

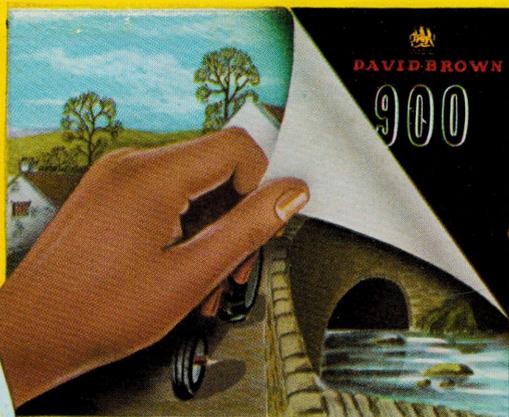


By Appointment
to Her Majesty Queen Elizabeth II
Manufacturers of Agricultural Machinery
David Brown Industries Limited

DAVID BROWN

900





LET'S LOOK INTO THIS . . .

. . . and let's look at it from your point of view. What will you expect from a new tractor? First of all, high power, but—and it's a big but—not so high that the tractor becomes too heavy for lighter tasks; not so high that the tractor becomes too unwieldy for rowcrop work; not so high that fuel consumption becomes a major consideration.

The David Brown 900 fills the bill admirably. With its powerful 40 h.p. Diesel engine, it will plough four furrows comfortably, saving valuable, irreplaceable man hours. Weighing under 37 cwt. and having a turning radius of less than 8 feet, it can be treated as a docile, highly manoeuvrable rowcrop tractor; the six forward-speed gearbox provides the right speed for all jobs; the range of track adjustments from 52" to 76" in 4" steps suits all row widths; 16" ground clearance is ample for all crops. As for fuel consumption, David Brown tractors have long been renowned for fuel economy and, with an average consumption of under three-quarters of a gallon per hour, the 900 is no exception.

What else must your new tractor have? Reliability? Understandably you may have forgotten to mention it, because with modern machines you assume that breakdowns will be almost non-existent. This is particularly true with the David Brown 900. An unusually keen degree of inspection is standard practice in the factory. Raw materials, machined components, heat-treated parts, unit assemblies like gearbox and engine, each stage of assembly and finally the complete tractor undergoes a rigid series of tests and checks. Every 900, not just one from each production batch, goes through this detailed routine.

But no amount of factory care will ensure reliable operation if maintenance is neglected. You'll probably be the first to admit that the strongest enemy of owner maintenance is inaccessibility. But the 900 scores all along the line, from the quickly detachable radiator grilles to the bonnet which may be completely removed in seconds, and eases cleaning, inspection and adjustment. This accessibility will speed too the more complex maintenance work carried out by your dealer's factory-trained service mechanics, cutting down servicing bills and reducing your tractor's out-of-commission time to a minimum.





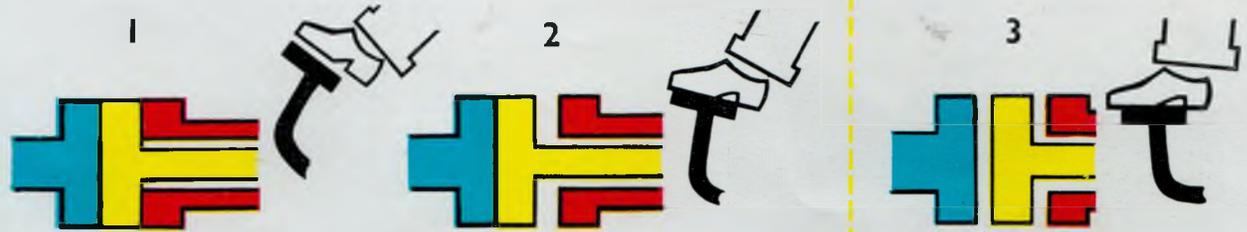
What of your new tractor's hydraulic system? It must be capable of handling modern, rather heavier, mounted implements and, in addition, don't you want some kind of weight transfer system to reduce wheelslip? On the 900 you not only have an 1800 lb. lift capacity, but an outstanding means of weight transfer in the David Brown Patented Traction Control Unit (T.C.U.), a method of weight transfer which never affects the implement's working depth. That's a result of the practical experience of David Brown designers, a result of putting each theory into practice both on farms in this country and on farms overseas. This world-wide, day to day farming experience under genuine, often rigorous, conditions explains why David Brown's have such a close, inside knowledge of your requirements.

This farm-bred knowledge results in your new David Brown embodying all the latest, yet proved, developments such as a live power-take-off and live hydraulics. The David Brown 900 Livedrive Tractor has a double plate clutch that enables you to apply all the engine power to the power-take-off, or hydraulic lift, without having to change into neutral. It allows you to stop, start or change gear with hydraulically-powered equipment without interrupting the hydraulic action, and as declutching to change gear does not involve momentary stopping or slowing of the power-take-off this obviates any machinery blockage on this account. Controlled by a single pedal, the Livedrive clutch has an intermediate pressure between the two stages of disengagement, making it impossible to cause wear to the p.t.o. and hydraulics clutch plate by partially disengaging it.



**HOW
LIVEDRIVE
WORKS**

HOW LIVEDRIVE WORKS



1
PEDAL UP Transmission clutch and p.t.o./hydraulics clutch are engaged. The tractor is moving, the p.t.o. and hydraulics are 'live'.

2
PEDAL HALF-DEPRESSED Transmission clutch is disengaged. The tractor stops, the p.t.o. and hydraulics are still 'live'.

3
PEDAL FULLY DEPRESSED. Both clutches are disengaged. The tractor stops, the p.t.o. and hydraulics stop

An intermediate pressure stage operates between 2 and 3.

AND HERE'S THE SPECIFICATION

PERFORMANCE

Brake h.p. at max. engine speed of 2200 r.p.m., 40
Belt h.p. at max. engine speed of 2200 r.p.m., 38.3

ENGINE

David Brown four-cylinder Diesel.
Capacity 165 cu. in. (2705 c.c.). Bore 3 $\frac{3}{8}$ "
(92.1 mm.).

Stroke 4" (101.6 mm.). Compression ratio 17 to 1.

- (1) Detachable cylinder head carrying overhead valve gear.
 - (2) Replaceable wet cylinder-liners.
 - (3) Direct injection by C.A.V. distributor type injection pump incorporating mechanical governor which controls entire speed range from 700 to 2200 r.p.m.
 - (4) Twin fuel filters.
 - (5) Full pressure lubrication.
 - (6) Full-flow oil filter.
 - (7) Oil-bath air cleaner.
 - (8) Thermostat-controlled cooling system.
 - (9) Radiator blind fitted.
 - (10) Decompressor lever fitted.
- 12-volt electric starting.
Coil ignition, vapourising oil or petrol engines are also available.

TRANSMISSION

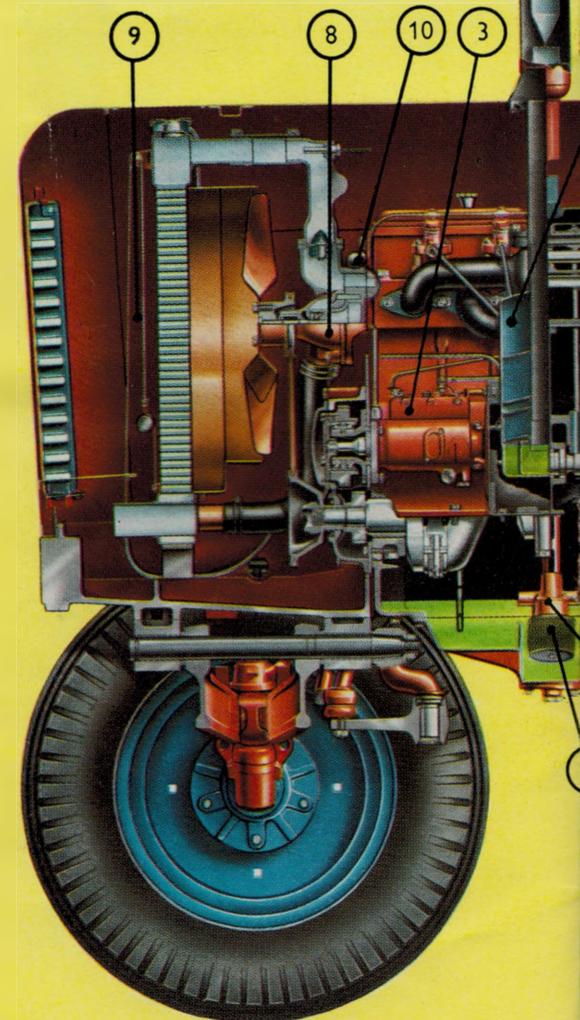
- (11) Through Borg and Beck single plate 10" diameter (25.4 cm.) dry clutch to David Brown three-speed and reverse twin range gearbox, giving six forward and two reverse speeds.
- (12) On the Livedrive model a two-stage double-plate clutch is used.

ROAD SPEEDS AND OVERALL GEAR RATIOS:

Gear	Overall Ratio	Vehicle Speed on 11.25 x 28 Tyres					
		700 r.p.m.		1800 r.p.m.		2200 r.p.m.	
		m.p.h.	k.p.h.	m.p.h.	k.p.h.	m.p.h.	k.p.h.
1st (L1) . . .	171.19	0.57	0.92	1.47	2.37	1.79	2.89
2nd (L2) . . .	95.12	1.03	1.66	2.64	4.25	3.22	5.18
3rd (H1) . . .	70.44	1.38	2.22	3.56	5.73	4.35	7.00
4th (L3) . . .	47.28	2.06	3.31	5.30	8.53	6.48	10.4
5th (H2) . . .	39.12	2.49	4.01	6.41	10.3	7.84	12.6
6th (H3) . . .	19.46	5.02	8.08	12.9	20.8	15.8	25.4
High reverse .	40.24	2.42	3.89	6.23	10.0	7.62	12.3
Low reverse .	97.82	1.00	1.61	2.56	4.12	3.13	5.04

STEERING

- (13) Recirculatory ball type. Turning Radius, left or right (minimum turning radius using brakes) 7 ft. 11 in. (241 cm.).



BRAKES:

Internal expanding on transmission half-shafts, foot-operated either independently for turning or locked together for road use. Pull-up type handbrake for parking.

TRACK ADJUSTMENT:

Rear, by dished wheel centres and two-position offset rim flanges, from 52" to 76" in 4" steps (from 132 to 193 cm. in 10.2 cm. steps).

Front, by adjustable axle, from 52" to 76" in 4" steps (from 132 to 193 cm. in 10.2 cm. steps).

TYRE SIZES:

Front 5.50 x 16 or 6.00 x 16.

Rear 11.00 x 28, 11.25 x 28 or 13 x 28.

HYDRAULIC LIFT:

(14) Inbuilt unit operated by gear type pump incorporating David Brown patented Traction Control (T.C.U.) weight transfer system. Lift capacity 1800 lb. (817 Kg.) at end of links. On the Livedrive model the hydraulic lift operates independently of the main transmission.

LINKAGE:

(15) Combined category one and two, three point.

(16) Top link incorporating overload release to prevent implement damage when underground obstructions are encountered. Linkage can be locked in raised position for transporting implements over distances.

DRAWBAR (extra):

(17) Universal swinging type. Height adjustable from 10½" to 16" (from 26.7 cm. to 40.6 cm.). Does not interfere with linkage. Adjustable rectangular frame type and linkage-operated pick-up hitch also available.

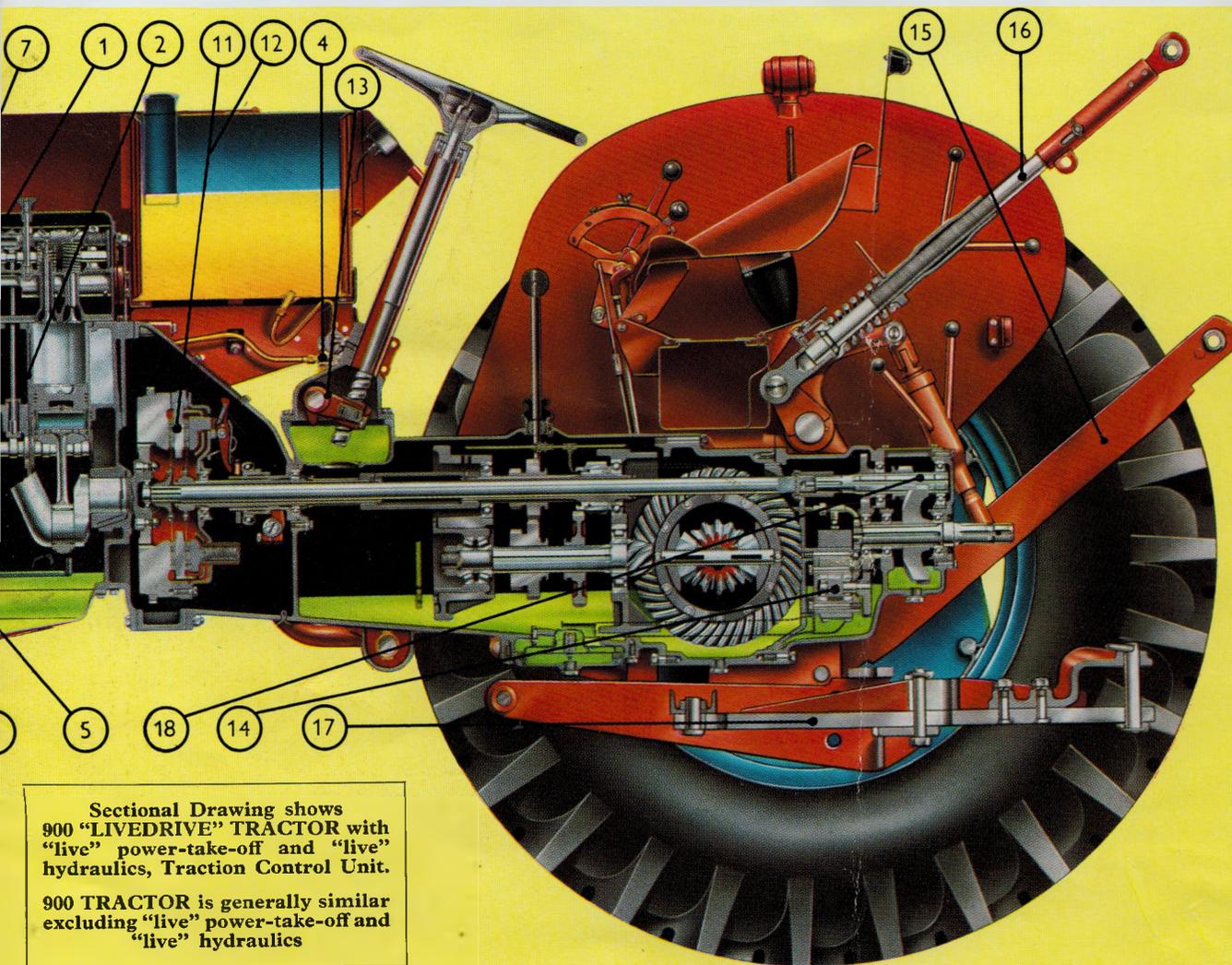
POWER-TAKE-OFF AND BELT PULLEY

P.T.O. speed at 1800 r.p.m. of engine is 540 r.p.m. Belt speed at 2200 r.p.m. of engine is 1436 r.p.m., 3200 ft./min. (975 metres/min.).

(18) On the Livedrive model the p.t.o. operates independently of the main transmission.

LIGHTING (extras):

Agricultural, one front lamp and one rear flood lamp. Universal, two front lamps, one rear flood lamp, two wing-mounted combined side-tail lamps with reflectors.



DIMENSIONS (on 11.25 x 28 tyres):

Overall length	9 ft. 9 ins. (297 cm.)
Overall height including exhaust	6 ft. 7 ins. (201 cm.)
Height excluding exhaust	4 ft. 7 ins. (140 cm.)
Overall width on narrowest wheel setting	5 ft. 4 ins. (163 cm.)
Wheelbase	6 ft. 4 ins. (193 cm.)
Ground clearance	16 ins. (41 cm.)
Weight, Livedrive Diesel model including drawbar and lighting	36½ cwt. (1860 Kg.)
Standard model	40 lb. (18 Kg.) less
Vapouring oil or petrol model	100 lb. (45 Kg.) less

Sectional Drawing shows 900 "LIVEDRIVE" TRACTOR with "live" power-take-off and "live" hydraulics, Traction Control Unit.

900 TRACTOR is generally similar excluding "live" power-take-off and "live" hydraulics

20
FEATURES



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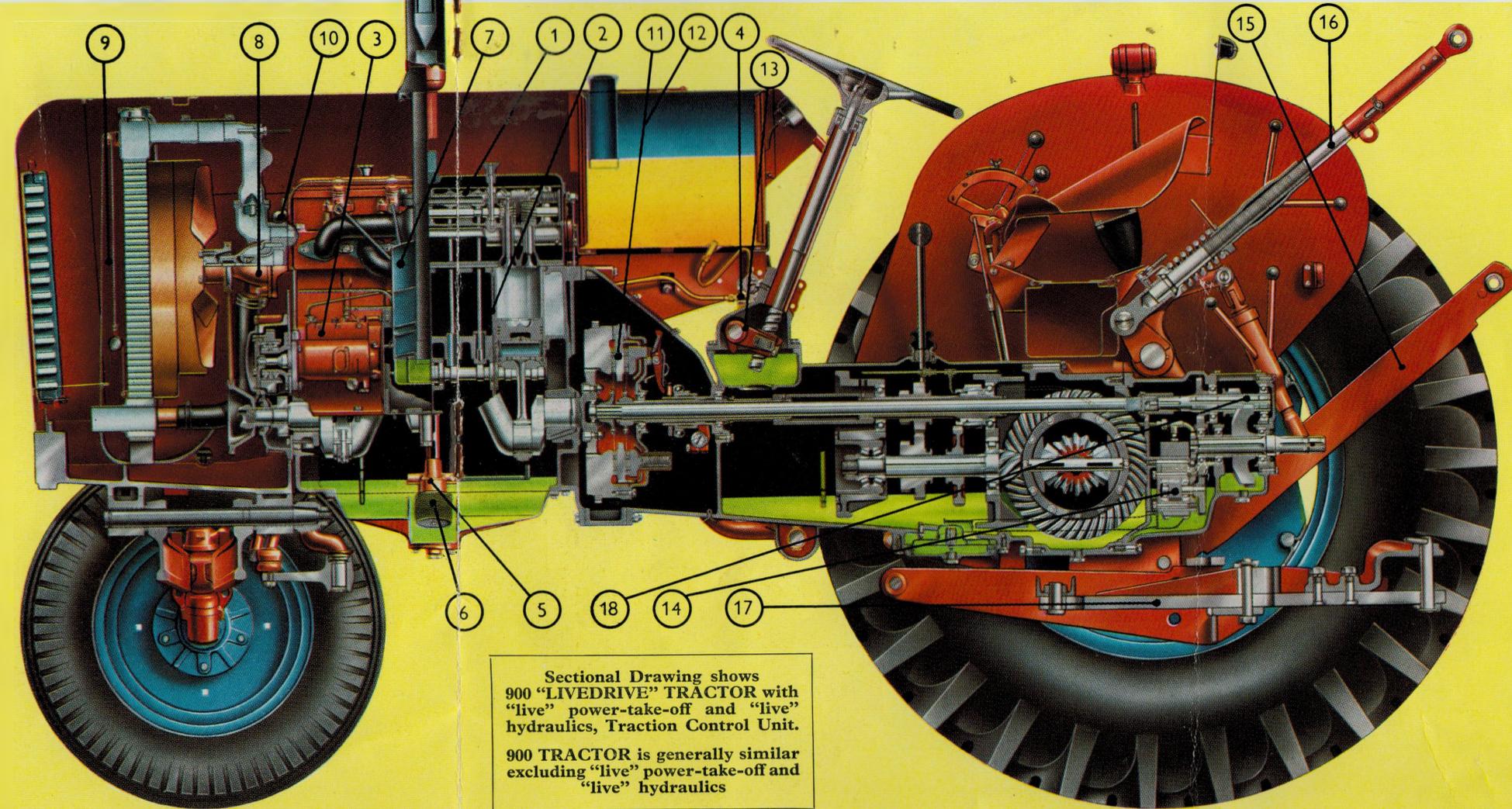
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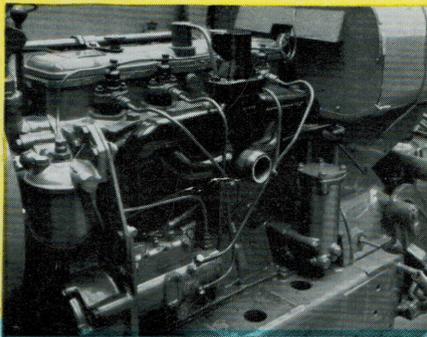
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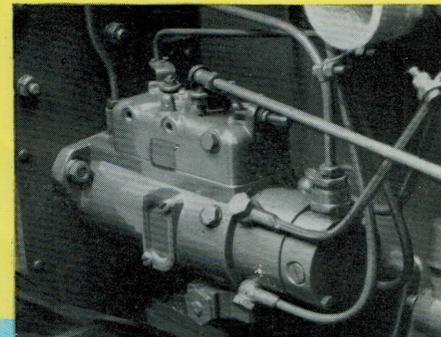
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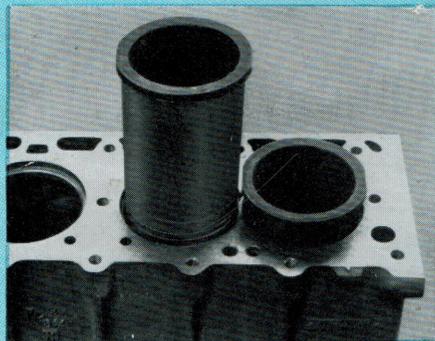
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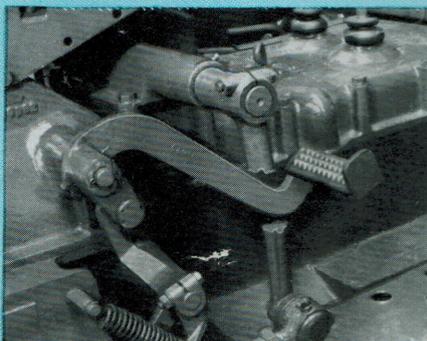
1 40 h.p. direct injection, overhead valve, four cylinder Diesel engine of proved performance.



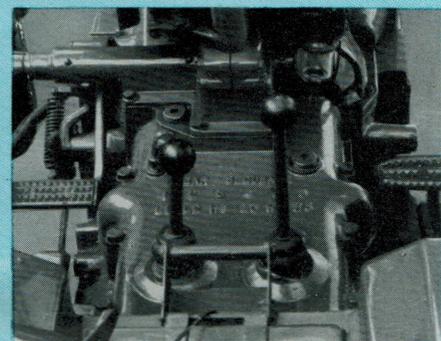
2 Easily maintained distributor-type C.A.V. injection pump with mechanical governor.



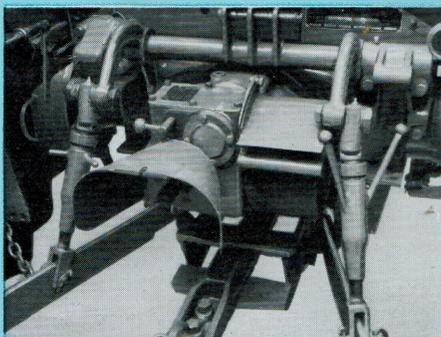
3 Wet cylinder liners reduce overhaul costs.



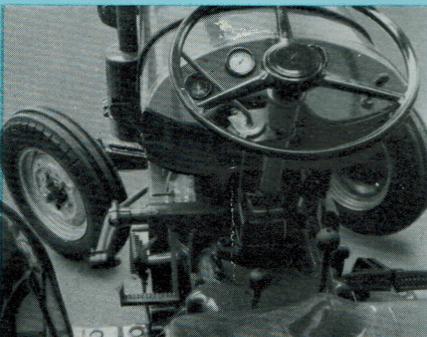
4 Two-stage double plate clutch, designed with intermediate pressure stage for long life.



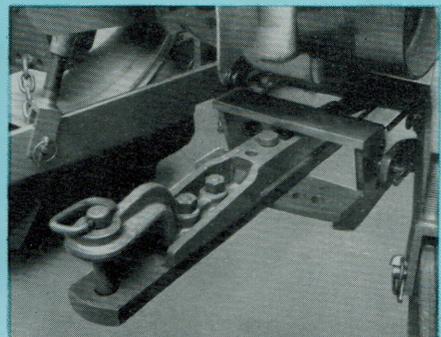
5 Gearbox with six forward and two reverse speeds gives right speed for every job.



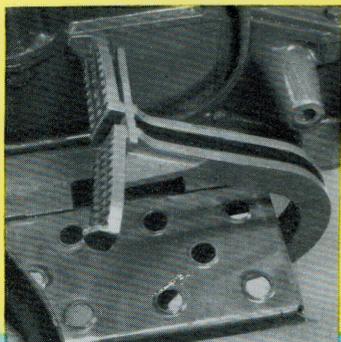
6 Full engine power can be applied to p.t.o. and belt pulley independently of main transmission.



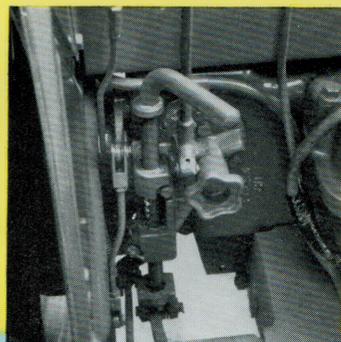
7 Recirculatory ball system provides light, shock-free steering with positive positioning.



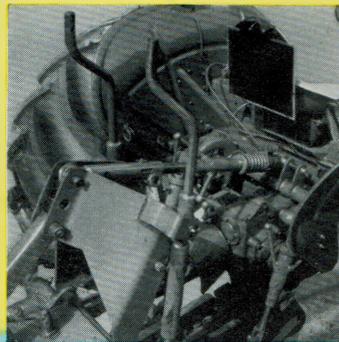
8 Universal swinging drawbar gives complete interchangeability and safety with hauled equipment.



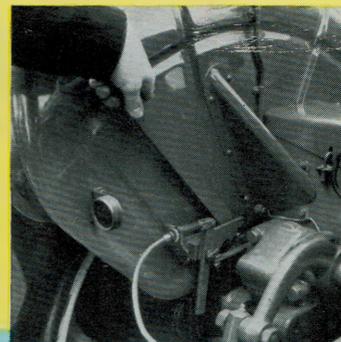
9 Independent foot-operated brakes, locking together for road use, give unsurpassed manoeuvrability.



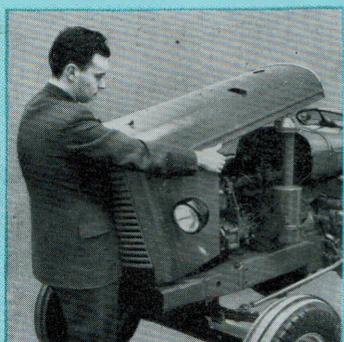
10 Parking safety afforded by pull-up type hand brake, acting in conjunction with foot pedals.



11 Overload release acts by disengaging the clutch and prevents implement damage.



12 Hand clutch makes one-man hitching easy and safe.



13 One-piece bonnet detachable in seconds gives complete accessibility.



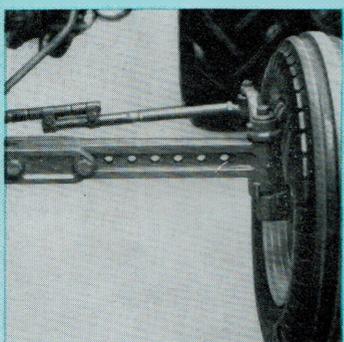
14 Clip-on radiator grilles make chaff removal and cleaning easy.



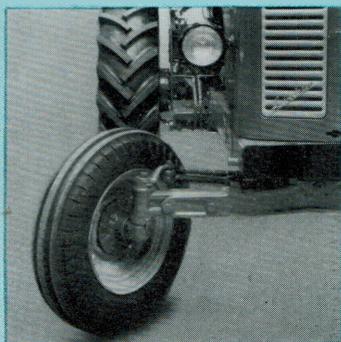
15 Flared mudguards flush to the footplate protect driver from mud.



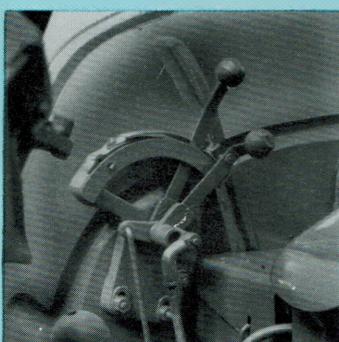
16 Rear wheel track adjustment in 4" steps from 52" to 76" (from 132 to 193 cm. in 10 2 cm. steps) suits all crops.



17 Flexibility is also assured by simple changing of front wheel width settings by adjustable axle.



18 Turning radius of less than 8 ft. (244 cm.) ensures high degree of manoeuvrability.



19 Inbuilt hydraulic lift unit carries heaviest implements with either category 1 or 2 linkages.

**AND THE
GREATEST
FEATURE**

TRACTION CONTROL

... overcomes tractor wheelslip and turns all your engine power into pull, saving irreplaceable man-hours, fuel and needless tyre wear. How does it work? A simple lever movement instantly transfers surplus implement or trailer weight to the tractor via the hydraulic system. A small wheel controls the amount of weight transferred.

A bogged-down tractor means time wasted to any farmer, but do you know that up to 25% of your ploughing can be lost to the Invisible Enemy, wheelslip, before the driver even begins to realise that anything is wrong? David Brown 900 owners don't have this problem. With Traction Control engaged they achieve maximum traction always, without having the inconvenience of using wheel weights, strakes, steel wheels, and water ballast except in extreme conditions. Traction Control transfers weight without affecting the implement's working depth when rough land or uneven soil texture is encountered. The implement's own land wheel controls the depth of work all the time.

Ask your dealer today for a detailed leaflet on Traction Control, or better still, ask him to demonstrate the David Brown 900 tractor on your farm in the near future.

WITH OUR COMPLIMENTS

THE
DAVID BROWN
CORPORATION (SALES) LTD.

A Subsidiary of The David Brown Corporation Limited

TRACTOR DIVISION : MELTHAM : HUDDERSFIELD

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