



# IP-0600 IP-1300 IP-1800 IMPELLICONE<sup>®</sup>

*Flow Divider for Anhydrous Ammonia*

## PARTS AND INSTALLATION MANUAL



### **CDS-JOHN BLUE COMPANY**

DIVISION OF ADVANCED SYSTEMS TECHNOLOGY, INC.  
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## Note to the Owner


Study this manual carefully. It will assist you in the care, installation and operation of your CDS – John Blue Flow Divider. Familiarize yourself with all parts before attempting to operate or service your flow divider.

Enter the serial number and date of purchase in the space provided for future reference. This information will be required for ordering replacement parts or servicing your flow divider.

*CDS – John Blue Engineering Department constantly improves its products. We reserve the right to make design and specification changes without notice.*

**SERIAL NUMBER:** \_\_\_\_\_ **DATE OF PURCHASE:** \_\_\_\_\_

## Safety Precautions

-  **Danger:** This symbol indicates imminently hazardous situation that, if not avoided, will result in serious injury or death. The sign will have the color combination of red and white.
- Safety Equipment such as gloves, goggles, etc. should be worn at all times while performing any repairs or maintenance to the Impellicone Flow Divider.
- A careful operator is the best insurance against an accident
- Only qualified and responsible people should operate equipment.
- Check all valves, fittings, hose clamps, etc for tightness and soundness before emitting anhydrous ammonia to the system. Only use components with materials that are compatible with anhydrous ammonia.
- Do not attempt to service or disconnect the Impellicone without first closing the tank outlet valve and completely bleeding all hoses and cavities of anhydrous ammonia.
- If anhydrous ammonia contacts the skin or eyes, the effected area should be promptly and thoroughly flushed with water, following all appropriate guidelines. See a physician in all severe cases of anhydrous ammonia burns.
- Use only approved anhydrous ammonia equipment.

## INSTALLATION AND OPERATION

Installation should be made by remote mounting the Impellicone Flow Divider vertically with the cap of the unit at the top, and keeping the cap as level as possible with the ground. Attach the discharge hose from the anhydrous ammonia metering device (pump or meter) to the 1" NPT inlet port on the bottom the Impellicone body. *(For maximum distribution accuracy use a 6" or longer piece of straight pipe in the inlet of the Impellicone manifold to help smooth out the flow.)*

If more than one Impellicone is needed per machine, use an Impellicone splitter (IPS-x) to divide up the flow out of the metering device.

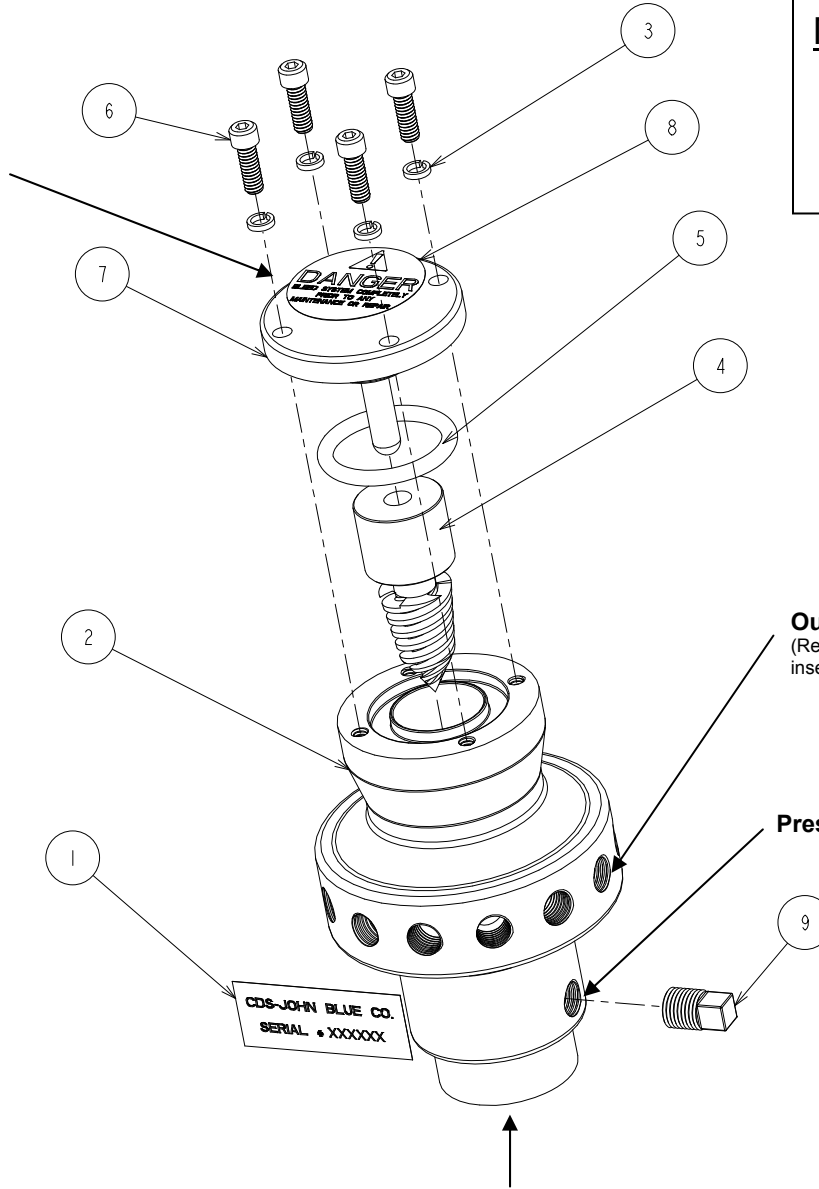
You may directly attach a pressure gauge to the provided pressure gauge port, or remote mount the gauge in a safe location. In the event that you do not use the pressure gauge port, leave the provided ¼" NPT stainless pipe plug in the port.

Each port should be connected to the hose that will carry the anhydrous ammonia to the point of application. For maximum distribution accuracy, use roughly the same length hose between the Impellicone and the shank. If you do not use all the ports, evenly space the used ports along the circumference of the flow divider and plug the unused ports with ¼" NPT stainless pipe plugs.

**Note: The plastic thread protectors in the ports are not plugs, remove before use.**

# ASSEMBLY DRAWING AND PARTS LIST

Top of Unit  
Mount Vertically



**Models:**  
 IP-0600 - 6 port  
 IP-1300 - 13 port  
 IP-1800 - 18 port

**Outlet Ports - 1/4" NPT**  
 (Remove all plastic thread protectors  
 insert hose barbs or pipe plugs)

**Pressure Gauge Port - 1/4" NPT**

**Inlet Port - 1" NPT**  
 (Connect to discharge from pump or  
 meter, recommend using straight pipe)

Item	Description	IP-0600 Parts List		IP-1300 Parts List		IP-1800 Parts List	
		Part #	Qty	Part #	Qty	Part #	Qty
1	Serial Tag	115496-01	1	115496-01	1	115496-01	1
2	Aluminum Body	116084-01	1	115518-01	1	115532-01	1
3	High Collar Lock Washer SS	115519-01	4	115519-01	4	115519-01	5
4	Impellicone Needle	115520-01	1	115520-01	1	115531-01	1
5	O-ring	115521-01	1	115521-01	1	115530-01	1
6	1/4-20 SHCS Stainless Steel	115525-01	4	115525-01	4	115525-01	5
7	Cap Assembly	115526-91	1	115526-91	1	115529-01	1
8	Danger Tag (Included In Cap Assembly)	115527-01	1	115527-01	1	115527-01	1
9	1/4 NPT Plug SS	115533-01	1	115533-01	1	115533-01	1

## LIMITED WARRANTY

THIS WARRANTY IS IN LIEU OF ALL OTHER WRITTEN OR EXPRESS WARRANTIES AND REPRESENTATIONS. ANY IMPLIED WARRANTIES INCLUDING MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO THIS WRITTEN WARRANTY. CDS-JOHN BLUE COMPANY SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES.

Use of this product for any purpose other than its original intent, abuse of the product, and/or any modification to the original product is strictly prohibited by the manufacturer, CDS-John Blue Company. Any modification to the product should be approved by CDS-John Blue Company prior to use. CDS-John Blue Company will deny Warranty claims and liability in any situation involving misuse, abuse or modification.

Each new machine or component manufactured by CDS-John Blue Company through original buyer is warranted by CDS-John Blue Company to buyer and to any party or parties to whom buyer may resell, lease or lend the equipment to be free from defects in material and workmanship under normal use and service. This obligation of CDS-John Blue Company under this warranty is limited to the repair or replacement of defective parts or correction of improper workmanship of any parts of such equipment which shall within one year from the date of CDS-John Blue's original delivery thereof, be returned to CDS-John Blue's factory, transportation charges prepaid and which CDS-John Blue Company shall determine to its satisfaction upon examination thereof to have been thus defective. When it is impractical to return the defective parts of such equipment to CDS-John Blue's factory, then CDS-John Blue shall have no liability for the labor cost involved in repairing or replacing any such parts and shall be liable solely for supplying the material necessary to replace or repair the defective parts, provided that prior thereto CDS-John Blue Company shall have determined to its satisfaction that any such parts are thus defective.

This warranty shall not apply to any equipment which shall have been repaired or altered outside CDS-John Blue's factory in any way so as to affect its durability, nor which has been subjected to misuse, abuse, negligence or accident, or operated in any manner other than in accordance with operating instructions provided by CDS-John Blue Company. This warranty does not extend to repairs made necessary by the use of inferior or unsuitable parts or accessories, or parts or accessories not recommended by CDS-John Blue Company.

CDS-John Blue Company makes no warranties in respect to parts, accessories or components not manufactured by CDS-John Blue Company, same ordinarily being warranted separately by their respective manufacturers.

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**YOUR LOCAL DEALER**