685 Tractor

Operators Manual

9-11273

CASE IH

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TABLE OF CONTENTS

TO THE OWNER I
SERIAL NUMBERS . . . . . II,III
SAFETY . . . . . VI-XI
Safety Rules VI
Before Starting VII
Operation VIII
Service XI
HAND SIGNALS . . . . . XII,XIII
DECALS . . . . . XIV-XVI

SPECIFICATIONS 1-25
Diesel Engine 1,2
General 3-5
Travel Speeds 6,7
Measurements 8-10
Turning Radius 11
Weights 11
Axle Capacities 11
Tires and Wheels 12-15
Front Wheel Tread, 2WD . . . 16
Front Wheel Tread, MFD . . . 17
Steering Angles, MFD 18
Oscillation Stops, MFD . . 19,20
Rear Wheel Tread 21-23
Diesel Fuel 24
Fuel Conditioner 25

OPERATING CONTROLS . . 26-47
Instrument Panel 26,27
Warning Lamps 28,29
Controls 30-39
Heater Controls 40
Air Conditioning 40,41
Operators Seat 42,43
Seat Belt 44
Amber Warning Lamps, Turn Signals and SMV Symbol 45-47

OPERATING INSTRUCTIONS 48-95
Run-in Procedure 48
Before Starting Engine . . . 49-51
Starting Procedure 52,53
Cold Starting 53-56
Cold Temperature Operation 55
Using Booster Batteries 57

OPERATING INSTRUCTIONS . . . . Continued
Driving The Tractor 58,59
Forward/Reverse Transmission 60
Two Speed Power Shift 60
Differential Lock 61
Mechanical Front Drive (MFD) 62
Steering The Tractor 63
Stopping The Tractor 64
Stopping The Engine 65
Dismounting and Mounting . . 66
Towing The Tractor 67
Transporting The Tractor . . . 67
Hitch System Control . . . 68-72
Position Control 68
Adjustable Stop 69
Draft Control 70
Raise Response 71
Drop Response 72
Remote Hydraulic Controls . . 73
Neutral and Float Lockout Bar 73
Remote Hydraulic Circuits . . 74
Hydraulic Hose Couplers . . . 75
Self Sealing Breakaway Couplers 76,77
Remote Cylinder 78
7 Point Electrical Socket . . . 79
Power Take Off (PTO) . . 80-83
PTO Guards 82
PTO Operating Safety 83
Drawbar 84
Three Point Hitch 85
Check Chains 86,87
Upper (Turnbuckle) Link . . . 88
Telescopic Stabilizers 88
Hitching An Implement 89
Ballasting 90,91
Front End Weights 90
Rear Wheel Weights 90
Water Ballasting 91
Measuring Wheel Slip . . . 92,93
Loads Matched To Tractor . . 94
Adjusting Tread Positions . . . 95
Front Axle, 2WD 95
Front MFD, and Rear 95

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SAFETY
Safety Rules

Understand that your safety and the safety of other persons is measured by how you service, and operate this machine. Know the positions and operations of all controls before you try to operate. MAKE SURE YOU CHECK ALL CONTROLS IN A SAFE AREA BEFORE STARTING YOUR WORK.

READ THIS MANUAL COMPLETELY and make sure you understand the controls. All equipment has a limit. Make sure you understand the speed, brakes, steering, stability, and load characteristics of this machine before you start to operate.

The safety information given in this manual does not replace safety codes, insurance needs, federal, state and local laws. Make sure your machine has the correct equipment needed by the local laws and regulations.

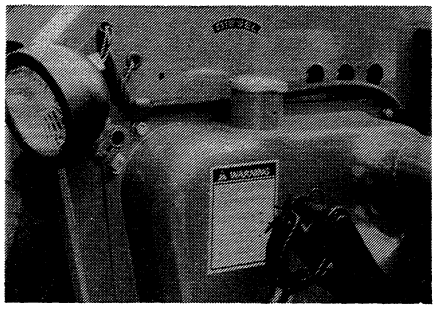
J I Case is continuing to work for your safety: by making tractors with better protection and by giving these rules for safe operation.



THIS SAFETY ALERT SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSSAGE THAT FOLLOWS AND BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY OR DEATH.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

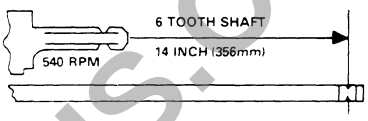


⚠ WARNING

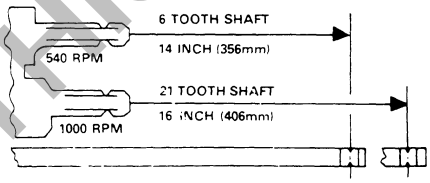
TO AVOID CLOTHING ENTANGLEMENT AND INJURY, PTO SHIELD MUST BE POSITIONED FOR SHAFT BEING USED. KEEP DRIVELINE SHIELDS IN PLACE

DRAWBAR MUST BE SET AND LOCKED TO PREVENT BOTTOMING OR SEPARATION OF DRIVELINE:

FOR TRACTORS WITH ONE PTO SHAFT



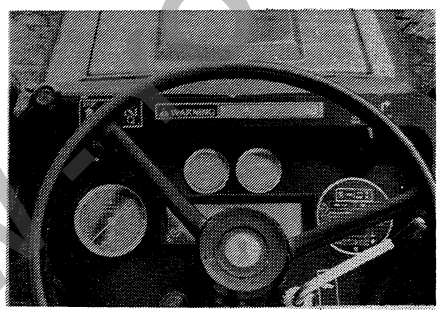
FOR TRACTORS WITH TWO PTO SHAFTS



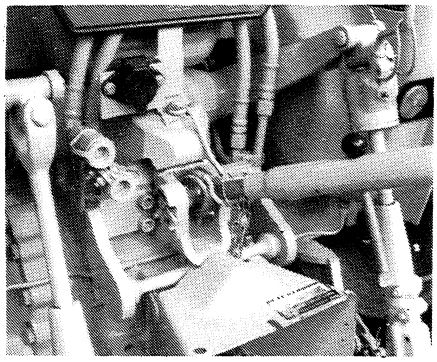
121 6769 COS

⚠ WARNING

PTO MACHINES MAY FAIL IF OPERATED OVER RATED SPEEDS AVOID INJURY. LIMIT RPM TO 600 OR LESS FOR 540 RPM MACHINES AND 1100 OR LESS FOR 1000 RPM MACHINES COS







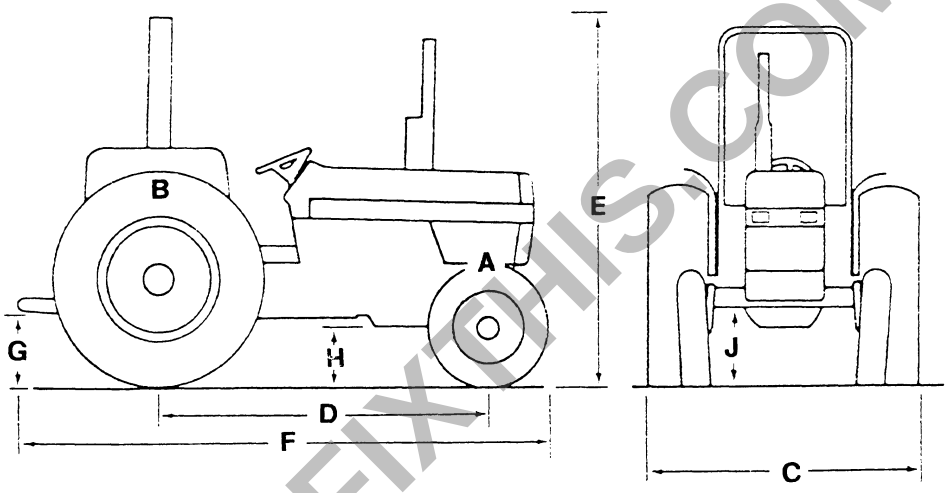
⚠ WARNING

Power drive system safety shields must be kept in place. 87

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

APPROXIMATE MEASUREMENTS AND WEIGHTS
Utility ROPS Tractors



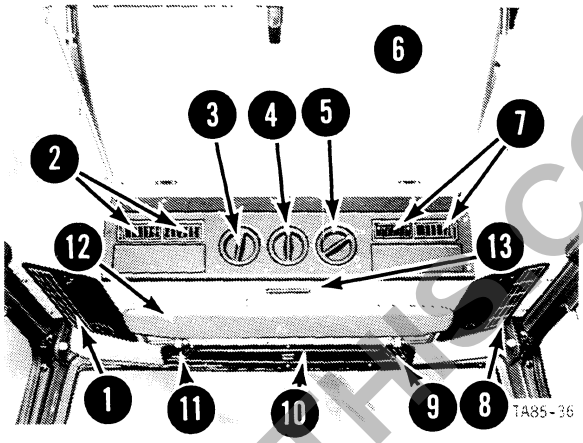
	UTILITY ROPS 2WD	UTILITY ROPS MFD	UTILITY ROPS WITH H D AXLE
A	7.50 - 16	9.5 - 24	7.50 - 16
B	16.9 - 30	16.9 - 30	16.9 - 30
C	75 inch (1 905 mm)	88 inch (2 235 mm)	75 inch (1 905 mm)
D	88.7 inch (2 253 mm)	88 inch (2 235 mm)	88.7 inch (2 253 mm)
E	96.5 inch (2 451 mm)	93.5 inch (2 375 mm)	93.5 inch (2 375 mm)
F	148 inch (3 759 mm)	152.7 inch (3 878 mm)	148 inch (3 759 mm)
G	15.5 inch (394 mm)	15.5 inch (394 mm)	15.5 inch (394 mm)
H	17.3 inch (439 mm)	12 inch (305 mm)	17.3 inch (439 mm)
J	20.8 inch (528 mm)	14.5 inch (368 mm)	

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

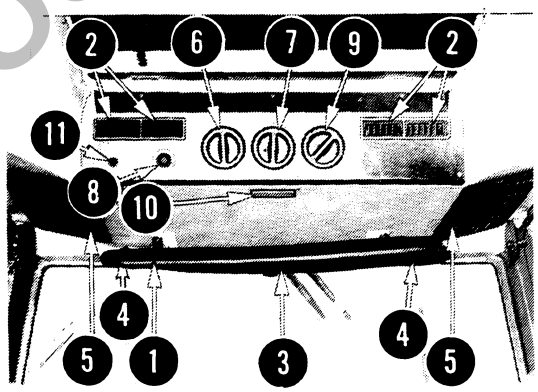
OPERATING CONTROLS

Cab Heater Controls



1. Recirculating vent
2. Air outlet vents
3. Heat control
4. Blower fan control
5. Recirculating control
6. Escape hatch
7. Air outlet vents
8. Recirculating vent
9. Air outlet vent
10. Demisting vent
11. Air outlet vent
12. Sun visor
13. Interior light

Air Conditioning System Controls



1. Sun visor
2. Adjustable air vents
3. Windshield defrost
4. Side window defrost
5. Air filter covers
6. Heat control
7. Fan control
8. Air conditioning control
9. Fresh air/recirculation
10. Interior light
11. Warning light

NOTE: *Under certain conditions the heater fan can run at maximum speed when the control is in the 2nd, 1st, or Off position. This is because of heat build up in a temperature controlled override switch, after a long period of operation, and is a safety feature designed to prevent overheating of resistors in the circuit.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TOWING THE TRACTOR

If it is necessary to tow a tractor, follow these rules:

IMPORTANT: *The engine must be running at approximately 1000 RPM. to provide power steering and transmission lubrication. If the engine cannot be run, add 4 U.S. gal (15 litre) of HY-TRAN PLUS (MS 1207) to the transmission. After towing the tractor, drain sufficient fluid to bring the level in the transmission to the FULL mark.*

1. Never tow the tractor faster than the maximum rated ground speed of the tractor.

2. Make sure all controls are in the NEUTRAL position.

3. Because of a possible loss of steering and brakes when the tractor engine is not running, use only a rigid towing bar and safety chains to tow the tractor.
4. Do not try to tow start a tractor fitted with Power Shift transmission or you will damage the over run clutch.



CAUTION: ***Make sure that the weight of a trailed vehicle that is not equipped with brakes, NEVER EXCEEDS the weight of the tractor that is towing the vehicle. Stopping distance increases with increasing speed as the weight of the towed load increases, espcially on hills and slopes.***

TRANSPORTING THE TRACTOR

When transporting the tractor by truck or rail, hold the tractor with tie downs and blocks.

IMPORTANT: *The PARK BRAKE MUST NOT be engaged when transporting a tractor. Engage the PARK BRAKE BEFORE releasing tractor tie downs.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Grease Points

Lubrication interval . . . . . Every 10 hours

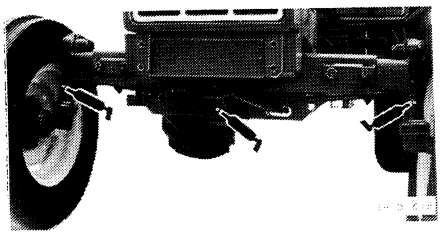


Figure 82
Steering arm pivot and knuckles

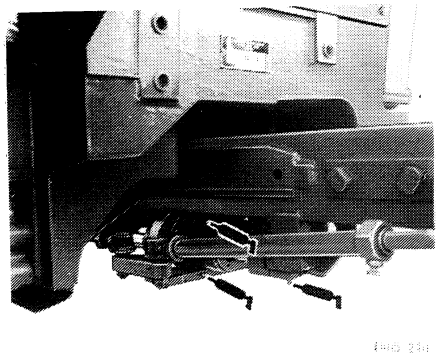


Figure 83
Steering cylinder pivot and clevis

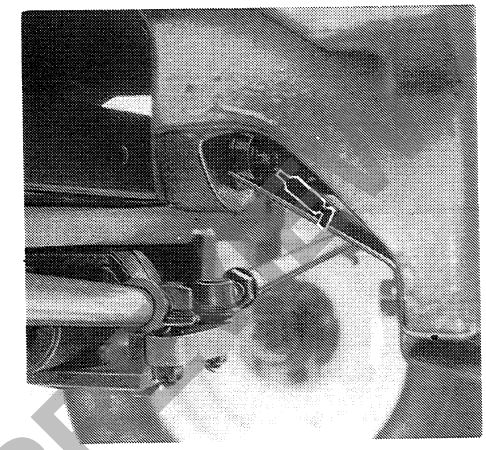


Figure 84
Axle pivot rear

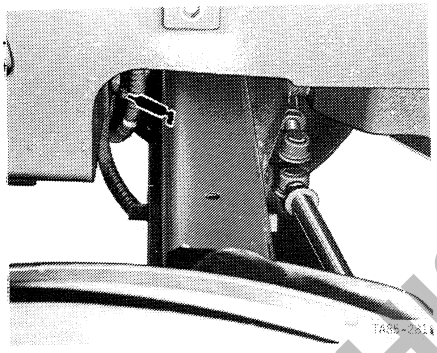


Figure 85
Axle pivot front

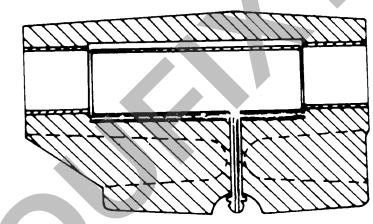


Figure 86
Axle pivot, Rigid cast iron axle

NOTE: *On tractors with a rigid cast iron axle, the pivot is lubricated through a single grease nipple located centrally on the underside of the axle as shown.*

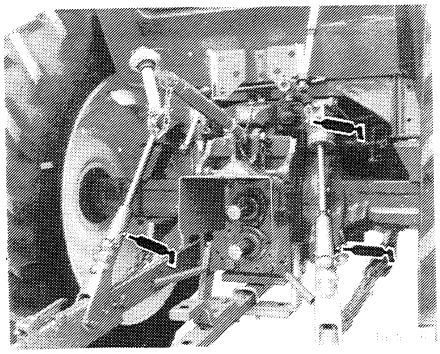


Figure 87
Three point linkage levelling box and levelling screws.

PRINTED BY YOUFIXTHIS.COM

Download full manual at youfixthis.com

The outside check chain front mounting brackets are bolted to the axle housings and have four holes to which the check chain front bracket can be attached depending on the mounting position (hitch point) of the front end of the lower links, and if swing or no swing in work is needed. The mounting bracket holes are numbered 1 to 4.

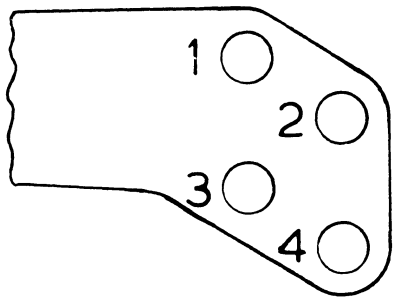


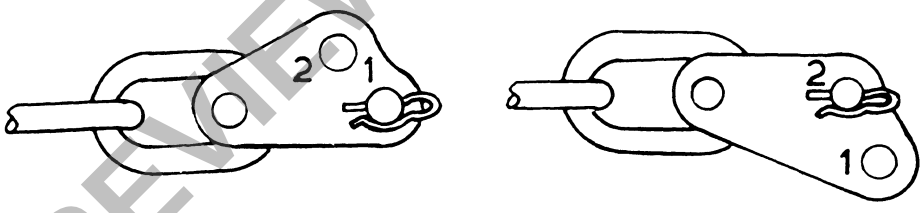
Figure 67

1. UPPER HITCH POINT - NO LATERAL SWAY
2. UPPER HITCH POINT - LATERAL SWAY
3. LOWER HITCH POINT - NO LATERAL SWAY
4. LOWER HITCH POINT - LATERAL SWAY

Outside check chains have two holes at the front of the front brackets which are stamped 1 and 2.

When using Category 1 equipment, fit the pin in the front bracket hole marked 1.

When using Category 2 equipment, fit the pin in the front bracket hole marked 2.



CATEGORY 1 POSITION CATEGORY 2 POSITION

Figure 68

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

ADJUSTING THE TREAD WIDTHS

Front Axle 2WD

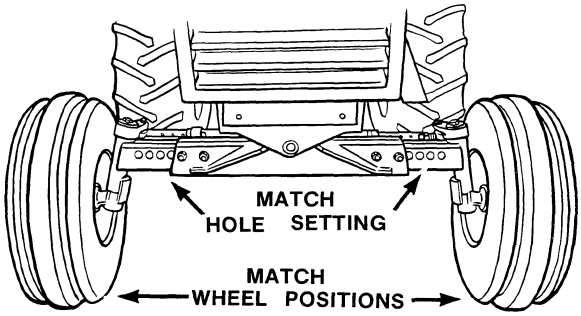


Figure 75

1. Put the tractor on level ground and turn the wheels until straight ahead.
2. Put blocks under the rear wheels and apply the park brake.
3. Raise both wheels clear of the ground.
4. Remove the nuts and bolts from the axle extensions.
5. Loosen the tie rod lock nut and bolt each side.
6. Move the axle extensions so that the bolt holes align at the tread position you want, at the same time extend the tie rods.
7. Install the bolts and nuts for the axle extensions and tighten to a torque of 246 to 272 lb ft (334 to 369 Nm).
8. Tighten the tie-rod lock bolt, making sure the bolt seats into the tie-rod dimple, then tighten the lock nut.
9. Lower the tractor to the ground.
10. Check bolt torque after the first 10 hours of operation and then every 50 hours until torque remains constant.

Front Axle MFD and Rear Axle

1. Loosen the wheel nuts and raise the tractor.
2. Remove the wheels and assemble rims to discs to give the setting you want. SEE SPECIFICATIONS FOR TREAD WIDTHS AND POSITIONS.

IMPORTANT: *When changing traction tire positions, wheels must be installed with the tread turning in the direction shown, for the most efficient traction and cleaning action of the lugs.*

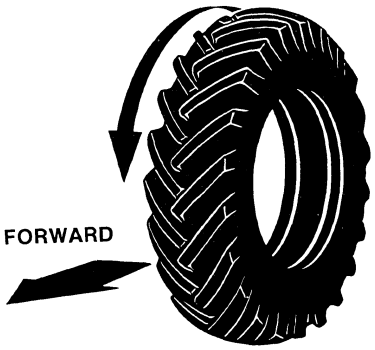


Figure 76

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Engine Oil Filter Change

Change Interval . . . . . Every 200 hours

IMPORTANT: *Change the oil filter at the correct interval, and use only a Case approved filter.*



Figure 91

1. Drain the engine oil then install and tighten the drain plug .
2. Turn the filter counterclockwise to remove. If necessary use a strap wrench.
3. Clean the the filter seat on the engine, then use clean oil to lubricate the filter gasket.
4. Install the new filter until the gasket comes into contact with the engine then tighten half a turn. DO NOT TIGHTEN WITH A WRENCH.
5. Fill with the correct grade of engine oil to the upper level mark on the dipstick.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SERIAL NUMBERS

When ordering parts, requesting information or assistance always give the model and serial numbers of your tractor.

Write the model and serial numbers of your tractor on the lines below:

1. TRACTOR MODEL NUMBER _____

2. PRODUCT IDENTIFICATION NUMBER _____

3. ENGINE SERIAL NUMBER _____

4. TRANSMISSION SERIAL NUMBER _____

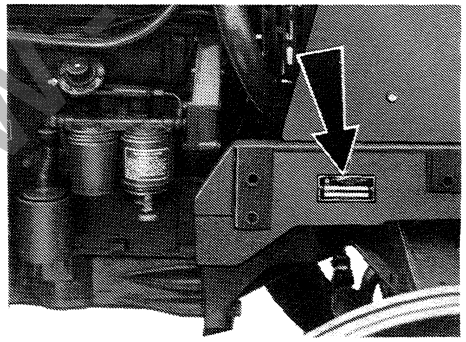
5. MFD AXLE SERIAL NUMBER _____

6. ROPS FRAME SERIAL NUMBER _____

7. CAB SERIAL NUMBER _____

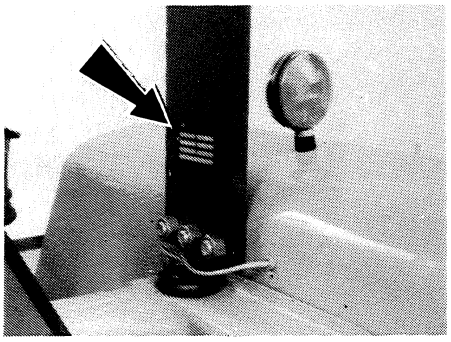
Serial Number Location

MODEL AND PRODUCT IDENTIFICATION NUMBER (P I N) PLATE



On right hand side of front bolster.

ROPS FRAME SERIAL NUMBER PLATE



On right hand upper frame.

PREVIEW YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 183 pages

The full manual includes:

- All 183 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Case IH 685 Tractor Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual