



Thank you for buying a StreetWorks product. Be confident that it will provide the quality and performance that you demand for your car. **Please read and understand all installation instructions before beginning.** Planning and preparation will make the entire process easy and quick.

- 1. LAYOUT** the best routing for the cable and location for the solenoid on solid sheet metal, away from the glass or other interference. The pull must be straight in line with the operation of the latch and the solenoid. The pulley allows the cable to change directions so that the solenoid can be located in a convenient place.
- 2. DETERMINE** the best way to attach the cable to the latch. For new, aftermarket latches, simply loop the cable through the latch lever hole and secure the cable to itself using the aluminum compression sleeve provided. Original latches frequently have a "T" rivet that slides in a slotted, flat metal band that connects to the inside handle. Remove the band, grind off the "T" and drill a 3/16" hole exactly in its place. Mark a straight line on the inside of the door to represent the centerline-of-action for the latch (through the center of the latch and the hole you just drilled). Loop one end of the cable and secure with a crimp compression sleeve provided. The loop should be about the size of a nickel. Install a #10-32 bolt through the band then the hole; add one flat washer, the cable loop end, a second flat washer and a nylon lock nut. Tighten only enough to still allow the band to slide under the head of the screw. This will allow the use of the inside door handles. If going all electric, eliminate the band and tighten the screw. **STREETWORKS strongly recommends** having a mechanical way to release the latch from the inside to get out in case of emergency.
- 3. THE PULLEY** location is determined by the latch centerline-of-action. Drill a 3/16" hole, 1/2" off the line-of-action and at least 3 inches away from the cable end and mount the pulley with bolt, cable, washers and nut. If possible, the pulley should rotate freely.
- 4. THE SOLENOID** can be attached to the other end of the

## SOLENOIDS FOR SHAVED DOOR HANDLES

#L22N (DUAL)

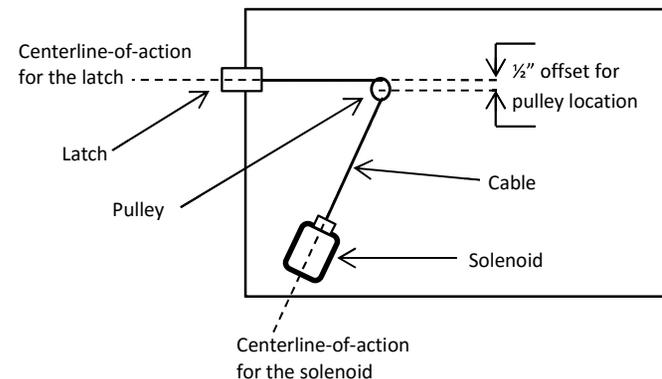
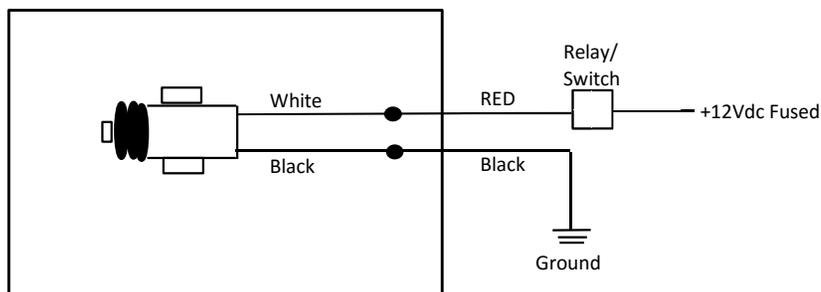
#L22NS (SINGLE)

**STREETWORKS** Solenoids can convert your doors or trunk to electrical operation when used with remote controls, such as our L-GM2Z, L-QD4, & L-LK7Z.

Powerful (40 lbs.), fast acting solenoids to open your door or trunk latches with bracket and boot only. **NOTE:** Be sure the switch you use to activate the solenoids is capable of switching **30 amps minimum**.

**Before you start Disconnect POWER at the BATTERY before doing any wiring!**

**IMPORTANT:** the switch (buttons, remotes, etc.) you use to activate the solenoids must be capable of switching 30 amps minimum. Other wise use a relay to relieve amperage draw on the switch.



**Some tips about original door latches** When keeping the original door latches it's important to give them an inspection. Check for broken or missing parts, especially on the driver's door, as it is used 2 to 3 times more often. Make sure that they operate smoothly. When switching to powered entry systems, like our solenoids, there are three additional checks that you'll want to make. First, the original latch "tongue" can often have a throw length of nearly an inch. But few solenoids have over 5/8" of action. To accommodate this, look for the rubber "bumper" that stops the tongue in its full out location. Replace the original with some thicker rubber to decrease the throw length. Secondly the return spring is usually overly strong for the job. Just reverse bend it (Cold, never hot) so that it returns the latch to its full out position but doesn't push excessively. Booster springs may be needed to apply a pretension to the cable. Finally, When aligning the latch and striker, limit their overlap to about 3/8" maximum.

## TROUBLE SHOOTING GUIDE FOR STREETWORKS DOOR SOLENOIDS

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>FIX</u>
<b><u>WEAKPULL</u></b>	Poor Grounding- the #1 cause	Don't expect to just bolt to the door and go. You <b>MUST</b> ground the solenoid to a good chassis ground. Use the 12 ga. black wire and terminals we provided. Make sure that there is no rust or paint at the spot where you ground to prevent good electrical contact.
	Cable too tight- the #2 cause	Loosen the cable using the hex adjuster provided.
	Excess Moisture	In a setup that had been working properly, check to see if excess water has gotten into the door and solenoid. Remove the solenoid and remove its boot and plunger. Clean and reassemble. See OTHER IMPORTANT NOTES below before lubricating.
	Insufficient switching power	Check all connections going to solenoid. Your Switching source (button, remote control, etc.) must be able to switch 30 amps. Check for proper connection through and into the door. If using a battery charger to test your setup, <b>DON'T!</b> A battery charger does provide the amperage needed for full solenoid strength.
	Door too tight or misaligned	If your door is hard to close due to hard or thick door rubbers or other causes, you cannot expect anyone's product to compensate. Excessive pressure against the latch causes friction to skyrocket. The basic mechanical operation of the door and latch must be good for any system to work. Addition of Streetworks booster springs will help (Part #L22BS)
<b><u>NO PULL</u></b>	All the Above	Check <b>ALL</b> per above
	Solenoid "burnt"	Check for burnt solenoid by seeing if the label has fallen off (sign of getting hot) and smell for obviously noxious odor. If no signs of being burnt, revert to above and check all fuses and breakers. You can also remove the solenoid and test directly on a battery. If obviously burnt, you will need to find out why. The solenoid is the victim- it didn't burn out on its own. The switching system has stuck "ON", a button has gotten wet or some other cause has sent power to the solenoid for an excessive time. <b>THIS MUST BE FIXED BEFORE REPLACING THE SOLENOID!</b>

### OTHER IMPORTANT NOTES

**NEVER** use WD-40 or similar lubricants or grease of any kind on the solenoid plunger. The only approved lubricant is spray Teflon and a little goes a long way. If the plunger has gotten wet and shows rust, repeatedly spray with Teflon lube and wipe clean. **DO NOT ABRABE!**

In normal operation and use inside a door, many things can corrode. It is good maintenance to periodically take apart all connections, clean them and reinstall. Electrically conductive grease (available at household electric supply stores) is great for preventing corrosion on electrical connections. Also periodically lubricate your latches (bear claws too) and pulley connection and check cable condition.