

OPERATION & MAINTENANCE MANUAL

// E-LOCK ELECTRIC DOOR LOCK SYSTEM FOR PGN AND SERVICE BODIES



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WARNING!

DO NOT STORE FLAMMABLE MATERIALS SUCH AS GASOLINE, ACETYLENE, PROPANE OR CLEANING FLUIDS IN ENCLOSED CARGO AREAS OR SIDE COMPARTMENTS OF A BODY. ELECTRICAL SWITCHES, LIGHTS, OR OTHER SPARK PRODUCING COMPONENTS MAY CAUSE AN EXPLOSION WHICH COULD RESULT IN SEVERE INJURY OR DEATH.

// INTRODUCTION

The Knapheide Manufacturing Company takes pride in manufacturing only the best quality products available in the truck equipment industry today. Thoroughly read and understand all of the information provided in this manual. Proper operation and maintenance of Knapheide products will assure many years of service. Follow all manufacturer's recommendations to qualify for warranty coverage. This manual contains important information for the proper operation and maintenance of E-Lock electric door locks.

When ordering parts, give the model and serial numbers of the body, as well as the key number. Body model and serial numbers can be found on the serial data plate located on the upper left corner of the right front compartment door. For future reference, write the information in the spaces provided below.

Date Purchased _____

Body Model No. _____

Body Serial No. _____

Key Number _____

For parts and service, contact The Knapheide Product Support Center as shown below.



The Knapheide Product Support Center
1848 Westphalia Strasse | P.O. Box 7140 | Quincy, IL 62305

P: 217-592-5233 | productsupport@knapheide.com

Knapheide product warranty information can be found at

<https://www.knapheide.com/files/source/knapheide/Service/Knapheide-Warranty.pdf>

// OPERATION

E-Lock electric door locks can be operated in a variety of ways depending upon how the electric lock system is set up (customer specified) when the body is installed on the chassis. The E-Lock system can be set up to lock and unlock doors using a Knapheide Body Keyless Fob or an OEM Chassis Keyless Fob. In the event the E-Lock system becomes inoperative, a Knapheide stamped key can be used to lock or unlock any of the doors manually.

Knapheide Body Keyless Remote Fob



Doors on Knapheide PGN Series Bodies and Service Bodies equipped with the E-Lock system can be operated with the Knapheide Body Keyless Remote Fob. **Chassis cab doors can not be locked or unlocked with this fob.**

If applicable, fobs are provided with bodies equipped with the system. Fobs have a maximum operating range of 100 feet, depending upon the condition of the fob batteries and obstacles located between the fob(s) and the doors. Each side compartment door (and rear overlap door on KUV and KC Series bodies) can be locked or unlocked with the fob.

Knapheide Body Keyless Remote Fob Operation			
To:	Procedure	Visual Signal	Audible Signal
Unlock Body Doors	Press the UNLOCK button on the fob. 	Red indicator on fob flashes	Double Whistle
Lock Body Doors	Make sure no tools, foreign objects or wiring harnesses impede door closure. Close all doors to second stage of rotary latch cam. Press the LOCK button on the fob. 	Red indicator on fob flashes	Single Whistle

**Ram Promaster and Ford Transit bodies are not equipped with fobs unless customer specified.*

// OPERATION

OEM Chassis
Keyless Remote Fob



Knapheide PGN Series Bodies and Service Bodies equipped with the E-Lock system can be operated with the OEM Chassis Keyless Remote Fob **if the control module is wired to the OEM locking system.** With this system set-up, all Knapheide body doors lock or unlock in unison with the chassis cab doors.

OEM Chassis Keyless Remote Fob Operation			
To:	Procedure	Visual Signal	Audible Signal
Unlock Chassis Cab Doors	Press the UNLOCK button on the fob once. 	None	Double Whistle
Unlock Body Doors	Press the UNLOCK button on the fob twice. 	None	Double Whistle
Lock Body Doors	Make sure no tools, foreign objects or wiring harnesses impede door closure. Close all doors to second stage of rotary latch cam. Press the LOCK button on the fob once. 	None	Single Whistle

// OPERATION

Knapheide Stamped Key

Knapheide PGN Series Bodies and Service Bodies equipped with the E-Lock system can be locked or unlocked manually with a Knapheide stamped key.



Stamped Key Operation			
To:	Procedure	Visual Signal	Audible Signal
Unlock Individual Body Doors	<p>Insert the key into the lock cylinder.</p> <p>Rotate the key counter-clockwise approximately 45°.</p> <p>Rotate the key clockwise 45° to remove the key.</p>	None	Click
Lock Individual Body Doors	<p>Make sure no tools, foreign objects or wiring harnesses impede door closure.</p> <p>Close all doors to second stage of rotary latch cam.</p> <p>Insert the key into the lock cylinder.</p> <p>Rotate the key clockwise approximately 45°.</p> <p>Rotate the key counter-clockwise 45° to remove the key.</p>	None	Click

// TROUBLESHOOTING

Troubleshooting		
Condition	Remedy	Notes
<p>Body Doors Will Not Lock/Unlock with Knapheide Body Keyless Fob</p>	<p>Check the fob battery. Replace if necessary. Make sure the fob battery is properly installed.</p> <p>Make sure no tools, foreign objects or wiring harnesses impede door closure.</p> <p>Make sure all body doors are completely closed (full second stage engagement of rotary lock cams to lock strikes).</p> <p>Adjust lock strikes if necessary.</p> <p>The control module may need to be re-programmed to identify the fob signal (see SYSTEM CONTROL MODULE PROGRAMMING).</p> <p>Make sure the chassis battery is connected and in good working condition.</p> <p>Use the supplied Knapheide stamped key to lock or unlock body doors.</p>	<p>An incorrectly installed fob battery (reversed polarity) can cause overheating and damage the fob.</p> <p>A series of 10 chirps indicates that one or more of the body doors are open or only in the first stage of engagement when the fob LOCK button is pressed.</p> <p>A disconnected or dead chassis battery will disable the electric door lock system. Full functionality resumes when a chassis battery (in good working condition) is re-connected to the system, provided no other disabling conditions exist.</p>
<p>Body Doors Will Not Lock/Unlock with OEM Chassis Keyless Fob</p>	<p>Check the fob battery (if possible). Replace if necessary. * Make sure the fob battery is properly installed.</p> <p>Make sure no tools, foreign objects or wiring harnesses impede door closure.</p> <p>Make sure all body doors are completely closed (full second stage engagement of rotary lock cams to lock strikes).</p> <p>Adjust lock strikes if necessary.</p> <p>Make sure the chassis battery is connected and in good working condition.</p> <p>Use the supplied Knapheide stamped key to lock or unlock body doors.</p>	<p>An incorrectly installed fob battery (reversed polarity) can cause overheating and damage the fob.</p> <p>A disconnected or dead chassis battery will disable the electric door lock system. Full functionality resumes when a chassis battery (in good working condition) is re-connected to the system, provided no other disabling conditions exist.</p>

// TROUBLESHOOTING

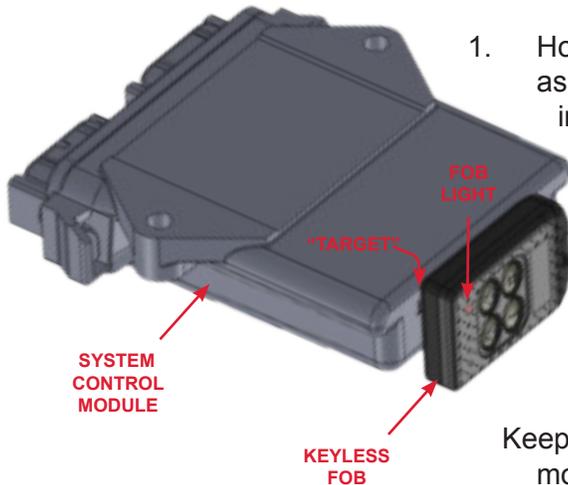
Troubleshooting		
Condition	Remedy	Notes
Lost or Damaged Knapheide Body Keyless Remote Fob	Call Knapheide Product Support (see contact information on page 3).	The system control module must be re-programmed to identify existing and replacement fobs (see SYSTEM CONTROL MODULE PROGRAMMING).
Lost or Damaged Knapheide Stamped Key	Call Knapheide Product Support (see contact information on page 3).	Record the stamped 3 digit alpha-numeric code located on the lock cylinders before calling Product Support.



// SYSTEM CONTROL MODULE PROGRAMMING

The Knapheide E-Lock system incorporates a system control module that can be programmed to recognize signals from the Knapheide Body Keyless Fob. Typically the system control module is pre-set during body installation to identify the signal.

The system control module can be programmed to identify more than one signal (total of four) and can also be re-programmed to identify a signal from a *replacement fob. To program or re-program the system control module, find the module located in the street side front vertical compartment and follow the instructions below.



1. Hold the backside of the fob against the end of the control module as shown for at least 5 seconds. A single “beep” should be heard indicating the control module is in program mode. It may be necessary to move the fob slightly back and forth to initiate the program mode and hear the audible signal. Position the light in the fob over the word “TARGET” on the end of the control module. Once the signal is heard, the fob can be removed.
2. In sequence, push the LOCK button  once on each fob to be used with the E-Lock system.

Keep in mind that whenever the control module is set to the program mode, signals from all fobs to be used must be re-programmed in the module.

3. After the LOCK button on all fobs have been pressed there should be a slight pause and then two “beeps” should be heard, indicating that the control module is no longer in program mode. At this point, programming is complete.

* Contact Knapheide Product Support; see page 3.

// MAINTENANCE

Proper operation and maintenance of Knapheide products will assure many years of service. Follow all manufacturer's recommendations to qualify for warranty coverage. Maintenance procedures are explained in the ensuing paragraphs along with recommended schedule intervals. Each procedure is alpha coded to match the Maintenance Schedule Quick Reference shown below.

MAINTENANCE SCHEDULE QUICK REFERENCE					
ALPHA CODE	PROCEDURE	INTERVALS			USE
		Daily	6 Mo.s	1 Yr.	
A	Make sure no tools, foreign objects or wiring harnesses impede closing of doors	X			
B	Lubricate all pivot points and wear surfaces on latches and rods		X		* 3M™ Lithium Lube P/N 08875
	Lubricate spring loaded door holders		X		
	Lubricate hinges		X		
	Lubricate lock cylinders		X		** Tri-Flow® Superior Lubricant
C	Adjust Lockstrikes	As Needed			T27 Torx Driver
D	Fob Battery Replacement			X	‡ 12 Volt Alkaline Battery

* or equivalent heavy bodied white grease

** aerosol or liquid form - DO NOT USE WD-40 PENETRATING OIL & WATER DISPLACING SPRAY OR SIMILAR PRODUCTS

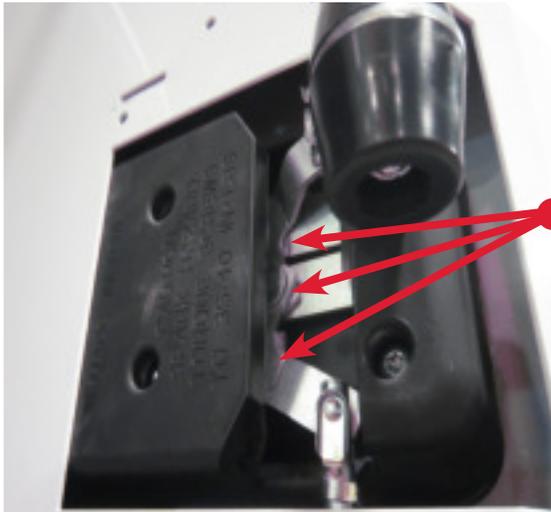
‡ Duracell MN21, Energizer A23, Radio Shack 23A or equivalent

// MAINTENANCE



A. Check Doorways For Obstructions

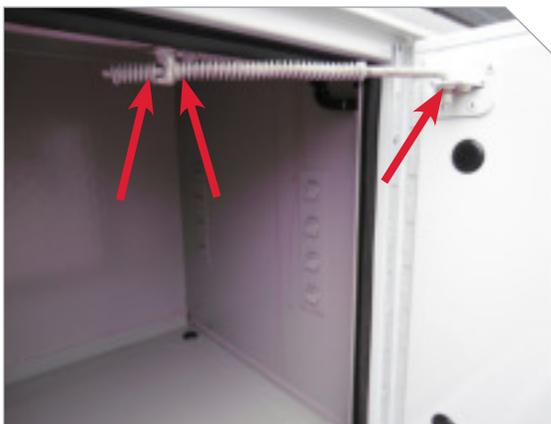
A. (Daily) Check each doorway for tools and foreign objects that may hinder door closure. Make sure wire harnesses do not lodge in the hinge track. Also inspect wire harnesses for possible wear or cuts. **Shorted or severed wires will cause system malfunctions.**



B. Lubricate Three Pivot Points

CAUTION! DO NOT use WD-40 Penetrating Oil & Water Displacing Spray or similar products to lubricate Knapheide products.

B. (Every 6 Months) Three pivot points on the paddle latch should be lubricated (see illustration) with 3M™ white lithium grease (P/N 08875) every 6 months (or sooner if needed). Use an aerosol can with a straw applicator to direct the grease into the pivot points. Once lubricated, re-install the cover with the Torx driver.



B. Lubricate Spring Loaded Door Holders

B. (Every 6 Months) Use an aerosol can with a straw applicator to apply 3M™ Lithium Lube (P/N 08875) to the pivot points of the spring loaded door holders as shown in the illustration at left.



B. Lubricate Door Hinges

B. (Every 6 Months) Use an aerosol can with a straw applicator to apply the white lithium grease to all door hinges. Remove excess grease with a clean rag.



B. Lubricate Door Lock Cylinders

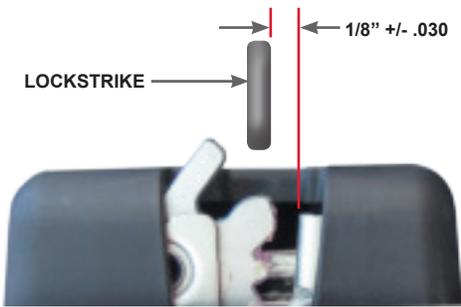
B. (Every 6 Months) Lubricate all door lock cylinders with Tri-Flow® Superior Lubricant (aerosol or liquid).

CAUTION! DO NOT use WD-40 Penetrating Oil & Water Displacing Spray or similar products to lubricate Knapheide products.



C. Loosen Torx Screws

C. (As Needed) To adjust the lockstrikes on a door opening, loosen the Torx screws with a T27 Torx driver.



C. Lockstrike to Latch Adjustment

C. (As Needed) Adjust the lockstrike to be within .030" of center of the latch. Re-tighten the Torx screws.

Close the door and check for proper seal. If the door seal is too loose or too tight, loosen the Torx screws slightly and adjust the lockstrike forward or backward to provide a tighter or looser seal.



D. Replace Fob Battery Yearly

D. (Every Year) Replace the fob battery. Verify proper operation of the fob(s) upon completion. The red indicator on the fob should illuminate when the lock or unlock button is pressed. If it does not, check to make sure the battery was installed properly (correct polarity).



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<https://www.knapheide.com/files/source/knapheide/Service/Knapheide-Warranty.pdf>**