



**Installation Manual v1.1:  
ATS High Capacity Transmission Pan  
GM Allison Transmissions**

**Please read all instructions before installation.**

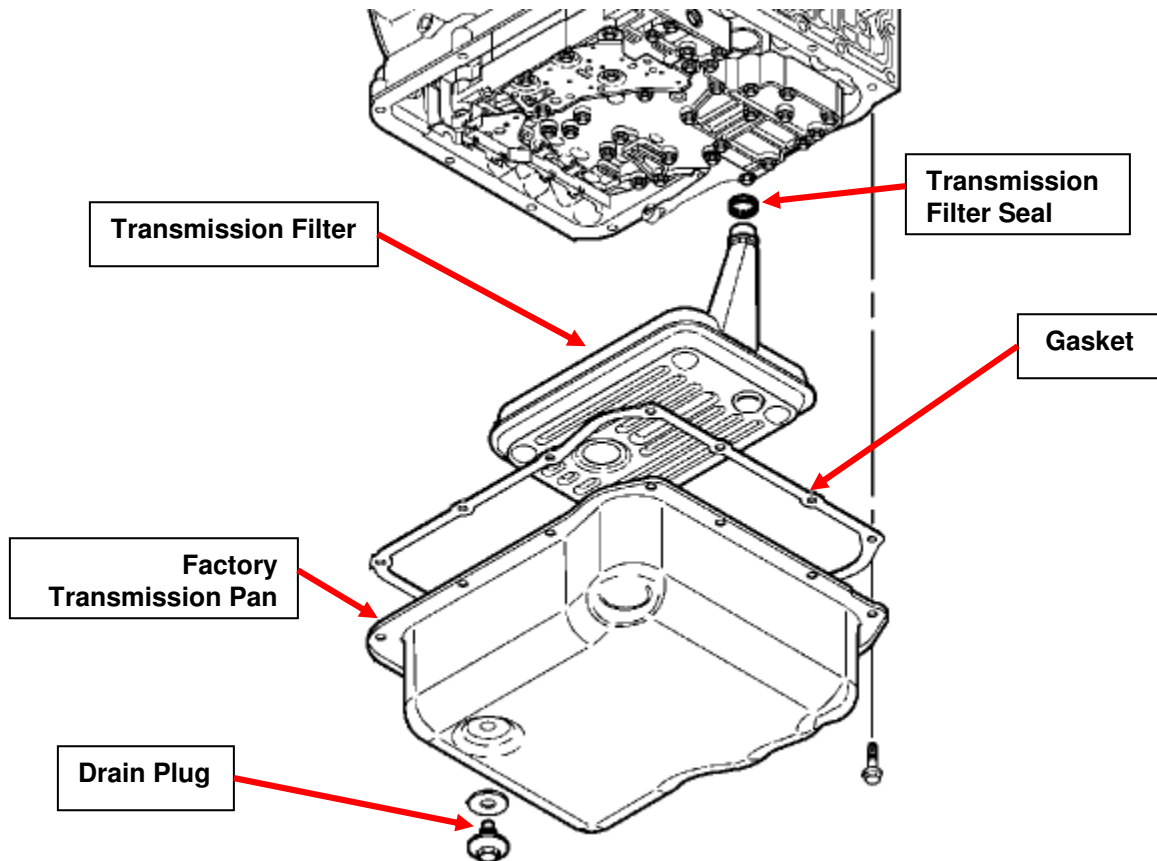
**If transmission temperatures run too high, consider ATS Transmission Coolers, Thermostats and Transmission Temperature Gauges for transmission temperature control and monitoring.**



**Figure 1: Allison High Capacity Transmission Pan**

1. Please make sure no parts are missing out of the ATS High Capacity Transmission Pan kit. A complete corresponding list of parts can be found on page 6. The bag pictured contains all hardware necessary for installation.
2. Park vehicle on level ground, apply parking brake and place transmission in **NEUTRAL**.
3. Position a drain pan under factory transmission to catch old automatic transmission fluid.

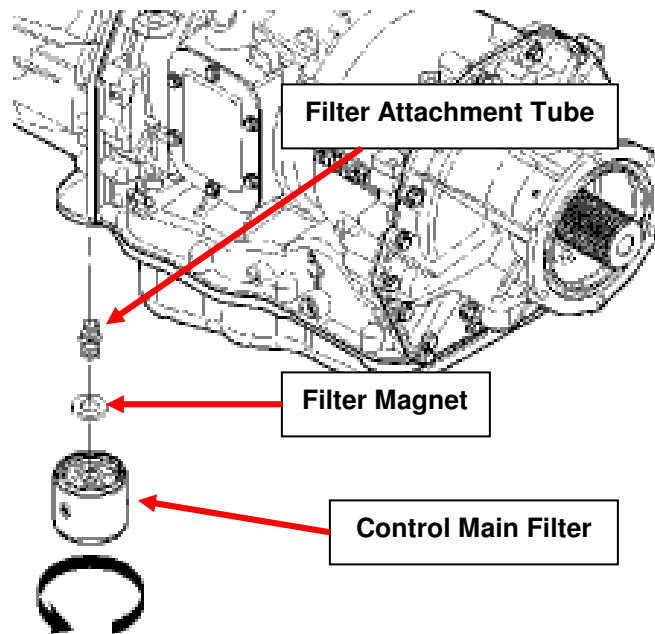
4. Remove transmission fluid drain plug and allow fluid to drain.
5. Once fluid has drained completely (fluid drips every 1 to 2 seconds) replace drain plug and remove the 12 bolts holding factory transmission pan in place. Remove pan and gasket.
6. Remove transmission fluid filter.



**Figure 2: Factory Transmission Pan and Filter Assembly**

7. Prior to installing new transmission filter, make sure that old fluid filter seal has been removed. Install a new fluid filter and seal assembly.
8. Clean gasket surface on transmission and transmission pan. Apply a ¼ in. wide bead of silicone/gasket maker to transmission pan around seal surface. The Right Stuff® gasket maker is a good choice and provides an instant seal.
9. Align ATS High Capacity Transmission Pan with bolt holes in transmission. Thread new stainless steel cap screws in transmission until finger tight. Torque all cap screws to **20 ft-lbs** in a crisscross pattern.

10. If not already installed, install drain plug and torque plug to **15 ft-lbs**.
11. **Note:** With the transmission drained, it is a good time to change the control main filter (canister style filter on driver's side of transmission). See steps 12 through 18 for installation instructions.
12. Use a standard strap-type filter wrench to remove control main filter. Remove filter by rotating counterclockwise.
13. Remove magnet from filter attachment tube in the converter housing or from the top of the control main filter.



14. Clean any metal debris from the magnet. Presence of any metal pieces larger than dust may indicate that transmission replacement or overhaul is required.
15. Reinstall magnet on filter attachment tube in converter housing.
16. Lubricate gasket on the control main filter with clean transmission fluid.
17. Install, by hand, control main filter until gasket on the filter touches converter housing.
18. Turn main filter  $\frac{3}{4}$  to 1 full turn after gasket touches. Turning past 1 full turn can damage filter and cause fluid leakage.
19. To fill transmission, add approximately **10 quarts** of new **DEXRON III** automatic transmission fluid to transmission through fluid filler tube located under hood of truck.

20. **Important:** DTC P0701 may often set fluid service. Cycling ignition clears code and allows Driver or Reverse range to be attained. Cycle ignition until Drive or Reverse range is attained.
21. Start engine. Move transmission range selector lever through all gear ranges, checking engagements.
22. With vehicle in **NEUTRAL**, engine running and transmission at normal operating temperature (**150-170°F**), check and adjust transmission fluid level, and check for any leaks. If fluid is needed, add fluid in increments of **0.25 quarts** until correct level is achieved (fluid should be between full and add marks on fluid level indicator).
23. Pour used transmission fluid into approved container and dispose of fluid at appropriate recycling facility or participating local parts store.

**A word of caution to the vehicle owner/installer:**

In some applications, or because of the use of certain factory options and/or aftermarket equipment, clearance problems can occur between the ATS High Capacity Transmission Pan and other vehicle systems. It is the responsibility of the vehicle owner/ installer to ensure no other vehicle component comes in contact with the ATS High Capacity Transmission Pan. **Contact with any vehicle component, or the making of any modifications to the ATS High Capacity Transmission Pan, automatically voids the warranty. ATS Diesel Performance assumes no liability, expressed or implied, for damage or injury to persons or property.**

## **Have Any Questions?**

Thank you for purchasing the ATS High Capacity Transmission Pan. Please check our website at <http://www.atsdiesel.com> for technical support and other performance products such as the 5-Star™ torque converter, ATS High Performance Valve Body and ATS High Performance Transmission along with our full line of power enhancers. Please call or e-mail our Technical Service Department, 8:00am to 5:30pm Mountain Standard Time, Monday through Friday.

### **Contact Information**

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We strive to make our instructions as clear and complete as possible. To achieve this, our instructions are under constant construction. We encourage you to visit our Technical Support Website (<http://www.atsdiesel.com/ATSWebsite/Technical.asp>) to check for the most up-to-date manuals and diagrams as well as other information. If you have any suggestions as to how we can improve this installation manual, let us know at <mailto:Suggestions@ATSDiesel.com>.

**Bill of Materials**

1. ATS High Capacity Transmission Pan 301-100-4248
2. Transmission Filter 121010A
3. Hardware Bag  
    (12) Stainless Steel Cap Screws (M8-1.25 x 25)
4. Magnetic Drain Plug  
    (1) Drain Plug  
    (1) O-Ring

Not Pictured:

5. Instruction Manual 301-900-4248 – INST
6. ATS Warranty [www.atsdiesel.com/warranty](http://www.atsdiesel.com/warranty)