FLEET HOSTER

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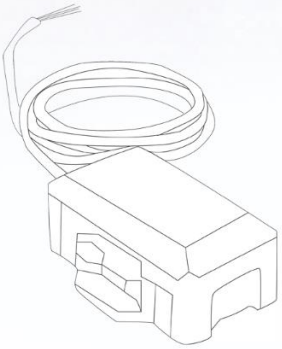
FLEET HOSTER INSTALLATION GUIDE SERIES
THIS IS THE ATW02-6.

Learn how to install your device with this installation guide



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ATW02-6 INSTALLATION GUIDE

Prior to installing, review and adhere to the following items.

- Use only a Digital or Analog Volt Meter - DO NOT USE TEST LIGHT!
- Check for possible installation locations for the GPS unit prior to permanent installation.
- ALWAYS LOOK BEFORE DRILLING. Make sure that the installation process does not cause damage to any vehicle hose, electrical loom, or to any part of the vehicle.
- Make note of the unit serial number prior to installation.
- Prior to working on any part of the dashboard (instrument cluster, center console, glove box, etc.), remove the negative and positive terminal from the battery to deactivate the sensors for the airbags.
- DO NOT place objects, including communication equipment, in the area over the airbag or near the airbag deployment area.
- Refer to the Owner's Manual

and to a Shop Manual of the vehicle for specific information related to the electrical wiring, interior disassembly, and any other mechanical aspects of the vehicle.

INCLUDED WITH KIT

- 1 ATW02-6 Unit
- 2 Mounting Screws

TOOLS NEEDED FOR INSTALLATION

- Metric and standard socket set
- Screwdriver set
- Side cutters, wire cutters
- Wire strippers
- Pliers
- Terminal crimpers
- Digital Multimeter
- Electrical tape.

Warning: It is highly recommended that a Digital Multimeter be used when probing electrical systems in the vehicle to prevent damage to factory components.

GPA FUNDAMENTALS

There is a minimum of 24, operational GPS satellites functioning at all times. The satellites, operated by the U.S. Air Force, orbit the earth every 12 hours. Each GPS satellite transmits data that indicates its location and the current time. All GPS satellites synchronize operations so that these repeating signals are transmitted at the same instant. The signals, moving at the speed of light, arrive at a GPS receiver at slightly different times because some satellites are farther away than others.
The distance to the GPS satellites can be determined by determining the amount of time it takes for their signals to reach the receiver. When the receiver determines the distance to at least four GPS satellites, it can by triangulation, calculate its position in three dimensions.

To ensure the GPS unit receives enough satellite signals at acceptable signal strength, it must be mounted so that it has a clear view of the sky. In hidden locations, such as under the dash, a clear view can be challenging. In these locations, it is important to keep any metaL interference as far as possible from the top portion of the GPS unit so that the most accurate position can be calculated.

While GPS data collection has improved in ease and speed, some obstacles remain. Solid or dense objects can block GPS signals. Wet trees with heavy branches and leaves can mask or attenuate GPS signals. Mountains and buildings can block satellite transmission. Multipath signals can corrupt GPS data. Multipath is a reflected signal from some nearby objects.
The resulting propagation delay can affect measurement accuracy. GPS electronics advancements have reduced the multipath threat but GPS field operators and users should Vbe aware of obvious multipath environments.

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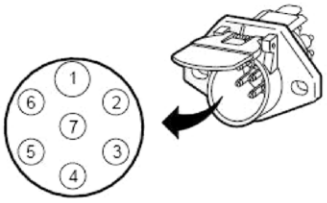
INSTALLING AND MOUNTING

The GPS unit will work best if it has a clear view of the sky and as much of the horizon as possible with no metal between it and the sky. Any metallic objects between the GPS unit and the satellites will degrade the signal and reduce the overall performance. For best signal acquisition, the roof of the trailer is the recommended mounting position. (This will require extending the wires on the unit to reach your trailer wiring socket or refer unit battery.) You can also mount the device on the front of the trailer as pictured below. For refrigerated trailers the device can be mounted inside the refer shroud and you can use the refer units battery for the external power source.

WARNING Any metal structure can affect the accuracy of the GPS signals and prevent normal operation. Location of the GPS unit is critical to the operation.

The GPS unit can be installed on any type of vehicle. The unit should be mounted so it will not be exposed to damage from people or objects. The GPS unit has tabs for mounting screws or you can use epoxy or double sided tape to attach the unit to your trailer.



CABLE INTERFACE

Main Harness Connections in Detail

RED and White (+) 12-volt Wiring

Locate the Red wire and the White wire found on the cable connected to the GPS unit. The red wire AND the white wire must be connected to a 12-volt source from the vehicle that will be connected to the trailer. It's important that the 12 volt power source maintains 12 volts at all times the trailer is in motion for proper functionality.

BLACK (-) Chassis Ground Wiring

Locate the Black wire found on the cable connected to the GPS unit. The black wire must be connected to a solid chassis ground uninhibited by paint or plastics. It is important that you do not use any floating grounds from the vehicles electrical system. Always connect the ground directly to the chassis body and secure with a factory bolt or aftermarket screw insuring wire to metal connection. It is also advised that you connect a jumper to the pin in your trailer wiring socket that is the “Ground return to towing vehicle”

SAE J560 and J1067 Wiring Circuits

Note: Trailer trackers are shipped with NO charge on the internal battery. The trailer must be attached to a truck for it to be powered; it takes 24-48 hours to completely charge the internal battery.
Note: It is imperative that the unit’s wiring is connected to pins that will be powered by ALL trucks in your fleet. Use a multimeter to check the connection coming from your trucks to verify how your trucks are wired. If a large percentage of your trucks do not provide power to the auxiliary power pin (7) you may consider wiring the units to the marker lights. (Under this scenario the device will ONLY receive external power when the lights are on. If you use this method, we strongly recommend you have your drivers always drive with their lights on.)

WARNING: IT IS IMPORTANT THAT ALL WIRING CONNECTIONS
ARE SECURE AND WATERTIGHT FOR RELIABLE OPERATION OF THE UNIT.

Prior to the initial powering of the unit, move the vehicle outside, so that the GPS receiver can receive signals from the GPS satellites. Upon initial power-up of the TTU-2830 the LEDs start flashing on the side of the unit to determine if the unit is powered on. If the LED is not flashing after 60seconds, check the power connections. The statuses of the LED’s are below.

Terminal	Color	Lamp and Signal Circuits
1	White	Ground return to towing vehicle
2	Black	Clearance, side marker,
3	Yellow	Left turn signal and hazard lamps
4	Red	Stop lamps and antilock devices
5	Green	Right turn signal
6	Brown	Tail and license plate lamps
7	Blue	Auxiliary

STATUS LED DEFINITIONS

Orange LED Status Cellular Communications	Green LED Status GPS Communications
Blinking – Tracker on, searching for wireless signal	Blinking – GPS on, searching for satellite signal
Patterned Blinking – Signal acquired, unit trying to establish connection to the communication server	
Solid – 2-way communication link with the communication server established	Solid – GPS lock established

TROUBLESHOOTING GUIDE

Symptom	Cause
Unit Does Not Power-up	Power is not connected to the unit. With a Digital Volt Meter, measure the voltage at the input to the unit. A positive voltage should be measured on the + terminal of the unit when measuring between the + terminal and the - terminal or chassis ground. This voltage should also measure 12 VDC. Correct the wiring to assure the correct polarity and the correct voltage level. Check fuse. Bad Ground connection. Make sure the ground is connected directly to metal with no paint or residue. Use a Digital Multimeter to test continuity to ground to ensure good connection.
Unit Does Not Find Cellular Service	The unit is not receiving the local cellular system. The main cause of this is poor signal strength due to shielding or coverage. Make sure the GSM (Orange) light is solid, move the unit outside the building and or outside of vehicle if necessary and re-apply power to the unit. Move vehicle to acquire better signal if necessary. Contact tech support if problem persists.
Unit Does Not Receive a GPS Signal	The GPS receiver is unable to lock into the satellites or receive signal. Make sure GPS (Green) light is solid if not, make sure that the unit's label is facing skyward and that there is no metal between it and the sky including but not limited to the roof of the vehicle and any dash bracing. If it is, the move the vehicle outside of or away from any building/garage to allow the internal GPS antenna in the unit to have a clear view of the sky. You may need to power the unit outside of the vehicle as some vehicles may have metallic or leaded windshields. Contact tech support if problem persists.

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Schedule a demo and see how Fleet Hoster
can deliver safety for your fleet.

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