

GENERAL

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1-2 GENERAL — General Repair Instructions

GENERAL REPAIR INSTRUCTIONS

1. Use fender, seat, and floor covers to keep the car clean and prevent damage.
2. During disassembly, keep parts in order for reassembly.
3. Before performing electrical work, disconnect the cable to the positive (+) battery terminal.
4. Always replace gaskets and O-ring with new ones.
5. Always use sealer on gaskets to prevent leaks.
6. Carefully observe all specifications for bolt torques. Always use a torque wrench.
7. Use genuine Toyota parts.
8. If the vehicle is to be jacked up only at the front or rear end, be sure to block the wheels in order to ensure safety.
9. After the vehicle is jacked up, do not fail to support it on stands. It is extremely dangerous to do any work on the vehicle raised on jack alone, even for a small job that can be finished quickly.
10. Use of a special service tool (SST) may be required, depending on the nature of the repair. Be sure to use SST where specified and follow the proper work procedure. A list of the SST is found at the back of this manual.

GENERAL – Abbreviations Used In This Manual

1–3

ABBREVIATIONS USED IN THIS MANUAL

For convenience, the following codes are used in this manual.

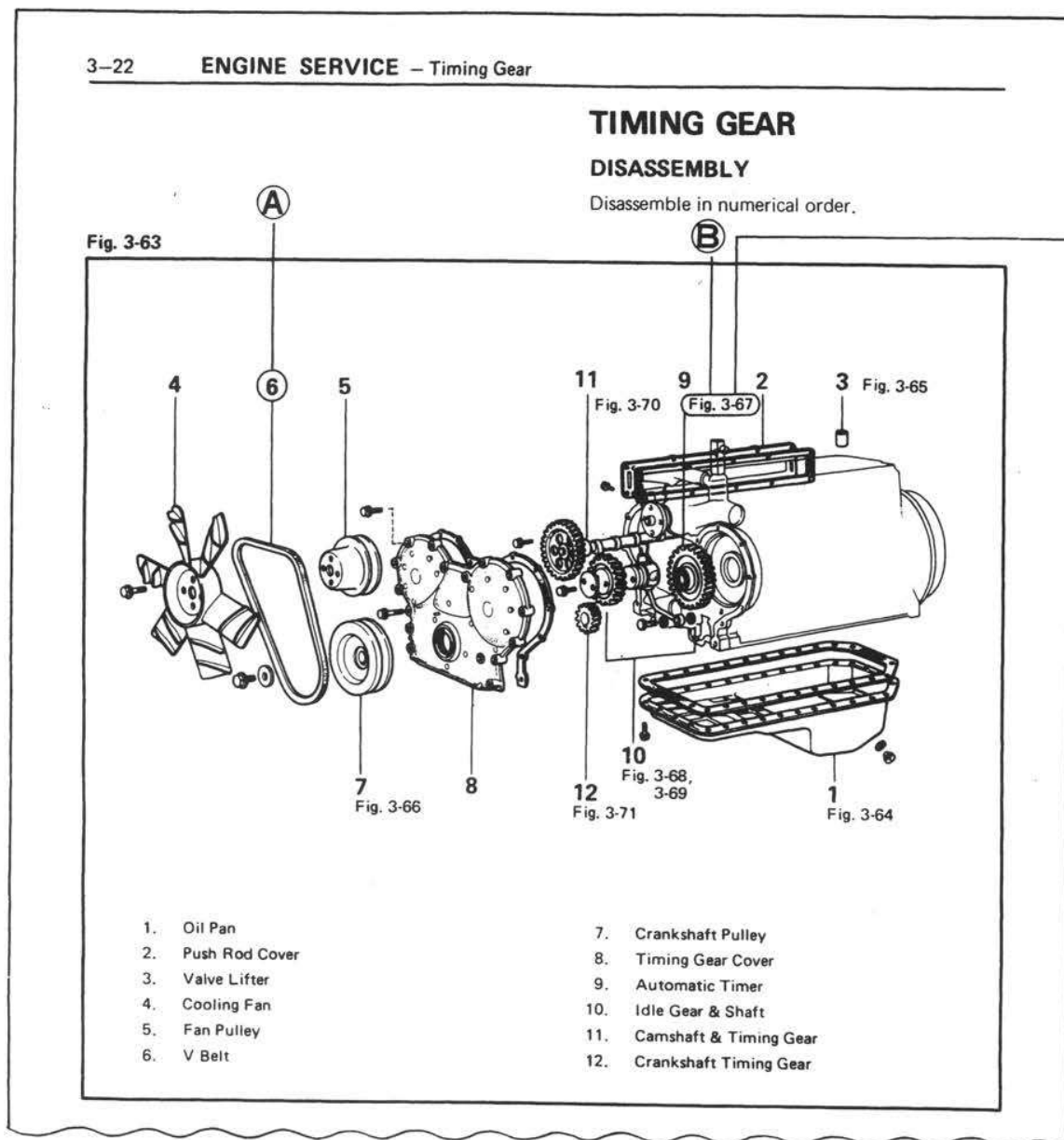
Abbreviation	Term	Definition
BDC	Bottom Dead Center	
BTDC	Before Top Dead Center	
EX.	Exhaust	
IN.	Intake	
MP	Multipurpose	Use in the case of MP grease.
O/S	Oversize	Sizes larger than STD are indicated as O/S.
SST	Special Service Tool	This term designates tools that have been manufactured specially for the servicing of this vehicle. Their part numbers are shown in the text enclosed by [].
STD	Standard	This term refers to the dimension of the part when originally manufactured.
TDC	Top Dead Center	
U/S	Undersize	Sizes smaller than STD are indicated as U/S.

1-4 GENERAL – How To Use This Manual

HOW TO USE THIS MANUAL

1. OVERVIEW ILLUSTRATION

Many service operations begin with an overview illustration as a general guide.



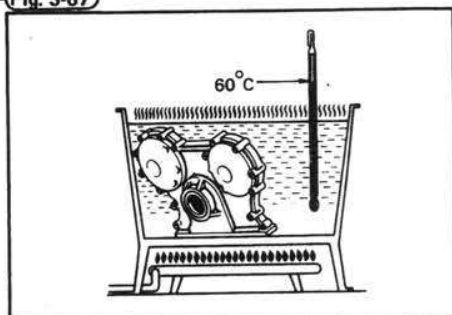
Ⓐ: The bold numerals show the order in which the components should be assembled.

Ⓑ: The figure numbers refer to more detailed instructions, and specifications.

2. ILLUSTRATED INSTRUCTIONS

All important steps in every service job are illustrated, but obvious steps are omitted to save space. Experienced technicians may only need to glance at the overview illustration and/or specifications.

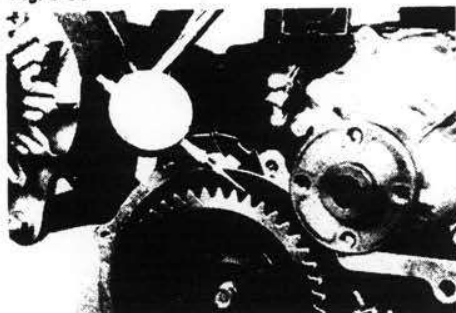
Fig. 3-67



Remove the automatic timer from the timing gear cover after heating the cover to about 60°C (140°F).

— Note —
For disassembly and assembly of the automatic timer, refer to "FUEL SYSTEM" section.

Fig. 3-68



Install the automatic timer to the injection pump spline shaft, and measure the timing gear backlashes.

Back lash

Camshaft, Timer to idle gear

Limit	0.3 mm (0.012 in.)
STD	0.06 – 0.09 mm (0.0024 – 0.0035 in.)

Crankshaft to idle gear

Limit	0.3 mm (0.012 in.)
STD	0.06 – 0.10 mm (0.0024 – 0.0039 in.)

- (C)**: The picture gives basic information on what to do in the step.
(D): A symbol is often used to explain the action required.
(E): The text explains how to do the step.
(F): Specifications, Notes, and Cautions are given in bold type so you won't miss them.

1-6 GENERAL – Symbol Marks

SYMBOL MARKS

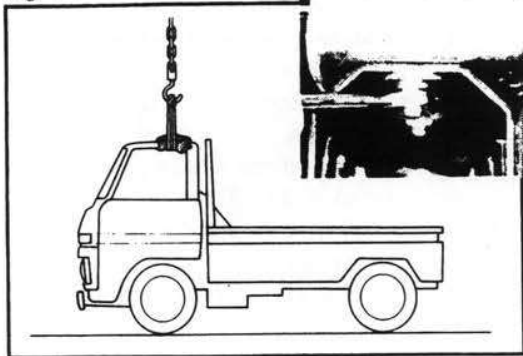
The following symbols have been adapted for simplicity and for easy comprehension.

**REMOVE or DISASSEMBLE****INSTALL or ASSEMBLE****INSPECT****MEASURE****TIGHTEN****CLEAN****IMPORTANT**

GENERAL — Front Cab Tilt Procedure

1-7

Fig. 1-1



FRONT CAB TILT PROCEDURE

When it is necessary to tilt the cab to perform major maintenance procedures, either of the following two methods may be used.

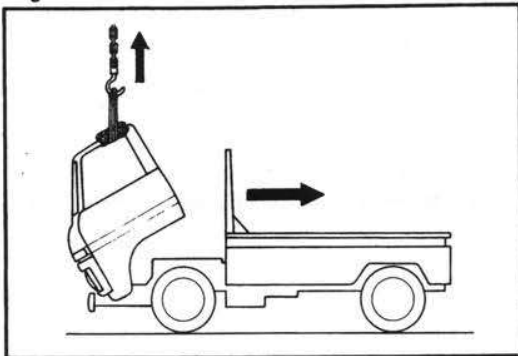
— Note —

Insure working safety at all times.

HOIST METHOD

1. Remove the cab mounting bolts.
2. Install the hoist to the cab.

Fig. 1-2

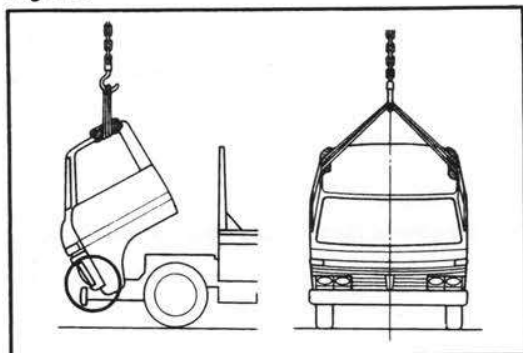


3. Insuring that the hoist is kept perpendicular, tilt the cab by slowly pushing the vehicle backwards.

— Note —

Be careful not to damage any wiring or hoses.

Fig. 1-3

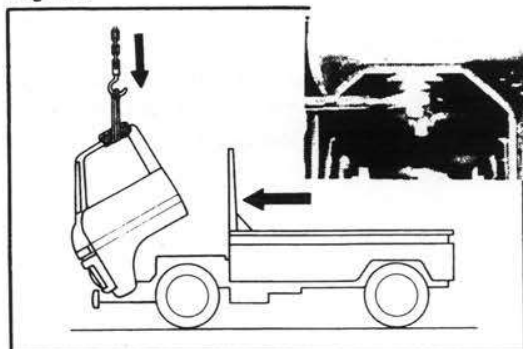


4. Insure that there is no interference between the front grill and bumper.

— Note —

Always keep the cab supported by the hoist during work.

Fig. 1-4



5. To lower the cab, slowly push the vehicle forward.
6. Install the mounting bolts after the cab has fully returned to its original position.

1-8 GENERAL — Front Cab Tilt Procedure

Fig. 1-5

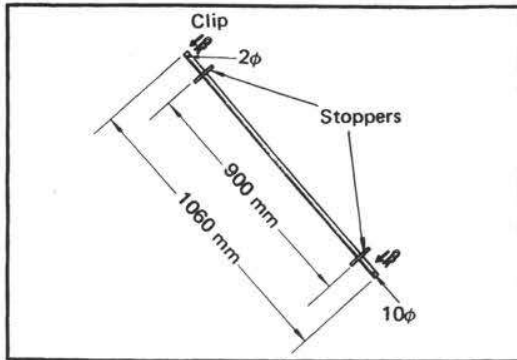


Fig. 1-6

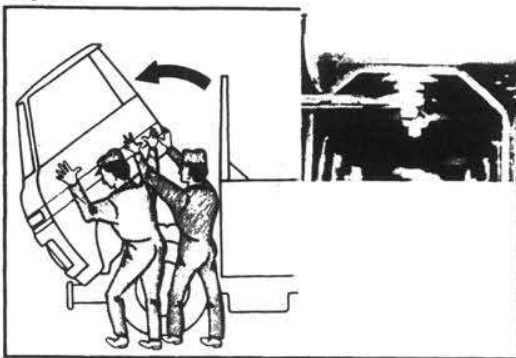


Fig. 1-7

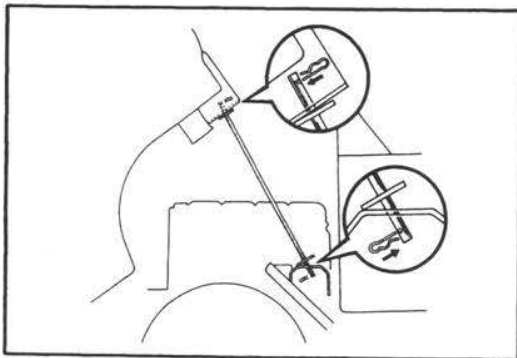
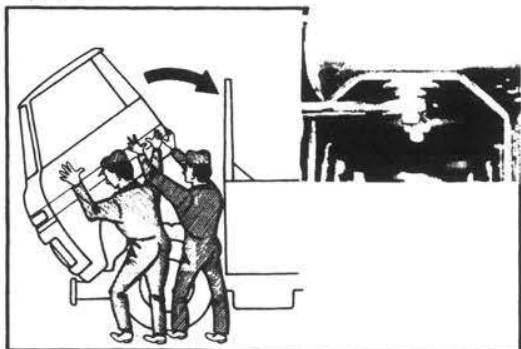


Fig. 1-8



LOCKING STAY METHOD

1. In advance, prepare a locking stay as shown in the figure.
 - Thickness 10 mm
 - Length 1060 mm
 - Clip (clutch release bearing clip) part no. 31232-30010
 - Weld two stoppers positioned 900 mm apart.
 - Drill a 2 mm hole at each end.

2. Remove the cab mounting bolts.
3. With 2 persons on both the left and right side, lift the upward.

— Note —

Be careful not to damage any wiring or hoses.

4. Insuring that there is no interference between the front bumper and grill, install the locking stay in the mounting bolt holes.

— Note —

Be careful that the cab does not overturn.

5. After necessary work is completed, the cab should be lowered slowly by four persons.
6. Install the mounting bolts after the cab has been fully lowered to its original position.

