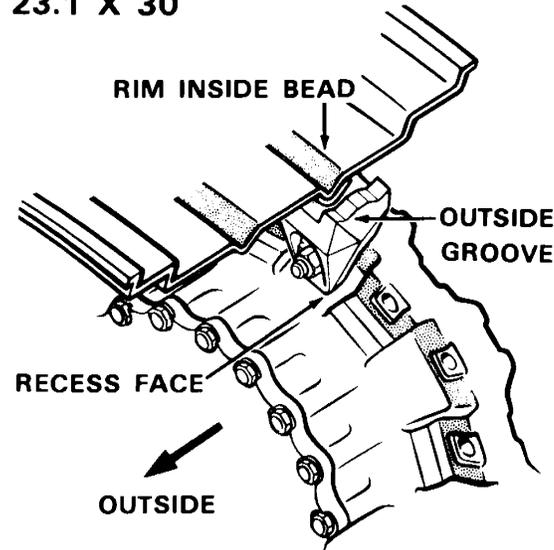
18.4 X 34

20.8 X 34

**92 Inch (2 337mm)**

**TIRE SIZE**

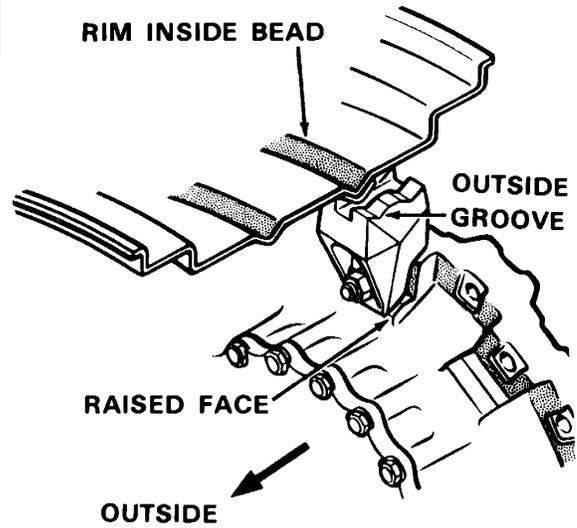
23.1 X 30



**94 Inch (2 388mm)**

**TIRE SIZE**

23.1 X 30

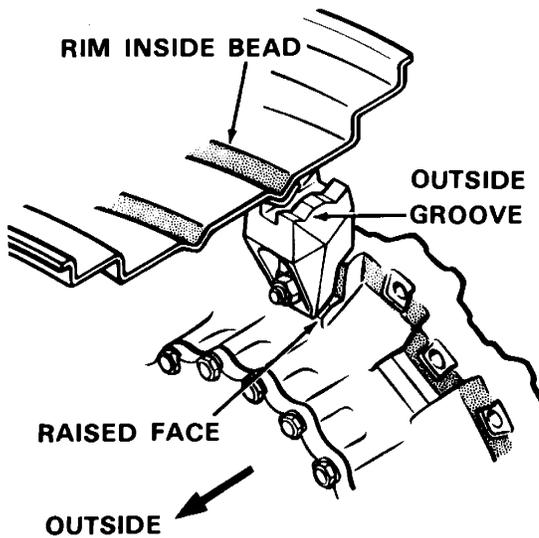


**92 Inch (2 337mm)**

**TIRE SIZE**

18.4 X 34

20.8 X 34



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