

After Service Instruction

Model Name

M140X1,M140X2,M200X3,M300X3

Task Name

M-Series Chip Conveyor and Coolant Tank Cleaning Procedure

Management No. **ASI-112**

This task should be carried out only by those who meet the following requirements.

Also, please understand the contents of "Precautions for Use" in advance before performing the work.

"Trained maintenance personnel"

- Persons who have knowledge of the electrical circuits of this machine and have received electrical safety education
- Persons who have received maintenance work education
- Persons who have been trained in the handling of high-pressure air and understand the piping of this machine

Precautions for Use

- Use of information, etc.

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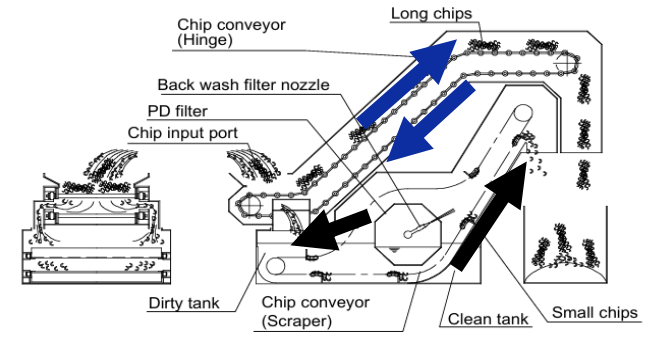
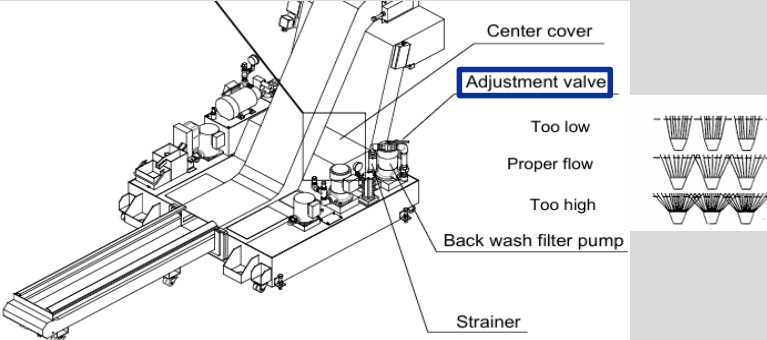
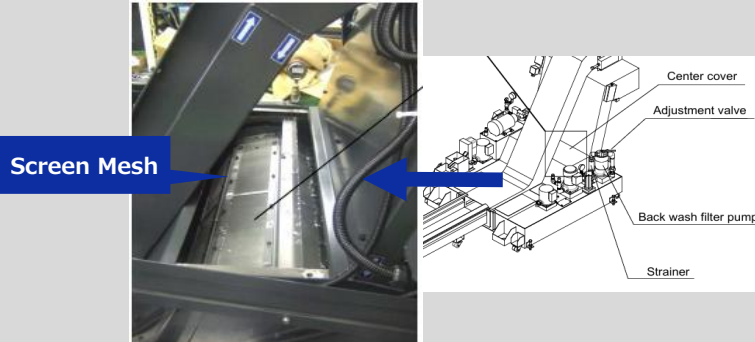
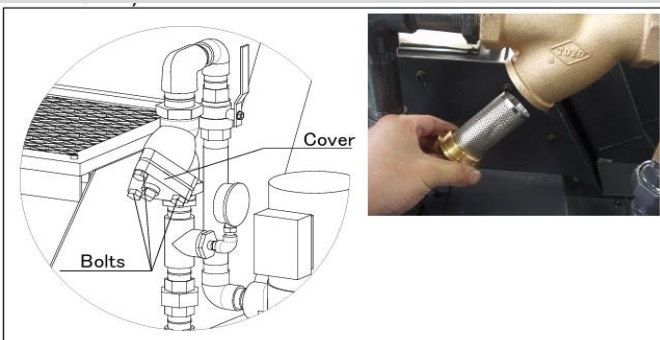
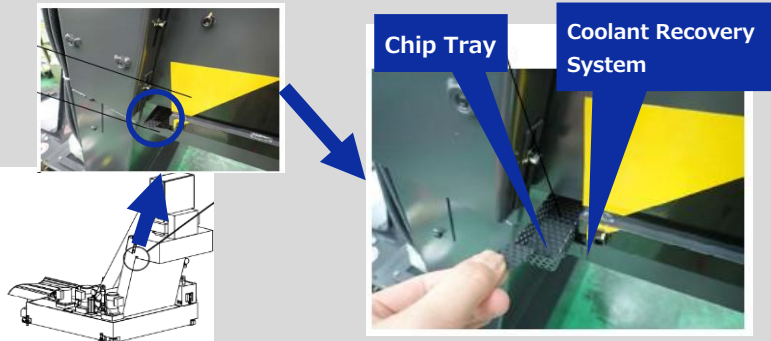
Public Document

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Work Procedure (Key Points of Work, Reasons for Key Points, Safety, Tips)	Detailed Diagram (Photos, Illustrations, Balloon Diagrams, etc.)
1 Understanding the Chip Conveyor Structure The hinge scraper-type chip conveyor is structured as shown in the figure on the right. Fine chips not collected by the hinge chip conveyor are collected by the scraper chip conveyor. Fine chips trapped by the PD filter are flushed by the filter backwash coolant and discharged from the conveyor. The PD filter rotates together with the conveyor. The operating direction of each conveyor is shown by the arrows in the figure on the right.	
2 PD Filter Backwash Coolant Flow Rate Adjust the backwash coolant flow rate using the adjustment valve on the conveyor. Excessive flow may wash away chips collected by the scraper conveyor. Insufficient flow may prevent chips from being removed from the PD filter.	
3 Screen Mesh Cleaning The PD filter is equipped with screen mesh panels on each side. Remove the center cover and clean the screen mesh with compressed air, or replace it as needed. CAUTION A clogged PD filter may cause: • Insufficient machining coolant supply • Coolant overflow in the dirty chamber	
4 Strainer Cleaning This strainer is used for the PD filter backwash coolant. If the strainer becomes clogged, the screen mesh may also clog, causing similar problems. Remove the retaining bolts and clean the strainer with compressed air, or replace it as needed. CAUTION Do not overtighten the retaining bolts. Tightening Torque: 29-34 N·m	
5 Chip Tray Cleaning The chip tray is located beneath the chip conveyor discharge outlet. If chips accumulate in the chip tray, the coolant recovery system may not function properly, causing coolant to overflow and be discharged together with the chips. Remove the chip tray and clean out any accumulated chips.	

Total Work Estimated
Time (minutes)
60minutes

Required Tools

1 Hex Key, Wrench

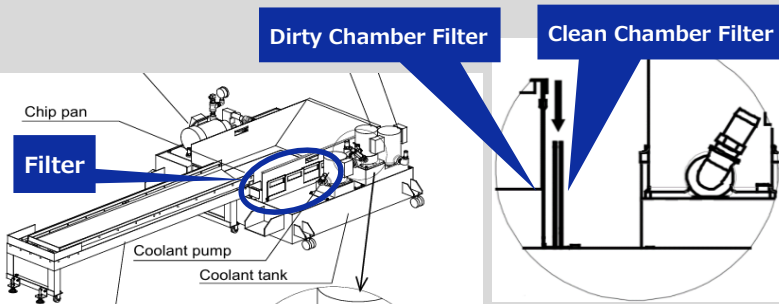
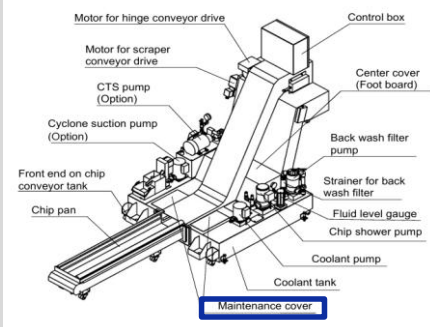
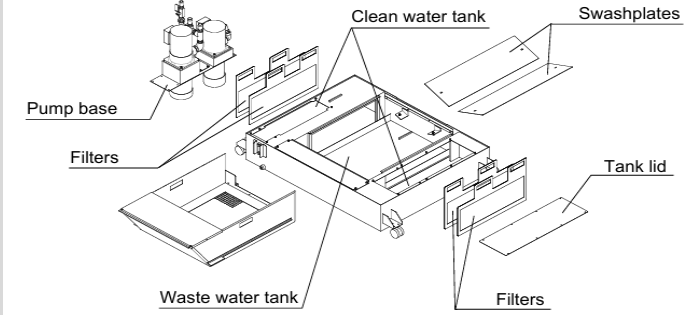
2 Torque Wrench

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	Work Procedure (Key Points of Work, Reasons for Key Points, Safety, Tips)	Detailed Diagram (Photos, Illustrations, Balloon Diagrams, etc.)
6	Plate Filter Cleaning Procedure Remove the plate filter and clean off any chips or sludge using compressed air. Clean and reinstall the two plate filters one at a time. CAUTION Cleaning both filters at the same time may allow chips to enter the clean coolant chamber causing pump damage or piping blockage.	
7	Coolant Tank Cleaning Procedure ① Open the two maintenance covers at the front of the tank and remove any chips or debris. If chips have entered the pumps, it is recommended to drain the coolant and clean the entire coolant tank.	
8	Coolant Tank Cleaning Procedure ② When cleaning the entire coolant tank, remove the tank cover panels as shown in the figure on the right. Inspect the coolant tank monthly and clean it as needed.	
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