
DAVID BROWN®

Operator's Manual
for 880 Implematic
Tractor (3-cylinder)

Pub. 9-57 13 June 1965



David Brown Tractors Ltd

A Tenneco Company

Affiliate of J I Case

Safety Points

- Don't operate** the independent foot brake when travelling in the higher gears.
- Don't run on the highway** without locking the two foot brake pedals together.
- Don't run the PTO or Belt Pulley** without a guard.
- Don't wear loose clothing** near moving parts of the tractor, engine, or implements.
- Don't attempt** to start the engine in gear.
- Don't leave the isolating/starter key** in the tractor when unattended, especially where children have access.
- Don't swerve or turn sharply** at speed.
- Don't let the clutch in suddenly** on a slope, or brake fiercely if running backwards down hill, or the tractor may rear up.
- Don't use the differential lock** on the public highway.
- Don't try to make a sharp turn unless the differential lock** is out of engagement.
- Don't operate the tractor** on dangerously steep ground. Move cautiously on steep slopes, the sudden swing of a heavy implement, or the pull of a trailer, may cause trouble. Use the clutch, brakes, throttle and steering *slowly*. Beware especially of slippery surfaces.
- Don't carry passengers** on the tractor or linkages.
- Don't turn with a projecting implement** without making sure there is room for it.
- Don't hitch trailed implements** above the centre line of the rear axle.

DAVID BROWN

880 Implematic and 880 Implematic Livedrive

Models

VAD 2E – Livedrive
VAD 2F – Non-Livedrive
With 3-cylinder Diesel Engine

Instruction Book

*Further copies of this book may be obtained
from your dealer at nominal cost*

DAVID BROWN TRACTORS LIMITED
MELTHAM HUDDERSFIELD YORKSHIRE

Publication No. TP609 – First Published August 1964
Reprinted June 1965

Introduction

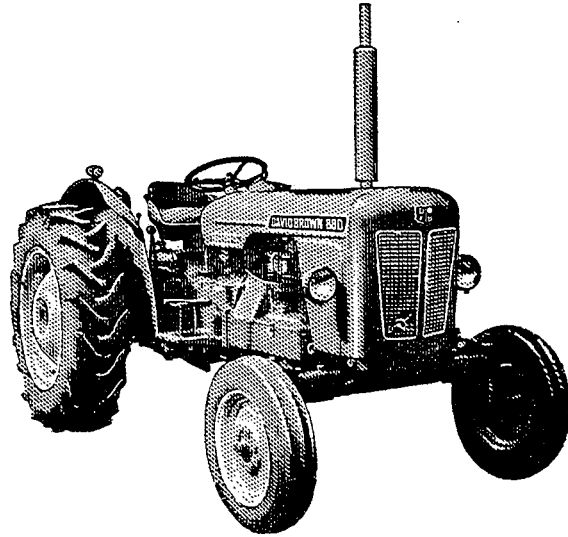
The 880 Implementatic tractor with 3-cylinder diesel engine incorporates the latest refinements of technical design and is the culmination of many years of development and rigorous field testing. In fact, it is a tractor which does a wide range of farming jobs well, reliably and efficiently.

Good design is backed up by skilled manufacture on some of the most modern machines currently available in Europe. The potential life and efficiency which is built into the tractor by careful choice of materials, close manufacturing limits and expert assembly, requires the co-operation of the user whose responsibility it is to carry out the *regular* greasing and maintenance outlined in this book.

Almost any but the complete novice will be able to carry out the various work which a tractor driver is required to do. But to do this in the easiest, quickest and most efficient way, not to mention the *safest* way because a tractor can be a dangerous machine if handled foolishly and without thought, requires knowledge and skills which have to be acquired. This book gives the necessary information, armed with which, the user will quickly gain skill after a little practice.

It is suggested that time spent in reading the Operation and Regular Maintenance sections of this book *before* the new tractor is put into use, will be amply repaid. It is appreciated that the tractor will only be used occasionally for some tasks and the book should be kept readily available at all times so that one's memory may be refreshed. For ease of use the book is divided into 4 sections as indicated in the contents list opposite.

In case of difficulty of any kind, the person most fitted to assist you is your David Brown dealer. Besides having specialist knowledge of the product, he has a great experience of local conditions which will be especially useful to you. In any query always quote the full *prefix* and *serial number* of the tractor and also the *engine type* and *number*.



Contents

	Page
Precautions with a new tractor	4
SECTION 1—OPERATION	5-33
Starting the engine	5
Controls	6
Description of the Implematic controls	11
Operation of the Implematic system	15
Differential lock	23
Track settings	24
Tyre pressures	26
Linkage settings	28
SECTION 2—REGULAR MAINTENANCE	34-43
Greasing Chart	36
Recommended lubricants	42
SECTION 3—SERVICING INFORMATION	44-63
Wiring diagram	63
SECTION 4—INFORMATION AND DATA	64-73
Capacities	67
Optional Equipment and Accessories	74
Allied equipment	75

PRECAUTIONS WITH A NEW TRACTOR

Although every engine is tested and part run-in at the factory care should be taken during the first 25 to 50 hours' use. Avoid excessive speeds or heavy loading. Do not allow the engine to labour, change to a lower gear instead. Use the middle range of engine speeds from 1400 to 1800 rev/min. If possible use light loads to begin with and gradually increase the loading until the engine is fully run-in. If high speed or heavy loading must be used, keep this down to very short periods interspersed with periods of light loading.

Periods of idling should be avoided as the rate of carbon formation is fairly high at low temperatures.

FIFTY-HOUR SERVICE

After 50 hours, change the engine oil and filter element, drain and flush the transmission gearbox and final drive reduction housings and clean the magnetic filter. Refill with new oil. Check the valve clearances and tightness of cylinder head and main external nuts and bolts.

Note—The transmission gearbox is filled at the factory with special oil having inhibitors to prevent corrosion and assist initial bedding in. This oil **must** be discarded after 50 hours and the gearbox refilled with new oil of the type recommended on pages 42 and 43.

Section 1—Operation

STARTING THE DIESEL ENGINE

- 1 With fuel in the tank and the tap turned on, pull the fuel cut-off rearward to the running position, and drop into the retaining slot.
2. Open the throttle wide (towards the driver).
3. **Put the gear lever in neutral.**
4. Depress the clutch.
5. Switch on and operate the starter switch (turn the key to the right against the spring).

Release the starter switch immediately the engine runs and close the throttle to give about 1000 rev/min to warm up. Check that the oil warning light goes out.

STARTING IN COLD WEATHER

The wing nut on the side of the Injection Pump should be screwed in **before** trying to start the engine. As soon as the engine is running, the screw must be unscrewed otherwise erratic running with black exhaust will occur. In conditions when starting is difficult the use of ether or a proprietary starting fluid is recommended. This should be used on the felt attached to the plastic plug in the top of the manifold. Replace and start immediately. When starting is difficult, short presses on the starter will be of no avail. The engine should be kept turning by the starter until the engine runs unaided. However, if it fails to run, release the starter switch after 25 seconds and wait 20 seconds before trying again, otherwise the batteries will be overheated and damaged.

Use of the starter places a heavy drain on the batteries and adequate running time should be allowed to enable the dynamo to replace the charge. Use of the correct grade of oil in the engine, and pressing the clutch whilst starting, will help to reduce the load on the starter.

STOPPING THE ENGINE AND TRACTOR

Reduce engine speed, lift the fuel cut-off and allow it to move forward to the stop position. Switch off and remove the key. Do not stop the engine by turning off the fuel as this will produce air locks necessitating complete venting of the fuel system. Apply the handbrake securely and provided the isolating key is removed, park in a low gear ratio if not on level ground.

CONTROLS

The engine and tractor controls are shown in Fig. 1/1 and 1/2.

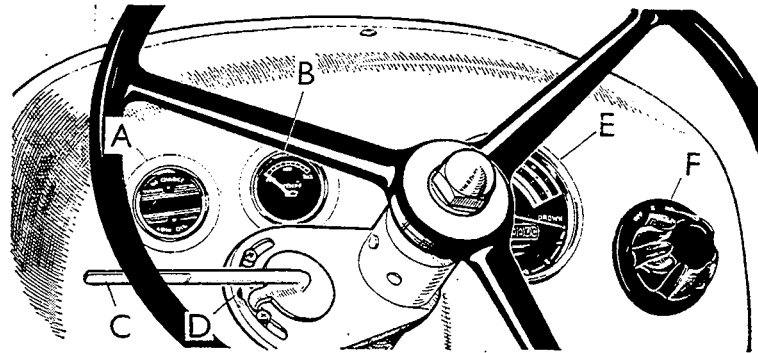


Fig. 1/1. Instrument panel

- | | |
|---------------------------------------|---------------------------------------|
| A. Warning lights
(Oil and charge) | D. Rated speed setting (1800 rev/min) |
| B. Water temperature (U581) | E. Tractormeter |
| C. Throttle lever | F. Light switch |

OIL WARNING LIGHT

The amber light is illuminated when oil pressure is too low. Ensure that it lights when the isolating switch is turned on and goes out when the engine runs.

NO CHARGE WARNING LIGHT

The red light is illuminated when the isolating switch is turned on but should extinguish as soon as the dynamo commences to charge.

THROTTLE CONTROL LEVER

When fully rearwards the diesel engine is governed to its maximum speed. When the lug on the lever is brought into line with the corresponding mark on the quadrant (Fig. 1/1), the engine is governed at its rated speed of 1800 rev/min. This position should be used for most purposes to conserve fuel and engine life. It also gives a PTO speed of 540 rev/min in low ratio.

LIGHT SWITCH

This has 5 positions as follows: OFF—all lights extinguished. S—Side and tail (and rear number plate) lights. S/D—Side and tail lights plus the head lamps on dipped beam. S/M—Side and tail lights plus the head lamps on main beam. M—Head lights only on main beam. The rear flood lamp is in circuit when the head lamps are on main beam but incorporates its own switch allowing it to be extinguished when not required.

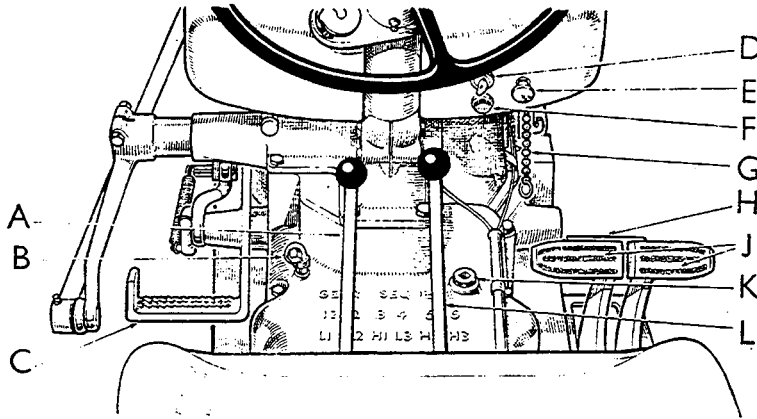


FIG. 1/2. Controls

- | | |
|--|--|
| A. <i>H/L range lever</i> | G. <i>Radiator blind control -U580</i> |
| B. <i>Transmission dip-stick</i> | H. <i>Locking bar</i> |
| C. <i>Clutch pedal</i> | J. <i>Brake pedals</i> |
| D. <i>Isolating and starter switch</i> | K. <i>Transmission filler plug</i> |
| E. <i>Engine stop control</i> | L. <i>Gear lever</i> |
| F. <i>Fuse holder</i> | |

The 5th position (M) is designed for use in the field and conserves the battery. It must not be used on the road, the S/D position is recommended for this purpose.

FUEL TAP

Fitted to the right-hand fuel tank support, the knob is pulled out to turn the fuel on and pushed in to cut off the fuel. It should only be closed for servicing purposes.

BRAKES

Twin foot pedals at the right-hand side give independent control of the brakes for steering in confined spaces. The locking bar H. Fig. 1/2 must be used to connect them together for use on the road. Individual use may cause a dangerous swerve besides giving only half braking power.

LIVEDRIVE CLUTCH

There are two main stages of pedal movement. Stage 1—Complete disengagement of the transmission clutch is denoted by an increase in pedal pressure. In practice the pedal should always be pressed to this point. "Easing" of the clutch to reduce forward speed, when baling etc., to allow the implement to clear a heavy patch, is detrimental to the life of the clutch plates. When moving off with a loaded trailer on road haulage, engine speed should be kept as low as possible, full engagement of the clutch should be

Buy Now



Our support email:

ebooklibonline@outlook.com