



by  Lippert Components®

KWIKKEE® KWIKTEST
OWNER'S MANUAL
(1420994)

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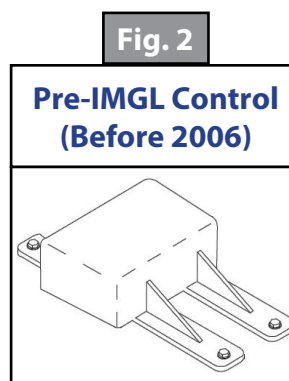
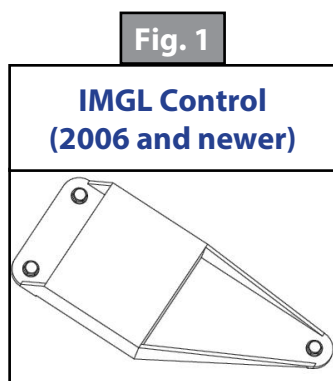
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Product Information

NOTE: The following information was obtained from Kwik® manual 1420994 issued February 2005 with Revision 0E dated January 2012.

The KwikTest control unit test box is used to check the basic functions of the control unit for the Kwik® step. Using these test procedures will shorten and reduce the time spent troubleshooting.

The KwikTest control unit test box (Kwik® 909518000 / LCI® [379607](#)) can be used for both IMGL (integrated motor/gearbox/linkage) (Fig. 1) and pre-IMGL (Fig. 2) step controls. Refer to the appropriate control section of this manual for test instructions.



Safety

⚠ WARNING

Keep fingers, arms, and legs clear of step mechanism while performing these tests. Failure to do so may result in serious personal injury.

⚠ CAUTION

Do not allow the battery terminals to come in contact with the step.

Resources Required

- KwikTest control unit test box (Kwik® 909518000 / LCI® [379607](#))
- Fully charged 12V DC automotive battery

Preparation

Connecting the KwikTest Control Unit Test Box to The Step

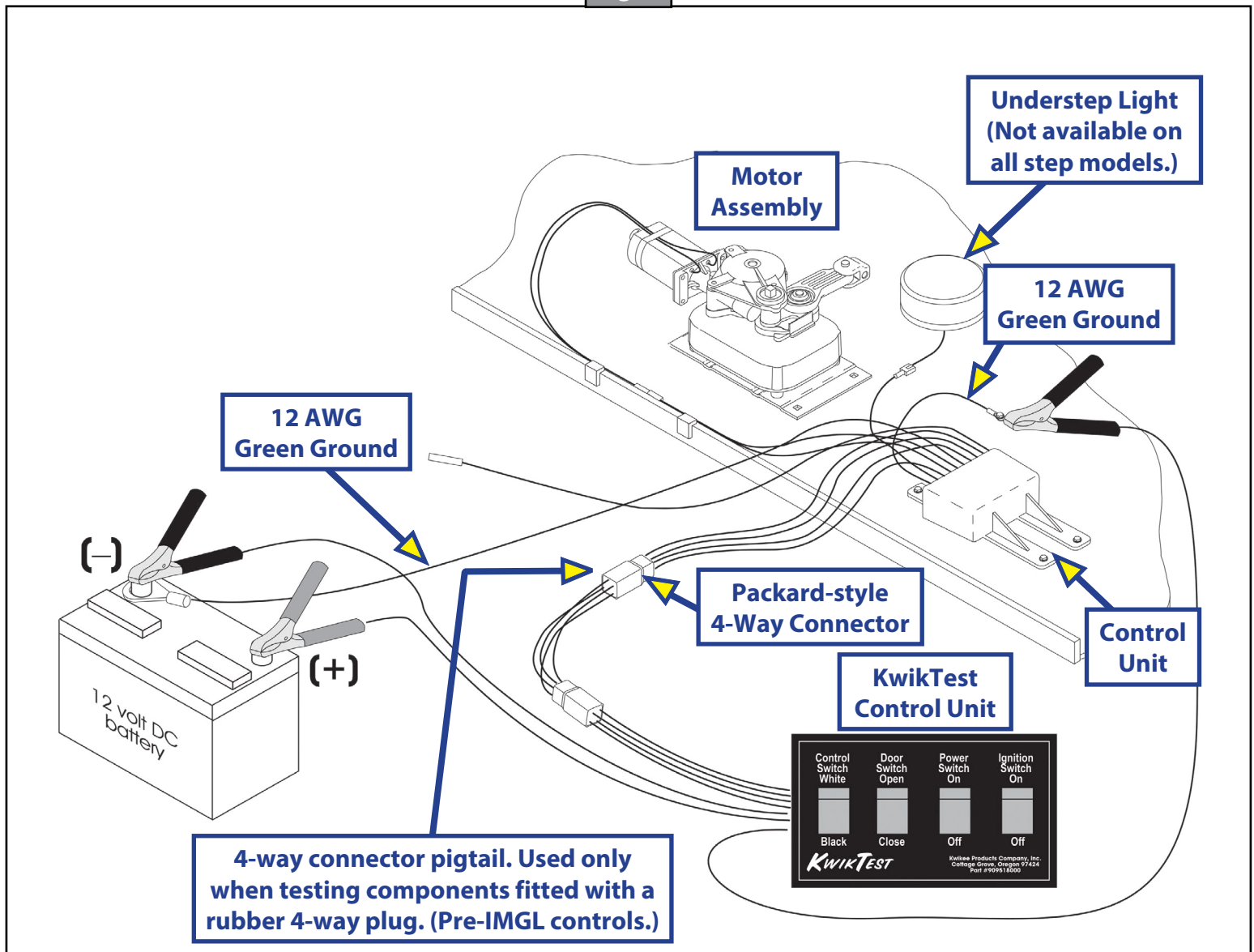
⚠ WARNING

A 12V DC automotive battery contains sulfuric acid, which can cause severe burns. Avoid contact with skin, eyes and clothing. A 12V DC automotive battery can also produce hydrogen gas, which is explosive. Keep cigarettes, open flames and sparks away from the battery at all times.

1. Attach the Packard-style 4-way connector from the KwikTest control unit test box to the 4-way connector on the step control unit (Fig. 3).
2. Connect the red wire clip to the positive post of the fully charged battery.
3. Attach one of the green wire clips to the negative post of the fully charged battery.
4. Attach the other green wire clip to the ring terminal on the end of the 12 AWG green ground wire coming from the step control unit.

NOTE: On steps fitted with the rubber 4-way plug, use the 4-way plug/pigtail (included with the KwikTest control unit test box) to make the connection between the step control unit and the test box.

Fig. 3



KwikTest Control Unit Test Box Set-Up

1. For all steps with pre-IMGL controls, set the Door Switch to Black or White (Fig. 3) to correspond with the color of the door switch on the step being tested.
2. For all steps with IMGL controls, set the Door Switch to Black.

Operation

Testing Procedures—For All Steps with Pre-IMGL Control Units

1. Run the following tests (Fig. 4) a minimum of six cycles, allowing 3-5 seconds between opening and closing the Door Switch to give the control unit's internal relays enough time to reset.
2. The step should remain extended until one of the following occurs:
 - A. The Door Switch is flipped Close and the power switch is in the On position, or
 - B. The Door Switch is flipped Close and the ignition switch is in the On position.

Fig. 4

For All Steps with Pre-IMGL Controls												
Perform Tests in the Sequence Listed	Test Actions						Step Response					
	Ignition Switch		Power Switch		Door Switch		Step Function				Step Light	
	Off	On	Off	On	Closed	Open	Goes In	Stays In	Goes Out	Stays Out	Off	On
Test 1 Settings	■			■	■		☑	☐	☐	☐	☑	☐
Test 2 Settings	■			■		■	☐	☐	☑	☐	☐	☑
Test 3 Settings	■			■	■		☑	☐	☐	☐	☑	☐
Test 4 Settings	■			■		■	☐	☐	☑	☐	☐	☑
Test 5 Settings	■		■			■	☐	☐	☐	☑	☑	☐
Test 6 Settings	■		■		■		☐	☐	☐	☑	☑	☐
Test 7 Settings†		■	■		■		☑	☐	☐	☐	☑	☐
Test 8 Settings		■	■			■	☐	☐	☑	☐	☑	☐
Test 9 Settings		■	■		■		☑	☐	☐	☐	☑	☐
Test 10 Settings	■		■		■		☐	☑	☐	☐	☑	☐
Test 11 Settings‡	■		■			■	☐	☐	☑	☐	☑	☐

†Tests Ignition Override Feature

‡Tests "Last Out" Feature

NOTE: The ignition override will not work until the door is closed.

NOTE: For steps fitted with a white door switch, the "last-out" feature will be disabled by turning the Power Switch on and then off (between Tests 6 and 7), or if the Power Switch is on when the ignition is turned off and is then turned off before the door is opened. These sequences will disable the "last-out" feature and the step will not extend.

NOTE: If your test results do not match what is indicated in this manual, contact LCI for further diagnostic assistance.

Testing Procedures—For All Steps with IMGL Control Units.

Run the following tests (Fig. 5) a minimum of six cycles, allowing 3-5 seconds between opening and closing the Door Switch to give the control unit's internal relays enough time to reset.

Fig. 5

For All Steps with IMGL Controls												
Perform Tests in the Sequence Listed	Test Actions						Step Response					
	Ignition Switch		Override (Power Switch)		Door Switch		Step Function				Step Light	
	Off	On	Off	On	Closed	Open	Goes In	Stays In	Goes Out	Stays Out	Off	On
Test 1 Settings	■		■		■		☑	☐	☐	☐	☑	☐
Test 2 Settings	■		■			■	☐	☐	☑	☐	☐	☑
Test 3 Settings	■			■		■	☐	☐	☐	☑	☐	☑
Test 4 Settings	■			■	■		☐	☐	☐	☑	☑	☐
Test 5 Settings		■		■	■		☑	☐	☐	☐	☑	☐
Test 6 Settings	■			■	■		☐	☑	☐	☐	☑	☐
Test 7 Settings	■			■		■	☐	☐	☑	☐	☐	☑

Troubleshooting

If a problem is discovered during the testing procedure, follow the process below to determine the source of the problem.

1. Disconnect the motor leads from the control unit.
 - A. Apply 12V DC to the red wire on the motor only and attach the yellow wire to ground.
 - B. This will cause the motor to extend the step.
 - C. Reverse the polarity to retract the step.
 - D. Repeat this function 15-20 times. If the step functions properly the motor is fine.
2. Examine the step frame.
 - A. Check to see if there is any binding or obstruction impeding the movement of the step.
 - B. To thoroughly check the frame, you must disconnect the drive linkage from the frame by removing the cotter pin and clevis pin from the end of the linkage.

NOTE: Removing the pins is easier if the step is not fully extended.

- C. To stop the step midway out, simply apply enough pressure with your hand to the leading edge of the step to stop its motion. The control will sense the load and stop the step.
 - D. Disconnect power to the step either at the battery or by disconnecting the 4-way connector between the step control unit and the coach wiring harness.
 - E. Once the pins have been removed, manually push and pull the step in and out.
 - F. The frame must be free from binding or stiffness in both directions.
3. If the motor and frame check out, the source of the problem may be in the coach wiring (including the door switch), low voltage, fuses, etc.

NOTE: If your test results do not match what is indicated in this manual, contact LCI for further diagnostic assistance.



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Lippert Components, Inc.

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



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