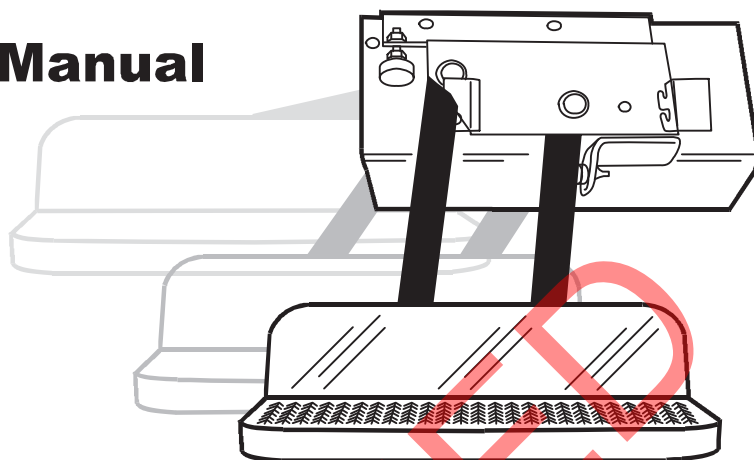




Owners Manual



Thank you for
purchasing a
KODIAK SideWinder™
retractable step.

Please take a few
minutes to read
through this Owners
Manual and write the
Serial Number of your
step in the space
provided by the
Warranty Information,
page 4.

The Serial Number is
located on the front of
the step support
(see Figure 1.)

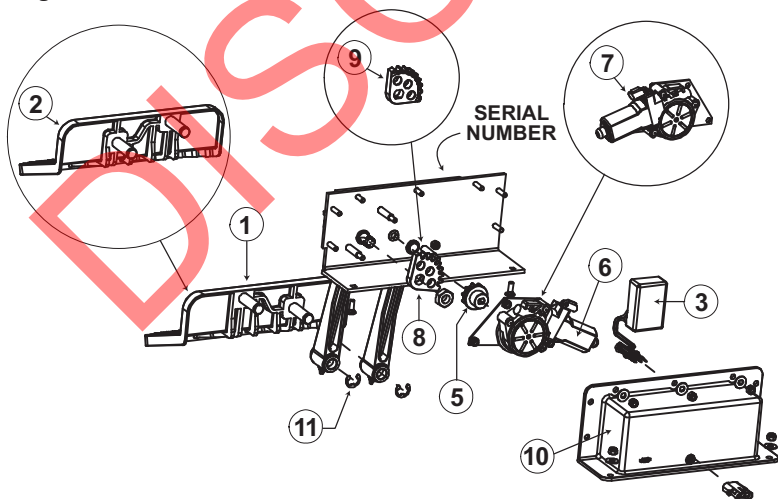
INTRODUCTION AND OPERATION

This manual is provided to assist you with the operation and troubleshooting of the Sidewinder retractable electric step. The step operates with the use of a permanent magnet motor that uses gear reduction to extend and retract the tread. The door switch senses ground, and the step is extended when the switch is closed. An internal control unit is used as a sensor and switching device to run the step in both directions. When the motor assembly moves the step tread to the extended position, or stops moving because of an obstruction such as a curb, or binding in the mechanism, the motor draws more current. The control unit "senses" the increased current draw and shuts off power to the motor. In addition to the current protection, the motor is also thermally protected by an internal breaker that shuts off power to the motor and prevents overheating.

STEP DRIVE ASSEMBLY DIAGRAM

The diagram below shows an overview of the step assembly and identifies replacement parts that may be ordered if needed (see Figure 1). The main view illustration shows the driver side step, with components specific to a passenger side step shown in the bubbles. Please note the location of the Serial Number.

Figure 1



Key #	Description	Replacement Part #
1	Driver side cast tread (silver)	950559301
	Driver side cast tread (black)	950550303
2	Passenger side cast tread (silver)	950550302
	Passenger side cast tread (black)	950550304
3	Control unit	950570201
4	Door switch kit (not shown)	950531000
5	Adapter gear	950570200
6	Driver side motor assembly	950570000
7	Passenger side motor assembly	950570100
8	Driver side sector gear	950550205
9	Passenger side sector gear	950550206
10	Motor housing cover	950550207
11	Clips	950560000

TROUBLE SHOOTING

If the Sidewinder retractable step does not operate correctly after installation, please perform the following troubleshooting steps to isolate the problem before contacting customer service:

External Checks:

1. Check all fuses. The Sidewinder retractable step electrical kit includes an in-line fuse holder and a 20 amp fuse. Locate the fuse holder on the RED battery positive lead to the step. Check to see if the fuse is in place. If the fuse holder is empty, place a 20 amp blade style (ATC) fuse in the holder.

If the fuse is in place, remove the fuse and visually inspect the internal trace for breaks or burns. Replace the fuse if necessary.

2. Check all electrical connections for contact. Check the battery positive RED lead to the step to be sure it is connected tightly to the POSITIVE (+) terminal on the battery or a constant 12 volt POSITIVE (+) vehicle power source.

Check the ground GREEN lead to the step to be sure it is connected tightly to the NEGATIVE (-) terminal on the battery or an otherwise suitable ground location on the vehicle.

Check the 3 way connector from the chassis harness to the step. Be sure the colors on the harness match up to the colors on the step (RED to RED, GREEN to GREEN, and BROWN to BROWN). Be sure the connector is pushed together tightly until it “clicks” and is locked together.

Check the door switch connections. Make sure the paint around the door switch hole has been scraped to provide a good grounding surface.

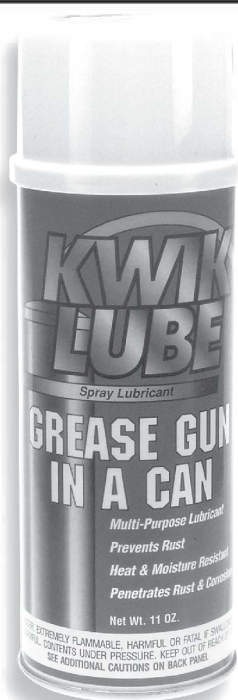
Check any other splices that may have been made to lengthen or alter the provided harness. Make sure all splices are tight and free of corrosion.

3. Check wire harness at the step for power and ground continuity. This check requires the use of a meter. Disconnect the 3-way connector between the step and the harness. Using the meter set to read 12 volts, place one meter lead to ground and one to the RED battery positive lead in the harness. The meter should indicate at least 9.0 volts on the RED lead, and no more than 18.0 volts. If there is no voltage on the RED lead and all of the connections and fuses have been checked, the harness needs to be replaced. If there is less than 9.0 volts, check the battery voltage. If the battery voltage appears good, the harness needs to be replaced. If there is more than 18.0 volts, there may be a problem with the vehicle electrical system that should be addressed by a certified technician.

Set the meter to measure resistance (OHMS) or for a continuity check. With one meter lead to ground and the other to the GREEN lead from the harness, the meter should read very close to zero ohms or as a closed, continuous circuit. If all of the connections have been checked and the meter reads an open circuit or very high resistance, the harness needs to be replaced.

Re-connect the 3 way connector when all checks are complete.

4. Check the door switch operation. This check also requires the use of a meter, set to measure resistance (OHMS) or continuity. Disconnect the 3-way connector at the step. With one meter lead on ground and the other lead to the brown wire, close the vehicle door. With the door closed, the meter should show an open circuit. With the meter still in place, open the vehicle



KwikLube™ is a unique aerosol grease that has hundreds of automotive, household, and industrial uses in addition to lubricating the Kodiak SideWinder™ step. It sprays on and into hard to reach places. KwikLube™ changes from a penetrating fluid to a tough, protective grease in a matter of minutes! The cured film is impervious to moisture and can withstand temperatures above 400° F (204° C). This formulation also contains additives to prevent rust and reduce wear.

**Ask for
KwikLube™
At your local
Auto Parts or
RV Dealer**

door. The meter should now show little or no resistance, or a continuous closed circuit. If all harness connections have been checked, and the meter does not confirm proper door switch operation, replace the door switch.

Re-connect the 3 way connector when all checks are complete.

5. Check the vehicle battery voltage. This check requires the use of a meter, set to read up to 20 volts. The Sidewinder step will not operate if the voltage at the step falls below 9.0 volts DC or rises above 18.0 volts DC. With the vehicle engine OFF, place one meter lead on the NEGATIVE (-) battery terminal, and one meter lead on the POSITIVE (+) battery terminal. The meter should read between 12 and 14 volts. If the meter indicates less than 12 volts, the battery may require charging or replacement.

Start the vehicle engine, taking care to be sure all tools and meter leads are away from the fan and other moving parts. With one meter lead on the NEGATIVE (-) battery terminal, and one meter lead on the POSITIVE (+) battery terminal, the meter should read around 14 volts. If the meter indicates more than 18 volts when the vehicle engine is running, there may be a problem with the vehicle electrical system that should be addressed by a certified technician.

If all of these checks have been completed and the Sidewinder step still does not function properly, contact Kodiak's Customer Service.

MAINTENANCE AND LUBRICATION

Clean all mud, salt, and road grime from the step before lubricating. Lubricate the upper bearing points with a good quality moisture and heat resistant penetrating grease, as shown in **Figure 2**. Kwiklube Spray Grease is specially formulated for this purpose.

The pivot point at the lower end of the legs contain zirc grease fittings and are illustrated in **Figure 3**. Apply standard automotive chassis grease to these at the same intervals as the vehicle chassis is greased.

Note: We recommend that penetrating oils and silicone lubricants not be used on the step as they do not retain lubrication.

Figure 2

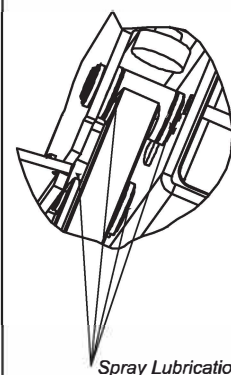
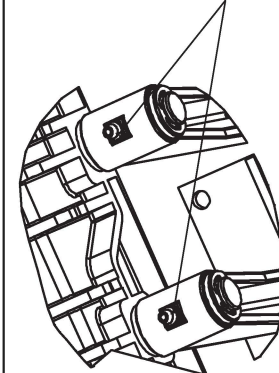


Figure 3

Leg End Grease Fittings



WARRANTY

SERIAL NUMBER

Use this space to record the Serial Number of your step. You will find it on the front of the step support (see **Figure 1**).

SERIAL NUMBER

DATE OF PURCHASE

Please have your Serial Number handy before calling the Kodiak Service Line.

This document has been modified from the original Kodiak 03/02 release. All former references to the Kodiak warranty and contact information were removed.

**For all concerns or questions, please contact
Lippert Components, Inc.**

Ph: (574) 537-8900 | Web: lci1.com | Email: customerservice@lci1.com

Warranty Guidelines and Procedures

1. Replace only those parts that are defective. Motors, gears, covers, and control units are all replaceable as individual parts. If you exchange a complete assembly when only the replacement of an individual part is required, the non-defective parts will be returned and only the defective part will be credited to you or replaced.

2. A Returned Goods Authorization (RGA) number must be obtained before any parts or claims are sent in. Call Kodiak's Service Line.

Our warranty is limited solely to replacement of defective parts.