INSTRUCTION BOOK SUPPLEMENT

for

FORDSON DEXTA
with
PETROL ENGINE

FORD MOTOR COMPANY LTD
DAGENHAM
ENGLAND

FOREWORD

This supplement contains operating and maintenance instructions for the 4 cylinder petrol engined version of the Fordson Dexta tractor where such instructions differ from those applicable to the Diesel engined version.

Apart from starting the engine, the operating instructions are identical with those detailed in the main Instruction Book (which is based on the diesel engined version) and reference should be made to the main book for full details of items which are common to both.

Similarly, routine maintenance tasks differ only in detail on the engine, electrical and cooling systems whilst all other items are identical for both versions of the Dexta.

Where it is considered essential, certain portions of the main book have been repeated in this supplement.

If you have occasion to correspond with your Dealer about your tractor, it will facilitate his understanding of your problem if you quote the Engine Number and Serial Number which will be found at the following locations:—

Tractor Serial Number—stamped on the left-hand side of the clutch housing/engine flange.

Tractor Engine Number—stamped on the left-hand side of the engine block between the oil filler and ignition coil.

SERVICE OPERATIONS DEPARTMENT
TRACTOR GROUP
FORD MOTOR COMPANY LTD
DAGENHAM
ENGLAND

CONTENTS

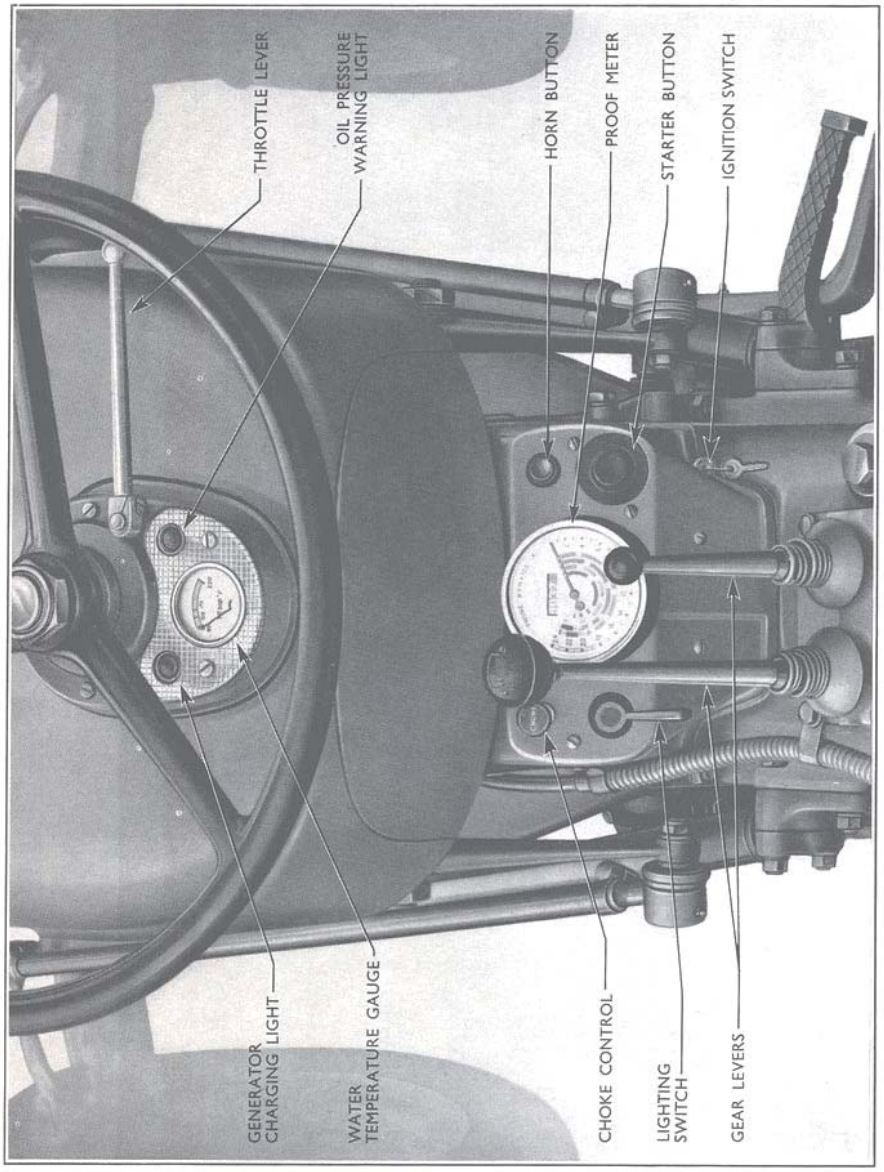


Fig. 1
The Instruments and Controls

INSTRUMENTS AND CONTROLS

The various instruments and controls are shown in Fig. 1 as they are seen from the driver's seat and the majority of these are described in the main Instruction Book. Those items which apply only to the petrol tractor are dealt with in detail below.

IGNITION SWITCH

The ignition is switched "on" when the key is inserted into the centre of the switch and turned in a clockwise direction. To stop the engine, the key must be turned to a vertical position.

The generator charging light (red) and oil pressure warning light (green) will glow immediately the ignition is switched "on".

FUEL SUPPLY TAP

This is located below the auxiliary fuel tank (Fig. 2) and shuts off the fuel supply when turned in a clockwise direction. Its main function is to enable the sediment bowl to be serviced without draining the contents of the fuel tanks.

INDUCTION PRIMER AND HEATER

This is used on diesel engines only and is not fitted to your petrol engine.

THROTTLE LEVER

This protrudes from the right-hand side of the instrument panel beneath the steering wheel and controls the speed of the engine. To increase engine speed, move the lever in a clockwise direction.

CHOKE CONTROL

This is located directly above the main control switch (Fig. 1) and brings into action the cold starting device on the carburettor, when it is pulled outwards. As soon as the engine is warmed up sufficiently to run without the choke, the control should be pushed back.

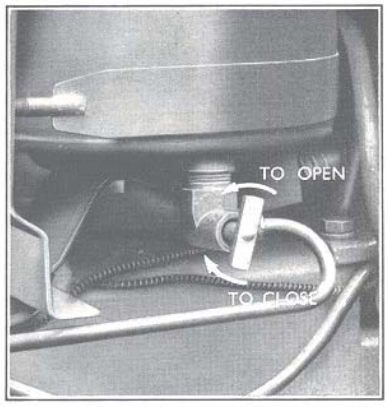


Fig. 2.
Fuel Supply Tap

Instruments & Controls

STARTER BUTTON

This is located on the lower right-hand side of the control box. It will operate the starter motor and turn the engine when it is pressed inwards, but it will not start the engine until the ignition is switched "on" at the main control switch.

ENGINE STOP CONTROL

Fitted only to diesel engined tractors. To stop the petrol engine, turn the main control switch key to a vertical position.

PROOFMETER

The proofmeter is located in the centre of the control panel (Fig. 1) and is driven by a cable, from a gear located in the distributor drive adaptor.
This proofmeter differs from the one detailed in the main Instruction Book only in that the indicator hand operates in a clockwise direction. For all other details of its operation refer to the appropriate section of the main Instruction Book.

All other controls are detailed in the "Instrument and Control" section of the main Instruction Book under the following headings:—

OIL PRESSURE WARNING LIGHT

GENERATOR CHARGING LIGHT

WATER TEMPERATURE GAUGE

CLUTCH PEDAL

GEAR LEVERS

BRAKE PEDALS

HANDBRAKE OR PARKING DEVICE

HORN

LIGHTING SWITCH

POWER TAKE-OFF SHIFTER

HYDRAULIC CONTROLS

DIFFERENTIAL LOCK

OPERATION

Each morning before starting the engine, remove the dip-stick (Fig. 3) and check that the engine sump is filled to the top mark on the dip-stick with lubricating oil. Use only oil of the correct grade (see "Specification") for topping up. Remove the radiator filler cap and check that the cooling system is filled with coolant.

DO NOT at any time run the engine when either of these items are low. Remember, if you drain the cooling system overnight, re-fill by taking the water to the tractor **not** the tractor to the water.

DO NOT under any circumstances, continue to operate the engine if the green oil pressure warning light glows whilst the engine is running. Switch off the engine and check the oil level—if this is correct, then your engine needs expert attention so contact your Dealer immediately.

DO NOT continue to operate the engine if the red generator charging light glows when the engine is running above a fast idling speed. Switch off the engine and investigate—it may be only a loose wiring connection, but it could just as well be a broken fan belt which will eventually result in over-heating.

TO START THE ENGINE

1. Open the fuel tank tap.
2. Check that the main gear lever is in neutral and the P.T.O. shifter lever is in the disengaged position.
3. Pull out the choke control if starting from cold (not necessary when re-starting a warm engine).
4. Move the throttle control fully anti-clockwise to close the throttle.
5. Turn the ignition switch key to the "on" position.
6. Depress the clutch pedal (to relieve the engine of load from transmission oil drag) and press the starter button.

Fig. 3.
Engine Dipstick

Note. Do not keep the starter button depressed for more than 5 seconds at a time. If the engine fails to start wait 10 seconds and then try again.

7. Move the throttle lever slowly in a clockwise direction to speed up the engine.
8. As soon as the engine has warmed up push in the choke control. Continuous operation with the choke control pulled out wastes fuel and is detrimental to the engine.
9. Check that the oil pressure warning light goes out immediately after the engine is started and that the generator charging light goes out as soon as the engine is running at a fast idling speed.

TO STOP THE ENGINE

1. Depress the clutch pedal and place the main gear lever in neutral.
2. Close the throttle by moving the throttle control fully anti-clockwise.
3. Switch off the ignition by turning the switch key to a vertical position.

DRIVING THE TRACTOR

1. Start the engine as previously described.
2. Depress the clutch pedal fully. If the tractor is fitted with "Live" P.T.O. it is necessary only to depress the clutch pedal through half its movement, i.e. to the point where the increased resistance of the P.T.O. clutch will just be felt.
3. Select the desired gear ratios by positioning the main and secondary gear levers in accordance with Fig. 4. It will be noted that 1st, 2nd and 4th forward and "Low Reverse" (L.R.) are obtained with the secondary gear lever in the forward position whilst 3rd, 5th and 6th and High Reverse (H.R.) are obtained with the secondary lever in the rearward position. Speeds corresponding to these ratios are listed under the "Specification" section of this Supplement.
4. Release the brakes and move the throttle lever in a clockwise direction to increase the speed of the engine at the same time allowing the clutch pedal to return slowly by gradually raising the foot until the tractor is in motion.
5. Remove the foot from the clutch pedal as soon as the tractor is in motion.

The life of the clutch will be drastically curtailed by operating with the foot resting continuously on the clutch pedal.

6. If the tractor is to be driven on the road, or at high speeds, the foot brake pedals should be locked together.

The following points should be observed if the maximum efficiency is to be obtained from the tractor.

1. It is most important to select the highest possible gear ratio consistent with operating conditions. A little experience will show the most suitable gear to engage for any given operation and the best speeds at which the engine will run Do not permit the engine to "labour" when under load—bring the tractor to rest and select a lower gear.
2. A Green Sector on the temperature gauge indicates the temperature at which the greatest efficiency is obtained. Try to keep the indicator needle within this sector, if necessary blank off the front of the radiator grille on cold mornings to assist in rapid warm up. Do not forget to remove the blanking once the engine has reached the correct temperature, nothing is to be gained by exceeding the maximum point indicated by the sector.
3. After starting from cold, warm up gradually—do not "race" the engine.

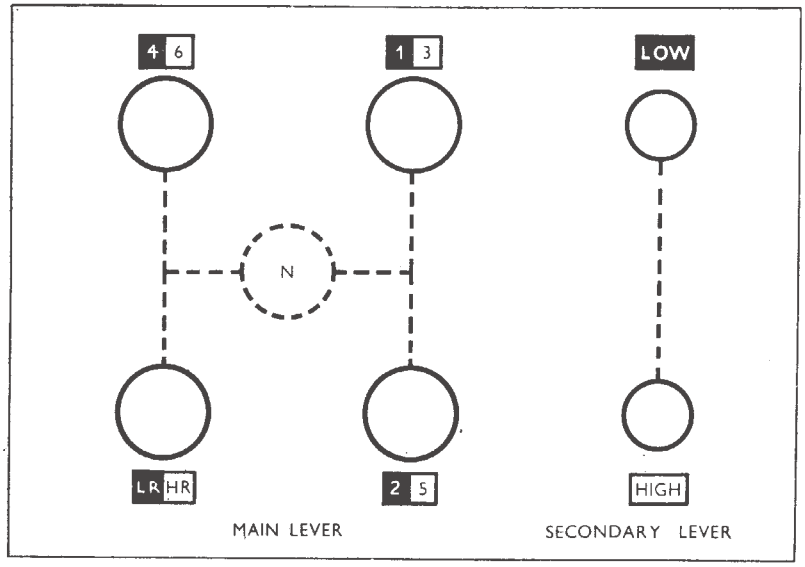


Fig. 4.
Gear Lever Positions

4. Ensure that routine maintenance and lubrication operations are performed regularly at the periods indicated on the chart attached to this supplement.

For full details of Power Take-Off, Belt Pulley, Hydraulics and Drawbar Operation refer to the "Operations" section of the main Instruction Book.

"RUNNING IN"

Instructions for "running in" the tractor are detailed in the main Instruction Book but this aspect of the tractor's operation is most important and is therefore repeated at this point.

The working parts of the engine and transmission of the Dexta are manufactured to a high quality finish giving a precision fit between mating parts. During the first few working hours these parts are subjected to a polishing action and finally acquire a very hard smooth surface which has a high resistance to wear.

This process of forming a hard skin on bearings, cylinder bores and gear teeth, etc., is usually referred to as "running in" and is essential to the subsequent performance of the tractor. The driver must therefore understand what is meant by this term and use the tractor accordingly during this short period.

The main thing to remember during the first 50 hours' work is to operate the tractor under light load and at moderate engine speeds. **Avoid overloading the engine and running at high engine speeds.**

The load should gradually be increased during this period and after 50 hours you will be able to begin putting the tractor on to heavier work with confidence. It is important to get the engine warmed up quickly and to maintain an even working temperature. Once the engine has been started, do not allow it to idle but put it under a light load straight away to assist a rapid warm up.

Particular attention must be paid to the lubrication, check the engine oil level frequently and also the radiator water level to avoid overheating.

It will be found that the wheel discs will bed-in on the hubs and the wheel nuts should be checked for tightness after the first day's work.

Repeat this check as necessary over the first few days until no further movement can be obtained on the wheel nuts.

After the first 25 hours, and again after the first 75 hours the tractor should be thoroughly checked over and serviced as detailed in the "Lubrication" section of this Supplement.

FOR BETTER PERFORMANCE AND SAFE OPERATION

DO—carry out the Daily Maintenance Tasks every day without fail.

DO—keep the air cleaner clean and the oil at the correct level.

DO—ensure that the correct grade of approved lubricating oil is used and that it is replenished and changed at the recommended intervals.

DO—fit new sealing rings when filter elements are renewed.

DO—watch the warning lights and temperature gauge and investigate any abnormality.

DO—keep the radiator filled with clean water. In cold weather use anti-freeze—drain the system only in an emergency and refill *before* starting the engine.

TAKE THE WATER TO THE TRACTOR—NOT THE TRACTOR TO THE WATER.

DO—keep all fuel in clean storage and use a filter when filling the tractor tank.

DO—read all the running-in instructions.

DO—attend to minor adjustments and repairs as soon as the necessity is apparent. When in doubt consult your Authorised Dealer.

DON'T—run the tractor downhill out of gear or with the clutch pedal depressed, or travel at high speed without previously locking the brake pedals together.

DON'T—engage the clutch suddenly or drive with your foot resting on the clutch pedal.

DON'T—run the engine if it is not "firing" on all cylinders.

DON'T—drive the tractor at speed with implements in the raised position, particularly over rough ground.

DON'T—run the tractor with P.T.O. engaged unless it is in use.

DON'T—remove the radiator filler cap when the engine is near boiling point.

DON'T—attempt high speed turns by using the steering brakes.

MAINTENANCE AND ADJUSTMENT

This section of the Supplement deals with those items of mechanical maintenance which differ from those dealt with in the main Instruction Book and covers the petrol engine, cooling system, fuel system, and electrical system.

Please refer to the corresponding section of the main Instruction Book for the following items which are common to both petrol and diesel engined versions of Dexta.

CLUTCH PEDAL ADJUSTMENT

BRAKE ADJUSTMENT

WHEELS

FRONT TRACK ADJUSTMENT

REAR TRACK ADJUSTMENT

POWER ADJUSTED REAR WHEELS

THE ELECTRICAL SYSTEM (excluding generator and starter motor)

VALVE TAPPET ADJUSTMENT

The maintenance of correct valve clearances is an important factor in the efficient operation of the engine and it is recommended that these should be checked, and adjusted if necessary, at intervals of 600 hours running. The following clearances are specified with a cold engine.

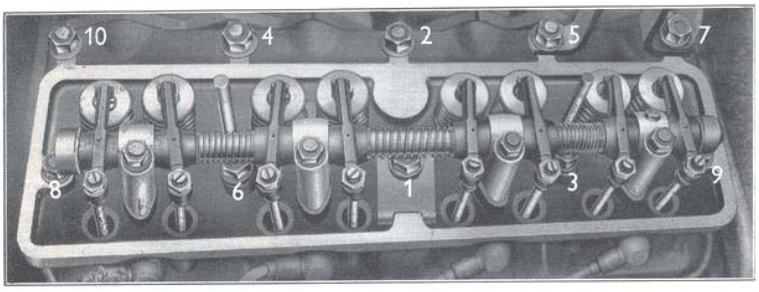


Fig. 5.
Cylinder Head Bolts Tightening

Clearance between the ends of the inlet valves and the pad on the corresponding rocker arms—0.010 in. (0.25 mm.), i.e. valves numbered 2 : 3 : 6 : 7. No. 1 is the valve nearest to the front of the engine.

Rotator caps are fitted over the ends of the exhaust valves and the clearance on these valves must be measured between the cap and the pad of the corresponding rocker arm.

Clearance for exhaust valves—0.006 in. (0.152 mm.), i.e. valves numbered 1 : 4 : 5 : 8.

To Set the Clearances Proceed as Follows:—

1. With the bonnet raised, slacken the union nut at the manifold end of the rocker cover breather pipe, remove the special bolt securing the pipe to the cover and remove the pipe.
2. Remove the rocker cover (two nuts, flat washers and fibre washers and cork gasket).
3. Check the tightness of the cylinder head nuts with a torque spanner, i.e. 60–65 lbs./ft. (8.29–8.97 kg.m) in the order shown in Fig. 5.
4. Turn the engine by means of the starting handle for half a revolution after the valve to be adjusted has closed.
5. Check the clearance with a feeler blade and if adjustment is required slacken the locknut and turn the rocker arm adjusting screw until the correct clearance is obtained (Fig. 6).
6. Tighten the locknut and recheck the clearance.
7. Repeat the procedure on the remaining valves.
8. Replace the rocker cover, ensuring that the cork gasket is in good condition and install the breather pipe.

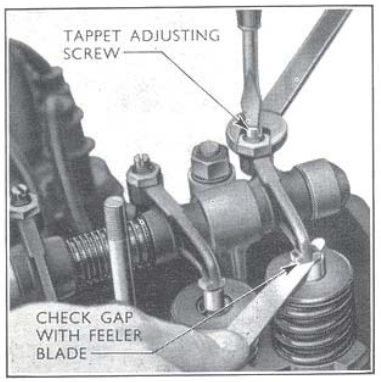


Fig. 6.
Adjusting Valve Clearances

FUEL SYSTEM

On the petrol Dexta the main fuel tank is augmented by an auxiliary tank giving the system a capacity of 9½ gallons (43 litres). This auxiliary tank is not a reserve supply as fuel is constantly fed from the main tank through the auxiliary tank to the fuel lift pump and thence to the carburettor where it is metered into the engine.

A fuel tap is fitted at the outlet from the auxiliary tank and before reaching the fuel lift pump proper the fuel passes into a glass sediment bowl. A gauze screen is incorporated in the top of the body into which the sediment bowl seats, to filter the fuel on its way to the lift pump.

SERVICING THE SEDIMENT BOWL AND SCREEN

It is recommended that a regular examination is made of the contents of the sediment bowl and any accumulation of water or foreign matter should immediately be removed.

Turn off the fuel supply at the fuel tap, unscrew the nut and release the clip holding the glass sediment bowl to the fuel pump body, remove the bowl and extract the gauze screen (Fig. 7). Wash the screen and bowl in clean petrol and blow away any accumulation of dirt on the screen with compressed air.

Before replacing the bowl examine the cork seating ring fitted between the bowl and the lift pump body. Renew the ring if it shows any signs of damage which would prevent an air tight joint from being obtained. An air leak at this point could result in difficult starting.

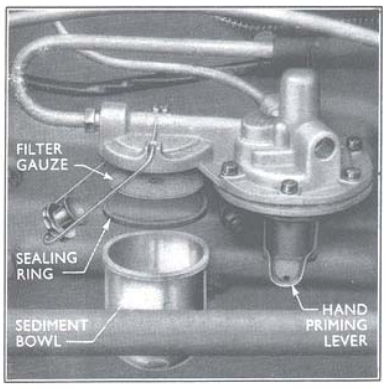


Fig. 7.
Fuel Sediment Bowl

CARBURETTOR ADJUSTMENT

Before making any adjustments, the engine should be warmed up to its normal operating temperature. A new engine will not idle so smoothly at the same carburettor setting as one which is fully "run in" therefore it is recommended that the slow running is re-adjusted after the first 50 hours running.

IDLING AND SLOW RUNNING ADJUSTMENTS

1. Run the engine up to normal operating temperature.
2. Close the throttle (lever fully anti-clockwise) and adjust the throttle stop screw (Fig. 8) to give an engine speed of 400-450 r.p.m.
3. Turn the slow running jet screw clockwise until a slight "hunting" occurs (i.e. rough running caused by over-richness of the mixture) then turn the screw back slowly, approximately one complete turn, until the engine runs evenly.
   On tractors up to engine number FPL 971 approximately one turn back on the slow running jet screw should give even running. On tractors with engine number after FPL 971 approximately one and a half turns should be sufficient to give even running.
4. Re-adjust the throttle stop screw if necessary to obtain an idling speed of 400-450 r.p.m.

MAIN JET ADJUSTMENT

Should it be necessary to re-set the main jet, the adjusting screw should be turned clockwise until seated and then unscrewed $3\frac{1}{2}$ turns (approx.) on tractors with engine numbers up to FPL 971, and $2\frac{5}{8}$ turns (approx.) on tractors with engine numbers after FPL 971.

WARNING

It is most important that the screw is not set at more than this amount from the seated position otherwise excessive fuel consumption and rapid engine wear will result.
Similarly, reducing the setting is false economy, the weak mixture bringing with it danger of burning out the engine valves.

GENERAL

Keep fuel and air hose connections tight and occasionally open up the drain valve in the carburettor bowl to allow the fuel to flush away any accumulation of foreign matter in the bowl.

Periodic servicing of the air cleaner is a vital necessity to the economic and efficient operation of the engine and conscientious attention to this item as detailed in the Lubrication Maintenance Chart is most important.

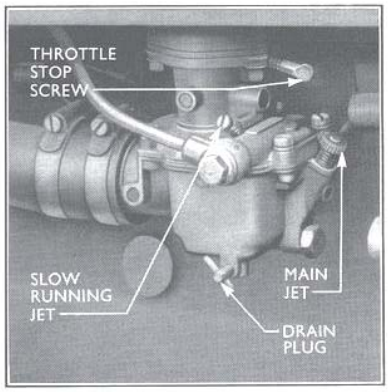


Fig. 8.
Carburettor Adjustments

THE COOLING SYSTEM

The petrol engine is cooled by the circulation of water through the cylinder jackets (surrounding the engine cylinders), the cylinder head and valve seats. The heated water flows by thermo-syphonic action, assisted by a centrifugal water pump, to the radiator and as it flows downwards through the radiator tubes it is cooled by a stream of air induced by the fan which is positioned behind the radiator. It is therefore important that the radiator grilles are removed from time to time and any accumulation of chaff and dirt, which may be impeding the flow of air, cleaned away from the front of the radiator.

A temperature gauge, having a green sector on the dial to indicate the most efficient operating temperature is mounted on the instrument panel and every endeavour should be made to keep the temperature within the limits of this sector.

To assist in rapid warm up a thermostat is fitted at the outlet from the engine to the radiator and the radiator filler cap incorporates a device which pressurises the cooling system. This assists in preventing any loss of coolant when the engine becomes hot, by raising the boiling point.

WARNING

It is dangerous to remove the radiator filler cap when the engine is hot as immediately the cap is loosened the pressure in the system will drop, lowering the boiling point so that high pressure steam may be ejected from the filler neck of the radiator.

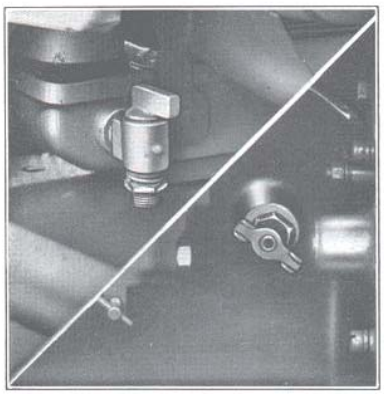


Fig. 9.
Coolant Drain Taps

Two main drain taps are fitted (Fig. 9), one at the bottom of the radiator and the other on the right-hand side of the engine. A further tap is located on the underside of the water pump body to prevent the possibility of water remaining in this component and causing damage by ice formation in winter. Open all three taps when draining the system to ensure that all the water is extracted. **When refilling do so slowly to avoid an air lock.**

In winter it is advisable to use an anti-freeze solution in the following proportions to obviate the risk of a cracked cylinder block or a damaged radiator due to freezing of the coolant. The system has a capacity of $11\frac{1}{2}$ pints (6.53 litres) and these figures are based on the use of Ford ME-1163-B anti-freeze.

PROTECTION	VOLUME OF ANTI-FREEZE		VOLUME OF WATER	
	PINTS	LITRES	PINTS	LITRES
17° F. or — 8° C.	$1\frac{1}{4}$ or	·71	$10\frac{1}{4}$ or	5·80
7° F. or —14° C.	$1\frac{3}{4}$ or	·99	$9\frac{3}{4}$ or	5·55
— 3° F. or —19° C.	$2\frac{1}{4}$ or	1·28	$9\frac{1}{4}$ or	5·25
—20° F. or —29° C.	$2\frac{3}{4}$ or	1·55	$8\frac{3}{4}$ or	4·96

If it becomes necessary to top up the anti-freeze treated system, do so with the correct proportion of solution when the engine is warm, so as to prevent loss due to subsequent expansion when the system becomes hot.

It is recommended that the anti-freeze is removed in the spring and the system thoroughly flushed out and refilled with clean soft water.

MAINTENANCE

The water pump, fan and generator are belt-driven from the crankshaft pulley and it is important that the driving belt tension be maintained. Such tension may be gauged by depressing the belt mid-way between the generator and crankshaft pulleys when a deflection of $\frac{3}{4}$ to 1 in. (19–25.4 mm.) should be obtained (Fig. 10). A tight belt will overload the water pump and generator bearings whilst a slack belt will result in overheating of the cooling system and rapid wear of the belt.

To adjust the tension, slacken the generator mounting bolts and swing the generator outwards to increase or inwards to decrease the tension. Re-tighten the bolts

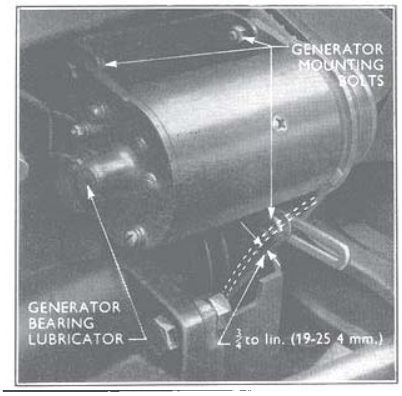


Fig. 10.
Fan Belt Adjustment

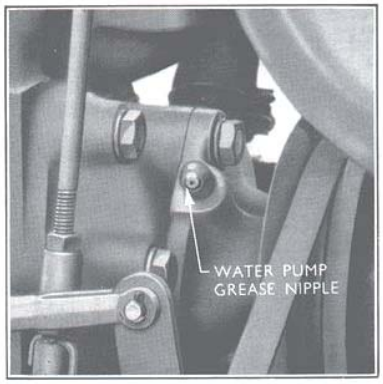


Fig. 11.
Water Pump Grease Nipple

securely after adjustment.

The water pump incorporates a grease nipple (Fig. 11) to enable the bearings to be lubricated with a grease gun. Sufficient grease should be injected, at intervals of 50 hours to force a small amount of the old grease out through the drilling in the housing.

THE ELECTRICAL SYSTEM

Full details of battery maintenance, charging system and the lighting system is contained in the "Electrical" section of the main Instruction Book but where a petrol engine is fitted of necessity an ignition system is required. The items requiring periodic maintenance on those items only fitted to the petrol engined Dexta are outlined below.

SPARKING PLUGS

Difficult starting or engine misfiring may be caused by dirty sparking plugs or incorrect gaps between the electrodes whilst indirectly engine power and fuel consumption will also be adversely affected. It is most important therefore that the plugs are removed, cleaned and the gaps re-set at regular intervals—200 hours is the recommended period for this operation to be carried out.

Sand-blasting, is considered the most efficient means of cleaning the plugs but wire brushing may be adopted where such equipment is not available. Check the insulation for cracks and keep the outside of the insulator clean.

Adjust the plug gaps by bending the side electrode until a gap of 0.030–0.032 in. (0.762–0.813 mm.) exists between the tip of the centre electrode and inner surface of the "L"-shaped side electrode (Fig. 12). It is good practice to fit new plug sealing washers each time the plugs are serviced.

When reconnecting the sparking plug leads after servicing remember that the firing order is 1 : 3 : 4 : 2—the distributor rotation being anti-clockwise.

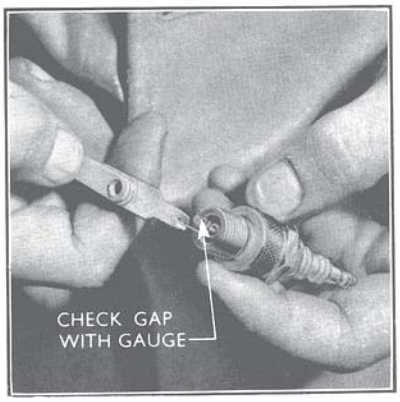


Fig. 12.
Sparking Plug Adjustment

DISTRIBUTOR

The contact breaker points of the distributor should be kept clean and the points gap correctly maintained. Dirty, pitted or incorrectly set points will result in inefficient operation of the engine. Badly pitted or burnt points could be an indication of faulty condenser or oil having reached the points.

To adjust the points gap proceed as follows:—

1. Remove the distributor cap (two clips) and lift off the rotor arm.
2. Extract the dust excluder plate complete with felt seal.
3. Check the contact faces of the points and if they are clean and not unduly pitted (the fixed contact will always exhibit a slight hollow and the moving contact a corresponding raised "pip" after being in service) turn the engine by means of the starting handle until the fibre block of the moving contact is on the peak of the spindle cam, i.e. this is the point where the maximum gap exists.

Fig. 13.
Contact Breaker Point Setting

4. Check the gap with feeler blades (Fig. 13) and adjust if necessary to 0.014–0.016 in. (0.35-0.41 mm.) by loosening the screws of the fixed contact plate and moving the fixed contact as necessary. Re-tighten the screws securely after adjustment and re-check the gap.
5. Add a drop of oil to the pivot post of the moving

contact (do not over-oil) and a spot of petroleum jelly to the spindle cam.

6. Replace the dust cover and rotor arm.
7. Clean the inside of the distributor cap and ensure that the carbon brush in the centre of the cap is not excessively worn and that it is free to slide in the cap, then replace the cap.

   The contact point faces may be "cleaned up" if they are not too deeply pitted with a carborundum stone, but care must be taken to maintain the correct face angles and to avoid removing more than the absolute minimum of metal.

   It is recommended that if deep pitting is apparent a new set of distributor points be fitted.

To fit a new set of points the following procedure should be adopted.

1. Remove the distributor cap, rotor arm and dust cover plate as previously described.
2. Remove the outer nut and washer from the low tension terminal of the distributor and disconnect the wire from the terminal.
3. Loosen the terminal inner nut and lift off the moving point from its pivot post and the spring end from the terminal. Note the exact location of the spring end before lifting it away, to ensure that the new point is assembled in the same relative position.
4. Remove the two screws securing the fixed point to the contact breaker base plate and remove the point.

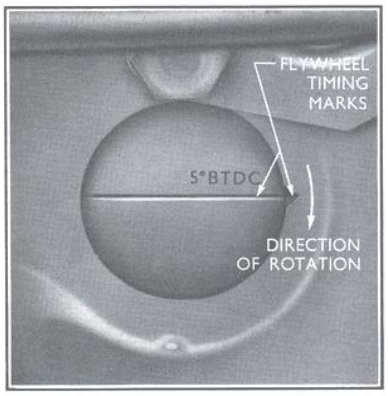


Fig. 14.
Flywheel Timing Marks

5. Assemble the new fixed point, insert the two retaining screws but do not tighten at this stage.
6. Ensure that the fibre washer is fitted to the moving point pivot post and position the new moving point on the pivot post.
7. Assemble the slotted end of the moving point spring over the terminal post so that it locates against the condenser contact strip, i.e. the end of the spring and the condenser strip must be fitted between the head of the

terminal screw and the insulator.

8. Tighten the inner nut of the terminal post, connect the low tension lead and retain with a flat washer and the outer nut.
9. Adjust the contact point gap as previously described and replace the dust cover, rotor arm and cap.

IGNITION TIMING

If, for any reason, the distributor is removed it is essential that it be correctly timed in the following manner after replacement.

1. Remove the plugs from Nos. 2, 3 and 4 cylinders and rotate the engine until it can be felt to be coming up on the compression stroke on No. 1 cylinder.
2. Loosen the flywheel aperture cover screw which is located at the left hand side of the clutch housing, and swing the plate to one side. The flywheel can be viewed through the aperture (Fig. 14). Remove the sparking plug from No. 1 cylinder and continue to rotate the engine until the 5° B.T.D.C. marking on the flywheel corresponds with "V" notch on the edge of the aperture.

   The distributor drive slot should now be in line with No. 1 push rod tube and the Woodruff keyway should be in alignment with the dipstick as shown in Fig. 15.
3. Set the contact breaker points gap as described previously and replace the dust cover and rotor arm.
4. Lower the distributor into its housing but before engaging the tongue of the distributor shaft with the drive shaft slot, ensure that the low tension terminal and data plate on the distributor body are facing away from the engine and that the rotor arm contact is pointing towards No. 1 sparking plug lead segment in the distributor cap.
5. Refit the distributor plate retaining nuts and spring washers.

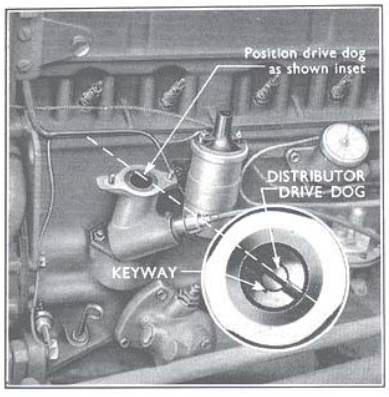


Fig. 15.
Distributor Drive Dog Positioning (when retiming distributor)

Note. To ensure that the drive is correctly engaged rock the rotor arm as the distributor is pushed down into the adaptor. Do not attempt to pull the unit into position by tightening the retaining nuts if a gap is apparent between the distributor plate and the adaptor flange.

A gap at the above location would indicate that the drive had not been correctly located.

6. Tighten the distributor plate retaining nuts and loosen the plate clamping screw. Turn the distributor body in a clockwise direction until the contact points are just beginning to open and then tighten the clamping screw in this position.

7. Replace the sparking plugs, fit the distributor cap and attach the plug lead which is adjacent to the rotor arm contact to No. 1 spark plug terminal.Connect the remaining plug leads in the correct firing order following the rotation of the rotor arm, i.e. 1 : 3 : 4 : 2.

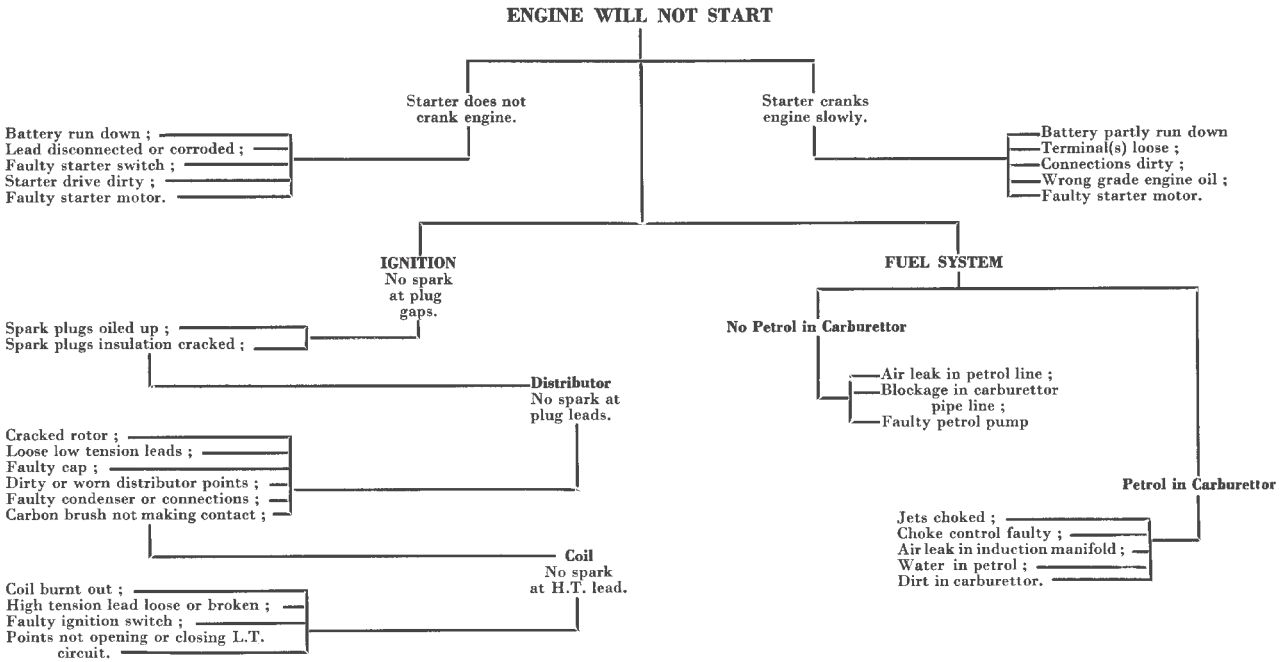
GOVERNOR ADJUSTMENT

The centrifugal governor is correctly set on assembly to limit the engine speed to a maximum of 2000 r.p.m. and no attempt should be made to interfere with the linkage.

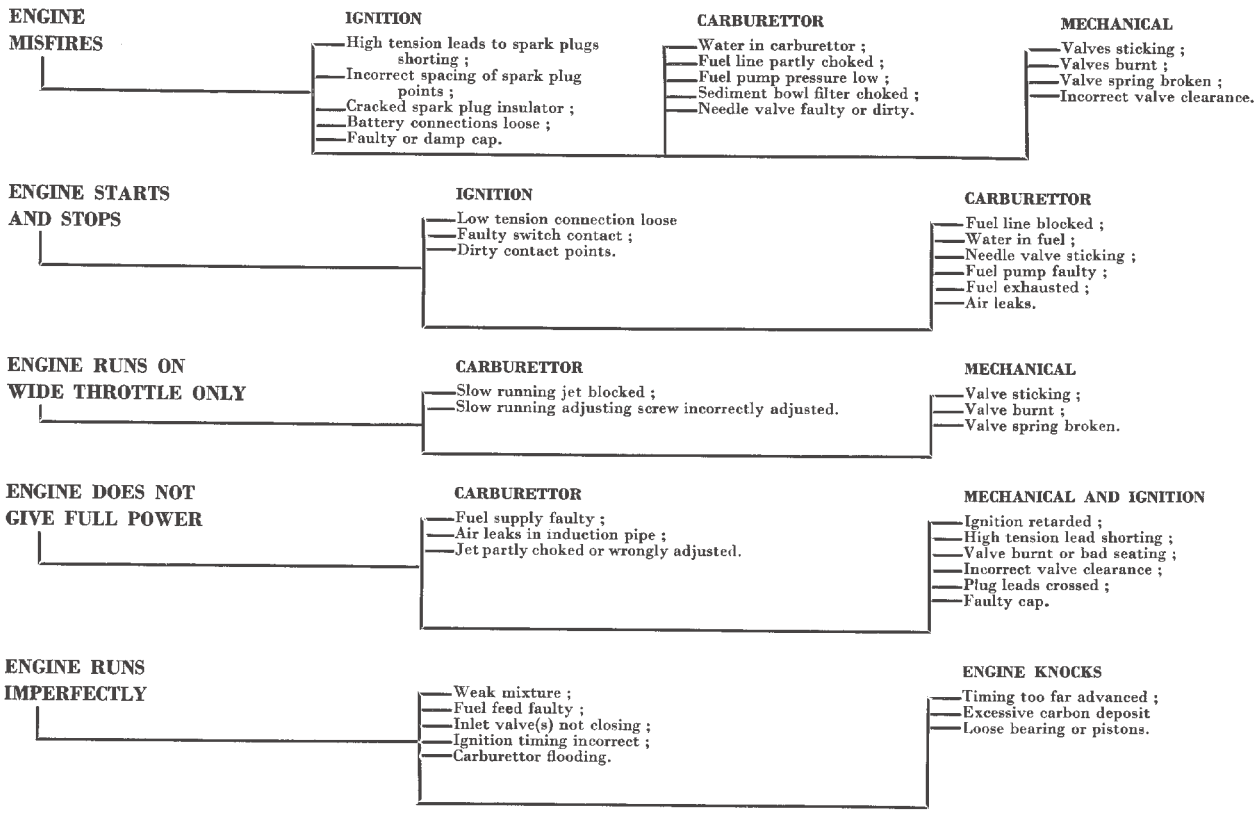
If it is suspected that the governor action is incorrect, first ensure that any dirt or rust formation on the joints, pivots, or springs is not restricting the freedom of the linkage—clean and lubricate as necessary. (It is recommended that approximately two drops of oil are placed on the pivot points after every 100 hours operation).

If this fails to correct the condition your Authorised Tractor Dealer should be consulted.

FAULT FINDING



FAULT FINDING (continued)



LUBRICATION

Read the corresponding section of the main Instruction Book, the principles apply equally to either a petrol or a diesel engined tractor.

Details of periodic attention to lubrication points will be found in the Chart attached to the inside cover of this supplement and a Routine Servicing Schedule covering all points which require attention on the petrol engined Dexta is shown on the following page.

AFTER THE FIRST 25 HOURS WORK

The first main service should be carried out after 25 working hours.

All items listed on this page should receive attention at this stage. Your Authorised Dealer will be pleased to carry out this service and at the same time you will benefit from his experience in that he will advise you on any other points which require attention.

1. Drain the engine oil, clean the filter body and re-fill the sump to the "full" mark on the dipstick with fresh oil.
2. Clean the fuel sediment bowl and gauze filter then check and tighten all fuel feed pipe unions.
3. Tighten cylinder head nuts to the correct torque and check and adjust valve rocker arm clearances.
4. Clean and re-fill the air cleaner base.
5. Check fan belt tension and adjust if necessary.
6. Check gearbox, rear axle and steering box oil levels, and top up if necessary.
7. Check the front wheel bearings for free play and adjust if necessary.
8. Lubricate all grease points.
9. Check tyre pressures.
10. Check wheel nuts and all steering connections.
11. Check brake pedal and clutch pedal adjustment.
12. After the belt pulley has been used check the pulley retaining screws for tightness.

ROUTINE SERVICING SCHEDULE

Items for Attention	Daily	Every 50 hours	Every 200 hours	Every 600 hours	1,000 hours (6 monthly)	2,000 hours (12 monthly)
Check engine oil level	●					
Change engine oil			●			
Change engine oil filter element			●			
Grease water pump bearing		●				
Check air cleaner	●					
Change air cleaner oil		●				
Strip and clean air cleaner				●		
Check gearbox oil level		●				
Change gearbox oil					●	
Check rear axle oil level		●				
Change rear axle oil						●
Check steering box oil level			●			
Lubricate generator bearing			●			
Check fan belt adjustment			●			
Carburettor—open drain tap to clear sediment			●			
Grease front wheel bearings			●			
Grease steering linkage	●					
Lubricate all grease points (except front wheel bearings)		●				
Top up battery		●				
Distributor—oil spindle and grease cam		●				
Spark plugs—clean and reset gaps			●			
Check valve clearances				●		
Check tyre pressures		●				
Check wheel nuts		●				
Check water level	●					
Check fuel sediment bowl—clean if necessary	●					
Oil parking brake latch and pawl shaft (if fitted)	●					
Grease handbrake lever tube and cross-shaft		●				
Check belt pulley oil level (if fitted)	●					

Watch your Proofmeter reading and service your tractor at the correct periods according to the above chart.

GENERAL SPECIFICATION

ENGINE

Type	4 cylinder in line overhead valve.
Bore	3·425 in. (87 mm.).
Stroke	3·622 in. (92 mm.).
Cubic Capacity	133·5 cu. in. (2188 cc.).
Compression Ratio	6 to 1.
Firing Order	1, 3, 4, 2.
Cylinder Block	Cast iron, wet liner.
Cylinder Head	Detachable cast iron type.
Pistons	Split skirt aluminium alloy.
Piston Rings	Two compression, two scraper, one below piston pin bore.
Connecting Rods	"H" section drilled longitudinally, big end will pass through cylinder bore.
Crankshaft	Located in 3 shell type main bearings.
Valves	Vertical overhead type operated by push rods from the chain driven camshaft.
Engine Number	Stamped on left hand side of engine between oil filler and ignition coil.

LUBRICATION

Type	Pressure feed by eccentric rotor pump to externally mounted full flow filter and thence to main oil gallery. The rocker shaft receives a controlled intermittent feed from the rear camshaft journal.
Normal Operating Pressure	40 to 60 lb. per sq. in. (2·8 to 4·2 kg. per sq. cm.).
Sump Capacity	12 pints (6·82 litres) approx.
Lubricant	Use an approved brand of engine oil in accordance with the viscosity figures and temperature range tabulated below.

Temperature Range	*S.A.E. Viscosity No.*
Above 80° F. (27° C.)	30
30° F. to 80° F. (—1° C. to 27° C.)	20
Below 30° F. (—1° C.)	10 W

COOLING SYSTEM

Type	Thermo-syphon, centrifugal pump assisted, with thermostatic circulation control fitted to cylinder head outlet.
Capacity	11½ pints (6·53 litres).
Fan	Four blade 15½ in. (39·37 cm.) diameter driven by V-belt from crankshaft pulley.

General Specification

FUEL SYSTEM

Fuel Tank Location	In front of steering column.
Auxiliary Tank Location	Between main tank and engine heat baffle.
Total Capacity	9½ gallons (43 litres).
Carburettor	Up draught, dust-proof construction.
Starting Device	Manual choke operating automatic throttle setting device.

IGNITION SYSTEM

Coil and Distributor	Automatic control by distributor governor weight mechanism.
Sparking Plugs	Size 14 mm. Type Champion L10. Point gap 0·030 to 0·032 in. (0·762 to 0·813 mm.).

CLUTCH

Type	Single plate dry clutch, or optional double plate clutch (with "Live" P.T.O.).	
	Single Plate	*Double Plate*
Diameter	11 in. (27·9 cm.)	9 in. (22·9 cm.)
Friction area of each plate	124 sq. in. (800 sq. cm.)	74 sq. in. (477 sq. cm.)

GEARBOX

Type — 6 forward 2 reverse speeds. All gears are constant mesh and are engaged by splined couplings sliding onto dog tooth gears.

Lubricant Capacity — Approx. 23 pints (13·07 litres).

Lubricant Grade

Temperature Range	*S.A.E. Viscosity No.*
Above 20° F. (—7° C.)	30 H.D. or 20 W/30 H.D.
Below 20° F. (—7° C.)	20 H.D. or 20 W/30 H.D.

Gear Ratios (through gearbox only)

1st gear	30·5
2nd ,,	17·0
3rd ,,	10·28
4th ,,	7·55
5th ,,	5·73
6th ,,	2·53
High rev.	6·30
Low rev.	18·70

REAR TRANSMISSION

Type — The rear axle is semi-floating; the axle shafts and the four pinion differential are supported on taper roller bearings.
Forward part of rear transmission housing contains the hydraulic power lift pump and valve gear.

Lubricant Capacity — Approx. 34 pints (19·32 litres).

Lubricant grade — As for Gearbox

Final drive gear ratio — 6 66 to 1.

FINAL GEAR RATIOS AND ROAD SPEEDS AT INDICATED ENGINE SPEEDS.

Gear	Over-all Ratio	800 RPM		1200 RPM		1400 RPM		1600 RPM		1800 RPM		2000 RPM	
		MPH	KPH	MPH	KPH	MPH	KPH	MPH	KPH	MPH	KPH	MPH	KPH
1st	204	·51	·82	·76	1·23	·89	1·44	1·02	1·64	1·16	1·86	1·27	2·04
2nd	113·5	·92	1·48	1·38	2·22	1·61	2·59	1·83	2·96	2·08	3·35	2·30	3·70
3rd	68·6	1·53	2·46	2·29	3·96	2·68	4·30	3·06	4·92	3·43	5·54	3·82	6·15
4th	50·2	2·08	3·35	3·12	5·02	3·67	5·85	4·16	6·70	4·68	7·54	5·20	8·38
5th	38·2	2·74	4·41	4·12	6·61	4·80	7·71	5·48	8·82	6·16	9·92	6·85	11·03
6th	16·8	6·18	9·96	9·27	14·95	10·80	17·40	12·35	19·90	13·92	22·42	15·45	24·88
H.R.	42·0	2·49	4·01	3·74	6·01	4·35	7·01	4·97	8·02	5·60	9·01	6·22	10·01
L.R.	124·2	·84	1·35	1·26	2·02	1·46	2·36	1·67	2·70	1·89	3·04	2·10	3·38

WHEELS AND TYRES

Rear Track	Standard setting 52 in. (132 cm.). Adjustable from 48 in. (122 cm.) to 76 in. (193 cm.) in steps of 4 in. (10·2cm.).	
Front Wheels	Pressed steel with well-base rims.	
Rear Wheels	Two piece pressed steel. The well-base rims are bolted on to dished wheel discs.	
	Size (inches)	*Pressures (lb./sq. in.)*
Front Tyres	4·00–19	32 (2250 gm./sq. cm.)
	5·50–16 (optional)	20 (1400 gm./sq. cm.)
Rear Tyres	10–28	12 (845 gm./sq. cm.)
	11–28 (optional)	12 (845 gm./sq. cm.)
	10–28 6-ply (optional)	12 (845 gm./sq. cm.)

Wheel Weights (Optional)

Front	For use with very heavy rear mounted equipment. One weight of 70 lb. (31·8 kg.) can be bolted to the inside face of each front wheel.
Rear	Cast iron weights of 80 lb. (36 kg.) can be used, generally in sets of three bolted to each rear wheel.
Liquid Ballasting	Liquid ballast may be used in the rear tyres to give increased wheel grip under certain conditions.

FRONT AXLE AND STEERING

Front Axle	Three piece construction, trunnion mounted at centre. The front wheel track is adjustable from 48 in. (122 cm.)–76 in. (193 cm.) in 4 in. (10·2 cm.) steps.
Steering	Worm and nut steering box with two drop arms and drag links.
Gear Ratio	13·2 to 1 in straight ahead position.
Steering Wheel Diameter	18 in. (45·7 cm.).
Turning Circle	19 ft. (5·79 metres) with brakes.
Lubricant	As for Gearbox.
Lubricant Capacity	1·68 pints (·85 litres).

General Specification

BRAKES

Type	Mechanical internal expanding brakes with bonded linings.
Drum Diameter	14 in. (35·6 cm.).
Shoe Width	2 in. (5·08 cm.).

ELECTRICAL SYSTEM

	12 Volt battery (57 ampere hour capacity), starter motor, and generator with constant voltage control, lighting equipment and an electric horn.
Front lamp bulbs	12 Volt. 36/24 Watt.
Warning lamp Bulbs	12 Volt. 2·2 Watt.

HYDRAULIC POWER LIFT

Type	Gear pump located in front compartment of rear transmission housing operating a ram cylinder and two lift arms. Category 1 Implement Linkage.
Operational Control	Automatic Qualitrol or Implement Position Control selected as required by a lever. The lift arms are operated by a manual lever on valve control gear.
Pump Drive	Gear drive from P.T.O. countershaft in continuous engagement.
Auxiliary Service Control	Fitted to hydraulic lift cover. Allows auxiliary hydraulic equipment to be operated independent of lift arms.
Double Acting Ram Control	Available as optional extra in place of Auxiliary Service Control.

Adjustable Drawbar (Optional)

Fitted between lower links and supported by two adjustable stays connected to upper link swivel.

Height adjustment is $11\frac{1}{2}$ in. to $22\frac{1}{2}$ in. (29·2 cm. to 57·1 cm.).

POWER TAKE OFF

	Engaged manually by a lever on the L.H. side of the driver's seat.
Engine/P.T.O. Speed Ratio	3·33 to 1. The P.T.O. runs at 540 r.p.m. at 1800 engine r.p.m.

BELT PULLEY

	Fitted at rear transmission housing and driven by P.T.O. shaft.
Direction of Rotation (Viewed from left hand side of tractor)	Pulley offset to right—anti-clockwise. Pulley offset to left—clockwise.
Pulley Diameter	10·25 in. (26·1 cm.).
Engine/Pulley Speed Ratio	1·78 to 1.

General Specification

Pulley and Belt Speeds	*Engine R.P.M.*	*Pulley R.P.M.*	*Belt Speed*
	1550	868	2325 ft./min. (708·6 m/min.)
	2000	1120	3000 ft./min. (915 m/min.)
Bevel Gear Ratio	1·866 to 1.		
Lubricant	Filled to level of filler plug using same grade oil as for gearbox.		
Lubricant Capacity	1 pint (0·57 litres).		

WEIGHTS AND DIMENSIONS

Overall Length	121 in. (307·3 cm.).
Height	To hood line 46½ in. (118 cm.). To steering wheel 54 in. (137 cm.).
Overall Width	With 48 in. (122 cm.) track—64½ in. (164 cm.). With 76 in. (193 cm.) track—86¾ in. (220 cm.).
Wheelbase	With 48 in. (122 cm.) track—76 in. (193 cm.). With 76 in. (193 cm.) track—71 in. (180·3 cm.).
Ground Clearance	Axles 21 in. (53 cm.). Transmission 12 in. (30·5 cm.).
Weight Distribution	Total weight with fuel and water 3142·5 lb. (1425 kg.). Weight on rear wheels 1936 lb. (878 kg.). Weight on front wheels 1206·5 lb. (547 kg.).

Ford Policy is one of continuous improvement, and the right to change prices, specifications, and equipment at any time without notice is reserved.

INDEX

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