

SHOP MANUAL

FORD

MODELS

1120—1220—1320—1520—1720—1920—2120

The tractor model number, serial number and engine number are stamped on an identification plate located on left side of transmission housing.

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DUAL DIMENSIONS

This service manual provides specifications in both the Metric (SI) and U.S. Customary systems of measurement. The first specification is given in the measuring system used during manufacture, while the second specification (given in parenthesis) is the converted measurement. For instance, a specification of "0.28 mm (0.011 inch)" would indicate that the equipment was manufactured using the metric system of measurement and the U.S. Customary equivalent of 0.28 mm is 0.011 inch.

CONDENSED SERVICE DATA

	1120	Models 1220	1320
GENERAL			
Engine Make	Shibaura		
Engine Model	S723	S753	J823
Number of Cylinders	3		
Bore	72 mm (2.83 in.)	75 mm (2.95 in.)	82 mm (3.22 in.)
Stroke	72 mm (2.83 in.)	72 mm (2.83 in.)	80 mm (3.15 in.)
Displacement	879 cc (53.6 cu. in.)	954 cc (58.2 cu. in.)	1267 cc (77.3 cu. in.)
Compression Ratio	23:1	23:1	22:1
Electrical System			
Alternator	12 Volts, 35 Amps		
Regulator	Mechanical	Mechanical	Solid State
Battery Ground Polarity	Negative		
TUNE-UP			
Firing Order	1-2-3		
Valve Clearance—Cold			
Intake	0.20 mm (0.008 in.)		
Exhaust	0.20 mm (0.008 in.)		
Valve Face Angle	45°		
Valve Seat Angle	45°		
Injection Timing—			
Static, BTDC	23°-24°	23°-24°	20°-21°
Timing Mark Location	Crankshaft Pulley		
Injector Opening Pressure	11760 kPa (1705 psi)		
Governed Speeds—Engine Rpm			
Low Idle	800-900		
High Idle (No-Load)	2650-2700		
Rated (Full Load)	2500		
Rated Power at Pto	9.3 kW (12.5 hp)	10.8 kW (14.5 hp)	12.7 kW (17.0 hp)
SIZES—CLEARANCES			
Crankshaft Main Journal			
Diameter	45.964-45.975 mm (1.8096-1.810 in.)	57.957-57.97 mm (2.281-2.282 in.)	

CONDENSED SERVICE DATA (CONT.)

	1120	Models 1220	1320
SIZES—CLEARANCES (Cont.)			
Main Bearing Radial Clearance	0.039-0.106 mm (0.0015-0.004 in.)		0.044-0.116 mm (0.0017-0.0045 in.)
Crankshaft End Play	0.05-0.30 mm (0.002-0.011 in.)		0.10-0.40 mm (0.004-0.016 in.)
Crankpin Diameter	38.964-38.975 mm (1.5340-1.5344 in.)		43.964-43.975 mm (1.730-1.731 in.)
Rod Bearing Radial Clearance	0.035-0.083 mm (0.001-0.003 in.)		0.035-0.083 mm (0.001-0.003 in.)
Connecting Rod Side Clearance	0.10-0.30 mm (0.004-0.012 in.)		0.10-0.30 mm (0.004-0.012 in.)
Piston-to-Cylinder Bore Clearance	0.0575-0.0875 mm (0.0022-0.0034 in.)	0.0425-0.0765 mm (0.0016-0.0030 in.)	0.088-0.106 mm (0.0034-0.0041 in.)
SPECIAL TORQUES			
Connecting Rod Caps	24-27 N·m (17-20 ft.-lbs.)		49-54 N·m (36-40 ft.-lbs.)
Crankshaft Main Bearing Holders	25-29 N·m (18-22 ft.-lbs.)		49-54 N·m (36-40 ft.-lbs.)
Main Bearing Holder Retaining Bolts	25-29 N·m (18-22 ft.-lbs.)		49-54 N·m (36-40 ft.-lbs.)
Crankshaft Pulley Retaining Nut	48-58 N·m (36-43 ft.-lbs.)		275-333 N·m (203-245 ft.-lbs.)
Flywheel Bolts	59-69 N·m (44-50 ft.-lbs.)		59-69 N·m (44-50 ft.-lbs.)
Cylinder Head Bolts	44-49 N·m (33-36 ft.-lbs.)		88-93 N·m (65-68 ft.-lbs.)
CAPACITIES			
Cooling System	3.5 liters (3.7 U.S. qts.)		Note 1
Crankcase with Filter Change	3.3 liters (3.5 U.S. qts.)		4.5 liters (4.8 U.S. qts.)
Fuel Tank	18 liters (4.8 U.S. gals.)		27 liters (7.1 U.S. gals.)
Rear Axle and Transmission	16 liters (16.9 U.S. qts.)		22 liters (23.3 U.S. qts.)
Power Steering		1.8 liters (1.9 U.S. qts.)	
Front Wheel Drive Axle	1.8 liters (1.9 U.S. qts.)		2.8 liters (3 U.S. qts.)

Note 1: Model 1320 cooling system capacity is 4 liters (4.2 U.S. qts.) with gear transmission and 5 liters (5.3 U.S. qts.) with hydrostatic transmission.



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