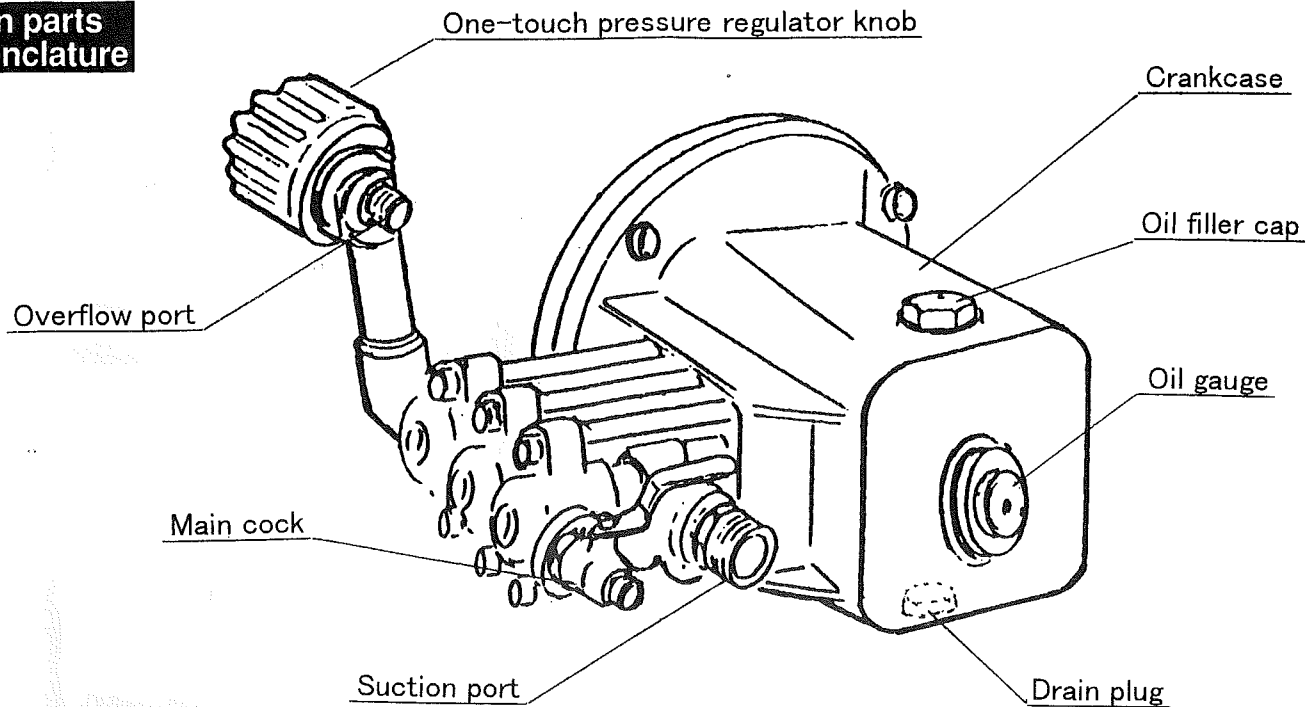


INSTRUCTION MANUAL

POWER SPRAYER

MSD40

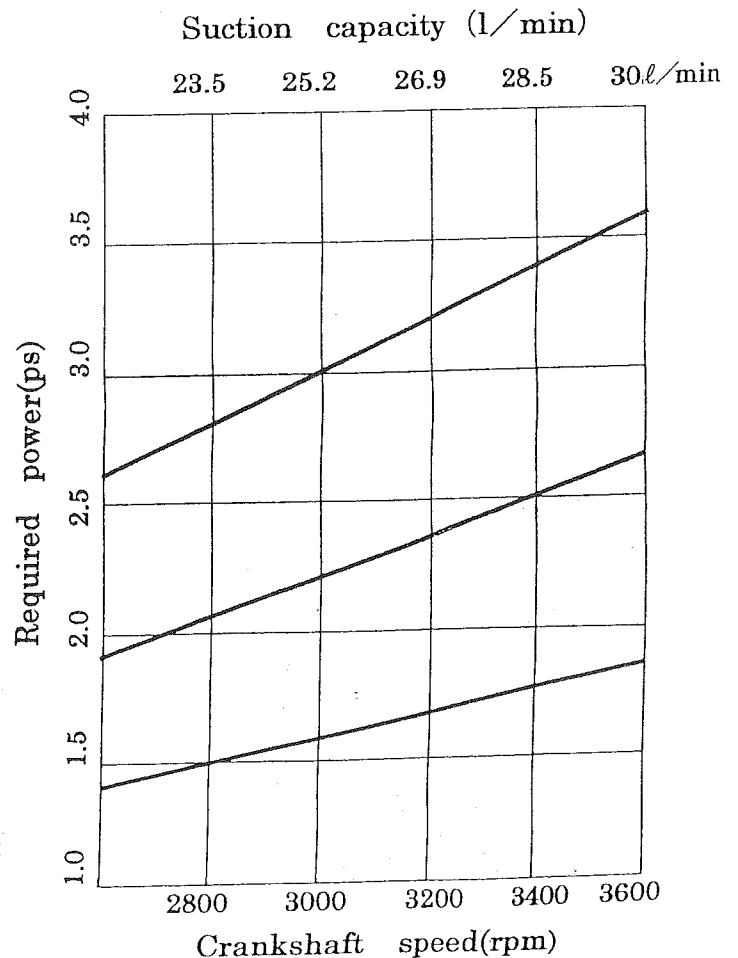
Main parts nomenclature



Specifications

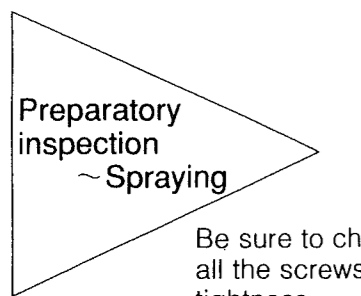
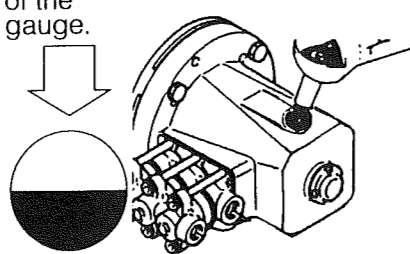
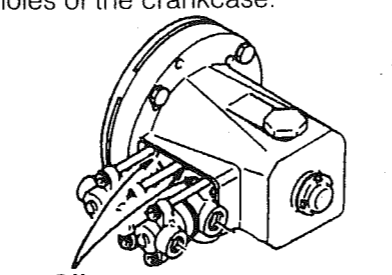

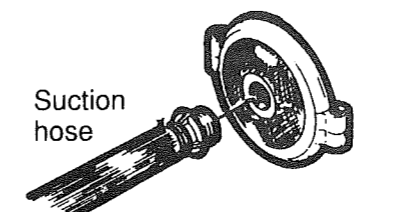
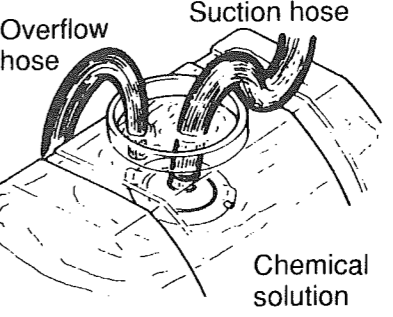
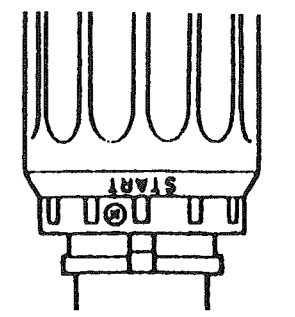
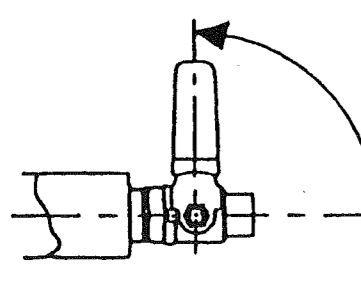

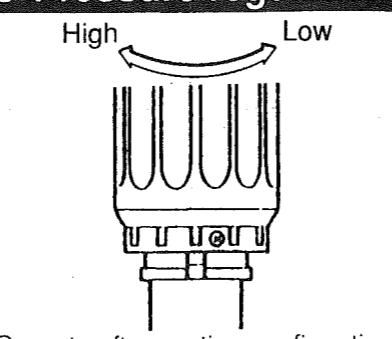
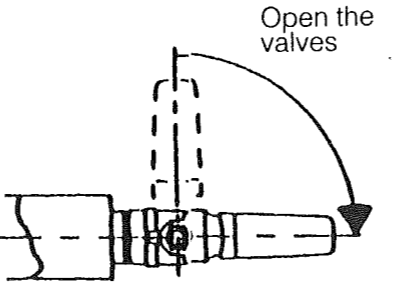
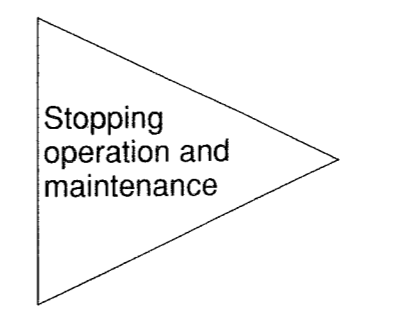
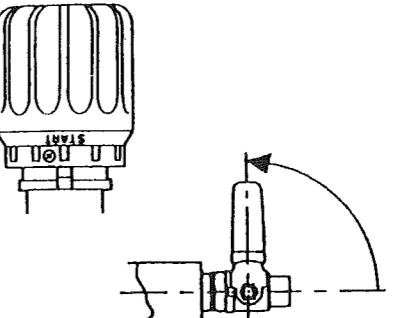
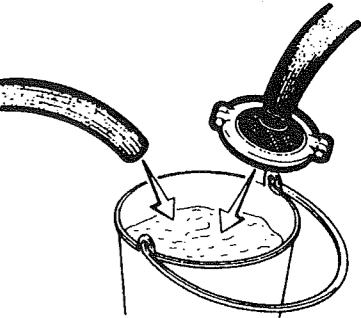

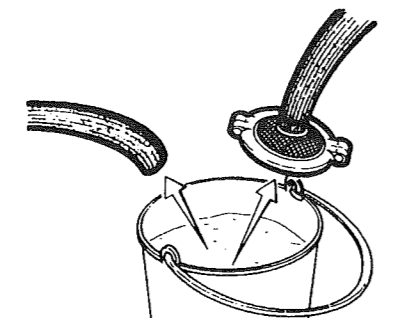
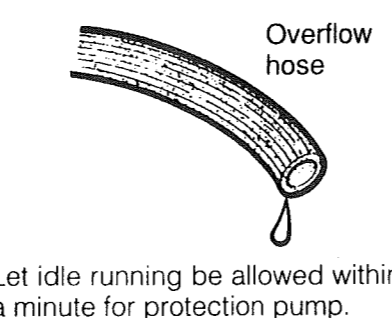
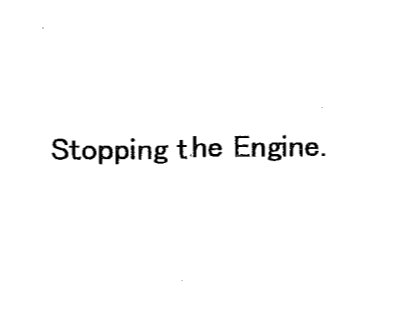
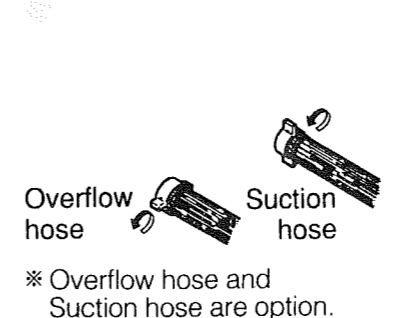
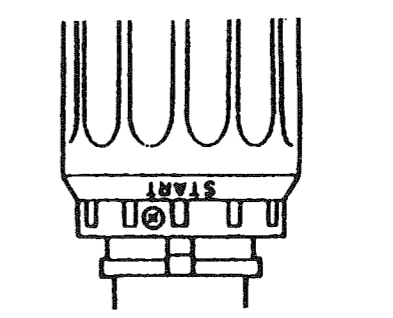
Model		MSD40
Overall height	Overall length (mm)	195
	Overall width (mm)	255
	Overall height (mm)	210
Weight (kg)		5.6
Specifications	Crankshaft speed (rpm)	3600
	Suction capacity (l/min)	30
	Pressure (kgf/cm ²)	40
	Required power (PS)	3.6
Inlet tap threads		PF 3/4
Outlet tap thread		PF 1/2
Lubricating oil		SC GRADE SAE10W-30
Lubricating oil capacity (L)		0.38

Performance curve



*To be provided by the user.

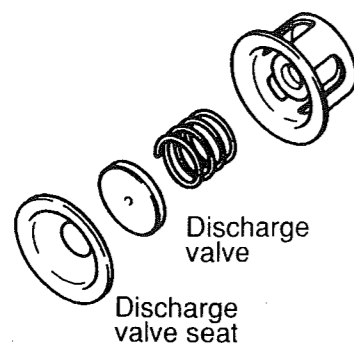
Operating procedure

<p>Preparatory inspection ~ Spraying</p> <p>Be sure to check all the screws for tightness.</p> 	<p>1 Lubricating oil.</p> <p>Fill the lubricating oil into the crankcase up to the center level of the gauge.</p> 	<p>2 Oiling</p> <p>Feed a few drops of oil into the 3 holes of the crankcase.</p>  <p>Oil</p>	<p>3 Installing the suction hose and overflow hose.</p> <p>Be sure to be equipped packing.</p>  <p>Overflow hose Suction hose</p> <p>* Overflow hose and Suction hose are option.</p>	<p>4 Attaching the strainer for the hose coupling.</p>  <p>Suction hose</p> <p>* Overflow hose and Suction hose are option.</p>	<p>5 Insert the suction hose and overflow hose into the chemical tank.</p>  <p>Overflow hose Suction hose</p> <p>Chemical solution</p>	<p>6 Coincide knob of pressure regulator with START</p> 
<p>7 Close the valve.</p> 	<p>8 Starting</p> <p>Starting the engine.</p> 	<p>9 Pressure regulation.</p>  <p>High Low</p> <p>Operate after suction confirmation.</p>	<p>10 Spraying</p>  <p>Open the valves</p>	<p>Stopping operation and maintenance</p> 	<p>11 Stopping spraying</p> 	<p>12 Wash up with the clean water after spraying.</p> 
<p>13 Running the Power Sprayer.</p> 	<p>14 Continue to run the sprayer for one minute after raising the strainer.</p> 	<p>15 Caution !!</p>  <p>Overflow hose</p> <p>Let idle running be allowed within a minute for protection pump.</p>	<p>16 Stopping the operation.</p> <p>Stopping the Engine.</p> 	<p>17 Detach the suction hose and overflow hose.</p>  <p>Overflow hose Suction hose</p> <p>* Overflow hose and Suction hose are option.</p>	<p>18 Resume knob to START Position.</p> 	<p>Protection from freezing.</p> <p>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.</p>

Inspection and adjustment

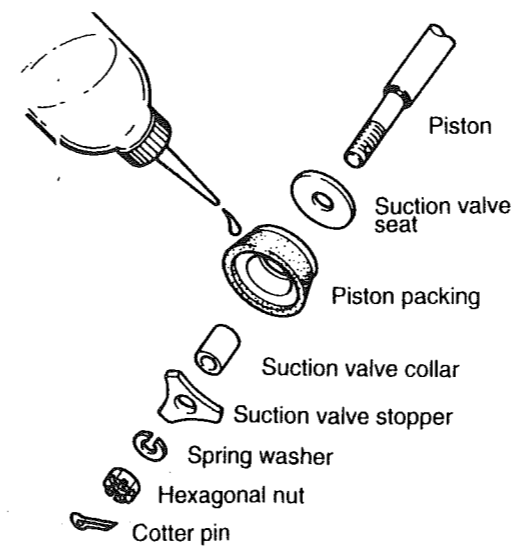
Discharge valve and its vicinity.

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



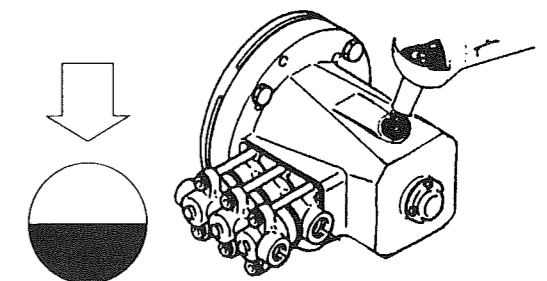
Piston and its vicinity.

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.



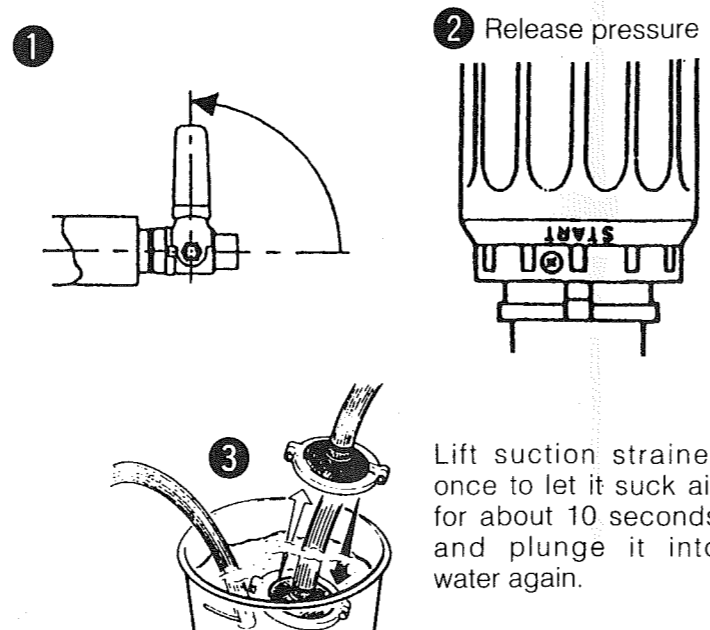
Bomba de pulverizar MSD40

Precautions

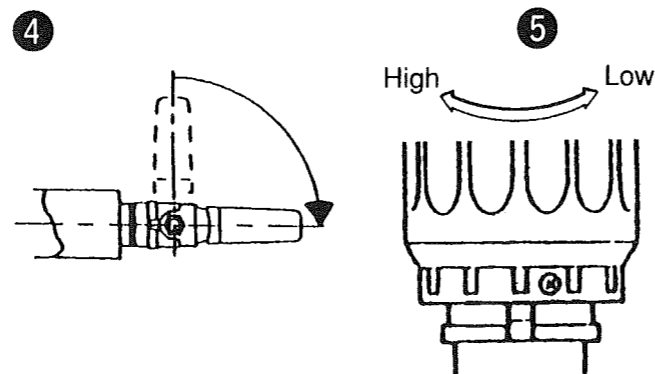
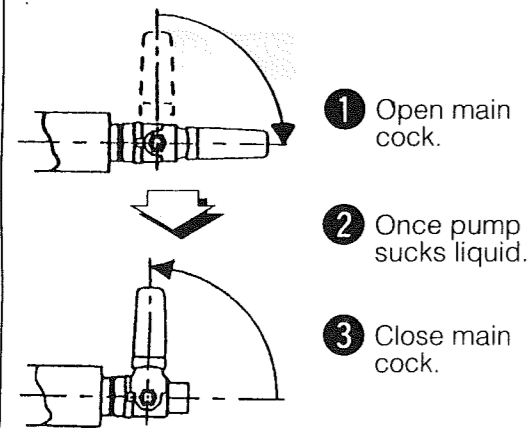
Thank you very much for your purchase this time. Needless to say, no matter how excellent the quality of the product may be it won't display its maximum potential performance unless operated properly. Read this instruction manual repeatedly prior to operation in order to make the best use of the product. 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 hoses are vibrating themselves...

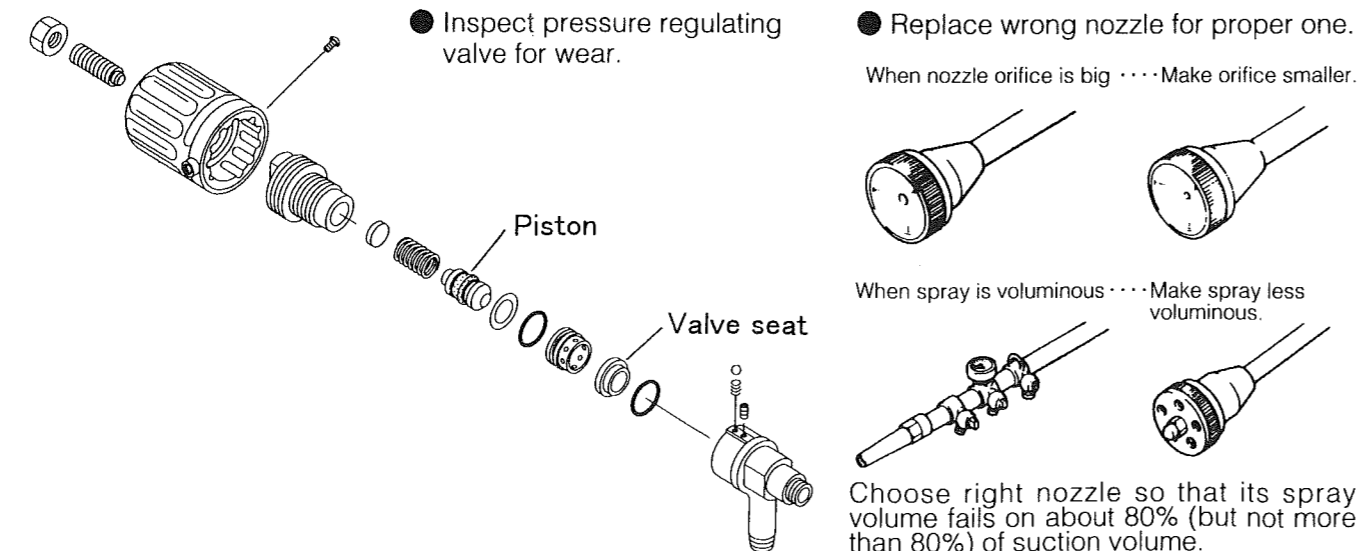
Hose vibration occurs when air is released out of air-chamber. It will stop if you let air send forth as following procedural.



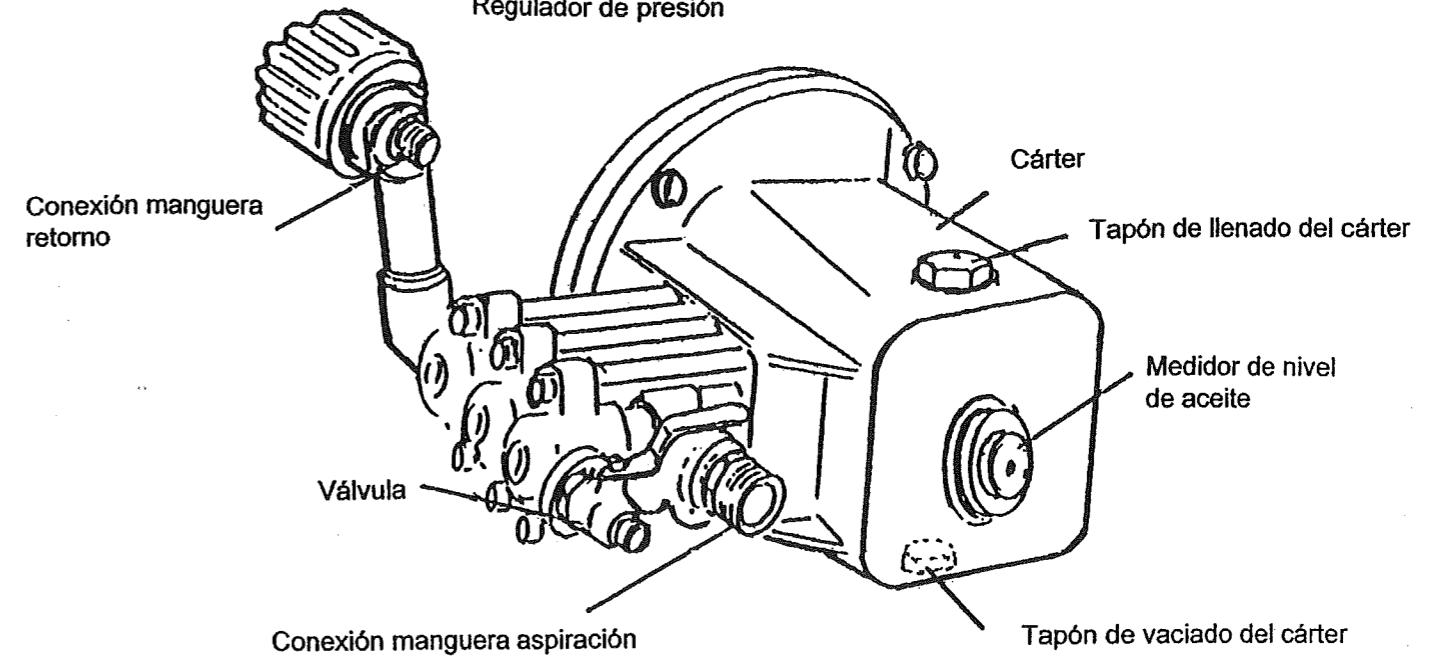
When pump fails to suck liquid.



When pressure fails to get accumulated...

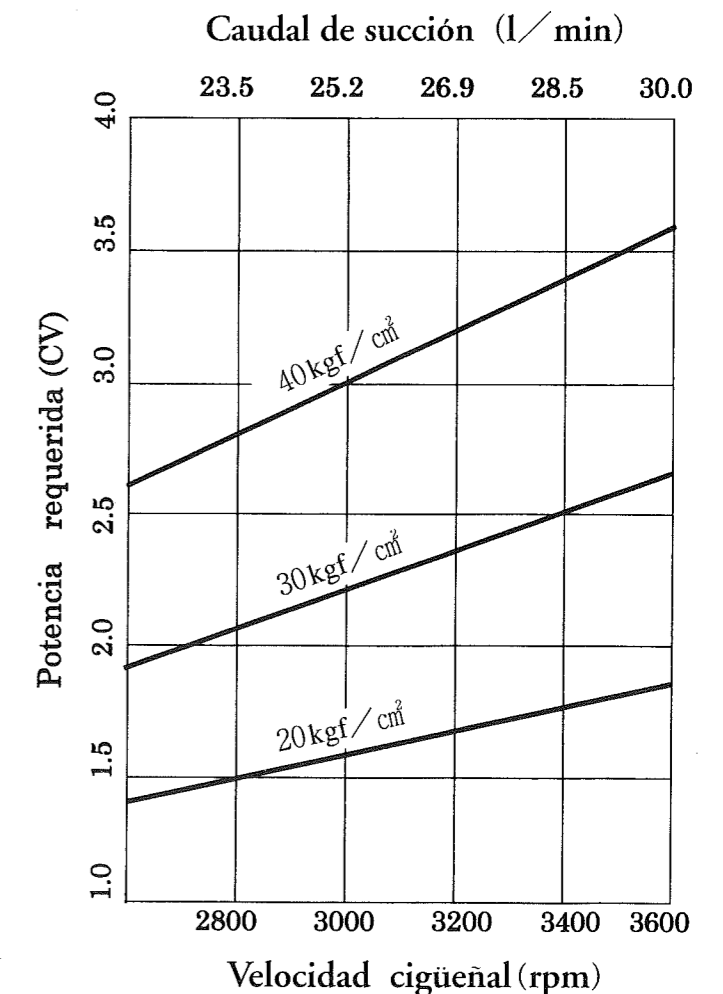


Regulador de presión



ESPECIFICACIONES TÉCNICAS

Modelo	MSD40
Longitud	223 mm
Anchura	270 mm
Altura	186 mm
Peso	5.6 kg
Velocidad del cigüeñal	3,600 rpm
Caudal de succión	30 l/min
Presión	40 kg/cm ²
Potencia requerida	3.6 CV
Aceite lubricante	SC GRADE SAE10W-30
Capacidad del cárter	0.38 l

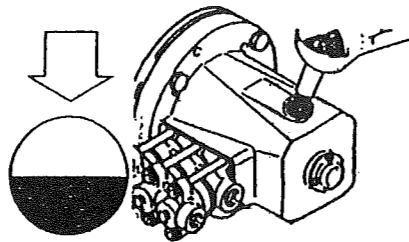


Procedimiento de funcionamiento

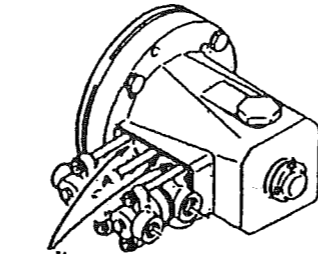
MONTAJE E INSTALACIÓN DE LA BOMBA

Asegurarse de que todos los tornillos tienen el par de apriete adecuado para el correcto funcionamiento de la bomba.

Rellenar de aceite el cárter hasta el centro del medidor. SAE 20W-40



Engrasar con unas gotas de aceite en los 3 agujeros del cárter



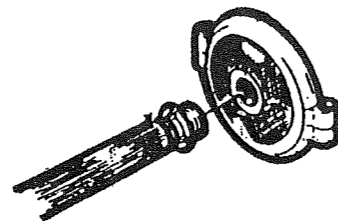
aceite

Conectar las mangueras de aspiración y retorno a la bomba

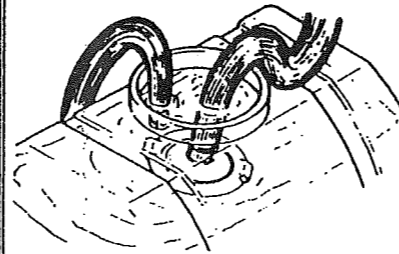


aspiración retorno

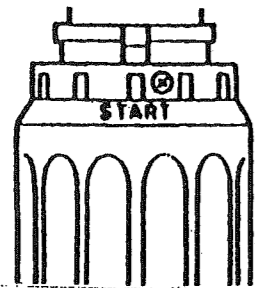
Ensamblar el filtro de aspiración a la manguera de aspiración



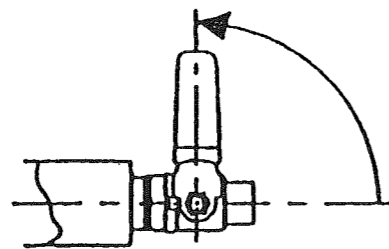
Introducir la manguera de aspiración y la de retorno dentro del depósito de pulverizar.



Llevar el regulador de presión a la posición START



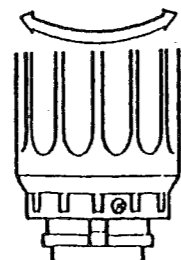
Cerrar la válvula



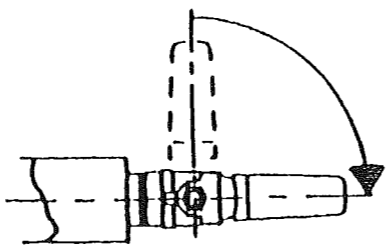
INICIO DEL TRABAJO DE PULVERIZACIÓN

Arrancar el motor.

Tras confirmar la succión de la bomba mover el regulador de presión hasta conseguir la presión deseada.

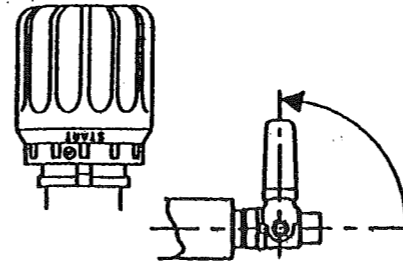


Abrir la válvula para pulverizar.

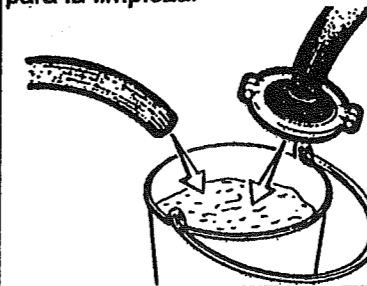


FINALIZACIÓN DEL TRABAJO DE PULVERIZACIÓN Y LIMPIEZA DE LA BOMBA

Cerrar la válvula y llevar el regulador de presión a la posición START.

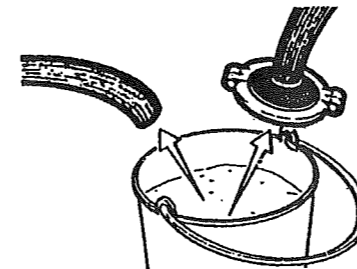


Introducir las mangueras de aspiración y retorno en agua limpia para la limpieza.



Hacer funcionar la bomba.

Continuar con la bomba en marcha durante 1 minuto tras sacar la manguera de aspiración.

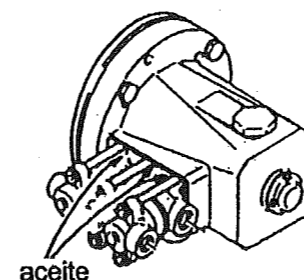


¡¡ATENCIÓN!!

Para proteger la bomba no hacerla funcionar en vacío más de 1 minuto seguido.

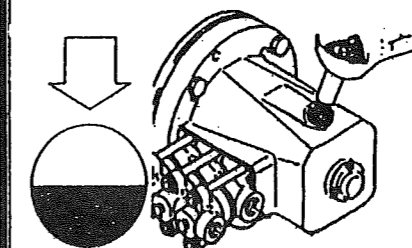
MANTENIMIENTO PERIÓDICO

Engrasar con unas gotas de aceite en los 3 agujeros del cárter cada 20 horas de trabajo.



aceite

Revisar y rellenar de aceite el cárter hasta el centro del medidor, si es necesario.

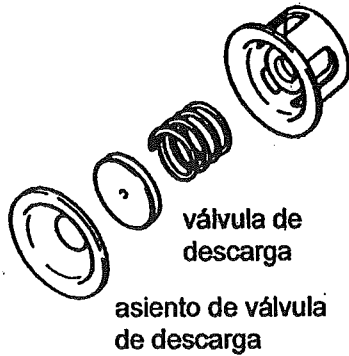


CAMBIO DE ACEITE
Hacer el primer cambio de aceite del cárter a las 50 horas de trabajo y posteriormente cada 100 horas de trabajo.
Emplear aceite SAE 20W-40

Despiece de los principales componentes

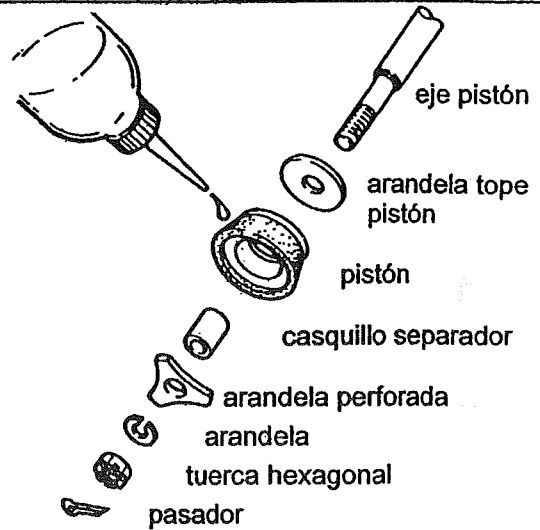
VALVULA DE DESCARGA

Desmontaje de la válvula de descarga para inspeccionar su estado y reemplazar las piezas desgastadas.

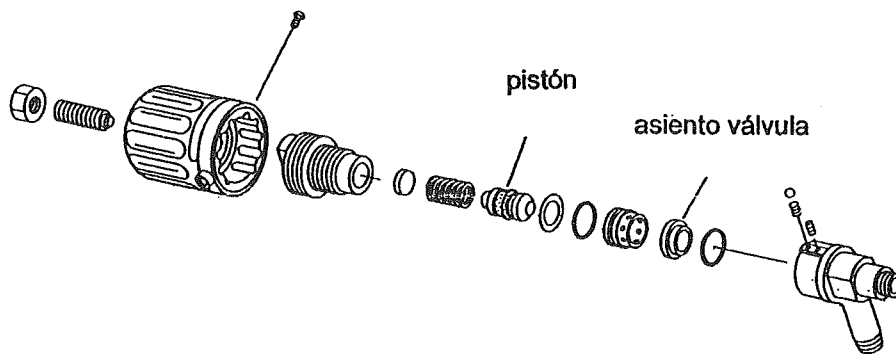


PISTÓN

Desmontaje del pistón. Al montarlo de nuevo lubricar el pistón.



REGULADOR DE PRESIÓN



Recomendaciones

- La bomba de pulverizar MS160 es una bomba diseñada para uso agrícola y no industrial, por tanto si se emplea con productos corrosivos, ácidos fuertes, etc., su vida útil puede verse acortada.
- La bomba de pulverizar MS160 es una bomba de pistón en la que el líquido ejerce al mismo tiempo una función lubricadora y difusora del calor de rozamiento, por tanto se recomienda no hacer funcionar la bomba en vacío más de un minuto seguido.
- Elegir una pistola de pulverización adecuada al caudal de succión de la bomba, de modo que no sobrepase el 80% del caudal de succión, pues de lo contrario disminuirá la presión final.
- Si no se lleva a cabo el mantenimiento periódico puede verse acortada la vida útil de la bomba.