

## Factorytaiwan K4N

# Factorytaiwan Piston Set for Mitsubishi K4N Engine - Installation Manual

## 1. INTRODUCTION

This manual provides essential information for the proper installation and handling of the Factorytaiwan Piston Set designed for Mitsubishi K4N engines. It is intended for qualified technicians and individuals with experience in engine repair. Adherence to these guidelines is crucial for ensuring the longevity and optimal performance of your engine. Always consult the official Mitsubishi K4N engine service manual for detailed procedures and torque specifications.

## 2. PRODUCT OVERVIEW

The Factorytaiwan Piston Set is a high-quality replacement component manufactured in Taiwan, specifically designed for Mitsubishi K4N diesel engines. This set includes four standard-sized pistons, along with their corresponding pins and clips, to ensure optimal engine performance and longevity. These pistons are engineered to meet or exceed original equipment specifications, providing a reliable solution for engine rebuilds or repairs.



*Image 2.1: Complete Factorytaiwan Piston Set for Mitsubishi K4N Engine.*

### 3. SAFETY INFORMATION

Always prioritize safety when working on engine components. Failure to follow safety precautions can result in serious injury or damage to the engine.

- **Wear Personal Protective Equipment (PPE):** Always wear safety glasses, gloves, and appropriate work attire to protect against chemicals, sharp edges, and hot surfaces.
- **Consult Service Manual:** Refer to the official Mitsubishi K4N engine service manual for specific disassembly, assembly, and torque procedures.
- **Use Proper Tools:** Ensure all tools are in good condition and are appropriate for the task.
- **Work in a Well-Ventilated Area:** Ensure adequate ventilation when working with cleaning solvents or lubricants.
- **Maintain a Clean Work Environment:** Keep the work area clean and free of debris to prevent contamination of engine components.
- **Handle Components Carefully:** Pistons and related parts are precision components. Avoid dropping or striking them.

### 4. PACKAGE CONTENTS

Upon opening the package, verify that all components are present and undamaged before proceeding with installation. If any items are missing or damaged, contact your supplier immediately.

- 4 x Pistons (Standard Size)
- 4 x Piston Pins
- 8 x Piston Clips



*Image 4.1: Single Piston (Front View)*



*Image 4.2: Piston Pin*



Image 4.3: Piston Clips

## 5. INSTALLATION GUIDELINES

The installation of pistons is a critical engine repair procedure that requires specialized knowledge and tools. It is highly recommended that installation be performed by a certified mechanic or an experienced engine builder.

1. **Engine Disassembly:** Follow the Mitsubishi K4N service manual for proper engine disassembly, including removal of cylinder head, oil pan, connecting rods, and old pistons.
2. **Cylinder Inspection and Preparation:** Inspect cylinder bores for wear, scoring, or damage. Hone cylinders as necessary to achieve the correct surface finish for new piston rings. Ensure bores are thoroughly cleaned after honing.
3. **Piston Ring Installation:** Install new piston rings onto the pistons according to the ring manufacturer's instructions and the engine service manual. Pay close attention to ring orientation (top/bottom) and gap placement.
4. **Connecting Rod Assembly:** Assemble the new pistons to the connecting rods using the provided piston pins and clips. Ensure clips are securely seated in their grooves.
5. **Lubrication:** Liberally lubricate piston skirts, piston pins, cylinder walls, and connecting rod bearings with clean engine oil before installation.
6. **Piston Orientation:** Carefully note the correct orientation of each piston relative to the engine block (usually indicated by a mark on the piston crown). Incorrect orientation can lead to engine damage.
7. **Installation into Cylinders:** Use a piston ring compressor to carefully guide each piston assembly into its respective cylinder bore. Ensure the connecting rod aligns with the crankshaft journal.
8. **Connecting Rod Bearing Caps:** Install connecting rod bearing caps and tighten fasteners to the torque specifications provided in the Mitsubishi K4N service manual.

9. **Reassembly:** Reassemble the remaining engine components, ensuring all fasteners are torqued to specification and all fluid passages are clear.

**Important:** Always refer to the specific torque values and procedures outlined in the official Mitsubishi K4N engine service manual. Deviations can lead to engine failure.

## 6. TECHNICAL SPECIFICATIONS

Below are the key specifications for the Factorytaiwan Piston Set for Mitsubishi K4N engines:

Specification	Value
Engine Model Compatibility	Mitsubishi K4N
Piston Bore Size	90 mm
Piston Length	86.5 mm
Piston Size (STD)	86.5x33, 27/2x68
Manufacturer Part Number	30H17-02110
Package Dimensions	7.8 x 7.76 x 4.65 inches
Item Weight	7.48 pounds
Manufacturer	Aftermarket New (Factorytaiwan)

## 7. WARRANTY AND SUPPORT

Information regarding specific warranty terms for this Factorytaiwan Piston Set is not provided within this manual. For warranty inquiries, technical support, or assistance with product-related issues, please contact your original supplier or the manufacturer directly. Ensure you have your purchase details and the product's manufacturer part number (30H17-02110) available when seeking support.