These door handles are designed to fit flush with the surface of the car door. The car will automatically disarm when the included key fob is out of range so no additional locking mechanism is needed. You will need Pull actuators capable of opening your existing door latches. You will also need to get power into each door so either door looms or 4 wire door contacts. Intended for steel doors.

1. Remove the inner door panel to allow access to the inside of the door. Remove the existing exterior door handle and unneeded linkage. The interior door handles linkage will still be used. Set up your pull actuators to properly pull your latches. Test this using jumper wires. The exterior key slot and the inside door lock should be eliminated as well.
2. **Position & install the handle pockets:** Use the template provided to mark where you would like to install your True Aero handle. Note that there is no direct mechanical linkage so you can place it anywhere on the door. Be sure you have 1.5" of backspace behind the spot you choose, roll the window down to make sure that it will not be in the way either. Once you have selected the location and marked the door you can cut out the panel.

You may need to fill in spots where the old lock and door handles were.

The pocket can now be welded into the door skin. Welds can be ground down and sanded smooth. The handle itself will be installed later.

NOTE: The handle can be test fit at this point. When mounting the handle in the pocket it can be easily cross threaded. To avoid this press the handle into the pocket to seat the pivot block while you start the screws

Flush Mounted Door handles with RFID Security

#ET-TA

Weld in door handles that are smooth to the body and activate with an RFID chip as you approach and disarm as you walk away.

****DISCONNECT ELECTRICAL POWER AT THE BATTERY BEFORE DOING ANY WIRING****

What is RFID?

RFID stands for **Radio-Frequency Identification**. The acronym refers to small electronic devices that consist of a small chip and an antenna. The RFID device serves the same purpose as magnetic strip on the back of a credit card; it provides a unique identifier for that object. And, just as a magnetic strip must be scanned to get the information, the RFID device must be scanned to retrieve the identifying information

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3. **Wiring**: on page 6 you will find the diagrams.

The switches should be removed for body work, use the provided quick disconnects to make that easier.

4. **Testing.** With the 4 electrical components installed and wired you can test the system. The handles do not need to be installed for electrical testing.
    a. Connect the battery
    b. Backup button. A press of the backup button should pop open the door latch.
    c. With the RFID fob out of range pressing the trigger switches will have no effect, this may take a minute to happen. If the door latch does “pop” either a fob is still in range or the RFID receiver is set to bypass mode. See RFID settings to adjust this.
    d. With one RFID fob in range pressing the trigger switch should “pop” the door latch. Repeat this for both fobs and both doors. Pressing and holding the trigger switch should not cause the actuator to stay engaged. The pulse control box is designed to only output a short burst to prevent the actuator from burning out. If one fob works and the other does not refer to RFID settings to reprogram the fobs.
    e. The backup switch should always work no matter where the RFID fob is.

The RFID unit has 3 different operating modes.

Mode 1: High security mode. This is the mode you want
Mode 2: Low security mode.
Mode 3: NO security mode.

The RFID is capable of working between 5 and 200 feet with the vehicle's windows closed. If the vehicle's windows are open we do not have a measurement for how far away the unit will work.

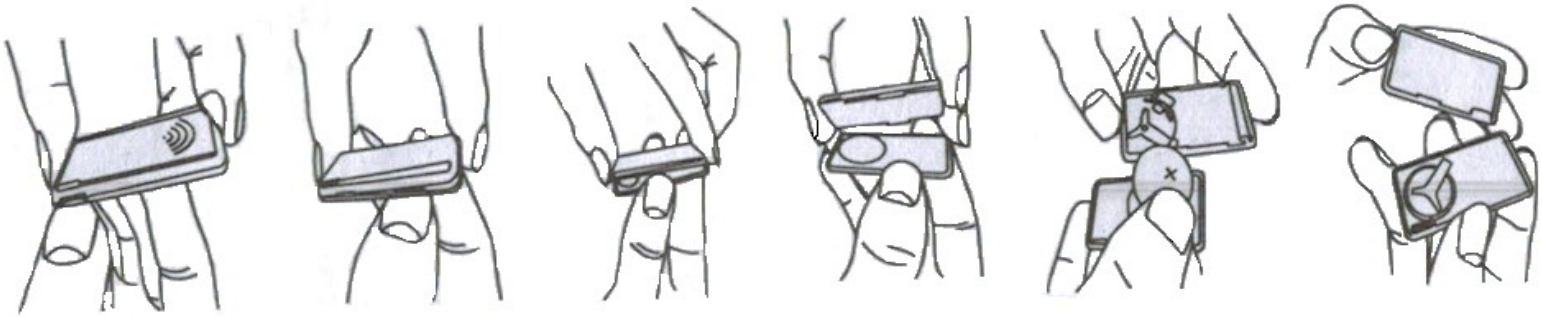
There are 8 increments of sensitivity that the unit can be programmed to. Our distance measurements are for estimates only as each case may vary slightly depending on one's environment.

The RFID system is equipped with a low battery detection system. If you approach your vehicle and the RFID recognizes that your battery has fallen below 2.3V the system will beep 3 times pause for 3 seconds and beep another 3 seconds to remind you to change the battery in your remote.

Remote Programming: *(The remotes come Pre-programmed with batteries installed.)*

The RFID comes with a hard wired programming button that you have mounted in an accessible place. Press the programming button 4 times and hold down the button on the fourth push until you hear a beep from the buzzer (approximately 8 seconds). This beep informs you that it is now in the remote learning mode. Install the battery into the first remote within 30 seconds. **(**As long as you get the confirmation beep for programming, the remote will retain its program while you get the remote put back together.) Each time a battery is installed in a remote you will hear the unit beep confirming the programming of each remote. After programming the first remote and hearing the beep you will be given another 30 seconds to install the battery in the second remote. The maximum amount of remotes allowed per unit is 3. The unit will beep 1 time for the first remote, 2 times for the second remote and 3 times for the third remote. Each time you reprogram the remotes the old program is forgotten. If no code is learned within 30 seconds the system will automatically exit the programming mode. If you are done programming the remote(s) you may press the programming button again to complete and exit the programming mode however this is not required. If you wait another 30 seconds after the confirmation program beep the unit will beep again telling you that it has exited the programming mode. Both remotes must be programmed in one single programming session.

Battery Installation: *Each Remote requires 1 x CR2032 (provided*



The RFID unit has 3 different programmable modes:

Mode 1: *This mode is a high security mode that requires the RFID at all times.* ***This is the mode you want(already programmed this way)***
Upon startup in this mode the unit has a small speaker that will beep confirming that it is indeed working properly. If you leave your vehicle running and run into a store the vehicle will remain running for up to 60 seconds once out of range. (Range must be programmed later in the instructions. See page 4) If someone steals your car while you are in the store do not worry because once they're out of range the vehicle will enter security mode and start counting down from 60 seconds. The module will start beeping slowly for 20 seconds. The next 21-40 seconds will make the beep a little faster creating an uneasy feeling. The last 41-60 seconds of beeping is at a fast "panic" rate of beeping. If they're still driving at the 61 second mark the vehicle's ignition power will be turned off. At this point the vehicle cannot be restarted without the RFID remote. If the thief disconnects the battery and reconnects it they will be able to start your vehicle however the RFID unit will automatically enter security mode and start the countdown. Once the counter hits 61 seconds the vehicles ignition will be turned off. They will then have to either disconnect the battery to get another 60 seconds or introduce the RFID back to the system. Once the unit recognizes the RFID again it will operate normally.

Mode 2: *This mode is a low security mode where the RFID is only needed to start the vehicle.*
Upon startup in this mode there is no audible confirmation indicating the unit is working. If you leave your vehicle running and run into the store and someone steals your car they can get as far as they want. Once the vehicle is turned off, the RFID is required in order for the vehicle to be restarted.

Mode 3: *This mode is a NO security mode.*
When you are in this mode the unit will not provide any security whatsoever. The RFID will not be needed to drive or start the vehicle. (This is a great mode if the battery dies in the remote until you replace your battery.)

Programming the mode for your RFID: (The unit comes pre-programmed in Mode 1.)

1. The RFID comes with a hard wired momentary push button for programming. This button is how you will program your RFID's Mode.
2. Press the button 3 times and on the third press of the button hold it down until you hear the RFID beep. Count the times the unit beeps. It will beep 1x for Mode one, 2x for Mode 2 and 3x for mode 3. The number of beeps you hear confirms the mode that the unit is currently in.
3. If you would like to change to a different mode you must wait 10 seconds then repeat step 2. Each time you do this the mode changes to the next one.

Note: Keeping the fobs in range to the RFID will drain the batteries in the fobs. If batteries need replacing, re-programming will be required.

Programming the range for your RFID remotes You will want to program the sensitivity(range) of the RFID unit to make sure it works best in your situation. Every scenario is different depending on interference and the location of the car to where the vehicles keys are stored etc. The programming "button" for this portion is located on the inside of your RFID remote.

There is a small hole in the back of the remotes that is access to the programming button. To program the sensitivity you will need to depress this switch with a pick or something small and continue to hold it down for 2 seconds. The RFID unit will then beep once letting you know it has entered the sensitivity programming mode and you can now release. If you press down the button on the RFID remote briefly the RFID will increase the sensitivity level by one and beep the corresponding amount of times to the level of sensitivity. (For instance; if you are currently in Level 4 for sensitivity the unit will have beeped a total of 5 times because it would increase by one sensitivity level.) Depressing the button and releasing briefly will increase the sensitivity level by one and confirm the level of sensitivity by beeping the corresponding times to the level you are on. You must wait until the unit stops beeping to increase to the next level. Once the unit has stopped beeping you can depress and release again to increase by another level and so on. Assuming that you were on level 4 before and you squeezed the remote once you will now get confirmation of 5 beeps corresponding to level 5. After the 5 beeps you can depress the button again putting the unit up to level 6; so on and so forth. If you are on level 8 and depress the remote button again; the unit will reset back to level 1.

Note: Each remote must be programmed for its own sensitivity level.

About the sensitivity levels:

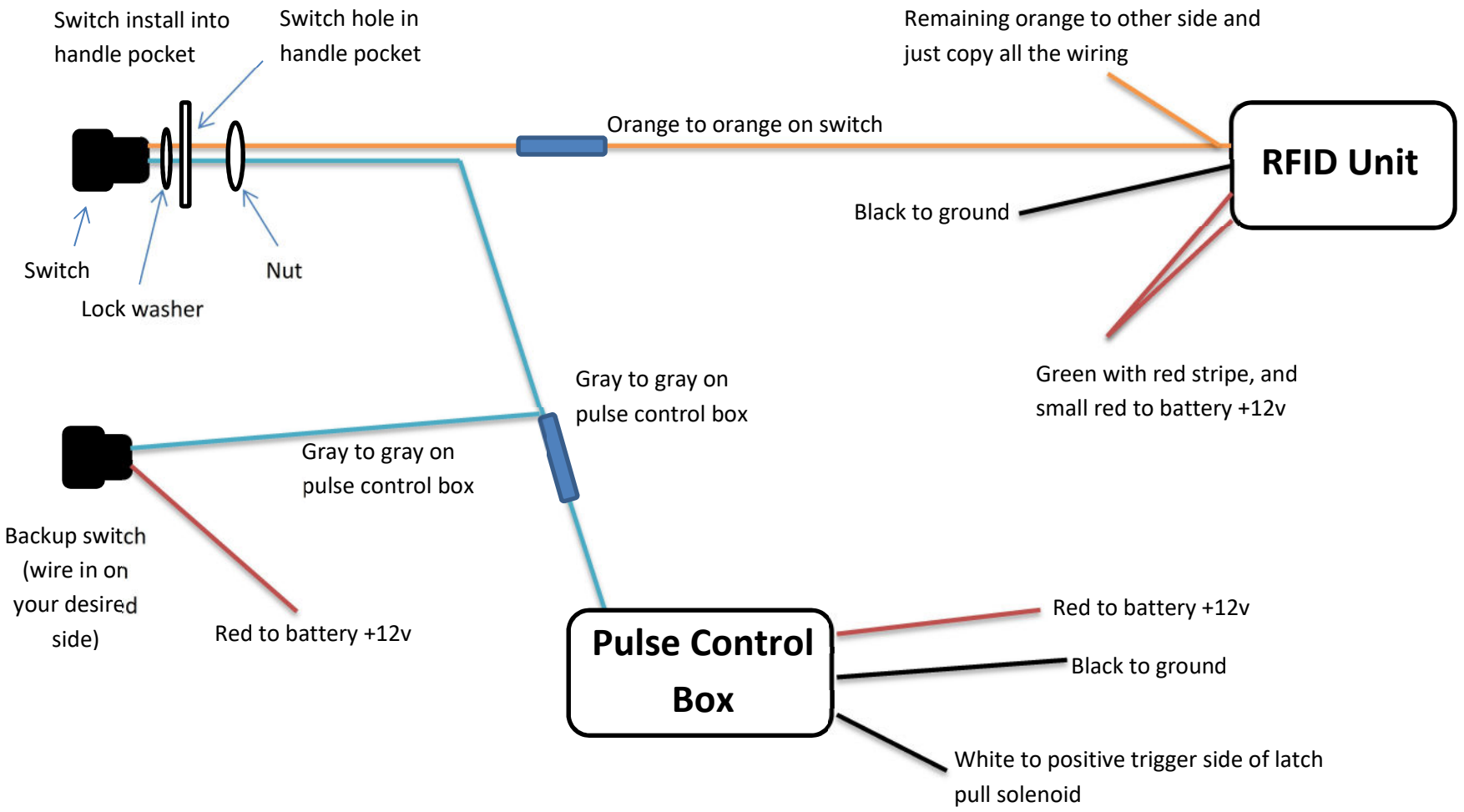
The RFID has 8 possible levels of sensitivity. Depending on your environment, whether or not your windows are rolled up or down or even the construction of the area the keys are stored all play a role in how this unit will operate. Please conduct your own tests to verify that the unit is working the way you would like it to in your specific conditions. All of our specifications are given as if the windows were rolled up in your vehicle.

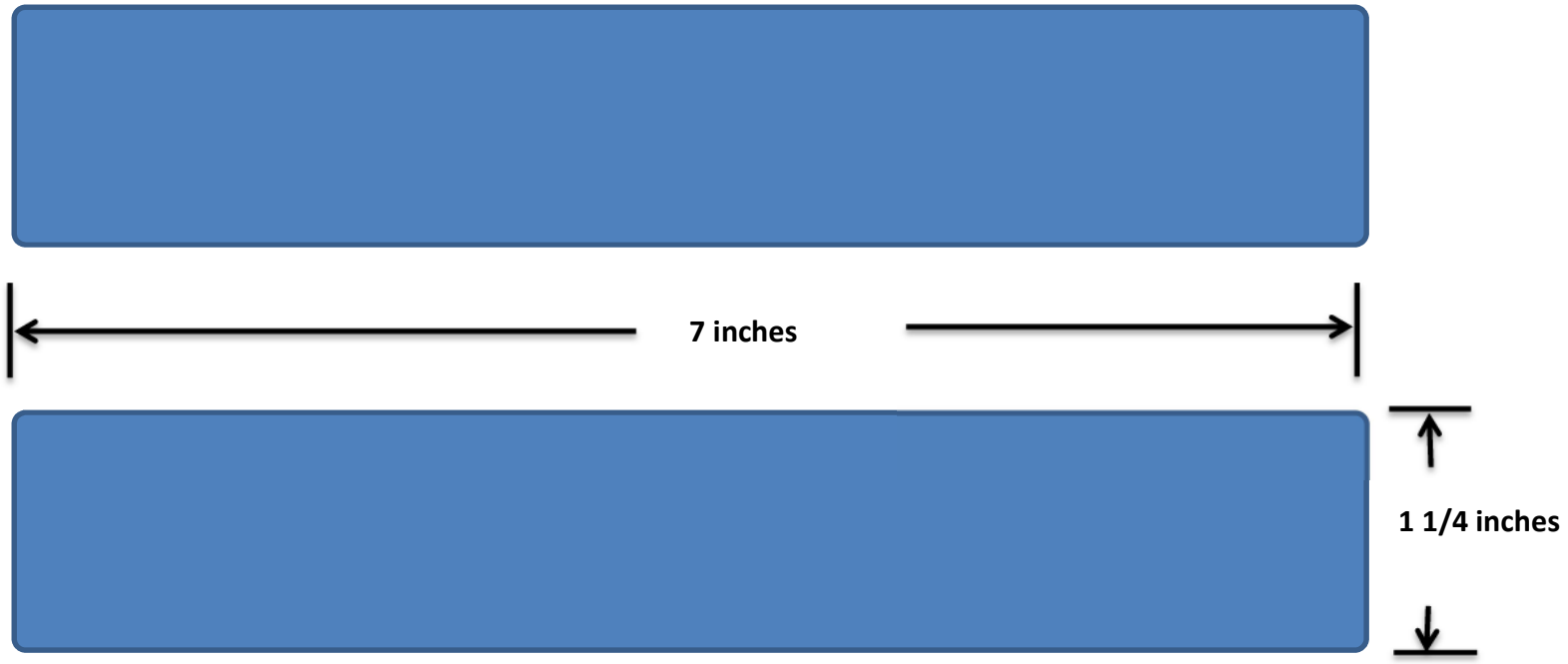
NOTE: If someone attempts to start the vehicle without the remote being within the specified distance to the vehicle you will need to put the remote within roughly one half of the minimum rating distance in order for it to be recognized again.

The following range ratings per level are rated outdoors in line of sight with the vehicle. If you bring the remote inside of a building, home etc.: this will decrease the sensitivity of the RFID by roughly one half depending on conditions and building structure. If you are using our remote start / security package we recommend starting with level 3 or 4. (Using this level in most situations will not allow the vehicle to be started until you walk to the nearest window to the vehicle and push the start function on the remote.)

Level 1: Range 5-20ft	Level 2: Range 10-40ft	Level 3: Range 20-60ft	Level 4: Range 30-80ft
Level 5: Range 40-100ft	Level 6: Range 50-120ft	Level 7: Range 60-140ft	Level 8: Range 70-160ft

Note: Keeping the fobs in range to the RFID will drain the batteries in the fobs. If batteries need replacing, re-programming will be required.


Switch install into handle pocket
Switch hole in handle pocket
Remaining orange to other side and just copy all the wiring
Orange to orange on switch
RFID Unit
Black to ground
Switch
Lock washer
Nut
Green with red stripe, and small red to battery +12v
Gray to gray on pulse control box
Gray to gray on pulse control box
Backup switch (wire in on your desired side)
Red to battery +12v
Pulse Control Box
Red to battery +12v
Black to ground
White to positive trigger side of latch pull solenoid


7 inches
1 1/4 inches