



# Instructions

6747 Whitestone Rd • Baltimore, MD 21207 • (410) 298-4343 • FAX: (410) 298-3579

www.atiracing.com

®

## SCS-30 COOLING SYSTEM

U.S Patent #8,251,851

### Operation and Draining Techniques

Part # 925000

ATI's SCS-30 comes completely installed in your ATI SuperCase®. You only need to supply 12-16 volts through a switch and 30 amp fuse to the negative (black) terminal of the motor (the red terminal is the ground). The pulley must spin **CLOCKWISE** when looking down at it. ATI recommends a premium brand ATF Type F or Super F - no hydraulic fluid!

**The ATI SCS System functions exactly like your engine is running, completing the cooler circuit normally supplied by the front pump into the converter, out to the cooler and back to the transmission to lube and cool it.**

The SCS also requires a fan-cooled (ATI part #925139 or #925140 ) or ice-cooled cooler to remove the heat as the pump moves the oil through the system.

Once installed in the race car, you can do many things with the SCS:

#### **Please note!**

- \* **During any of these operations, you can add new fluid and continue to flush the old fluid through the system. Since your ATI transmission is dyno run and verified for zero case pressure, any fluid observed in the overflow tank will indicate over filling.**
  - \* **For each option below, you must thoroughly warm up the transmission and run it through all gears to insure proper fluid level.**
1. You can activate the pump after initial installation of 4-5 quarts of fluid and finish filling the transmission and converter without starting the engine. The SCS will completely fill the transmission, converter, all lines and the cooler. You can then add fluid until you are at the full mark as the fluid will grow slightly when it gets hot. The level will decrease when the drums get filled as you run it through the gears on jack stands warming it up. Of course, verify the fluid level after you run it through the gears.
  2. Turning the pump on before the run or at engine shutdown after the run will provide a constant flow of oil to lubricate and cool the transmission when the engine stops turning the front pump of the transmission. This will also eliminate the near boiling fluid from sitting in the converter. Depending on what type of car, engine and class, the SCS-30 will completely cool your transmission and converter in as little as 30 minutes.
  3. A temperature switch (ATI part #925134, 160° F-180° F) is available that will turn the pump on and off at a preset temperature if you desire. This can also be used in conjunction with a bung heater in your pan to cycle the pump and heater to maintain a constant transmission temperature when you are ready to go to the line.
  4. You can change the oil in your transmission, converter, cooler and lines by unhooking the bottom cooler hose. This is the "out" hose. Observe when the flow stops or starts to sputter which indicates the pan is empty. Shut down the pump so it doesn't run dry. **Note! Since the SCS sucks the oil through the filter you will need to remove the drain plug and allow the last little bit out.**
  5. To change oil just from the transmission and converter - Unhook both cooler lines and cap. Get a spare piece of hose and install it on the lower transmission fitting. Run the pump and it will start moving the oil out of the converter first and then it will suck from the pan into the converter and back out. If you watch the fluid you will see it get cleaner as it removes the burnt converter fluid and starts sucking from the pan.
  6. To continue to flush your system - Put the drain plug back in and pour 5 quarts of oil into the transmission and prepare 5 more quarts. Again activate the pump and observe the outflow until it starts looking like new fluid is moving. The new oil will be pumped through the converter and then into your container for disposal.