# PT Series Bearcat, Cougar, Panther

# **Operators Manual**

37-060-R1

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.

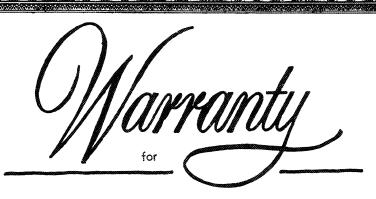
LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE, CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

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.

© 1995 Case Corporation

CASE and IH are registered trade marks of Case Corporation



#### AGRICULTURAL PRODUCTS

Steiger Tractor, Inc. (Steiger) warrants, to the original purchaser only, each new Steiger Tractor to be free from defects in material and workmanship under normal agricultural application use and service, subject to the conditions and qualifications herein set forth. The obligation of Steiger hereunder is limited to the repair or replacement of those parts which Steiger, in its sole discretion, determines to have failed as a result of defects in material or workmanship within twelve months or 1500 hours of use in agricultural applications, whichever occurs first, after delivery to the original purchaser. Steiger's obligation hereunder shall in no case be greater than the cost of the necessary parts and labor which Steiger, in its sole discretion, determines to have failed as a result of defects in material or workmanship. Replacement parts provided under the terms of this Warranty are warranted for the remainder of the warranty period applicable to the product in which it is installed as if such parts were original components of that product.

Steiger shall not be liable for any costs other than those specified herein, specifically excluding damage to crops, loss of use, transportation expense to an authorized Steiger dealer, service calls, normal maintenance and upkeep cost, overtime labor cost, and any and all other injuries, claims, or special, indirect or consequential damage, or other economic loss. "Also this warranty does not extend to engines (Cummins), tires, and tubes not manufactured by Steiger, but instead the applicable warranties, if any, of the respective manufacturers shall apply."

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, AND THERE IS NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. No dealer, salesman or agent has any authority to alter or amend this warranty nor does any dealer, salesman or agent make any warranty for himself unless the same is reduced to writing and delivered to the purchaser at the time of purchase.

This warranty shall be effective only if the purchaser requests warranty repairs to be made by an authorized Steiger dealer at his place of business and, if requested by such dealer, the purchaser presents evidence of the date of delivery of the equipment. This warranty shall not apply unless Steiger or one of its dealers is promptly notified of claimed defect and the allegedly defective part is preserved for inspection.

This warranty shall immediately become void if any service, other than normal maintenance, is performed by anyone other than an authorized Steiger dealer; or if any alteration or modification is made, or attachments are used, without the prior written consent of Steiger; or if, in Steiger's sole discretion, the failure is due to abuse or neglect in the operation or maintenance of the tractor or due to failure to follow the provisions of the operator's manual.

#### IMPORTANT

This warranty shall only become valid when delivery notification for warranty is received by Steiger Tractor, Inc. within ten (10) days of completion of sale.

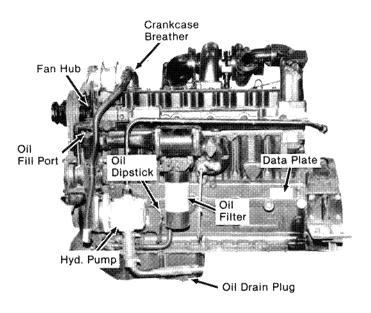


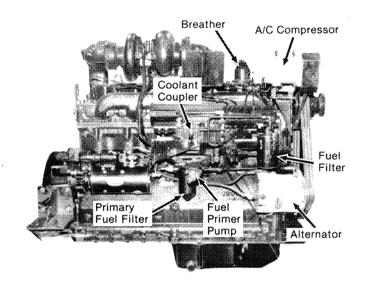
3101 - 1ST AVE. N. — FARGO, NORTH DAKOTA 58102

### "PT" SERIES OPERATORS MANUAL

### PT 225 BC III Engine Specifications:

Serial No. 141-00651 & Up





#### Caterpillar 3306 DIT-225

#### **General Specifications**

Model - Caterpillar 3306 DIT-225

Type-Inline 6 cylinder, direct injected and Turbocharged

Bore & Stroke – 4.75 x 6.00 inches (121 mm x 152 mm)

Displacement - 638 cubic inch (10.5 liters)

Comp. Ratio - 15:1

Nominal Torque Rise - 29.6

Rated Speed - 2100 RPM, approximately

High Idle - 2300 RPM, approximately

Low Idle - 830 RPM, approximately

Oil Pressure - See chart

Engine temperature at 200°F  $\pm$  10° (92°C  $\pm$  10°).

ENGINE OIL PRESSURE CHART				
TEST	SAE NO.	Minimum Permissible Pressure		
rpm	OF TEST OIL	psi	kPa	
1500 rpm or above	10	20	138	
	30	24	165	
	10	6	41	
600 to 800 rpm	30	7	48	

#### **Lubrication Specifications**

Oil Type - API Class CD or MIL-L-2104-C

Oil Viscosity -

	remp. H	ange
SAE Grade	Min. °F	Max. °F
10W	10	+ 70
*10W/30	<del></del> 10	+ 100
*15W/40	+5	+ 120
30	+ 20	+ 100
40	+ 45	+ 120

\*CD qualified multi-viscosity oils are preferred.

Oil Capacity – 29 qts. (27.44 liters) including filter Oil Filter Type – Engine mounted, spin-on, throwaway type

Coolant Capacity - 13 gal. (49.2 liters)

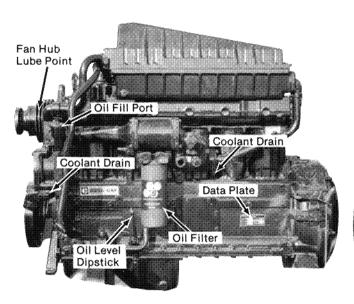
Fuel Requirements – ASTM Grade No. 2D or 1D for cold weather operation. A minimum Cetane number of 40 is recommended.

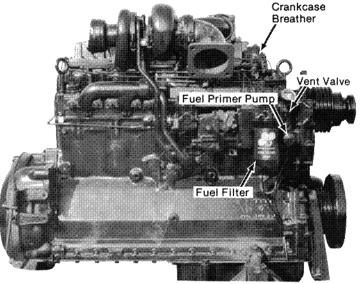
Factory Fill Oil - 15W40

### "PT" SERIES OPERATORS MANUAL

### PT 250 Cougar III Engine Specifications:

Serial No. 142-00017 & Up





#### Caterpillar 3306 DITA-250

#### **General Specifications**

Model - Caterpillar 3306 DITA-250

Type-Inline 6 cylinder, direct injected and Turbocharged

Bore & stroke-4.75 x 6.00 inches (121 mm x 152 mm)

Displacement - 638 cubic inch (10.5 liters)

Comp. Ratio - 15:1

Nominal Torque Rise - 37.6%

Rated Speed - 2100 RPM, approximately

High Idle - 2300 RPM, approximately

Low Idle - 830 RPM, approximately

Oil Pressure - See chart

Engine temperature at 200°F ± 10° (92°C ± 10°).

ENGINE OIL PRESSURE CHART				
TEST	TEST SAE NO.		Minimum Permissible Pressure	
rpm	OF TEST OIL	psi	kPa	
1500 rpm or above	10	20	138	
	30	24	165	
	10	6	41	
600 to 800 rpm	30	7	48	

#### **Lubrication Specifications**

Oil Type — API Class CD or MIL-L-2104-C Oil Viscosity —

	Temp. Range		
SAE Grade	Min. °F	Max. °F	
10W	- 10	+ 70	
*10W/30	10	+ 100	
*15W/40	+5	+ 120	
30	+ 20	+ 100	
40	+ 45	+ 120	

<sup>\*</sup>CD qualified multi-viscosity oils are preferred.

Oil Capacity — 29 qts. (27.44 liters) including filter Oil Filter Type — Engine mounted, spin-on, throwaway type

Coolant Capacity - 14 gal. (53 liters)

Fuel Requirements – ASTM Grade No. 2D or 1D for cold weather operation. A minimum Cetane number of 40 is recommended.

Factory Fill Oil - 15W40

### PT SERIES OPERATORS MANUAL

# **ATTENTION:**

All tractors above the model and serial number range that follows ARE NOT equipped with the automatic engine shutdown feature that was available on earlier production models.

IMPORTANT: Compare your tractor serial number to the following serial number list. If the serial number is above those listed it will NOT have the automatic engine shutdown feature.

		MODEL	SERIAL NO.
PT	350	Panther III	140-00071
PT	225	BC III	141-00581
PT	250	Cougar III	142 <b>-0</b> 0006
PT	270	Cougar III	143-00218

ALL reference pertaining to the earlier automatic engine shutdown system contained within this manual is to be disregarded ONLY on those models ABOVE the serial number range listed in this supplement. The following information shall apply on those models ABOVE the listed serial number range.

In the event of a system malfunction such as - loss of engine oil pressure, excessive engine coolant temperature, loss of PTO charge pressure, there will be an intermittent tone alarm sound and the appropriate dash indicator light will illuminate. When this happens, the engine MUST be switched off manually. To avoid additional system damage, correct the cause before continued operation.

In addition to the above, the system will also emit a STEADY tone alarm in the event of high transmission oil temperature or if the park brake is applied. When this happens the appropriate dash indicator light will also illuminate, but again the engine WILL NOT shut down automatically. All system information contained within this manual is correct EXCEPT for the automatic engine shutdown feature used on prior model tractors.

## SERIES III ST & PT OPERATORS MANUALS

### **Clutch Operated Electric Decelerator**

Recently Steiger Tractor, Inc. released a clutch operated Electric Decelerator package as a production installed "option" or as a field installed kit for Series III "ST" and "PT" models equipped with the mechanical transmission and clutch arrangement.

The Electric Decelerator was designed and released as the result of many requests from dealers and customers experiencing high clutch failures due to operator error.

The major cause of clutch failures could be summarized with two words: "Excessive Heat". Excessive heat is not the amount of heat a clutch can normally absorb and dissipate, but the amount of heat a clutch is "Forced" to absorb and attempt to dissipate.

Heat or wear is practically non-existent when a clutch is "Fully Engaged", but during the moment of engagement, when the clutch is picking up the load, it generates considerable heat.

This is particularly true if the operator attempts to start a heavy load with the engine throttle set at high idle. Temperatures generated between the flywheel, driven discs and pressure plates can be high enough to cause the metal to flow and the friction facing material to char and burn.

The design purpose of the Electric Decelerator is to prevent the operator of the vehicle from starting a load at full engine RPM which results in generating excessive heat when the clutch is picking up the load. The Electric Decelerator is designed to reduce engine RPM from high idle down to near engine "peak torque" RPM without disturbing the original throttle setting whenever the clutch pedal is depressed, and it will not allow the engine to resume high idle until the clutch is fully engaged.

Anytime the clutch pedal is depressed the engine RPM will be reduced from high idle to near peak torque RPM. This will allow the engine to pick up the load without stalling while reducing the heat generated by slipping the clutch.

The Electric Decelerator will also reduce the effects of the heat generated during clutch "break-away" if the clutch pedal is suddenly depressed while the operator is operating the vehicle under full load and full engine RPM.

# SUPPLEMENT TO STEIGER OPERATORS MANUALS

#### Crankcase Oil and Filter Intervals Extended

In the past Steiger Tractor, Inc. has recommended 100 hour crankcase oil and filter change intervals on all model tractors.

The 100 hour drain interval has now been extended to 250 hours (or every six (6) months which ever comes first) on all models EXCEPT those models using the 3208 Cat engine. ON THESE MODELS THE RECOMMENDATION WILL REMAIN AT THE 100 HOUR CRANKCASE OIL AND FILTER CHANGE INTERVALS.

The 250 hour oil and filter change interval can be considered under normal condtions and type CD oils are used. Type CD oils are required to meet Engine Service Classification CD, or MIL-L-2104C specifications.

The above recommended oil change interval applies when the fuel sulphur is .04% or less. When the sulphur content is 0.4% to 1.0% then reduce the change interval one-half (1/2). When the sulphur content is above 1.0% then reduce the interval to one-fourth (1/4) the normal interval.

NOTE: ALL OTHER LUBRICATION AND CHANGE REQUIREMENTS REMAIN THE SAME AS STATED WITHIN THIS OPERATORS MANUAL.

#### **Axle Lubricant Specifications**

Steiger P/N 01-5526 is an SAE 80W90 gear lube oil that is recommended for all normal service, in all current model Steiger axles.

All axle lube oils must meet the MIL-L-2105B and API GL-5 specifications.

In general the 85W90 is the recommended lube, however, SAE 90 is acceptable as an alternative, however it does not provide the more desirable multi-viscosity characteristics of the 85W90.

Steiger Tractor, Inc. does NOT indorse specific brands of lubricants. We consider it the obligation of the supplier to assure that the lubes meet the applicable MIL-L-2105B and API-GL-5 specifications.



Our support email: ebooklibonline@outlook.com