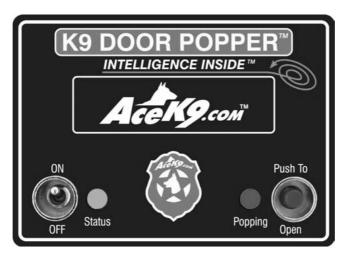


# **DP-3000**



**Patented** 

K9 Door Popper®

Installation Manual

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#### Introduction

The K9 Door Popper® features a system that prevents the door from opening while the vehicle is in gear. Our exclusive double pop system unlocks the K9 door and releases the latch when the Door Popper is activated

#### **WARNING!**



Do not install equipment in areas that interfere with air bags. When installing equipment use Caution to avoid damage to wiring, fuel lines, or other equipment. Refer to the vehicles service manual during installation. As the installer of

electrical/electronic equipment, proper installation techniques are your responsibility!



#### **Important**

It is the responsibility of the Installer and the Handler to confirm that all safety features are installed and working properly at the time of installation. The handler is also responsible to make continuing periodic checks of all safety systems of this product.



#### WARNING!

<u>Do not place any of the cables, connections, Alert Option Modules, or Relays under the carpet/mat.</u> This area is subject to excessive heat and moisture and may cause the unit to malfunction as well as shorten the life of electronic

components. Never run a wire through a drilled hole without a grommet, the wire can become chaffed and may cause a vehicle fire. Seal and/or protect any grommets, relays, connections, and components that are exposed to weather.

# **K9 Door Popper® Installation**

#### STEP 1

## **Getting Started**

Review the Door Popper Installation Diagram and Install supplement (if applicable), this will assist in getting an overview of the hardware placement, wiring and connections. Make connections following the order outlined below. Determine with the K9 Handler a suitable location for the Control Head, and which Door the K9 will be deployed from. Consider where connections will be made in the vehicle and run wires in groups to arias that components/connections are located. Prior planning will speed installation.

<u>Install tip.</u> Vehicle Specific information is stapled to the outside of the install package. If you need additional copy Email <u>Service@acek9.com</u> with the Acek9.com serial # and the vehicle Make Model and Year.

## STEP 2

## **Control Head & Intelabox Installation**

Determine with the K9 Handler a suitable location for the Control Head to be mounted. The mounting bracket can be rotated to allow the unit to be mounted from above, below or each side.

**Place the Intelabox in a location that is protected from weather**. It may be necessary to situate the box temporarily in a location that allows you to easily connect your wires. Mount the Control Head and route the Control Head Cable to the Intelabox. Be sure that the cables (RJ45) connectors go in strait and the cable is not kinked. Attach the Intelabox Black Ground wire to a good ground.

#### STEP 3

#### **Neutral Safety**

Attach the **Brown** Neutral Safety wire to the vehicles Transmission range sensor wire noted in the Install manual supplement.

#### Overview

The purpose of this sense wire is to detect when the Vehicle is in Park or Neutral. Traditionally the Ignition Switch "Start" wire would provide a path to ground via the "PRNDL" Switch and the Start relay. The "PRNDL" Switch inhibits the engine from starting with the vehicle in gear. Many newer Vehicles utilize an "Anti-Theft" features or Computer controlled ignition systems requiring adaptor kits. (Vehicle specific information is available by contacting AceK9.com Support, Serial # required)



It is CRITICAL that the Brown Neutral Safety wire is attached to the vehicle wiring properly to allow the K9 Door Popper® product to prevent the door from popping when the vehicle is in gear and potentially moving. If this connection is not done correctly the canine could exit and be harmed while the vehicle is in

#### motion.

# STEP 4 Antenna

Mount the K9 Door Popper® Antenna and route the cable to the Intelabox. Keep Antenna as far away from other antennas as possible. See instruction included with antenna (D-ANT-K)

#### STEP 5

Remove the Door Panel from the door that the handler/department wants to remotely opened.

These Instructions assume that the K9 container and aluminum door panels have already been installed. Check with the Handler to see which door is to be remotely opened.

<u>Install Tip</u>. To prevent erratic operation of the windows, window switches in the door should be protect them from the weather with plastic bags and situate in a Dry location

#### STEP 6

#### **Main Power**

Route the Battery wire to the Battery connection point. Attach and fuse at 40A.



If you have to drill a hole in the Firewall use a grommet and seal it.

## STEP 7

#### **Unlock & Solenoid Wires**

Route the Solenoid wire and Unlock Motor cable from the Intelabox area into the door. Run solenoid ground wire into the car and attach to a **good ground on the chassis.** 

<u>Install tip</u> Be careful to route the Solenoid wires and Unlock Motor cable in the door away from the window's travel and avoid sharp objects. Run wires so that the door panel screws do not contact these wire.



## **DO NOT GROUND SOLENOID TO DOOR** the hinges make poor ground.

(Continued)

At Vehicle's Unlock Motor locate the unlock wire using a voltmeter; this wire will go Positive during unlocking. Cut this wire attach the cable's **Yellow** wire to the wire **going to the Motor**. Attach the K9 Door Popper® Unlock Motor cable **Red** wire to the wire **coming from the Switch**.

<u>Install tip</u> if unlock is not functioning, Check the 10A Fuse at the intelabox, if it is blown there is a short on the unlock cable wiring. Check the length of the cable for damage. On vehicles with ground defaulting switches, if these connections are reversed 10A Fuse attached to unlock cable will blow.

#### STEP 8

#### **Attach Popper Wires**

Attach main power, unlock, neutral safety, and solenoid wires to the Intelabox.

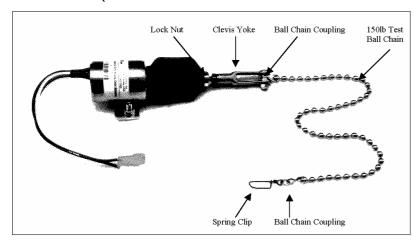
#### STEP 9

#### **Install Solenoid**

The installation of this solenoid varies greatly; the outline below is generalized and is applicable to most vehicles. When available, Special instructions are included in the vehicle information "install Supplement" for additional tips. (ref Step 1)

#### **Heavy Duty Solenoid Instructions**

(bead chain is not included in all kits see vehicle specific information for detail)



Locate the lever on the door latch mechanism that if pulled will unlatch the door. The best choice is usually the lever that moves down when the outside door handle is pulled up. Determine a mounting location for the Solenoid that will allow the chain to pull the door latch lever in straight alignment. Also make sure no items will interfere with the chain and other moving objects.

Attach the Swivel Clip on to the door latch lever and place the Solenoid in the approximate area where it will be mounted. Detach the Ball Chain from the

Ball Chain Coupling at the Solenoid or the Spring Clip and cut to the proper length.

Mount the Solenoid. You can then make a fine adjustment of the Ball Chain tension by loosening the Lock Nut and turning the Clevis Yoke up or down the Solenoid threaded stud. The Heavy Duty Solenoid works best with some slack in the chain, with No tension on the door latch lever. Re-tighten the Lock Nut and apply a medium thread locker to lock nut and yoke.



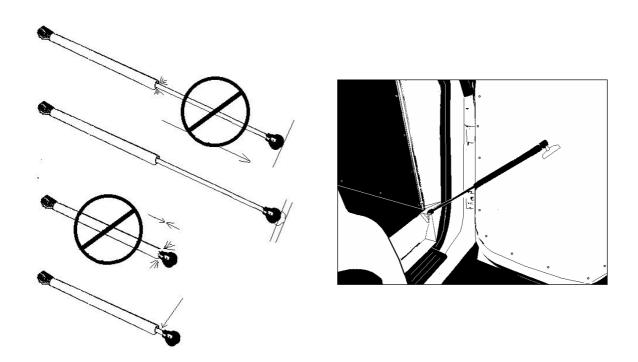
# DO NOT REINSTALL THE DOOR PANEL AND CLOSE THE DOOR BEFOR THOROUGLY TESTING

Connect solenoid and ground wires to the Solenoid. Turn ON the Door Popper Power. Return to the open door with the K9 Door Popper® Remote (DP-NTX). Without closing the door, use a suitable tool to move the door latch's jaws closed, simulating the door closing. Press the Remote's button and watch the interaction of the Solenoid and the door latch. If latch fails to release adjust the Solenoid (add or remove slack from cable/chain). Lock the door and repeat the test. When you have confidence that the Solenoid is releasing the door latch mechanism close the door without replacing the door panel. Pull on the door to simulate the shock pushing on it and test again. When you are very confident that the Solenoid is working reliably, use cable ties to secure the solenoid & unlock wires to prevent them from detaching. Re-install the door panel and Test again.

<u>Install tip</u> When installing check the vehicles lock linkages for proper operation. The linkages may get jammed if lying loose or contacting with the Door panels. Some Agency Remove the linkages all together.

#### **STEP 10**

Shock Mount door opening shock at an angle with the door fully opened. The Shock should allow the door to fully close without the Shock being completely compressed or extended. See illustration for approximate placement of brackets. When done correctly the door will open fully to allow an easy exit for the K9. Mount shock with rod pointing down. Remove the door check to allow the door to open smoothly and quickly. Lower bracket should be close as possible to the front of the cage.



# System Test Procedure for K9 Door Popper®, DP-3000

Turn ON the K9 Door Popper. Lock doors.

Put the Vehicle in PARK and Confirm that the Door Popper Status Light is ON, this indicates that Door Popper is READY.

Put the Vehicle in REVERSE and through ALL the DRIVE Gears, D-3-2-1 etc. and Confirm that the Door Popper Status Light FLASHES, this indicates that Door Popper is DISABLED.

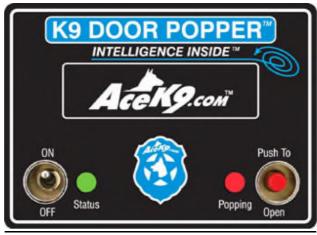
Now press the "push to open" Button -or- press the button on the Remote and the Door should NOT Pop.

Put the Vehicle IN PARK, Press the "push to open" button -or- Press the button on the Remote and the Door should Pop.

#### IF THE ABOVE TEST FAILS - TURN OFF Door Popper until system is repaired and all tests pass!

Test Door Popper Remote at a distance of 200 to 500 feet to confirm Remote's range Visually inspect the Gas Spring mounts and confirm they are not binding and that the door fully opens.





# **K9 Door Popper**<sup>TM</sup> Owners Manual

by AceK9.com<sup>TM</sup> a division of Radiotronics, Inc.

Your K9 Door Popper<sup>TM</sup> is one of our state of the art products designed and developed by AceK9.com<sup>TM</sup> a division of Radiotronics, Inc. It is a unique blend of positive features taken from actual field use of our K9 Lifesaver<sup>TM</sup> and Hot-N-Pop<sup>TM</sup> products plus the incorporation of a new microprocessor control system. The following are a few of the new features:

Door Popper Stopper<sup>TM</sup> – Extremely important Safety Feature that prevents the Door from opening when the vehicle is in motion

Unlock Feature – Unlocks the Door when it is Popped

Gas Shock – Quickly opens and holds the Door to allow the canine an unobstructed release

External Antenna – Enables very long reliable range Microprocessor Controlled Door Popper System

Software Upgradeable – As new features are developed, System can be easily updated Module design – Add new Features and Options as needs change

# **K9** Door Popper<sup>TM</sup> Power Up:

Turn ON K9 Door Popper<sup>TM</sup>. The Microprocessor checks the complete status of all systems. If all is OK and the vehicle is in Park or Neutral the Green LED will stay On. If the Door Popper Stopper<sup>TM</sup> system senses that the Neutral Safety input is NOT OK the Green LED will blink. When the Green LED is ON solid the K9 Door Popper<sup>TM</sup> is ready for action.

# **K9 Door Popper**<sup>TM</sup>:

The K-9 Door Popper<sup>TM</sup> will enable you to release your canine to your aid when you are away from your vehicle. The Remote Control Transmitter is very small and easy to wear or conceal. The Door Popper Stopper<sup>TM</sup> Feature disables the K9 Door Popper<sup>TM</sup> when the vehicle is in motion to prevent accidental Door opening and premature exit of your canine. The Gas Shock, when installed correctly, will push and hold the Door open fully, allowing easy exit for your canine.

Insert the Remote Transmitter into the Belt Case with the button under the window area and place it on your belt in a safe and accessible location. Activate the K9 Door Popper<sup>TM</sup> by pressing the button on the Remote Control Transmitter, or by pressing the Push To Test button on the K-9 Door Popper<sup>TM</sup> Control Head when you want to release the canine.

Always make sure that the K9 Door Popper<sup>TM</sup> is disabled when the vehicle is in gear. To confirm that the Door Popper Stopper<sup>TM</sup> Feature is wired and working correctly MAKE SURE that the K9 Door Popper's<sup>TM</sup> Ready Light illuminates <u>ONLY</u> when the gear lever is in PARK OR NEUTRAL, if not, have the installer re-check the wiring. This Feature disables the Door Popper when the car is in motion. DO NOT USE THIS PRODUCT WITHOUT THIS CRITICAL SAFETY FEATURE FULLY FUNCTIONAL!

**IMPORTANT:** It is the responsibility of the Installer and the Handler to confirm that all safety features are installed and working properly at the time of installation. The handler is also responsible to make continuing periodic checks of all safety systems of this product.

## **Record Serial Numbers**

Control Head Serial #\_\_\_\_\_\_ found on Side Control head.

Remote Serial #\_\_\_\_\_\_ found on back of remote.

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# Additional Other Products available from AceK9.com





Cool K9 and Cool Cop



**K9** Transporters



See Acek9.com for additional information and products

