

# **Wildcat II/Bearcat II Tractors**

## **Operators Manual**

37-037

Reprinted

**CASE III**



***This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.***

SB001

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW.

BEFORE THE OPERATOR STARTS THE ENGINE:

1. GIVE INSTRUCTIONS TO THE OPERATOR ON SAFE AND CORRECT USE OF THE MACHINE.
2. MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR'S MANUAL FOR THIS MACHINE.



**IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.**

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

1. READ THE OPERATOR'S MANUAL.
2. READ ALL SAFETY DECALS ON THE MACHINE.
3. CLEAR THE AREA OF OTHER PERSONS.

LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE, CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine operation and maintenance.

See your Authorized Case dealer for additional operator's manuals, parts catalogs, and service manuals.

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# FOREWORD

With proper care your Steiger tractor will give you many years of excellent service. This manual is written to help you get the most out of your tractor. By observing the instructions and suggestions you will be well satisfied. Keep this manual in a convenient place for quick, easy reference, and use it when questions arise.

If you require additional information, contact your Steiger dealer. He is kept informed of the best methods of operating and servicing the Steiger Tractor.



FIGURE 1 Tractor serial number

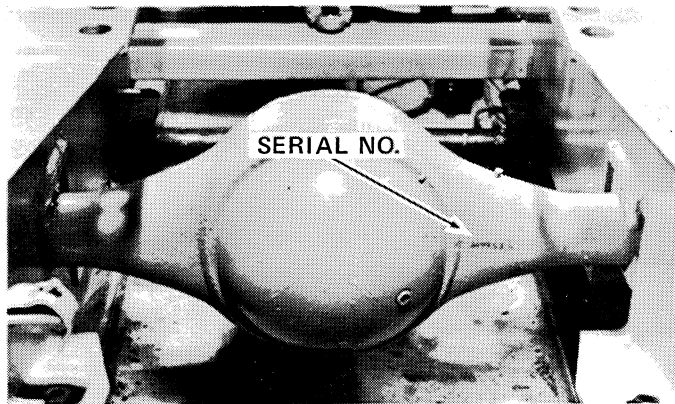
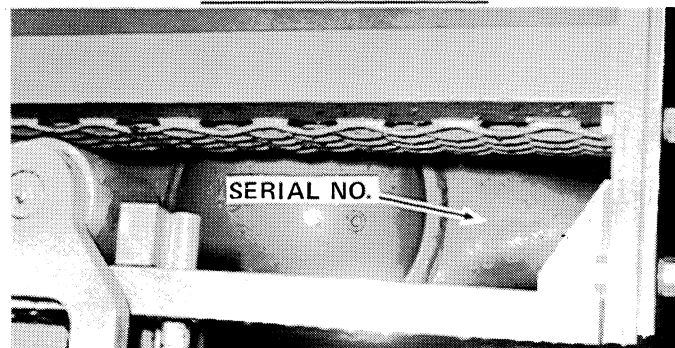


FIGURE 2A: Clark Rear Axle Serial Number



For your convenience we suggest you fill in the following information. To insure efficient and prompt service, please furnish this information in all correspondence or when service is required or when ordering new parts.

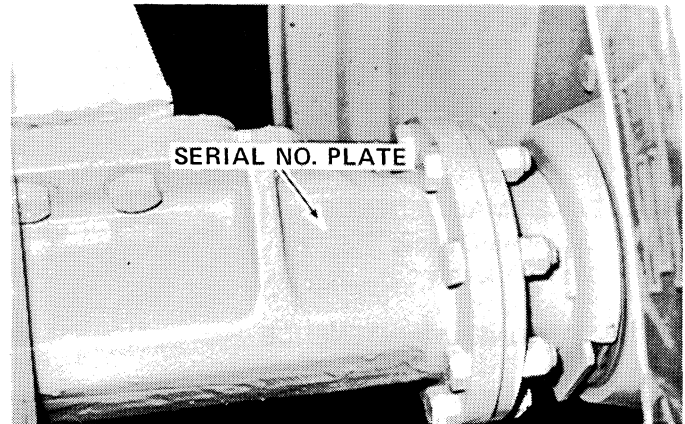


FIGURE 3: Dana Front Axle Serial Number

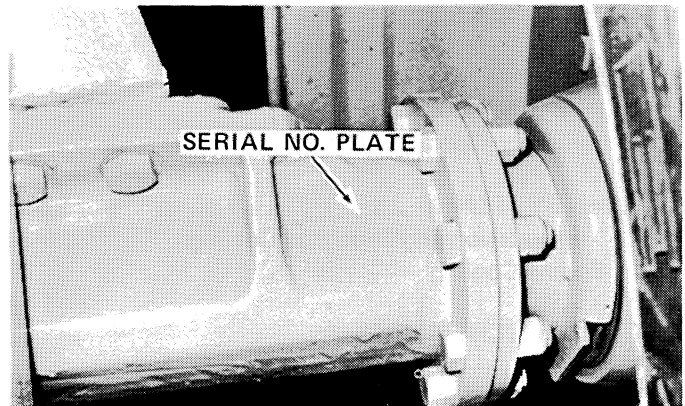


FIGURE 3A: Dana Rear Axle Serial Number

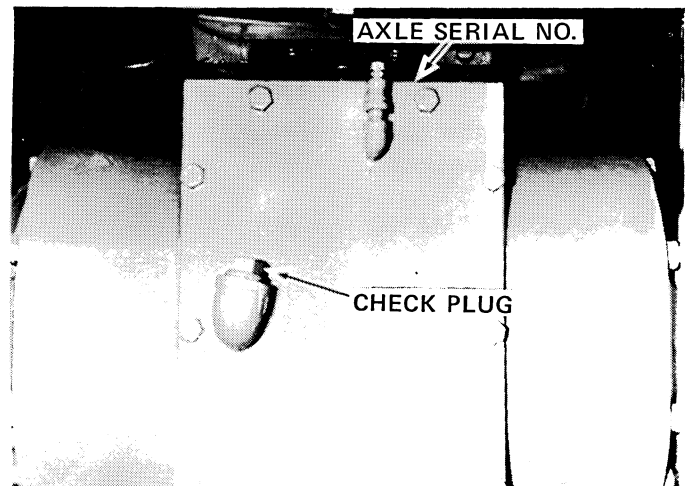


FIGURE 4: Adjustable Axle serial number

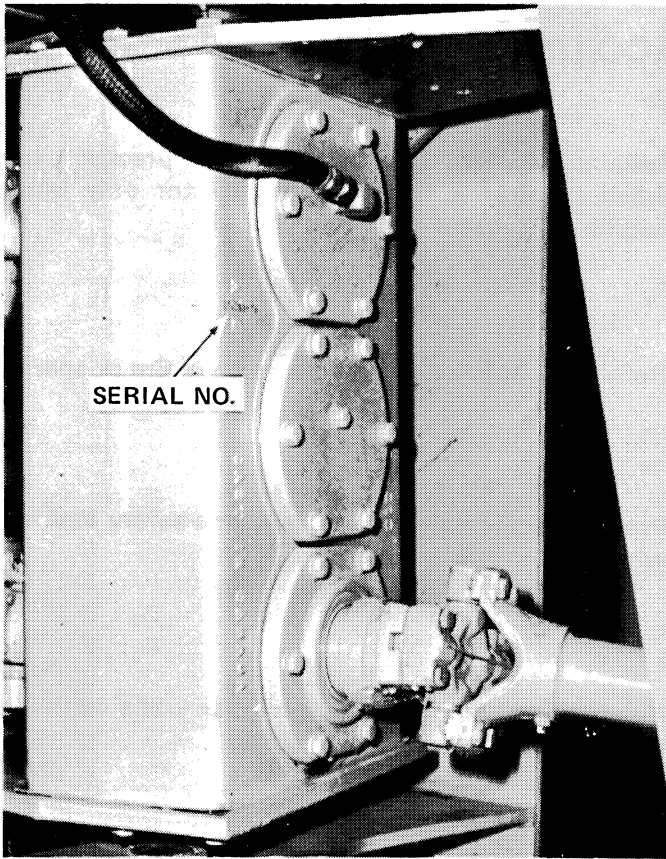


FIGURE 5 Drop box serial number



Never stand near center hinged area while engine is running.

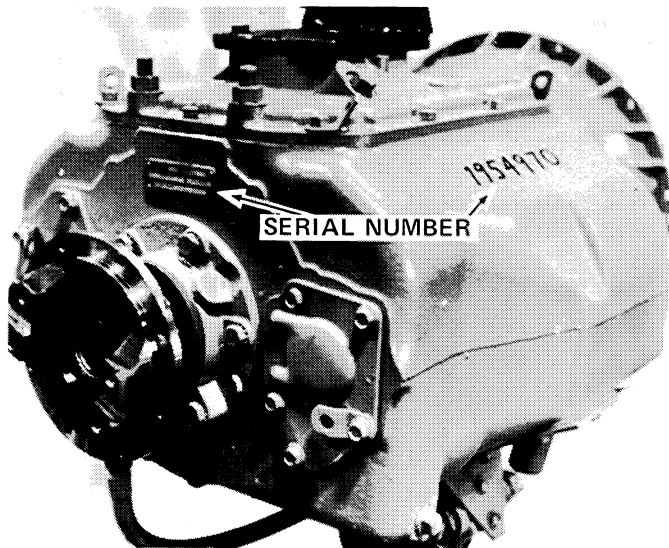


FIGURE 6 Transmission serial number

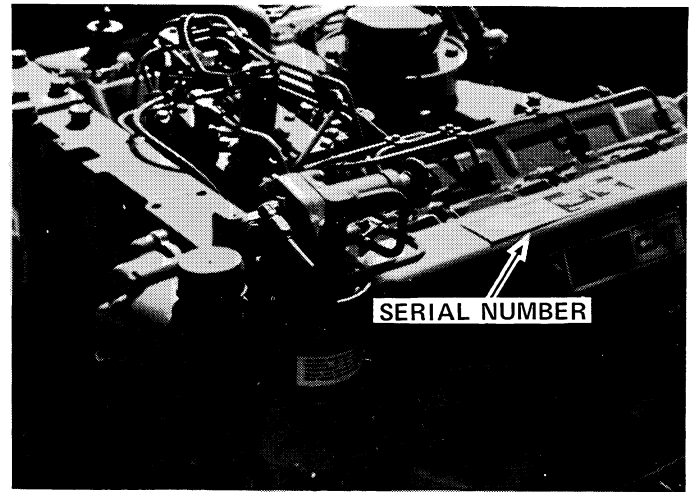


FIGURE 7 Diesel engine Serial Number

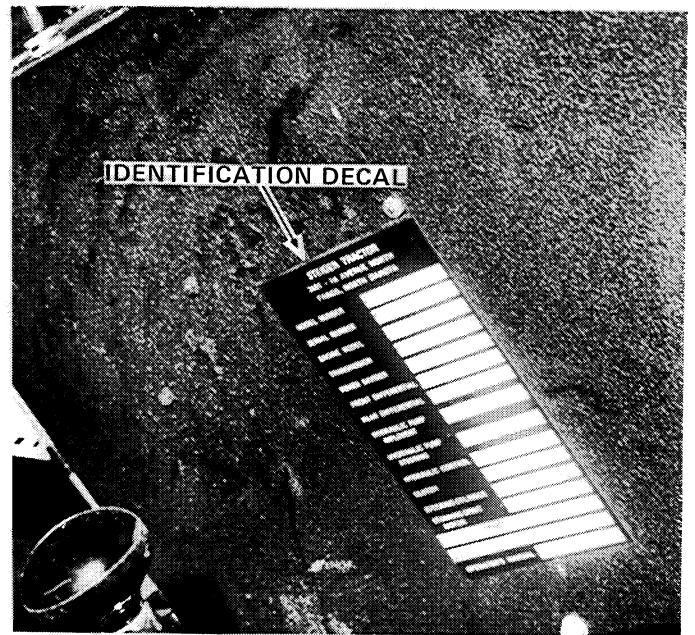


FIGURE 7A: Identification Decal

## Identification Decal

The identification decal is located on the dash inspection cover. Information concerning tractor Model No., Tractor Serial No., Engine Model, Transmission Part No., Axle Part No., etc., may be obtained from this decal. Refer to this decal when completing the Steiger tractor identification form.

# **SAFETY PRECAUTIONS**

## **A CAREFUL OPERATOR IS ALWAYS THE BEST INSURANCE AGAINST AN ACCIDENT.**

**Be sure all control levers are in neutral before attempting to start the engine.**

**Take care when removing radiator pressure cap when radiator is hot. Add to radiator only when engine is stopped and fully cooled.**

**Do not operate tractor from any position but seated in the operator's seat.**

**Refuel in a safe place away from open fire or sparks.**

**Operate tractor at lower speed to insure safety and complete control, especially over rough terrain.**

**Prevent accidents—use red flags or a safety emblem when transporting tractor.**

**Reduce speed when making a turn, going down hill or applying brakes.**

**Never stand near center hinged area while engine is running.**

**Do not leave engine running while it is unattended.**

**Never by-pass (wire around) safety starting switch.**

**Shut the engine off before making any adjustments or when servicing tractor.**

**Machinery should only be operated by those who are responsible and delegated to do so.**

**Do not dismount from tractor when it is in motion.**

**Brakes should be properly adjusted.**

**Do not allow passengers on tractor.**

**Use the braking power of the engine, always downshift to lower gear before descending a steep grade.**

**Never operate your tractor in closed garage or shed.**

**Shift to lower gear before approaching a hill, so it does not become necessary to shift against the hillside with danger of rolling backward while shifting.**

**Provide a first aid kit. Treat all scratches, cuts, etc. with the proper antiseptic immediately.**

# SAFETY PRECAUTIONS

**BE A SAFE OPERATOR  
AVOID ACCIDENTS**

**A CAREFUL OPERATOR IS THE  
BEST INSURANCE AGAINST  
AN ACCIDENT**

**THE COMPLETE OBSERVANCE OF  
ONE SIMPLE RULE WOULD  
PREVENT MANY THOUSAND  
SERIOUS INJURIES EACH YEAR.  
THAT RULE IS:**

**NEVER ATTEMPT TO CLEAN, OIL,  
OR ADJUST A MACHINE WHILE  
IT IS IN MOTION!**

Most accidents, whether they occur in industry, on the farm, at home, or on the highway, are caused by the failure of some individual to follow simple and fundamental safety rules or precautions. For this reason most accidents can be prevented by recognizing the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment, there are many conditions that can not be completely safe guarded against without interfering with reasonable accessibility and efficient operation.

**THE USER'S RESPONSIBILITY AS  
TO THE USE AND MAINTENANCE  
OF THE PRODUCT.**

It is the responsibility of the user to read the Operator's Manual and understand the safe and correct operating procedure as pertains to the operation of the product, and to lubricate and maintain the product according to the maintenance schedule in the Operator's Manual.

The user is responsible for inspecting his machine, and for having parts repaired or replaced when continued use of the product would cause damage or excessive wear to other parts.

It is the user's responsibility to deliver his machine to the Steiger dealer who sold him the product, for service or replacement of defective parts which are covered by the standard warranty.

The user should notify his Selling Dealer in advance so arrangements can be made to have his 250-hour check or inspection performed. The user should not be charged for this inspection or adjustments, but is expected to pay for oil, filters, or any parts and labor which are not covered by the standard warranty. The user is responsible for bringing the product to the Selling Dealer's shop to have this inspection performed.

If the Dealer is requested by the customer to travel to another location, or haul the machine to his shop for the purpose of performing a warranty obligation or free inspection, it would be for the Customer's convenience, and the cost for such trips is to be paid for by the Customer. Any arrangement whereby the dealer agrees to absorb all or a part of the cost of these trips is to be considered a courtesy to the Customer.

Steiger tractor does not allow credit for the cost of travel time, mileage, or hauling as a warranty allowance.

# SPECIFICATIONS

## ENGINE

### SUPER WILDCAT II

Engine: Caterpillar 3208

Type: Direct injection, four stroke cycle, 90 deg. V8 diesel

Bore & Stroke: 4.5" x 5" (114 mm x 127 mm)

Piston Displacement: 636 Cubic inch (10.4 liters)

Compression ratio: 16.5:1

Firing Order: 1-2-7-3-4-5-6-8

BHP: Approx. 185 (138 Kilo watts)

Torque: 20 %

Normal operating speed: 2800 rpm

Oil pressure: 40 to 80 psi at normal operating temp.

Filter spin on throw away type

### BEARCAT II

Engine: Caterpillar 3208

Type: Direct injection, four stroke cycle, 90 deg. V8 diesel

Bore & Stroke: 4.5" x 5" (114 mm x 127 mm)

Piston Displacement: 636 cubic inch (10.4 liters)

Compression ratio: 16.5:1

Firing order: 1-2-7-3-4-5-6-8

BHP Approx. 210 (156 Kilowatts)

Torque: 15 %

Normal operating speed: 2800 rpm

Oil pressure: 40 to 80 psi at normal operating temp.

Filter: Spin on throw away type

## ELECTRICAL SYSTEM

Battery: one 12 volt

Alternator: 72 amp 12 volt

Lights: 8 working lights, one red tail-light on left rear fender and two safety flashers visible from front and rear of unit.

## LUBRICATION

Engine: CC or CD Oil

Central sump: IH Hi-Tran, John Deere 303, Texaco 303 or equivalent.

Transmission: Lubricated from Central sump

Drop Box: Lubricated from Central sump

Axles: (Clark) Mil-L-2105 SCL 90 weight (Dana) E-P-90

(Adjustable) E-P-90

Hydraulic Oils: Hydraulic No. 10, IH Hi-Tran, John Deere 303, Texaco 303 or equivalent.

## POWER TRAIN

Transmission:

RC Model: Fuller TA 4510 ten forward speeds; two reverse

ST Model: Spicer SST 1010-10 speeds forward and 2 reverse speeds. Rubber mounted and oil cooled, rated at 950 ft. lbs. (131 Kg. meters)

Power divider:

Patented Steiger swinging power divider, oil cooled, tapered roller bearings with 1:1 ratio.

Axles:

ST Model: Outboard planetary hubs, spiral bevel ring gear and pinion differential.

RC Model: Inboard planetary type, adjustable thread centers with 96" (243.8 cm) or 115" overall length.

## HYDRAULIC SYSTEM

Pump steering 17.5 gpm (66.2 liters/min) at 2800 RPM and 1500 psi (106 kgs/sq. cm) main pump 22 gpm (83.3 liter-s/min) at 2800 RPM and 2000 psi (140 kgs/sq. cm.)

Orbitrol steering unit with two double acting cylinders.

Filtration: 25 micron replaceable cartridge throw away type.

Control valve: 3 bank stack type (includes one float and two detent valves)

## BRAKES

Main Brakes: Hydraulically operated, disc type with caliper.

Parking Brake: Hand cable operated, disc type with one caliper.

## CLUTCH

Dana Spicer heavy duty 14" (35.56 cm) ceramic, 6 button, 2 plated rated at 1690 ft. lbs. (233.7 kg/meters) pull type release.

## CAPACITIES

Fuel Tank: 140 gals. (530 liters)

Engine cooling system: 10 gals. (39.9 liters)

Crankcase: 3 gals. (11.4 liters)

Central sump including transmission & drop box: 12.5 gals (47.3 liters)

Differentials (ST) Front including wheel ends: 7 gals. (26.5 liters) Rear including wheel ends: 7 gals. (26.5 liters)

Differentials (RC) Front: 4 gals. (15.14 liters)

Rear: 4 gals (15.14 liters)

Hydraulic System : 30 gals (113.6 liters)

## TRANSMISSION & DROP BOX COOLING

Type of system: Thru use of transmission pump lubricant is pumped thru the oil cooler. Flow is then divided at the transmission and distributed thru the transmission and dropbox and gravity fed back to the sump.

## ROPS CAB

Rops for roll over protections certified 23,000 lbs per SAE standards J-168 or ASAE S-305 or California state approved R-304, tinted safety glass, rubber mounted, under coating in complete cab, cab pressurizer, windshield wiper, mirror, Bostrom T-Bar seat with arm rests and seat belts. approx 86.5 dB(A)

The roll over protected cab has been designed and manufactured to meet the ROPS requirements set forth in SAE and ASAE standards. Modification to the structure or changes in the mounting or mounting hardware will effect compliance with these requirements. In event that the protective cab structure becomes damaged, it should be replaced rather than repaired to assure continued roll-over protection.

If the ROPS cab must ever be removed and replaced make certain that the proper torques are applied to attaching bolts. The eight 1/2 x 1-1/2 Grade 5 bolts, used to hold isolators in place must be torqued to 100 ft-lbs (13.56 kilogrammeters). The four 3/4 x 4" Grade 8 bolts used to attach the cab to the tractor must be torqued to 250 ft. lbs. (34.90 kilogrammeters).



# SPECIFICATIONS & SPEED CHART

## CALCULATING SLIPPAGE

10 to 15 per cent is considered ideal slippage. Slippage can be calculated by:

1. Mark a reference line on the side of the tire. Walk along side of tractor while it is working and drop a marker where the chalk marks come down to the ground.
2. Count off 10 wheel revolutions, and again mark the spot where the chalk mark comes down to the ground.
3. With the implement out of the ground, drive the tractor between the marked spots, remarking the tire beside the marker on the ground. Count the wheel revolutions between the markers on the ground.
4. Determine the per cent of slip from the revolutions obtained in step 3.

Revolutions	Per Cent of slip	Revolutions	Per Cent of slip
10	0	8	20
9-1/2	5	7-1/2	25
9	10	7	30
8-1/2	15	6-1/2	35

## WEIGHTING THE TRACTOR

There may be times when it is desirable to weight the tractor to prevent slippage and increase stability. Desirable tractor weight distribution is 35 per cent on the rear axle and 65 per cent on the front axle. If it becomes necessary to add weight for better traction, add weight to inside tires only to maintain ratio.

When tractor is under load this distribution will even out to 50 per cent on each axle. This weighting will give more equal distribution of tractor effort to all four wheels under extreme conditions.

**NOTE: Maximum warranted tractor weight is 23,000 lbs.**

**Tractor should be weighted accordingly to obtain proper slippage.**

## TIRE SIZE CHART

### R-1 TIRES

#### AND WHEELS

	MULTIPLIER
18.4x34 - 8 ply	.943
18.4x38 - 6 ply	.994
18.4x38 - 8 ply	.994
23.1x30 - 8 ply	.946
23.1x34 - 8 ply	.997
24.5x32 - 10 ply	1.000
30.5x32 - 10 ply	1.017
28.1x26 - 10 ply	.895

### R-2 TIRES &

#### WHEELS (Rice & Cane)

	MULTIPLIER
18.4x34 - 8 ply	.975
32.1x30 - 8 ply	.981
24.5x32 - 10 ply	1.025
28.1x26 - 10 ply	.937

## SPEED CHART

### NOTE:

**Instructions to Use Speed Chart and Tire Size Multiplier (as Listed in Tire Size Chart)**

1. **Select Gear & Note Speed**
2. **Using the Multiplier shown for the selected tire size, multiply the speed shown by the Multiplier.**

Example:

Bearcat ST 225 4th Gear Speed - 4.86 MPH  
7.82 km

R-1 30.5x32 - 10 ply Multiplier = 1.017 X 4.86  
Actual Speed 4.94 MPH 7.95 km

		TRACTOR(S) SUPER WILDCAT II & BEARCAT II BASED ON 24.5x32 TIRES (Rr. 31.9")											
		AXLE RATIO	GEAR: 1	2	3	4	5	6	7	8	9	10	
<b>ST SERIES</b>	Dana	25.720	2.33	2.97	3.83	4.86	6.17	7.86	10.18	13.00	16.28	20.67	MPH
	Model No. A-235		3.75	4.78	6.16	7.82	9.93	12.65	16.38	20.92	26.20	33.27	KM
<b>Clark</b>		29.143	2.06	2.62	3.38	4.29	5.38	6.94	8.99	11.47	14.14	18.24	MPH
	Model No. 19.850		3.32	4.22	5.44	6.90	8.66	11.17	14.47	18.46	22.76	29.35	KM
<b>RC SERIES</b>	Adjustable	30.84	2.14	2.74	3.45	4.36	5.39	6.87	8.75	11.05	13.90	17.24	MPH
	Model No. 1-005 or 1-006		3.44	4.41	5.55	7.02	8.67	11.01	14.08	17.78	22.37	27.75	KM

**Buy Now**



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