YANMAR SERVICE MANUAL

DIESEL TRACTOR

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MODEL YM135(D), YM155(D)
CONTENTS

I. Nomenclature 1

II. Specifications  5
1. Specifications 5
2. Power train 10
   Power train (1) 10
   Power train (2) 11
   Power train (3) 12
   Power train (4) 13
3. Transmission sectional view 14
4. Electric wiring diagram 15
5. Fuel system 17
6. Engine lubricating system 17
7. Cooling system 18
8. Transmission lube/hydraulic system 18

III. Tractor separation 19

IV. Disassembly sequence 20

V. Engine disassembly 31

VI. Engine construction and maintenance 35
1. Cylinder liners 35
2. Pistons 36
3. Piston rings 37
4. Piston pin 38
5. Connecting rods 39
6. Crankshaft 40
7. Camshaft 43
8. Cylinder head 45
9. Combustion chambers 46
10. Rocker arm assembly 48
11. Injection pump and injection valve 48
12. Governor 53
13. Lubricating oil pump 53
14. Cooling system 54
15. Gears 54
16. Oil seals, O-rings and ball bearings 54

VII. Engine assembly 56

VIII. Engine adjustments 61
1. Governor linkage 61
2. Valve clearance 61
3. Fuel injection timing 62
4. Fan belt tension 63
5. Air venting (bleeding) 63
6. Other measurements and inspections 64

IX. Electrical equipment 65
1. Battery 65
2. Governor & current limiter 67
3. Inspection and characteristics 69
4. Cautions during handling and assembly 70
5. Instructions for disassembly and assembly 71
6. Maintenance and inspection 71
7. Starter motor 72
8. Thermostat (optional) 76
9. Turn signal lights (optional) 77
10. Water temperature indicator light 77
11. Engine lube oil pressure 77
12. Horn 78
13. Lights 78
14. Safety start switch 78

X. Tractor construction and maintenance 79
1. Clutch and relevant items 79
2. Transmission and related items 83
3. Brake 89
4. Hydraulic lift device 90
5. Steering 93
6. Front axle and rear axle 95

XI. Tractor assembly 103
1. General assembly 103
2. Transmission assembly 105
   2-1 P.T.O. driving shaft assembly 105
   2-2 P.T.O. fork shaft assembly 106
   2-3 Front P.T.O. shaft assembly (YM135D, YM155D) 107
   2-4 Front P.T.O. shift shaft assembly (YM135D, YM155D) 107
   2-5 Driven shaft assembly 108
   2-6 Counter shaft assembly 109
   2-7 Low-high shift shaft assembly 110
   2-8 Main change shaft assembly 110
   2-9 The fork of the 2nd/3rd speed shift shaft assembly 111
   2-10 Reverse/1st speed shift shaft assembly 112
   2-11 Main shaft and transmission front cover assembly 113
   2-12 Gear shaft lever assembly 114
   2-13 P.T.O. reduction shaft assembly 115
   2-14 Connecting shaft assembly 115
   2-15 P.T.O. shaft assembly 116
   2-16 Differential lock shaft assembly 117
   2-17 Final reduction pinion and rear axle shaft assembly 118
   2-18 Differential device 120
   2-18 (a) Assembly 121
   2-18 (b) Assembly 122
   2-19 Cam, differential lock assembly 122

XII. Engine disassembly 31
XIII. Engine construction and maintenance 35
XIV. Engine adjustments 61
XV. Electrical equipment 65
XVI. Tractor construction and maintenance 79
XVII. Tractor assembly 103
XVIII. Engine disassembly 31
XIX. Engine construction and maintenance 35
XX. Engine adjustments 61
XXI. Electrical equipment 65
XXII. Tractor construction and maintenance 79
XXIII. Tractor assembly 103

Click anywhere for more details.
3. Front axle assembly
   3-1 Front axle assembly (YM155D, YM135D) .......... 123
   3-2 Front axle assembly (YM155, YM135) .......... 126
   3-3 Front axle assembly (YM155D, YM135D) .......... 127
   3-4 Differential device assembly (YM155D, YM135D, front axle) .......... 128

4. Center pin assembly ........................................ 129
   4-1 For YM155D & YM135D .................................. 129
   4-2 For YM155 & YM135 ..................................... 130

5. Brake drum assembly ........................................ 131

6. Hydraulic system assembly ................................. 132
   6.1 Cylinder head assembly .................................. 133
   6.2 Lifting shaft, lift arms, lift crank, hydraulic piston rod assembly .... 133
   6.3 Control valve assembly .................................. 135
   6.4 Hydraulic control fork, hydraulic control lever assembly .......... 135
   6.5 Auto-return rod, operator's seat bracket assembly ........ 137
   6.6 Slow return valve assembly ......................... 138
   6.7 Lift arm assembly ...................................... 139
   6.8 Operational precaution points ....................... 139

XII. Tractor adjustments ....................................... 141

XIII. Tractor trouble-shooting ................................. 142
   1. Engine and related items ............................... 143
   2. Electrical system ....................................... 145
   3. Brake system ........................................... 145
   4. Clutch and related items ................................ 146
   5. Transmission and related items ....................... 147
   6. P.T.O. and related items ................................ 147
   7. Hydraulic system ....................................... 148
   8. Steering and suspension system ....................... 149

XIV. Regular inspections ...................................... 150

XV. Tightening torque ratings ................................. 151

XVI. Maintenance equipment and tools ....................... 153
## SPECIFICATIONS (3)

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>YM135</th>
<th>YM135D</th>
<th>YM155</th>
<th>YM155D</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHASSIS RUNNING SIS gear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rear axle type</td>
<td></td>
<td>Semi-floating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front Toe-in</td>
<td>in.</td>
<td>0.16–0.32 (4–8mm)</td>
<td>0.16–0.32 (4–8mm)</td>
<td></td>
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<tr>
<td>Rear toe-in</td>
<td></td>
<td>0.16–0.32 (4–8mm)</td>
<td>0.16–0.32 (4–8mm)</td>
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<tr>
<td>Caster degree</td>
<td>degree</td>
<td>2°</td>
<td>2°</td>
<td>2°</td>
<td>2°</td>
</tr>
<tr>
<td>Camber degree</td>
<td>degree</td>
<td>3°</td>
<td>3°</td>
<td>3°</td>
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<tr>
<td>Trail in.</td>
<td>in.</td>
<td>0.43</td>
<td>0.43</td>
<td>0.43</td>
<td>0.43</td>
</tr>
<tr>
<td>Alignment</td>
<td></td>
<td>7°</td>
<td>6°</td>
<td>7°</td>
<td>6°</td>
</tr>
<tr>
<td>King-pin inclination degree</td>
<td></td>
<td>7°</td>
<td>6°</td>
<td>7°</td>
<td>6°</td>
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<tr>
<td>Steering system</td>
<td></td>
<td>Ball-screw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gear ratio</td>
<td></td>
<td>15.4 : 1</td>
<td>18.9 : 1</td>
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<td></td>
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<tr>
<td>Steering wheel diam.</td>
<td>in.</td>
<td>15.0 (380mm)</td>
<td>15.8 (400mm)</td>
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<tr>
<td>Gear box oil capacity</td>
<td>U.S.gal.</td>
<td>0.05 (0.2l)</td>
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<td></td>
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<tr>
<td>Tires</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front wheels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire pressure</td>
<td>psi</td>
<td>17.8 (1.25 kg/cm²)</td>
<td>17.8 (1.25 kg/cm²)</td>
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<td></td>
</tr>
<tr>
<td>Rims</td>
<td></td>
<td>3.50B x 10GA</td>
<td>4JA–12</td>
<td>3.50 x 10GA</td>
<td></td>
</tr>
<tr>
<td>Optional tires</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front wheels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire size</td>
<td>20–8.00–10–4PR–PD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire pressure</td>
<td>psi</td>
<td>24.2 (1.7 kg/cm²)</td>
<td>22.8 (1.6 kg/cm²)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rims</td>
<td></td>
<td>6.001 x 10DT</td>
<td>5JA–12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rear wheels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire size</td>
<td></td>
<td>7–16–4PR–FSL</td>
<td>8–16–4PR–FSL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire pressure</td>
<td>psi</td>
<td>25.6 (1.8 kg/cm²)</td>
<td>22.8 (1.6 kg/cm²)</td>
<td></td>
<td></td>
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<tr>
<td>Rims</td>
<td></td>
<td>5½K–16</td>
<td>5½K–16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optional Rear wheels</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Tire size</td>
<td>27–8.50–15–2PR–PD</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire pressure</td>
<td>psi</td>
<td>11.4 (0.8 kg/cm²)</td>
<td>22.8 (1.6 kg/cm²)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rims</td>
<td></td>
<td>7001 x 15DT</td>
<td>5½K–16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brakes</td>
<td>Type</td>
<td>Internal expansion mechanical brakes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking brake type</td>
<td></td>
<td>Locking foot brake</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lining surface area</td>
<td>sq. in.</td>
<td>16.1 (104 cm²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lining (width x thickness x length)</td>
<td>in.</td>
<td>0.98 x 0.16 x 4.09 (25 x 4 x 104mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brake drum diameter</td>
<td>in.</td>
<td>4.3 (110mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method of activation</td>
<td></td>
<td>Main brakes by foot</td>
<td>Parking brake by hand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifting system</td>
<td>Type</td>
<td>Hydraulic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of hydraulic pump</td>
<td></td>
<td>Gear pump</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position of pump</td>
<td></td>
<td>In front of engine governor chamber</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump drive</td>
<td></td>
<td>Claw coupling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump discharge capacity</td>
<td>U.S.gal./min</td>
<td>3.76 (14.2l) at 2700 rpm</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
## IV. DISASSEMBLY SEQUENCE

<table>
<thead>
<tr>
<th>Division</th>
<th>Part Name</th>
<th>Illustration</th>
<th>Caution/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Installation</td>
<td>Installation stand</td>
<td><img src="image1" alt="Image" /></td>
<td>1) Utilize the top link hinge assembly bolt (12 x 45) to attach the installation stand (B).</td>
</tr>
<tr>
<td>stand</td>
<td>Installation stand</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 2. Tires          | Flange bolts        | ![Image](image2) | 2) Utilize the front axle bracket assembly bolt (12 x 30) to attach the disassembly stand (A). |
|                   | Pin 10 x 78         |              |                 |

3) Raise the rear tires by turning the adjusting bar of both stands (A) and (B). Prior to this adjustment loosen the flange bolts of the rear tire rim.

4) Be sure to adjust both stands (A) and (B) uniformly to ensure that the tractor remains level.

**CAUTION:** When attaching the front stand (A) be sure the front tires remain in contact with the ground.

Loosen the two flange bolts and remove the snap pin (10 x 78). The rear tire can then be removed.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Tightening torque ft-lbs (kg-m)</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Fuel injection pump</td>
<td>Set up the cylinder block in the normal position. Fuel oil pump: ○ Fit rack to notch and attach pump in position. ○ Insert injection timing control shims to prescribed thickness. The following should be done before the next step: ○ Lube oil pipe. ○ Two points on the cylinder block ○ Lube oil pressure switch ○ Lube oil dipstick</td>
<td></td>
</tr>
</tbody>
</table>
6.3 Control Valve Assembly

(1) Insert the (2) seal washer and the (3) "O" ring P14 into the (1) hydraulic cylinder case.

(2) Insert the (5) "O" ring P14 (2 pcs) into the (4) control valve.

(3) Attach the assembled parts of step 2 to the parts of step 1, and secure with the (6) (7) control valve set bolts (2 pcs).

NOTES:

a) Tighten the (6) (7) control valve set bolts (2 pcs) uniformly to the required torque.

b) Torque for the (6) (7) control valve set bolts: 33–40 ft-lbs (4.5–5.5 kg-m)

c) DO NOT turn or take apart the nut or spindle that is attached to the bottom of the (4) control valve.

6.4 Hydraulic Control Fork, Hydraulic Control Lever Assembly

(1) Attach the (2) circlip 14 to the (1) hydraulic control lever, and insert the (3) control lever liner and the (4) "O" ring S12.

(2) Place the (5) hydraulic control fork in the (6) hydraulic cylinder case, insert the assembled parts in step 1 in the (6) hydraulic cylinder case, and the (5) hydraulic control fork. Be sure to place the (8) spring pin 6 x 25 of the (7) control...