

Double Diaphragm Pumps

INSTALLATION

DPS-90 & DPS-120

A good start is halfway to success

DOUBLE DIAPHRAGM PUMPS **SMART GUIDE**



Anest Iwata Double Diaphragm Pumps are available in five different versions, designed to meet the diverse needs of various users. Each configuration is engineered to suit specific applications or operating environments. This guide provides installation instructions for each version, with the aim of ensuring proper assembly and optimal performance.

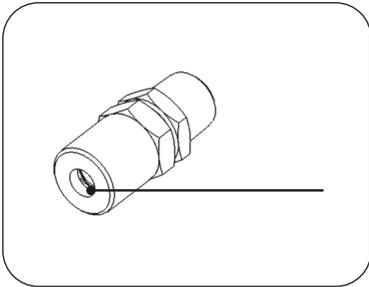
IMPORTANT INFORMATION

Before carrying out any installation or operating activities of the diaphragm pump, ensure the system is properly grounded using the grounding cable supplied. During all operating and adjustment phases of the DIAPHRAGM PUMP, always wear appropriate body and/or respiratory protection, such as: safety goggles, ANEST IWATA mask, and gloves.



SAFETY SYSTEMS

In the design and manufacturing of diaphragm pumps, several safety systems have been incorporated to protect the user's safety, in full compliance with all applicable safety regulations.



SAFETY VALVE: To prevent the pump's operating pressure from exceeding safe limits within the supply circuit, a safety valve calibrated to 7 bar has been installed. When this threshold is surpassed, the valve automatically opens to discharge excess air, ensuring system protection.



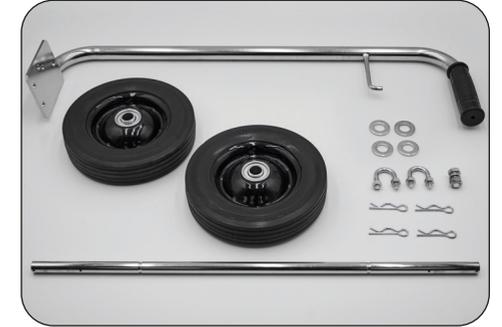
DRAIN BALL VALVE: The drain ball valve is designed to stop the supply flow and safely depressurize the circuit. It is particularly useful in the event of malfunctions or unexpected shutdowns, as it allows for the controlled release of any residual pressure inside the pump. To activate the drain function, rotate the valve lever 90° from the open position.

01. PRE-INSTALLATION PREPARATION

Upon receiving the diaphragm pump, carefully check that it has not been damaged during transport or storage. Also ensure that all standard components, as specified for the selected configuration, are included in the package.



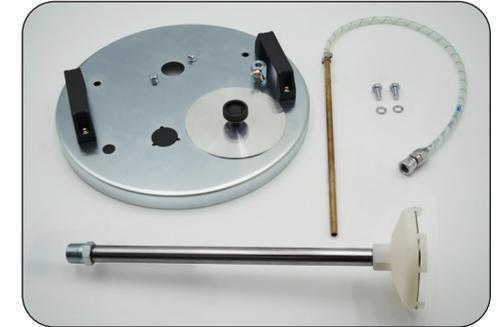
- 1** **STAND CONFIGURATION:** Stand / Suction Hose set with 50 Mesh Filter / Drain Hose set / Pressure Regulator Handle / Instruction manual.



- 2** **CART CONFIGURATION:** Cart set (included Wheel cart set and Handle) / Suction Hose set with 50 Mesh Filter / Pressure Regulator handle/ Instruction manual.



- 3** **GRAVITY CONFIGURATION with Hopper:** Cart set (included Wheel cart set and Handle) Hopper set with 50 mesh filter / "U" Supply Hose set / Drain Hose set / Hopper set 6 lt. / Pressure Regulator handle/ Instruction manual.



- 4** **TANK LID CONFIGURATION:** Tank Lid Cover set / Suction Hose set with 50 Mesh Filter / Pressure Regulator handle/ Instruction manual.

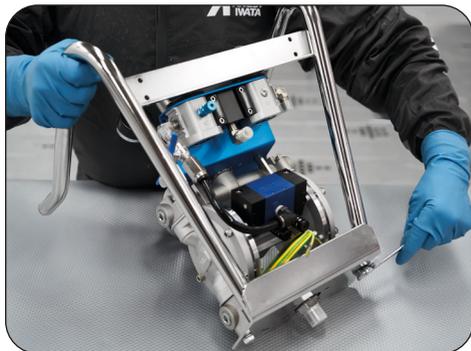


- 5** **WALL MOUNT CONFIGURATION:** Wall Bracket / Suction Hose set with 50 Mesh Filter / Recirculation Hose set / Pressure Regulator Handle / Instruction Manual.

02. INSTALLATION OF CONFIGURATIONS

on **STAND** (DPS-901 / -1201) or on **CART** (DPS-903 / -1203)

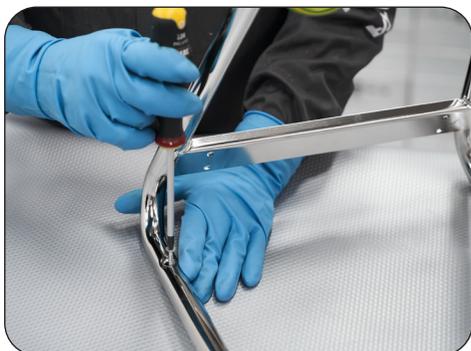
ALWAYS INSTALL THE PUMP ON A STABLE SURFACE TO PREVENT DANGEROUS VIBRATIONS DURING OPERATION



- 1** Disassemble the pump body from the support by removing the Hex head screws (M8).



- 2** Flip the stand upside down and reinstall the pump body in the correct position on its support, tightening the Hex head screws (M8) securely by using a proper open-end wrench.



- 3** For the stand-mounted version, securely fasten the pump to the ground by screwing the fixing bolt into the designated hole on the stand.



- 4** Always remove all dust caps present on the pump fittings, installed during the pump assembly phase. Keep them for possible future use, such as during storage, in order to preserve the integrity of the fitting threads.



- 5** Connect the suction hose to the pump's paint supply joint. Once connected, securely tighten it using an open-end wrench



- 6** Connect the drain hose to the 2-way valve for paint recirculation. Once connected, securely tighten it using an open-end wrench. Fasten the drain hose to the suction hose with clamps at the three designated points.

INSTALLATION ON CART:

The only difference compared to the stand configuration is that, in this version, the cart must be assembled separately and then mounted onto the stand.



- 1** Place one of the washers included in the set onto the wheel axle, then insert the axle through the central hole of the rigid wheel.



- 2** On the other side of the axle, insert another washer.



- 3** Place both washers against the wheel on the inner and outer sides, then secure them by inserting the pins into the corresponding holes on the axle. Repeat the same procedure for assembling the second wheel. **WARNING:** Insert the pins and press firmly until you hear a click, confirming that they are properly locked in place.



- 4** Once the wheels have been assembled onto the axle, install the entire set onto the stand, by securing it with the two U-bolts. The U-bolts must pass through the holes in the stand bracket and be securely fastened by tightening the nuts at both ends.



- 5** Unscrew the M8 hex head screw from the pump's lower adaptor and use it to attach the handle to the support, ensuring the holes on both the support and the adaptor are properly aligned.

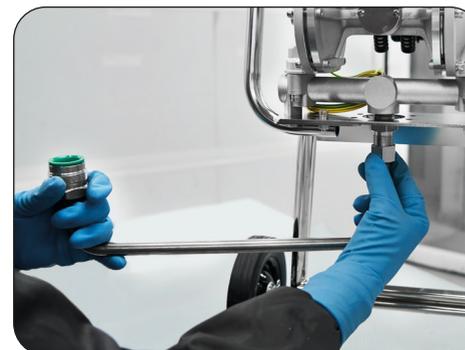


- 6** To ensure a stable and balanced attachment of the handle to the pump support, insert the M6 hex socket head screw through the support and tighten it securely using an open-end wrench.



03. GRAVITY-FED CONFIGURATION

ON CART with HOPPER SET (DPS-9036 / DPS-12036)



- 1** Connect the hopper's U-shaped hose to the pump's paint inlet joint and securely tighten it using a proper open-end wrench.





2 Connect the drain hose to the fitting of the two-way valve for paint recirculation located on the outlet paint filter, and firmly tighten it by using a proper open-end wrench.



2 Connect the suction hose set to the pump's paint inlet joint. Once connected, firmly tighten it by using a proper open-end wrench.



3 Fit the refill cap into its seat.



3 Securely screw the hopper set onto the fitting of the U-shaped hose.



4 Fit the drain hose into the designated hole on the hopper lid, making sure the fitting is stable.



4 Connect the drain hose to the 2-way valve for paint recirculation.



5 Insert the rigid section of the drain hose into the designated housing on the lid.

04. INSTALLATION OF CONFIGURATION ON TANK LID (DPS-902 / DPS-1202)



1 Properly place the pump body to align the holes of the lower adaptor with those on the lid intended for the fastening screws. Once the correct alignment is verified, secure the pump body using M8 hex head screws, tightening them with a proper open-end wrench.



6 Secure the rigid part of the drain hose by tightening the clamp nut until fully locked.

05. INSTALLATION OF CONFIGURATION ON WALL BRACKET (DPS-904 / DPS-1204)



- 1 Disassemble the pump assembly from the wall bracket by removing the hex head screws (M8). Flip the bracket and reassemble the pump body so that the holes on the lower manifold align with those on the bracket. Once proper alignment is confirmed, secure the pump body using the hex head screws (M8), tightening them with a proper open-end wrench.



- 2 Connect the suction hose to the pump's paint inlet joint. Once connected, securely tighten it using a proper open-end wrench.



- 3 Connect the drain hose to the 2-way valve for paint recirculation. Once connected, firmly tighten it using a proper open-end wrench. Fasten the drain hose to the suction hose using clamps (at the 3 desired points).



Get help with ANEST IWATA SUPPORT
www.anest-iwata-coating.com/support/



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