

Hondavert S300. Use with Automatic gearbox

This instruction was released thanks to the guy with nickname Buka55ru, who many years has been successfully using HondaVert for tuning his car with automatic transmission

WARNING! Before you start. Please understand ONE simple thing. **Hondavert S300** is **NOT a fake copy/counterfit/replica** of Hondata S300 Board. It is own development Board with **COMPATIBILITY** of Hondata SManager software. Yes it's has full compatibility with Hondata S300 V2 hardware, but she has other functionality that Hondata does not (for example — our board work as an OSTRICH emulator + CROME Datalogger via ONE USB port. Yes, You can also use our board as a standalone OSTRICH for nonHonda ECU).

Understanding this simple thing, we come to the understanding that our board is NOT Compatible with new versions of Hondata SManager software from Hondata's web site.

To make our board compatible with new versions of Hondata's software, we will have to crack the Hondata S300 board, but we respect intellectual property and we will not do it.

So please use the software ONLY from this CD or from www.holyguard.ru site. All versions on this sources are TESTED and STABLE.

With best regards, Hondavert TEAM!

Hondata SManager compatibility mode (Set by default)

- If you **not use** Hondata's Traction Control unit, Please USE ONLY **2.2.8** version of Smanager. It's a most STABLE version of all. **Do not forget to disable automatic updates. See instrution below.**
- If you **use** Hondata's Traction Control unit, Please USE ONLY **2.3.7** version of Smanager. **Do not forget to disable automatic updates. See instrution below.**

All two versions of installation aviable on CD or on www.holyguard.ru website.

CROME compatibility mode (Read «SetMode» instruction)

- You can use CROME from oficial website, from CD or from www.holyguard.ru website

ECU Hardware and Wiring

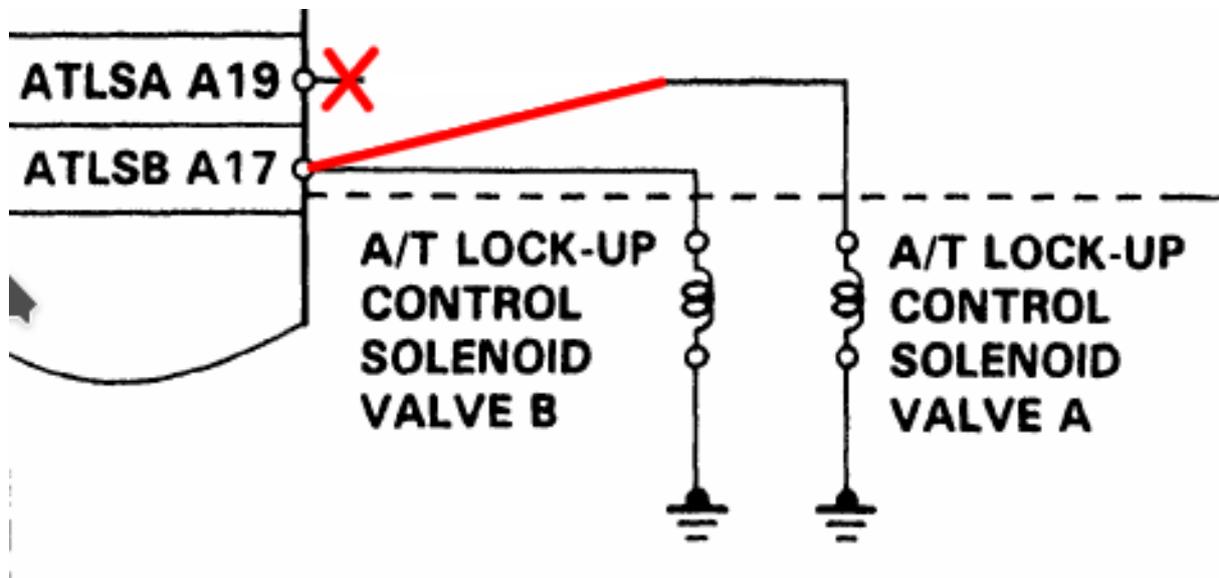
To work, we need the following OBD1 ECU output:

A17 IAB — Secondary Intake Runner / A/T Lock-Up Solenoid

Manual ECU This type of ECU needs to be modified by adding the power output A17 from the ECU, to run automatic valve control. Read below.

Automatic ECU This type of ECU already has everything you need from the factory, does not require any modification.

For ECU wiring connect both A/T Lock-Up Solenoids (OBD1 pin A17 and A19) to pin A17, as shown in the diagram below.



OBD1 Pinout fragment.

A17 IAB Modification (for Manual ECU)

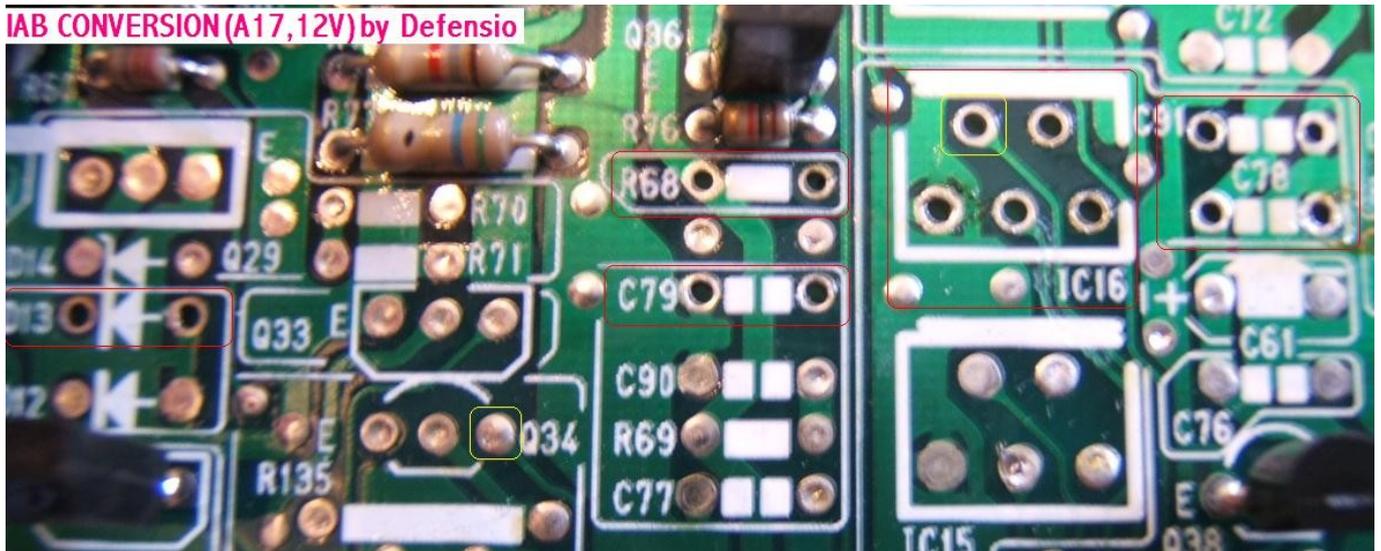
For this modification we need:

IC16 5050S High Side Switch

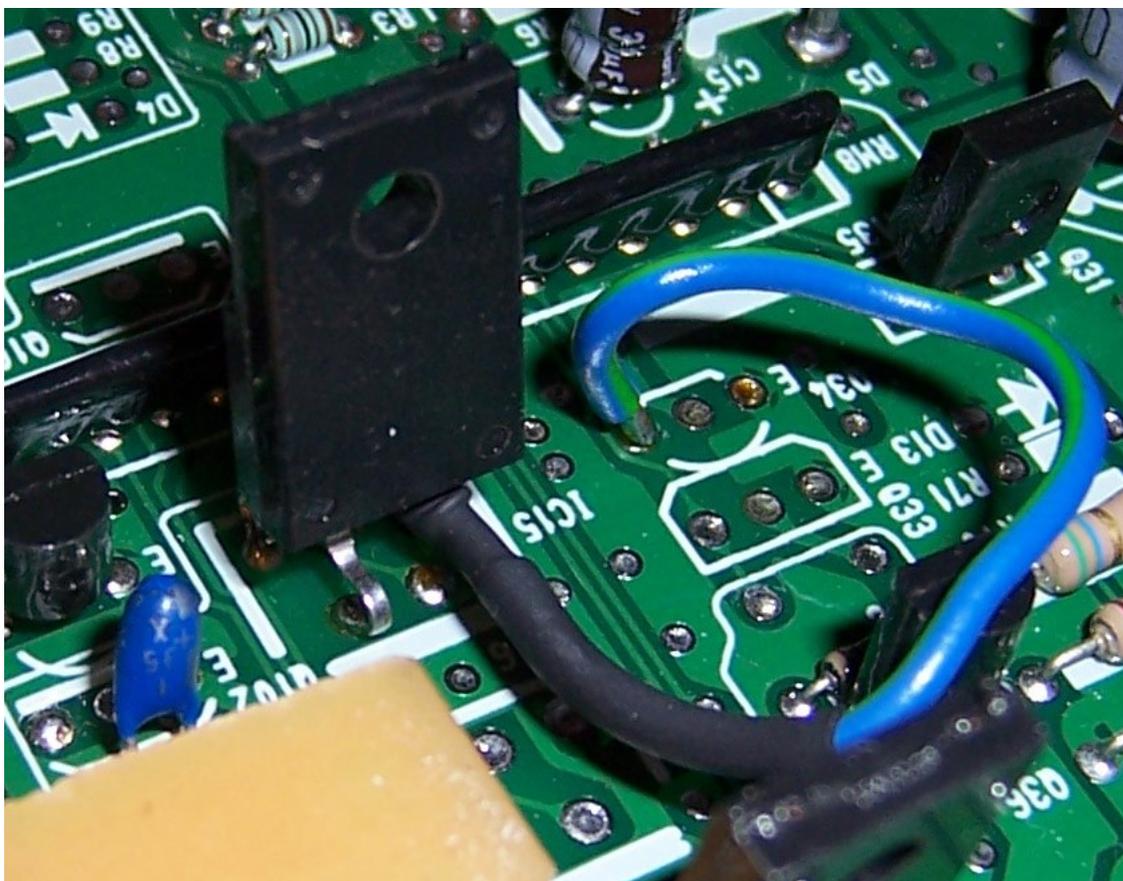
R68 820 Ohm Resistor

D13 4001 Diode

C78, C79, C91 22 pF Capacitors (sometimes sealed from the factory)



Solder R68, D13, C78, C79, C91 in shown places



Solder IC16, Connect the Q34 right hole to left control pin of 5050S

SManager ECU calibration

To run with automatic transmission, we will use a great feature available in SManager - programmable events.

Go to the **Nitrous/AUX 1** event and configure the following parameters:

Function ---> Nitrous control

Input tab ---> Always on

Output tab ---> A17 IAB (Secondary Intake Runner)

Conditions tab

-Engine speed ---> 1500-7200 rpm

switching on early so that there is a margin to failure when locking

-Engine load ---> 300-950 mbar

950 is 8.5 column, if less then flying off when cruising on 100 kmh

-Throttle ---> 1%

-Vehicle speed ---> 70-220 kph

-Air Temperature ---> -30 C

-Water Temp ---> -37 - 130 C

Upload calibration to ECU and Go Driving ;)

Parameters [Window Title Bar]

Analog Inputs	Boost Control	Boost Cut	Closed Loop	Closed Loop Advanced	Digital Input
Flex Fuel	Fuel Compensation	Fuel Trim	Full Throttle Shift	Gear Comp	
Idle	Ignition Compensation	Launch Control	MAP	Misc	
Nitrous/AUX 1	Nitrous/AUX 2	Nitrous/AUX 3	Notes	On-Board Datalogging	Protection
Rev Limits	Secondary Tables	Security	Shift Light	IPS	TPS Ign
VTEC					

Function

Nitrous Control [Dropdown Menu] [Nitrous Help](#)

Input | Output | Conditions | Fuel & Ignition

Arming Input

Always On [Dropdown Menu]

- Invert input
- Disable if check engine code
- Disable on full throttle shift & launch control

Parameters [min] [max] [close]

Analog Inputs	Boost Control	Boost Cut	Closed Loop	Closed Loop Advanced	Digital Input
Flex Fuel	Fuel Compensation	Fuel Trim	Full Throttle Shift	Gear Comp	
Idle	Ignition Compensation	Launch Control	MAP	Misc	
Nitrous/AUX 1	Nitrous/AUX 2	Nitrous/AUX 3	Notes	On-Board Datalogging	Protection
Rev Limits	Secondary Tables	Security	Shift Light	IPS	TPS Ign
VTEC					

Function

Nitrous Control [Nitrous Help](#)

Input Output Conditions Fuel & Ignition

Output Control

Important: Use a relay between the ECU and any solenoid.

A17 IAB (Secondary Intake Runner)

Invert output

Parameters [-] [□] [×]

Analog Inputs | Boost Control | Boost Cut | Closed Loop | Closed Loop Advanced | Digital Input
 Flex Fuel | Fuel Compensation | Fuel Trim | Full Throttle Shift | Gear Comp
 Idle | Ignition Compensation | Launch Control | MAP | Misc
 Nitrous/AUX 1 | Nitrous/AUX 2 | Nitrous/AUX 3 | Notes | On-Board Datalogging | Protection
 Rev Limits | Secondary Tables | Security | Shift Light | IPS | TPS Ign | VTEC

Function: Nitrous Control [Nitrous Help](#)

Input | Output | **Conditions** | Fuel & Ignition

Conditions

	Minimum	Maximum	
Engine Speed	1500	7211	rpm
Engine Load	300	950	mbar ▼
Throttle	1		%
Vehicle Speed	70	220	kph ▼
Air Temperature	18		°F ▼
Water Temp	-38	130	°F