DAVID BROWN 990, 995 & 996 Tractors

Operator's Manual

9-5101

CASE III

Reprinted



THIS SAFETY ALERT SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY OR DEATH. M171B

If Safety Decals on this machine use the words **Danger, Warning or Caution,** which are defined as follows:

- DANGER: Indicates an immediate hazardous situation which if not avoided, will result in death or serious injury. The color associated with Danger is RED.
- **WARNING:** Indicates an potentially hazardous situation which if not avoided, will result in serious injury. The color associated with Warning is ORANGE.
- CAUTION: Indicates an potentially hazardous situation which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is YELLOW.

If Safety Decals on this machine are ISO two panel Pictorial, decals are defined as follows:

- The first panel indicates the nature of the hazard.
- The second panel indicates the appropriate avoidance of the hazard.
- Background color is YELLOW.
- Prohibition symbols such as $\sum X$ and (stop) if used, are RED.

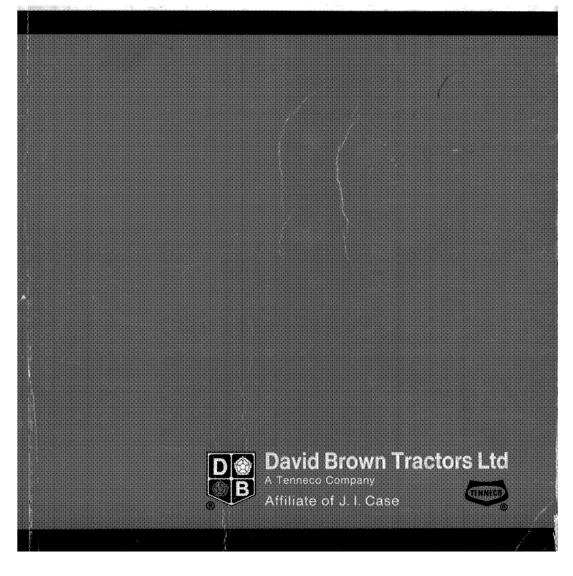


IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH. BEFORE USING THIS MACHINE, MAKE CERTAIN THAT EVERY OPERATOR:

- Is instructed in safe and proper use of the machine.
- Reads and understands the Manual(s) pertaining to the machine.
- Reads and understands ALL Safety Decals on the machine.
- Clears the area of other persons.
- Learns and practices safe use of machine controls in a safe, clear area before operating this machine on a job site.

It is your responsibility to observe pertinent laws and regulations and follow Case Corporation instructions on machine operation and maintenance.

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WARNING!



Improper operation of this machine may result in injury or death. Before operating this machine study the SAFETY POINTS starting on page 2 and read this book thoroughly.

Â

Look for this symbol which points out important safety precautions. It means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

> David Brown policy is one of continuous development and improvement and therefore the specification details may have been altered since this book went to press.

> Moreover, as the David Brown tractor is offered in a variety of forms to cover a large number of markets and applications, this handbook may contain details of items not applicable to the particular tractor for which it has been supplied.



DAVID BROWN Instruction Book 990, 995 and 996 Tractors

David Brown Tractors Limited Meltham 'Huddersfield 'England 'HD7 3AR Publication 9-5101 December 1973



SAFETY POINTS

- Â
- Always lock the two foot brake pedals together when running on the highway.
- Always ensure the PTO is set to low ratio for implements designed to run at 540 rev/min. Running them faster may cause a dangerous mechanical failure.
- Always ensure the PTO (and Belt Pulley when fitted) is adequately guarded.
- Always remove loose clothing when working near moving parts of the tractor, engine and implements, or ensure that it is adequately fastened or tied up.

Always remove the ignition/starter key from the tractor when leaving it unattended, especially where children have access.

Always operate the steering and driving controls with care, for example:—

Don't swerve or turn sharply at speed.

Don't let the clutch in suddenly going up hill or the tractor may rear up.

Don't brake fiercely, especially going backwards down hill.

Always take extra care on steeply sloping ground. Move cautiously, as the sudden swing of a heavy implement, or pull of a trailer, may cause trouble.

Always make sure before turning that there is room for any mounted implement which will swing *outwards* at the rear.

Always hitch trailers to the approved drawbar or pick-up hitch which is below the centre line of the rear axle. Do not hitch above the centre line.



IMPORTANT DONT'S

Do Not carry passengers on the linkages or on the tractor, except in an approved passenger seat.

Do Not drill into the safety frame.

NOTE: Any damaged parts should be replaced immediately with new parts. Bent parts should not be straightened but replaced and no welding should be attempted on the safety frame. Bolts when replaced, must be of the correct tensile strength. After any accident to a safety frame it is advisable to report this to your local safety officer.

- **Do Not** lift the tractor by the cab lifting hooks. These are designed only for removing a cab from the tractor.
- **Do Not** tow the tractor at speed where power steering is fitted, as there will be no oil pressure from the power steering pump and the steering will be heavy to operate.

INTRODUCTION

Even the most experienced tractor user should read Sections 1, 2, 3 and 4 *before* commencing operations with his new tractor.

A great deal of care goes into the building of every David Brown tractor. The engine is part run-in, the completed tractor is road tested and at each stage of assembly it is checked by a team of Quality Control Inspectors. The user can help to maintain this in-built quality by carrying out the simple tasks outlined in the Regular Maintenance chapter — Section 4. Neglect can lead eventually to major repairs which are expensive as well as time wasting.

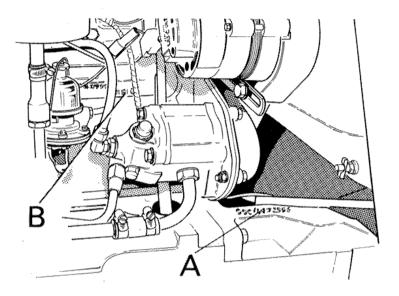
Most difficulties are experienced through incorrect methods of operation. Sections 1, 2 and 3 detail the easiest, quickest and most efficient ways of operating the tractor, especially the many design features which are special to the David Brown Tractor.

Coupled with the above is the question of safety. A tractor can be a dangerous machine if handled without due caution and knowledge gained beforehand from this book can prevent accidents.

Three models of tractor are covered in this book, the 990, 995 and the 996 (which is known in some countries as the 995 with independent PTO).* The main differences between these models is that the 995 and 996 have a longer stroke and higher powered engine than the 990, and the 996 has fully independent PTO controlled by a separate hand lever

All three incorporate the Selectamatic Hydraulic system, first introduced by David Brown in 1965, and which has proved exceptionally reliable and simple to operate. Small refinements since then have further improved the system. The two versions of the David Brown 4-cylinder diesel engine used in these tractors are carefully matched to the transmission and maintain the David Brown reputation for low fuel consumption and ease of starting.

*NOTE: Those tractors fitted with independent PTO and stamped with serial numbers commencing 995/6/1/980001 are referred to throughout this book as 996. This should be particularly noted in countries where the tractor is known as a "995 with independent PTO". (References to 995 in this book are confined to tractors stamped with serial numbers commencing 995/1/ 920001).



Tractor Number/Engine Number

When ordering parts or with any query always quote the full prefix and serial numbers as follows:

Tractor letters and numbers as stamped on right-hand edge of the chassis front extension at A and on the identification plate, e.g. 990/1/850001.

Engine Numbers as stamped on the flat vertical surface on the right-hand side of the cylinder block at B and on the identification plate, e.g. 449001/36588.

Tractor Serial No.

Engine Serial No.

Tractor Registration No.

The final drive reduction ratio is stamped in the centre of the rear wheel hub.

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### TAKE SPECIAL CARE OF YOUR NEW TRACTOR

Although every engine is tested and run-in at the factory, care should be taken during the first 25 to 50 hours' use. Avoid excessive speeds or loading. Do not allow the engine to labour unduly, instead change to a lower gear. Use the middle range of engine speeds from 1200 to 1800 rev/min. Prolonged light load should also be avoided as this might lead to cylinder wall glazing with consequent high oil consumption. Best running-in is achieved by alternating between low/medium and high (not maximum) loading.

#### FIRST SERVICE (50/100 HOURS)

The first service should be done by a David Brown dealer who will carry out a full check on the tractor. The main essentials in this service are :—

- 1. Change the fuel filter element.
- 2. Change the engine oil and filter element.
- 3. The transmission gearbox should be flushed and the wire mesh and magnetic filter cleaned. A new paper filter element should be fitted and the gearbox refilled with new oil.
- 4. Change the oil in the final drive reduction housings.
- 5. Check the tightness of cylinder head bolts and the valve clearances, and the tightness of main external nuts and bolts especially rear wheel nuts.

NOTE: To remove any contaminants which may build up in the oil due to initial bedding in, it is essential to drain the transmission oil and refill with new oil at the 50/100 hour service (see pages 73 to 76).



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