



**ELIMINATE
HEAT INDUCED
FATIGUE**

**The World Leader
in Personal Cooling**

COOL SHIRT® Rally System *Driver Cooling System*

Congratulations on your purchase of the world's finest Driver Cooling System

The **COOL SHIRT® Rally System *Driver Cooling System*** is the finest *Driver Cooling System* available today. Used by drivers in all levels of racing, this system delivers comfortable cooled water to the driver's and navigator's shirt, keeping them more comfortable, safe, mentally alert and helping prevent heat exhaustion.

COOL SHIRT® Personal Cooling Systems are manufactured in the USA and contain the highest quality components available. With proper installation and maintenance, your system will provide you with years of dependable service. *Please inspect your purchase to ensure that your system contains the selected components listed below. If there are any discrepancies, please contact Shafer Enterprises Customer Service at 800-345-3176 immediately.*

Included with your system:

Quantity	Part#	Description
_____ 1	CS-24 or CS-12	Platinum Series Cooling Unit with 400GPH internal pump
_____ 1	CH-8	8-foot insulated temp control water hose with quick disconnects
_____ 1	HY-8	8-foot insulated Y-Hose
_____ 2	CW-(size)	COOL SHIRT® Cool Water shirt
__NO__ 1	FC-1	Temperature Control Switch

Available accessories for your Rally System 24 System:

Part#	Description
_____ MT-12 or MT-24	Custom Stainless Mounting Tray with tie-down strap
_____ BCW	COOL BLUE HANS-Friendly Shirt for HANS Users
_____ FWS-LS	FireWear HANS-Friendly Shirt for HANS Users
_____ C-NCW	CarbonX Nomex COOL SHIRT®
_____ NCW-LS	Long-Sleeve Nomex COOL SHIRT®
_____ PRC-2	Emergency Safety Pull Release Connector Kit
_____ UK-1	Universal Connector and Drain Kit
_____ Other (specify)	_____ Order packed by: _____

System Specifications

	<u>Dimensions</u>	<u>Cooling Time</u>	<u>Dry Weight</u>	<u>Power Required</u>
CS-24:	15.5"L x 10.5"W x 13"H	6 hours	4 lbs.	Water Pump: 2.0A,12V
CS-12:	14"L x 9.5"W x 11"H	3 hours	4 lbs.	Water Pump: 2.0A,12V



Rally System *Driver Cooling System*

Installation Instructions

COOLING UNIT (Part#: CS-24 or 12) and MOUNTING TRAY (Part #: MT-24 or 12)

- 1) Select mounting tray location and permanently attach the tray to the racecar with any appropriate hardware (not provided). Place cooling unit into the mounting tray.
- 2) Thread the tie down strap through one of the two slots provided on the cooling unit, then run the strap down through the slot on the same side of the mounting tray. Run the strap lengthwise *under* the cooling unit *between* the mounting tray and cooling unit, through the slot on the other side of the mounting tray and up through the slot in the top of the cooling unit.
- 3) Use the clamp provided on the strap to secure the cooling unit to the tray. The cooling unit and mounting tray were packaged this way from the factory prior to shipping to illustrate proper placement of tie-down strap.

Note: Ensure that the 8-foot water hose can reach the driver. Do not allow the hose to come into contact with any hot metals as this may damage the hose.

COOLING UNIT (Part#: CS-24 or 12) Only / No Mounting Tray

- 1) Mount the Cooling Unit at a convenient place in the racecar using your own fabricated mounting tray or by strapping the cooling unit directly to the racecar with eye hooks and ratchet straps.
- 2) Wire the cooler into the COOL SHIRT® Temperature Control switch (Part# FC-1) using the instructions provided with the switch.

Brown wire = positive, Black wire = negative connection.

Note: Do not allow the cooling unit to come into contact with any hot metals as this may damage the unit. For driver safety, before using the system, ensure that the cooling unit can be securely fastened to the racecar and that it will not break loose in the event of a crash.

Instructions for Use

- 1) Pour 1 gallon of water into the cooling unit. Fill the unit with block ice (preferable) or cubed ice to the top of the unit.
- 2) Put on the COOL SHIRT® next to your skin with the tubing facing out. Put on your driver's suit and route the hoses outside of your suit via the side pocket or front zipper.
- 3) Connect the COOL SHIRT® to the straight hose, connect the straight hose to the Y-hose, connect the Y-hose to the cooling unit. Listen for audible "clicks" at all connections - that ensures a good connection. Turn the unit on via the FC-1 switch. Instructions for switch wiring & installation are included separately with the switch.

Troubleshooting

- 1) ***Leaks:*** check to see if all fittings are properly connected. Listen for audible "click".
- 2) ***Not pumping:*** recheck electrical connections.
- 3) ***Water not flowing:*** Check the hoses to be sure that your seat belt or harness is not crimping the tubing. If the pump is running but not pumping water, add one more quart of water.

Maintenance

- 1) ***COOL SHIRT®:*** Turn the shirt inside out and wash in washing machine on the gentle cycle in warm or cold water.
- 2) To prevent scum build-up and algae growth, once per month or just before long-term storage, add 8 ounces of rubbing alcohol to the cooling unit with a gallon of water and circulate through the hose and shirt. Or drain the hose and shirt with the Universal Connector & Drain kit (Part# UK-1)

All products are guaranteed for one year from the initial date of purchase for defects in material and workmanship. If you have any questions, please call Shafer Enterprises Customer Service at (800)345-3176. We appreciate your interest in our personal cooling products.