1000 Powershift Series Puma & Wildcat

Operation & Maintenance Manual

37-158

Reprinted





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.

STEIGER TRACTOR, INC. PUMA 1000 WARRANTY

Steiger Tractor, Inc (Steiger) warrants to an authorized Steiger dealer and the Steiger dealer, in turn, warrants to the original purchaser each new tractor covered by this manual to be free of defect in material or workmanship, subject to the following provisions.

WARRANTY PERIOD

Tractor Warranty The base warranty period starts on the date the tractor is delivered to the original purchaser and

extends for a period of twelve (12) months.

Extended Drivetrain Warranty The extended drivetrain warranty starts at end of base warranty period and ends twenty four (24)

months, or 2000 hours, whichever occurs first from the date of delivery to the original purchaser. Applies to transmission, transfer case, drivelines and axle assemblies (engine excluded).

Steiger Service Parts Warranty Steiger service parts and remanufactured parts purchased from an authorized Steiger dealer are

warranted to be free of defect in material or workmanship for a period of 90 days, starting from the date of purchase or for the balance of the Steiger equipment's warranty period, whichever is

greater.

WARRANTY REGISTRATION

Warranty will become valid only when a warranty registration form for the tractor has been properly completed and received by Steiger.

SECURING WARRANTY REPAIR

Warranty repair can be performed by any Steiger dealer authorized to self and/or service the tractor involved. When securing warranty repair, preference should be given to the dealer from which the tractor was purchased.

STEIGER RESPONSIBILITIES

If a defect is found in material or workmanship during the warranty period, Steiger will, through a Steiger dealer:

- Repair the defective parts or provide new or remanufactured parts.
- Pay reasonable labor cost when warranty is performed during normal working hours at dealer's place of business. (Labor expense
 is not paid under Steiger service parts warranty).

PURCHASER REPSONSIBILITIES

- Transport tractor to dealer's place of business or pay the cost of dealer service calls and/or transportation charges associated with the warranty repair.
- Premium or overtime labor cost requested by purchaser.
- Cost of normal maintenance and normal replacement of service items such as oil, filters, belts etc.
- Give timely notice of a warrantable repair within the warranty period and promptly make the tractor available for repair.
- Cost of removal and replacement of modifications not authorized by Steiger.
- Provide evidence of date of delivery of tractor or purchase date of service parts, whichever is applicable when securing warranty service.

LIMITATIONS

Warranty Does Not Cover:

- Cummins engines, tires and tubes. These components are covered by the respective manufacturer's warranty, if any.
- Failures resulting from misadjustment, abuse, lack of lubrication, improper maintenance, normal wear, accident or improper use.
- Failures resulting from modifications of the tractor in ways not approved by Steiger.
- Attachments, accessory items and parts not sold by Steiger.
- Repairs required due to purchaser's unreasonable delay in making tractor available after notice for product improvements ordered by Steiger.
- Warrantable repair cost, when such repairs are performed by other than authorized Steiger dealer.

TO THE EXTENT ALLOWED BY LAW THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED AND THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT WILL STEIGER, ITS EMPLOYEES, ITS DEALERS OR ANY COMPANY AFFILIATED WITH STEIGER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR INJURIES, INCLUDING, BUT NOT LIMITED TO: LOSS OF CROPS, LOSS OF PROFITS, RENTAL OF EQUIPMENT, LOSS OF USE OR OTHER ECONOMIC LOSSES.

IMPORTANT SUPPLEMENT TO

Puma & Wildcat 1000 Powershift Series Operation & Maintenance Manual P/N 37-158(1-86)

This Operation and Maintenance manual was originally issued for the Puma 1000 Series tractors. With the introduction of the new Wildcat 1000 Series tractor and its commonality with the Puma series (except for engine horsepower and axle), the purpose of this supplement is to furnish the operator with the additional information required for the Wildcat Series.

Except for the following information and specifications, all other information within this manual regarding operation, maintenance and specifications are the same for both the Puma and Wildcat 1000 Series tractors

NOTE: The specifications listed for the axle (page 11) and for the engine (page 16) within this manual pertain to the Puma 1000 Series only.

General SpecificationsWildcat 1000 Series (S/N WK1-07001 and up)

Axle

Model: Steiger/Raba Adjustable Bar

Type: Single reduction inboard planetary,

spiral bevel ring and pinion Bar Diameter: 4.0 in. (10.16 cm) Bar Length: 119.5 in. (303.5 cm)

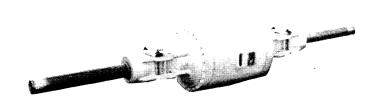
Overall Ratio: 25.294:1

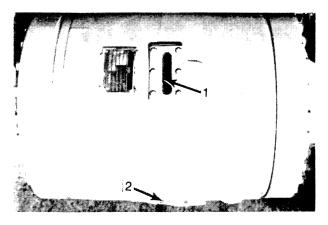
Wheel Spacing: Adjustable from 60.0 in. (152.4

cm) to 130.0 in. (330.2 cm)

Oil Capacity: 11.75 U.S. gal. (44.5L)

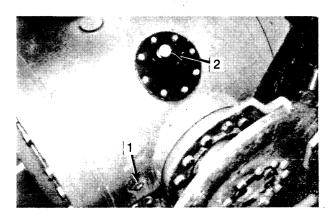
Oil Type: Steiger HD 80W-90 gear oil or other quality oils that meet API classification GL-5 and/or MIL-L-2105B military specifications.





1-Oil Level Sight Glass

2-Drain Plug



1-Axle Oil Check/Fill Plug

2-Axle Breather Vent

Axle Maintenance:

IMPORTANT:

Axle assemblies must be drained and refilled with new oil of the specified type after the first 100 hours of operation. Change oil every 500 hours (or 6 months) thereafter as prescribed in the Service and Maintenance section of this manual.

The axle housings are equipped with an oil level sight glass. However, because of rear frame design, the rear axle housing sight glass is not visible. Check rear axle oil level by turning the tractor in a fully articulated left turn. Shut down the engine. Access to the rear axle check/fill plug is through the rear frame driveline tunnel.

Approximate Shipping Weight (Wildcat 1000)

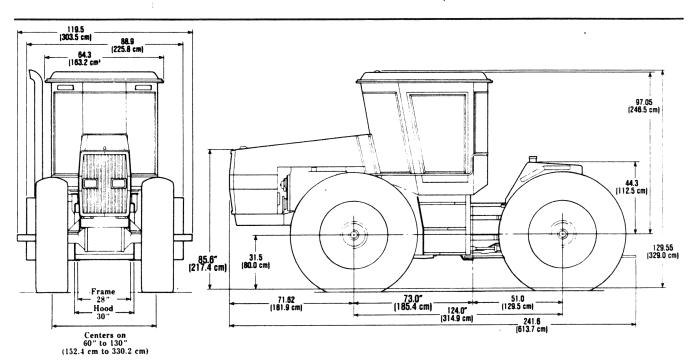
25,022 lbs (11, 334 Kg) with 18.4 x 38 R1 Hub Style Duals, (21,530 lbs (9,775 Kg) with 18.4 x 38 R1 singles)

Front Steer Axle, PTO and TPH with Quick Coupler, less fuel and operator.

Maximum Warranted Weight (Wildcat 1000)

26,000 lbs. (11,778 Kg)

NOTE: The maximum warranted weight listed is the maximum ballasted GVW with a 60% front and 40% rear static split.

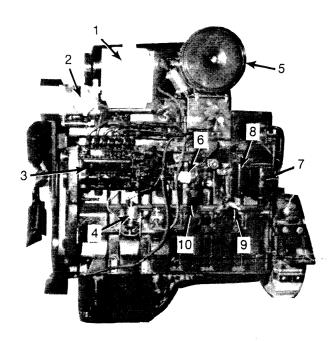


DIMENSIONS & DATA Wheelbase 124.00 in. (314.9 cm) Hood width 30 in. (76.2 cm)

Turning radius
14.0 ft. (4.27 m) to center of
drawbar (12.8 ft. with front
steer option)

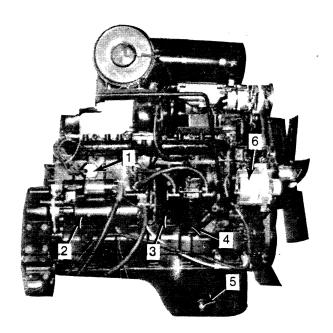
Drawbar Heavy-duty swing type Frame Articulation 40 degrees left/right Frame Oscillation 13 degrees in each direction (26 degrees total)

General Specifications



Engine Left Side

1-Coolant Surge Tank 2-A/C Compressor 3-Fuel Injection Pump 4-Ether Start 5-Engine Air Cleaner 6-Fuel Shutoff Solenoid 7-Water Separator 8-Fuel Filter 9-Fuel Lift Pump 10-Oil Fill



Engine Right Side

1-Coolant Heater 2-Starter 3-Oil Filter 4-Coolant Filter 5-Oil Drain 6-Alternator

Engine (Wildcat 1000)

Engine Make: Cummins Model: 6 CTA-8.3

Type: In-line 6 cyl. diesel

Displacement: 504.5 cu. in. (8.27L) **Rated Horsepower:** 220 HP (163.9 Kw)

Rated R/min: 1700-2100 Turbo Charged: Yes After-Cooled: Yes

High Idle (no load): 2310 approx.

Low Idle: 850 approx.

Bore & Stroke: 4.49 x 5.32 in. (114 x 135 mm)

Compression Ratio: 16.5:1 Firing Order: 1-5-3-6-2-4

Peak Torque: 550 lb ft (746 N.m) @ 2100 rpm

Torque Rise: 30%

Valve Setting (cold): Intake-0.012 in. (0.30 mm)

Exhaust-0.024 in. (0.61 mm)

Oil Capacity (including filter): 23.7 U.S. qts

(22.4 L)

Oil Pressure (min. allowable): Low idle - 10 psi

(69 kPa) High idle - 30 psi (207 kPa) Coolant Capacity: 35 U.S. qts. (33.1 L)

Lubricating Oil: Use multi-viscosity, preferably 15W-40 meeting API classification CC/CD.

NOTE: 10W-30 oil can be used if ambient tempera-

ture remains below 23°F (-5°C).

General Specifications

Speed Chart (Wildcat 1000) Engine RPM: 2100

Transmission: Steiger Powershift

Gear	MPH	(KPH)
1	2.0	(3.3)
2	2.5	(3.9)
3	3.0	(4.9)
4	3.7	(5.9)
5	4.4	(7.1)
6	5.5	(8.8)
7	6.5	(10.5)
8	7.8	(12.5)
9	9.6	(15.4)
10	11.7	(18.9)
11	14.1	(22.7)
12	17.3	(27.9)
R1	2.7	(4.3)
R2	4.8	(7.8)
	1 2 3 4 5 6 7 8 9 10 11 12 R1	1 2.0 2 2.5 3 3.0 4 3.7 5 4.4 6 5.5 7 6.5 8 7.8 9 9.6 10 11.7 11 14.1 12 17.3 R1 2.7

NOTE: Variable ground speeds are possible with high torque rise engines within 2100 rpm and 1700 rpm.

Speeds shown represent following tire sizes at rated rpm (2100):

18.4 x 38 R1

23.1 x 34 R1

24.5 x 32 R1

24.5 x 32 LS2

20.8 x 38 R1

30.5L x 32 R1

To determine speed for other tire sizes use the following chart multipliers:

Average Static		
Loaded R.R.	Tire Size	Factor
30.5	14.9 x 38	.96
30.5	16.9 x 38	.96
30.7	20.8 x 34 R1	.96
33.5	20.8 x 38 R2	1.05
33.7	18.4 x 42 R1	1.05
34.6	20.8 x 42 R1	1.09
33.0	30.5L x 32 R2	1 03
32.5	30.5L x 32 LS2	1.02

Example of Use:

If chart speed was 14.6 MPH and tractor was equipped with 20.8 x 34 R1 tires,

Then:

MPH = (Chart) x (Factor)

 $MPH = 14.6 \times .96 = 14.0 MPH$

Engine Speeds

If MPH is wanted for engine speeds other than rated,

MPH = MPH (Chart) x Engine RPM
Rated RPM

Example:

If chart speed was 14.6 MPH and tractor has engine with rated speed of 2100 RPM and MPH wanted at 1800 RPM;

Then:

 $MPH = 14.6 \times 1800 = 12.5 MPH$

2100

Puma & Wildcat 1000 Series

Front Steerable Axle Bolt Torque

The optional front steerable axle structure must have bolts "A" and "B" checked and tighened to the specified torque at the first 50 and 100 hours of operation (Fig. 1).

Tighten bolts "A" and "B" to 255 ± 12 ft/lbs $(346 \pm 16 \text{ N.m})$

Front Steer Lubrication Requirements

The lubrication decal (page 75) specifies a 50 hour grease interval at the eleven grease fittings for the front steer unit. This is incorrect, the grease interval should be every 10 hours as specified in the lubrication guide on page 76 of this manual. Please note this change.

IMPORTANT NOTICE:

When 18.4×38 or 18.4×42 tires are used at a 60 inch tread setting on models equipped with an optional front steer axle, tire wall to cab mount clearance is normally close.

To avoid tire damage due to production tolerances, if 18.4×38 or 18.4×42 tires are used at a 60 inch tread setting, tire wall to cab mount interference must always be checked in both directions.

There should be a minimum of one-fourth (1/4) inch clearance between the tire wall and front cab mount in both directions of steering. Adjust the wheel hub on the axle slightly if necessary to assure the minimum clearance requirements.

20.8 x 38 tires cannot be used at a 60 inch tread setting on models equipped with a front steer axle.

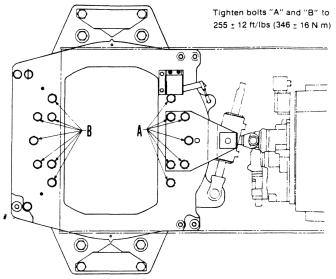


Figure 1:



Our support email: ebooklibonline@outlook.com