

SERVICE MANUAL

MODEL

J13, J15 & J16 SERIES

ENGINES

SECTION SE

SERVICE EQUIPMENT

SE

SERVICE EQUIPMENT SE- 2

SERVICE EQUIPMENT

GENERAL SPECIFICATIONS

Special Tools play very important role in the maintenance of cars. These are essential to the safe, accurate and speedy servicing.

The working times listed in the column under FLAT RATE TIME in FLAT RATE SCHEDULE are computed based on the use of Special Tools. The identification code of maintenance tools is made up of 2 alphabetical letters and 8-digital figures.

The heading two letters roughly classifies tools or equipments as:

ST00000000: Special Tool

EM00000000: Engine Overhauling Machine

CLASSIFICATION OF SPECIAL TOOL

		Classification	
		Important	General
I.	Inspection and minor repair	1	4
II.	General disassembly and assembly	2	5
III.	Special disassembly and assembly	3	6

A. Important

- a. Exclusive with no alternative
- b. Parts likely will be damaged if repaired without special tool.
- c. Gauges

B. General

- a. To ease servicing
- I. Inspection and minor repair
 - a. Inspection and maintenance
 - b. Unit replacement

c. Minor unit disassembly

- II. General disassembly and assembly
 - a. General disassembly such as engine, differential, transmission.
- III. Special disassembly and assembly
 - a. Disassembly of exclusive parts such as automatic transmission and electrical accessories
 - b. Special work such as boring.
 - c. Work very rarely required

TOOL LIST

Tool Number	Tool Name	Class	Remark
Engine			
ST0501S000	Engine stand assembly	5	Former tool No. ST05010000
— ST05011000	Engine stand		
— ST05012000	Base		
ST05280000	Engine attachment	5	
ST11600001	Valve seat cutter set	3	Former tool No. ST11600000
ST12070000	Valve lifter	5	
ST13040000	Piston pin press stand	2	For J13 engine
ST13060000	Piston pin press stand	2	For J15 and J16 engines
ST16511000	Crankshaft main bearing cap puller	2	
ST16530000	Crankshaft gear puller	5	
ST16610001	Pilot bush puller	3	Former tool No. ST16610000
ST19320000	Oil filter wrench	1	
ST19550000	Distributor drive spindle puller	2	
EM03470000	Piston ring compressor	2	
EM03500000	Piston ring expander	5	