1490

Operators Manual

9-7302

Reprinted

CASE

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TO THE OWNER OF A DAVID BROWN TRACTOR

Use this manual as your guide. If you follow the instructions that are given, your David Brown tractor will work correctly for many years. It is a recommendation that some jobs are best done by your David Brown Dealer. For this reason, a complete description of these jobs is not given in this manual.

If you do need to do these jobs, a service repair manual is available from your David Brown Dealer. See your David Brown Dealer for any parts or assistance that you need. He has persons with special training who know the best methods for the maintenance and repair of your David Brown Tractor.

This manual gives operating instructions for 1490 David Brown Tractors in cab, flat deck or standard form with Hydra-Shift® or Synchromesh gearbox, two or four wheel drive.

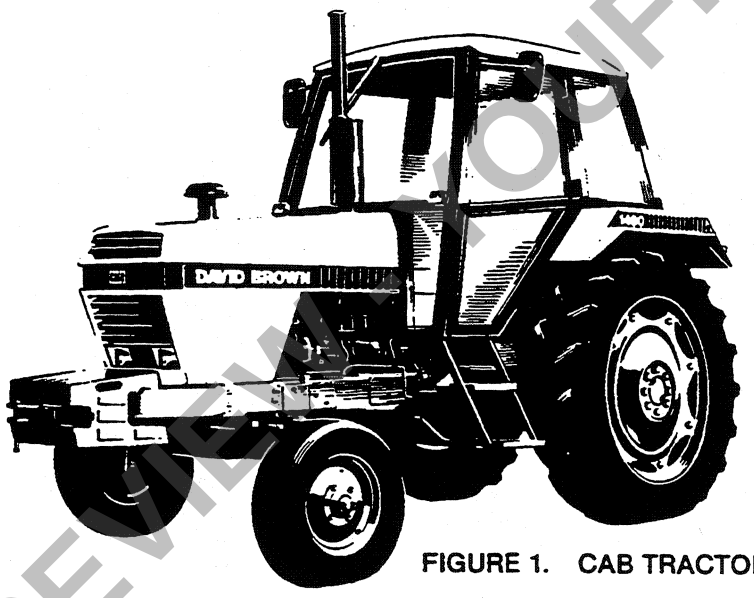


FIGURE 1. CAB TRACTOR

81-085

Your David Brown Dealer

PREVIEW ONLY YOUFIXTHIS.COM

Download full manual at youfixthis.com

TRACTOR SERIAL NUMBERS

The tractor serial number is on the right-hand top face of the main frame.

The engine serial number is on the right-hand side of the cylinder block behind the starter motor.

The cab serial number is on a plate fastened inside the cab.

The serial number plate is fastened to the left-hand side of the clutch housing for cab and flat deck tractors and to the toolbox for standard tractors.

The front axle serial number (4WD) is on the right-hand front face (David Brown axle) or on the left-hand top face (Carraro axle) of the axle casting.

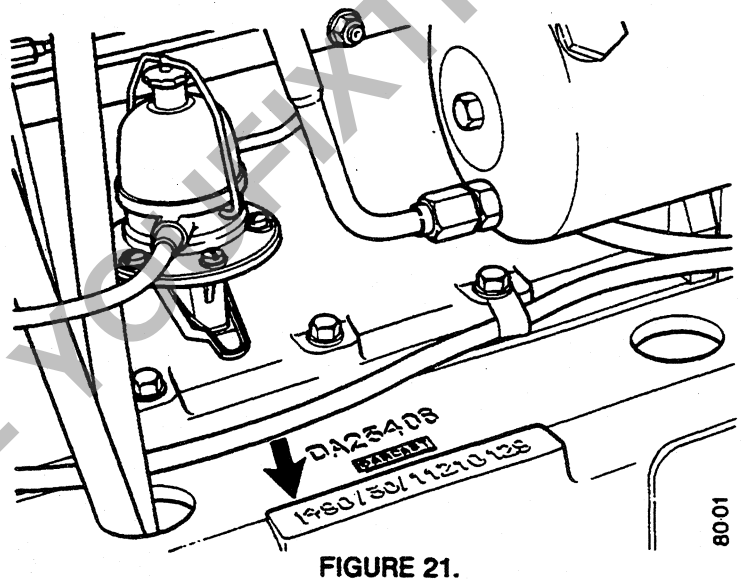


FIGURE 21.

Write the serial numbers for your tractor below:

TRACTOR SERIAL NUMBER _____

ENGINE SERIAL NUMBER _____

CAB SERIAL NUMBER _____

CAB DOOR KEY NUMBER _____

FRONT AXLE (4WD) MAKE AND SERIAL NUMBER _____

REGISTRATION NUMBER _____

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

GENERAL TRACTOR SPECIFICATIONS

Electrical System

Type	12 volt, Negative Ground
Battery:	
Standard Duty	12 volt, 96 amp hour
Heavy Duty	12 volt, 128 amp hour
Alternator	Lucas 23766 AC-Delco 7982992
Voltage Regulator	Part of Alternator
Starter Motor	Lucas 27413A or 26379A
Head Lamps	12v 40/60W Sealed Beam
Side Lamps	12v 5W
Direction Turn Signal Lamps	12v 21W
Rear and Stop Lamps	12v 5/21W
Instrument Warning Lamps	No. 168
Instrument Illumination Lamps	No. 194
Fuses	Two 35A, One 25A, One 15A

Brakes

Type	Wet Disc. 178 mm (7 in) diameter Drum and Shoes, 216 mm (8½ in) diameter Drum, 90 mm (3½ in) Wide Shoe
Operation	Hydraulic
Hand Brake	Lever and Cables

Steering

Type	Hydrostatic, Transverse or Side Mounted Ram

Power Take-Off (PTO)

PTO TYPE	NUMBER OF SPLINES	PTO SPEED	REQUIRED ENGINE SPEED
SINGLE SPEED	6	540 r/min	2000 r/min
MULTI-SPEED	6 6	540 r/min 1000 r/min	2000 r/min 2000 r/min
REVERSIBLE SHAFT	6 21	540 r/min 1000 r/min	2050 r/min 2050 r/min

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TRAVEL SPEED CHART

1490 SYNCHROMESH TRANSMISSION

10/49 RATIO FINAL DRIVES

TYRE SIZES: 16·9/14-34, 13·6/12-38, 18·4/15-32

AVERAGE ROLLING RADIUS 735 mm (29 in)

Range Levers	Gear Lever	Gearbox Ratio	Overall Ratio	700 r/min		1100 r/min		1800 r/min		2050 r/min		2200 r/min	
				mile/h	km/h	mile/h	km/h	mile/h	km/h	mile/h	km/h	mile/h	km/h
1	1	11·132	335·06	0·4	0·6	0·6	0·9	0·9	1·5	1·0	1·7	1·1	1·8
1	2	6·788	204·31	0·6	0·9	0·9	1·5	1·5	2·4	1·7	2·8	1·8	3·0
2	1	5·581	167·97	0·7	1·2	1·1	1·8	1·8	3·0	2·1	3·4	2·2	3·6
3	1	4·404	132·55	0·9	1·5	1·4	2·3	2·3	3·8	2·7	4·3	2·8	4·6
1	3	3·932	118·36	1·0	1·6	1·6	2·6	2·6	4·2	3·0	4·8	3·2	5·2
2	2	3·403	102·42	1·2	1·9	1·8	3·0	3·0	4·9	3·4	5·5	3·7	5·9
3	2	2·685	80·82	1·5	2·4	2·3	3·8	3·8	6·2	4·4	7·0	4·7	7·5
4	1	2·208	66.45	1·8	2·9	2·8	4·6	4·7	7·5	5·3	8·5	5·7	9·4
2	3	1·971	59·34	2·0	3·3	3·2	5·1	5·2	8·4	5·9	9·6	6·4	10·3
3	3	1·556	46·82	2·6	4·1	4·0	6·6	6·6	10·6	7·5	12·1	8·1	13·0
4	2	1·346	40·52	3·0	4·8	4·7	7·5	7·6	12·3	8·8	14·0	9·3	15·9
3	3	0·780	23·47	5·1	8·2	8·1	13·0	13·2	21·2	15·0	24·2	16·1	25·9
1	R	6·679	201·04	0·60	0·96	0·94	1·5	1·5	2·5	1·8	2·8	1·9	3·0
2	R	3·348	100·78	1·19	1·92	1·88	3·0	3·1	4·9	3·5	5·6	3·8	6·0
3	R	2·642	79·53	1·51	2·44	2·38	3·8	3·9	6·3	4·4	7·1	4·8	7·7
4	R	1·325	39·87	3·02	4·86	4·74	7·6	7·8	12·5	8·8	14·2	9·5	15·3

Maximum travel speed with light load at 2350 r/min engine speed is 17·2 mile/h (27·7 km/h).

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

OPERATOR'S SEAT: STANDARD TRACTORS

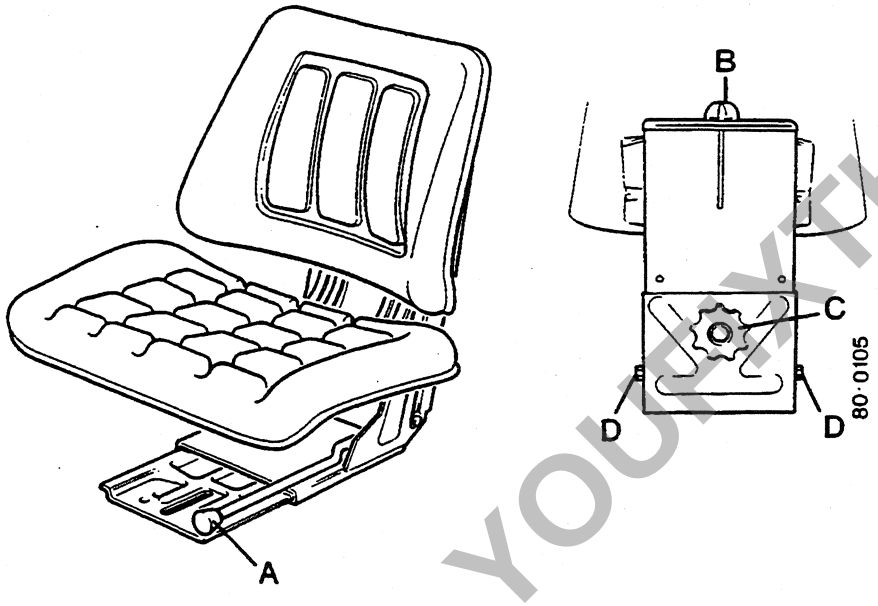


FIGURE 55. OPERATOR'S SEAT

A. Front to Rear Adjustment
Pull lever A upward. Move the seat backward or forward to the required position then release the lever. Press the seat backward to make sure that the lock is engaged.

B. Weight Adjustment
Use knob B to make this adjustment. Turn the knob clockwise for heavier operators or counterclockwise for lighter operators.

C. Height Adjustment
Turn the knob C counterclockwise. Loosen the two nuts D then lift or lower the seat to the required height. Tighten the nuts then turn the knob clockwise.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Reversible Shaft PTO

One end of the output shaft has 6 splines to use with 540 r/min implements. The other end has 21 splines to use with 1000 r/min implements. Run the engine at 2050 r/min to get the correct output shaft speed.

The PTO clutch must be disengaged before engaging or disengaging the PTO.

Move the PTO selector lever in the following directions to engage or disengage the PTO drive:

CAB or FLAT DECK TRACTORS-
ENGAGE - FORWARD
DISENGAGE - REARWARD

STANDARD TRACTORS -
ENGAGE - REARWARD
DISENGAGE - FORWARD

To change the speed of the output shaft, do the following:

1. Remove the four special bolts A which hold the output shaft B in position.
2. Pull the output shaft clear of the PTO housing C.
3. Install the output shaft in the PTO with the splined end that you need toward the outside.
4. Install the bolts in the recessed holes and tighten to a torque of 122 Nm (90 lb/ft).

NOTE: ***Use the outer set of holes for 540 r/min operation and the inner set of holes for 1000 r/min operation.***

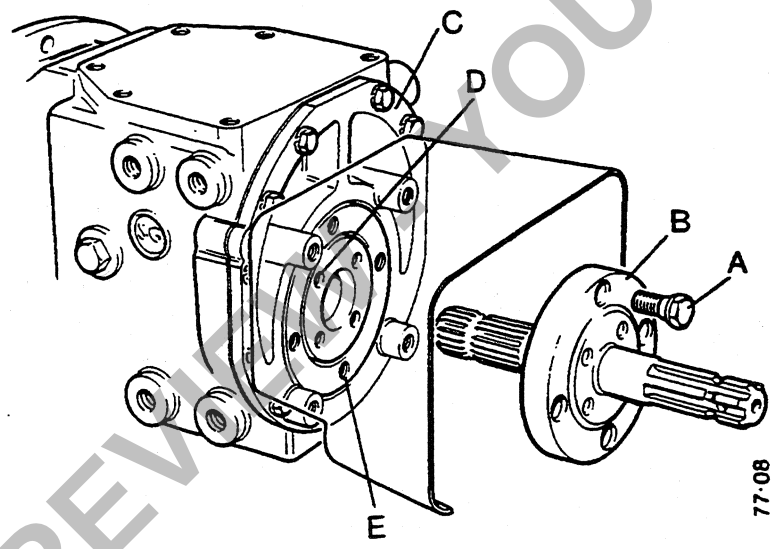


FIGURE 93. REVERSIBLE SHAFT PTO
D. *Bolt holes for 1000 r/min operation*
E. *Bolt holes for 540 r/min operation*

PREVIEW ONLY YOUFIXTHIS.COM

Download full manual at youfixthis.com

MAINTENANCE

Introduction

Preventive maintenance is important to you.

As the owner of a David Brown tractor you have a machine that is made to the highest possible standards. Preventive maintenance is an easy and low cost method to make sure that your tractor gives you many hours of efficient operation.

Because it is important, the procedure has been made very easy. It is a recommendation that maintenance is done at the end of the operating period. The oils will then be warm and if necessary can be removed easily. If possible, do maintenance jobs under cover and make sure you do the following:

Before using a grease gun, clean the grease fittings.

Before removing drain or fill plugs, clean the plugs and the area around the plug.

Before putting new oil or diesel fuel into a container, make sure that the container is clean.

Call your David Brown dealer if you need assistance or information.

FIRST OIL CHANGE AT 20/60 HOURS

IMPORTANT: *Special oils are used at the factory when a tractor is being filled up for the first time. These give extra protection during storage, shipping and the run-in period of the tractor.*

These oils must be changed at the First Service (as detailed in the Tractor Service Book). Get your David Brown dealer to do the First Service as soon as possible after the tractor hour-meter reads 20 hours. This service MUST be done before the tractor hour-meter reads 60 hours.

If the service is not done within this period, your tractor may be damaged. The cost of repair will not be covered by warranty if oils have not been changed according to the recommendations.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

OPERATING:

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

4. Fan Belt:
Check the belt for the correct tension as shown. Adjust if necessary as follows:

Loosen the bolts A. Move the alternator away from the engine to increase the tension.

NOTE: *Use only the pressure of one finger to check the belt tension.*

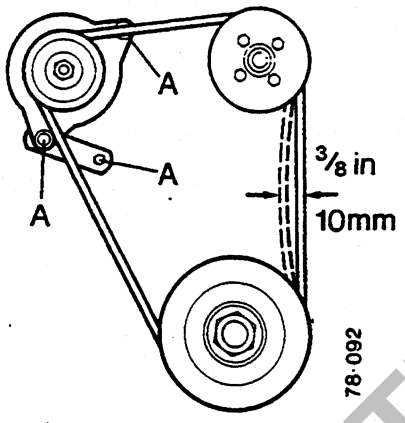


FIGURE 128. FAN BELT DRIVE ADJUSTMENT

A. *Securing Bolts*

5. Fuel Filters:
Install new fuel filter elements.

When you have done this all air must be removed from the fuel system before the engine can be started. See pages 144 and 145 for instructions.

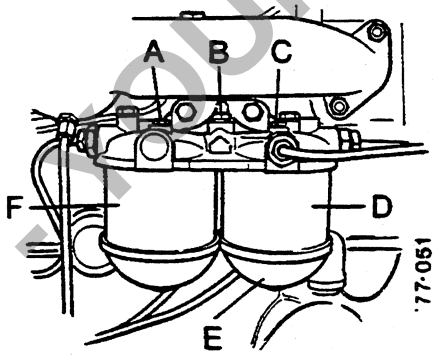


FIGURE 129. FUEL FILTERS

A. *Fastening Bolt*
B. *Vent Plug*
C. *Fastening Bolt*
D. *First Filter*
E. *Filter Base*
F. *Second Filter*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

7. Operator's Seat Belt

Keep shart edges and items that can cause damage, away from the belts.

From time to time, check belts, buckles and mounting bolts for damage.

Replace all parts that have damage or wear.

Replace belts that have cuts that can make the belt weak.

Check that bolts are tight on the seat bracket.

Keep seat belts clean and dry.

Clean belts only with a soap solution and warm water.

Do not use bleach or dye on the belts because this can make the belts weak.

8. Stub Axles: 4WD Tractors - Carraro Axle

Apply grease to the fittings A (two each side). Do this until grease flows from the relief valve at the side of the grease fittings.

9. External Nuts and Bolts: Check the tightness of all nuts and bolts using the table below:

Thread Diameter	Torque
1/4 in	9-5 Nm (7 lb/ft)
5/16 in	20 Nm (15 lb/ft)
3/8 in	34 Nm (25 lb/ft)
7/16 in	61 Nm (45 lb/ft)
1/2 in	88 Nm (65 lb/ft)
5/8 in	150 Nm (110 lb/ft)
3/4 in	190 Nm (140 lb/ft)

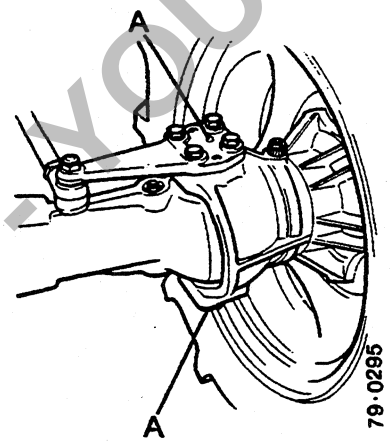


FIGURE 132. STUB AXLES

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 168 pages

The full manual includes:

- All 168 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Case IH 1490 Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual