# SERVICE MANUAL

## MODEL L20A, L24 SERIES ENGINES

NISSAN

NISSAN MOTOR CO., LTD.
TOKYO, JAPAN

## SECTION SE

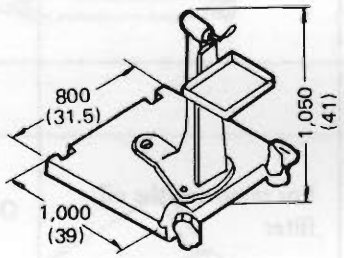
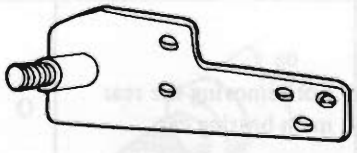
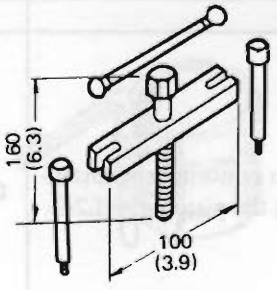
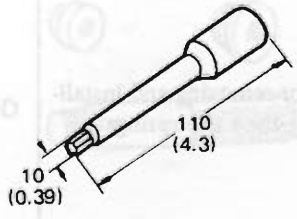
# SERVICE EQUIPMENT

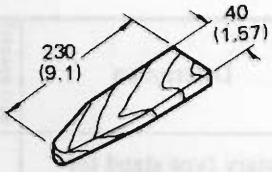
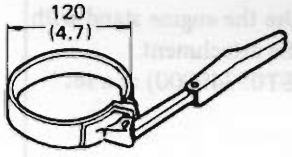
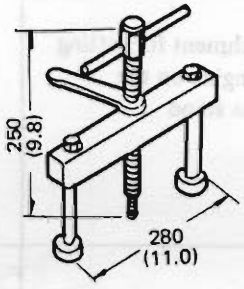
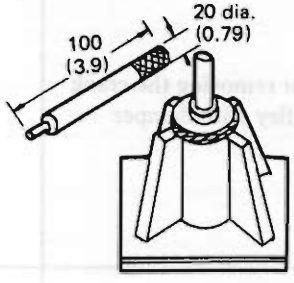
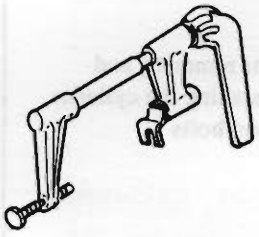
L20A, L24 ENGINE SPECIAL SERVICE TOOL ..... SE- 1

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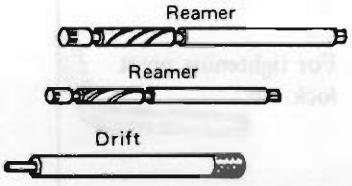
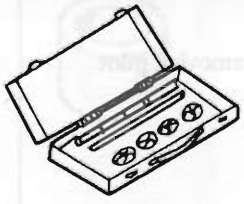
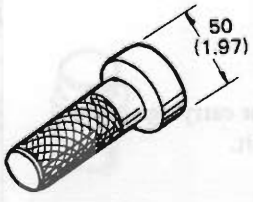
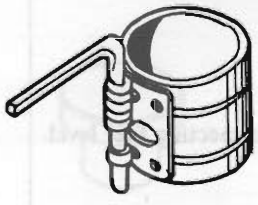
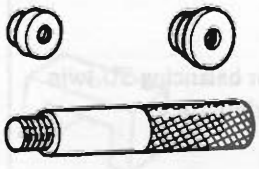
# L20A, L24 ENGINE SPECIAL SERVICE TOOL

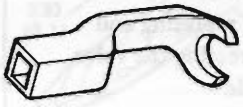
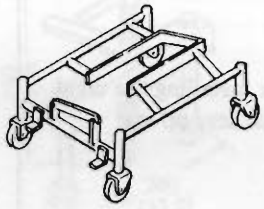
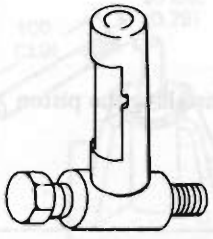
510 Special service tool set number ST09110000

| Tool number<br>Tool name | Figure<br>mm (in) | Description | 510 special service tool set | Applied model | S.M. reference page (See Fig. No.) |
|---|---|---|---|---|---|
| ST0501S000<br>├ ST05011000<br>└ ST05012000<br><br>Engine stand assembly<br>├ Stand body<br>└ Base plate |  | Rotary type stand for efficient, safe disassembly or reassembly of the engine<br><br>Use the engine stand with the attachment (ST05340000) as a set | | All | Fig. EM-11 |
| ST05340001<br><br>Engine attachment |  | Attachment for setting the engine on the engine stand | | L24<br>L20A | Fig. EM-11 |
| ST16540000<br><br>Crank pulley puller |  | For removing the crank pulley with damper | | L24<br>L20 | Fig. EM-17 |
| ST10120000<br><br>Cylinder head bolt wrench |  | For removing and installing the cylinder head bolts | O | L24<br>L20A<br>L16<br>L13 | Fig. EM-19<br>Fig. EM-82 |

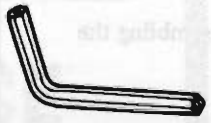
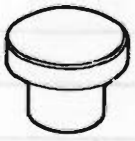
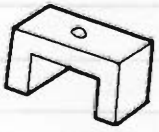
| Tool number<br>Tool name | Figure<br>mm (in) | Description | 510 special service tool set | Applied model | S.M. reference page (See Fig. No.) |
|---|---|---|---|---|---|
| ST17420001<br>Chain stopper |  | For supporting the timing chain | O | L24<br>L20A<br>L16<br>L13 | Fig. EM-18 |
| ST19320000<br>Oil filter wrench |  | For removing the oil filter | O | All | |
| ST1651S000<br>├ ST16511000<br>└ ST16512001<br>Crankshaft main bearing cap puller assembly<br>├ Puller body<br>└ Adapter |  | For removing the rear main bearing cap | O | L24<br>L20A<br>L16<br>L13 | Fig. EM-23 |
| ST13030001<br>Piston pin press stand |  | For removing and installing the piston pin (L24) | O | L24<br>L20A<br>L16<br>L13 | Fig. EM-27 |
| ST12070000<br>Valve lifter set |  | For removing and installing the valve springs | O | All | Fig. EM-30<br>Fig. EM-69 |

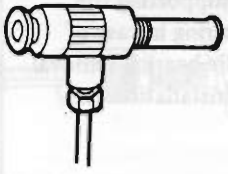
# SERVICE EQUIPMENT

| Tool number<br>Tool name | Figure<br>mm (in) | Description | 510 special service tool set | Applied model | S.M. reference page (See Fig. No.) |
|---|---|---|---|---|---|
| ST1103S000<br>├ ST11031000<br>├ ST11032000<br>└ ST11033000<br>Valve guide reamer assembly<br>├ Reamer [12.2ϕ (0.480ϕ)]<br>├ Reamer [8.0ϕ (0.3150ϕ)]<br>└ Drift bar |  | For replacing and correcting the valve guide | | L24<br>L20A<br>L20<br>L16<br>L13 | Fig. EM-40 |
| ST11650001<br>Valve seat cutter |  | For correcting the valve seat insert | | L24<br>L20A<br>L16<br>L13 | Fig. EM-41 |
| ST15310000<br>Crankshaft rear oil seal drift |  | For installing the crankshaft rear oil seal | | L24<br>L20A<br>L16<br>L13 | |
| EM03470000<br>Piston ring compressor |  | For installing the piston | | All | Fig. EM-79 |
| ST1524S000<br>├ ST15241000<br>├ ST15242000<br>└ ST15243000<br>Front oil seal drift assembly<br>├ Adapter (press in)<br>├ Adapter (press out)<br>└ Drift bar |  | For replacing oil seal | | L24<br>L20A | |

| Tool number<br>Tool name | Figure<br>mm (in) | Description | 510 special service tool set | Applied model | S.M. reference page<br>(See Fig. No.) |
|---|---|---|---|---|---|
| ST10640001<br>Pivot adjuster |  | For tightening pivot lock nut. | | L24<br>L20A<br>L16<br>L13 | |
| ST16610001<br>Pilot bush puller |  | For removing pilot bush. | | L24<br>L20A<br>L16<br>L13 | |
| ST07010000<br>Engine carrier |  | For carrying engine unit. | | L24<br>L20 | |
| ST19200000<br>Float level gauge |  | For inspecting fuel level. | | L24<br>L16<br>A12 | |
| EG1670000<br>Flow meter |  | For balancing SU twin carburetor | | L24<br>L16<br>U20<br>R | Fig. EF-40<br>Fig. EC-29 |

# SERVICE EQUIPMENT

| Tool number<br>Tool name | Figure<br>mm (in) | Description | 510 special service tool set | Applied model | S.M. reference page (See Fig. No.) |
|---|---|---|---|---|---|
| *ST19810000<br>Hexagon wrench |  | For removing and installing the rotor ring assembly | | L24 | Fig. EC-10 |
| *ST19820000<br>Support for disassembling rotor ring |  | For supporting the rotor ring in case of needle bearing removal and installation | | L24 | Fig. EC-11 |
| *ST19830000<br>Attachment for pushing out needle bearing |  | For removing the needle bearing | | L24 | Fig. EE-11 |
| *ST19840000<br>Attachment for pressing in needle bearing |  | For installing the needle bearing | | L24 | Page EC-11 |
| *ST19850000<br>Bridge for pulling out relief valve |  | Use as a bridge for removing the relief valve by the puller | | L24 | Fig. EC-13 |

| Tool number<br>Tool name | Figure<br>mm (in) | Description | 510 special service tool set | Applied model | S.M. reference page (See Fig. No.) |
|---|---|---|---|---|---|
| *ST19860000<br>Dummy shaft |  | For assembling the vanes | | L24 | Page EC-10 |
| *ST19870000<br>Air pump test gauge adapter |  | For checking the air pump performance | | L24 | Page EC-16 |

*: Emission control maintenance special tool

## SERVICE JOURNAL OR BULLETIN REFERENCE

| DATE | JOURNAL or BULLETIN No. | PAGE No. | SUBJECT |
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