ThinkWare Dash Cam Installation Sheet VHL3Z-19G490-C VHL3Z-19G490-D VHL3Z-19G490-E

Tools Required:

8mm Nut Driver or Socket with Ratchet 10mm Nut Driver or Socket with Ratchet Plastic dash panel removal tool Drill with Phillips bit Alcohol Pads

Kit Contents:

- 1. HWK-TW01-HAR OBD II Plug-n-Play Thinkware Harness
- 2. Forward Facing Camera
- 3. Rear facing or Interior IR Camera (bundle dependent)
- 4. Connection cable from front to rear camera (bundle dependent)
- 5. IGN-3F Ignition Module
- 6. Windshield mount for front facing camera
- 7. Micro SD memory card with adapter
- 8. 2 x 14" Wire Ties
- 9. 2 x #8 Self Tapping Stinger Head Screws



VHL3Z-19G490-C



VHL3Z-19G490-D



VHL3Z-19G490-E

Read and understand these instructions first before proceeding with the installation of the ThinkWare Dash Cam.

Fig. A



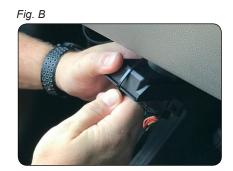
1. Locate the OBD II connector in the vehicle and release it from the mounting surface. This may require the removal of two 8mm nuts from the studs securing it to the under dash (Fig. A) or by depressing the two side clips, with a plastic dash trim tool, securing it behind the drop down plastic cover (Fig. B).



2. Connect the male end of the included Plug-n-Play HWK-TW01-HAR to the vehicles factory ODB II connector (Fig. A).

3. Secure the OBD II connector and the harness together using one of the included wire ties and cut off any excess wire tie that is not needed (Fig. B).





4. For the Nut and Bolt style mounting system: Place the left ear of the connector over the left factory stud and replace and tighten the 8mm nut removed in step 1. Secure the right ear of the connector to the under dash using the included self tapping screw (Fig. C).

For the clip in style mounting system: Feed the body of the harness into the dash opening and secure connector to the dash using the included self tapping screws (Fig. D).





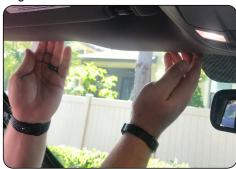
5. Remove the A-Pillar trim panel; this may require the removal of 2 x 10mm bolts. Route the Thinkware power cable over to the driver side of the vehicle, up the A-Pillar (Fig. E) and across the front of the headliner (Fig. F & G) so that it exits the headliner at the factory notch above the rearview mirror. **NOTE: When routing cables near the side curtain airbag, be sure to route them** *in a way that will not impact the airbags' ability to deploy in the event of an accident.*

Fig. E





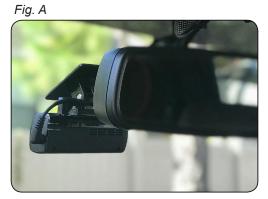
Fig. G



6. Clean and dry the mounting location with an alcohol pad prior to mounting camera. Slide the camera into the mount and secure it to the windshield using the pre-installed adhesive pad on the mount (Fig. A). Be sure to mount the dash cam behind the rear view mirror in a manner to not obstruct the view of the driver while positioning the camera lens as close to the center of the vehicle and as level as possible. Connecting to the dash cam using the Thinkware smartphone app may be necessary to fine tune the up and down adjustment so that the picture is adequate.

7. Bundle and secure all left over cable (Fig. B).

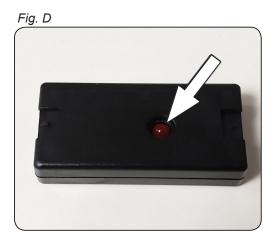




8. With the vehicle's ignition in the OFF position, connect the IGN-3F to the 10-Pin Molex connector located on the HWK-TW01-HAR (Fig. C).



9. With the vehicle's ignition in the OFF position and the IGN-3F plugged in, the LED should be emitting a slow consistent flash. The LED will change from a flashing state to being ON solid once you start the vehicle. When the LED is ON solid, a phantom ignition signal will be sent to the dash cam to turn it on and will remain on during the event of a start/stop sequence. The LED and dash cam will turn off 2 minutes and 30 seconds after the vehicle is shut down.



10. Using the included wire tie, secure the module and the factory OBD II junction under the dash or kick panel in a way that will not impact the airbags' ability to deploy in the event of an accident.

11. Ensure that any and all of the vehicles trim that may have been removed during the previous installation steps is reinstalled.

The following page is only needed when installing the secondary interior IR camera or the rear facing camera.

These next steps are only needed when installing the optional rear facing camera.

12. Using the techniques mentioned earlier, tuck and route the cable in the headliner from the front camera to the mounting position of the rear camera. The cable will have a label stating which side should be routed to the front of the vehicle. See Fig. A - D for clarification. *NOTE: When routing cables near the side curtain airbag, be sure to route them in a way that will not impact the airbags' ability to deploy in the event of an accident.*



13. Clean and dry mounting location with an alcohol pad prior to mounting camera. Mount the camera on the rear window using the supplied adhesive on the camera. Keep in mind to not mount camera in a location that will interfere with rear view mirror visibility. Connecting to the dash cam using the Thinkware smartphone app may be necessary to verify that the picture is right side up and the entire rear of vehicle is in the frame. See Fig. E and F for clarification.





14. Ensure that any and all of the vehicles trim that may have been removed during the previous installation steps is reinstalled.

These next steps are only needed when installing the interior IR camera.

15. Clean and dry mounting location with an alcohol pad prior to mounting camera. Mount the camera on the front windshield using the supplied adhesive on the camera. Connecting to the dash cam using the Thinkware smartphone app may be necessary to verify that the picture is right side up and the entire interior of vehicle is in the frame. See Fig G for clarification. Connect and secure the supplied cable from the forward facing camera to the interior camera.



16. Ensure that any and all of the vehicles trim that may have been removed during the previous installation steps is reinstalled.