ORIGINAL INSTRUCTIONS

PUMA 130 PUMA 145 PUMA 160 Tractors

OPERATOR'S MANUAL

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1 - GENERAL INFORMATION

METRIC AND IMPERIAL UNITS ABBREVIATIONS

Typical applications	Metric unit		Imperial unit		
	Name	Symbol	Name	Symbol	
Area (Land area)					
	hectare	ha	acre	ac	
	square meter	m²	square foot	ft²	
			square inch	in²	
	square millimeter	mm²	square inch	in²	
Electricity			+	_	
	ampere	Α	ampere	Α	
	volt	V	volt	V	
	microfarad	μF	microfarad	μF	
	ohm	Ω	ohm	Ω	
Force					
	kilonewton	kN	pound	lb	
	newton	N	pound	lb	
Force per length					
	newton per meter	N/m	pound per foot	lb/ft	
			pound per inch	lb/in	
Frequency					
	megahertz	MHz	megahertz	MHz	
	kilohertz	kHz	kilohertz	kHz	
	hertz	Hz	hertz	Hz	
Frequency - Rotational					
	revolution per minute	r/min	revolution per minute	r/min ^a	
		rpm		rpm	
Length			1		
	kilometer	km	mile	mi	
	meter	m	foot	ft	
	centimeter	cm	inch	in	
	millimeter	mm	inch	in	
	micrometer	μm			
Mass	Lile grove	la e-	***	11-	
	kilogram	kg	pound	lb	
	gram	g	ounce	oz	
Mana par Mana	milligram	mg			
Mass per Mass	maillianna na an Isila ana an				
Davisa	milligram per kilogram	mg/ kg			
Power	kilowatt	I-VA/	horogramar	U.s.	
		kW	horsepower	Hp	
	watt	W	Btu per hour	Btu/hr	
December 11 - 15 - 15			Btu per minute	Btu/min	
Pressure or stress (Force p	•	1.5			
	kilopascal	kPa	pound per square inch	psi	
			inch of mercury	inHg	
	pascal	Pa	inch of water	inH2O	
	megapascal	MPa	pound per square inch	psi	

1 - GENERAL INFORMATION

Typical applications	Metric unit		Imperial unit			
	Name	Symbol	Name	Symbol		
Temperature (other than T	hermodynamic)			_		
	degrees Celsius	°C	degrees Fahrenheit	°F		
Time						
	hour	h	hour	h		
	minute	min	minute	min		
	second	S	second	s		
Torque (includes Bending r	moment, Moment of force, ar					
	newton meter	N m	pound foot	lb ft		
			pound foot	lb in		
Velocity						
	kilometer per hour	km/h	mile per hour	mph		
	meter per second	m/s	foot per second	ft/s		
	millimeter per second	mm/s	inch per second	in/s		
	meter per minute	m/min	foot per minute	ft/min		
Volume (includes Capacity						
	cubic meter	m³	cubic yard	yd³		
				cu yd		
	liter	I	cubic inch	in³		
	liter	I	US gallon	US gal		
			UK gallon	UK gal		
			US quart	US qt		
			UK quart	UK qt		
	milliliter	ml	fluid ounce	fl oz		
Volume per time (includes Discharge and Flow rate)						
	cubic meter per minute	m³/min	cubic foot per minute	ft³/min		
	liter per minute	l/min	US gallon per minute	US gal/min		
	milliliter per minute	ml/min	UK gallon per minute	UK gal/min		
Sound power level and So	und pressure level		· · · · · · · · · · · · · · · · · · ·	•		
•	decibel	dB	decibel	dB		

TO THE OWNER

GENERAL INFORMATION

This Manual has been prepared to assist you in the correct procedure for running- in, driving and operating and for the maintenance of your new tractor. Read this Manual carefully. Your tractor is intended for use in normal and customary agricultural applications.

If at any time you require advice concerning your tractor, do not hesitate to contact your authorised dealer. He has factory trained personnel, genuine manufacturers' parts and the necessary equipment to carry out all your service requirements.

The specification are provided for your information and guidance. For further information concerning your tractor and equipment, consult your authorised dealer.

All data given in this manual is subject to production variations. Dimensions and weight are approximate only. The illustrations do not necessarily show tractors in standard condition or imply that these features are available in all countries. For exact information about any particular tractor, please consult your authorised dealer.

Your tractor has been designed and built to give maximum performance, economy and ease of operation under a wide variety of operating conditions. Prior to delivery, the tractor was carefully inspected, both at the factory and by your dealer to ensure that it reaches you in optimum condition. To maintain this condition and ensure trouble-free operation, it is important that the routine services, as specified on page **7-13** of this Manual, are carried out at the recommended intervals.

OPERATORS MANUAL STORAGE

The Operators Manual supplied with your tractor is an important source of information and should be stored safely.

The manual is written specifically for your tractor so it is important that you make a note of the print number and issue date which can be found on the cover. In the event the manual is lost or damaged it can be replaced with the correct version.

A storage pocket for the Operators Manual can be found on the rear of the seat. The manual should be kept in this pocket at all times when not in use.

ABOUT THIS MANUAL

This manual gives information for use of your machine, as intended and under the conditions foreseen by the manufacturer during normal operation and routine service and maintenance.

Read and understand; keep it in good condition and always safely store it in the provided pocket in the back of your seat for later easy retrieval. This manual does not contain all the information related to periodical service, converting and repairs to be carried out by professional service personnel.

The Table of Contents page(s) are provided to have an overview of main manual's topics. A detailed alphabetic index is available at the end of this manual for locating specific items.

Normal operation

- Normal operation means the use of the tractor for the purpose intended by the manufacturer by an operator familiar with the tractor and the mounted or towed equipment and complying with the information for operation and safe practices, as specified by the manufacturer in this manual and by the decals on the tractor and the equipment.
- Normal operation includes the preparation and storage of the tractor, swinging components into work position and vice versa, adding or removing ballast and picking up and setting off attachments.
- Normal operation includes the adjustment and setting of the tractor and equipment, for the specific condition of the field and/ or the crop.

Routine service

 Routine service and maintenance means activities that must be done daily by an operator familiar with the tractor characteristics and complying with the information for routine service and safe practices, as specified by the manufacturer in this manual and by decals on the tractor, in order to maintain its proper function. Routine service includes activities such as fueling, cleaning, washing, topping up fluid levels, greasing, replacing of consumable articles such as lamp bulbs.

Converting, periodical service and repair

- Periodical service means activities that must be done at defined intervals by trained personnel familiar with the tractor characteristics and which are complying with the information for periodical service and safe practices, as partly specified by the manufacturer in this manual and in other Company literature, in order to maintain the expected life time of the tractor.
- Converting means activities that must be done by professional service personnel familiar with the tractor characteristics and complying with the information for converting, as partly specified by the manufacturer in this manual, in assembly instructions or in other Company literature, in order to fit the tractor to a specific configuration.
- Repair means activities that must be done by professional service personnel only familiar with the tractor characteristics and complying with the information for



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