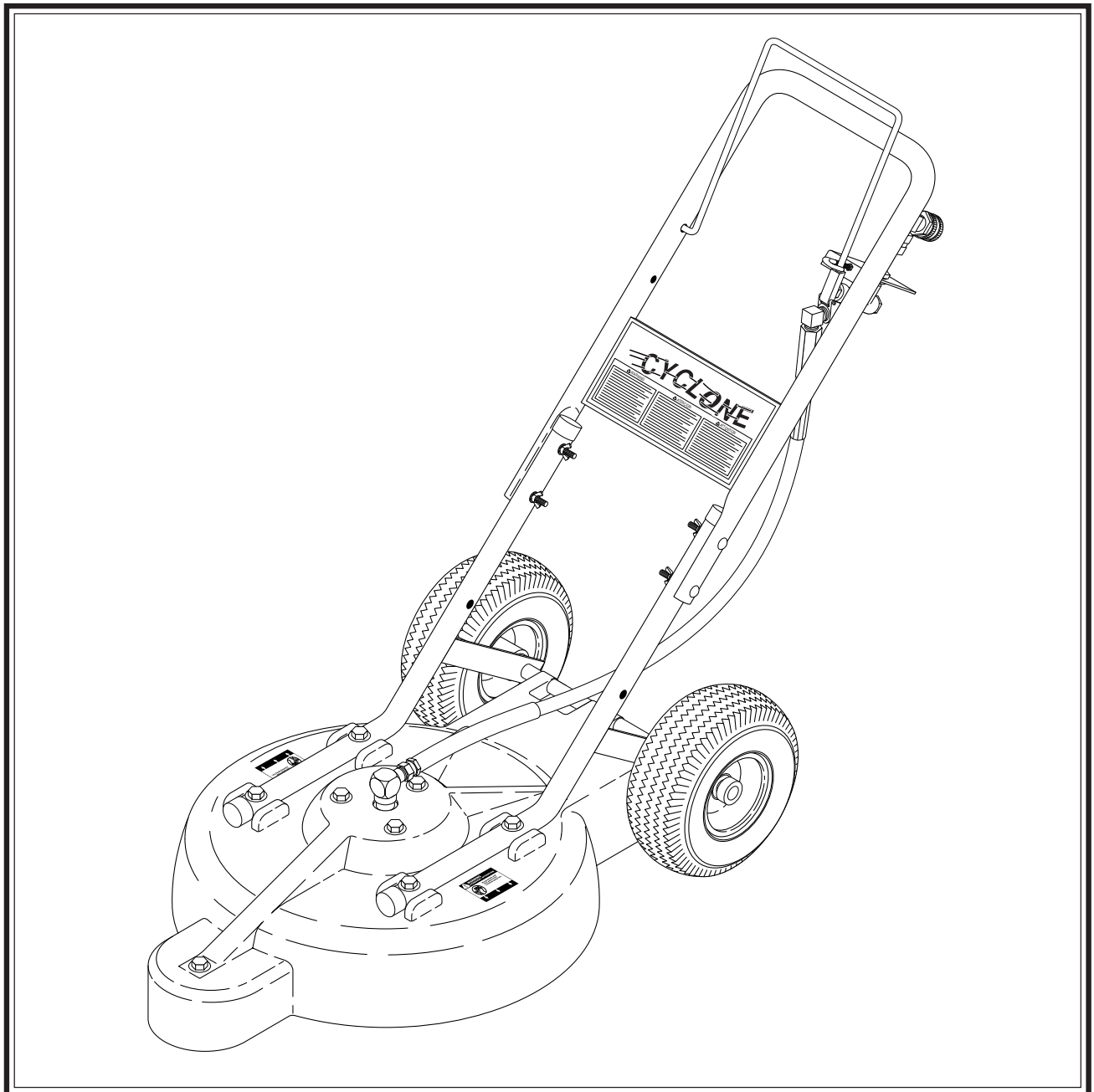


# **CYCLONE**

## **OPERATING INSTRUCTIONS AND PARTS MANUAL**



**4275 N.W. PACIFIC RIM BLVD. ■ CAMAS, WA 98607 ■ USA**

For technical assistance or the Dealer nearest you, call (360) 833-1600



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Model Number _____
Serial Number _____
Date of Purchase _____
The model and serial numbers will be found on a decal attached to the Cyclone. You should record both serial number and date of purchase and keep in a safe place for future reference.

## INTRODUCTION

The Cyclone is designed to attach to a pressure washer which rotates two high pressure nozzles in the Cyclone. The nozzles produce spray as well as determine the size of the swath when cleaning surfaces such as parking lots, driveways and sidewalks.

### Owner/User Responsibility:

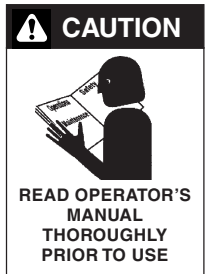
The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this Cyclone. Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

Owner and/or user must study and maintain for future reference the manufacturers' instructions.

**This manual should be considered a permanent part of the machine and should remain with it if machine is resold.**

**When ordering parts, please specify model and serial number.**

## IMPORTANT SAFETY INFORMATION



**CAUTION:** To reduce the risk of injury, read operating instructions carefully before using.

1. Read the owner's manual thoroughly. Failure to follow instructions could cause malfunction of the machine and result in death, serious bodily injury and/or property damage.



**WARNING:** High pressure stream of fluid that equipment can produce can pierce skin and its underlying tissues, leading to serious injury.

2. High pressure developed by these machines will cause personal injury or equipment damage. Use caution when operating. Do not direct discharge

stream at people or animals or severe injury or death will result.

3. Never make adjustments on machine while it is in operation.
4. Eye safety devices and foot protection must be worn when using this equipment.

5. The best insurance against an accident is precaution and knowledge of the machine.
6. Never expose any parts of the body, such as feet or fingers, to the underside of base when spray arms are rotating. Never tilt or attempt to work on underside of base while pressure washer is running or spray arms are rotating.



**WARNING:** High pressure spray can cause paint chips or other particles to become airborne and fly at high speeds.

7. Safety clothing and protective eye covering must be worn.
8. The Cyclone comes equipped with two #3 nozzles in the rotating swivel. Check your machine nozzle size before using.
9. We will not be liable for any alterations made to our standard machines, or the application of any components not purchased from us.
10. Pressure must NOT exceed 4,000 PSI. Temperature must NOT exceed 200°F. Flow rate must NOT exceed 6 GPM.
11. To protect from freezing, squeeze the trigger lever after you turn off the pressure washer and have disconnected the high pressure hose from the Cyclone. This will allow water to drain through the nozzles.

## GENERAL OPERATING TECHNIQUES

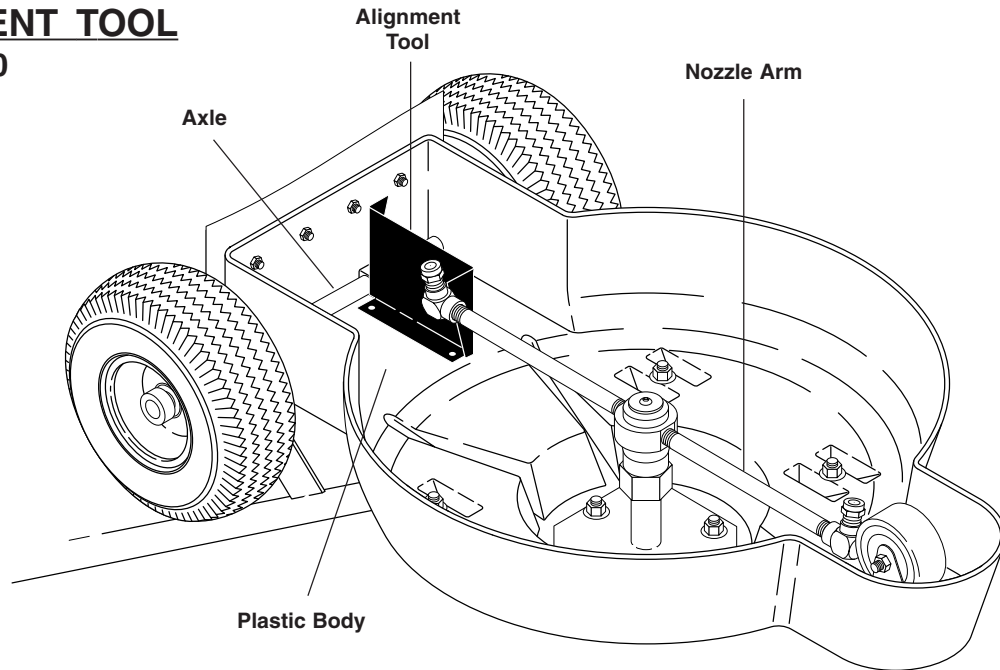
1. Disconnect pressure washer spray gun from high pressure hose. These items are not included, but are provided with the soon to be attached pressure washer.
2. Attach the female nipple, supplied with the Cyclone, to the pressure washer high pressure hose. **NOTE: We recommend using no mar hose to prevent black marks from appearing on the cleaning surface.**
3. Couple pressure washer high pressure hose to Cyclone.
4. Inspect your pressure washer nozzle size. The Cyclone surface cleaner comes with two #3 nozzles. If your pressure washer requires a nozzle larger than a #6, consult with your local dealer.

**NOTE:** For ideal cleaning, the Cyclone must be attached to a minimum 4 gpm at 3,000 psi pressure washer.

5. Turn on water supply and start pressure washer.
6. Pull the trigger for water to start cleaning surface. **NOTE: Never stop moving the Cyclone while trigger is engaged and surface is being sprayed or damage to surface could occur.**

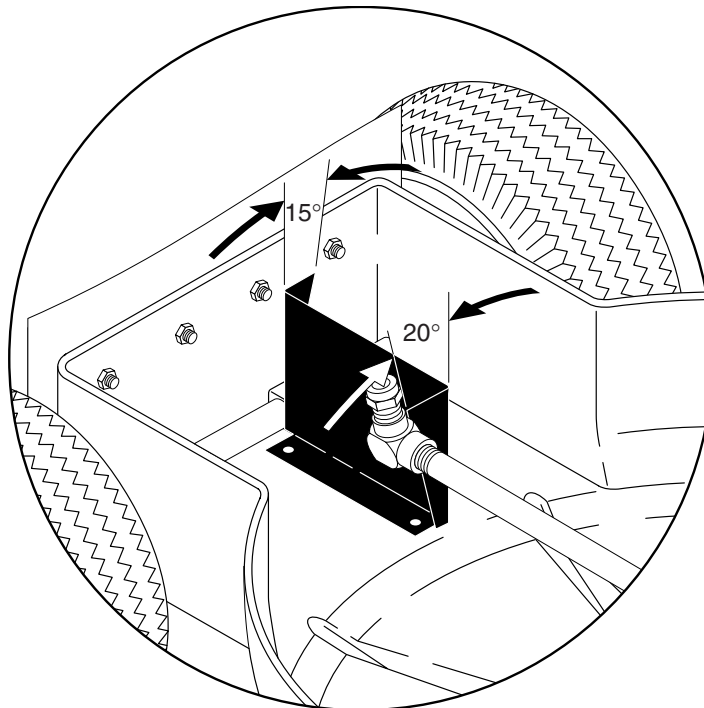
## ALIGNMENT TOOL

95-0728030



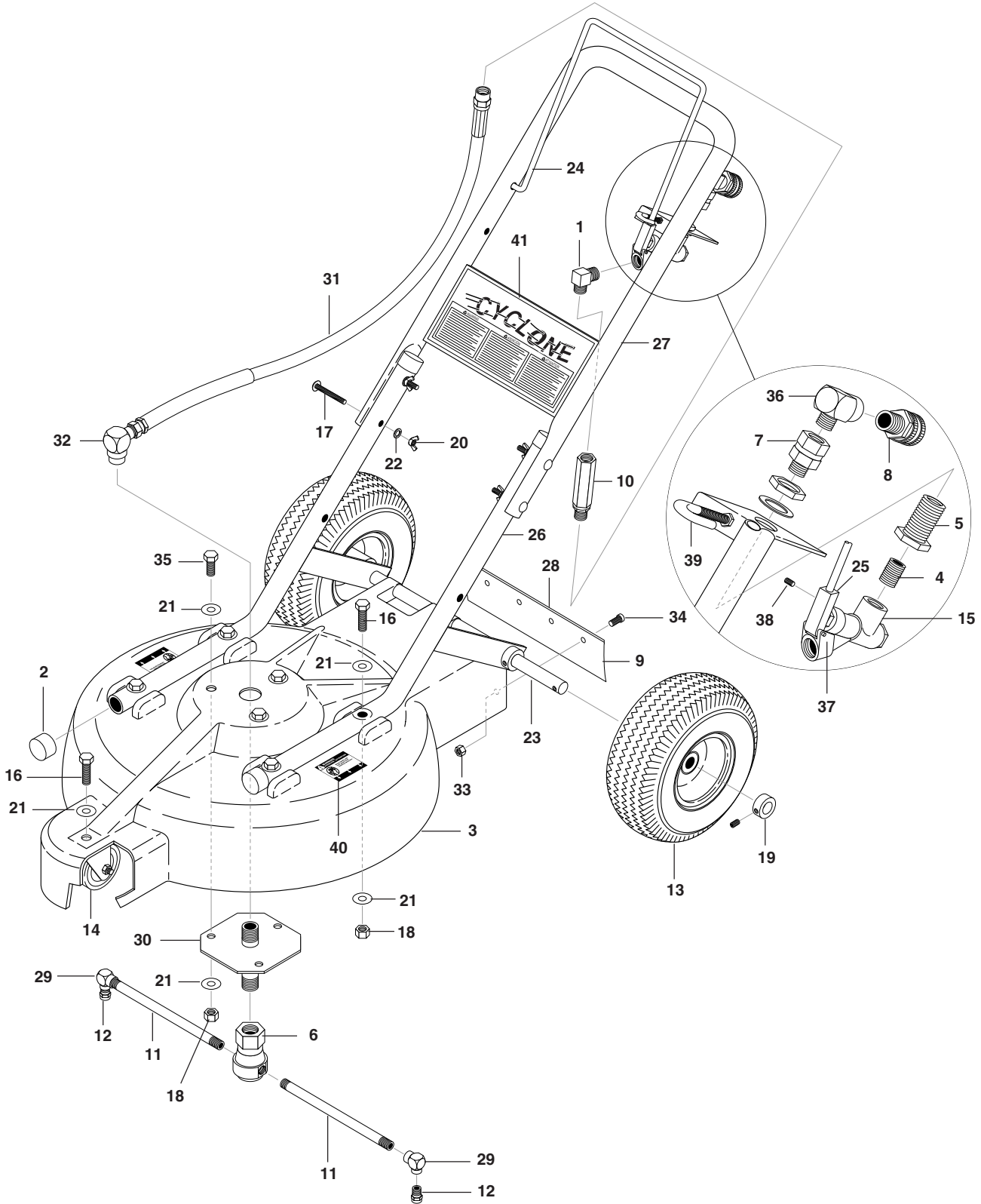
**STEP 1:** Disconnect water to Cyclone, then turn entire machine over to allow access to nozzle jets.

**STEP 2:** Place base of alignment tool flat against bottom of Cyclone plastic body. Press end of tool (opposite of desired angle) against axle, then rotate nozzle arm to alignment tool as shown.



**STEP 3:** Use either the 20° or the 15° end of tool, adjust nozzle to align with angled surface of tool. **NOTE:** 20° is the factory setting. Nozzles can be set at 15° if a slower rotational speed is desired.

## EXPLODED VIEW



## EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	2-00260	Elbow, 1/4", Male Pipe	1
2	2-01080	Cap, Black Vinyl	4
3	2-011049	Base, Polyethylene, Red	1
4	2-0003	Nipple, 1/4" Close Sch 80 Steel	1
5	2-1104	Connector, 1/4" Anchor	1
6	2-11055	Swivel, Rotary Union URF400	1
7	2-11059	Swivel, 1/4" High Pressure	1
8	2-2003	Coupler, 3/8" Male Brass	1
9	2-4006	Guard, Splash	1
10	2-99071	Filter, High Pressure	1
	2-990710	▲ Screen, High Press Filter S/S	1
	2-990711	▲ Gasket, Nylon	1
11	4-0111320	Wand, 8" Rotary	2
12	4-01803015	Nozzle Only, SA, 1/8", MEG-1503	2
13	4-0303	Wheel & Tire Assy, 4" w/Tube	2
14	4-031509	Wheel, Caster 3 Grey	1
15	81-21007L	Valve, Acuator, Assy	1
16	90-10182	Bolt, 3/8" x 1-3/4", HH NC Stainless	5
17	90-1042	Screw, 1/4" x 2" Carriage, ZN	4
18	90-20021	Nut, 3/8" Stainless, ESNA NC	8
19	90-20041	Collar, 5/8" Bore Shaft 3010	4
20	90-20054	Nut, Wing 1/4-20 ZN	4
21	90-40021	Washer, 3/8", SAE, Stainless Steel	13
22	90-40089	Washer, Split-Lock 1/4" ZN	4

ITEM	PART NO.	DESCRIPTION	QTY
23	95-0728018	Axle, 5/8" x 18.5", Stainless	1
24	95-0728022	Handle, Trigger Bar	1
25	95-0728023	Adapter, Valve, Trigger Bar	1
26	95-0728026	Handle, Lower Assy	2
27	95-0728027	Handle, Upper Assy	1
28	95-0728029	Plate, Backup, Splash Guard	1
29	2-10410	Elbow, 1/4" x 1/8", Brass, 90 Degree	2
30	95-0728025	Nipple, Bulkhead, 1/2" x 4-1/2", 304 SS, SCH. 40	1
31	4-02021234	Hose, 3/8" x 34" Pressure, 1/2" FJIC x 1/4" FNPT	1
32	2-00602	Elbow, 1/2" JIC x 1/2" FEM 90 DGR	1
33	90-020	Nut, 10/32" NF ST ST KEP	4
34	90-10141	Screw, 10/32" x 1/2" SHCS SS	4
35	90-10162	Bolt, 3/8" x 1" HH/NC, 316 SS	3
36	2-00301	Elbow, Street, 1/4" x 3/8", Steel	1
37	90-50035	Pin, Roll M2.5" x 24 mm 5395A277	1
38	90-1700	Screw, 8/32" x 1/4" SS, SOL SET	1
39	90-50168	Hook, 10/24" x 2"	1
	90-20044	▲ Nut, 10/24" HEX, Whiz Loc M/S Zinc	2
40	10-020310	Label, Warning	2
	10-08014	▲ Label, Made in USA	1
41	11-0477	Label, Cyclone	1

▲ Not Shown



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*Cyclone System*  
**WARRANTY**

**LIMITED MINIMUM 90 DAY WARRANTY**

We warrant to the original consumer that each new part and accessory sold by C-Tech will be free from manufacturing defects in materials or workmanship in normal service for the duration specified by the original component manufacturer with a 90 day minimum from date of purchase, provided it is installed properly and the equipment is maintained in accordance with C-Tech's instructions and manuals. Components manufactured by C-Tech, such as frames and handles, have a one year warranty from date of purchase.

Our obligation under this warranty is expressly limited as to the replacement or repair, at our option, at C-Tech, Camas, Washington 98607, or at a service facility designated by us, for such part or parts as inspection shall disclose to have been defective.

**EXCLUSIONS:**

This warranty does not apply to defects caused by casualty or unreasonable use, including faulty repairs by others and failure to provide reasonable and necessary maintenance.

**THE FOLLOWING ITEMS ARE NOT COVERED BY THIS WARRANTY:**

WE SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND, including but not limited to labor costs or transportation charges in connection with the replacement or repair of defective parts.

ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. We make no other express warranty, nor is anyone authorized to make any on our behalf.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

**TO OBTAIN WARRANTY SERVICE:**

Purchaser must bring the accessory parts to an authorized C-Tech Dealership. For the dealership nearest you write:  
C-Tech, 4275 NW Pacific Rim Blvd, Camas, WA 98607.

## INTRODUCCION

El Sistema de Cyclone de agua está diseñado para adaptarse a una lavadora de presión haciendo rotar dos boquillas de alta presión para producir el rociado y así mismo determinar el tamaño del ancho de corte cuando se limpian superficies de playas de estacionamiento, pistas de acceso y veredas.

### Responsabilidad del Dueño/Usuario

El dueño/usuario debe entender las instrucciones de operación y las advertencias del fabricante antes de usar el Sistema de Chorro de agua. La información de advertencia debe ser enfatizada y entendida. Si el operador no habla inglés, las instrucciones y advertencias del fabricante deberán ser leídas y discutidas en la lengua nativa del operador por el comprador/dueño, asegurándose que el operador entienda su contenido.

El dueño y/o usuario deben estudiar y mantener las instrucciones del fabricante para futuras referencias.

**Este manual deberá ser considerado como una parte de la máquina y debe permanecer así en caso que se revenda la unidad.**

**Cuando ordene repuestos, por favor especificar el modelo y el número de serie.**

## SEGURIDAD DE LA MAQUINA

### ADVERTENCIA



**ADVERTENCIA:** Para reducir el riesgo de accidentes, leer cuidadosamente las instrucciones de operación antes de usar la unidad.

1. Leer cuidadosamente el manual del operador. El incumplimiento de las

instrucciones puede causar un operación defectuosa e inadecuada de la unidad y puede provocar la muerte, causar heridas serias y/o daños a la propiedad.

### ADVERTENCIA



**ADVERTENCIA:** El flujo de líquido de alta presión del equipo puede producir perforaciones en los tejidos de la piel, causando heridas graves.

2. La alta presión desarrollada por estas unidades causará accidentes personales o daños

al equipo. Sea precavido al operar. No descargar el flujo directamente en personas o animales ya que puede causar heridas graves o la muerte.

3. Nunca hacer ajustes a la máquina mientras esté operando.
4. Deben usarse accesorios de seguridad para los ojos y protección de los pies cuando se use este equipo.
5. El mejor seguro contra un accidente es la precaución y el conocimiento de la máquina.
6. Nunca dirija la varilla del chorro de agua a cualquier parte de su cuerpo o alguna persona a 10 pies de distancia ya que podría producir heridas graves.



**ADVERTENCIA:** El chorro de alta presión puede ocasionar que trozos de pintura y otras partículas vuelen por los aires a altas velocidades.

7. Debe usarse ropa de seguridad y protección para los ojos.

8. El ensamble del Sistema de chorro de agua viene equipado con una boquilla #6 en la pistola de apagado y dos boquillas #3 en la placa giratoria. Revise la boquilla de su equipo antes de usarlo.
9. No seremos responsable por cualquier cambio hecho a nuestras unidades estándar o la aplicación de cualquier otro componente no comprado de nosotros.
10. La presión NO debe exceder 4,000 PSI. La temperatura NO debe exceder 200°F.
11. Para protegerla del congelamiento, apriete la palanca del disparador después de apagar la máquina para lavado a presión y después de haber desconectado el tubo flexible de alta presión de Cyclone. Esto permitirá que el agua desagüe a través de los tubos flexibles.

## TECNICAS GENERALES DE OPERACION

1. Desconectar la pistola de alta presión de la manguera de alta presión. Estos artículos no se incluyen, pero serán provistos cuando se requieran acoplar a la lavadora de presión.
2. Conectar la boquilla hembra, incluida con la lavadora, a la manguera de agua de alta presión.

**NOTA:** Recomendamos no usar manguera tipo mar para prevenir que aparezcan marcas negras en la superficie que se está limpiando.

3. Acoplar la manguera de alta presión de la lavadora al Sistema de chorro de agua.

4. Inspeccionar el tamaño de la boquilla de la lavadora de presión. El Sistema de chorro de agua viene con dos boquillas #3. Si su lavador de presión requiere una boquilla más grande que la #6, consulte con su vendedor local.

**NOTA:** Para un lavado ideal, el Sistema de chorro de agua debe adaptarse a un lavador de un mínimo de 4 gpm y 3,000 psi de presión.

5. Prender el suministro de agua y arrancar la lavadora de presión.

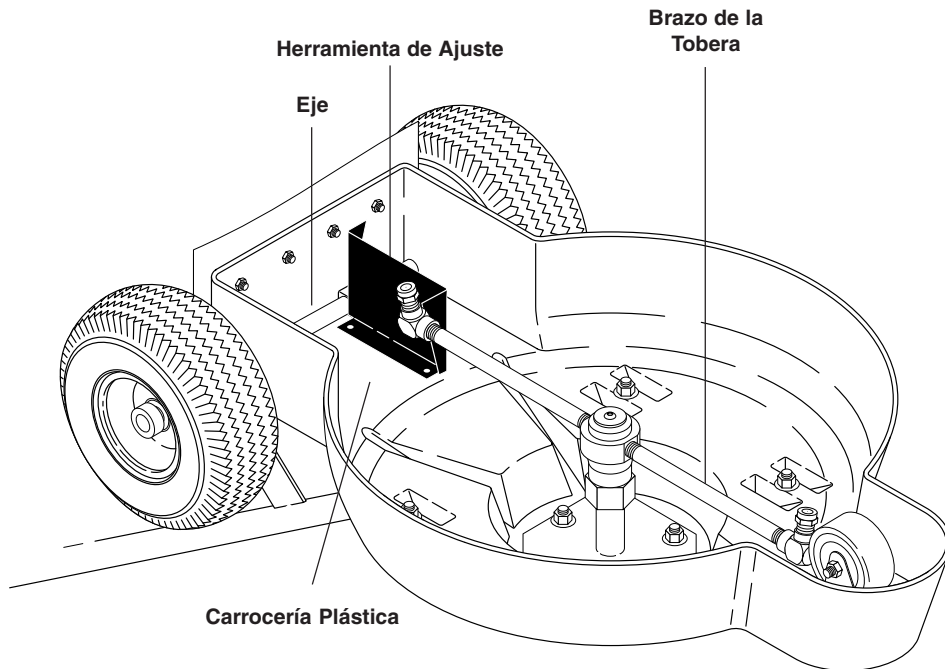
**NOTA:** Siempre es importante probar en una área pequeña para la correcta regulación de la altura necesaria de tal manera que la superficie a ser limpiada no sea dañada.

6. Tirar del gatillo para que el agua empiece a limpiar la superficie.

**NOTA:** Nunca deje de mover el Sistema de chorro de agua mientras el gatillo está accionado y la superficie está siendo limpiada o podrían ocurrir daños en la superficie.

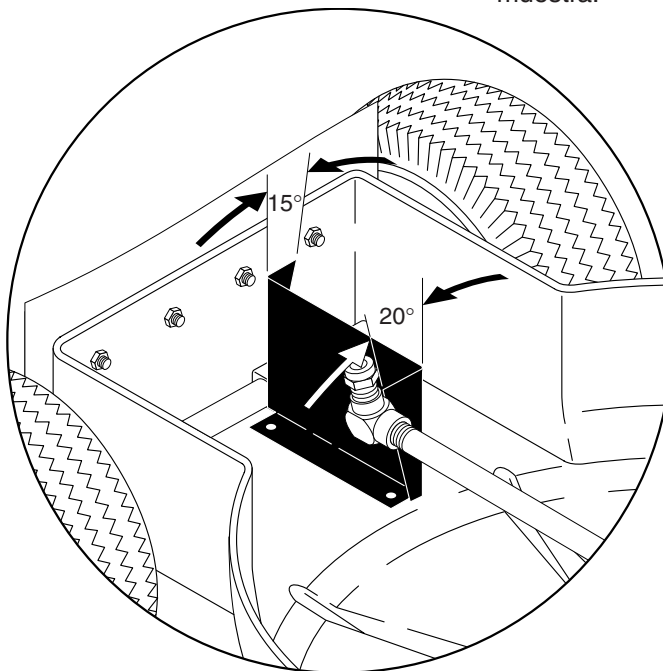
**HERRAMIENTA DE ALINEAMIENTO**

95-0728030



**PASO 1:** Desconecte el agua de Cyclone, luego gire la máquina completa para permitir el acceso a las toberas de chorro.

**PASO 2:** Coloque la base de la herramienta de ajuste plana contra la parte inferior de la carrocería plástica de Cyclone. Presione el extremo de la herramienta (opuesto al ángulo deseado) contra el eje y luego gire el brazo de la tobera hacia la herramienta de ajuste tal como se muestra.



**PASO 3:** Utilizando el extremo de la herramienta en 20° o en 15°, ajuste la tobera para alinearla con la superficie en ángulo de la herramienta. **NOTA:** 20° es ajuste de fábrica. Las toberas se pueden fijar en 15° si desea una velocidad de rotación más despacio.



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