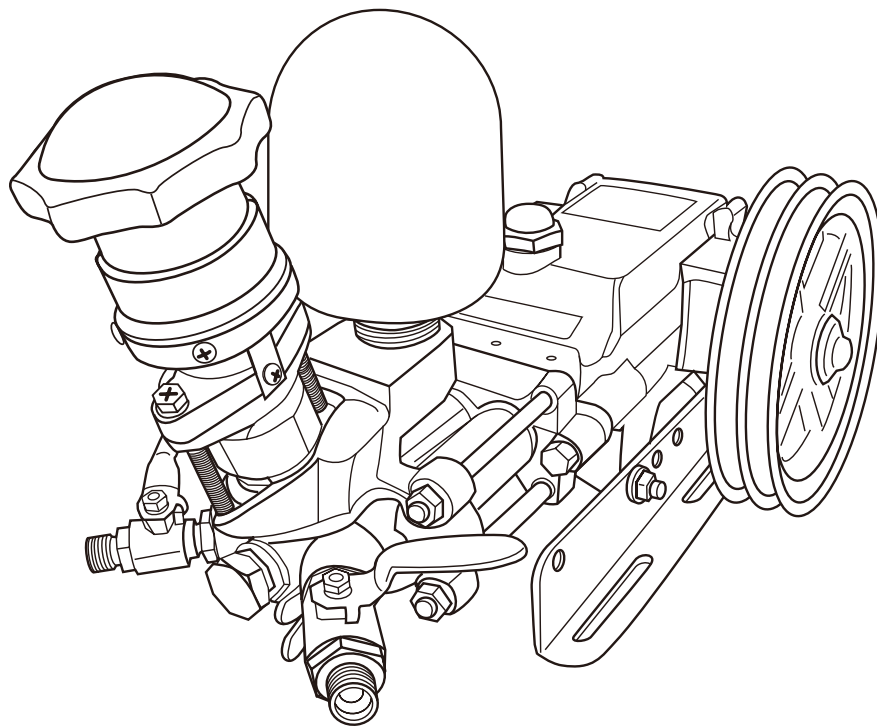


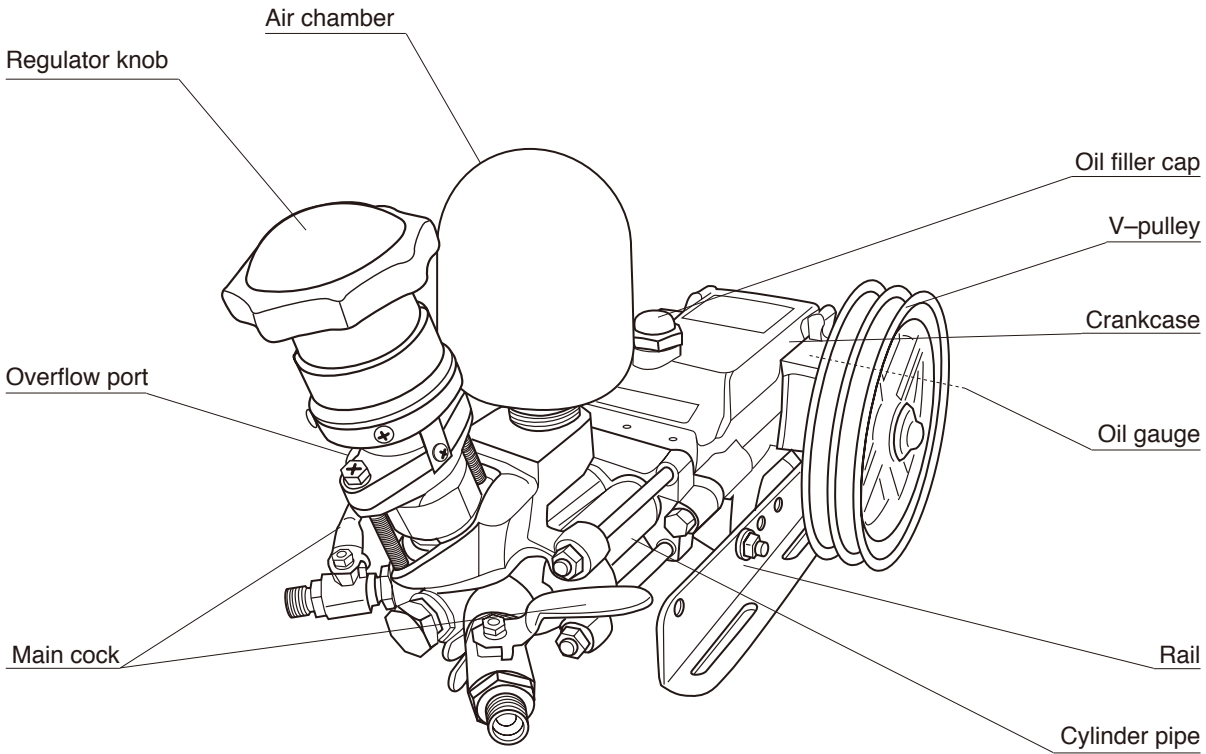


POWER SPRAYER MS331
FUMIGADORA DE MOTOR MS331



INSTRUCTION MANUAL
MANUAL DE INSTRUCCIONES

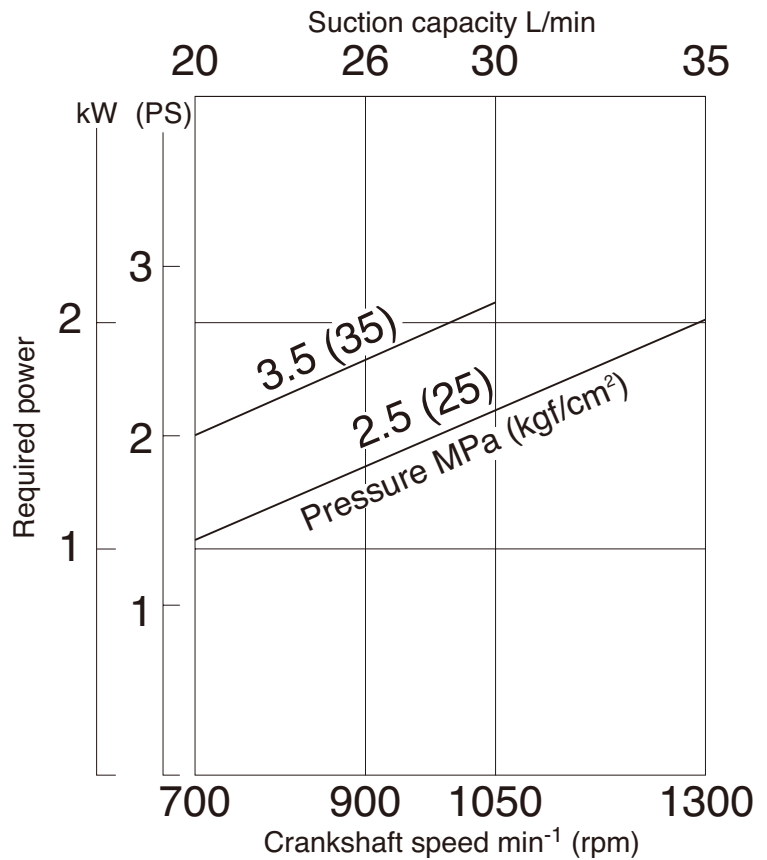
Main parts nomenclature



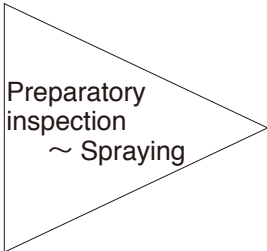
Specifications

Model		MS331		
Dimensions	Overall length (mm)	422		
	Overall width (mm)	243		
	Overall height (mm)	291		
Weight (kg)		9.2		
		Maximum	Irrigation	
Specifications	Crankshaft speed (rpm)	1050	1300	
	Suction capacity (L/min)	30	35	
	Pressure	MPa	3.5	2.5
		(kgf/cm ²)	(35)	(25)
	Required power	kW	2.0	1.9
(PS)		(2.8)	(2.6)	
Suction hose		ø19, G ³ / ₄		
Overflow hose		ø13, G ¹ / ₂		
Main cock		G ³ / ₈ , G ¹ / ₄		
Lubricating oil		SAE10W-30		
Lubricant volume (L)		0.42		

Performance curve



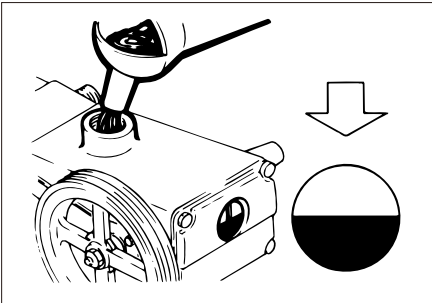
Operating procedure



Be sure to check all the screws for tightness.

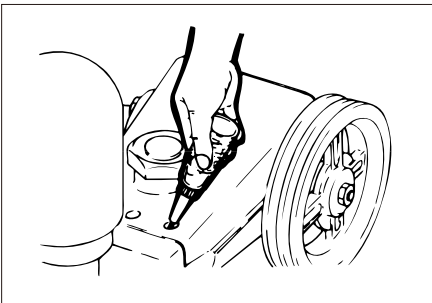
1 Lubricating oil.

Fill the lubricating oil into the crankcase up to the center level of the gauge.



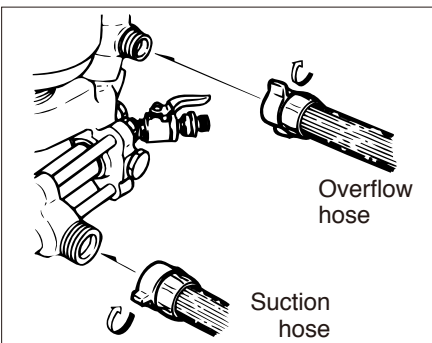
2 Oiling

Feed a few drops of oil into the 3 holes of the crankcase.

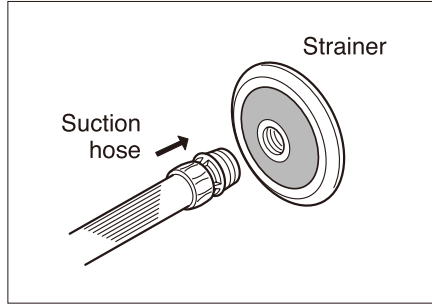


3 Installing the suction hose and overflow hose.

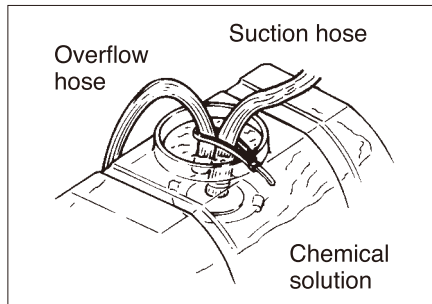
Be sure to be equipped packing.



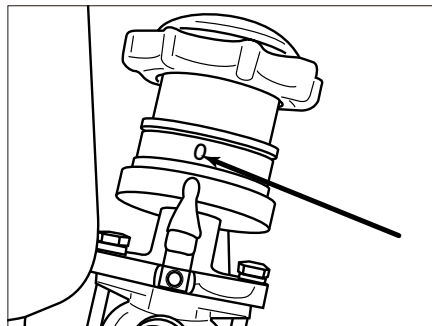
4 Attaching the strainer for the hose coupling.



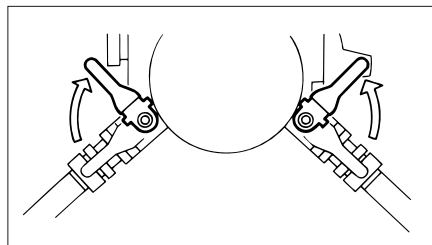
5 Insert the suction hose and overflow hose into the chemical tank.



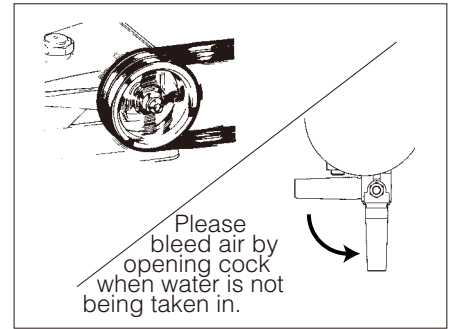
6 Coincide knob of pressure regulator with 0.



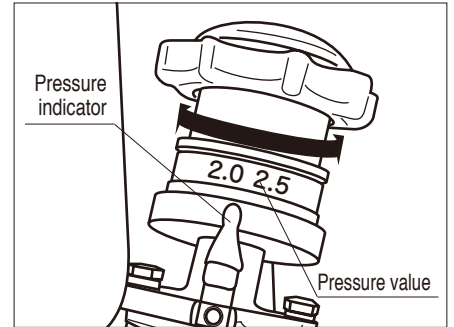
7 Close the valve.



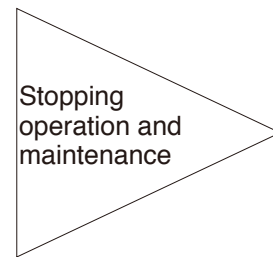
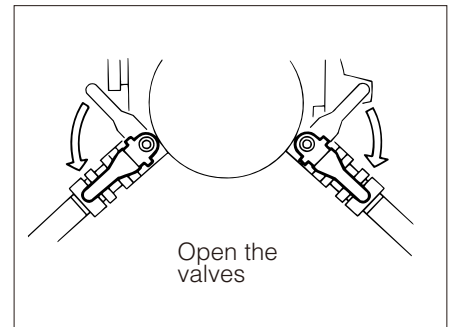
8 Starting



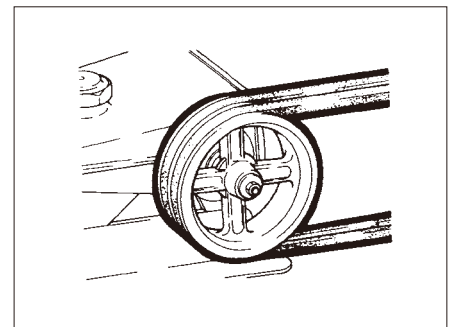
9 Pressure regulation.



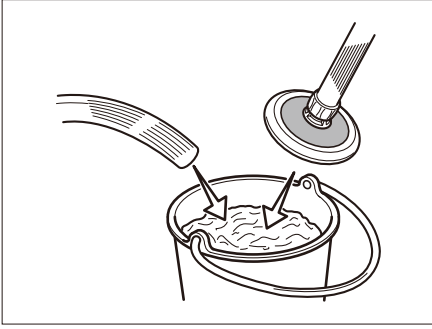
10 Spraying



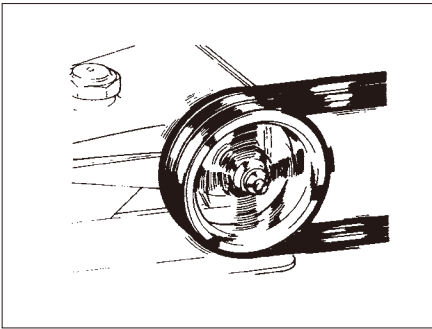
11 Stopping spraying



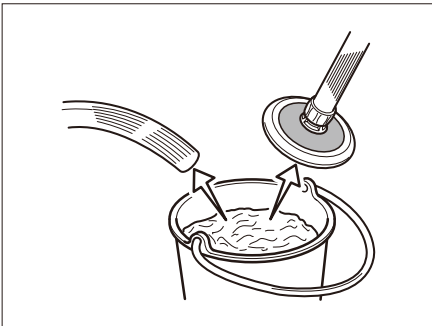
12 Wash up with the clean water after spraying.



13 Running the Power Sprayer.

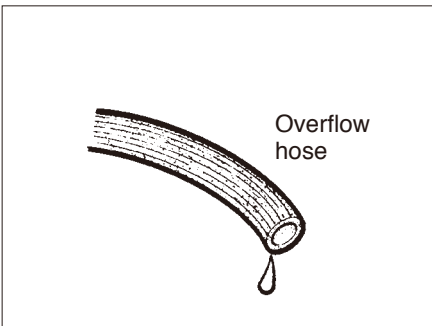


14 Continue to run the sprayer for one minute after raising the strainer.

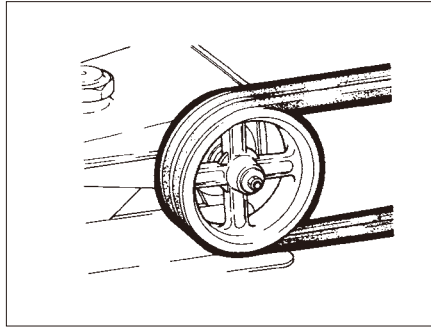


15 Caution !!

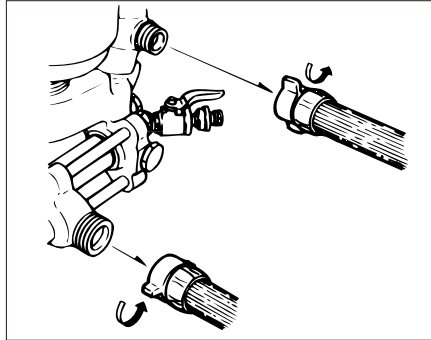
Let idle running be allowed within a minute for protection pump.



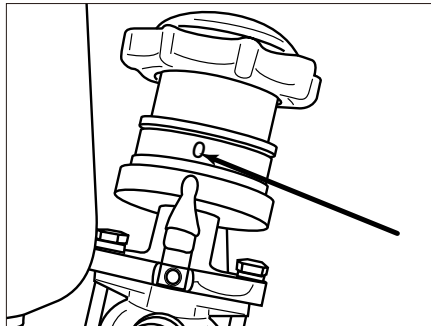
16 Stopping the operation.



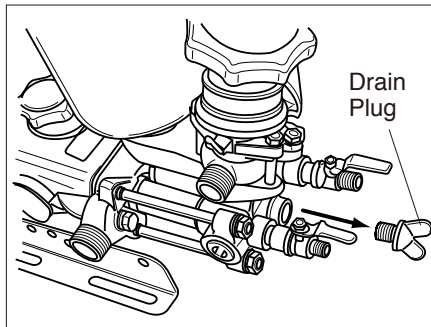
17 Detach the suction hose and overflow hose.



18 Resume knob to 0 position.



Protection from freezing.

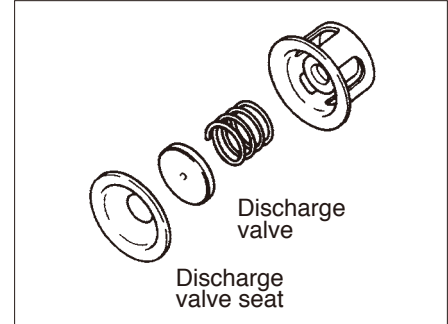


Water should be completely drained during winter storage to prevent freezing. The operation is performed according to items from 11 to 18 in the operation procedure.

Inspection and adjustment

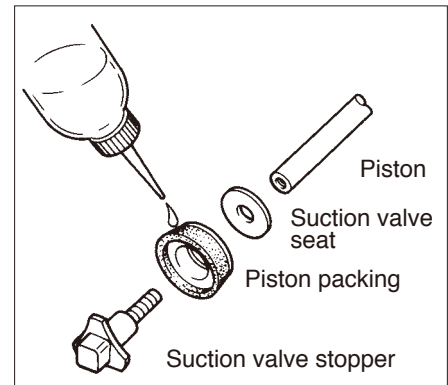
Discharge valve and its vicinity.

Inspect discharge valve and valve seat for wearing degree over their contact surface. Replace worn or spoiled ones, if any.



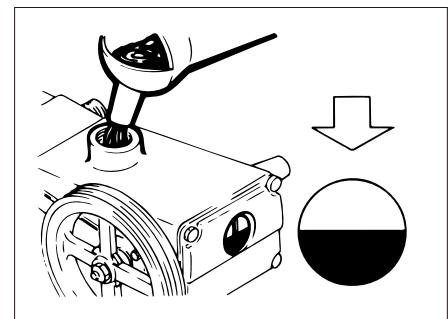
Piston and its vicinity.

Inspect parts as exploded for damage wear break, etc. Lubricate mobile oil over piston packing when reassembled.



Replacement of Crankcase oil.

Replace at 50 hours operation after initial operation.



Precautions

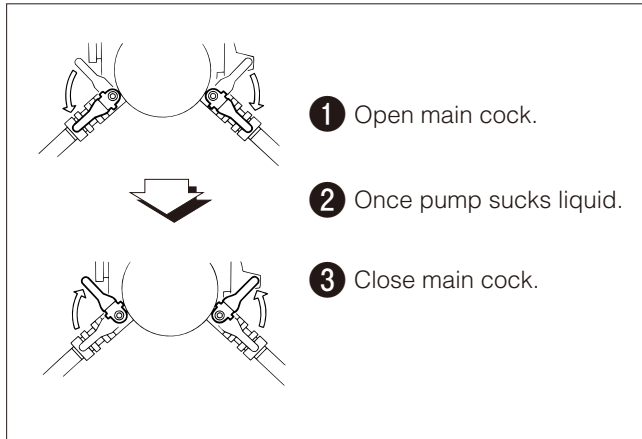
Thank you very much for your purchase this time. Needless to say, no matter how excellent the quality of the product may be it won't display its maximum potential performance unless operated properly.

Read this instruction manual repeatedly prior to operation in order to make the best use of the product.

Power sprayers are for agricultural or irrigation uses and not for industrial use. Therefore, do not use chemicals, seawater, hot water, etc. When agrichemicals are used, read and follow the instruction manual for chemicals.

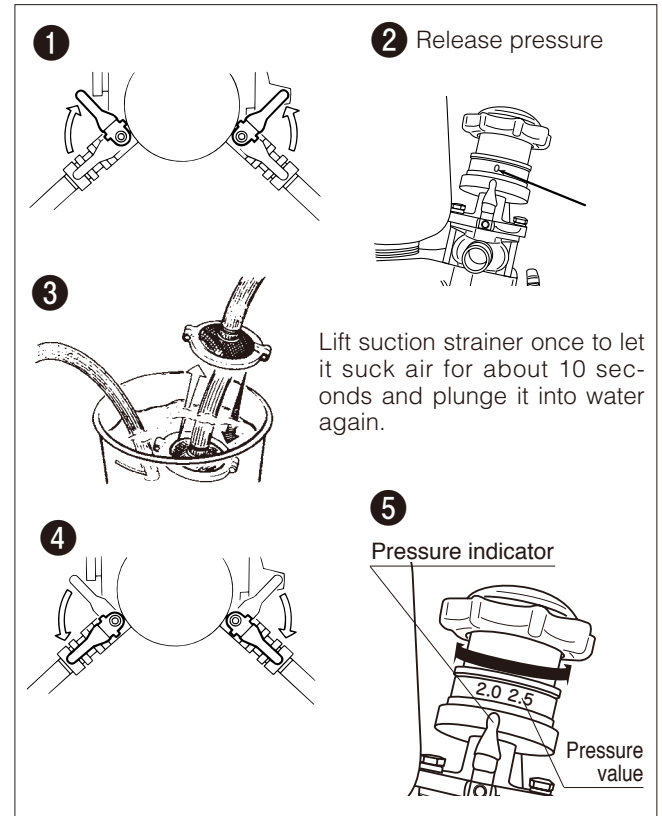
You had better go and ask our dealer nearby or shop you purchased from for further information and questions you have on the product.

When pump fails to suck liquid.

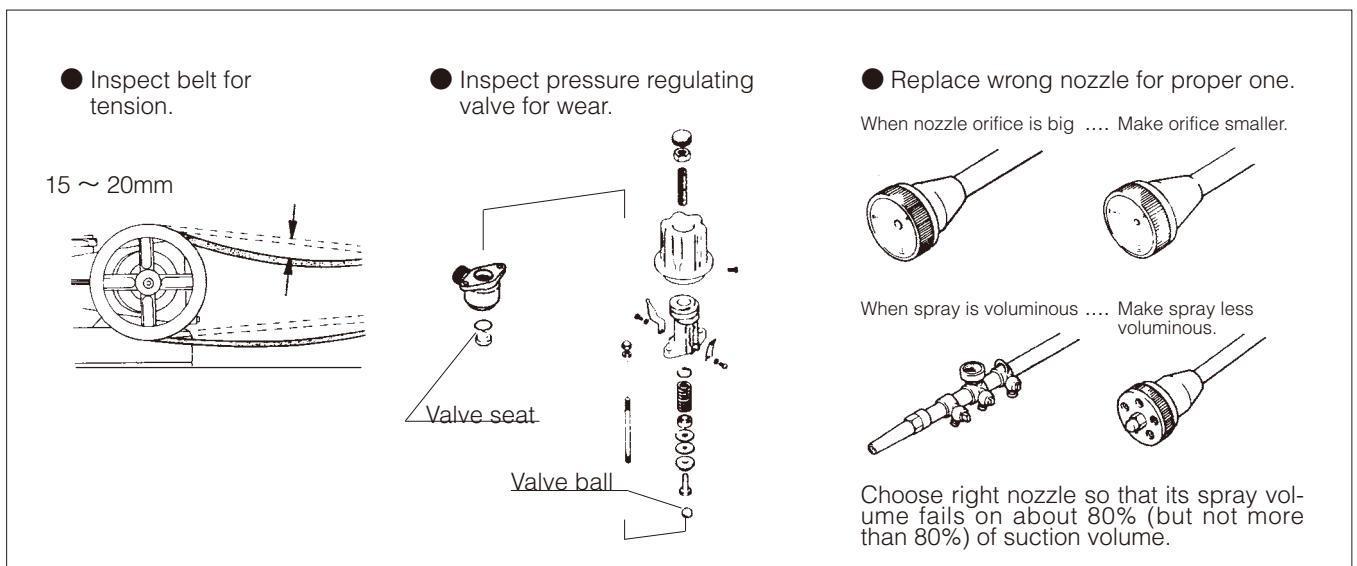


When hoses are vibrating themselves...

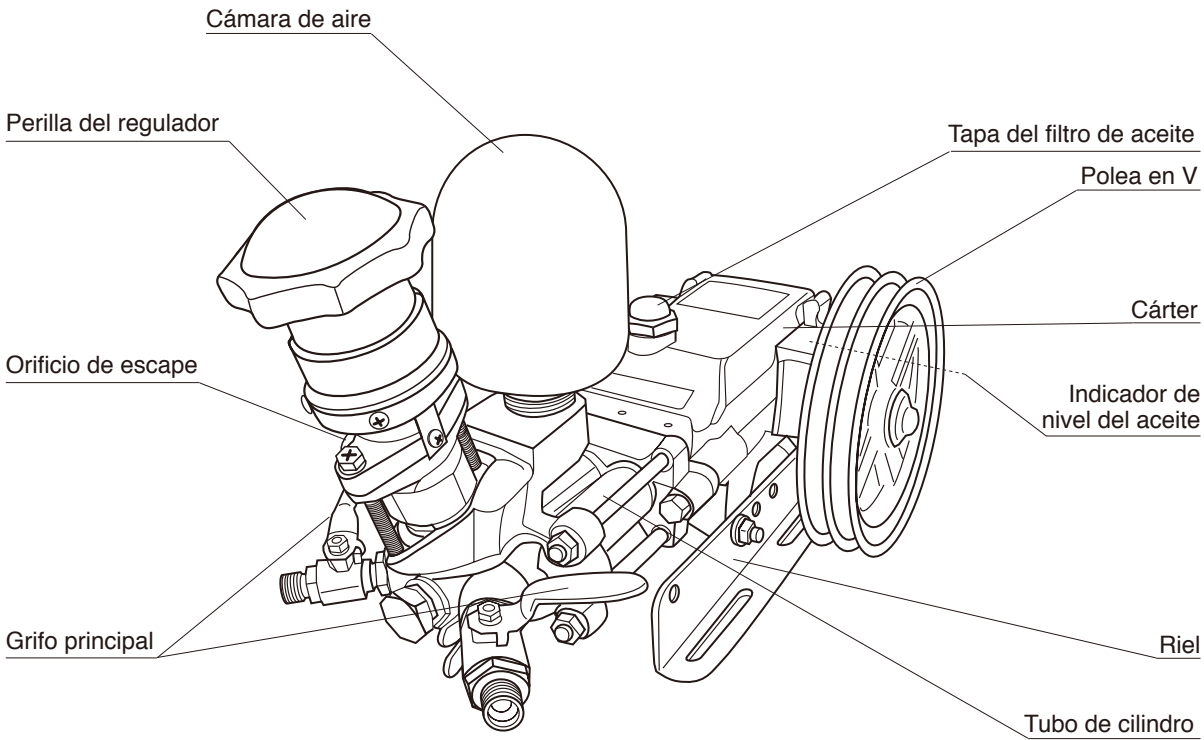
Hose vibration occurs when air is released out of air-chamber. It will stop if you let air send forth as following procedural.



When pressure fails to get accumulated...



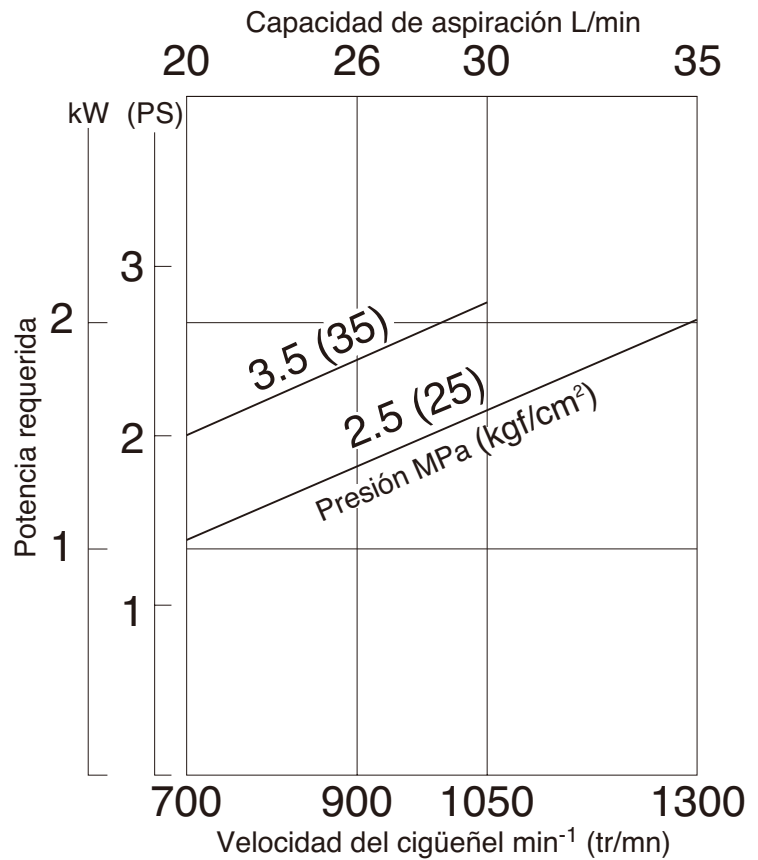
Nomenclatura de piezas principales



Especificaciones

Modelo		MS331		
Altura total	Longitud total (mm)	422		
	Anchura total (mm)	243		
	Altura total (mm)	291		
Peso (kg)		9.2		
		Máximo	Irrigación	
Especificaciones	Velocidad del cigüeñal (rpm)	(rpm)	1050 1300	
	Capacidad de aspiración	(L/min)	30 35	
	Presión	MPa	3.5	2.5
			(kg/cm ²)	(35)
Potencia requerida	kW	2.0	1.9	
		(PS)	(2.8)	(2.6)
Manguera de aspiración		ø19, G ³ / ₄		
Manguera de escape		ø13, G ¹ / ₂		
Grifo principal		G ³ / ₈ , G ¹ / ₄		
Aceite lubricante		SAE10W-30		
Capacidad del aceite lubricante (L)		0.42		

Curva funcional



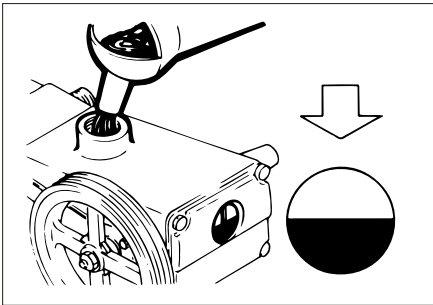
Procedimiento de operación

Inspección preparatoria
~ Pulverización

Asegurarse sin falta de que todos los tornillos estén bien apretados.

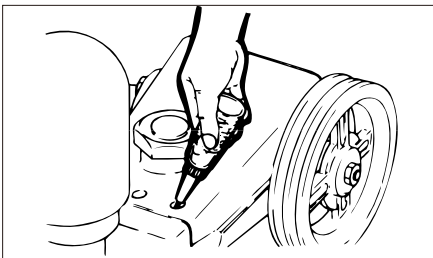
1 Aceite lubricante.

Llenar el aceite lubricante en el cárter hasta el centro del indicador de nivel del aceite.



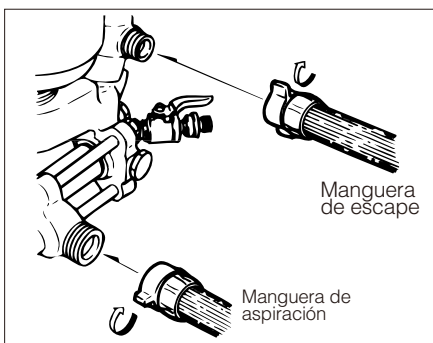
2 Lubricación

Alimentar unas gotas de aceite en los 3 orificios del cárter.

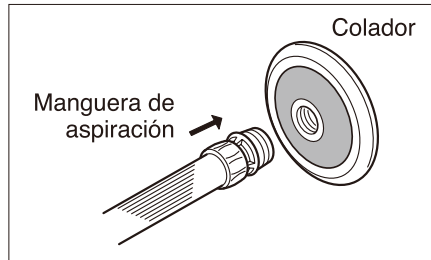


3 Instalación de la manguera de aspiración y la manguera de escape.

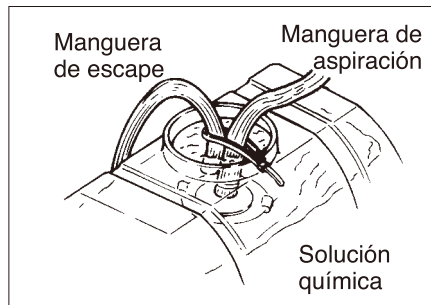
Asegurarse de que esté equipada la guarnición estanca.



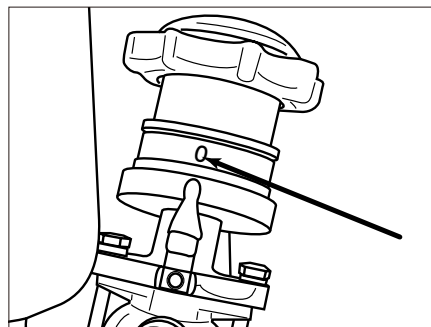
4 Conexión de la alcachofa para el acoplamiento de manguera.



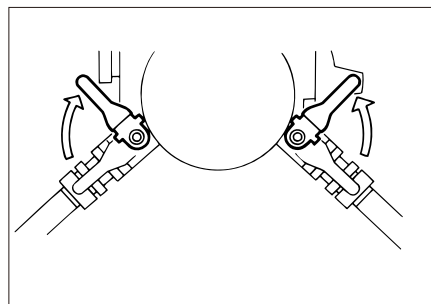
5 Insetar la manguera de escape y la manguera de aspiración en el depósito de sustancia química.



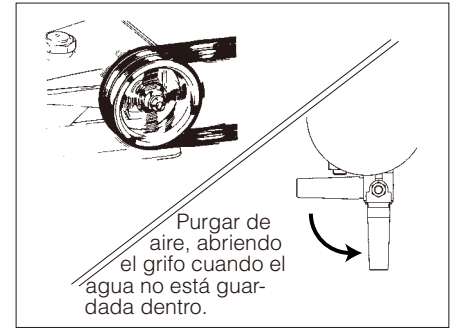
6 Ajustar la manija del regulador de presión a 0.



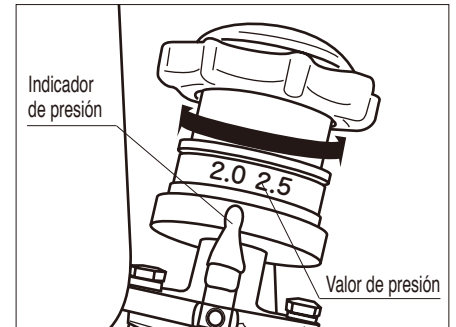
7 Cerrar la válvula.



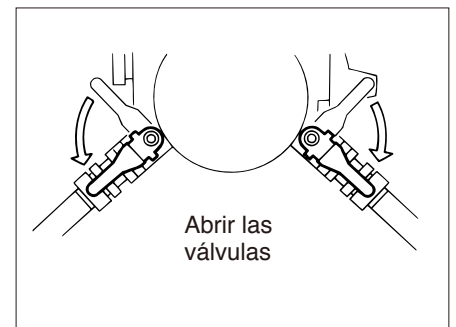
8 Arranque



9 Regulación de presión.

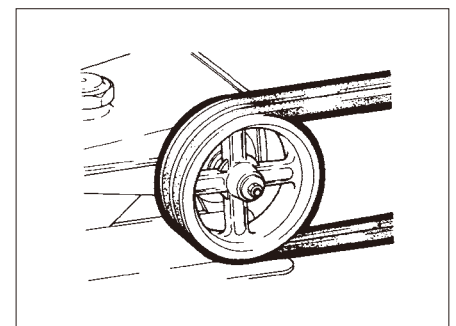


10 Pulverización

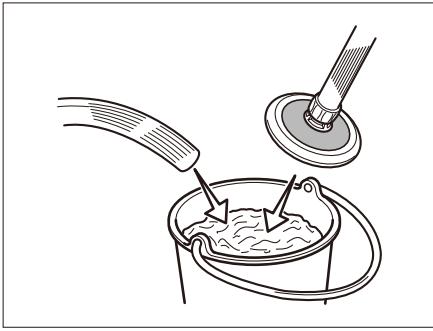


Parada de operación y
manutención

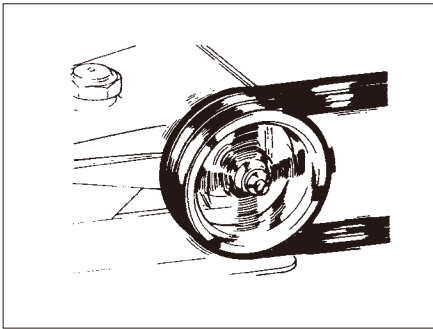
11 Parada de pulverización



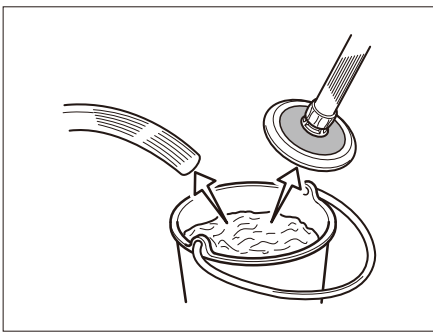
12 Lavar con agua limpia después de pulverización.



13 Puesta en funcionamiento del Power Sprayer.



14 Continuar haciendo funcionar el Power Sprayer por un minuto después de levantar la alcachofa.

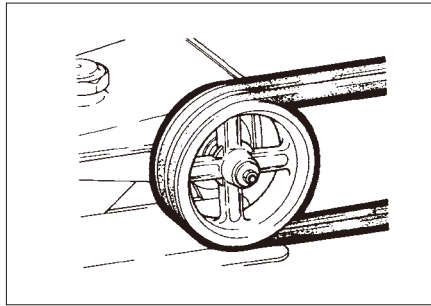


15 ¡Cuidado!

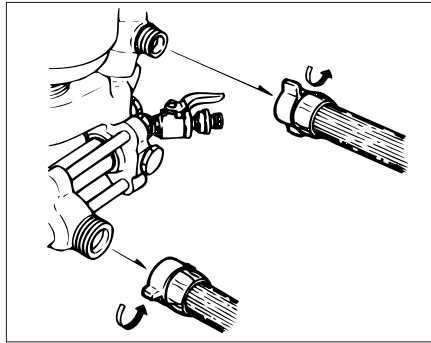
Hacer funcionar en vacío en un minuto para la protección de la bomba.



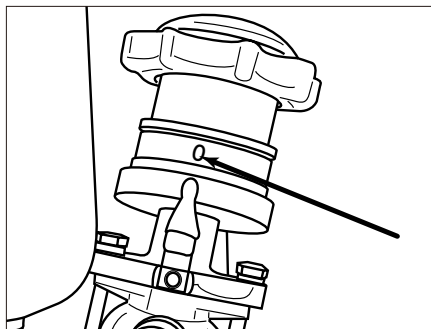
16 Parada de operación.



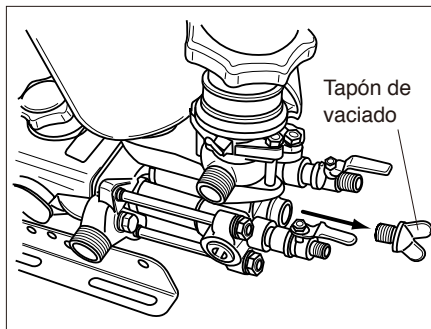
17 Separar la manguera de aspiración y la manguera de escape.



18 Reponer la manija a la posición 0.



Protección contra la congelación

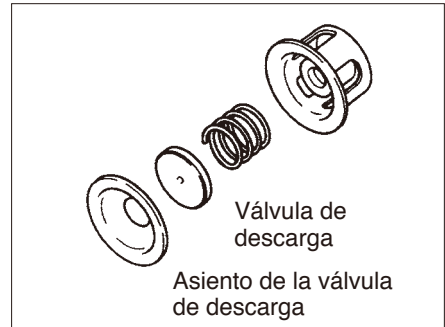


El agua debe ser extraída completamente durante el invierno para prevenir la congelación. La operación relativa se efectúa según los elementos 11-18 indicados en el procedimiento de la operación.

Inspección y ajuste

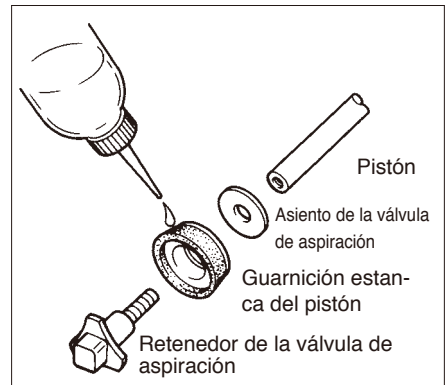
Válvula de descarga y su entorno.

Inspeccionar la válvula de descarga y el asiento de la válvula para ver si la superficie de contacto de ambas partes está excesivamente desgastada. Reemplazar las piezas desgastadas o deterioradas, si las hay.



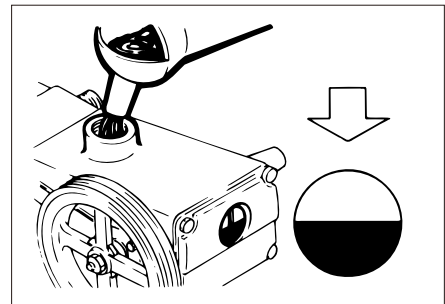
Pistón y su entorno.

Inspeccionar las piezas indicadas en la vista desarrollada para ver si están dañadas, desgastadas, rotas, etc. Lubrificar la guarnición estanca del pistón con aceite fluido al rearmarla.



Reemplazo del aceite del cárter

Reemplazar el aceite después de 50 horas a partir de la operación inicial.



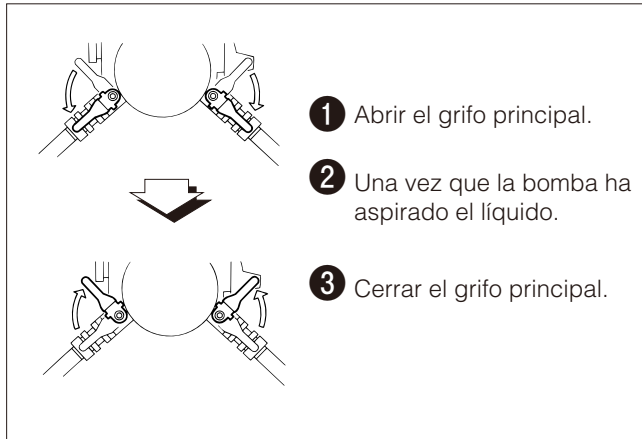
Precaución

Muchas gracias por haber comprado nuestro producto. Excusado es decir que, por más excelente que sea la calidad del producto, eso no podrá mostrar su funcionamiento potencial al máximo a menos que lo haga funcionar correctamente.

Para sacar el mejor provecho del producto, leer repetidamente este manual de instrucciones antes de comenzar las operaciones. Power sprayers son para uso agrícola o de irrigación y no para uso industrial. Por lo tanto no usar sustancias químicas, agua de mar, agua caliente, etc. Cuando se usan sustancias agriquímicas, leer y seguir el manual de instrucciones para sustancias químicas.

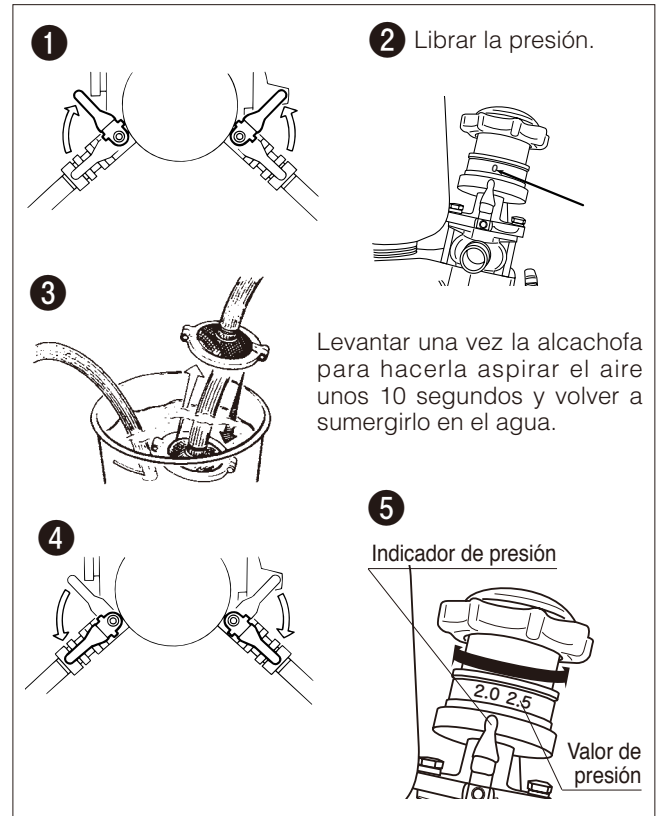
Será mejor comunicar con nuestros distribuidores o con la tienda donde lo ha comprado usted para pedir informaciones detalladas y hacer preguntas sobre el producto.

Cuando la bomba no aspira líquido.



Cuando las mangueras vibran solas...

La vibración de mangueras ocurre cuando el aire se escapa de la cámara de aire. Para detener esto seguir el procedimiento siguiente y mandar fuera el aire.



Cuando la presión no se acumula...

