

OPERATION MANUAL

Robex 16-7

SER. NO. HY1670001~

 **HYUNDAI**
HEAVY INDUSTRIES CO.,LTD.

<https://marengine.com/r16-7-excavator>

INTRODUCTION

WARNING

Read this manual carefully before operating the machine to ensure safe and optimum running conditions. If you do not understand any of the points in the manual, or the machine breaks down, contact your dealer. In particular, attention needs to be paid to the following points.

- Read this operation manual if you have any questions or doubts on any point to ensure proper and safety excavator operation.
 - Keep this operation manual in the excavator at any time to ensure readily access to it in case a need for it arises.
 - Be sure to hand over this operation manual to the new owner if the ownership of the excavator is to be transferred.
 - Make every possible effort to ensure proper and safety operation of the excavator.
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- Note that a portion of the contents of this instruction manual may differ from the excavator you have purchased, which is mainly due to the improvements adopted for it.
 - Consult our marketing staff if you have any questions or comments on this operation manual.

HOW TO USE THE OPERATION MANUAL

Read this manual carefully before operating the machine.
This chapter describes the marks in the operation manual.

Symbols:

DANGER

This symbol shows an immediate hazard that will cause death or severe injury if the instruction is not observed.

WARNING

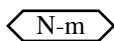
This symbol shows a hazard that can cause death or severe injury if the instruction is not observed.

CAUTION

This symbol shows a hazard that can cause injury of machine damage if the instruction is not observed.

IMPORTANT

This symbol shows a hazard that can cause damages to the excavator or reduce its service life if the instruction is not observed.



This symbol shows the tightening torque for a given bolt that needs to be strictly observed during the assembly.



This symbol shows related matters or the referring page.



This symbol shows the amount of grease or oil that needs to be filled.

- If you notice any ambiguous points in this manual, consult your dealer.
- The descriptions and figures in this operation manual may not coincide with the machine due to changes in the specifications.



CONTENTS

OPERATION

Safety Decals	1
Basic Precautions on Safety	3
Safety Precautionary Notes before Start	4
Safety Precautions during Operation	6
Safety Precautions during Inspection and Maintenance	15
Safety Post Operational Caution	18
Part Names	19
Explanation of Each Device	21
Operation	28
Operational Precautions	32
Transporting by Truck	38
Machine Traction	40
How to Hoist a Machine	41
Cold Weather or During-Winter Operations	43
Long-Period Storage	45

INSPECTION AND MAINTENANCE

Ordering Parts and Servicing Guidelines	46
Inspections	47
Maintenance after the First 50 Service Hours (New Machine)	52
Maintenance after the First 100 Service Hours (New Machine)	53
Maintenance Every 50 Service Hours	54
Maintenance Every 100 Service Hours	56
Maintenance Every 250 Service Hours	57
Maintenance Every 500 Service Hours	58
Maintenance Every 1000 Service Hours	60
To Pressurize	61
Inspection and Maintenance Procedures for Engine Parts	63
Inspection and Maintenance Procedures	64
Periodical Inspections and Maintenance List	68
Lubricants	70

OTHERS

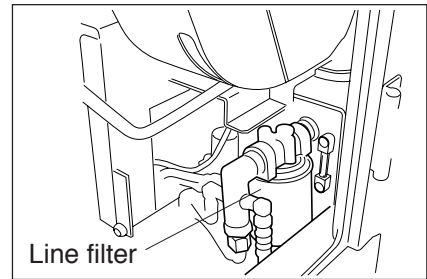
Dimensions and Specifications	74
Hydraulic Circuit	76
Electric Circuit	77

MAINTENANCE AFTER THE FIRST 100 SERVICE HOURS (FOR NEW MACHINE)

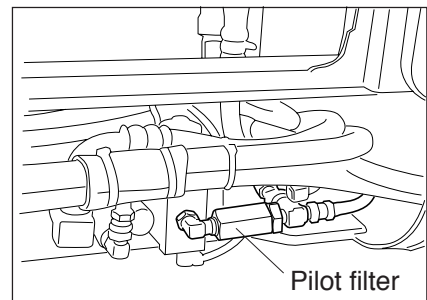
1. Replacing the line filter element
Remove the filter with a filter wrench and replace it with new one.

IMPORTANT

Before replacing the filter, be sure to open the hydraulic oil tank to bleed the filter.



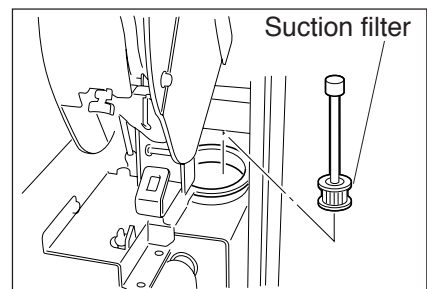
2. Cleaning the pilot filter
Remove the plug from under the floor plate with a wrench (width across flats:27 mm) and pull out the element.
Clean the element with cleaning oil and remove all dirt.



3. Cleaning the suction filter
Remove the suction filter from the hydraulic oil tank. Clean the filter with diesel fuel or kerosene to remove the dirt. If the strainer is broken, replace it with new one.

IMPORTANT

To reinstall the lid, set the O-ring securely into the flange groove in order to prevent a leak of hydraulic oil.



CAUTION

Do not perform this operation while the hydraulic oil is still hot, to avoid being burned.

MAINTENANCE EVERY 50 SERVICE HOURS

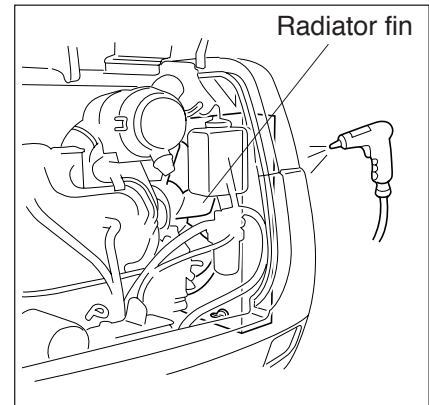
(PERFORM THE MAINTENANCE AT THE SAME TIME IF IT IS CONTAINED IN THE DAILY MAINTENANCE.)

Perform the following maintenance after the first 50 service hours.

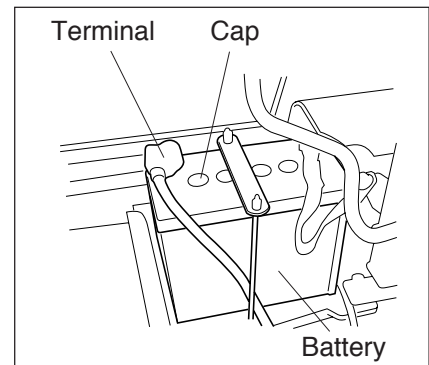
1. Cleaning the radiator fins
Clean the radiator fins using pressurised air and steam.

⚠ WARNING

If the fins remain dirty, the engine will overheat.



2. Checking the amount of battery electrolyte
Loose the bolt which fix the battery cover to take out the battery.
The color of the indicator on the battery shows battery's condition. Blue is OK. Red is necessary to charging. White is necessary to add distilled water.
(1) Visually check whether the level of the battery electrolyte in each block is between the upper and lower limits.
(2) If it is under the lower limit, take off the cap to add battery electrolyte or distilled water to the upper limit in each block.



⚠ CAUTION

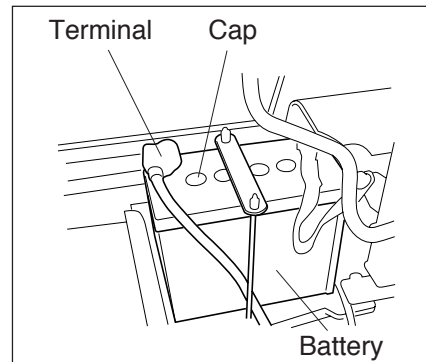
- When inspecting the batteries, be sure to stop the engine.
- When dealing with the batteries, you must put on a protect glasses.
- Deluted sulfuric acid as electrolyte is dangerous substance. Be careful not to strain your eyes, hands, clothes and metals. If it gets in your eyes, wash with a large amount of water at once. Then go and see a doctor.
- As highly flammable hydrogen gas is rising from the batteries, do not make a spark or use fire in any other way near the batteries.
- When disconnecting the terminals, start with \ominus terminal. Contrarily, when connecting them, connect the \ominus terminal last.

MAINTENANCE EVERY 50 SERVICE HOURS

3. Inspecting the specific gravity of the fluid
Measure the specific gravity of the electrolyte. If it is lower than the specified values, recharge the battery. At this time, clean and connect the terminals, and then coat with grease.

⚠ CAUTION

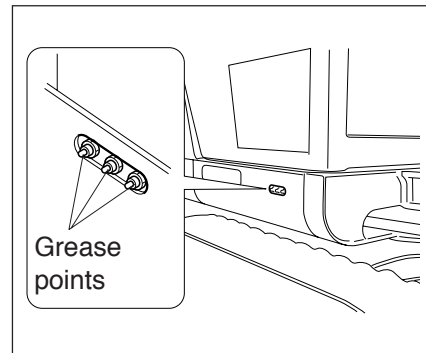
- Always stop the engine while the work.
- Do not coat with grease before connecting the terminals.



4. Greasing slew bearing
Use a grease gun to lubricate the grease nipples of screw bearing.

⚠ WARNING

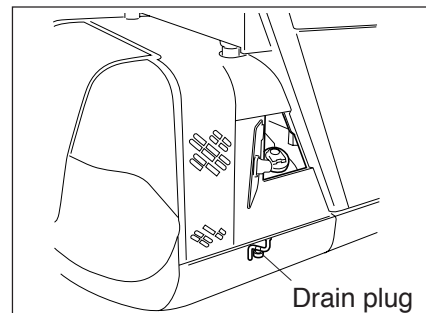
After working in water, give grease without fail.



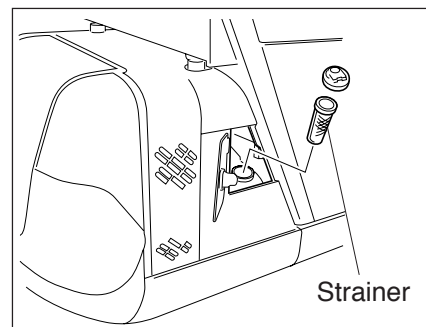
5. Eliminating the sediment in the fuel tank
Open the drain cock to eliminate the sediment and drain the water.

IMPORTANT

It is effective to do this before starting the engine.



6. Checking the fuel tank strainer
Remove the tank cap, remove any loose dirt on the strainer and clean it with diesel fuel.

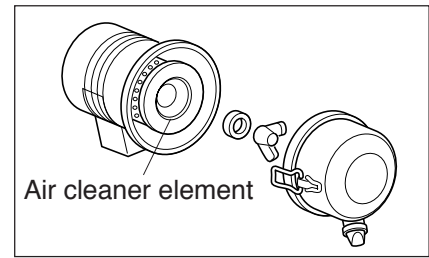


MAINTENANCE EVERY 100 SERVICE HOURS

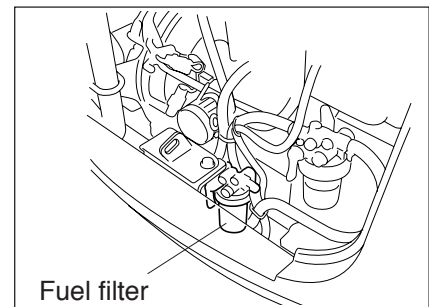
1. Inspecting and cleaning the air cleaner
Clean the dust-cover. Inspect and clean the element.
☞ For details refer to page 64.

⚠ WARNING

After stopping the engine, clean them.



2. Cleaning the fuel filter element.
You can take out the element by removing the filter ring nut. Clean the filter with diesel fuel.



Diesel Engines

ABS	Agco-Sisu
Akasaka	Baudouin
BMW	Bukh
Caterpillar	CHN 25/34
Cummins	Daihatsu
Detroit	Deutz
Doosan-Daewoo	Fiat
Ford	GE
Grenaa	Guascor
Hanshin	Hatz
Hino	Honda
Hyundai	Isotta
Isuzu	Iveco
John-Deere	Kelvin
Kioti	Komatsu
Kubota	Liebherr
Lister	Lombardini
MAK	MAN B&W
Mercedes	Mercruiser
Mirrlees BS	Mitsubishi
MTU	MWM
Niigata	Paxman
Perkins	Pielstick
Rolls / Bergen	Ruggerini
Ruston	Scania
Shibaura	Sisu-Valmet
SKL	Smit-Bolnes
Sole	Stork
VM-Motori	Volvo
Volvo Penta	Westerbeke
Wichmann	Yanmar

Machinery

ABG	Airman
Akerman	Ammann
Astra	Atlas Copco
Atlas Weyha.	Atlet
Bell	Bendi
Bigjoe	Bobcat
Bomag	BT
Carelift	Case
Caterpillar	Cesab
Challenger	Champion
Claas	Clark
Combilift	Crown
Daewoo-Doosan	Demag
Deutz-Fahr	Dressta

Machinery

Drott	Dynapack
Extec	Faun
Fendt	Fiat
Fiatallis	Flexicoil
Furukawa	Gehl
Genie	Grove-gmk
Halla	Hamm
Hangcha	Hanix
Hanomag	Hartl
Haulpack	Hiab
Hidromek	Hino truck
Hitachi	Hyster
Hyundai	IHI
Ingersoll-rand	JCB
JLG	John-Deere
Jungheinrich	Kalmar
Kato	Kioti
Kleeman	Kobelco
Komatsu	Kramer
Kubota	Lamborghini
Landini	Liebherr
Linde	Link-belt
Manitou	Massey-Ferg.
Mccormick	MDI-Yutani
Mitsubishi	Moxy
Mustang	Neusson
New-Holland	Nichiyu
Nissan	OK
OM-Pimespo	others-tech
Pel-Job	PH-mining
Poclain	Powerscreen
Same	Samsung
Sandvik	Scania
Schaefer	Schramm
Sennebogen	Shangli
Shibaura	Steiger
Steinbock	Steyr
Still	Sumitomo
Super-pac	Tadano
Takeuchi	TCM
Terex	Toyota
Valpadana	Venieri
Versatile	Vogele
Volvo	Weidemann
Wirtgen	Yale
YAM	Yanmar